

AIR PROGRAMS POLICY  
and GUIDANCE NOTEBOOK

Volume 2

U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Air and Radiation  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

**U.S. Environmental Protection Agency**  
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230 South Dearborn Street  
Chicago, Illinois 60604

## AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK

### Introduction

The Air Programs Policy and Guidance Notebook is a collection of previously-distributed material which can be used as a convenient reference document for anyone who is involved in the development and implementation of air pollution control programs. The material is organized according to sections of the Clean Air Act and is cross-indexed by subject.

The documents in each section have been assigned code numbers related to the respective section of the Clean Air Act, the date of issuance of the document, and a number denoting the order or location of the document in each section of the Notebook. For example, a document coded PN 172-80-06-16-027 would indicate:

#### Policy Notebook

#### Section 172 of the Clean Air Act

80-06-16 June 16, 1980 - date of initial distribution of the document

027 - 27th item included in the Section 172 portion of the Notebook

Documents within each section are arranged such that the most current documents generally appear at the front of any given section. To accomplish this, the documents should be placed in each section so that the last three digits of the code number are in descending order.

The subject index in the Notebook lists code numbers for all documents relating to the individual subject. For example, economic feasibility has two documents listed: PN 110-86-04-11-074 and PN 110-87-01-20-080. This indicates that both documents can be found in the Section 110 chapter of the Notebook. They can readily be located in the book using the code information as explained above.

Users of the Policy and Guidance Notebook should be aware that it does not necessarily contain all of EPA's policy and guidance related to a given topic. It is a compilation of policy and guidance documents but the users cannot rely only upon the Notebook for all of their needs. Users should be aware of other policy compilations which might be useful. One such compilation is the Clean Air Act Compliance/Enforcement Manual - Compendium of Operative Policies, which is maintained by EPA's Office of Enforcement and Compliance Monitoring. Another compilation is the New Source Review - Prevention of Significant Deterioration and Nonattainment Area Guidance Notebook, which is also published by EPA's Office of Air Quality Planning and Standards.

Distribution of the Notebook is to EPA Regional Offices and to officials of State and local agencies. Recipients of the Notebook will receive periodic updates. For additional information related to the Notebook please call Bill Hamilton, Office of Air Quality Planning and Standards, at FTS 629-5498 or 919-541-5498.

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PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
PN172-84-12-21-049	VOLUME 1	CONNECTICUT VOLATILE ORGANIC COMPOUND (VOC) ISSUES
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PN110-85-01-02-070	VOLUME 1	REGIONAL IMPLEMENTATION OF MODELING GUIDANCE
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PN110-87-09-21-086	VOLUME 2	AMBIENT AIR DEFINITION
PN110-87-05-11-088	VOLUME 2	GUIDANCE ON ACCOUNTING FOR TRENDS IN PARTICULATE MATTER EMISSION AND AIR QUALITY DATA
PN110-90-07-05-106	VOLUME 2	PM-10 SIP DEMONSTRATIONS FOR SMALL ISOLATED AREAS WITH SPATIALLY UNIFORM EMISSIONS
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PN165-87-01-29-027	VOLUME 2	IMPLEMENTATION OF THE REVISED MODELING GUIDELINE FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-89-03-31-040	VOLUME 2	APPLICATION OF-BUILDING DOWNWASH IN PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT ANALYSES
PN172-78-03-10-002	VOLUME 1	EXAMPLE DEMONSTRATION OF ATTAINMENT FOR PHOTOCHEMICAL OXIDANTS
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN107-86-04-11-012	VOLUME 2	REQUIRED MONITORING PERIOD FOR OZONE REDESIGNATION IN UNCLASSIFIED AREAS
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PN110-83-05-27-064	VOLUME 1	SUMMARY OF NAAQS INTERPRETATION
PN110-87-05-11-088	VOLUME 2	GUIDANCE ON ACCOUNTING FOR TRENDS IN PARTICULATE MATTER EMISSION AND AIR QUALITY DATA.
PN110-88-11-21-099	VOLUME 2	REVISION TO POLICY ON THE USE OF PM10 MEASUREMENT DATA
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PN172-81-05-21-038	VOLUME 1	1982 OZONE AND CARBON MONOXIDE SIP GUIDANCE INDEX
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PN110-87-04-30-083	VOLUME 2	AMBIENT AIR
PN110-87-09-21-086	VOLUME 2	AMBIENT AIR DEFINITION
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PN112-88-03-31-010	VOLUME 2	REVISED ASBESTOS NESHAP STRATEGY
PN113-88-03-11-046	VOLUME 2	LISTING ASBESTOS DEMOLITION AND RENOVATION COMPANIES PURSUANT TO SECTION 306 OF THE CLEAN AIR ACT
PN113-88-06-30-050	VOLUME 2	ASBESTOS CONTRACTOR LISTING
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PN165-87-09-22-021	VOLUME 2	IMPLEMENTATION OF NORTH COUNTY RESOURCE RECOVERY PSD REMAND
PN165-87-12-01-022	VOLUME 2	IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
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PN113-87-03-25-035	VOLUME 2	REVISED CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY
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PN112-84-07-11-005	VOLUME 1	VINYL CHLORIDE NESHAP ENFORCEMENT STRATEGY
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PN113-83-02-15-017	VOLUME 1	POLICY ON EXCESS EMISSIONS DURING STARTUP, SHUTDOWN, MAINTENANCE, AND MALFUNCTIONS
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PN113-84-12-20-022	VOLUME 1	POLICY ON NO-ACTION ASSURANCES
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PN113-87-06-25-037	VOLUME 2	PROPER AND TIMELY REVIEW OF STATE IMPLEMENTATION PLAN (SIP) REVISIONS
PN113-87-09-23-041	VOLUME 2	REVIEW OF STATE IMPLEMENTATION PLANS AND REVISIONS FOR ENFORCEABILITY AND LEGAL SUFFICIENCY
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PN113-88-03-02-045	VOLUME 2	REVISIONS TO VOLATILE HAZARDOUS AIR POLLUTANT (VHAP) CIVIL PENALTY POLICY
PN113-88-03-11-046	VOLUME 2	LISTING ASBESTOS DEMOLITION AND RENOVATION COMPANIES PURSUANT TO SECTION 306 OF THE CLEAN AIR ACT
PN113-88-03-31-048	VOLUME 2	TRANSMITTAL OF REISSUED OAQPS CEMS POLICY
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PN114-81-05-13-002	VOLUME 1	REGIONAL OFFICE CRITERIA FOR NEUTRAL INSPECTIONS OF STATIONARY SOURCES - AMENDED GUIDANCE
PN114-83-12-15-003	VOLUME 1	EXECUTION OF CONFIDENTIALITY AGREEMENTS UNDER SECTION 114 OF THE CLEAN AIR ACT
PN114-84-09-06-004	VOLUME 1	FINAL GUIDANCE ON USE OF UNANNOUNCED INSPECTIONS
PN167-83-12-14-001	VOLUME 1	GUIDANCE ON ENFORCEMENT OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS UNDER THE CLEAN AIR ACT

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PN113-86-04-22-030	VOLUME 2	TRANSMITTAL OF NATIONAL PROGRAM GUIDANCE - ENFORCEMENT APPLICATIONS OF CONTINUOUS EMISSION MONITORING SYSTEM DATA
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PN110-86-08-07-076	VOLUME 2	POLICY ON SIP REVISIONS REQUESTING COMPLIANCE DATE EXTENSIONS FOR VOC SOURCES
PN113-83-04-12-019	VOLUME 1	LETTER TO ROBERT R. WAHLER FROM KATHLEEN BENNETT RE ENFORCEMENT POLICY ON INTERIM PARTICULATE CONTROLS
PN113-86-08-07-032	VOLUME 2	POLICY ON THE AVAILABILITY OF LOW-SOLVENT TECHNOLOGY SCHEDULES IN CLEAN AIR ACT ENFORCEMENT ACTIONS
PN172-78-10-06-008	VOLUME 1	COMMENTS ON AUTO INDUSTRY PROPOSALS
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN113-87-03-25-035	VOLUME 2	REVISED CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY
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PN165-84-01-09-012	VOLUME 1	INTERPRETATION OF THE POLICY ON COMPLIANCE WITH THE PROVISIONS OF PART D
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PN113-84-10-05-021	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF EXCESS EMISSION REPORTS

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PN113-82-08-12-014	VOLUME 1	GUIDANCE CONCERNING EPA'S USE OF CONTINUOUS EMISSION MONITORING DATA
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PN172-78-08-04-004	VOLUME 1	REQUIREMENT FOR VOC RACT REGULATIONS IN ALL OXIDANT NONATTAINMENT AREAS
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PN172-79-08-21-019	VOLUME 1	STATE IMPLEMENTATION PLANS: GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - SUPPLEMENT (ON REVISED SCHEDULES FOR SUBMISSION OF VOLATILE ORGANIC CHEMICAL RACT REGULATIONS)

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PN172-80-09-03-030	VOLUME 1	MISCELLANEOUS METAL PARTS AND PRODUCTS CTG - EMISSION LIMITS FOR COATING OF SHIPPING PAILS AND DRUMS
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PN172-80-12-02-035	VOLUME 1	RACT FOR SPECIALTY PRINTING OPERATIONS
PN172-84-06-25-046	VOLUME 1	APPLICABILITY OF GROUP III CONTROL TECHNIQUES GUIDELINES (CTG'S)
PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
PN172-84-09-14-048	VOLUME 1	VOLATILE ORGANIC COMPOUND (VOC) TEST METHODS OR PROCEDURES FOR SOURCE CATEGORIES IN GROUPS I, II, AND III CONTROL TECHNIQUES GUIDELINES (CTGS)
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PN172-85-07-02-051	VOLUME 1	RESIDUAL VOLATILE ORGANIC COMPOUND (VOC) CONTAINED IN COATING LINE PRODUCTS
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
PN172-87-06-25-054	VOLUME 2	EMISSION CUT-OFF FOR CONTROL TECHNIQUES GUIDELINES VOLATILE ORGANIC COMPOUND SOURCES
PN172-86-01-09-057	VOLUME 2	CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
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PN113-83-01-12-018	VOLUME 1	GUIDANCE ON IMPLEMENTATION OF THE 1982 DEADLINE ENFORCEMENT POLICY ISSUED SEPTEMBER 20, 1982
PN113-83-04-26-020	VOLUME 1	PROCEDURES FOR REVIEW AND FEDERAL REGISTER PUBLICATION OF DELAYED COMPLIANCE ORDERS UNDER SECTION 113(D) OF THE CLEAN AIR ACT
PN113-86-06-02-031	VOLUME 2	113(d)(4) LETTER TO CAN MANUFACTURERS INSTITUTE
PN113-86-08-22-033	VOLUME 2	SAMPLE FEDERAL REGISTER LANGUAGE FOR PROPOSAL AND FINAL DCO'S
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PN123-86-02-11-011	VOLUME 2	PRIORITY FOR REVIEW OF PARTICULATE MATTER SOURCES FOR COMPLIANCE WITH REVISED STACK HEIGHT REGULATIONS
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PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN165-85-05-09-015	VOLUME 1	IMPROVED NEW SOURCE REVIEW/PREVENTION OF SIGNIFICANT DETERIORATION (NSR/PSD) PROGRAM TRANSFER
PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
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PN110-80-08-08-041	VOLUME 1	THE BUBBLE POLICY AND STATE IMPLEMENTATION PLANS UNDER CLEAN AIR ACT SECTION 111D
PN110-82-11-24-061	VOLUME 1	SIP ACTIONS AND TOXIC POLLUTANTS
PN110-85-01-02-070	VOLUME 1	REGIONAL IMPLEMENTATION OF MODELING GUIDANCE
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PN112-85-02-08-006	VOLUME 1	REVISIONS TO ASBESTOS DEMOLITION AND RENOVATION CIVIL PENALTY POLICY
PN112-86-10-01-009	VOLUME 2	GUIDELINE S-26 - ENFORCEMENT OF THE ARSENIC NESHAP FOR GLASS MANUFACTURING PLANTS
PN112-88-03-31-010	VOLUME 2	REVISED ASBESTOS NESHAP STRATEGY
PN113-85-04-24-023	VOLUME 1	ACHIEVING VOC COMPLIANCE FROM DEPARTMENT OF DEFENSE CONTRACTOR FACILITIES
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PN113-87-03-25-035	VOLUME 2	REVISED CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY
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PN165-87-04-08-018	VOLUME 2	CLARIFICATION OF NEW SOURCE REVIEW POLICY ON AVERAGING TIMES FOR PRODUCTION LIMITATIONS
PN167-83-12-14-001	VOLUME 1	GUIDANCE ON ENFORCEMENT OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS UNDER THE CLEAN AIR ACT
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PN123-85-09-19-006	VOLUME 1	GUIDANCE ON FLUID MODEL DEMONSTRATIONS FOR DETERMINING GEP STACK HEIGHT IN COMPLEX TERRAIN

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PN172-80-06-16-027	VOLUME 1	GASOLINE TANK TRUCK REGULATIONS
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PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
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PN110-80-09-25-043	VOLUME 1	INCORPORATION BY REFERENCE OF SIP REVISIONS
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PN110-82-08-11-060	VOLUME 1	REVIEW OF 1982 OZONE AND CO SIPs
PN172-81-05-21-038	VOLUME 1	1982 OZONE AND CARBON MONOXIDE SIP GUIDANCE INDEX
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN114-84-09-06-004	VOLUME 1	FINAL GUIDANCE ON USE OF UNANNOUNCED INSPECTIONS
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PN110-79-06-18-066	VOLUME 1	REQUIREMENTS FOR PREPARATION, ADOPTION AND SUBMITTAL OF IMPLEMENTATION PLANS: INTERGOVERNMENTAL CONSULTATION (FR CITATION)
<b>** INTERIM CONTROL POLICY</b>		
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PN126-89-01-11-005	VOLUME 2	LETTER TO THOMAS JORLING REGARDING INTERSTATE AIR POLLUTION CRITERIA
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PN165-87-12-01-022	VOLUME 2	IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
PN165-88-04-25-030	VOLUME 2	LAER EMISSION LIMITS FOR AUTOMOBILE AND LIGHT-DUTY TRUCK TOPCOAT OPERATIONS
PN165-88-08-29-034	VOLUME 2	TRANSFER OF TECHNOLOGY IN DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
PN165-89-02-28-038	VOLUME 2	GUIDANCE ON DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
PN165-89-02-24-046	VOLUME 2	CUT-OFF DATE FOR DETERMINING LAER IN MAJOR NEW SOURCE PERMITTING
PN165-89-08-09-047	VOLUME 2	LAER DETERMINATION FOR A PREVIOUSLY CONSTRUCTED SOURCE
PN172-88-06-21-062	VOLUME 2	TRANSMITTAL OF AUTOMOBILE TOPCOAT PROTOCOL
PN172-90-02-28-078	VOLUME 2	LOWEST ACHIEVABLE EMISSION LIMITS (LAER) FOR OZONE NONATTAINMENT AREAS
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PN165-87-10-06-029	VOLUME 2	EMISSIONS FROM LANDFILLS
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PN110-79-06-14-016	VOLUME 1	LEAD SIPS
PN110-79-11-21-023	VOLUME 1	MINIMUM NUMBER OF SAMPLES FOR DETERMINING QUARTERLY AVERAGE LEAD CONCENTRATION
PN110-80-04-08-032	VOLUME 1	NEW SOURCE REVIEW REQUIREMENTS FOR LEAD
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PN172-80-11-20-032	VOLUME 1	COMPLIANCE WITH VOC EMISSION LIMITATIONS FOR CAN COATING OPERATIONS
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PN172-89-04-07-073	VOLUME 2	BASELINE FOR CROSS-LINE AVERAGING
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PN172-79-05-25-017	VOLUME 1	CLARIFICATION OF AGENCY POLICY CONCERNING OZONE SIP REVISIONS AND SOLVENT REACTIVITIES
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PN165-86-10-21-025	VOLUME 2	APPLICABILITY OF PSD TO PORTIONS OF A PLANT CONSTRUCTED IN PHASES WITHOUT PERMITS
PN165-86-12-01-026	VOLUME 2	NEED FOR EMISSION CAP ON COMPLEX NETTING SOURCES
PN165-89-04-10-041	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY TO SULFUR DIOXIDE (SO2) EMISSIONS FROM INCINERATION OF TOTAL REDUCED SULFUR (TRS) COMPOUNDS
PN165-90-01-18-049	VOLUME 2	LETTER TO MORTON STERLING OF DETROIT EDISON FROM GERALD E. EMISON
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PN165-89-09-11-048	VOLUME 2	LETTER TO CHRISTOPHER J. DAGGETT FROM GERALD A. EMISON ON USE OF UREA INJECTION FOR NOX CONTROL FROM MUNICIPAL WASTE COMBUSTORS
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PN172-80-08-11-043	VOLUME 1	MUNICIPAL WASTEWATER TREATMENT WORKS: CONSTRUCTION GRANTS LIMITATION PROVIDED BY SECTION 316 OF THE CLEAN AIR ACT: POLICY AND PROCEDURES (FR CITATION)
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PN112-82-03-24-002	VOLUME 1	DELEGATION OF AUTHORITY TO STATES: NESHAPS
PN112-84-06-01-004	VOLUME 1	BENZENE NESHAP GUIDANCE
PN112-84-07-11-005	VOLUME 1	VINYL CHLORIDE NESHAP ENFORCEMENT STRATEGY
PN112-85-02-08-006	VOLUME 1	REVISIONS TO ASBESTOS DEMOLITION AND RENOVATION CIVIL PENALTY POLICY
PN112-86-10-01-009	VOLUME 2	GUIDELINE S-26 - ENFORCEMENT OF THE ARSENIC NESHAP FOR GLASS MANUFACTURING PLANTS
PN112-88-03-31-010	VOLUME 2	REVISED ASBESTOS NESHAP STRATEGY
PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
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PN165-88-07-05-032	VOLUME 2	AIR QUALITY ANALYSIS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-89-06-13-043	VOLUME 2	TRANSMITTAL OF BACKGROUND STATEMENT ON "TOP-DOWN" BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
PN165-89-02-24-046	VOLUME 2	CUT-OFF DATE FOR DETERMINING LAER IN MAJOR NEW SOURCE PERMITTING
PN165-89-08-09-047	VOLUME 2	LAER DETERMINATION FOR A PREVIOUSLY CONSTRUCTED SOURCE
PN167-88-07-15-003	VOLUME 2	PROCEDURES FOR EPA TO ADDRESS DEFICIENT NEW SOURCE PERMITS UNDER THE CLEAN AIR ACT

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PN165-89-08-24-044	VOLUME 2	GUIDANCE ON IMPLEMENTING THE NITROGEN DIOXIDE (NO2) PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENTS
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PN110-78-02-24-002	VOLUME 1	CRITERIA FOR APPROVAL OF 1979 SIP REVISIONS
PN110-79-04-04-015	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF STATE IMPLEMENTATION PLAN REVISIONS FOR NONATTAINMENT AREAS (44 FR 20372)
PN110-79-07-02-017	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - SUPPLEMENT (ON PUBLIC COMMENT AND CONDITIONAL APPROVAL) (44 FR 38583)
PN110-79-09-17-020	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - (SUPPLEMENT ON CONTROL TECHNIQUES GUIDELINES) (44 FR 53761)
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PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
PN113-87-11-23-042	VOLUME 2	SETTLING ENFORCEMENT ACTIONS IN CLEAN AIR ACT NONATTAINMENT AREAS AGAINST STATIONARY SOURCES WHICH WILL NOT BE IN COMPLIANCE BY THE APPLICABLE ATTAINMENT DATE
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PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-84-06-25-046	VOLUME 1	APPLICABILITY OF GROUP III CONTROL TECHNIQUES GUIDELINES (CTG'S)
PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
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PN172-87-12-10-060	VOLUME 2	LETTER TO LEONARD LEDBETTER ON USE OF POTENTIAL VS ACTUAL EMISSIONS FOR VOC REGULATIONS
PN172-88-05-27-061	VOLUME 2	TRANSMITTAL OF EPA GUIDANCE ON VOC ISSUES
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PN172-88-12-01-066	VOLUME 2	RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
PN172-90-02-28-078	VOLUME 2	LOWEST ACHIEVABLE EMISSION LIMITS (LAER) FOR OZONE NONATTAINMENT AREAS
PN172-90-06-18-079	VOLUME 2	OZONE AND CARBON MONOXIDE DESIGN VALUE CALCULATIONS
PN175-80-06-12-008	VOLUME 1	PROCEDURES FOR CONFORMANCE OF TRANSPORTATION PLANS, PROGRAMS AND PROJECTS WITH CLEAN AIR ACT STATE IMPLEMENTATION PLANS
PN175-80-06-23-009	VOLUME 1	PUBLIC PARTICIPATION IN THE STATE IMPLEMENTATION PLAN - TRANSPORTATION REVISION PROCESS: EXPANDED GUIDELINES (FR CITATION)
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PN120-81-04-02-004	VOLUME 1	SETTLEMENT OF NONCOMPLIANCE PENALTY ASSESSMENTS UNDER SECTION 120 OF THE CLEAN AIR ACT, AS AMENDED
PN120-81-04-30-005	VOLUME 1	ISSUANCES OF NOTICES OF NONCOMPLIANCE UNDER SECTION 120 OF THE CLEAN AIR ACT TO SEASONAL SOURCES
PN120-85-03-19-006	VOLUME 1	PERMISSIBLE GROUNDS FOR SETTLEMENT OF NONCOMPLIANCE PENALTIES UNDER SECTION 120 OF THE CLEAN AIR ACT
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PN113-76-06-25-002	VOLUME 1	DOCUMENTATION OF VIOLATION EXTENDING 30 DAYS BEYOND NOTICE OF VIOLATION UNDER SECTION 113 OF THE CLEAN AIR ACT
PN113-83-01-12-018	VOLUME 1	GUIDANCE ON IMPLEMENTATION OF THE 1982 DEADLINE ENFORCEMENT POLICY ISSUED SEPTEMBER 20, 1982
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PN111E-76-05-03-001	VOLUME 1	ENFORCEMENT OF NSPS REQUIREMENTS
PN111E-82-05-07-002	VOLUME 1	RESTATEMENT OF GUIDANCE ON EMISSIONS ASSOCIATED WITH SOOT BLOWING
PN111E-86-09-11-004	VOLUME 2	DELEGATION OF NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AUTHORITY TO STATE/LOCAL AGENCIES

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PN113-84-10-05-021	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF EXCESS EMISSION REPORTS
PN113-85-10-30-025	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF COAL SAMPLING AND ANALYSIS DATA
PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
PN114-81-05-13-002	VOLUME 1	REGIONAL OFFICE CRITERIA FOR NEUTRAL INSPECTIONS OF STATIONARY SOURCES - AMENDED GUIDANCE
PN120-80-09-12-001	VOLUME 1	PRIORITIES FOR ISSUING NOTICES OF NONCOMPLIANCE
PN123-85-10-28-009	VOLUME 1	IMPLEMENTATION OF STACK HEIGHT REGULATIONS - PRESUMPTIVE NSPS EMISSION LIMIT FOR FLUID MODELING STACKS ABOVE FORMULA GEP HEIGHT
PN165-86-07-07-024	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) DEFINITION OF "MODIFICATION"
PN165-88-09-09-035	VOLUME 2	APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NEW SOURCE PERFORMANCE STANDARDS (NSPS) TO THE WISCONSIN ELECTRIC POWER COMPANY (WEPSCO) PORT WASHINGTON LIFE EXTENSION PROJECT
PN165-88-10-14-036	VOLUME 2	LETTER TO JOHN BOSTON FROM LEE THOMAS ON WEPSCO DETERMINATION
PN165-89-02-15-042	VOLUME 2	LETTER TO JOHN BOSTON FROM DON CLAY ON WEPSCO DETERMINATION
PN165-90-06-08-050	VOLUME 2	LETTER TO JOHN BOSTON FROM WILLIAM G. ROSENBERG ON WEPSCO DETERMINATION
PN172-78-08-24-006	VOLUME 1	CLARIFICATION OF EPA POLICY ON EMISSIONS FOR METHYL CHLOROFORM
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PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
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PN107-85-10-08-010	VOLUME 1	OZONE AIR QUALITY DATA FOR REDESIGNATIONS
PN107-86-04-11-012	VOLUME 2	REQUIRED MONITORING PERIOD FOR OZONE REDESIGNATION IN UNCLASSIFIED AREAS
PN107-87-04-06-013	VOLUME 2	OZONE REDESIGNATION POLICY
PN110-79-09-17-020	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - (SUPPLEMENT ON CONTROL TECHNIQUES GUIDELINES) (44 FR 53761)
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PN110-83-05-27-064	VOLUME 1	SUMMARY OF NAAQS INTERPRETATION
PN110-80-07-22-067	VOLUME 1	(CITATION OF FR NOTICE ON SOLVENT REACTIVITIES)
PN110-85-08-27-071	VOLUME 1	CLASSIFICATION OF BENZENE AS A VOC
PN110-86-08-07-076	VOLUME 2	POLICY ON SIP REVISIONS REQUESTING COMPLIANCE DATE EXTENSIONS FOR VOC SOURCES
PN110-87-01-08-079	VOLUME 2	CLARIFICATION OF SEASONAL VOC CONTROL POLICY
PN110-87-04-17-081	VOLUME 2	DEFINITION OF VOC
PN113-87-07-06-038	VOLUME 2	SMALL VOC SOURCE COMPLIANCE STRATEGY - FINAL
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PN172-78-03-10-002	VOLUME 1	EXAMPLE DEMONSTRATION OF ATTAINMENT FOR PHOTOCHEMICAL OXIDANTS
PN172-78-08-04-004	VOLUME 1	REQUIREMENT FOR VOC RACT REGULATIONS IN ALL OXIDANT NONATTAINMENT AREAS
PN172-78-10-26-009	VOLUME 1	OZONE TRANSPORT VALUES FOR SIP REVISIONS
PN172-79-03-06-014	VOLUME 1	CUTBACK ASPHALT VOC REGULATIONS
PN172-79-05-25-017	VOLUME 1	CLARIFICATION OF AGENCY POLICY CONCERNING OZONE SIP REVISIONS AND SOLVENT REACTIVITIES
PN172-79-06-20-018	VOLUME 1	MODIFICATIONS TO RECOMMENDATIONS FOR SOLVENT METAL CLEANING
PN172-79-08-22-020	VOLUME 1	STATE IMPLEMENTATION PLANS/REVISED SCHEDULES FOR SUBMITTING RACT REGULATIONS FOR STATIONARY SOURCES OF VOLATILE ORGANIC COMPOUNDS(VOC)
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PN172-80-09-03-030	VOLUME 1	MISCELLANEOUS METAL PARTS AND PRODUCTS CTG - EMISSION LIMITS FOR COATING OF SHIPPING PAILS AND DRUMS
PN172-80-11-20-032	VOLUME 1	COMPLIANCE WITH VOC EMISSION LIMITATIONS FOR CAN COATING OPERATIONS
PN172-80-12-01-033	VOLUME 1	REVISED SEASONAL AFTERBURNER POLICY
PN172-80-12-02-034	VOLUME 1	COST EFFECTIVENESS FOR RACT APPLICATION TO LEAKS FROM PETROLEUM REFINERY EQUIPMENT
PN172-80-12-02-035	VOLUME 1	RACT FOR SPECIALTY PRINTING OPERATIONS
PN172-81-02-06-036	VOLUME 1	STORAGE TANK VAPOR BALANCE REQUIREMENTS AT SYNTHESIZED PHARMACEUTICAL PRODUCTS MANUFACTURE FACILITIES
PN172-81-05-21-038	VOLUME 1	1982 OZONE AND CARBON MONOXIDE SIP GUIDANCE INDEX
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
PN172-82-10-29-041	VOLUME 1	QUESTIONS AND ANSWERS ON 1982 OZONE AND CO SIPS
PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
PN172-86-09-29-058	VOLUME 2	SEASONAL VOC CONTROLS
PN172-87-09-11-059	VOLUME 2	GEOGRAPHIC APPLICABILITY OF CLEAN AIR ACT SANCTIONS
PN172-87-12-10-060	VOLUME 2	LETTER TO LEONARD LEDBETTER ON USE OF POTENTIAL VS ACTUAL EMISSIONS FOR VOC REGULATIONS
PN172-88-06-21-062	VOLUME 2	TRANSMITTAL OF AUTOMOBILE TOPCOAT PROTOCOL
PN172-88-09-07-064	VOLUME 2	AIR PROGRAMS APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D AND SECTION 110 OF THE CLEAN AIR ACT (FR CITATION)
PN172-88-12-01-066	VOLUME 2	RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
PN172-89-01-27-069	VOLUME 2	TRANSMITTAL OF QUESTIONS AND ANSWERS ON EMISSION INVENTORIES FOR POST-1987 OZONE AND CARBON MONOXIDE STATE IMPLEMENTATION PLAN CALL AREAS
PN172-90-02-28-078	VOLUME 2	LOWEST ACHIEVABLE EMISSION LIMITS (LAER) FOR OZONE NONATTAINMENT AREAS
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PN110-87-08-11-085	VOLUME 2	PROCESSING OF PARTICULATE MATTER STATE IMPLEMENTATION PLAN REVISIONS
PN110-87-05-11-088	VOLUME 2	GUIDANCE ON ACCOUNTING FOR TRENDS IN PARTICULATE MATTER EMISSION AND AIR QUALITY DATA
PN110-87-08-11-090	VOLUME 2	DEVELOPMENT PLAN FOR PM10 STATE IMPLEMENTATION PLANS (SIP's)
PN110-87-10-02-091	VOLUME 2	CLARIFICATION OF IMPLEMENTATION POLICIES FOR PM10 NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)
PN110-88-09-06-097	VOLUME 2	PM10 SIP DEVELOPMENT: STATUS AND CONCERNS
PN110-88-11-04-098	VOLUME 2	GUIDANCE ON LONG-TERM NONATTAINMENT OF THE PM10 STANDARDS
PN110-88-11-21-099	VOLUME 2	REVISION TO POLICY ON THE USE OF PM10 MEASUREMENT DATA
PN110-89-06-30-103	VOLUME 2	RESPONSE TO PM10 CONTROL STRATEGY ISSUES
PN110-89-08-14-104	VOLUME 2	REVIEW OF PM-10 IMPLEMENTATION POLICY
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PN110-90-07-05-106	VOLUME 2	PM-10 SIP DEMONSTRATIONS FOR SMALL ISOLATED AREAS WITH SPATIALLY UNIFORM EMISSIONS
PN113-80-03-11-006	VOLUME 1	INTERIM PARTICULATE CONTROLS
PN113-83-04-12-019	VOLUME 1	LETTER TO ROBERT R. WAHLER FROM KATHLEEN BENNETT RE ENFORCEMENT POLICY ON INTERIM PARTICULATE CONTROLS
PN113-85-06-28-024	VOLUME 1	PARTICULATE MATTER INTERIM ENFORCEMENT POLICY
PN123-86-02-11-011	VOLUME 2	PRIORITY FOR REVIEW OF PARTICULATE MATTER SOURCES FOR COMPLIANCE WITH REVISED STACK HEIGHT REGULATIONS
PN165-87-08-05-028	VOLUME 2	IMPLEMENTATION OF REVISED PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PROGRAM FOR PARTICULATE MATTER
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PN111E-76-05-03-001	VOLUME 1	ENFORCEMENT OF NSPS REQUIREMENTS
PN111E-82-05-07-002	VOLUME 1	RESTATEMENT OF GUIDANCE ON EMISSIONS ASSOCIATED WITH SOOT BLOWING
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PN167-88-07-15-003	VOLUME 2	PROCEDURES FOR EPA TO ADDRESS DEFICIENT NEW SOURCE PERMITS UNDER THE CLEAN AIR ACT
PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
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PN172-80-12-02-034	VOLUME 1	COST EFFECTIVENESS FOR RACT APPLICATION TO LEAKS FROM PETROLEUM REFINERY EQUIPMENT

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\*\* VOLATILE HAZARDOUS AIR POLLUTANTS

PN113-88-03-02-045

VOLUME 2

REVISIONS TO VOLATILE HAZARDOUS AIR POLLUTANT (VHAP) CIVIL PENALTY POLICY

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PN113-86-08-07-032	VOLUME 2	POLICY ON THE AVAILABILITY OF LOW-SOLVENT TECHNOLOGY SCHEDULES IN CLEAN AIR ACT ENFORCEMENT ACTIONS
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PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN113-82-08-12-014	VOLUME 1	GUIDANCE CONCERNING EPA'S USE OF CONTINUOUS EMISSION MONITORING DATA
PN113-84-10-05-021	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF EXCESS EMISSION REPORTS
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PN113-83-01-12-018	VOLUME 1	GUIDANCE ON IMPLEMENTATION OF THE 1982 DEADLINE ENFORCEMENT POLICY ISSUED SEPTEMBER 20, 1982
PN113-83-04-26-020	VOLUME 1	PROCEDURES FOR REVIEW AND FEDERAL REGISTER PUBLICATION OF DELAYED COMPLIANCE ORDERS UNDER SECTION 113(D) OF THE CLEAN AIR ACT
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PN113-86-08-22-033	VOLUME 2	SAMPLE FEDERAL REGISTER LANGUAGE FOR PROPOSAL AND FINAL DCO'S
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PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
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PN110-80-07-31-039	VOLUME 1	APPLICABILITY OF VOC CONTROL TECHNIQUE GUIDELINES (CTGS) TO THE AUTOMOBILE MANUFACTURING INDUSTRY
PN110-80-08-08-041	VOLUME 1	THE BUBBLE POLICY AND STATE IMPLEMENTATION PLANS UNDER CLEAN AIR ACT SECTION 111D
PN110-82-11-24-061	VOLUME 1	SIP ACTIONS AND TOXIC POLLUTANTS
PN110-85-01-02-070	VOLUME 1	REGIONAL IMPLEMENTATION OF MODELING GUIDANCE
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PN113-86-01-17-027	VOLUME 2	ISSUES #3(E) AND #5 OF THE VOC ISSUE RESOLUTION PROCESS: ESTABLISHING PROOF OF VOC EMISSIONS VIOLATIONS, AND BUBBLES IN CONSENT DECREES RESOLVING CIVIL ACTIONS UNDER SECTION 113(b) OF THE CLEAN AIR ACT
PN165-84-01-20-013	VOLUME 1	PSD INCREMENT CONSUMPTION CALCULATIONS
PN172-84-01-20-045	VOLUME 1	AVERAGING TIMES FOR COMPLIANCE WITH VOC EMISSION LIMITS - SIP REVISION POLICY
PN172-89-04-07-073	VOLUME 2	BASELINE FOR CROSS-LINE AVERAGING
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PN113-84-10-05-021	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF EXCESS EMISSION REPORTS
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PN112-84-07-11-005	VOLUME 1	VINYL CHLORIDE NESHAP ENFORCEMENT STRATEGY
PN112-85-02-08-006	VOLUME 1	REVISIONS TO ASBESTOS DEMOLITION AND RENOVATION CIVIL PENALTY POLICY

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PN113-85-04-24-023	VOLUME 1	ACHIEVING VOC COMPLIANCE FROM DEPARTMENT OF DEFENSE CONTRACTOR FACILITIES
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PN113-87-07-06-038	VOLUME 2	SMALL VOC SOURCE COMPLIANCE STRATEGY - FINAL
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PN113-87-12-31-043	VOLUME 2	GUIDANCE ON EVALUATING CLEAN AIR ACT ENFORCEMENT OF STATE IMPLEMENTATION PLAN VIOLATIONS INVOLVING PROPOSED STATE REVISIONS
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PN113-88-03-31-049	VOLUME 2	IMPLEMENTATION OF RULE EFFECTIVENESS STUDIES
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PN167-83-12-14-001	VOLUME 1	GUIDANCE ON ENFORCEMENT OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS UNDER THE CLEAN AIR ACT
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PN123-85-10-28-009	VOLUME 1	IMPLEMENTATION OF STACK HEIGHT REGULATIONS - PRESUMPTIVE NSPS EMISSION LIMIT FOR FLUID MODELING STACKS ABOVE FORMULA GEP HEIGHT
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PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
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PN110-82-08-11-060	VOLUME 1	REVIEW OF 1982 OZONE AND CO SIPS
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PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN165-87-12-01-022	VOLUME 2	IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
PN165-88-04-25-030	VOLUME 2	LAER EMISSION LIMITS FOR AUTOMOBILE AND LIGHT-DUTY TRUCK TOPCOAT OPERATIONS
PN165-88-08-29-034	VOLUME 2	TRANSFER OF TECHNOLOGY IN DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
PN165-89-02-28-038	VOLUME 2	GUIDANCE ON DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
PN165-89-02-24-046	VOLUME 2	CUT-OFF DATE FOR DETERMINING LAER IN MAJOR NEW SOURCE PERMITTING
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PN113-86-08-07-032	VOLUME 2	POLICY ON THE AVAILABILITY OF LOW-SOLVENT TECHNOLOGY SCHEDULES IN CLEAN AIR ACT ENFORCEMENT ACTIONS
PN172-80-11-20-032	VOLUME 1	COMPLIANCE WITH VOC EMISSION LIMITATIONS FOR CAN COATING OPERATIONS
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PN172-89-02-15-070	VOLUME 2	MARINE VESSEL VAPOR CONTROL
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PN172-80-09-03-030	VOLUME 1	MISCELLANEOUS METAL PARTS AND PRODUCTS CTG - EMISSION LIMITS FOR COATING OF SHIPPING PAILS AND DRUMS
PN172-89-04-03-072	VOLUME 2	APPLICABILITY OF MISCELLANEOUS METAL PARTS AND PRODUCTS COATINGS REGULATIONS TO ADHESIVES, SEALANTS AND FILLERS
PN172-89-04-07-073	VOLUME 2	BASELINE FOR CROSS-LINE AVERAGING
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PN172-78-08-24-006	VOLUME 1	CLARIFICATION OF EPA POLICY ON EMISSIONS FOR METHYL CHLOROFORM
PN172-79-05-25-017	VOLUME 1	CLARIFICATION OF AGENCY POLICY CONCERNING OZONE SIP REVISIONS AND SOLVENT REACTIVITIES
<b>** METHYLENE CHLORIDE</b>		
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PN165-86-10-21-025	VOLUME 2	APPLICABILITY OF PSD TO PORTIONS OF A PLANT CONSTRUCTED IN PHASES WITHOUT PERMITS

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PN165-89-04-10-041	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY TO SULFUR DIOXIDE (SO2) EMISSIONS FROM INCINERATION OF TOTAL REDUCED SULFUR (TRS) COMPOUNDS
<b>** MUNICIPAL WASTE INCINERATION</b>		
PN165-87-04-22-019	VOLUME 2	HUNTSVILLE INCINERATOR - DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
PN165-87-06-26-020	VOLUME 2	OPERATIONAL GUIDANCE ON CONTROL TECHNOLOGY FOR NEW AND MODIFIED MUNICIPAL WASTE COMBUSTORS (MWCs)
PN165-88-06-07-031	VOLUME 2	RESPONSE TO REQUEST FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY DETERMINATION
<b>** MUNICIPAL WASTEWATER TREATMENT WORKS</b>		
PN172-80-08-11-043	VOLUME 1	MUNICIPAL WASTEWATER TREATMENT WORKS: CONSTRUCTION GRANTS LIMITATION PROVIDED BY SECTION 316 OF THE CLEAN AIR ACT: POLICY AND PROCEDURES (FR CITATION)
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PN112-78-03-30-001	VOLUME 1	STATE ENFORCEMENT OF ASBESTOS DEMOLITION REGULATIONS IN LIGHT OF ADAMO WRECKING COMPANY V. UNITED STATES
PN112-82-03-24-002	VOLUME 1	DELEGATION OF AUTHORITY TO STATES: NESHAPS
PN112-84-06-01-004	VOLUME 1	BENZENE NESHAP GUIDANCE
PN112-84-07-11-005	VOLUME 1	VINYL CHLORIDE NESHAP ENFORCEMENT STRATEGY
PN112-85-02-08-006	VOLUME 1	REVISIONS TO ASBESTOS DEMOLITION AND RENOVATION CIVIL PENALTY POLICY
PN112-86-10-01-009	VOLUME 2	GUIDELINE S-26 - ENFORCEMENT OF THE ARSENIC NESHAP FOR GLASS MANUFACTURING PLANTS
PN112-88-03-31-010	VOLUME 2	REVISED ASBESTOS NESHAP STRATEGY
PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
PN113-86-04-11-028	VOLUME 2	TIMELY AND APPROPRIATE ENFORCEMENT RESPONSE GUIDANCE
PN114-81-05-13-002	VOLUME 1	REGIONAL OFFICE CRITERIA FOR NEUTRAL INSPECTIONS OF STATIONARY SOURCES - AMENDED GUIDANCE
PN114-84-09-06-004	VOLUME 1	FINAL GUIDANCE ON USE OF UNANNOUNCED INSPECTIONS
PN120-80-09-12-001	VOLUME 1	PRIORITIES FOR ISSUING NOTICES OF NONCOMPLIANCE
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PN123-85-10-10-007	VOLUME 1	QUESTIONS AND ANSWERS ON IMPLEMENTING THE REVISED STACK HEIGHT REGULATION
PN123-88-05-17-016	VOLUME 2	APPLICATION OF THE INTERIM POLICY FOR STACK HEIGHT REGULATORY ACTIONS
PN165-80-12-16-007	VOLUME 1	INTERPRETATION OF "SIGNIFICANT CONTRIBUTION"
PN165-84-01-09-012	VOLUME 1	INTERPRETATION OF THE POLICY ON COMPLIANCE WITH THE PROVISIONS OF PART D
PN165-84-06-11-014	VOLUME 1	APPLICABILITY OF PSD INCREMENTS TO BUILDING ROOFTOPS

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PN165-87-02-27-017	VOLUME 2	PLANTWIDE DEFINITION OF MAJOR STATIONARY SOURCES OF AIR POLLUTION
PN165-87-04-08-018	VOLUME 2	CLARIFICATION OF NEW SOURCE REVIEW POLICY ON AVERAGING TIMES FOR PRODUCTION LIMITATIONS
PN165-87-04-22-019	VOLUME 2	HUNTSVILLE INCINERATOR - DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
PN165-87-06-26-020	VOLUME 2	OPERATIONAL GUIDANCE ON CONTROL TECHNOLOGY FOR NEW AND MODIFIED MUNICIPAL WASTE COMBUSTORS (MWCs)
PN165-87-12-01-022	VOLUME 2	IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
PN165-85-06-28-023	VOLUME 1	MEMO TO WILLIAM S. BAKER ON SEASONAL AFTERBURNER POLICY
PN165-87-10-06-029	VOLUME 2	EMISSIONS FROM LANDFILLS
PN165-88-07-05-032	VOLUME 2	AIR QUALITY ANALYSIS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-89-06-13-043	VOLUME 2	TRANSMITTAL OF BACKGROUND STATEMENT ON "TOP-DOWN" BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
PN165-89-02-24-046	VOLUME 2	CUT-OFF DATE FOR DETERMINING LAER IN MAJOR NEW SOURCE PERMITTING
PN167-88-07-15-003	VOLUME 2	PROCEDURES FOR EPA TO ADDRESS DEFICIENT NEW SOURCE PERMITS UNDER THE CLEAN AIR ACT
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PN113-84-12-20-022	VOLUME 1	POLICY ON NO-ACTION ASSURANCES
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PN165-89-02-15-037	VOLUME 2	GUIDANCE ON EARLY DELEGATION OF AUTHORITY FOR THE NITROGEN DIOXIDE (NO2) INCREMENTS PROGRAM
PN165-89-08-24-044	VOLUME 2	GUIDANCE ON IMPLEMENTING THE NITROGEN DIOXIDE (NO2) PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENTS
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PN107-82-09-16-007	VOLUME 1	MILWAUKEE SO2 NONATTAINMENT DESIGNATION
PN107-83-04-21-008	VOLUME 1	SECTION 107 DESIGNATION POLICY SUMMARY
PN110-78-02-24-002	VOLUME 1	CRITERIA FOR APPROVAL OF 1979 SIP REVISIONS
PN110-79-04-04-015	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF STATE IMPLEMENTATION PLAN REVISIONS FOR NONATTAINMENT AREAS (44 FR 20372)
PN110-79-07-02-017	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - SUPPLEMENT (ON PUBLIC COMMENT AND CONDITIONAL APPROVAL) (44 FR 38583)
PN110-79-09-17-020	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - (SUPPLEMENT ON CONTROL TECHNIQUES GUIDELINES) (44 FR 53761)
PN110-80-10-23-044	VOLUME 1	GROWTH RESTRICTIONS IN SECONDARY NAAQS NONATTAINMENT AREAS
PN110-88-11-04-098	VOLUME 2	GUIDANCE ON LONG-TERM NONATTAINMENT OF THE PM10 STANDARDS

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PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
PN113-87-11-23-042	VOLUME 2	SETTLING ENFORCEMENT ACTIONS IN CLEAN AIR ACT NONATTAINMENT AREAS AGAINST STATIONARY SOURCES WHICH WILL NOT BE IN COMPLIANCE BY THE APPLICABLE ATTAINMENT DATE
PN113-88-03-31-049	VOLUME 2	IMPLEMENTATION OF RULE EFFECTIVENESS STUDIES
PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-84-06-25-046	VOLUME 1	APPLICABILITY OF GROUP III CONTROL TECHNIQUES GUIDELINES (CTG'S)
PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
PN172-84-09-14-048	VOLUME 1	VOLATILE ORGANIC COMPOUND (VOC) TEST METHODS OR PROCEDURES FOR SOURCE CATEGORIES IN GROUPS I, II, AND III CONTROL TECHNIQUES GUIDELINES (CTGS)
PN172-84-12-21-049	VOLUME 1	CONNECTICUT VOLATILE ORGANIC COMPOUND (VOC) ISSUES
PN172-85-07-02-051	VOLUME 1	RESIDUAL VOLATILE ORGANIC COMPOUND (VOC) CONTAINED IN COATING LINE PRODUCTS
PN172-86-10-30-053	VOLUME 2	INCLUSION OF CLEAN-UP SOLVENTS IN-DETERMINING APPLICABILITY TO THE 100-TON PER YEAR NON-CTG REQUIREMENTS
PN172-87-06-25-054	VOLUME 2	EMISSION CUT-OFF FOR CONTROL TECHNIQUES GUIDELINES VOLATILE ORGANIC COMPOUND SOURCES
PN172-87-09-11-059	VOLUME 2	GEOGRAPHIC APPLICABILITY OF CLEAN AIR ACT SANCTIONS
PN172-87-12-10-060	VOLUME 2	LETTER TO LEONARD LEDBETTER ON USE OF POTENTIAL VS ACTUAL EMISSIONS FOR VOC REGULATIONS
PN172-88-05-27-061	VOLUME 2	TRANSMITTAL OF EPA GUIDANCE ON VOC ISSUES
PN172-88-09-07-064	VOLUME 2	AIR PROGRAMS APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D AND SECTION 110 OF THE CLEAN AIR ACT (FR CITATION)
PN172-88-12-01-066	VOLUME 2	RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
PN175-80-06-12-008	VOLUME 1	PROCEDURES FOR CONFORMANCE OF TRANSPORTATION PLANS, PROGRAMS AND PROJECTS WITH CLEAN AIR ACT STATE IMPLEMENTATION PLANS
PN175-80-06-23-009	VOLUME 1	PUBLIC PARTICIPATION IN THE STATE IMPLEMENTATION PLAN - TRANSPORTATION REVISION PROCESS: EXPANDED GUIDELINES (FR CITATION)
PN176-79-06-08-001	VOLUME 1	IMPACT OF CLEAN AIR ACT NONATTAINMENT SANCTIONS
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PN120-81-02-12-003	VOLUME 1	IMPLEMENTATION OF NONCOMPLIANCE PENALTY PROGRAM UNDER SECTION 120 OF THE CLEAN AIR ACT
PN120-81-04-02-004	VOLUME 1	SETTLEMENT OF NONCOMPLIANCE PENALTY ASSESSMENTS UNDER SECTION 120 OF THE CLEAN AIR ACT, AS AMENDED
PN120-81-04-30-005	VOLUME 1	ISSUANCES OF NOTICES OF NONCOMPLIANCE UNDER SECTION 120 OF THE CLEAN AIR ACT TO SEASONAL SOURCES
PN120-85-03-19-006	VOLUME 1	PERMISSIBLE GROUNDS FOR SETTLEMENT OF NONCOMPLIANCE PENALTIES UNDER SECTION 120 OF THE CLEAN AIR ACT
PN120-85-03-19-007	VOLUME 1	GUIDANCE CONCERNING IMPLEMENTATION OF SECTION 120 OF THE CLEAN AIR ACT IN FISCAL YEAR 1985

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PN113-76-06-25-002	VOLUME 1	DOCUMENTATION OF VIOLATION EXTENDING 30 DAYS BEYOND NOTICE OF VIOLATION UNDER SECTION 113 OF THE CLEAN AIR ACT
PN113-83-01-12-018	VOLUME 1	GUIDANCE ON IMPLEMENTATION OF THE 1982 DEADLINE ENFORCEMENT POLICY ISSUED SEPTEMBER 20, 1982
<b>** NSPS</b>		
PN110-80-05-09-034A	VOLUME 1	CLARIFICATION OF REQUIREMENTS FOR INCLUSION OF CONTINUOUS EMISSION MONITORING PROVISIONS IN STATE IMPLEMENTATION PLANS
PN111E-76-05-03-001	VOLUME 1	ENFORCEMENT OF NSPS REQUIREMENTS
PN111E-82-05-07-002	VOLUME 1	RESTATEMENT OF GUIDANCE ON EMISSIONS ASSOCIATED WITH SOOT BLOWING
PN111E-86-09-11-004	VOLUME 2	DELEGATION OF NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AUTHORITY TO STATE/LOCAL AGENCIES
PN113-82-08-12-014	VOLUME 1	GUIDANCE CONCERNING EPA'S USE OF CONTINUOUS EMISSION MONITORING DATA
PN113-84-10-05-021	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF EXCESS EMISSION REPORTS
PN113-85-10-30-025	VOLUME 1	FINAL TECHNICAL GUIDANCE ON THE REVIEW AND USE OF COAL SAMPLING AND ANALYSIS DATA
PN113-85-11-27-026	VOLUME 1	REVISED ENFORCEMENT POLICY RESPECTING SOURCES COMPLYING WITH CLEAN AIR ACT REQUIREMENTS BY SHUTDOWN
PN114-81-05-13-002	VOLUME 1	REGIONAL OFFICE CRITERIA FOR NEUTRAL INSPECTIONS OF STATIONARY SOURCES - AMENDED GUIDANCE
PN120-80-09-12-001	VOLUME 1	PRIORITIES FOR ISSUING NOTICES OF NONCOMPLIANCE
PN123-85-10-28-009	VOLUME 1	IMPLEMENTATION OF STACK HEIGHT REGULATIONS - PRESUMPTIVE NSPS EMISSION LIMIT FOR FLUID MODELING STACKS ABOVE FORMULA GEP HEIGHT
PN165-86-07-07-024	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) DEFINITION OF "MODIFICATION"
PN165-88-09-09-035	VOLUME 2	APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NEW SOURCE PERFORMANCE STANDARDS (NSPS) TO THE WISCONSIN ELECTRIC POWER COMPANY (WEPKO) PORT WASHINGTON LIFE EXTENSION PROJECT
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PN165-89-02-15-042	VOLUME 2	LETTER TO JOHN BOSTON FROM DON CLAY ON WEPKO DETERMINATION
PN172-78-08-24-006	VOLUME 1	CLARIFICATION OF EPA POLICY ON EMISSIONS FOR METHYL CHLOROFORM
<b>** OPERATING PERMITS</b>		
PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
<b>** ORGANISOLS</b>		
PN172-85-04-25-050	VOLUME 1	CONSIDERATION OF ORGANISOLS IN VOLATILE ORGANIC COMPOUNDS (VOC) COMPLIANCE CALCULATIONS
<b>** OZONE/CO CONTROL</b>		
PN107-85-04-08-009	VOLUME 1	LETTER TO JUDGE TERRY ROBERTS FROM GERALD A. EMISON
PN107-85-10-08-010	VOLUME 1	OZONE AIR QUALITY DATA FOR REDESIGNATIONS
PN107-86-04-11-012	VOLUME 2	REQUIRED MONITORING PERIOD FOR OZONE REDESIGNATION IN UNCLASSIFIED AREAS

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PN110-79-09-17-020	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - (SUPPLEMENT ON CONTROL TECHNIQUES GUIDELINES) (44 FR 53761)
PN110-82-08-11-060	VOLUME 1	REVIEW OF 1982 OZONE AND CO SIPs
PN110-83-05-27-064	VOLUME 1	SUMMARY OF NAAQS INTERPRETATION
PN110-80-07-22-067	VOLUME 1	(CITATION OF FR NOTICE ON SOLVENT REACTIVITIES)
PN110-85-08-27-071	VOLUME 1	CLASSIFICATION OF BENZENE AS A VOC
PN110-86-08-07-076	VOLUME 2	POLICY ON SIP REVISIONS REQUESTING COMPLIANCE DATE EXTENSIONS FOR VOC SOURCES
PN110-87-01-08-079	VOLUME 2	CLARIFICATION OF SEASONAL VOC CONTROL POLICY
PN110-87-04-17-081	VOLUME 2	DEFINITION OF VOC
PN113-87-07-06-038	VOLUME 2	SMALL VOC SOURCE COMPLIANCE STRATEGY - FINAL
PN113-87-09-11-040	VOLUME 2	REPORTING REQUIREMENTS AND SUPPLEMENTAL GUIDANCE: SMALL VOC SOURCE COMPLIANCE STRATEGY
PN113-88-03-31-049	VOLUME 2	IMPLEMENTATION OF RULE EFFECTIVENESS STUDIES
PN172-78-03-10-002	VOLUME 1	EXAMPLE DEMONSTRATION OF ATTAINMENT FOR PHOTOCHEMICAL OXIDANTS
PN172-78-08-04-004	VOLUME 1	REQUIREMENT FOR VOC RACT REGULATIONS IN ALL OXIDANT NONATTAINMENT AREAS
PN172-78-10-26-009	VOLUME 1	OZONE TRANSPORT VALUES FOR SIP REVISIONS
PN172-79-03-06-014	VOLUME 1	CUTBACK ASPHALT VOC REGULATIONS
PN172-79-05-25-017	VOLUME 1	CLARIFICATION OF AGENCY POLICY CONCERNING OZONE SIP REVISIONS AND SOLVENT REACTIVITIES
PN172-79-06-20-018	VOLUME 1	MODIFICATIONS TO RECOMMENDATIONS FOR SOLVENT METAL CLEANING
PN172-79-08-22-020	VOLUME 1	STATE IMPLEMENTATION PLANS/REVISED SCHEDULES FOR SUBMITTING RACT REGULATIONS FOR STATIONARY SOURCES OF VOLATILE ORGANIC COMPOUNDS(VOC)
PN172-79-12-12-023	VOLUME 1	EXEMPTIONS FOR DEGREASERS
PN172-80-07-02-029	VOLUME 1	EXEMPTION FOR COLD CLEANER DEGREASERS
PN172-80-09-03-030	VOLUME 1	MISCELLANEOUS METAL PARTS AND PRODUCTS CTG - EMISSION LIMITS FOR COATING OF SHIPPING PAILS AND DRUMS
PN172-80-11-20-032	VOLUME 1	COMPLIANCE WITH VOC EMISSION LIMITATIONS FOR CAN COATING OPERATIONS
PN172-80-12-01-033	VOLUME 1	REVISED SEASONAL AFTERBURNER POLICY
PN172-80-12-02-034	VOLUME 1	COST EFFECTIVENESS FOR RACT APPLICATION TO LEAKS FROM PETROLEUM REFINERY EQUIPMENT
PN172-80-12-02-035	VOLUME 1	RACT FOR SPECIALTY PRINTING OPERATIONS
PN172-81-02-06-036	VOLUME 1	STORAGE TANK VAPOR BALANCE REQUIREMENTS AT SYNTHESIZED PHARMACEUTICAL PRODUCTS MANUFACTURE FACILITIES
PN172-81-05-21-038	VOLUME 1	1982 OZONE AND CARBON MONOXIDE SIP GUIDANCE INDEX
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
PN172-82-10-29-041	VOLUME 1	QUESTIONS AND ANSWERS ON 1982 OZONE AND CO SIPs
PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-84-06-25-047	VOLUME 1	CONFIRMATION OF DEFINITION OF "100 TON-PER-YEAR (100 TPY) SOURCE"
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
PN172-86-09-29-058	VOLUME 2	SEASONAL VOC CONTROLS

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PN172-87-12-10-060	VOLUME 2	LETTER TO LEONARD LEDBETTER ON USE OF POTENTIAL VS ACTUAL EMISSIONS FOR VOC REGULATIONS
PN172-88-06-21-062	VOLUME 2	TRANSMITTAL OF AUTOMOBILE TOPCOAT PROTOCOL
PN172-88-09-07-064	VOLUME 2	AIR PROGRAMS APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D AND SECTION 110 OF THE CLEAN AIR ACT (FR CITATION)
PN172-88-12-01-066	VOLUME 2	RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
PN172-89-01-27-069	VOLUME 2	TRANSMITTAL OF QUESTIONS AND ANSWERS ON EMISSION INVENTORIES FOR POST-1987 OZONE AND CARBON MONOXIDE STATE IMPLEMENTATION PLAN CALL AREAS
<b>** PAPER COATING</b>		
PN110-80-08-04-040	VOLUME 1	APPLICABILITY OF PAPER COATING, FABRIC COATING, AND GRAPHIC ARTS CTGS
PN172-80-12-02-035	VOLUME 1	RACT FOR SPECIALTY PRINTING OPERATIONS
<b>** PARTICULATE MATTER CONTROLS</b>		
PN110-80-03-10-030	VOLUME 1	EMISSION OFFSET REQUIREMENTS IN SECONDARY STANDARD TOTAL SUSPENDED PARTICULATE PLANS
PN110-87-08-11-085	VOLUME 2	PROCESSING OF PARTICULATE MATTER STATE IMPLEMENTATION PLAN REVISIONS
PN110-87-05-11-088	VOLUME 2	GUIDANCE ON ACCOUNTING FOR TRENDS IN PARTICULATE MATTER EMISSION AND AIR QUALITY DATA
PN110-87-08-11-090	VOLUME 2	DEVELOPMENT PLAN FOR PM10 STATE IMPLEMENTATION PLANS (SIP's)
PN110-87-10-02-091	VOLUME 2	CLARIFICATION OF IMPLEMENTATION POLICIES FOR PM10 NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)
PN110-88-09-06-097	VOLUME 2	PM10 SIP DEVELOPMENT: STATUS AND CONCERNS
PN110-88-11-04-098	VOLUME 2	GUIDANCE ON LONG-TERM NONATTAINMENT OF THE PM10 STANDARDS
PN110-88-11-21-099	VOLUME 2	REVISION TO POLICY ON THE USE OF PM10 MEASUREMENT DATA
PN110-89-06-30-103	VOLUME 2	RESPONSE TO PM10 CONTROL STRATEGY ISSUES
PN110-89-08-14-104	VOLUME 2	REVIEW OF PM-10 IMPLEMENTATION POLICY
PN113-80-03-11-006	VOLUME 1	INTERIM PARTICULATE CONTROLS
PN113-83-04-12-019	VOLUME 1	LETTER TO ROBERT R. WAHLER FROM KATHLEEN BENNETT RE ENFORCEMENT POLICY ON INTERIM PARTICULATE CONTROLS
PN113-85-06-28-024	VOLUME 1	PARTICULATE MATTER INTERIM ENFORCEMENT POLICY
PN123-86-02-11-011	VOLUME 2	PRIORITY FOR REVIEW OF PARTICULATE MATTER SOURCES FOR COMPLIANCE WITH REVISED STACK HEIGHT REGULATIONS
PN165-87-08-05-028	VOLUME 2	IMPLEMENTATION OF REVISED PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PROGRAM FOR PARTICULATE MATTER
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PN111E-76-05-03-001	VOLUME 1	ENFORCEMENT OF NSPS REQUIREMENTS
PN111E-82-05-07-002	VOLUME 1	RESTATEMENT OF GUIDANCE ON EMISSIONS ASSOCIATED WITH SOOT BLOWING
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PN167-88-03-29-002	VOLUME 2	OPINION IN U.S. V. LOUISIANA-PACIFIC CORPORATION
PN167-88-07-15-003	VOLUME 2	PROCEDURES FOR EPA TO ADDRESS DEFICIENT NEW SOURCE PERMITS UNDER THE CLEAN AIR ACT

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<b>** PETROLEUM REFINERY LEAKS</b>		
PN172-80-12-02-034	VOLUME 1	COST EFFECTIVENESS FOR RACT APPLICATION TO LEAKS FROM PETROLEUM REFINERY EQUIPMENT
<b>** PHARMACEUTICALS</b>		
PN172-81-02-06-036	VOLUME 1	STORAGE TANK VAPOR BALANCE REQUIREMENTS AT SYNTHESIZED PHARMACEUTICAL PRODUCTS MANUFACTURE FACILITIES
<b>** POLYETHYLENE</b>		
PN172-86-01-09-057	VOLUME 2	CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
<b>** POLYPROPYLENE</b>		
PN172-86-01-09-057	VOLUME 2	CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
<b>** POLYSTYRENE</b>		
PN172-86-01-09-057	VOLUME 2	CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
<b>** POWER PLANTS - COAL FIRED</b>		
PN111E-76-05-03-001	VOLUME 1	ENFORCEMENT OF NSPS REQUIREMENTS
PN111E-82-05-07-002	VOLUME 1	RESTATEMENT OF GUIDANCE ON EMISSIONS ASSOCIATED WITH SOOT BLOWING
PN113-80-03-11-006	VOLUME 1	INTERIM PARTICULATE CONTROLS
PN113-83-04-12-019	VOLUME 1	LETTER TO ROBERT R. WAHLER FROM KATHLEEN BENNETT RE ENFORCEMENT POLICY ON INTERIM PARTICULATE CONTROLS
PN165-78-12-22-001	VOLUME 1	BACT INFORMATION FOR COAL-FIRED POWER PLANTS
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PN165-87-04-08-018	VOLUME 2	CLARIFICATION OF NEW SOURCE REVIEW POLICY ON AVERAGING TIMES FOR PRODUCTION LIMITATIONS
<b>** PSD</b>		
PN110-87-09-21-086	VOLUME 2	AMBIENT AIR DEFINITION
PN113-87-05-27-036	VOLUME 2	REACTIVATION OF MORANDA LAKESHORE NINES' RLA PLANT AND PSD REVIEW
PN123-85-10-10-007	VOLUME 1	QUESTIONS AND ANSWERS ON IMPLEMENTING THE REVISED STACK HEIGHT REGULATION
PN123-88-05-17-016	VOLUME 2	APPLICATION OF THE INTERIM POLICY FOR STACK HEIGHT REGULATORY ACTIONS
PN165-81-04-03-006	VOLUME 1	LETTER TO NATIONAL PARK SERVICE FROM EDWARD F. TUERK REGARDING PSD PERMITS
PN165-80-12-16-007	VOLUME 1	INTERPRETATION OF "SIGNIFICANT CONTRIBUTION"
PN165-84-01-20-013	VOLUME 1	PSD INCREMENT CONSUMPTION CALCULATIONS
PN165-84-06-11-014	VOLUME 1	APPLICABILITY OF PSD INCREMENTS TO BUILDING ROOFTOPS
PN165-85-05-09-015	VOLUME 1	IMPROVED NEW SOURCE REVIEW/PREVENTION OF SIGNIFICANT DETERIORATION (NSR/PSD) PROGRAM TRANSFER
PN165-86-11-24-016	VOLUME 2	NEED FOR A SHORT-TERM BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS FOR THE PROPOSED WILLIAM A. ZIMMER POWER PLANT

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PN165-87-06-26-020	VOLUME 2	OPERATIONAL GUIDANCE ON CONTROL TECHNOLOGY FOR NEW AND MODIFIED MUNICIPAL WASTE COMBUSTORS(HWCs)
PN165-87-09-22-021	VOLUME 2	IMPLEMENTATION OF NORTH COUNTY RESOURCE RECOVERY PSD REMAND
PN165-87-12-01-022	VOLUME 2	IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
PN165-86-07-07-024	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) DEFINITION OF "MODIFICATION"
PN165-86-10-21-025	VOLUME 2	APPLICABILITY OF PSD TO PORTIONS OF A PLANT CONSTRUCTED IN PHASES WITHOUT PERMITS
PN165-86-12-01-026	VOLUME 2	NEED FOR EMISSION CAP ON COMPLEX NETTING SOURCES
PN165-87-01-29-027	VOLUME 2	IMPLEMENTATION OF THE REVISED MODELING GUIDELINE FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-87-08-05-028	VOLUME 2	IMPLEMENTATION OF REVISED PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PROGRAM FOR PARTICULATE MATTER
PN165-88-06-07-031	VOLUME 2	RESPONSE TO REQUEST FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY DETERMINATION
PN165-88-07-05-032	VOLUME 2	AIR QUALITY ANALYSIS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-88-07-28-033	VOLUME 2	SUPPLEMENTAL GUIDANCE IN IMPLEMENTING THE NORTH COUNTY PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REMAND
PN165-88-09-09-035	VOLUME 2	APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NEW SOURCE PERFORMANCE STANDARDS (NSPS) TO THE WISCONSIN ELECTRIC POWER COMPANY (WEPKO) PORT WASHINGTON LIFE EXTENSION PROJECT
PN165-88-10-14-036	VOLUME 2	LETTER TO JOHN BOSTON FROM LEE THOMAS ON WEPKO DETERMINATION
PN165-89-02-15-037	VOLUME 2	GUIDANCE ON EARLY DELEGATION OF AUTHORITY FOR THE NITROGEN DIOXIDE (NO2) INCREMENTS PROGRAM
PN165-89-03-16-039	VOLUME 2	USE OF ALLOWABLE EMISSIONS FOR NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) IMPACT ANALYSES UNDER THE REQUIREMENTS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
PN165-89-03-31-040	VOLUME 2	APPLICATION OF BUILDING DOWNWASH IN PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT ANALYSES
PN165-89-04-10-041	VOLUME 2	PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY TO SULFUR DIOXIDE (SO2) EMISSIONS FROM INCINERATION OF TOTAL REDUCED SULFUR (TRS) COMPOUNDS
PN165-89-02-15-042	VOLUME 2	LETTER TO JOHN BOSTON FROM DON CLAY ON WEPKO DETERMINATION
PN165-89-06-13-043	VOLUME 2	TRANSMITTAL OF BACKGROUND STATEMENT ON "TOP-DOWN" BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
PN165-89-08-24-044	VOLUME 2	GUIDANCE ON IMPLEMENTING THE NITROGEN DIOXIDE (NO2) PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENTS
PN165-89-09-18-045	VOLUME 2	REQUEST FOR CLARIFICATION OF POLICY REGARDING THE "NET EMISSIONS INCREASE"
PN167-83-12-14-001	VOLUME 1	GUIDANCE ON ENFORCEMENT OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS UNDER THE CLEAN AIR ACT
PN167-88-03-29-002	VOLUME 2	OPINION IN U.S. V. LOUISIANA-PACIFIC CORPORATION
PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
** PUBLIC COMMENT PN110-79-07-02-017	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - SUPPLEMENT (ON PUBLIC COMMENT AND CONDITIONAL APPROVAL) (44 FR 34521)

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PN110-82-08-11-060	VOLUME 1	REVIEW OF 1982 OZONE AND CO SIPS
PN110-87-01-20-080	VOLUME 2	DETERMINATION OF ECONOMIC FEASIBILITY
PN113-83-01-12-018	VOLUME 1	GUIDANCE ON IMPLEMENTATION OF THE 1982 DEADLINE ENFORCEMENT POLICY ISSUED SEPTEMBER 20, 1982
PN172-80-11-20-032	VOLUME 1	COMPLIANCE WITH VOC EMISSION LIMITATIONS FOR CAN COATING OPERATIONS
PN172-84-01-20-045	VOLUME 1	AVERAGING TIMES FOR COMPLIANCE WITH VOC EMISSION LIMITS - SIP REVISION POLICY
PN172-85-07-02-051	VOLUME 1	RESIDUAL VOLATILE ORGANIC COMPOUND (VOC) CONTAINED IN COATING LINE PRODUCTS
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
PN172-86-01-09-057	VOLUME 2	CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
PN172-88-06-21-062	VOLUME 2	TRANSMITTAL OF AUTOMOBILE TOPCOAT PROTOCOL
PN172-88-08-23-063	VOLUME 2	LETTER TO WILLIAM JURIS ON VOC EMISSION CUTOFF
PN172-88-11-04-065	VOLUME 2	EPA AUTHORITY TO REQUEST CHANGES IN RACT RULES
PN172-88-12-01-066	VOLUME 2	RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
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PN110-77-07-08-065	VOLUME 1	(CITATION OF FR NOTICE ENTITLED "RECOMMENDED POLICY ON CONTROL OF VOLATILE ORGANIC COMPOUNDS")
PN110-85-08-27-071	VOLUME 1	CLASSIFICATION OF BENZENE AS A VOC
PN110-87-04-17-081	VOLUME 2	DEFINITION OF VOC
PN110-87-07-21-089	VOLUME 2	DEFINITION OF VOLATILE ORGANIC COMPOUNDS (VOC's)
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PN165-85-05-09-015	VOLUME 1	IMPROVED NEW SOURCE REVIEW/PREVENTION OF SIGNIFICANT DETERIORATION (NSR/PSD) PROGRAM TRANSFER
PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
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PN107-86-04-11-012	VOLUME 2	REQUIRED MONITORING PERIOD FOR OZONE REDESIGNATION IN UNCLASSIFIED AREAS
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PN107-88-04-05-014	VOLUME 2	LETTER TO NANCY MALOLEY ON REDESIGNATION OF 2 INDIANA COUNTIES
PN110-83-05-27-064	VOLUME 1	SUMMARY OF NAAQS INTERPRETATION
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PN301-81-01-20-001	VOLUME 1	IMPLEMENTATION OF THE REGIONAL CONSISTENCY REGULATIONS
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PN110-88-06-17-094	VOLUME 2	DEMONSTRATION OF "REPRESENTATIVE EMISSION CONDITIONS" FOR USE IN "EXPECTED EXCEEDANCE" DETERMINATIONS
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PN172-84-06-25-046	VOLUME 1	APPLICABILITY OF GROUP III CONTROL TECHNIQUES GUIDELINES (CTG'S)
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PN172-80-08-11-043	VOLUME 1	MUNICIPAL WASTEWATER TREATMENT WORKS: CONSTRUCTION GRANTS LIMITATION PROVIDED BY SECTION 316 OF THE CLEAN AIR ACT: POLICY AND PROCEDURES (FR CITATION)
PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-87-09-11-059	VOLUME 2	GEOGRAPHIC APPLICABILITY OF CLEAN AIR ACT SANCTIONS
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PN165-85-06-28-023	VOLUME 1	MEMO TO WILLIAM S. BAKER ON SEASONAL AFTERBURNER POLICY
PN172-80-12-01-033	VOLUME 1	REVISED SEASONAL AFTERBURNER POLICY
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
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PN110-80-10-23-044	VOLUME 1	GROWTH RESTRICTIONS IN SECONDARY NAAQS NONATTAINMENT AREAS
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PN110-80-08-08-041	VOLUME 1	THE BUBBLE POLICY AND STATE IMPLEMENTATION PLANS UNDER CLEAN AIR ACT SECTION 111D
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PN113-86-04-11-028	VOLUME 2	TIMELY AND APPROPRIATE ENFORCEMENT RESPONSE GUIDANCE
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PN110-80-10-23-044	VOLUME 1	GROWTH RESTRICTIONS IN SECONDARY NAAQS NONATTAINMENT AREAS
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PN113-82-05-04-013	VOLUME 1	GUIDANCE ON POLICY FOR ENFORCEMENT OF VE VIOLATIONS AGAINST SOURCES WHICH ARE MEETING AN APPLICABLE MASS EMISSION STANDARD
PN113-82-08-12-014	VOLUME 1	GUIDANCE CONCERNING EPA'S USE OF CONTINUOUS EMISSION MONITORING DATA
PN113-84-12-20-022	VOLUME 1	POLICY ON NO-ACTION ASSURANCES
PN113-85-06-28-024	VOLUME 1	PARTICULATE MATTER INTERIM ENFORCEMENT POLICY
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PN120-80-09-12-001	VOLUME 1	PRIORITIES FOR ISSUING NOTICES OF NONCOMPLIANCE
PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
PN172-86-02-28-052	VOLUME 2	RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE
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PN110-78-02-24-002	VOLUME 1	CRITERIA FOR APPROVAL OF 1979 SIP REVISIONS
PN110-80-09-25-043	VOLUME 1	INCORPORATION BY REFERENCE OF SIP REVISIONS
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PN172-79-05-25-016	VOLUME 1	SUBMISSION OF STATE AIR PERMITS AS SIP REVISIONS
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PN110-86-08-07-076	VOLUME 2	POLICY ON SIP REVISIONS REQUESTING COMPLIANCE DATE EXTENSIONS FOR VOC SOURCES
PN113-87-09-23-041	VOLUME 2	REVIEW OF STATE IMPLEMENTATION PLANS AND REVISIONS FOR ENFORCEABILITY AND LEGAL SUFFICIENCY
PN113-87-12-31-043	VOLUME 2	GUIDANCE ON EVALUATING CLEAN AIR ACT ENFORCEMENT OF STATE IMPLEMENTATION PLAN VIOLATIONS INVOLVING PROPOSED STATE REVISIONS
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PN172-78-08-04-004	VOLUME 1	REQUIREMENT FOR VOC RACT REGULATIONS IN ALL OXIDANT NONATTAINMENT AREAS
PN172-79-01-16-012	VOLUME 1	CONTINUITY OF SIP REGULATIONS - REVISED ENCLOSURE
PN172-83-11-02-044	VOLUME 1	COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D OF THE CLEAN AIR ACT - FINAL (48 FR 50686)
PN172-84-01-20-045	VOLUME 1	AVERAGING TIMES FOR COMPLIANCE WITH VOC EMISSION LIMITS - SIP REVISION POLICY
PN172-87-09-09-055	VOLUME 2	ALTERNATIVE COMPLIANCE FOR GRAPHIC ARTS RACT
PN172-88-09-07-064	VOLUME 2	AIR PROGRAMS APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D AND SECTION 110 OF THE CLEAN AIR ACT (FR CITATION)
PN175-80-06-12-008	VOLUME 1	PROCEDURES FOR CONFORMANCE OF TRANSPORTATION PLANS, PROGRAMS AND PROJECTS WITH CLEAN AIR ACT STATE IMPLEMENTATION PLANS
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PN110-79-07-02-017	VOLUME 1	GENERAL PREAMBLE FOR PROPOSED RULEMAKING ON APPROVAL OF PLAN REVISIONS FOR NONATTAINMENT AREAS - SUPPLEMENT (ON PUBLIC COMMENT AND CONDITIONAL APPROVAL) (44 FR 38583)
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PN113-83-02-15-017	VOLUME 1	POLICY ON EXCESS EMISSIONS DURING STARTUP, SHUTDOWN, MAINTENANCE, AND MALFUNCTIONS
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PN123-88-05-17-016	VOLUME 2	APPLICATION OF THE INTERIM POLICY FOR STACK HEIGHT REGULATORY ACTIONS
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PN172-80-07-02-029	VOLUME 1	EXEMPTION FOR COLD CLEANER DEGREASERS
PN172-86-10-30-053	VOLUME 2	INCLUSION OF CLEAN-UP SOLVENTS IN DETERMINING APPLICABILITY TO THE 100-TON PER YEAR NON-CTG REQUIREMENTS
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PN123-85-10-10-007	VOLUME 1	QUESTIONS AND ANSWERS ON IMPLEMENTING THE REVISED STACK HEIGHT REGULATION
PN123-85-10-28-008	VOLUME 1	IMPLEMENTATION OF STACK HEIGHT REGULATIONS - EXCEPTIONS FROM RESTRICTIONS ON CREDIT FOR MERGED STACKS
PN123-85-10-28-009	VOLUME 1	IMPLEMENTATION OF STACK HEIGHT REGULATIONS - PRESUMPTIVE NSPS EMISSION LIMIT FOR FLUID MODELING STACKS ABOVE FORMULA GEP HEIGHT
PN123-85-10-28-010	VOLUME 1	DETERMINING STACK HEIGHTS "IN EXISTENCE" BEFORE DECEMBER 31, 1970
PN123-86-02-11-011	VOLUME 2	PRIORITY FOR REVIEW OF PARTICULATE MATTER SOURCES FOR COMPLIANCE WITH REVISED STACK HEIGHT REGULATIONS
PN123-86-02-11-012	VOLUME 2	CLARIFICATION OF EXISTING GUIDANCE ON DISPERSION MODELING REQUIREMENTS FOR PLANTS WITH "TALL STACKS" AND OTHER PROHIBITED DISPERSION TECHNIQUES
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PN123-88-01-07-015	VOLUME 2	STACK HEIGHT EMISSIONS BALANCING - FINAL POLICY STATEMENT (53 FR 480)
PN123-88-05-17-016	VOLUME 2	APPLICATION OF THE INTERIM POLICY FOR STACK HEIGHT REGULATORY ACTIONS
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PN112-85-06-xx-007	VOLUME 1	REPRINT OF THE EPA AIR TOXICS STRATEGY (REFERENCE ONLY)
PN112-89-06-15-011	VOLUME 2	CONTROL OF AIR EMISSIONS FROM SUPERFUND AIR STRIPPERS AT SUPERFUND GROUNDWATER SITES
PN165-87-09-22-021	VOLUME 2	IMPLEMENTATION OF NORTH COUNTY RESOURCE RECOVERY PSD REMAND
PN165-88-07-28-033	VOLUME 2	SUPPLEMENTAL GUIDANCE IN IMPLEMENTING THE NORTH COUNTY PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REMAND
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PN172-81-01-22-039	VOLUME 1	STATE IMPLEMENTATION PLANS-APPROVAL OF 1982 OZONE AND CARBON MONOXIDE PLAN REVISIONS FOR AREAS NEEDING AN ATTAINMENT DATE EXTENSION (46 FR 7182)
PN175-80-06-12-008	VOLUME 1	PROCEDURES FOR CONFORMANCE OF TRANSPORTATION PLANS, PROGRAMS AND PROJECTS WITH CLEAN AIR ACT STATE IMPLEMENTATION PLANS
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** VINYL COATINGS PN172-85-07-02-051	VOLUME 1	RESIDUAL VOLATILE ORGANIC COMPOUND (VOC) CONTAINED IN COATING LINE PRODUCTS
** VISIBILITY PROTECTION PN169A-85-03-25-001 PN169A-86-11-10-002	VOLUME 1 VOLUME 2	VISIBILITY MONITORING STRATEGY REQUIREMENTS VISIBILITY PROTECTION STATE IMPLEMENTATION PLANS (SIP'S)--VISIBILITY SIP'S PART II
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** VOC COMPLIANCE PN113-87-07-06-038 PN113-87-09-11-040 PN172-85-04-25-050 PN172-85-07-02-051 PN172-86-02-28-052 PN172-89-03-16-071	VOLUME 2 VOLUME 2 VOLUME 1 VOLUME 1 VOLUME 2 VOLUME 2	SMALL VOC SOURCE COMPLIANCE STRATEGY - FINAL REPORTING REQUIREMENTS AND SUPPLEMENTAL GUIDANCE: SMALL VOC SOURCE COMPLIANCE STRATEGY CONSIDERATION OF ORGANISOLS IN VOLATILE ORGANIC COMPOUNDS (VOC) COMPLIANCE CALCULATIONS RESIDUAL VOLATILE ORGANIC COMPOUND (VOC) CONTAINED IN COATING LINE PRODUCTS RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND DEPARTMENT OF JUSTICE COMPLIANCE SCHEDULES FOR VOLATILE ORGANIC COMPOUNDS (VOC's)
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- \* PN110-86-12-10-078  
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\* PN165-86-12-01-026

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\* PN172-86-10-30-053

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\* PN172-87-06-25-054

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\* PN172-88-06-21-062

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14 AUG 1989

MEMORANDUM

SUBJECT: Review of PM-10 Implementation Policy

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)TO: Thomas J. Maslany, Director  
Air Management Division, Region III (3AM00)

In your memorandum of July 13, 1989, you requested my comments on your understanding of PM-10 State implementation plan (SIP) requirements for Group II and III areas. Generally, your understanding of the plan requirements is correct; however, I wish to expand on your statements in four areas: (1) demonstrating the adequacy of Group II PM-10 SIP's; (2) redesignating total suspended particulate (TSP) nonattainment areas; (3) responding to the absence of source-specific emission factors; and (4) demonstrating maintenance of PM-10 national ambient air quality standards (NAAQS) for PM-10 bubbles, SIP relaxations, and new source permits.

PM-10 Group II SIP Demonstrations

In their Group II SIP's, States are committing to determine whether the control measures in their existing particulate matter (PM) SIP will assure timely attainment and maintenance of the PM-10 standards. This commitment is to be fulfilled within 37 months of promulgation of the PM-10 standards or by August 31, 1990. The July 1, 1987 Federal Register notice promulgating the PM-10 implementation requirements lists three criteria to be considered in determining the adequacy of the existing SIP for PM in a Group II area. The criteria to consider are air quality data, emissions data, and the control strategy presently applicable to the area. Evaluation of the present control strategy "should include the use of dispersion and receptor modeling techniques where appropriate. [Emphasis added.]"

We have not previously defined where modeling would be appropriate, nor have we identified the Federal Register actions EPA should take for Group II areas that are attaining and can maintain the standards. Therefore, in the following paragraphs, I have delineated criteria for screening the SIP to determine its adequacy. The existing SIP can be considered fully adequate if these criteria are met. Otherwise, the State must demonstrate that the SIP will maintain the PM-10 standards. This demonstration should follow the

guidance provided in section 4 of the PM-10 SIP Development Guideline. I have also discussed when rulemaking actions are required and when a public notice is adequate to complete actions for Group II areas.

The current SIP is fully adequate if all of the following provisions are met:

- Air Quality Data

- The most recent 3 years of PM-10 data demonstrate attainment in accordance with Appendix K of 40 CFR Part 50.
- The 24-hour design concentration for PM-10 monitoring is more than 20 percent below the standard ( $< 120 \mu\text{g}/\text{m}^3$ ) and the annual arithmetic mean PM-10 concentration is more than 20 percent below the standard ( $< 40 \mu\text{g}/\text{m}^3$ ).

- Emissions Data

- Actual emissions from point sources impacting the Group II area are greater than 75 percent of allowable emissions.
- Actual or allowable emissions in the area will not be increased through the use of banked emissions or through renewed operation of sources with existing operating permits without first requiring a maintenance demonstration.

- Present Control Strategy

- Present PM control measures are being implemented and adequately enforced.
- Start-up, shutdown, and malfunction regulations are specific enough to prevent circumvention of the emissions limitations.

The existing SIP is inadequate, of course, if attainment cannot be demonstrated with the most recent 3 years of PM-10 ambient air quality data. The adequacy of the existing SIP is very questionable if any one of the above criteria are not met. In such cases, the State must demonstrate, as discussed in section 4 of the PM-10 SIP Development Guideline (EPA-450/2-86-001), that the SIP will maintain the standards or revise the SIP as necessary.

Rulemaking actions must be taken in two situations in Group II areas. First, the committal SIP must be approved and incorporated by reference into the SIP. Second, a rulemaking is necessary to revise the SIP if it is found to be inadequate. If the current SIP is found to be adequate, the Regional Office should publish a notice to inform the public that the SIP is adequate to attain and maintain the PM-10 standards and that the Group II area is currently attaining the standards.

### TSP Nonattainment Area Redesignations

If the requirements for committal SIP's and statewide rule changes for Group II and III areas are met, the areas can be redesignated when the SIP's are approved. Group II areas should not be redesignated before the statewide (Group III) SIP is approved, however, because the State should first be responsible for protecting the PM-10 standards.

### Absence of Source-Specific Emission Factors

Emission factors are useful tools that can be used to estimate average emissions from categories of sources when developing emissions inventories for geographic areas. If, however, factors are not available in AP-42 for certain source categories, the following alternative actions should be taken in the priority shown to determine representative emission rates.

- a. Conduct source tests to characterize emissions. Tests may be conducted by the source, provided that appropriate quality assurance steps are undertaken. (This alternative may be employed even if emission factors are available, but are disputed.)
- b. Contact the EPA Emission Factor Clearinghouse if source testing (alternative a) is not practicable, to determine if an unpublished factor already exists or can be derived from existing data.
- c. If an unpublished factor cannot be obtained, the State should select a default emission rate in consultation with the Regional Office (and the source, if appropriate).

### Demonstrating Maintenance With SIP Revisions and New Source Permits

The PM-10 area grouping process was a mechanism to prioritize EPA's and States' workload. We recognized that no areas had PM-10 attainment demonstrations and that Group I areas were suspected to have the worst PM-10 problems, Group II next, and Group III least, if any. Thus, we required Group I areas to demonstrate attainment and Group II areas to increase monitoring to determine their attainment status. Group II and III areas are required to submit a demonstration if a violation is observed. Group II and III areas without violations are required to submit a demonstration if (1) the existing SIP is found to be questionable or (2) a major change in the emissions of an area is expected, e.g., through an emission trade, construction of a new source, or a SIP relaxation.

The EPA's policies regarding approval of emission trades, SIP relaxations, and new source permits all require a demonstration that the relevant NAAQS will be attained and maintained. These longstanding policies have not been changed with regard to the PM-10 standards. The emissions trading policy requires a demonstration of "ambient equivalence." The Emission Trading: Technical Issues Document states that the use of emission reduction credits cannot violate an increment or ambient standard (51 FR 43843). The emissions trading

policy provides four alternative methods of determining the ambient impact of a trade; de minimis; and Level I, II, and III analyses. The degree of modeling required in each method is linked to the likely impact of the trade.

Trades that qualify for de minimis or Level I analysis do not require dispersion modeling. If such trades are among sources located in areas that lack demonstrations of attainment but have not measured PM-10 violations (Group II or III areas), our policy is to not require an attainment demonstration. You can require a demonstration, however, if you have additional reasons to question whether the SIP will maintain the standards.

Modeling is required for more complex trades that need Level II or III analysis. Trades requiring Level II analysis can be approved if the trading sources do not cause significant increases in PM-10 concentrations as determined by dispersion modeling. A significant increase is defined as greater than  $1.0 \mu\text{g}/\text{m}^3$  annual average or greater than  $5.0 \mu\text{g}/\text{m}^3$  24-hour average (40 CFR 51.165). A Level III analysis requires full dispersion modeling considering all sources affecting the trade's areas of impact. Modeling for Level II and III trades in areas which lack modeled demonstrations for PM-10 must show that the NAAQS will be attained and maintained.

Any relaxation of a SIP requires a demonstration that the SIP will continue to maintain the applicable standards. This policy was initially stated in the attached memorandum from Richard Rhoads to David Hawkins, dated May 16, 1978.

Prior to approving permits to construct major new or modified sources of PM-10, EPA's policy is to require demonstrations that the standards will not be violated and TSP increments will not be exceeded.

I hope these comments clarify your concerns about PM-10 implementation policies. If you have additional questions, please call Dave Stonefield or his staff at FTS 629-5350.

Attachment

cc: R. Bauman  
PMPS Staff  
PM-10 Contacts, Regions I-X

OAQPS:AQMD:SDPMPB:MD-15:KWoodard:lferrell:629-5585:7/27/89  
Disk: KW#1, doc. MASLANY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D C 20460

JUN 15 1989

OSWER Directive 9355.0-28

MEMORANDUM

SUBJECT: Control of Air Emissions From Superfund Air Strippers at Superfund Groundwater Sites

FROM: Henry L. Longest II, Director  
Office of Emergency and Remedial Response

Gerald Emison, Director  
Office of Air Quality Planning and Standards

TO: Addressees

PURPOSE

This memorandum establishes guidance on the control of air emissions from air strippers used at Superfund sites for groundwater treatment and establishes procedures for implementation. Under this guidance, Regions should continue to make air emission control decisions on a case-by-case basis using the nine remedy selection criteria and the remedy selection process set forth in the proposed National Contingency Plan (NCP). As described below, however, the evaluation and weighing of the criteria in a "to be considered" (TBC) context will differ according to the air quality status of the site's location.

BACKGROUND

Approximately 35% of the Records of Decision (RODs) signed to date have involved sites which use a pump and treat technique to either partially or fully remediate groundwater contamination. Close to 45% of these pump and treat sites have selected air stripping. For the foreseeable future, OERR expects to use air stripping at about the same rate. This treatment technique relies on volatilization to remove volatile organic compounds (VOCs) from the groundwater, i.e. it transfers the contaminants from the liquid to vapor phase. One known side effect of air stripping is the emission of VOCs, many of which

are toxic, to the ambient air. The Superfund Program uses control devices such as vapor phase carbon adsorption and incineration to control these emissions.

In response to a request from Regional Air Division Directors for a policy to guide the selection of controls for air strippers, OERR and OAQPS conducted a joint study. The results showed that historically close to half of the Superfund air stripper sites had adopted controls during remedy selection. Another 25 percent deferred the decision to the remedial design phase. At sites with RODs signed after the enactment of the Superfund Amendments and Reauthorization Act, approximately two-thirds of the air strippers are controlled. At these sites, control decisions were based on an analysis of the cleanup standards established in Section 121 of CERCLA and the other statutory considerations which together comprise the nine remedy selection criteria: overall protection of human health and the environment; compliance with Applicable or Relevant and Appropriate Requirements (ARARs); long-term effectiveness/permanence; reduction of mobility, toxicity or volume (MTV); short-term effectiveness; implementability; cost; State acceptance; and community acceptance. Control decisions to date have been driven largely by protectiveness and State ARARs for both air toxics control and VOC control for ozone reduction. Other criteria such as MTV, short-term effectiveness, cost, and community acceptance, have also influenced the inclusion of controls.

Despite the trend towards increased control of air emissions from Superfund air strippers, the Agency remains concerned with the control of these air emissions. This concern underlies the vigorous efforts by EPA, States, localities, and industry across the country to control air toxics and reduce VOCs in ozone nonattainment areas. The adoption of this policy responds to these concerns, reflects an overall Agency concern with preventing the cross-media transfer of pollutants, and recognizes that the number of Federal, State, and local ARARs for both VOCs and air toxics appears to be rapidly increasing.

The following policy has been adopted to guide Regional decisionmakers on the use of controls for air emissions from Superfund air strippers, and other vented Superfund sources of VOCs. This policy is grounded in the remedy selection process and distinguishes between sites located in attainment and nonattainment areas.

## STATEMENT OF POLICY

For sites located in areas that are attaining the National Ambient Air Quality Standards for ozone, Regions should continue applying controls based on existing Agency policy. In most cases, this will mean the adoption of controls largely in response to State ARARs, risk management (i.e., protective-ness) guidelines, and other requirements of CERCLA Section 121.

In ozone nonattainment areas, however, the adoption of controls is more likely to be indicated even if they are not mandated by current Federal or State laws and regulations or indicated by a cancer risk analysis. Aside from cancer risk from air toxics, VOC emissions contribute to non-cancer health risks in nonattainment areas because most are precursors to the formation of ozone. Consideration of these non-cancer risks when applying the remedy selection criteria generally will show that in nonattainment areas Superfund air strippers, except those with the lowest emissions rates as indicated below, generally merit controls. In determining the need for air stripper controls at a particular Superfund site in a nonattainment area, the Regions should be guided by the emissions limit goals in the document entitled, "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations," issued in May 1988 by the Office of Air Quality Planning and Standards (OAQPS) to aid States in revising their State Implementation Plans (SIPs) to incorporate post-1987 ozone attainment strategies. The OAQPS guidance indicates that the sources most in need of controls are those with an actual emissions rate in excess of 3 pounds per hour (lb/hr) or 15 lb/day or a potential (i.e., calculated) rate of 10 tons per year (TPY) of total VOCs. The calculated rate assumes 24-hour operation, 365 days per year. Regions should note that control levels are applied on a facility basis. For the purposes of this guidance, facility is defined as a contiguous piece of property under common ownership.

This guidance applies to air strippers at Superfund sites. In establishing the policy, however, the potential for applicability to other VOC sources is recognized. Generally, the guidelines described for air strippers are suitable for VOC air emissions from other vented extraction techniques (e.g., soil vapor extraction) but not from area sources (e.g., soil excavation).

This guidance applies to future remedial decisions at Superfund sites. The policy is not explicitly designed for

actions taken by the removal program in the case of emergency or time critical removal actions. However, where time and other response circumstances permit, such as for non-time critical actions, adherence to this policy is expected.

The control levels referred to above serve as guidelines only if ARARs do not exist or are less stringent than presented here. They are not intended to preclude or replace State proposals for more stringent levels of control in pursuit of Clean Air Act goals as part of SIP revisions in nonattainment areas.

#### IMPLEMENTATION

This guidance seeks to incorporate air quality concerns into the Superfund remedy selection process. In particular, the use of controls for Superfund air strippers in nonattainment areas demonstrates the Agency's commitment to reducing VOCs and thus progressing toward attainment of the ozone standard. Additionally, the guidance is consistent with both the current NCP and proposed revisions. Where ARARs do not exist, EPA may consider TBCs in setting target cleanup levels. This guidance constitutes a TBC.

The Remedial Investigation/Feasibility Study (RI/FS) should generate the data needed to support control decisions for both attainment and nonattainment areas. At a minimum, the five major types of information needed are:

- Estimated cumulative uncontrolled air emissions rate from all air strippers at the site
- Consideration of health risks from the execution of the remedy as well as from the uncontrolled site
- Control alternatives and their costs
- Ozone attainment status
- Air ARARs

For purposes of this guidance "nonattainment area" means any county included in a formal post-1987 ozone SIP deficiency notification (SIP call) or any other county where the ozone National Ambient Air Quality Standard was exceeded during the previous three-year period. EPA's initial SIP calls were issued pursuant to Section 110(a)(2)(H) of the Clean Air Act and were described in the September 7, 1988 Federal Register.

The RI/FS scoping phase and work plan development should describe the specific data to be generated and the methods for doing so. Remedial Project Managers should consult with the designated Air Superfund Coordinator for technical assistance. Additional assistance is available from National Technical Guidance Manuals developed jointly by the Air and Superfund program offices for estimating air emissions and conducting air pathway analyses. The ROD should summarize this information as appropriate and clearly document the basis for the air emissions control decision.

**Addressees:**

Regional Waste Management Division Directors  
Regional Superfund Branch Chiefs  
Regional Air Division Directors  
Regional Air Branch Chiefs  
OERR Division Directors  
OAQPS Division Directors



PN 165-89-02-24-046

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB 24 1989

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Cut-off Date for Determining LAER in Major New Source Permitting

FROM: John Seitz, Director  
Stationary Source Compliance Division  
Office of Air Quality, Planning and Standards

TO: David Kee, Director  
Air and Radiation Division  
Region V

This memorandum responds to a February 22, 1989 telephone request by Bill McDowell of your staff for a written answer to the following question:

When a permitting agency is issuing a new source review permit involving a LAER determination, must that LAER determination reflect the most stringent LAER construction permit which has been issued anywhere in the country in the time period up to and including the public comment period on the permit currently under consideration?

The answer to your question is yes. The conditions in a new source permit are not set until the final permit is issued. The final permit is not issued until after a draft permit has been published, there has been a public comment period, and the permitting agency has had an opportunity to consider any new information that may have come to light during the comment period. If the permitting agency cannot consider new information it learns during the comment period, including recent technological advances, the comment period does not serve its intended purpose.

Since a new source may not legally begin to construct until after it has received a final permit, a source is not put to an equitable disadvantage by having the permit conditions change between the proposed and final permit.

If you have any questions about this matter, do not hesitate to call me, or to refer to Judy Katz of OEMC (382-2843) or Sally Farrell of my staff (382-2875).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-10-24-077

12 4 OCT 1989

MEMORANDUM

SUBJECT: Compliance Time Period for Electrophoretic Prime-Coating Operations

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Winston A. Smith, Director  
Air, Pesticides, and Toxics  
Management Division (Region IV)

This is in regard to your March 31, 1989 memorandum to me concerning a longer than 24-hour compliance time period for electrophoretic prime-coating operations at auto coaters. I regret the long delay in giving you this answer.

The monthly weighted average requested by Georgia for determining compliance with the 1.2 pounds of volatile organic compounds (VOC) per gallon of coating, excluding water, for electrophoretic applied prime operations at automobile-coating operations is acceptable. Although the usual rule for coatings is that 24-hour averaging must apply, for electrophoretic prime coatings a longer averaging time must be used. This is because solids are removed gradually from the coating dip tank as cars are prime coated. Likewise, organic solvents are gradually depleted from the tank by evaporation over time, as well as by being carried out on the coated auto body. It is not possible to determine the VOC emissions from the dip tank by taking a sample of the dip-tank liquid at any one point in time and analyzing it for VOC and solids content. Rather, some account must be made of solvent which evaporates over time and of solvent which is periodically added to the bath to make up for the loss.

This situation is quite different from the case of spray paint where a high-solvent paint could be sprayed one day and a low-solvent paint the next day. This possibility of switching quickly to high-solvent paints necessitates 24-hour averaging for spray-coating operations.

You should be aware, however, that for automobile electrodeposition prime (EDP) tanks, use of a monthly-weighted average may not in itself insure that compliance is accurately determined. When an automobile assembly plant EDP tank is operated at less than a normal production rate, the gallons of solids applied will fall, while evaporative emissions from the tank surface stay near constant and use of flow control additive may rise, giving a large number for pounds of VOC per gallon of solids applied. At the same time, total monthly emissions (lb/month) fall. This problem and our best currently available

Page No. 1  
03/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 107  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 107

\* PN107-87-04-06-011  
OZONE REDESIGNATION POLICY

\* PN107-86-04-11-012  
REQUIRED MONITORING PERIOD FOR OZONE REDESIGNATION IN UNCLASSIFIED  
AREAS

\* PN107-87-04-06-013  
OZONE REDESIGNATION POLICY

\* PN107-88-04-05-014  
LETTER TO NANCY MALOLEY ON REDESIGNATION OF 2 INDIANA COUNTIES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

428 - 5 1988

OFFICE OF  
AIR AND RADIATION

Ms. Nancy A. Maloley  
Commissioner, Indiana Department  
of Environmental Management  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Dear Ms. Maloley:

This is in response to your February 23, 1988, letter to Lee Thomas regarding the Environmental Protection Agency's (EPA's) interpretation of the Mitchell-Conte Amendment and the effect it may have on the redesignation of St. Joseph and Elkhart Counties in Indiana.

As you point out in your letter, EPA did propose, on July 22, 1986 (51 FR 26272), to redesignate St. Joseph and Elkhart Counties to attainment. That proposal, however, was contingent on Indiana demonstrating that the requirements of EPA's redesignation policy were fulfilled, including the requirement that the State implementation plan for the area be fully implemented. Since EPA has not completed its deliberations with regard to the effect of the Mitchell-Conte Amendment, future decisions might alter portions of my answer; however, I believe I can still respond adequately to your questions at this time.

In response to your first question, I can assure you that we do not interpret the Amendment to mean that EPA's current redesignation policy has been overturned. As you are probably aware, that policy requires, in addition to measured attainment level air quality, evidence that the approved plan for the area has been implemented and that, consequently, emission reductions that led to the improvement in air quality are sufficient, permanent and enforceable. The existing policy addresses EPA's concern that the planning effort envisioned in the Clean Air Act be fully carried out in order to ensure that the national ambient air quality standards are attained and maintained. The EPA's redesignation policy provides an assurance of attainment and maintenance that air quality data alone cannot provide.

In response to your second and third questions, we do not expect to reevaluate any areas presently designated nonattainment for the purpose of redesignating them to attainment under the Mitchell-Conte Amendment. Redesignations of additional areas to nonattainment will be promulgated in 40 CFR Part 81, along with the existing nonattainment designations.

Finally, in response to your fourth question, we expect actions on current requests for redesignations from nonattainment to attainment to proceed independently of any action taken under the Mitchell-Conte Amendment. Thus, the Mitchell-Conte Amendment will not delay action on Indiana's request for St. Joseph and Elkhart Counties.

I appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

DON R. CLAY FOR

J. Craig Potter  
Assistant Administrator  
for Air and Radiation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711



APR 6 1987

MEMORANDUM

SUBJECT: Ozone Redesignation Policy

FROM: Gerald A. Emison, *[Signature]*  
Director  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Management Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

Recently, Region V responded to questions from the State of Michigan regarding the Environmental Protection Agency's ozone redesignation policy. My staff and the Office of General Counsel assisted in preparing that response.

That letter, which I have attached for your information and use, addresses many concerns about redesignations previously encountered in day-to-day review of these actions at Headquarters. The letter supplements the Sheldon Meyers April 21, 1983, redesignation policy guidance. \* It should be utilized by Regional staff when they discuss documentation requirements with their States and review requests for redesignations.

Also attached is boilerplate language that should be inserted into all final Federal Register notices on ozone redesignations. This language serves notice that redesignations are not to be used as justification for noncompliance or regulation relaxations.

\* SEE PN 107-83-04-21-008

-2-

If you have any questions regarding the attached correspondence, please contact Tom Helms at FTS 629-5526.

Attachments

cc: R. Campbell  
T. Helms  
J. Silvasi  
B. Beal  
P. Wyckoff  
L. Wilson  
J. Rasnic  
S. Hitte  
R. Ossias

## OZONE REDESIGNATION BOILERPLATE

### Control Strategy Implementation

Ozone State implementation plans (SIP's) are designed to satisfy the requirements of Part D of the Clean Air Act and to provide for attainment and maintenance of the ozone NAAQS. This redesignation today should not be interpreted as authorizing the State to delete, alter, or rescind any of the VOC emission limitations and restrictions contained in the approved ozone SIP. Changes to ozone SIP VOC regulations rendering them less stringent than those contained in the EPA approved plan cannot be made unless a revised plan for attainment and maintenance is submitted to and approved by EPA. Unauthorized relaxations, deletions, and changes could result in both a finding of nonimplementation [section 173(b) of the Clean Air Act] and in a SIP deficiency call made pursuant to section 110(a)(2)(H) of the Clean Air Act.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

16 MAR 1987

REPLY TO THE ATTENTION OF:

Robert P. Miller, Chief  
Air Quality Division  
Michigan Department of Natural Resources  
P.O. Box 30028  
Lansing, Michigan 48909

Dear Mr. Miller: *R.P.*

This is in response to your November 20, 1986, request for ozone redesignation policy guidance. In that request, you raised a number of significant policy questions, which are addressed in an attachment. Because the questions are of interest from the perspective of national ozone redesignation policy, Region V of the U.S. Environmental Protection Agency (USEPA) requested input from USEPA's Office of Air Quality Planning and Standards (OAQPS). This input is reflected in the responses to your questions.

As you read the attached responses please keep in mind the following underlying rationale. Because of the imprecise nature of the various control strategy demonstration techniques commonly utilized in ozone implementation plans, USEPA has prescribed basic control measure requirements (such as RACT I, RACT II, etc.) which are common to nonattainment areas with similar ozone forming potential. USEPA's redesignation policy is founded on the principle that improvements in air quality must be related to the permanent and enforceable implementation of these control measures. Without actual implementation there is no assurance that the air quality will remain at its improved level.

Likewise, redesignation by itself cannot provide the means by which sources can avoid implementing, or discontinue implementing, any required control measure. Again, in the absence of a demonstration utilizing photochemical dispersion modeling, nonimplementation of a portion of USEPA's basic control measure requirements creates an unacceptable degree of uncertainty that measured improvements in air quality will be sustained.

If you have any questions on the enclosed responses, please contact Joseph Paisie at 312/886-6055 or Carl Nash at 312/886-6030.

Sincerely yours,

David Kee, Director  
Air and Radiation Division (5ARD-26)

Attachment

cc: Susan Mortell, MIDOT  
Charles Hersey, SEMCOG

Attachment

I(A):

Question:

What conditions constitute a "fully approved" State Implementation Plan (SIP) for a state which has submitted a redesignation request?

Response:

A fully approved SIP is one which contains the appropriate measures for the type of area involved (nonextension, extension, or SIP-call) and which has undergone final, unconditional rulemaking in the Federal Register.

This final rulemaking will have included approval of the: demonstration of attainment; maintenance commitments (including acceptable provisions for new source review); and control strategy. In order to have been approved, a control strategy must have included:

- ° For existing stationary sources, Reasonably Available Control Technology (RACT), defined as:
  - °° Categories I and II in all nonattainment areas; and, in addition
  - °° Category III and non-Control Technology Guideline (CTG) RACT on major sources in extension and post-1982 SIP-call areas
- ° Transportation Control Measures (TCMs) in extension areas and SIP-call areas; and
- ° Vehicle Inspection/Maintenance (I/M):
  - °° required in all ozone and carbon monoxide extension areas.
  - °° required in post-1982 SIP-call areas where attainment of the ozone standard by December 31, 1987 necessitated the adoption of an I/M commitment.

I(B):

Question:

In the case of extension areas like the Detroit metropolitan area, does "fully approved" necessarily mean that the RACT III and major non-CTG rules must be adopted and submitted to the USEPA?

Response

Yes. The Detroit metropolitan area is an extension area for ozone. Based on policy published in the Federal Register on January 22, 1981 (46 FR 7182), the SIP must contain acceptable RACT regulations for Category III and major non-CTG sources.

Question:

Does "fully approved" mean that the RACT III and major non-CTG rules must be approved (undergo final rulemaking in the Federal Register) prior to a USEPA action to grant the redesignation of the Detroit metropolitan area?

Response:

Yes. RACT III and major non-CTG source RACT rules along with other control measures required in the 1982 SIP revision must be given final approval by USEPA in the Federal Register before USEPA can approve the redesignation of the Detroit area. In addition, the control strategy, including RACT III and major non-CTG RACT controls must be implemented before USEPA can approve the redesignation of the Detroit area.

Question:

In generating approval of a redesignation request, is it necessary that the RACT III and major non-CTG rules provide for VOC reductions prior to December 31, 1987?

Response:

No. However, compliance after 1987 will delay approval of the redesignation request because USEPA will not approve the redesignation prior to the implementation of the entire control strategy. Sources which have never complied (other than those with enforceable compliance schedules), or non-implemented mobile source control measures, including vehicle I/M where required, may constitute sufficient justification for USEPA to disapprove or delay a redesignation request. In addition, committing to post-1987 deadlines could delay approval of the SIP revision and, hence, approval of the redesignation request.

I(C):

Question:

Under what scenarios, if any, might the 1982 ozone SIP for Detroit be fully approved without the adoption and submittal of the RACT III and major non-CTG rules?

Response:

SIP approval policy (46 FR 7182) for ozone extension areas, such as the Detroit nonattainment area, requires the inclusion of RACT regulations for Category III and major non-CTG sources in the SIP. The only scenario under which a 1982 SIP submittal might be fully approved without RACT III and major non-CTG source control rules would be where the SIP involved the use of acceptable photochemical dispersion modeling techniques to demonstrate that less than full RACT implementation is sufficient to attain and maintain the ozone standard. However, the photochemical dispersion modeling results must demonstrate that partial RACT implementation, either source category exemptions or specific source/facility exemptions, will not interfere with expeditious attainment of the ozone standard.

Insufficient data exist for the Detroit area to support the use of photochemical dispersion modeling techniques. It would take 3 to 4 years to acquire such data, and this time delay would not provide for expeditious attainment of the ozone standard. Therefore, RACT III and major non-CTG source control rules are required in the Detroit area.

II(A):

Question:

What are the prerequisites or qualifications that are to be considered by USEPA staff in the determination of whether or not a SIP has been "finally implemented"?

Response

On occasion, USEPA processing of a redesignation request is delayed by questions regarding the basis for the redesignation. In order to provide for timely evaluation and processing, it is suggested that prior to submitting a redesignation request, the State review all available records to confirm that:

1. All stationary sources affected by RACT regulations (including major non-CTG sources) have either installed and are operating RACT controls or are on an enforceable compliance schedule to do so.
2. All TCMs committed to in the SIP have been implemented.

3. A RACT level I/M program, where required, has been implemented.
4. Acceptable provisions exist in the SIP and are being implemented to provide for new source review, particularly, proper use of offsets as required under section 173 of the Clean Air Act and proper tracking of use of growth allowances previously approved by USEPA.

The redesignation request should address the extent of control implementation with as much documentation as possible. USEPA will review all available documentation, including documentation already on file with USEPA, to assess the completeness of control implementation.

II(B):

Question:

What "evidence" is required by the USEPA to demonstrate that "the approved control strategy has been fully implemented"?

Response:

Again, in order to avoid delays which may occur due to questions about the basis of the redesignation, it is suggested that the State review the source inspection and compliance records on file for all stationary sources affected by RACT regulations. This review should confirm that all affected sources have either installed and are operating RACT controls or are on an enforceable compliance schedule. As part of the redesignation request, the State should provide a summary of the results of the records review. The redesignation submittal should note the records reviewed and the results of the review with particular note made of sources that have not installed RACT controls. All on-file records reviewed in this process should be made available for USEPA review during future State program audits.

Local agencies responsible for TCM implementation should provide a review of SIP TCM commitments and the status of TCM implementation by project. The review should be done with as much project-specificity as the SIP. This review should be supplied with the redesignation request.

The agencies responsible for the vehicle I/M program, where required for SIP approval, should review the current status of the I/M program. This review should summarize the requirements of I/M regulations and should provide sufficient test data to demonstrate what emission reduction the I/M program is currently achieving. In addition, the redesignation submittal should include a State commitment to continue I/M implementation throughout the time period committed in the SIP.

In order to provide assurance that the improved air quality levels will be maintained, base year (pre-control) and current VOC emissions and operating rates (from an up-to-date stationary source inventory) should be summarized. This data should then be examined for evidence of economic down-turn. The causes of emissions changes from the base year should be well documented.

II(C):

Question:

What criteria will be used by the USEPA in the determination of whether or not a VOC source is "in compliance with the enforceable SIP measures?"

Response:

It is the primary responsibility of the State to review its source control regulations and the extent to which all sources comply with these or have enforceable compliance schedules. The State must certify in its redesignation request the status of source compliance, itemizing the sources that have not installed RACT controls.

The USEPA will use all data available to it to verify the State's claims of compliance. The data to be reviewed by USEPA may come from such sources as: State quarterly compliance reports; significant violators lists; compliance data system reports; audit reviews; 114 letter responses; and source inspection reports.

II(D):

Question:

What specific VOC sources need to be verified in compliance? All sources which are subject to RACT rules? Only major sources?

Response:

As previously suggested, in order to ensure that the evaluation and processing of the redesignation request will proceed smoothly, all sources subject to RACT rules should be verified as either having implemented the provisions of the rules or as being on an acceptable, enforceable mechanism for ensuring implementation.

II(E):

Question:

What "information" must be presented for VOC sources in a state's demonstration of compliance?

Response:

See the responses to question II(B) and II(C) above.

II(F):

Question:

In the case of the Detroit metropolitan area, do the VOC sources subject to the RACT III and major non-CTG rules need to be verified in compliance?

Response:

Yes. See the responses to I(A) and I(C).

III(A):

Question:

What criteria will be used by the USEPA to determine whether or not the air quality of a particular regional area will exhibit continued attainment for ozone in the future, i.e., maintenance of the standard?

Response:

In some areas examined by USEPA for long term ozone strategy effectiveness, growth has outstripped reductions from current programs. Therefore, in its redesignation request, the State should address whether there is reason to believe that actual VOC emissions increases in the area due to source growth or recovery from economic downturn have exceeded or will exceed those assumed in the SIP. Any controls to be implemented in the future should also be discussed. Implementation of the provisions for new source review, particularly the use of offsets and growth allowances should be addressed.

Question:

If a nonattainment area would demonstrate attainment and maintenance of the standard, could mobile source emissions [reductions assumed] be replaced or enhanced by stationary source emission reductions (i.e., reductions from an I/M program being substituted for by emission reductions from stage II vapor recovery or other legally enforceable program)?

Response:

Substitution of non-required control measures for required control measures (other than I/M) is allowed only in those situations involving emissions trading or where acceptable photochemical dispersion modeling results demonstrate that such control substitution will not jeopardize expeditious attainment of the ozone standard. The use of city-specific EKMA to make such a demonstration will not be acceptable. In nonattainment areas lacking a demonstration, such as Detroit, emission trades are rigidly constrained by the provisions of EPA's emission trading policy (51 FR 43814, December 4, 1986). Finally, because it is required by law in extension areas, other measures cannot be substituted for I/M.

III(B)

Question:

What criteria will be used by USEPA to determine if the growth factor used to predict anticipated source emissions for a regional area are complete and reasonable.

Response:

USEPA has no such criteria. The growth/projection factors will be evaluated on a case-by-case basis. The State should document the bases for the growth factors to the extent possible. In the review of the factors, USEPA will review all available data including previously submitted SIPs and emissions documentation.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

APR 11 1986

MEMORANDUM

SUBJECT: Required Monitoring Period for Ozone Redesignation in  
Unclassified Areas

FROM: Darryl D. Tyler, Director *Darryl*  
Control Programs Development Division

TO: William B. Hathaway, Director  
Air, Pesticides, and Toxics Division, Region VI

This is in response to your January 31, 1986, memorandum to me regarding the acceptability of redesignating an "unclassified" area to "attainment" for ozone based on short-term (e.g., 4 or 6 months) monitoring. Tom Helms and his staff discussed this matter in the interim with Jack Divita and his staff.

First of all, let me point out that for all of the purposes listed in section 107(d)(1) of the Clean Air Act--including transportation planning, Part D, and Part C--section 107(d)(1)(E) considers "unclassifiable" ozone areas to be the same as "attainment" areas. There is no distinction made in 40 CFR Part 81 between such areas. Specifically, in Part 81, "attainment" and "unclassified" areas are jointly grouped into the category "cannot be classified or better than national standards." Therefore, no formal redesignation or differentiation can occur.

Of course, short-term information on air quality in these "unclassified/attainment" areas can still be useful. Such data--which meet quality assurance criteria and which show attainment of the ozone standard--can be sufficient proof that SIP planning is not required in the area for which the data are considered representative. Also, such data can be used to satisfy PSD pre-construction monitoring requirements. Where such data are used to determine the need for SIP planning, two questions arise, for which the PSD monitoring guidelines (EPA-450/4-80-012, November 1980, pages 8-9) suggest a resolution:

1) In areas presently lacking air quality data or where present data are not geographically representative, what is the minimum monitoring period acceptable to support a finding that no SIP planning is necessary?

The 4-month minimum monitoring period (June-September) described in the PSD guidelines must be extended if "historical ozone data" indicate that maximum concentrations have occurred outside that period. Since there were no monitors previously in the unclassified area, the term "historical ozone data" means data from other locations. Thus, at the very least,

historical data from any urbanized area in the general vicinity of the site in question should be examined. If such data indicate the occurrence of a yearly maximum outside the June-September range the monitoring period must be extended to include the month in which the maximum occurred and all intervening months.

2) If the monitor is not permanent, how long after the site is discontinued can the data be used to support a finding that SIP planning is not necessary?

The PSD monitoring guidelines indicate that the data would be considered representative for a period of 3 years provided that ozone-forming emissions in the immediate area and/or any adjacent urban area do not increase substantially over that time frame.

I would like to stress that the above discussion pertains only to areas designated as "cannot be classified or better than national standards" for ozone and that the requirements for redesignating nonattainment areas remain as discussed in previous memorandums --3 years of air quality data, fully implemented plan, etc.

If you or your staff have any questions, please give Tom Helms a call (FTS-629-5526) or contact Ray Vogel or Larry Wilson of his staff.

cc: R. Campbell  
R. Rhoads  
T. Helms  
R. Vogel  
L. Wilson

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 110  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 110

- \* PN110-86-03-28-073  
BLOCK AVERAGES IN IMPLEMENTING SO2 NAAQS
- \* PN110-86-04-11-074  
RESPONSES TO FIVE VOC ISSUES RAISED BY THE REGIONAL OFFICES AND  
DEPARTMENT OF JUSTICE
- \* PN110-86-05-23-075  
LETTER TO NANCY MALOLEY FROM CRAIG POTTER ON THE INDIANA SO2 SIP
- \* PN110-86-08-07-076  
POLICY ON SIP REVISIONS REQUESTING COMPLIANCE DATE EXTENSIONS FOR VOC  
SOURCES
- \* PN110-86-12-04-077  
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- \* PN110-86-12-10-078  
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- \* PN110-87-01-08-079  
CLARIFICATION OF SEASONAL VOC CONTROL POLICY
- \* PN110-87-01-20-080  
DETERMINATION OF ECONOMIC FEASIBILITY
- \* PN110-87-04-17-081  
DEFINITION OF VOC
- \* PN110-87-04-30-082  
AMBIENT AIR
- \* PN110-87-04-30-083  
AMBIENT AIR
- \* PN110-87-07-29-084  
STATE IMPLEMENTATION PLANS FOR SULFUR DIOXIDE
- \* PN110-87-08-11-085  
PROCESSING OF PARTICULATE MATTER STATE IMPLEMENTATION PLAN REVISIONS
- \* PN110-87-09-21-086  
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- \* PN110-87-05-11-088  
GUIDANCE ON ACCOUNTING FOR TRENDS IN PARTICULATE MATTER EMISSION AND  
AIR QUALITY DATA

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 110  
(VOLUME 2)

- \* PN110-87-07-21-089  
DEFINITION OF VOLATILE ORGANIC COMPOUNDS (VOC's)
- \* PN110-87-08-11-090  
DEVELOPMENT PLAN FOR PM10 STATE IMPLEMENTATION PLANS (SIP's)
- \* PN110-87-10-02-091  
CLARIFICATION OF IMPLEMENTATION POLICIES FOR PM10 NATIONAL AMBIENT AIR  
QUALITY STANDARDS (NAAQS)
- \* PN110-87-12-23-092  
EXPANDED USE OF DIRECT FINAL SIP PROCESSING
- \* PN110-88-03-18-093  
POLICY FOR DETERMINING COMPLETENESS OF SIP SUBMITTALS
- \* PN110-88-06-17-094  
DEMONSTRATION OF "REPRESENTATIVE EMISSION CONDITIONS" FOR USE IN  
"EXPECTED EXCEEDANCE" DETERMINATIONS
- \* PN110-88-06-27-095  
"GRANDFATHERING" OF REQUIREMENTS FOR PENDING SIP REVISIONS
- \* PN110-88-08-05-096  
IDENTIFYING AND EXPEDITING SIP REVISIONS THAT IMPACT THE ENFORCEMENT  
PROCESS
- \* PN110-88-09-06-097  
PM10 SIP DEVELOPMENT: STATUS AND CONCERNS
- \* PN110-88-11-04-098  
GUIDANCE ON LONG-TERM NONATTAINMENT OF THE PM10 STANDARDS
- \* PN110-88-11-21-099  
REVISION TO POLICY ON THE USE OF PM10 MEASUREMENT DATA
- \* PN110-89-01-19-100  
STATE IMPLEMENTATION PLAN COMPLETENESS REVIEW (FR CITATION)
- \* PN110-89-01-19-101  
STATE IMPLEMENTATION PLAN PROCESSING REFORM (FR CITATION)
- \* PN110-89-01-30-102  
PROCEDURES FOR LETTER NOTICE APPROVAL OF MINOR SIP ACTIONS
- \* PN110-89-06-30-103  
RESPONSE TO PM10 CONTROL STRATEGY ISSUES

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AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 110  
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- \* PN110-89-08-14-104  
REVIEW OF PM-10 IMPLEMENTATION POLICY
- \* PN110-90-06-18-105  
REPLACEMENT OF SURROGATE PM-10 MONITORS
- \* PN110-90-07-05-106  
PM-10 SIP DEMONSTRATIONS FOR SMALL ISOLATED AREAS WITH SPATIALLY  
UNIFORM EMISSIONS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUL 5 1990

MEMORANDUM

SUBJECT: PM-10 SIP Demonstrations for Small Isolated  
Areas With Spatially Uniform Emissions

FROM: Robert D. Bauman, Chief *R Bauman*  
SO<sub>2</sub>/Particulate Matter Programs Branch (MD-15)

Joseph A. Tikvart, Chief *J A Tikvart*  
Source Receptor Analysis Branch (MD-14)

TO: Chief, Air Branch  
Regions I-X

This memorandum is in response to recent conversations between the Particulate Matter Programs Section and Regions VIII and X. The Regions have repeatedly expressed the need for flexibility in control strategy demonstration requirements when confronted with air-sheds where receptor modeling, coupled with proportional (rollback) modeling is considered to be adequate to identify source contributions and demonstrate attainment. The purpose of this memorandum is to discuss the rationale and justification for exercising this flexibility.

It is appropriate in certain situations to rely on a receptor model (RM) demonstration (i.e., use of receptor modeling, emission inventories, design value obtained by air quality monitoring, and proportional modeling) as the basis for a control strategy demonstration. This approach is an option provided for in sections 4 and 6 of the PM-10 SIP Development Guideline. While it is clear from the guideline that the use of dispersion models in combination with receptor models is the preferred approach, in certain limited situations, the use of an RM demonstration alone may be adequate to demonstrate attainment. The State must obtain approval to use the RM demonstration option prior to SIP submittal. The decision that an RM demonstration is adequate to demonstrate attainment is the responsibility of the Regional Office; however, the Region should consult the Model Clearinghouse for advice in making this determination. The Region must justify the determination and, in doing so, must consider all of the following:

1. The spatial representativeness of the monitoring network and the spatial uniformity of emissions. The PM-10 monitoring network must be representative of the maximum air quality impacts from the predominant (i.e., generally on the order of 90 percent) sources and source categories in the PM-10 emission inventory. Emissions from

area source categories are often distributed nearly uniformly across the area. This implies that ambient patterns would not be characterized by strong concentration gradients, thus lessening the need for an extensive monitoring network. However, areas with point sources will generally find an RM demonstration difficult to justify because the concentration pattern would be characterized by local "hot spots." In such cases, a dispersion model, along with representative meteorological data are typically required.

In a few areas, emissions of antiskid materials from a small number of road surfaces constitute the predominant PM-10 source category. These emissions should be uniformly distributed along these road surfaces. The monitoring network must be shown to be in accordance with EPA's monitoring guidance and spatially representative of the maximum air quality impact from this source category.

2. The temporal representativeness of the monitoring network. If the 24-hour NAAQS is controlling, the network must have samples collected at sufficiently frequent intervals to ensure that the impacts from the governing emission sources are adequately monitored.
3. The impact of only a few, relatively well characterized source categories. Receptor models can generally well characterize only a limited number of chemically distinguishable sources or source categories.

The above criteria imply that the area should be relatively small, characterized by uniform areawide emissions of one or two source categories, and geographically isolated from other PM-10 source areas. Examples of circumstances where RM demonstrations may be justifiable are small air-sheds where the only significant emission sources are residential wood combustion and/or road antiskid materials. It must be noted that the prerogative to use RM demonstrations should be exercised judiciously. Even when a RM is employed, consideration should be given to initiation of basic meteorological measurements as a contingency to the control program being found inadequate and predictive dispersion modeling being necessary at a later time. The use of dispersion modeling and receptor modeling in combination remains the preferred approach when both models are applicable to a particular circumstance.

cc: T. Pace  
D. Stonefield  
D. Wilson  
Regional Modeling Contact, Regions I-X  
PM-10 Contact, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 18 1990

MEMORANDUM

SUBJECT: Replacement of Surrogate PM<sub>10</sub> Monitors

FROM: William G. Laxton, Director  
Technical Support Division, OAQPS (MD-14) *William G. Laxton*

TO: Winston A. Smith, Director  
Air, Pesticides and Toxics Management Division  
Region IV

The Technical Support Division (TSD) has considered your recommendation to provide relief from the requirements of 40 CFR Part 58, Appendix C, which specifies that TSP monitors used as PM<sub>10</sub> "surrogates" must be replaced with actual PM<sub>10</sub> monitors if concentrations are measured which exceed the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS). Further, we have examined in great detail your analyses regarding PM<sub>10</sub>/TSP ratios for collocated samplers in Region IV. Recognizing that the problems inherent in the widespread replacement of high volume samplers and the obvious resource impacts which you describe, are not unique to Region IV, the following procedure should be observed:

In areas with adequate existing PM<sub>10</sub> monitoring, offending surrogate monitors may be redesignated as Special Purpose Monitors (SPM's). "Surrogates" measuring greater than the PM<sub>10</sub> NAAQS in areas not implementing adequate PM<sub>10</sub> monitoring, should be replaced in accordance with 40 CFR Part 58, Appendix C.

We believe that implementation of this policy will provide appropriate relief where it is justified, yet maintain the credibility of the particulate matter monitoring network and this Agency's efforts to ensure the protection of the public and the environment.

Compliance with the requirements for high volume surrogate samplers may be accomplished through the purchase and installation of new PM<sub>10</sub> monitors or through the redesign of a State or local agency's present particulate monitoring network. Our Headquarters NAMS Coordinator, George Manire (FTS) 629-5478, is of course available to assist you in this endeavor.

Please review this policy, determine the impact upon the agencies in Region IV, and inform us of your plans to comply as soon as practicable. Should you wish to discuss this matter in further detail, please contact Ogden Gerald, Chief, Monitoring Section, (919) 541-5651.

cc: N. Berg  
O. Gerald  
W. Hunt  
G. Manire  
Headquarters National Air Monitoring Stations (NAMS) Coordinators  
Regional NAMS Coordinators  
Regional PM<sub>10</sub> Monitoring Contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 110-89-06-30-103

JUN 30 1989

MEMORANDUM

SUBJECT: Response to PM-10 Control Strategy Issues

FROM: *for* Gerald A. Emison, Director *Chambers*  
Office of Air Quality Planning and Standards (MD-10)

TO: Irwin L. Dickstein, Director  
Air and Toxics Division, Region VIII

As you know, the Office of Air Quality Planning and Standards (OAQPS) is currently providing technical support to Region VIII and the State of Utah in response to their specific requests for assistance in the preparation of the Utah PM-10 State implementation plan (SIP). On June 2, you wrote to me identifying six issues which need resolution in order for Utah to proceed with development of the SIP. The following is OAQPS' response to those questions:

1a. How should secondary particulates be evaluated for modeling and control strategies?

Section 4.3.1 of the PM-10 SIP Development Guideline states that no model recommended for regulatory use at this time handles secondary particulate or other transformations in a manner suitable for SIP control strategy demonstrations. Thus, any techniques to be used in this regard need to be justified on a case-by-case basis. Our staffs have discussed the May 10 State of Utah proposal for assessing the impacts of secondary particles formed by emissions from Geneva Steel. While little detail has been provided, we agreed with your staff that the proposed technique to add secondary particulate from chemical mass balance (CMB) modeling to the primary PM-10 impacts from industrial source complex modeling in proportion to the ratio of secondary to primary particulates identified in the CMB source profile appears viable.

A procedure to use the results of this modeling analysis to develop a control strategy for secondary particles must also be justified on a case-by-case basis. My staff will comment on Utah's proposed techniques for control strategy development when requested to do so by the Region.

1b. How much credit can be given to control strategies on "assumptions" of source(s) contribution?

Credit will be based on the amount of emission reduction that can be justified by the State in its SIP. The assumptions underlying the emission

reductions would be different for each source category and, thus, would need to be justified on a case-by-case basis. Discussion of credits for three particular source categories is given in question #3 below. For sources with stack test data, the effectiveness of the particular control device could be used to estimate the post-control emissions and, thus, to determine the emission reduction credits. The effectiveness assumptions should be based on the best available information and post-control stack testing should be required to verify the control effectiveness. In those cases where control effectiveness values derived from AP-42 are deemed inappropriate for a specific application, the State may, with appropriate justification and Regional Office and emission factor clearinghouse concurrence, use a different effectiveness value.

2. What should be the design value: modeled or monitored values?

Section 6.2 of the PM-10 SIP Development Guideline states that the preferred approach for estimating a design value is through the use of an applicable dispersion model corroborated by receptor models, any available total suspended particulates data, and any available PM-10 data. It is our understanding that, for the most part, this approach is being attempted in the Utah (Provo) PM-10 SIP. If corroboration is not possible, we recommend that the dispersion model be used except for periods of stagnation; for periods of stagnation, monitored PM-10 data should be used to establish the design value.

3a. How much credit can be given to mandatory wood burning bans?

A Residential Wood Combustion Workshop was held by Region VIII and OAQPS in March 1989 in Missoula, Montana. The supporting document for the workshop, "Guidance Document for Residential Wood Combustion Emission Control Measures," provides the guidance for determining credits. The State of Utah had a representative in attendance at the workshop.

The guidance document describes the recommended features for mandatory curtailment program elements. The essential elements include: a public awareness program, a curtailment program, and an enforcement program. As stated in the document, good programs could receive as much as 50 percent credit for wood burning stoves. This credit is considered a starting point and should be adjusted according to the quality of the programs implemented and justification presented. The features which enhance or detract from the effectiveness of programs are described in detail in the document. It is important that in the course of developing a curtailment program and determining (applicable) credits that the State use the "Guidance Document for Residential Wood Combustion Emission Control Measures."

3b. How much credit can be given to various street sanding/salting control measures?

There is little quantitative information on the effectiveness of control measures for street sanding and salting operations. Generally, the measures would focus on reducing the amount of abrasive material used through improved

contemplated SIP calls for ozone nonattainment areas, new SIPs resulting from NAAQS revisions (e.g., PM<sub>10</sub>), and SIP revisions contemplated by proposed legislation. In addition, SIP revisions can be expected to increase as a defensive strategy to side-track enforcement in light of recent adverse judicial interpretation. Therefore, addressing proposed SIP revisions and the SIP revision process will become important considerations in pending and future air enforcement cases.

#### Judicial Interpretation of the SIP Revision Procedure

Some courts have considered the SIP revision procedures and, in some instances, also have considered whether SIP revision timing affects enforcement. These judicial determinations should be considered by a Region during an evaluation of a case prior to its referral. The following judicial decisions have addressed the issue of the SIP revision procedure.

In Duquesne Light Co. v. EPA, 698 F.2d 456 (D.C. Cir. 1983), the D.C. Circuit held that SIP revisions must be acted upon by the Administrator within four months and that Section 120 administrative penalties may be assessed but collection would be "held in abeyance" for the period beyond the four month deadline. If EPA disapproves the proposed revision, it may collect the penalty from the date of the deadline, with interest.

The Fifth Circuit refused to adopt the D.C. Circuit Court rule regarding the effect of delay past four months in a Section 120 proceeding. In American Cyanamid Co. v. EPA, 810 F.2d 493, 500 (5th Cir. 1987), the Fifth Circuit Court of Appeals held that EPA may not collect Section 120 administrative penalties for violations of an applicable SIP during the period "between 1) four months after a state submits and 2) the date EPA rejects the revision." The Court also held that EPA may not "commence" a Section 120 proceeding to collect the economic benefit of noncompliance with the applicable SIP, other than to issue a notice of noncompliance, once four months have passed without EPA action on a pending revision. After EPA ultimately rejects a proposed revision, it may commence a Section 120 proceeding. The court stated that it had not prohibited EPA from collecting noncompliance penalties from the date of a notice of noncompliance until four months after the state submitted a proposed SIP revision and then resuming noncompliance penalties for the period after EPA rejected the State's proposed revision. Neither Duquesne Light Co. v. EPA, supra nor American Cyanamid Co. v. EPA, supra pertained to an injunctive action.

In Council of Commuter Organizations v. Gorsuch, 683 F.2d 648 (2nd Cir. 1982) and Council of Commuter Organizations v. Thomas, 799 F.2d 879 (2nd Cir. 1986) the Second Circuit Court of Appeals used the four-month requirement for review of initial

SIPs as an analogy and stated that EPA was required to approve or disapprove SIP revisions within four months. The Second Circuit did not, however, discuss whether the pendency of a SIP revision for more than four months impinges on EPA's authority to enforce a provision of the applicable SIP. Instead, the court stated that the appropriate remedy for requiring an EPA decision within four months was a citizen's suit.

In United States v. National Steel Corp., 767 F.2d 1176 (6th Cir. 1985), the Sixth Circuit accepted EPA's interpretation that the four month rule in the Act applies only to EPA review of general state plans and not to revisions.

In Dunn-Edwards v. Thomas, C.A. No. C-87-3157 MHP (N.D. Cal. August 4, 1987), the Northern District of California noted in dictum that there was no express statutory deadline for EPA action on SIP revisions. The Court did not decide whether EPA delays impinged on Section 113 enforcement. It distinguished American Cyanamid and Duquesne Light as involving penalty assessments pursuant to Section 120 rather than Section 113. The court dismissed an action by paint manufacturers to enjoin EPA from taking initial steps pursuant to Section 113 to enforce a SIP where a proposed revision had been pending at EPA for more than four months. Although the Court did not decide whether the pendency of the SIP revision for more than four months would bar issuance of a Section 113(a) administrative order or initiation of a Section 113(b) judicial enforcement action, the Court refused to "rescind" the Notices of Violation which EPA issued to the companies.

Many courts which have not directly addressed the deadline issue have held or stated in dicta that revisions to SIPs are ineffective without EPA approval. See Train v. NRDC, 421 U.S. 60, 92 (1975) ("This litigation, however, is carried out on the polluter's time not the public's, for during [the pendency of a SIP revision] the original regulations remain in effect, and the polluter's failure to comply may subject him to a variety of enforcement procedures."); NRDC v. EPA, 507 F.2d 905, 915 (9th Cir. 1974) ("...until any variance is sanctioned by the EPA, any source operating in contravention of a state implementation plan that has been approved by that Agency is subject to forced compliance at the instance of the EPA."); Metropolitan Washington Coalition for Clean Air v. District of Columbia, 511 F.2d 809, 813 (D.C. Cir. 1985) ("A requirement of EPA approval prior to effectuation of any proposed revision is thus essential to prevent critical irreparable delays which the Administrator is not empowered to authorize under the less rigorous revision provisions or which

do not meet the standards for revision."); Getty Oil Co. (Eastern Operations) v. Ruckelshaus, 342 F. Supp. 1006 (D. Del. 1972), rem'd on other grounds 467 F.2d 349 (3d Cir. 1972); United States v. Wheeling-Pittsburgh Steel, 818 F.2d 1077 (3d Cir. 1987) (pending bubble application at a state agency is not effective until approved by the state agency and EPA and cannot be a basis for extending compliance schedule in consent decree); United States v. Ford Motor Co., 814 F.2d 1099, 1103 (6th Cir. 1987) ("the original emission limit remains fully enforceable until a revision or variance is approved by both the State and EPA"); Ohio Environmental Council v. U.S. District Court., 565 F.2d 393, 398 (6th Cir. 1977) ("If a plan became unenforceable every time such a revision became a possibility, the entire enforcement procedure of the Clean Air Act would be crippled.") United States v. West Penn Power Co., 460 F. Supp. 1305 (W.D. Pa. 1978).

### Analysis of Cases Affected by SIP Revisions

We have outlined some factors for you to consider in your evaluation of a case involving a SIP revision. Some of these factors allow an easy decision by you; others require a balancing of equitable considerations applicable to the specific case. These factors should be considered as you determine whether or not to refer a civil action.

#### 1. SIP revision approval is likely.

If a Region expects to approve a pending SIP revision which would authorize the source's existing operations, there is very little likelihood that a court would either order compliance with more stringent existing limits or assess substantial penalties for emissions unless the defendant exceeds the limits allowed in the revised SIP. Therefore, it is unlikely that a complaint would be filed as a result of a referral seeking either injunctive relief or penalties in this situation. Enforcement resources would be better directed to other cases.

#### 2. Fifth Circuit cases.

The Court of Appeals decision in American Cyanamid was not appealed. Therefore, enforcement actions against sources located within the Fifth Circuit's jurisdiction should be pursued only in factually different circumstances. The Region should not seek Section 120 penalties in administrative or judicial proceedings until EPA has published at least one final disapproval of a SIP revision in the Federal Register. However, if Section 120 enforcement is being delayed by successive proposed revisions, it

can proceed after denying the first revision. The successive submittals would be a new problem not addressed by the court. A Region might also refer cases based upon other factors not adversely decided in American Cyanamid; and it might refer cases for Section 113 proceedings, which, unlike Section 120, allow consideration of equitable factors in the assessment of penalties. We urge you to consult with the Air Enforcement Division and Department of Justice attorneys as Fifth Circuit cases are considered for referral.

3. No Compliance with Proposed SIP Revision.

If the source has not materially complied with the proposed SIP revision, the case is a reasonable candidate for referral even before the Region acts on a pending SIP revision. A court may be persuaded that penalties are appropriate. The appropriate injunctive relief should be analyzed in the litigation report with modifications to be determined at the time of settlement or judicial decision.

4. No Proposed Revision Submitted to EPA.

Where federal approval of a SIP revision is required and the state has not submitted a proposed SIP revision, e.g., a non-generic bubble, then there is no reason to delay enforcement.<sup>1/</sup> Conversely, if the source complies with a generic bubble which has been approved by the State, and EPA agrees that the state's bubble approval authority is generic, no enforcement action should be undertaken. If EPA has not received a formal SIP revision submittal because the State is still processing the proposal or an incomplete submittal was returned to the State, the case may be referred for enforcement.<sup>2/</sup> The litigation report should discuss any known pending state action on a SIP revision if the matter otherwise merits such action.

---

<sup>1/</sup> EPA ought to inform both the State and the affected source for source-specific revisions that EPA believes the SIP revision requires formal Federal approval, where there is a defensible legal basis for EPA's position.

<sup>2/</sup> Where EPA has received only an informational package, the Region ought to notify immediately the state and the affected source (in the case of a source specific proposal) that the package is not a formal submittal, and that enforcement action may be commenced against the source.

## 5. SIP Revision Disapproval by Region.

As we discussed in earlier sections, several courts have indicated that EPA should act on pending SIP changes before enforcing a SIP standard. Other courts have recognized that proposed changes should not thwart enforcement of existing regulations. In order to present a reasonable position on this issue, we recommend that the Region conduct a thorough analysis of any SIP revision pending at EPA. The Regional Administrator should formally act on a submittal by signing the proposed decision before referring a case for enforcement. Regions should take steps to ensure that a SIP revision is reviewed on its merits and independent of potential enforcement considerations.

If the Region decides to recommend disapproval of the package, the analysis supporting that position could increase the prospects for a successful enforcement action. Thus, a referral should not be made until after the Regional Administrator acts on the package proposing disapproval. We recommend that the Regional SIP staff coordinate with the appropriate Headquarters offices to make sure all issues are properly analyzed before taking action on a denial package subject to Headquarters approval. The referral can be made after the Regional decision if there is no required Headquarters review, or after an informal approval if Headquarters review is necessary.

## 6. Equitable Considerations.

Equitable considerations bear on the decision to refer an enforcement action when a SIP revision is pending with the Region. Since no court has held that EPA should be barred from seeking injunctive relief when a SIP revision is pending, it may, in appropriate circumstances, be desirable to refer an action for injunctive relief. For example, if imminent and substantial endangerment to health exists in any jurisdiction, including the Fifth Circuit, enforcement should be undertaken regardless of the status of the SIP revision.

Additional equitable factors which bear on the decision to refer a case include the actual SIP revision review period, the timing of the SIP revision submittal in relation to any preliminary enforcement procedures (i.e., whether the submittal appears to be a dilatory tactic), the source's ability to comply with the applicable SIP without great expense and difficulty, and the cooperation of the source in providing accurate information and endeavoring to comply with air requirements. Many of the above factors may pertain to a case. You should evaluate all of these factors and the source's willingness to negotiate in assessing the appropriate enforcement action. We also recommend that you consult with the Air Enforcement Division and Department of Justice before referring a case based only on these equitable factors.

### Other Considerations

In order to assess a case for referral, the Regional attorneys will have to consult with the Region's SIP analysts. We recommend that your contacts be undertaken with an awareness of the Seventh Circuit decision in Bethlehem Steel Corp. v. EPA, 638 F.2d 994 (7th Cir. 1980).

The Case Evaluation Sheet with definitions of its data points has been provided to assist you in ensuring that the relevant information has been obtained for your evaluation. This data will be used for national evaluations of all SIP enforcement cases. We therefore ask that you complete the evaluation form for all SIP enforcement actions regardless of whether a revision is pending at the time of referral.

### Summary

In summary, we recommend that enforcement be initiated when 1) the source is not in compliance with the pending SIP revision, 2) no SIP revision has been submitted to EPA, 3) the Region has recommended disapproval of the SIP revision proposal (except for the Fifth Circuit where final disapproval is needed), or 4) equitable considerations mandate action. We recommend that a Region concentrate on these cases rather than cases where a SIP revision approval is likely, or where the merits of the SIP revision have not been addressed by the Region.

Our staff will be available to discuss specific cases with you. We appreciate your assistance in considering these additional factors in your case evaluation. Please contact us, or Elizabeth A. Edmonds, Air Enforcement Division, FTS 382-4577, if you have any questions regarding this policy.

Attachment

Addressees:

Regional Counsels  
Regions I-X

Regional Counsel Air Contacts  
Regions I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

Alan Eckert  
Office of General Counsel

David Buente, Chief  
Environmental Enforcement Section  
Department of Justice

Robert Van Heuvelen, Assistant Chief  
Environmental Enforcement Section  
U.S. Department of Justice

CASE EVALUATION FORM FOR STATE IMPLEMENTATION PLAN (SIP) CASES

1. SOURCE NAME: \_\_\_\_\_
2. SOURCE LOCATION: \_\_\_\_\_
3. REGION: \_\_\_\_\_
4. FEDERAL COURT: CIRCUIT \_\_\_\_\_ DISTRICT \_\_\_\_\_

SIP REVISION

5. HAS A PROPOSED SIP REVISION BEEN SUBMITTED TO EPA? \_\_\_\_\_
6. IF NOT, A) DOES THE REGION BELIEVE THAT THE STATE HAS GENERIC AUTHORITY TO APPROVE THE TYPE OF REVISION AT ISSUE?\* \_\_\_\_\_  
B) DOES THE STATE BELIEVE THAT IT HAS GENERIC AUTHORITY TO APPROVE THE TYPE OF REVISION AT ISSUE? \_\_\_\_\_
7. IF A SIP REVISION HAS BEEN RECEIVED BY EPA, IS IT A FORMAL SUBMITTAL? \_\_\_\_\_ OR IS IT INFORMATIONAL? \_\_\_\_\_
8. IF IT IS A FORMAL SUBMITTAL, HAS THE DETERMINATION OF COMPLETENESS BEEN MADE? \_\_\_\_\_
9. IF COMPLETE, PROVIDE DATE RECEIVED. \_\_\_\_\_
10. IF INCOMPLETE, A) WAS IT RETURNED TO THE STATE? \_\_\_\_\_  
DATE RETURNED: \_\_\_\_\_ B) WAS A NOTICE OF DISAPPROVAL, BASED ON INCOMPLETE SUBMITTAL, PUBLISHED IN THE FEDERAL REGISTER? \_\_\_\_\_ DATE PUBLISHED: \_\_\_\_\_
11. IS SIP REVISION APPROVAL LIKELY? \_\_\_\_\_

\* If the answer is yes, no further questions should be answered. If the answer is no, no further questions should be answered after 6B.

12. DOES ~~THE~~ SOURCE COMPLY WITH THE PROPOSED SIP REVISION? \_\_\_\_\_
13. STATUS OF SIP REVISION SUBMITTED TO EPA:

<u>STATUS</u>	<u>OUTCOME</u> (Approval/Disapproval)	<u>DATE</u>
PROPOSAL TO HQ	_____	_____
PROPOSAL TO OMB	_____	_____
PROPOSAL PUBLISHED	_____	_____
FINAL TO REGION	_____	_____
FINAL TO HQ	_____	_____
FINAL TO OMB	_____	_____
FINAL PUBLISHED	_____	_____

ENFORCEMENT

14. DATE(S) RECEIVED VIOLATION INFORMATION: \_\_\_\_\_  
and TYPES OF INFORMATION RECEIVED: \_\_\_\_\_
15. DATE(S) OF NOTICE(S) OF VIOLATION: \_\_\_\_\_  
DATE(S) OF NOTICE(S) OF NONCOMPLIANCE: \_\_\_\_\_

EQUITABLE CONSIDERATIONS

16. WHAT RELIEF DOES EPA SEEK? \_\_\_\_\_
- PENALTY: \_\_\_\_\_ INJUNCTIVE RELIEF: \_\_\_\_\_

17. IS THERE AN IMMINENT AND SUBSTANTIAL ENDANGERMENT TO PUBLIC HEALTH? \_\_\_\_\_

DESCRIBE: \_\_\_\_\_

18. POLLUTION INFORMATION:

(a) MAJOR SOURCE: \_\_\_\_\_

(b) VOLUME OF EMISSIONS: (i) ACTUAL EMISSIONS: \_\_\_\_\_ TPY

(ii) ALLOWED EMISSIONS: \_\_\_\_\_ TPY

(c) TYPE OF POLLUTANT: \_\_\_\_\_

(d) EXTENT OF VIOLATION: (i) ACTUAL EMISSIONS: \_\_\_\_\_

(ii) EMISSION LIMITATION: \_\_\_\_\_

(e) NONATTAINMENT AREA: \_\_\_\_\_

(f) EXTENSION AREA: \_\_\_\_\_

19. ESTIMATE COST OF COMPLIANCE OPTIONS: \_\_\_\_\_

20. COOPERATION BY THE SOURCE

(a) IS SOURCE IN COMPLIANCE WITH EXISTING SIP? \_\_\_\_\_

(b) IS SOURCE SEEKING ALTERNATIVE MEANS OF RESOLVING THE  
NONCOMPLIANCE? \_\_\_\_\_

21. OTHER RELEVANT FACTORS: \_\_\_\_\_

DEFINITIONS FOR CASE EVALUATION FORM FOR SIP CASES

1. Name of company/entity violating the Clean Air Act.
2. City, County and State where source is located.
3. EPA Region
4. (See attached list of Circuit Courts)

SIP REVISION

5-12. Self-explanatory

13. Indicate whether the revision has been formally recommended for approval or disapproval and the date of the decision or publication.

ENFORCEMENT

14. List dates EPA received information of violation(s) and indicate whether information was provided by the source or an air pollution control agency, or as a result of an inspection by EPA.
15. Self-explanatory.

EQUITABLE CONSIDERATIONS

16-17. Self-explanatory.

POLLUTION INFORMATION

- 18(a). A Class A Source; including Class A1: Any stationary source whose actual or potential emissions while operating at design capacity equal at least 100 tons per year, and Class A2: Any stationary source whose uncontrolled emissions while operating at design capacity are at least 100 tons per year of any regulated pollutant.
- (b)(i). Annual tons per year of a regulated pollutant actually emitted by the source
- (ii). Annual tons per year of a regulated pollutant, permitted by applicable SIP
- (c). Self-explanatory
- (d)(i). Actual measurement of emission level of regulated pollutant.  
eg. \_\_\_\_\_ pounds per gallon excluding water, of VOCs
- (ii). SIP authorized limit of emission level of regulated pollutant.
- (e). An area which as calculated by air quality modeling exceeds any national ambient air quality standard for an air pollutant.
- (f). Is the source located in a nonattainment area which has an extension until December 31, 1987, to attain the national primary standard for photochemical oxidants and/or carbon monoxide?
- 19-21. Self-explanatory.

**§ 41. Number and composition of circuits**

The thirteen judicial circuits of the United States are constituted as follows:

Circuits	Composition
District of Columbia	District of Columbia.
First	Maine, Massachusetts, New Hampshire, Puerto Rico, Rhode Island.
Second	Connecticut, New York, Vermont.
Third	Delaware, New Jersey, Pennsylvania, Virgin Islands.
Fourth	Maryland, North Carolina, South Carolina, Virginia, West Virginia.
Fifth	District of the Canal Zone, Louisiana, Mississippi, Texas.
Sixth	Kentucky, Michigan, Ohio, Tennessee.
Seventh	Illinois, Indiana, Wisconsin.
Eighth	Arkansas, Iowa, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.
Ninth	Alaska, Arizona, California, Idaho, Montana, Nevada, Oregon, Washington, Guam, Hawaii.
Tenth	Colorado, Kansas, New Mexico, Oklahoma, Utah, Wyoming.
Eleventh	Alabama, Florida, Georgia.
Federal	All Federal judicial districts.

(As amended Oct. 31, 1951, c. 655, § 34, 65 Stat. 727; Oct. 14, 1980, Pub.L. 96-452, § 2, 94 Stat. 1994; Apr. 2, 1932, Pub.L. 97-164, Title I, § 101, 96 Stat. 25.)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

A-88-18

II-B-7

PN 110-89-01-30-102

JAN 30 1989

MEMORANDUM

SUBJECT: Procedures for Letter Notice Approval of Minor SIP Actions

FROM: Gerald A. Emison, Director *G. A. Emison*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides & Toxics Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Region VII, VIII, X

The Agency is currently reforming the entire system for processing State implementation plans (SIPs) pursuant to recommendations of the Deputy Administrator's Task Group on SIP Processing. One such recommendation creates an entirely new form of SIP processing referred to as "letter notice." This memorandum describes the new letter notice procedure and provides examples of letter notice approvals and a model Federal Register notice.

Under the letter notice procedure, EPA will use letters to affected States and parties rather than notice-and-comment rulemaking to approve truly insignificant SIP actions. The Agency will not publish notices of proposed rulemaking in the Federal Register prior to sending final letter notice approvals to the States and affected parties. The letter to the State will be the Agency's final action approving such minor SIP revisions. The Agency will periodically publish a summary list of all letter notice actions in the Federal Register to keep the general public informed of SIP matters. The effective date of letter notice approvals will be the date of the letter to the State, not the date of the subsequent summary Federal Register

notice. Letter notice approvals will, however, remain subject to potential judicial review until 60 days after the date of the summary Federal Register notice.<sup>1</sup>

Regional Offices are encouraged to use the letter notice procedure for all minor SIP approvals that are sufficiently insignificant such that no member of the general public would have an interest in commenting on them. Categories of SIPs appropriate for processing through letter notice differ from those previously processed under the "direct-final" procedure in that direct-final has been used for SIPs on which EPA did not expect to receive any adverse comment but which may have held some interest for the general public. Letter notice should be used only for those SIPs on which the public will have no interest in commenting. The Agency is justifying dispensing with notice and comment rulemaking by relying on the exemption in the Administrative Procedure Act for situations where it is "unnecessary or contrary to the public interest" to provide opportunity for public comment. See 5 U.S.C. 553(b). For a full analysis of the legal issues associated with the letter notice procedure, see memorandum, Sara Schneeberg to Jim Weigold, "Legal Analysis of Letter Notice Option for Processing Minor SIP Actions," dated May 25, 1988 (attached).

Categories of SIP actions appropriate for letter notice processing would include recodification involving no substantive changes, minor technical amendments, typographical corrections, address changes and similar non-substantive matters. Regional Offices are encouraged to consult in advance with the Office of Air Quality Planning and Standards if questions arise concerning the appropriateness of using letter notice processing for any particular SIP action.

Where insignificant SIP actions are generally applicable, Regional Offices should send a letter similar to that in Attachment A from the Regional Administrator to the State indicating that EPA is approving the SIP action. Where insignificant SIP actions are source-specific, a letter similar to that in Attachment B should be sent to the affected source in addition to the approval letter sent to the State.

<sup>1</sup> Clean Air Act Section 307(b)(1) provides that "[a]ny petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval or action appears in the Federal Register . . . ." 42 U.S.C. 7607(b)(1).

Periodically as the Regional Office determines appropriate, but generally not less often than once every six months, Regional Offices should publish in the Federal Register a summary listing of all letter notice approvals made by the Regional Administrator since the last summary publication. A model summary Federal Register notice is included as Attachment C to this memorandum.

I believe that use of the letter notice procedure will greatly expedite your processing of minor SIP revisions. Should you or your staff have any questions on these procedures please contact Johnnie Pearson of my staff at FTS 629-5691 or Sara Schneeberg of the Office of General Counsel at FTS 382-7606.

#### Attachments

cc: Regional Counsel, Reg. I-X  
Regional Counsel (Air Contact), Reg. I-X  
Air Branch Chiefs, Reg. I-X  
John Calcagni  
Johnnie Pearson  
Sara Schneeberg  
Jim Weigold

ATTACHMENT A

MODEL APPROVAL LETTER TO STATE

Governor  
State of [Name of State]

Dear Governor:

The Environmental Protection Agency (EPA) has received your request for approval of a revision to the [name of State] State implementation plan (SIP) for [pollutant] relating to [subject matter of SIP revision] submitted to us on [date of submission].

I have determined that this minor SIP revision complies with all applicable requirements of the Clean Air Act (CAA) and EPA policy and regulations concerning such SIP revisions. [Insert more detailed rationale for approval as appropriate.] I am therefore approving this submission under section 110(a) of the CAA as a revision to the [name of state] SIP for [pollutant]. This approval is effective as of today's date.

Due to the minor nature of this SIP revision, EPA has concluded that conducting notice-and-comment rulemaking prior to approving this SIP revision would be "unnecessary and contrary to the public interest," and hence not required by the Administrative Procedure Act, 5 U.S.C. 553(b). I am approving this revision consistent with the procedures outlined in EPA's Notice of Procedural Changes on SIP processing published on January 19, 1989 at 54 FR 2214. This is a final action of the Agency subject to judicial review as appropriate.

[Insert the following if appropriate]

I have informed [name of company] of this action.

Sincerely,

Regional Administrator

ATTACHMENT B

MODEL INFORMATION LETTER TO SOURCE

President  
[Name of Company]

Dear [Name of Company President]:

The Environmental Protection Agency (EPA) has received a request from the state of [name of state] for approval of a revision to the [name of state] State implementation plan (SIP) for [pollutant] relating to [subject matter of SIP revision] involving your company. I have determined that this minor SIP revision complies with all applicable requirements of the Clean Air Act (CAA) and EPA policy and regulations concerning such SIP revisions. [Insert more detailed rationale for approval as appropriate.] I have therefore approved this submission under section 110(a) of the CAA as a revision to the [name of state] SIP for [pollutant] by letter dated today. The approval is effective as of this date.

Due to the minor nature of this SIP revision, EPA has concluded that conducting notice-and-comment rulemaking prior to approving this SIP revision would be "unnecessary and contrary to the public interest," and hence, not required by the Administrative Procedure Act, 5 U.S.C. 553 (b). I have approved the revision consistent with the procedures outlined in EPA's Notice of Procedural Changes on SIP Processing published on January 19, 1989 at 54 FR 2214. This approval is a final Agency action subject to judicial review as appropriate.

Sincerely,

Regional Administrator

ATTACHMENT C

MODEL SUMMARY FEDERAL REGISTER NOTICE

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

AGENCY: Environmental Protection Agency (EPA)

ACTION: Notice of Approvals

SUMMARY: Pursuant to procedures described at 54 FR 2214 (January 19, 1989), EPA has recently approved a number of minor State implementation plan (SIP) revisions. This notice lists the revisions EPA has approved and incorporates the relevant material into the Code of Federal Regulations.

DATES: The incorporation by reference will be effective [insert date of publication in Federal Register].

ADDRESSES: Copies of the State SIP revision requests and EPA's letter notices of approval are available for public inspection during normal business hours at the following locations:

Environmental Protection Agency  
Region \_\_\_\_\_  
[Address of Regional Office]  
State of [Name of State]  
[Address of State Environmental Office]

FOR FURTHER INFORMATION CONTACT: [name and address of Regional contact person]

SUPPLEMENTARY INFORMATION: EPA Region \_\_\_\_ has approved the following minor SIP revision requests under section 110(a) of the Clean Air Act (CAA):

STATE	POLLUTANT	SUBJECT MATTER	SOURCE	DATE OF SUBMISSION	DATE OF APPROVAL
-------	-----------	-------------------	--------	-----------------------	---------------------

[Prepare table with headings similar to those shown.]

EPA has determined that each of these SIP revisions complies with all applicable requirements of the CAA and EPA policy and regulations concerning such revisions. Due to the minor nature of these revisions, EPA concluded that conducting notice-and-comment rulemaking prior to approving the revisions would have been "unnecessary and contrary to the public interest," and

hence was not required by the Administrative Procedure Act, 5 U.S.C. Section 553(b). Each of these SIP approvals became final and effective on the date of EPA approval as listed in the chart above.

The Office of Management and Budget has exempted all SIP approvals from the requirements of Section 3 of Executive Order 12291.

Under 5 U.S.C. 605(b), I certify that these SIP revisions will not have a significant impact on a substantial number of small entities. See 46 FR 8709.

Under Section 307(b)(1) of the CAA, as amended, judicial review of this action is available only by filing a petition for review in the United States Court of Appeals for the appropriate circuit within 60 days of today. These actions may not be challenged later in proceedings to enforce their requirements. See Section 307(b)(2).

List of Subjects in 40 CFR Part 52: [List relevant subjects]

Date

Regional Administrator

40 CFR Part 52, Subpart \_\_\_\_\_, is amended as follows:

Subpart \_\_ - [Name of State]

1. The authority citation for Part 52 continues to read as follows: AUTHORITY: 42 U.S.C. 7401-7642.

2. Section \_\_\_\_\_ is amended as follows:  
[insert relevant CFR language]

PN 110-89-01-19-101

In order to conserve space, the Federal Register notice entitled:

State Implementation Plan Processing Reform (54 FR  
2214, January 19, 1989)

is not included in the Air Programs Policy and Guidance Notebook.  
Please refer to this notice for EPA policy related to this  
subject.

PN 110-89-01-19-100

In order to conserve space, the Federal Register notice entitled:

State Implementation Plan Completeness Review (54 FR  
2138, January 19, 1989)

is not included in the Air Programs Policy and Guidance Notebook.  
Please refer to this notice for EPA policy related to this  
subject.

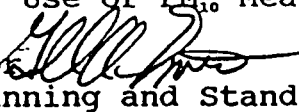


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

NOV 21 1988

MEMORANDUM

SUBJECT: Revision to Policy on the Use of  $PM_{10}$  Measurement Data

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

TO: See Attached List

A joint Office of Air Quality Planning and Standards (OAQPS)/Environmental Monitoring Systems Laboratory (EMSL) committee has evaluated the issue of potential uncertainty in measurement data produced by  $PM_{10}$  samplers. They considered modifications and/or clarifications to existing Environmental Protection Agency (EPA) policy contained in the  $PM_{10}$  SIP Development Guideline (Section 2.3), the supplementary Response to Questions Regarding  $PM_{10}$  State Implementation Plan (SIP) Development (published June 1988), and the data requirements of Appendix K to 40 CFR 50 and Part 58. This committee's issue paper which incorporated comments from Regional staff is attached. This memo follows their recommendations and presents the revised EPA policy regarding the treatment of  $PM_{10}$  data produced by reference and nonreference  $PM_{10}$  samplers. Treatment of data produced by collocated  $PM_{10}$  samplers is also discussed. Deviations to this general policy must receive concurrence of OAQPS.

For this discussion, the term reference sampler shall be used to represent samplers using a reference method based on Appendix J to 40 CFR 50 and designated by EPA in accordance with 40 CFR 53, as well as samplers using an equivalent method designated by EPA in accordance with 40 CFR 53. Nonreference samplers are all other  $PM_{10}$  samplers which have not been formally designated as such.

USE OF REFERENCE AND NONREFERENCE SAMPLER DATA

For purposes of evaluating  $PM_{10}$  air quality status, all data produced by reference samplers shall be interpreted at face value and can be used to make comparisons with the National Ambient Air Quality Standards (NAAQS) for the purposes of determining attainment or nonattainment, in accordance with

Appendix K to 40 CFR 50. Data collected by nonreference samplers may only be used to supplement and to corroborate data collected by reference samplers where such data are insufficient in quantity to make a determination of whether or not the area is attaining or not attaining the standard. Moreover, data collected by some nonreference  $PM_{10}$  samplers shall be interpreted using gray zones to indicate the potential uncertainty in these older data, which was the policy used for determination of Group I, II and III areas. These details for using data produced by nonreference samplers in order to interpret status with respect to the 24-hour and annual NAAQS are contained in Attachment A. Three situations are discussed: attainment, nonattainment and indeterminate. The latter situation is one in which sufficient reference and nonreference data are not available to make an unambiguous attainment or nonattainment determination.

Regulations in 40 CFR 58 require that State and Local Air Monitoring Stations (SLAMS) Networks be established by August 1, 1988; therefore, data collected after this date by nonreference samplers shall not be used. If a nonreference sampler without further modification is designated as a reference sampler in the future, then all of its historical data is retroactively defined as data produced by a reference sampler.

A table providing a general overview of this new policy for interpretation of  $PM_{10}$  measurement data is included as Attachment B. The treatment of reference and nonreference data is described according to the dates associated with its collection.

#### COLLOCATED $PM_{10}$ SAMPLERS

In the event that more than one  $PM_{10}$  sampler is operating concurrently at a location, data from reference method samplers always takes precedence over data from nonreference samplers. If multiple samplers are collocated for data quality assessment purposes (i.e., precision and accuracy), similar sampler types must be used and one sampler must be designated a priori for data reporting purposes (Appendix A to 40 CFR 58). Furthermore, if more than one type of sampler is used by a reporting organization, collocated precision sites should be established for each sampler type.

In order to sample more frequently than every 6<sup>th</sup> day, more than one sampler may be operated at a monitoring site. This group of samplers, plus any samplers sited for data quality assessment purposes, shall represent a single monitoring

station. When more than one sampler (or group) is operated independently by one or more monitoring agencies concurrently for attainment assessment purposes, each sampler (or group) shall represent a different monitoring station. The data from each monitoring station shall be used separately to assess attainment or nonattainment with the NAAQS, provided that the data meet all the requirements for SLAMS specified in 40 CFR 58, includes quality assurance and siting, and a quality assurance program that has been approved by the appropriate Regional Office.

#### Attachments

##### Addressees:

Director, Air Management Division, Regions I, III, IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides and Toxics Management Division,  
Region IV  
Director, Air and Radiation Division, Region V  
Director, Air, Pesticides and Toxics Division, Region VI  
Director, Air and Toxics Division, Regions VII, VIII, X  
Director, Environmental Services Division, Regions I-VIII, X  
Director, Office of Policy and Management, Region IX

cc. G. Foley, AREAL  
A. Eckert, OGC

bcc. D. Novello, OGC  
J. Bachmann (MD-11)  
PM<sub>10</sub> Measurement Data Working Group  
PM<sub>10</sub> Monitoring Contacts  
PM<sub>10</sub> SIP Contacts

## ATTACHMENT A:

### USE OF NONREFERENCE PM<sub>10</sub> DATA TO SUPPORT AND CORROBORATE REFERENCE PM<sub>10</sub> DATA

#### COMPARISONS WITH THE 24-HR NAAQS

Data produced by nonreference samplers may be interpreted subject to the following conditions: (1) Exceedances measured with certain PM<sub>10</sub> dichotomous samplers<sup>1</sup> shall be treated the same as exceedances measured with reference or equivalent method samplers, but only when there also are one or more exceedances subsequently measured with reference samplers at the same location. (2) Data produced with other nonreference samplers shall be interpreted using gray zones (as previously defined in the PM<sub>10</sub> SIP Development Guideline and which were used for SIP area grouping) as follows - (a) an exceedance measured with a nonreference sampler outside its gray zone can be treated as an exceedance of the NAAQS, only when there also are one or more exceedances subsequently measured with reference samplers at the same location, and (b) a PM<sub>10</sub> value produced by a nonreference sampler which is in its gray zone is not treated as an exceedance of the NAAQS nor is it treated as a nonexceedance of the NAAQS (i.e. it is treated as an uncertain data value for purposes of making comparisons with the NAAQS), but it does count as a measurement used to satisfy data completeness and compute annual averages.

Accordingly, data produced by nonreference method samplers in combination with data produced with reference method samplers may be used to identify the following situations:

#### 24-hr NAAQS - Attainment Situation

If (1) the total number of observed exceedances measured by reference and nonreference samplers results in an estimated number of exceedances to be less than or equal to one (subject to the rounding conventions and adjustments specified in Appendix K), (2) uncertain data values produced by nonreference samplers as defined above do not exist, and (3) the combined data produced by these samplers satisfy the data completeness requirements in Appendix K and are in accordance with the established EPA guidelines, i.e. Guideline on Exceptions to Data Requirements for Determining Attainment of Particulate Matter Standards (EPA-450/4-87-005, April 1987), then the State can

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<sup>1</sup>Samplers with inlet models SA246B, GMW9200 and WA10.

solicit approval by the appropriate Regional Administrator to demonstrate attainment with the 24-hr NAAQS.

#### 24-hr NAAQS - Nonattainment Situation

If (1) the total number of observed exceedances measured by a reference sampler results in an estimated number of exceedances to be greater than one, or (2) one or more exceedances are observed by a reference sampler and the total number of observed exceedances measured by reference and nonreference samplers results in an estimated number of exceedances to be greater than one (subject to the rounding conventions and adjustments specified in Appendix K), then the State should acknowledge that a nonattainment problem exists and take appropriate action.

#### 24-hr NAAQS - Indeterminate Situation

If the total number of observed exceedances results in an estimated number less than or equal to one, but the available data is insufficient to demonstrate attainment as judged under Appendix K, the State or local monitoring agency must continue  $PM_{10}$  sampling until attainment or nonattainment of the NAAQS can be established.

#### **COMPARISONS WITH THE ANNUAL NAAQS**

When insufficient reference data are available to estimate the  $PM_{10}$  expected annual mean according to Appendix K, then nonreference data can be used to supplement and corroborate data produced by the reference samplers. In order to facilitate this discussion, the following definitions are introduced:

- (1)  $x_r$  and  $x_{nr}$  represent the annual means computed from data produced by reference and nonreference samplers, respectively.
- (2)  $x'_{nr}$  represents the nonreference mean adjusted for the effect of the gray zone, as follows:

$x'_{NR} = 1.2 x_{NR}$ , if nonreference data is Wedding<sup>2</sup>,  
=  $0.8 x_{NR}$ , if nonreference data is Sierra  
Anderson<sup>3</sup>,

=  $x_{NR}$ , if nonreference data is produced by certain  
dichotomous samplers specified in footnote 1.

- (3)  $x$  and  $x'$  represent the range of estimated annual means  
resulting from a combination of data produced by  
reference and nonreference samplers and the effects of  
the gray zones:

$$x = p * x_{NR} + (1-p) * x_R, \text{ and}$$
$$x' = p * x'_{NR} + (1-p) * x_R,$$

where  $p$  is the relative weight placed on the  
nonreference data (e.g.  $p = 1/3$  when 1 year of  
nonreference and 2 years of reference data are  
available).

#### Annual NAAQS - Attainment Situation

If  $x_R$  is less than or equal to 50 ug/m<sup>3</sup> and both  
 $x$  and  $x'$  are also less than or equal to 50 ug/m<sup>3</sup>  
(subject to the rounding conventions and  
adjustments specified in Appendix K), then the  
nonreference data have corroborated that the  
expected annual mean is less than the level of  
the NAAQS and the State can solicit approval by  
the appropriate Regional Administrator to  
demonstrate attainment with the NAAQS.

#### Annual NAAQS - Nonattainment Situation

If  $x_R$  is greater than 50 ug/m<sup>3</sup> and both  $x$  and  $x'$   
are also greater than that concentration level  
(subject to the rounding conventions and  
adjustments specified in Appendix K), then the  
State should acknowledge that a nonattainment  
problem exists and take appropriate action.

#### Annual NAAQS - Indeterminate Situation

If (1)  $x_R$  is less than or equal to 50 ug/m<sup>3</sup>,  
and  $x$  or  $x'$  is greater than 50 ug/m<sup>3</sup>, or (2)  
 $x_R$  is greater than 50 ug/m<sup>3</sup>, and  $x$  or  $x'$  is  
less than or equal to 50 ug/m<sup>3</sup>, then the

---

<sup>2</sup>GMW9000 or any comparable Wedding designed high volume PM<sub>10</sub>  
sampler without a cleaning port.

<sup>3</sup>SA321A

status with respect to the annual standard is indeterminate and the State or local monitoring agency must continue  $PM_{10}$  sampling until attainment or nonattainment of the NAAQS can be established.

ATTACHMENT B

REVISED POLICY FOR INTERPRETATION OF PM<sub>10</sub> MEASUREMENT DATA

DATA COLLECTION TIME PERIOD			
	Prior to Aug. 1, 1987 (effective date of promulgation)	Aug 1, 1987 to July 31, 1988	From Aug. 1, 1988
<u>PM<sub>10</sub> Sampler:</u>			
Reference Samplers	Face Value	Face Value	Face Value
Unapproved Samplers <sup>1</sup>			
SA & Wedding (older)	Gray Zone <sup>2</sup>	Gray Zone	Not to be Used <sup>3</sup>
Dichots	Face Value	Face Value	Not to be Used <sup>3</sup>

<sup>1</sup> Data produced by unapproved samplers may only be used to support and corroborate data produced by reference samplers.

<sup>2</sup> A zone of uncertainty within which PM<sub>10</sub> data are used with less authority, as discussed in Attachment A; Gray zone limits were defined in the PM<sub>10</sub> SIP Development Guideline.

<sup>3</sup> For attainment/nonattainment and design values only; Regional Administrator approval for other SIP purposes (40 CFR 58.14(b)).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

NOV 4 1983

OFFICE OF  
AIR AND RADIATIONMEMORANDUM

SUBJECT: Guidance on Long-Term Nonattainment of the  $PM_{10}$  Standards

FROM: Don R. Clay, Acting Assistant Administrator  
for Air and Radiation *DRC*

TO: Regional Administrators, Regions I - X

States are currently in the process of developing and submitting to the Environmental Protection Agency (EPA) State implementation plans (SIP's) to implement the  $PM_{10}$  national ambient air quality standards (NAAQS) with the highest priority being those areas having the greatest probability of violating the standards (Group I). This memorandum provides guidance to Regional Offices regarding review of SIP's for areas that may not be able to provide for attainment within 3 to 5 years, the statutory deadlines.

Background

Preliminary assessments of air quality and emissions information from around the country indicate that a number of areas, principally in the West, may not attain the  $PM_{10}$  primary standards within 3 to 5 years, even with application of innovative control technologies. These areas range in size and type from small rural agricultural and mountain communities to a few major urban areas. The most difficult control problems in these areas are posed by "nontraditional" sources of  $PM_{10}$ , such as wood stoves, urban fugitive dust, agricultural and desert dust, diesel emissions, atmospherically formed secondary particles such as sulfates and nitrates, and prescription burning in forested and agricultural areas.

Earlier this year, this office established a task force to examine long-term nonattainment of the  $PM_{10}$  standards and suggest approaches for dealing with it. In so doing, the task force found notable constraints under the Clean Air Act (ACT). Under the section 110 pathway we are currently following for  $PM_{10}$ , our tools for forcing actions are limited. Furthermore, even in situations where States are making a good faith effort to attain, the rigid time constraints may force Federal intervention. The task force concluded that consideration of amendments to the nonattainment portions of the Act should be expanded to include  $PM_{10}$ . I strongly support this conclusion and we are encouraging the

Congress to address PM<sub>10</sub> in Act legislation (see attached letter to Congressman Dingell). [Attachment not included in notebook]

In the meantime, our options for dealing with long-term PM<sub>10</sub> nonattainment must comply with our current authorities. We intend, however, to do as much as we can to encourage real progress while avoiding penalizing those States which are making good faith efforts. The following presents guidance that we are able to provide at the present time on the control of nontraditional sources and action on PM<sub>10</sub> SIP's.

#### Guidance on Control of Nontraditional Sources

The Office of Air Quality Planning and Standards (OAQPS) previously has distributed to State and local air pollution control agencies guidance on implementation of the PM<sub>10</sub> standards, including the PM<sub>10</sub> SIP Development Guideline (June 1987) and this year's supplement to that guideline. These materials also referenced a number of previously-released publications on PM<sub>10</sub> control techniques and SIP development. In addition to providing written guidance, OAQPS also held a series of workshops in August 1987 to brief State and local agencies on requirements for implementing the PM<sub>10</sub> NAAQS. A list of reference materials pertaining to control technology for point sources, fugitive sources, and wood stoves was made available at the workshops. These references were also mailed to those who requested copies.

The OAQPS has additional work underway on guidance for measures to control emissions from nontraditional sources such as urban fugitive dust, wood smoke, rural fugitive dust, open burning/smoke management, and secondary particle formation. The first technical guidance document, Control of Open Fugitive Dust Sources (EPA-450/3-88-008), is now being distributed. Other guidance documents will be forthcoming from workgroups formed to provide example control measures for these nontraditional source categories. We expect that the Regional Offices will consult with States experiencing difficulty in providing for attainment of the NAAQS by the statutory deadlines and will encourage adoption of the measures identified in the guidance. Where the State control strategy does not incorporate the measures in a guidance document, the State should explain why the measures are not appropriate or otherwise not included in the SIP. Where guidance on control measures do not exist, the Regional Office should include a careful evaluation of the reasonableness of the control strategy in the Technical Support Document.

#### Action on PM<sub>10</sub> SIP's

The EPA has previously determined that PM<sub>10</sub> SIP submittals are governed by section 110 of the Clean Air Act. Under section 110(a)(2)(A), however, these SIP's are to provide for attainment of the primary standards "as expeditiously as possible but [(subject

planning and spreading methods, using better quality (e.g., more durable) abrasives and more rapid and efficient cleanup. As you know, there is currently an effort under way by the Colorado Department of Health to investigate street sanding control measures further. Also, OAQPS' Emission Standards Division is currently compiling information on the durability and silt content of road abrasives. Results are expected in late 1989. Robin Dunkins and Larry Elmore of my staff are preparing additional information on the effectiveness of street sanding control measures which may be helpful until these studies are complete. My staff will be in contact with Lee Hanley to discuss this information in early July.

3c. How much credit can be given to diesel inspection/maintenance programs?

In previous conversations with my staff, Region VIII was referred to the Office of Mobile Sources for assistance in determining credits for diesel inspection/maintenance. I understand that you have been in contact with them.

4. Will EPA accept a SIP with only compliance schedules and specific overall emission reductions for the stationary source categories that have been identified as major contributors to PM-10 (e.g., not specifically defined control measures)?

A SIP submitted to EPA for approval must meet the "Criteria for Determining the Completeness of Plan Submissions" as delineated in the Federal Register January 19, 1989 (54 FR 2141). One completeness criterion is that the State has adopted the SIP. There is an exception for parallel processing; however, EPA can review and propose to approve a SIP through parallel processing, even though the State has not adopted the necessary regulations, if the technical support criteria have been submitted. The technical support information to be submitted include:

- identification of the affected sources (those to be controlled),
- quantification of the changes in allowable emissions from the affected sources,
- procedures for determining compliance by the sources, and
- a demonstration that the PM-10 standards will be attained within 3 years if the affected sources comply with the new allowable emission rates.

The EPA will give final approval to the SIP after the State has adopted the necessary regulations. We understand that regulation adoption may require a protracted period before final approval can be granted.

5. What emission factor should be applied if such factor does not exist in AP-42? Would the SIP have to be amended if, and when, AP-42 factors are developed?

Emission factors are useful tools that can be used to estimate average emissions from categories of sources when developing emissions inventories for geographic areas such as Salt Lake City and Provo, Utah. If factors are not available in AP-42 for certain source categories, however, the following alternative actions should be taken in order of priority to determine representative emission rates.

- a. Conduct source tests to characterize emissions. Tests may be conducted by the source, provided that appropriate quality assurance steps are undertaken. (This alternative may be employed even if emission factors are available, but are disputed.)
- b. Contact the EPA Emission Factor Clearinghouse if source testing (alternative a) is not practicable to determine if an unpublished factor already exists or can be derived from existing data.
- c. If an unpublished factor cannot be obtained, select a default emission rate in consultation with the State (and the source, if appropriate) that can be used until a factor is developed by the clearinghouse.

A SIP would not ordinarily have to be amended if AP-42 factors are developed later. Factors are available in AP-42 or other EPA reports for nearly all of the larger source categories impacting an area. New factors becoming available for smaller sources should not significantly impact the SIP control strategy. In the unlikely event that a new or revised factor could significantly affect the SIP strategy, a case-by-case evaluation should be made in consultation with OAQPS to determine whether a SIP revision is warranted. If such a condition occurs prior to the proposed SIP being approved by EPA, a case-by-case determination should also be made as to whether the SIP strategy needs to be adjusted. Various considerations, including the existing PM-10 air quality or air quality trend in the vicinity of the source(s), might affect the need for a SIP revision.

6. How does the State enforce PM-10 emission limits without a PM-10 stack test method? Since PM-10 stack test methods currently under review do not consider condensibles for compliance determinations, should the State address condensible PM-10 for stationary sources in its attainment strategy?

In accordance with the SIP Development Guideline, the State of Utah may develop a PM-10 compliance stack test method based on the modified Method 5 procedure described in Appendix C of that guideline. The procedure is also described in the Federal Register of June 6, 1989 (54 FR 24213) as proposed EPA Reference Method 201A for measuring PM-10 emissions from stationary sources. A variation of that method which moves the collecting filter from inside the stack to a heated enclosure outside of the stack may be used to capture particulate matter that condenses above 120 degrees Celsius (120° C). We understand that it may be necessary to regulate particulate matter that

condenses below 120° C; Gil Wood, Chief, Emission Measurement Branch, will contact your staff separately to discuss techniques to measure these condensibles.

I hope that the above discussion is helpful to you. We will continue to work with you to ensure that the proper guidance is given to Utah to develop an approvable PM-10 SIP. Please continue to contact Tom Pace for overall coordination. I also encourage you to continue to work directly with the technical support contacts which have been previously identified.

cc: G. Wood  
J. Tikvart  
M. Martinez  
J. Calcagni  
J. O'Connor  
L. Hanley  
D. Gillam  
B. Blaszcak  
Director, Air Division, Regions I-VII, IX, X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

SEP 6 1988

MEMORANDUMSUBJECT: PM<sub>10</sub> SIP Development: Status and ConcernsFROM: John Catcagni, Director  
Air Quality Management Division (MD-15)TO: Director, Air Division  
Regions I-X

In promulgating the new PM<sub>10</sub> standards last year, we recognized that the States did not have adequate resources to develop plans to demonstrate attainment everywhere. Therefore, we initiated three mechanisms to reduce the planning burden, to allow time for the States to develop quality State implementation plans (SIP's), and to provide us with information on the status of the SIP development.

First, with your help, we classified all areas as Group I, II, or III. We required only procedural revisions for Group III areas and procedural revisions, increased monitoring, and commitment for Group II areas. Full demonstration SIP's were required only for Group I areas and Group II areas which observed violations of the standards.

Next, we asked you to work with your States to submit SIP development plans. These plans allow the States to set reasonable deadlines for developing and submitting the SIP's.

Then we developed a computerized bulletin board tracking system to track the State-established milestones. This allows your staffs to update the SIP development status and allows the Office of Air Quality Planning and Standards (OAQPS) to have the information necessary to manage the program.

At the Atlantic City Division Directors meeting, you expressed concerns about the status of SIP development and consequences of missing deadlines. The purpose of this memorandum is to address those concerns.

Revisions to the SIP Development Plans

Last fall when we were reviewing the SIP development plans, we noted that several of them appeared to be overly optimistic. Since these were State commitments, we approved the plans. In addition, some States with

schedules which seemed reasonable at the time have found the development of the PM<sub>10</sub> SIP more time consuming than originally thought. Therefore, some of the development plan milestones will have to be revised. The revised milestones should show sustained progress for submission of the SIP's as soon as possible. Revised milestones must be fully justified and cannot extend beyond the end of FY 1988 for the Group II and III SIP's, and not later than the end of FY 1989 for the Group I full attainment demonstration SIP's. It is imperative that States fulfill their obligations to prepare and submit SIP's as outlined above. If a State does not submit a SIP revision for a Group I area by the end of FY 1989, the process leading to the development of a Federal implementation plan should begin.

If a State requests a revision to its development plan, you should review it to ensure it meets the above guidelines, then send me a memorandum justifying the extended schedule. Please expedite your efforts to make the necessary revisions to the schedules since we intend to use the schedules to develop the FY 1989 Strategic Planning and Management System (SPMS) commitments.

#### Missed Milestones

Attainment of the PM<sub>10</sub> standard is one of the Environmental Protection Agency's (EPA's) top priorities. States should have planned for, and provided, adequate resources to develop their SIP's. Where reasonable efforts are not being made, the Region at this time should meet with the State to discover the cause of the slippage. Although the milestone dates are not legally enforceable, they were developed by the States, and the State's record in meeting the milestone dates can be used to show that the State is, or is not, making a good-faith effort to develop and submit a SIP.

If one of your States has missed or will miss a milestone, you should renegotiate the development dates. The revised schedules and justifications should be submitted as described above. If the slippage results from a misunderstanding of EPA's priorities, you should use the grant negotiation process to ensure proper attention is given to PM<sub>10</sub> SIP development. In this regard, you should note that failure to meet a grant condition can be considered a basis for the withholding of section 105 grant funds. On the other hand, if a State is making good-faith efforts and has justifiable reasons for not being able to meet the milestones, documenting this fact and specific needs will be beneficial to us in nationally evaluating options for assistance and for prioritizing future resource allocations.

#### Changes in Groupings

We have received several requests to reclassify areas from one group to another. Our basic purpose in developing the grouping process was to prioritize and allocate resources; it was intended to be a one-time

to subsection (e)] in no case later than 3 years from the date of approval of such plan." Section 110(e) allows EPA, upon application of the Governor of the State, to extend the attainment deadline by as much as 2 additional years, if the technology or other means necessary for attainment will not be reasonably available with that 3-year period. Clearly, if EPA determines that a PM<sub>10</sub> SIP demonstrates attainment of the standards within these time periods, the SIP can be approved.

Some PM<sub>10</sub> SIP's submitted to Regional Offices may, however, lack a persuasive demonstration of attainment of the primary standards within 3 to 5 years. The SIP in such a case will likely include control measures that are necessary to move the area toward attainment and, therefore, constitute an improvement upon the existing SIP. As a result of an adverse judicial decision in the Ninth Circuit [(Abramowitz v. EPA, 832 F.2d 1071 (1987))], however, some ambiguity exists as to whether EPA may approve individual control measures for States unless it first determines whether or not the SIP demonstrates that the area will attain the standard by the statutory deadlines. (The Ninth Circuit encompasses all the States in Regions IX and X, as well as Montana.) In Abramowitz, which involved the South Coast (California) ozone/CO SIP, EPA had approved a number of individual control measures but explicitly declined to judge whether or not those measures would achieve attainment of the NAAQS by December 31, 1987, the statutory deadline in Part D of the Act, even though California had submitted an attainment demonstration (which indicated the standards would not be attained by the deadline). The court rejected this view, holding that EPA exceeded its authority by approving the control measures without requiring a demonstration of attainment, Id. at 1079. The Abramowitz court did note that it was expressing no view on the question of whether EPA may approve individual control measures if they would strengthen the SIP and improve air quality, at the same time it disapproves the attainment demonstration. Id.

While the holding does not apply directly to PM-10 SIPs, it could be interpreted to require EPA to determine whether a PM-10 SIP demonstrates attainment within 3 to 5 years before approving any individual control measures. At least in the Ninth Circuit, this ruling poses some obstacles to approval of a SIP that does not demonstrate attainment in 3 to 5 years, unless the SIP as a whole is disapproved for failure to attain. In such a case, we should be able to approve particular SIP measures that improve air quality. In other circuits EPA is not bound by the Abramowitz precedent.

Based on current information, it is likely that some areas may not be able to provide a persuasive demonstration of attainment within the statutory deadlines even after adoption of reasonable control strategy measures. These areas appear to have unique combinations of factors which will prevent rapid attainment of the standards. These factors include: (1) the variety and magnitude of difficult-to-control sources that are the major causes of the

elevated ambient concentrations, (2) the degree of control required, and (3) the amount of time necessary to develop and apply control measures to bring about attainment. Due to these factors, it is not possible at this time to issue comprehensive and explicit guidance which will pertain in all situations.

Each State has an obligation to attain the standards as expeditiously as practicable but no later than 5 years, by adopting necessary control measures. The Regional Offices can use the control measures identified by the workgroups mentioned earlier as a guide to judge whether the control strategy submitted by the State is reasonable. A SIP which does not provide a persuasive demonstration that attainment will occur by the statutory deadlines and does not include a reasonable control strategy should be disapproved. Where such an attainment demonstration cannot be made, but the SIP includes a reasonable control strategy, the Regional Office should consult with OAQPS and the Office of General Counsel concerning action on the SIP.

We appreciate the assistance provided by the Regional Offices in developing long-term nonattainment programs for  $PM_{10}$ , and encourage your continued participation in the further development of guidance material. Should you have any questions, comments, or further suggestions, please contact John Calcagni at FTS 629-5621.

Attachment

cc: G. Emison  
A. Eckert



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

AUG 5 1988

MEMORANDUM

SUBJECT: Identifying and Expediting SIP Revisions that Impact the Enforcement Process

FROM: John S. Seitz, Director *John Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Michael S. Alushin *WC Register for*  
Associate Enforcement Counsel for Air  
Office of Enforcement and Compliance Monitoring

TO: Air Management Division Directors  
Regions I, III, and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII, and X

Regional Counsels  
Regions I-X

We are providing an additional means to help you manage the process of reviewing proposed revisions to State Implementation Plans (SIPs) under the Clean Air Act. One area of difficulty is where delay in reviewing a proposed change undermines your ability to enforce the current version of a SIP.

We have agreed with John Calcagni, Director, Air Quality Management Division, that you may use the OEMC Case Docket as a way to alert Headquarters to SIP processing delays which may impact a referral action. As you know, a case enters the Docket once the litigation report has been received by Headquarters. Among the many pieces of information tracked in the Docket is a field called "Regional Comments". This field is updated monthly by Regional Counsel and read by the Headquarters staff attorney to learn about the most recent events affecting the case. We suggest that the Regional comment field be used as the means for you to describe your understanding on the status, location, and expected future action of a SIP revision affecting the case. SIP revisions received by the Region but not yet forwarded to Headquarters should be noted in the comment field along with how the revision impacts the case. In the future, OAQPS's computerized SIP TRAX system will be expanded to also include information on SIPs being processed by the Region and whether the revision impacts an enforcement action.

The OEMC-AED attorneys will share the Docket updates with SSCD's Regional Programs Section (RPS) on a monthly basis and they will alert their respective management to issues/needs noted in these updates. Of course, should a matter that needs a quicker response arise, a call to RPS (Gerard A. Kraus FTS 382-2847) or the OEMC-Air Enforcement Division (Elliott Gilberg FTS 475-7089) is welcome.

SIP revisions that impact a significant violator also need to be expeditiously reviewed. To alert Headquarters to this, the SIP's transmittal memo should clearly state that the revision impacts a significant violator.

Where SSCD learns from Docket reviews or a transmittal memo that SIP revisions in Headquarters need to be expedited because they impact a current referral, forthcoming referral or a significant violator source, SSCD (RPS) will alert Johnnie Pearson in AQMD (FTS 629-5691) on an ongoing basis. As mentioned above, the SIP TRAX system will soon note if revisions impact an enforcement action. He will then notify the Headquarters reviewing offices of the need to complete their reviews in a timely fashion. Johnnie will also monitor those SIPs that have to go through OMB to minimize delays there. On a monthly basis (simultaneous to reviewing the case Docket), RPS will check with Johnnie on the status of the revisions previously identified as needing expeditious review and attempt to get outstanding problems resolved.

For you to benefit from this process, it is imperative that Regional Counsel complete their monthly Docket updates in a timely fashion and the Regional air programs (including compliance) be involved. It is also necessary that the memorandum transmitting a SIP revision to Headquarters note that the revision impacts a referral, will impact a referral, or impacts a significant violator source. This will give Headquarters two avenues (the Docket and the SIP's transmittal memo) for knowing whether certain SIPs need to be expedited.

Please start identifying SIP revisions which affect referrals in the August Docket update. Regions should already be noting the needed information in the SIP's transmittal memo (see attached memo). For SIP revisions that are in Headquarters and impact a significant violator, the Regions need to alert their Regional liaison in SSCD as soon as possible of these revisions so they can be expedited.

Please call Gerard C. Kraus (382-2847) in SSCD or Elliott Gilberg (475-7089) in the OECM-Air Enforcement Division, if you have questions.

Attachment

cc: Edward Reich, OECM  
Sally Mansbach, OECM  
John Calcagni, AQMD  
Johnnie Pearson, AQMD

Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI and IX

Air Program Branch Chiefs  
Regions I - X

Regional Counsel Air Contacts  
Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 14 1985

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Pending SIP Revisions Which Affect Active Air Enforcement Cases

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Sources Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

I would like to thank you and your staff for the cooperation you gave in helping OECM-AED prepare the attached memorandum. I and John Calcagni will do our best to expedite the processing of these pending SIPs and will keep you informed of our progress.

Since this exercise only addressed SIPs officially in Washington, we need to begin identifying SIPs within the region but not yet submitted to Washington that have Federal enforcement action initiated. When these SIPs are forwarded to us, please clearly note that expeditious processing is needed due to its effect on the enforcement action.

Thank you again for your help.

Attachment

cc: Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI and IX

Air Program Branch Chiefs  
Regions I, VII, VIII and X

John Calcagni, AQMD



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 27 1983

PN 110-88-06-27-095

MEMORANDUM

SUBJECT: "Grandfathering" of Requirements for Pending SIP Revisions

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides and Toxics Division  
Region IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Region VII, VIII, X

Recommendations for improving SIP processing generally at EPA were presented to the Deputy Administrator and approved fully. It is the intention of the Agency's management that the recommendations be implemented promptly. This is being done by an Intra-Agency Work Group composed of Headquarters and Regional Office persons. This memorandum provides guidance on applying previously applicable standards to pending SIP revisions where the relevant requirements have changed since the state prepared the SIP submittal (i.e., "grandfathering").

In a number of cases, States have submitted SIP packages that were consistent with the EPA "requirements" (i.e., standards, regulations, policies, legal interpretations, guidances, and clarifications) in effect at the time. As a result of processing delays and policy evolution, the applicable requirements were revised before the proposed SIP change received EPA approval. When the revised requirements did not contain an appropriate grandfathering provision (e.g., a provision allowing SIP packages to be acted upon based on the requirements in effect at the time of State adoption), SIP reviewers assumed that the appropriate action was to disapprove the SIP revision and/or return it to the State for changes.

Not only can this delay rulemaking, but it also may be inequitable and serve as an irritant to effective EPA/State/local agency cooperation. Moreover, such action usually results in an ineffective use of resources by the State and EPA. Consequently, we are today extending the concept

of grandfathering contained in existing guidance (e.g., for modeling), as described in the enclosure. It is the intent of EPA management that grandfathering be applied where it is warranted and appropriate. Today's guidance was developed in conjunction with the Regional Offices and the Office of General Counsel. We believe that it deals with the equity issue, will not have a noticeable environmental impact overall, will strengthen the Agency's working relationship with its State and local partners, and does not conflict with either the Clean Air Act or the Administrative Procedures Act.

Attachment

cc: Air Branch Chiefs, Regions I-X  
Regional Counsel (Air Branch Chiefs), Regions I-X  
Don Clay  
Alan Eckert  
Mike Alushin  
John Seitz  
Robert Cahill  
John Calcagni  
Bob Wayland  
Dick Wilson  
Bill Laxton  
Charles Gray

bcc: Work Group Members  
Jack Farmer  
Rich Ossias  
Peter Wyckoff  
Bern Steigerwald

GUIDANCE ON GRANDFATHERING OF  
REQUIREMENTS FOR PENDING SIP REVISIONS

June 1988

Introduction

EPA is expanding its guidance on how to apply previously applicable requirements in two general situations where the issue may arise: (1) when new or newly revised "requirements" (i.e., standards, regulations, policies, legal interpretations, guidances, or clarifications) for SIPs are issued by the Agency and (2) when rulemaking action is taken on a "SIP revision" (i.e., a State-specific EPA rulemaking under the Clean Air Act). This guidance will be in effect for complete SIP revisions submitted to EPA and for requirements issued and/or revised by EPA after today. In general, all SIP revisions submitted before today will continue to be reviewed based on EPA's current policy, which is to decide each SIP revision based on the requirements in existence at the time of EPA's rulemaking.

Grandfathering is not to be considered mandatory or automatic. In determining whether grandfathering should apply, and what the appropriate date should be, the decision maker should keep in mind the thrust of this guidance, i.e., to honor good faith effort on the part of the State/local agency submitting the revision, balancing equity with other considerations. This guidance expressly is not intended as a vehicle to allow circumvention of tighter requirements or to facilitate the avoidance of difficult decisions.

Legal Background

Whenever a new requirement is established by Congress (via statute) or by EPA (via regulation or policy), it becomes generally applicable unless the authority establishing the requirement provides otherwise. When Congress enacts a new statute, it applies to all matters then pending before an agency unless Congress specifically provides otherwise in the statute. The Agency has no authority to grandfather any matter from the new statutory requirements without explicit provisions in the statute.

When EPA issues new regulations, they are also generally applicable unless the regulations themselves include grandfathering provisions. If grandfathering provisions are not explicit in the regulations and absent a contrary interpretation by the Agency, courts will apply the new rules to matters pending before the Agency. Thorpe v. Housing Authority of

Durham, 393 U.S. 268 (1969). However, an agency does have some flexibility to provide grandfathering provisions in new regulations. Generally, such provisions are appropriate where they meet a four-part test. First, the new rule represents an abrupt departure from well-established practice. Second, affected parties have relied on the old rule. Third, the new rule imposes a large burden on those affected. Fourth, there is no strong statutory interest in applying the new rule generally. Sierra Club v. EPA, 719 F.2d 436 (D.C. Cir. 1982), cert. den. 468 U.S. 1204 (1984). In the past, EPA has generally included explicit grandfathering provisions in new regulations where appropriate. Under this guidance, EPA will affirmatively consider the need for grandfathering provisions in all new regulations.

An agency has very broad authority to decide how and when to issue new guidance, since as a purely legal matter guidance is not absolutely binding on subsequent proceedings. Pacific Gas and Electric Co. v. FPC, 506 F.2d 33 (D.C. Cir. 1974). Historically, EPA has provided only limited grandfathering from revised guidance. This document establishes a detailed framework for grandfathering pending SIP revisions from all future EPA requirements.

#### The Guidance

The following will be considered in deciding whether to apply grandfathering to an individual SIP revision and in developing appropriate grandfathering provisions for each EPA SIP requirement:

A. General Guidance: A SIP revision generally will remain subject to the requirements in effect either (a) on the date that the State adopts the SIP revision (provided a complete, fully adopted revision is submitted promptly, generally within 60 days of the adoption), or (b) on the date that the USEPA proposes the SIP revision under the parallel processing procedure. However, in specific cases, EPA will apply different dates as appropriate (e.g., see memorandum, J. Tikvart to Regional Modeling Contacts, January 2, 1985, concerning grandfathering modeling requirements). A discussion of what constitutes a complete, fully adopted SIP revision is found in the memorandum, G. Emison to Regional Air Directors, March 18, 1988.

B. There are certain exceptions to the general grandfathering guidance:

1. Grandfathering should not be considered if the State has not acted in good faith in preparing and submitting a SIP revision. For example, an incomplete revision hurriedly submitted to avoid coverage under a new or revised EPA requirement should not be grandfathered. Similarly, grandfathering should not be considered when a SIP revision is submitted

substantially in excess of 60 days after State adoption as specified in paragraph A.

2. Grandfathering of SIP revisions may not be appropriate or possible when a court ruling has explicitly changed a current federal requirement or has convinced EPA that a previous requirement is no longer supportable. Under these circumstances, the Office of General Counsel (OGC), in consultation with the Office of Enforcement and Compliance Monitoring (OECM) and the Office of Air and Radiation (OAR), will define the limits of the court's decision and how it may affect EPA's requirements and SIP revisions, including previously approved SIP revisions, pending SIP revisions, and SIP revisions which are to be submitted in the future. OGC will make its best effort to issue such an opinion within 60 days from the date of the court's decision.

Based on this analysis, OAR will issue a decision on the appropriateness of grandfathering and the continued use of the pre-court ruling requirement on pending and future SIP revisions. This decision will generally be issued within 90 days from the date of the court's decision. OAR will also issue a decision on the appropriate action to take, e.g., notice of SIP deficiency or "no action" needed at this time, on previously approved SIP revisions.

3. The Administrator may determine that grandfathering is not appropriate under a certain new policy. He could conclude that the old policy was ill-founded, or simply not wish to grandfather due to the importance of the new policy to EPA's programs. Where a new policy issued by the Administrator specifically states that grandfathering is not appropriate or establishes a particular grandfathering provision that differs from this guidance, such provisions would of course supersede this guidance.

4. Grandfathering of a particular SIP revision or requirement is not appropriate if a decision to grandfather it would have an imminent and substantial adverse environmental impact or could permanently foreclose the continued use of the provisions and/or sanctions of Part D of the Clean Air Act, e.g., changes in Section 107 designations or the full approval of Part D plans, both of which may foreclose the future use of sanctions to assure the correction of any deficiency arising from the change in EPA requirements.

5. Action on a SIP revision which comports with the revised requirements but not the original requirements may be based on the revised requirements.

6. If a SIP revision complies with the original but not the revised requirements, and such lack of compliance renders the SIP as a whole substantially inadequate to assure the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) under the revised requirements, an individual analysis of the appropriateness of grandfathering under the four-part test established in the Sierra Club case discussed above under Legal Background must be conducted. If the analysis concludes that grandfathering of the particular SIP revision is appropriate, action may be based on the original requirements. In such an event, however, additional actions may be necessary depending upon the nature of the SIP revision being considered.

a. For SIP revisions (e.g., variances and interim emission limits) which would have an effective lifetime of 2 years or less from the date of EPA final rulemaking, no additional action will generally be taken, because of the length of time it would take for the State and EPA to change the action to comport with the revised requirements. Any subsequent requests for the continuation of grandfathering (i.e., beyond the effective lifetime of the original SIP revision) should be rejected.

b. For SIP revisions which would otherwise have an effective lifetime of greater than 2 years, other rulemaking actions will be necessary to assure that the SIP ultimately comports with the revised requirements.

(i) Elements in plans that have been "conditionally" approved will be approved subject to the further condition that the plan as a whole be corrected as necessary to assure full compliance with all requirements of the Clean Air Act. For a discussion of EPA's original policy on conditional approval, see 44 FR 20372 (April 4, 1979), 44 FR 38583 (July 2, 1979) and 44 FR 67182 (November 23, 1979).

(ii) Elements in fully approved plans will be approved with the simultaneous issuance of a CAA Section 110(a)(2)(H) notice of deficiency.

Under either of these circumstances, the approval of the particular SIP revision should contain a sunset provision that terminates the effectiveness of the approval within a predetermined period, generally 2 years. In addition, the Region should make an affirmative effort to assure that the timeframe (generally 2 years) for complete, fully adopted State rulemaking action involved with either the notice of SIP deficiency or conditional approval is strictly adhered to. If a State does not adhere to this schedule, the Region will initiate appropriate steps to ensure ultimate compliance, e.g., performance-based grant actions, sanctions, and EPA promulgations.

7. Certain classes of changes are only indirectly related to attainment and maintenance of national ambient air quality standards. Such changes may involve PSD/NSR rules, stack height provisions, permit fees and similar generic requirements which are clearly not intended to be permanently grandfathered. Changes of this type are to be handled as described in paragraph 6 above.

C. All new requirements issued by OAR or OGC will address their impact on SIP revisions previously approved or pending, and SIP revisions to be submitted in the future. New requirements will contain provisions incorporating the general grandfathering guidance (paragraph A above) whenever appropriate and possible. Generally, changes in EPA's requirements will have effective dates which are 60 days from the date of signature to allow States to adjust their pending rulemaking actions before they are finally adopted and submitted. Longer effective dates should be used when the changed requirements affect fundamental, long-term air quality strategy development tools and the requirements of the change are resource intensive.

D. SIP revisions framed to meet major requirements currently being reconsidered by EPA or currently under litigation should proceed and will not be held back from rulemaking until the issues are decided. SIP revisions approved under these circumstances will be addressed, if necessary, as described in paragraph B(6)(b) above for revised EPA SIP requirements and by paragraph B(2) for requirements being changed because of court decisions.

E. Staff personnel making grandfathering decisions should coordinate with Offices of Regional Counsel or OGC on application of this guidance as appropriate, especially in connection with the analysis required under paragraph B(6) above.

F. Each Federal Register notice for action on a SIP revision will state the rationale for which requirements were applied.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 110-88-06-17-094

17 JUN 1988

MEMORANDUM

SUBJECT: Demonstration of "Representative Emission Conditions"  
for Use in "Expected Exceedance" Determinations

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Gary O'Neal, Director  
Air and Toxics Division, Region X

On May 9, 1988, you requested further written guidance on determining attainment with a statistical based standard (e.g., a standard that is attained when the expected number of exceedances per year is less than or equal to one). In my March 8, 1988 memorandum, I stated that a State could use more than 3 years of data, provided the additional years are representative of current emission conditions. Specifically, you requested guidance on what is meant by representative of current conditions.

In your May 9 memorandum, you stated:

We feel that there are a number of technical issues which are important and need to be addressed in any guidance for determining the representativeness of past emissions conditions. These include temporal and spatial considerations as well as emissions characteristics. All parameters which affect the ambient concentrations at a specific monitoring site must remain essentially constant.

You went on to state that:

It is important that we clearly indicate that EPA does not consider a demonstration that the total area-wide mass emissions have remained constant to be an adequate demonstration that the conditions which affect a specific monitoring site have not changed.

Although we are in general agreement with the concept of those suggestions, we need to expand on their applicability.

The reason for promulgating a statistical form of the standard was to recognize the variations that exist both in the meteorology and emissions. Therefore, "representative of current conditions" does not mean that no variation has occurred in either meteorology or emissions. However, the variations which have occurred should be random and not subject to human control. For example, some winters are warmer than others, requiring less use of wood stoves for heating, resulting in lower annual wood stove emissions. Such variations would be normal and would be "representative of current conditions."

On the other hand, we agree that major shifts in emission patterns could affect the representativeness of the data even if the total quantity of the emissions are approximately the same. For example, shifts from mobile source to industrial source volatile organic compound emissions, from point source to area source emissions, from direct emissions of PM<sub>10</sub> to emissions of PM<sub>10</sub> precursors, or from emissions in one location to another, in general, will affect the representativeness of the data. In addition, ambient data collected during periods when emissions are reduced due to poor economic conditions would not be "representative of current conditions."

In other words, we expect there will be some random variation both in meteorology and emissions and such variation would not disqualify data from being considered as representative of current conditions. However, if major changes in emission trends, type, location, or quantity, have occurred, we will not consider the data to be representative of current conditions.

In a related question, you asked "What would constitute an acceptable monitoring network for use with more than 3 years of data?" The monitoring network requirements are published in 40 CFR 58. These requirements are to be met for all monitoring years regardless of whether it is 3, 5, or more years.

If you have any questions, please contact Dave Stonefield of my staff at FTS 629-5350.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

18 MAR 1988

MEMORANDUM

SUBJECT: Policy for Determining Completeness of SIP Submittals

FROM: Gerald A. Emison, Director  
Office of Air Quality Planning and Standards (MD-10)TO: Director, Air Management Division  
Regions I, II, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides and Toxics Division  
Region IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Region VII, VIII, X

Today I am forwarding to you a policy (attached) concerning the screening of incoming SIP packages to determine whether their contents justify EPA review and action or warrant immediate return to the state. It provides objective criteria for the Regional Offices to use in determining completeness for review. It also will assist State and local agencies in the preparation of SIP packages. Regional Offices should discuss these requirements with their States and implement the policy as soon as possible.

During the course of the Agency's assessment of the SIP processing system, the problem of processing packages that were deficient (e.g., no clearly specified emission limits, test procedures, averaging times, legal authority) was identified early on. Some Regions believed that there was no legal option and put such deficient packages into the usual review cycle, delaying response to the State and needlessly consuming valuable resources. Our current judgment is that with appropriate criteria defined, it is legal for EPA to return deficient SIPs because they are incomplete and inadequate to trigger the requirement for EPA review.

Certain Regional Offices have adopted their own procedures to screen out of the review loop patently deficient submittals and have operated without problems for many years; perhaps the most successful of these

procedures was developed in Region I. The attached policy, based on the Region I approach, is being adopted at this time as national procedure for use by all Regional Offices.

Although this policy is immediately effective, EPA intends to publish regulations formally setting out these completeness criteria to further assist States in preparing SIP revisions. This will be done as part of the general Federal Register notice we will be publishing this spring on the complete SIP processing reform effort. This policy will provide guidance to Regional offices and States until the criteria are formalized in final regulations.

Note that this policy deals only with the adequacy of a SIP submittal for purposes of review. Completeness review is intended to be done promptly, based on objective criteria. It is not intended to focus on the approvability of the proposed change (which often may involve extensive technical review and subjective professional judgment). As a general rule, the reviewer should err on the side of processing a SIP submittal of questionable completeness rather than injecting the issue of approvability versus completeness into discussions with the State. On the other hand, if a submittal is clearly incomplete and there are also deficiencies with regard to approvability, all such information should be transmitted to the State. As an alternative, of course, EPA can always process a disapproval of the submittal.

This policy is intended to provide a quick screen of incoming packages so that unreviewable SIPs are promptly returned to the State for incorporation of missing items. Used properly by the Regional Offices, scarce review resources will be conserved and needless delays will be avoided; used properly by your State and local agencies as a guide in SIP preparation, we should see a decline in unreviewable packages accompanied by an improvement in the overall quality of SIP submittals.

cc: Air Branch Chiefs, Region I-X  
Regional Counsel (Air Branch Chiefs), Regions I-X  
Craig Potter  
Don Clay  
Robert Cahill  
Alan Eckert  
John Calcagni  
John Seitz  
Bob Wayland

bcc: Work Group Members  
Bill Laxton  
Jack Farmer  
Rich Ossias  
Peter Wyckoff  
Bern Steigerwald  
Mike Alushin

## COMPLETENESS DETERMINATIONS OF SIP REVISION SUBMITTALS

## Introduction

EPA is instituting the following policy for determining whether SIP revision submittals are administratively and technically complete for processing via federal rulemaking. The objective is to return promptly fundamentally unreviewable SIP submittals to the State for corrective action. This policy is expected to provide the following benefits:

1. Improved quality of the State submittals received for processing.
2. Fewer SIPs being disapproved for inadequacies related to issues that are simply not addressed.
3. More efficient use of EPA's resources in SIP reviews, and in the preparation of Federal Register actions directed to those State submittals requiring EPA approval or disapproval based upon relevant, substantive issues.
4. More efficient use of State resources in SIP preparation with the delineation of criteria by which to prepare adequate submittals.

The following policy contains the criteria to be used by States in preparing submittal packages and by EPA to evaluate such submittals in order to make completeness determinations. It also provides sample letters for communicating those determinations to State Agencies. The information is presented in two parts: submittals for Sequential Processing and submittals for Parallel-Processing. \*

## I. SIP REVISIONS SUBMITTED FOR SEQUENTIAL PROCESSING

Determining Completeness

SIP revisions that are submitted for EPA approval via the sequential rulemaking process involve revisions that have been through all of the necessary State procedures, and have been finally adopted (e.g. regulations, regulatory amendments) or finally issued (e.g. operating permits, consent agreements, State orders). These revisions are formally submitted to EPA for approval and incorporation into the SIP. Under sequential processing, EPA may conduct traditional rulemaking (publishing both proposed and final actions) or direct final rulemaking (publishing a final action without a prior proposed action). Basically, these submittals must include:

\* SAMPLE LETTERS NOT INCLUDED

- ° a letter from the appropriate State official requesting that EPA approve the enclosed revision;
- ° evidence that the necessary public notice was given and a public hearing was held;
- ° a document (regulation, permit, State order) fully adopted/issued and enforceable by the requesting agency for incorporation by reference with its effective date clearly indicated, and
- ° the technical support necessary to demonstrate that approval of the revision will not violate ambient air quality standards or PSD increments, will not interfere with RFP, and is consistent with requirements for maintenance of ambient standards (note: different/additional technical support may be appropriate depending upon the nature of the revision).

Upon receipt of a SIP revision request for approval via sequential processing, Regional Offices are to use the checklist found at Attachment 1 to determine completeness. Once these criteria have been established in regulatory form, Regional Offices should follow the relevant regulations.

Regions are to institute procedures whereby each SIP revision request is determined to be complete or incomplete within 45 days of receipt. When a submittal has been determined to be complete, the Region should send a letter to the requesting official confirming receipt of a complete submittal and informing that official of EPA's general processing schedule. Please see the sample letter found at Attachment 2.

When a submittal is determined incomplete, a letter should be sent to the requesting official returning the submittal and detailing its deficiencies, both administrative and technical. Please see the sample letter found at Attachment 3. The letter may also state that if the revision is resubmitted in its current form, EPA will publish a notice proposing to disapprove the request.

Care must be taken to insure that SIP submittals that are determined incomplete are, in fact, returned on those grounds. This requires that the reviewer make the completeness determination based on the lack of necessary components of the submittal rather than on whether the contents of the submittal are approvable.

This determination can be difficult and judgment will be needed. For example, a SIP revision may request that EPA approve a permit/order/

consent agreement issued to a single source to reduce its emissions. Examination of the document may reveal that it contains no emission rate. If the action clearly warrants the incorporation of an emission rate (e.g., modeling support assumed an emission rate), then the submittal is incomplete.

Alternatively, the submittal may contain an emission rate not expressed in accordance with our enforcement policy memoranda for acceptable forms of emission rates. In this case the issue is not completeness, but whether the emission rate as submitted is approvable. As another example, take the case where a submittal's emission rate(s) involves a bubble and/or long term averaging. The emission rate(s) as expressed may be acceptable. However, the Emission Trading Policy requires technological and economic justification beyond the usual technical support necessary for a single source SIP revision. If the justifications are missing from the submittal, it should be determined incomplete and returned to the State on those grounds.

## II. SIP REVISIONS SUBMITTED FOR PARALLEL-PROCESSING

SIP revisions that are submitted for EPA approval via the parallel rule-making process involve revisions that are concurrently undergoing the necessary State procedures for adoption or final issuance. These revisions are submitted to EPA by the State Agency in the form of proposed regulations or proposed permits/orders/consent agreements. EPA initiates the federal rulemaking process by preparing a notice of proposed rulemaking on the submittal. EPA subsequently takes final action on the States' formal submittal of the SIP revision once it is finally adopted at the State level.

### Determining Completeness

Making completeness determinations for States' requests to parallel-process SIP revisions requires evaluations of proposed State actions. (A second, separate completeness determination must later be made on the formal submittal.)

Basically, a SIP revision request for parallel-processing must include:

- ° a letter from the appropriate State official requesting parallel-processing of the enclosed revision,
- ° a schedule for completing the adoption/issuance process at the State level,

- ° a proposed or draft document (regulation, permit, state order, consent agreement) that will eventually be adopted/issued by the State and formally submitted as a SIP revision, and
- ° sufficient technical support to evaluate the proposed revision's impact on air quality and conformance with federal statutes, regulations and policies.

Regions are to use the checklist found at Attachment 1 for determining if a parallel-processing request is adequate to initiate the federal rulemaking process. (Again, once the criteria are adopted as regulations, Regional Offices should look to the relevant regulations.) The Region should determine whether the draft/proposed revision is adequate within 45 days of receipt of the request to parallel process and advise the State promptly. When a submittal is determined adequate to initiate the federal approval process, the Region should so inform the requesting State official. That letter should remind the State of the necessity of a complete formal submittal in order for EPA to take final rulemaking action (please see the sample letter found at Attachment 2).

Similarly, when the completeness review indicates that the submittal in for parallel-processing is not adequate to initiate federal rulemaking, a letter should be sent explaining the deficiencies, and returning the draft submittal (please see the sample letter found at Attachment 3).

After the State completes the final adoption/issuance process, the SIP revision request is formally submitted to EPA exactly as required under sequential rulemaking. The Regions are to use the checklist found at Attachment 1 (and eventually the regulatory checklist) to determine if the formal submittal is complete. EPA can only take final rulemaking actions on formal submittals of adopted regulations and final permits, orders, consent agreements, etc.

As before, the Regions are to send a letter to the requesting State official within 45 days of receipt of the formal submittal stating that it is complete or, alternatively, that the submittal is incomplete, outlining the deficiencies, and returning the submittal.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

DEC 23 1987

PN 110-87-12-23-092

MEMORANDUM

SUBJECT: Expanded Use of Direct Final SIP Processing

FROM: Gerald A. Emison, Director Original Signed By  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides and Toxics Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

As you know, recommendations for improving SIP processing at EPA have been presented to the Deputy Administrator and were approved in full. Moreover, it is the intention of Agency management that the recommendations be implemented promptly. An intra-agency work group, led by OAQPS with representation from each Regional Office, is taking the necessary action to put these wide-ranging recommendations into place. The work group goal is to have all transition activities completed by early summer. One recommendation involves the expanded use of direct final rule-making procedures. The recommendation concerned not only more frequent use of direct final where appropriate but also more aggressive application of the concept. Consequently, it is Air Programs' policy to achieve increased use of direct final processing consistent with previously published criteria.

Proposed in 1981 and finalized in 1982 (46 FR 44477, September 4, 1981 and 47 FR 27073, June 23, 1982), direct final has been used to great advantage by several Regional Offices in the intervening years. Under our current direct final procedures, SIP actions that are noncontroversial in nature and where no adverse public comment is expected can be processed as direct final rules. This type of processing has been demonstrated to cut the review time in half. Since its inception, hundreds of changes have gone direct final with very few engendering any adverse public comment (which under existing procedures would require withdrawal of the change, followed by full review and comment processing).

This history of very little public intervention suggests that we are not using as well as we might an effective tool for speeding review and decision making on SIPs. In addition, it appears that the use of the direct final approach has not been consistent across all Regional Offices. Some have been reluctant, for various reasons, to take full advantage of the mechanism. Table 1 shows usage by Region for the last three years. Although direct final was used for 17% of total SIP actions, the variation in use by Region is substantial--ranging from a low of 5% to a high of 31%. Significantly, during these three years, only 2 of 134 packages were withdrawn because of adverse comment. Each Region should evaluate, in conjunction with the Regional Counsel, its use of the direct final procedure. Table 2 lists some examples of SIPs successfully processed as direct final. Please review the categories on this list, and any other appropriate categories, and identify additional opportunities for direct final processing by your Region. By January 29, 1988, please send to John Calcagni a memorandum outlining the Region's effort to increase direct final actions.

A wide variety of SIP actions can be candidates for direct final, the primary criteria being that the action be noncontroversial and that no adverse public comment is anticipated. These actions do not have to be limited to trivial administrative changes. While we clearly do not want to abuse a good thing and diminish public confidence in our review procedures, it is intended that we make full use of this valuable tool. Although the risk of aggressive action is a possible increase in the number of SIPs drawing comment, this risk should be more than offset by the expected improvement in timely processing and in numbers processed, without jeopardizing air quality.

Until final approval authority is delegated to the Regional Administrators, all direct final actions will have to come to Headquarters for processing. Headquarters will continue to track the use of direct final, not only in terms of numbers by Region, but also the kinds of SIP changes involved. However, to keep in the spirit of the SIP reform recommendations, Headquarters will not challenge a Regional Office decision to go direct final that is consistent with existing guidance. Moreover, my office and OGC will gladly consult with you on any specific cases you wish. At OAQPS, the focal point for questions concerning direct final actions is Johnnie Pearson (FTS 629-5691).

#### Attachments

cc: Air Branch Chiefs, Reg. I-X  
Regional Counsel, Reg. I-X  
Don Clay  
Craig Potter  
Joe Lees  
Alan Eckert  
John Calcagni

bcc: Work Group members  
Bill Laxton  
Jack Farmer  
Rich Ossias  
Bern Steigerwald  
Peter Wyckoff  
John Seitz  
Mike Alushin  
Tom Helms

TABLE 1. DIRECT FINAL USAGE

<u>Region</u>	<u>Total Actions 3 Years</u>	<u>Number of DF's</u>	<u>% of DF's</u>
I	79	24	30
II	38	7	18
III	72	7	10
IV	134	42	31
V	241	11	5
VI	46	11	24
VII	58	10	17
VIII	26	5	19
IX	61	10	16
X	48	7	15
	<hr/>	<hr/>	<hr/>
TOTAL	803	134	17

TABLE 2

EXAMPLES OF DIRECT FINAL ACTIONS TAKEN BY REGIONS

- Amendments to definitions to conform to EPA requirements
- Changes in monitoring/modeling procedures to reference new EPA guidelines
- To incorporate new test methods by reference
- Single source SIP revision that makes a State's requirement more stringent
- Public availability of emissions data
- Permit fees
- Compliance schedules for 111(d) plans
- Visibility plans
- 111(d) plans
- Site specific alternate RACT
- Stack height regs
- VOC consent order
- PSD modeling regs
- Minor changes to I/M program
- New opacity regs
- Variances
- Operating permit for Pb SIP
- CO redesignation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

OCT 02 1987

MEMORANDUM

SUBJECT: Clarification of Implementation Policies for PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS)

FROM: Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Management Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

Comments received from the PM<sub>10</sub> national workshops conducted last month in Raleigh, North Carolina; Chicago, Illinois; Denver, Colorado; and San Francisco, California, have shown that the workshops were extremely successful and achieved their goal of providing a good understanding of the need for high quality State implementation plans (SIP's) and the methods and techniques to achieve such plans. This would not have been possible without the strong support of the Regional Offices. Thank you for your participation and support.

The true success of the workshops can only be measured by the timeliness and quality of the SIP's and the ease with which the PM<sub>10</sub> standards are implemented. A number of detailed questions resulted from the workshops; responses to the questions and elaboration on existing guidance is thus warranted. This memorandum provides additional clarification and amplification of implementation issues of an immediate nature. Next month we plan to issue additional memoranda, including a supplement to the PM<sub>10</sub> SIP Development Guideline.

We have selected the following issues for early resolution because they deal with the first steps of the SIP development process or are important in establishing the overall direction for developing SIP's.

PM<sub>10</sub> SIP DEVELOPMENT PLANS

- Q. What milestones must be included in the SIP development plans and must those plans show that the SIP's will be submitted in 9 months?

- A. In my August 11, 1987, memorandum I outlined the milestones to be included in the SIP development plans. I asked that the SIP development plans represent realistic schedules; however, schedules which extend beyond May 2, 1988, must be justified. \*
- Q. Who is responsible for tracking the States' progress, and will sanctions be imposed if a State fails to meet a milestone?
- A. The Regional Offices are primarily responsible for tracking their States' progress in meeting the milestones. We are investigating the possibility of developing a national bulletin board tracking system. In any case, we will be calling your staff on a routine basis to check on the status of the SIP development. The development plans can be revised and updated occasionally by the States. However, any extension of the milestone should be justified. Although we do not anticipate imposing sanctions for missing just one milestone, the State or local agency's record for meeting the milestones will be considered in determining when to impose any sanctions.

#### SIP REQUIREMENTS

- Q. What SIP revisions are necessary in all areas regardless of their groupings?
- A. 1. Most SIP's identify specific ambient air quality standards which must be attained or protected, those SIP's must be revised to protect the PM<sub>10</sub> standards. If a SIP requires protection of any NAAQS, including any new or revised standard, then it may not need revision. Therefore, all SIP's should be reviewed to ensure that they provide for the attainment and maintenance of the PM<sub>10</sub> standards and that PM<sub>10</sub> is regulated as a criteria pollutant.
2. Since the SIP must protect both the PM<sub>10</sub> standard and the total suspended particulates (TSP) prevention of significant deterioration (PSD) increment, it must trigger preconstruction review for a major new or modified source which would emit significant amounts of either TSP or PM<sub>10</sub>.
3. The significant harm level for particulate matter was revised in 40 CFR 51.151 to 600ug/m<sup>3</sup> measured as PM<sub>10</sub> and the combined sulfur dioxide-particulate matter significant harm level was deleted. In addition, the example alert, warning, and emergency levels of particulate matter in Appendix L to Part 51 were also revised to PM<sub>10</sub> concentrations. Therefore, State emergency episode plans must be revised to reflect these changes.
4. Revisions to 40 CFR 58 set forth the requirements for design of national, State and local PM<sub>10</sub> air monitoring networks. The revised monitoring networks must be submitted for EPA approval. The information presented at the PM<sub>10</sub> workshops and included in the workbook concerning the time required to fully implement

- Public hearing dates
- Adoption of SIP into State regulations
- Submission of SIP for EPA approval

The SIP development plan for revisions to the prevention of significant deterioration and monitoring provisions should include the administrative steps:

- Public hearing dates
- Adoption of SIP into State regulations
- Submission of SIP for EPA approval

We are asking you to request the States to notify you upon completion of, or the inability to complete, each milestone identified. We are not requesting that monthly status reports be submitted to the Office of Air Quality Planning and Standards as we did for the stack height regulation implementation. However, we expect you to know the status of PM<sub>10</sub> SIP development in your States.

If you have any questions on this matter, please contact Kenneth Woodard at FTS 629-5351.

cc: R. Bauman  
R. Campbell  
G. Emison  
D. Stonefield  
K. Woodard  
Chief, Air Branch, Regions I-X  
NSR Contacts  
PM<sub>10</sub> Regional Contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

AUG 11 1987

MEMORANDUMSUBJECT: Development Plan for PM<sub>10</sub> State Implementation Plans (SIP's)FROM: Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)TO: Director, Air Management Division  
Regions I, III, IXDirector, Air and Waste Management Division  
Region IIDirector, Air, Pesticides, and Toxic Management Division  
Regions IV, VIDirector, Air and Radiation Division  
Region VDirector, Air and Toxics Division  
Regions VII, VIII, X

On July 1, 1987, the Environmental Protection Agency (EPA) published a notice to promulgate the revised national ambient air quality standards (NAAQS) for particulate matter known as PM<sub>10</sub> (52 FR 24634). As a result, States must revise their SIP's to attain and maintain the new NAAQS. Under section 110(a)(1) of the Clean Air Act, those SIP revisions must be submitted to EPA by April 30, 1988 (9 months after the July 31, 1987, promulgation date).

As you know, we have divided all areas into three groups. Group I areas have data showing high probabilities that the areas will violate the PM<sub>10</sub> NAAQS and must submit full SIP's including attainment demonstrations. Group II areas do not have adequate data to determine if the areas are violating the new PM<sub>10</sub> NAAQS and must submit a committal SIP. Group III areas have data showing high probabilities that the areas will attain the PM<sub>10</sub> NAAQS and need only retain their existing controls. States must revise the prevention of significant deterioration and monitoring SIP's for all areas. The detailed requirements for all these SIP revisions are described in the PM<sub>10</sub> SIP Development Guideline (EPA 450/2-86-001) and will be discussed at the PM<sub>10</sub> workshops.

The development of full PM<sub>10</sub> SIP's for Group I areas will vary greatly among States. Not only do the sources of PM<sub>10</sub> and meteorology vary from one State to another, the administrative procedures also differ greatly. Thus,

it is important that we allow the States flexibility in how they proceed with the development of their SIP's. On the other hand, it is also important that we track their progress. Therefore, we are requesting you to work with each of your States to produce a PM<sub>10</sub> SIP development plan. Those plans should be submitted to my office by October 15, 1987.

The PM<sub>10</sub> SIP development plan for Group I areas should include deadlines for the following milestones:

- ° Data acquisition and analysis
  - Completion of the emission inventories
  - Completion of analysis of periods of high ambient concentrations
  - Completion of chemical/other filter analysis
- ° Modeling analyses
  - Submission of modeling protocol
  - Completion of verification of model
  - Reconciliation of model results
- ° Control strategies
  - Determination of alternative strategies
  - Selection of proposed strategy
- ° Administrative steps
  - Public hearing dates
  - Adoption of SIP into State regulations
  - Submission of SIP for EPA approval

Several of these dates are also included in the Strategic Planning and Management System for 1988.

The development plan for committal SIP's for Group II areas should include:

- ° Identification of area of applicability
- ° Administrative steps

process based upon available data in July 1987. Therefore, all requests to reclassify areas were evaluated to determine if the areas were erroneously classified based upon the data available in July 1987. We believe that only three areas need to be reclassified and we plan to issue a Federal Register notice to amend the August 7, 1987 Federal Register listing.

#### Observed Exceedances in Group II and III Areas

As a State observes an exceedance of the PM<sub>10</sub> standards in the Group II areas, it should initiate a chain of events which will lead to the development and submittal of a SIP revision when a violation of the standard is recorded. The first step in the process will be intensive monitoring of the area. As additional exceedances are observed, the State should begin planning SIP revisions for the area. The planning process should include reviewing the status of the emission inventories, conducting filter analyses, and evaluating the need for special studies. If additional exceedances sufficient to constitute a violation are observed, the State must notify EPA within 30 days and submit a SIP revision within 6 months of that notification.

Therefore, it is important to identify exceedances as soon as possible. Your staff should work with the State to review the Group II area monitoring data to ensure early detection of the exceedances. If one is observed, you should discuss its implications with the State. When a State notifies you of a violation of the standard, or your own analysis indicates that a standard is being violated, you should request that the State immediately submit a SIP development plan. That plan should be sent to OAQPS for review and, if acceptable, milestones will be extracted for the bulletin board tracking system.

In promulgating the implementation regulations, we announced that we would treat Group III areas which observed violations of the PM<sub>10</sub> standards as newly discovered nonattainment areas (52 FR 24682, Col. 1). If a State reports a violation of a standard in a Group III area, you should ask the State to investigate the cause of the problem and take appropriate action. This may include revisions to the SIP. In addition, you should notify us as soon as possible and, if necessary, work with the State to submit a SIP development plan which meets the timeframes discussed above.

#### Technical Assistance

In developing their emission inventories, several States have identified sources which are not covered in our "Compilation of Air Pollutant Emission Factors" (AP-42). To estimate the emissions, States had to develop their own emission factors. Although many of these factors are very site-specific, the information they generate may be transferable to other areas. Therefore, last year we instituted an emission factor clearinghouse to assist in the transfer of information on PM<sub>10</sub> emission

factors (see memorandum from Richard G. Rhoads to Regional Air Branch Chiefs dated November 9, 1987). Emission factors obtained from the clearinghouse will be deemed to be acceptable for SIP use.

In February 1988, we cosponsored with APCA a specialty conference on PM<sub>10</sub> implementation. The transactions from that conference have been published by APCA and the conferees should be receiving their copies this month. We have sent a copy to each Regional Office Air Branch Chief. Additional copies can be purchased from APCA.

If you have any questions, please contact Dave Stonefield at FTS 629-5350.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

21 JUL 1987

MEMORANDUM

SUBJECT: Definition of Volatile Organic Compounds (VOC's)

FROM: G. T. Helms, Chief *GH*  
Control Programs Operations Branch (MD-15)

TO: Carl Walters, Chief  
Air Branch, Region VII

On April 17, 1987, I issued a memorandum recommending that the definition of VOC's be standardized by the States and that references to vapor pressure cutoffs, i.e. 0.1 mmHg be excluded from such definitions. The reason for this recommendation was based on the necessity to be consistent with the Environmental Protection Agency's (EPA's) photochemical reactivity policy. This reactivity policy only exempts specific compounds as cited in the following Federal Register notices. \*

42 FR 35314, dated July 8, 1977 exempts

Methane  
Ethane  
1,1,1-Trichloroethane (Methyl Chloroform)  
Trichlorotrifluoroethane (Freon 113)

42 FR 38391, dated August 1, 1977 - corrects 7/8/77 Federal Register

44 FR 32042, dated June 4, 1979 and 45 FR 32424, dated May 16, 1980 exempts

Methyl Chloroform  
Methylene Chloride

45 FR 48941, dated July 22, 1980 exempts

Trichlorofluoromethane (CFC-11)  
Dichlorodifluoromethane (CFC-12)  
Chlorodifluoromethane (CFC-22)  
Trifluoromethane (FC-23)  
Trichlorotrifluoroethane (CFC-113)  
Dichlorotetrafluoroethane (CFC-114)  
Chloropentafluoroethane (CFC-115)

\* SEE PN 110-87-04-17-081

48 FR 49097, dated October 24, 1983 - proposed exemption of Perchloroethylene (never finalized)

Examples of VOC's that would escape control if a vapor pressure (0.1 mm Hg.) cutoff is included in the definitions are Butyl Carbitol (used in paints), some oils used in metal rolling; low vapor pressure, naptha blends manufactured under various trade marks and various acetate compounds.

It is our goal in the "ultimate long-term" to standardize the new definition of VOC in all ozone State implementation plans so that EPA's reactivity policy will not be compromised. In the "short-term" we can live with the old definition of VOC, provided that the State will issue a letter to EPA pledging to observe our photochemical reactivity policy. But, if a State is just entering the formal process to develop and adopt new regulations or is making appropriate revisions to existing regulations, we encourage them to correct the inconsistency problem between the "definition of VOC" and our reacting policy.

I hope that this clarifies our effort to standardize the definition of VOC. If you have any further questions, please contact me.

cc: Chief, Air Branch  
Regions I-VI and VIII-X  
VOC Contacts Regions I-X

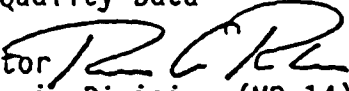


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

11 MAY 1987

MEMORANDUM

SUBJECT: Guidance on Accounting for Trends in Particulate  
Matter Emission and Air Quality Data

FROM: Richard G. Rhoads, Director   
Monitoring and Data Analysis Division (MD-14)

TO: Director, Air Management Division, Regions I, III, V, and IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides, & Toxic Management Division, Region IV  
Director, Air, Pesticides, & Toxics Division, Region VI  
Director, Air and Toxics Division, Regions VII, VIII, & X

The new 24-hour and annual National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) are expressed in terms of expected annual values. In general, EPA has chosen a 3-year measurement period for estimating an expected annual average concentration and expected annual number of 24-hour exceedances. However, it is usually impractical to wait 3 years to determine whether a SIP control strategy area has attained the NAAQS and, when averaging is performed over a 3-year period in which a change in emissions has occurred, the estimate of expected air quality value can be biased.

Accordingly, Appendix K to 40 CFR 50 permits States and local agencies, subject to the approval of the Regional Administrator in accordance with EPA guidance, to use mathematical techniques to adjust expected annual concentrations to ensure that they are not inappropriately biased by nonrepresentative data. Appendix K also states that "in the event of a trend or shift in emission patterns, either the most current representative year(s) could be used or statistical techniques or models could be used in conjunction with previous years of data to adjust for trends."

This memo provides guidance concerning the appropriateness of such adjustments. The guidance is intended to (1) distinguish serendipitous and random changes in emissions from permanent changes, (2) give credit toward attainment determinations for those emission reductions that are permanent and legally enforceable, and (3) use mathematical techniques together with the emission reduction credits, to provide improved estimates of expected annual values. Adjustment for trends should be evaluated on a case-by-case basis.

Procedures that simply extrapolate or interpolate available air quality data without considering the reasons for the changes are not appropriate. However, procedures which account for the contribution that emissions from various sources make to concentration levels are appropriate.

Receptor models, together with a modified rollback approach, may be used to estimate the impact of changes in emissions on ambient concentrations. Alternatively, dispersion models may be used.

The following steps should be followed in making the trends adjustment to areas which have recorded at least 1 year of air quality data with no violations of the NAAQS:

(1) Apply the model using the base year emissions and then the proposed attainment year (i.e., that year in which no violations were recorded) emissions. With dispersion models, the most recent 5 years of meteorological data should be used for both applications. All modeling should be in accordance with the "Guideline on Air Quality Models."

(2) For each receptor or monitoring location to which the adjustment procedure is applied, determine whether the difference between the base year and proposed attainment year measured air quality concentrations can be attributed to the emission reductions over the period. If so, then the area could be determined to be in attainment of the NAAQS if it also satisfies all other criteria for attainment.

This memorandum provides guidance referred to in Appendix K of 40 CFR Part 50 regarding attainment determinations for PM<sub>10</sub> NAAQS. It should not be interpreted as modifying any of the monitoring requirements attendant on an area being classified as Group I or II under EPA's PM<sub>10</sub> development policy. This guidance is also not applicable to attainment designations under Section 107 of the Clean Air Act for other pollutants.

cc: G. Emison

D. Tyler

ESD Director, Region I-VIII & X

Director, Office of Policy and Management, Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

*John - f. 11*

21 SEP 1987

MEMORANDUM

SUBJECT: Ambient Air Definition

FROM: G.T. Helms, Chief *Tom*  
Control Programs Operations Branch

TO: Bruce P. Miller, Chief  
Air Programs Branch, Region IV

We are in receipt of your memorandum of August 17, 1987, regarding ambient air. In response to your request, we have considered the need for clarification of the Environmental Protection Agency's (EPA) policy on prevention of significant deterioration (PSD) increment consumption on rooftops and whether the May 16, 1985, Regional Meteorologists memo needs to be revised to avoid ambiguous guidance.

With respect to PSD increments and rooftops, EPA's policy is contained in Joseph Cannon's memo of June 11, 1984. As you correctly pointed out, PSD increment consumption does not apply at the tops of buildings. With respect to the Regional Meteorologists memo, that memo does not attempt to define ambient air beyond what is currently contained in the Code of Federal Regulations and clarified by Senator Randolph in 1980. The meteorologists memo addresses technical modeling concerns and states that for modeling purposes, receptors will be placed everywhere the general public has access outside of contiguous plant property, e.g., rooftops. Subsequent decisions on use of the pollutant concentrations calculated at the receptors is determined by the definition of ambient air and EPA policy and guidance, such as the Cannon memo. Thus, we conclude that the meteorologists memo contains clear guidance on the placement of receptors when modeling and the Cannon memo defines rooftops as not ambient air when calculating increment consumption.

I hope this information is helpful to you.

cc: Joseph Tikvart  
Richard Rhoads  
Darryl Tyler



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

11 AUG 1987

MEMORANDUM

SUBJECT: Processing of Particulate Matter State Implementation Plan Revisions

FROM: Gerald A. Emison, Director *[Signature]*  
Office of Air Quality Planning and Standards

TO: Director, Air Management Division  
Regions I, III, V, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Division  
Regions IV, VI  
Director, Air and Toxics Division  
Regions VII, VIII, X

The promulgation of the revised particulate matter ambient air quality standard (PM<sub>10</sub>) raises a policy issue as to how to process total suspended particulates (TSP) State implementation plan (SIP) revisions proposed by State or local agencies. This memorandum suggests a method for categorizing and processing these TSP SIP's.

Most pending TSP SIP actions fall into one of the following categories:

1. Those written specifically to control TSP to meet a Part D nonattainment requirement;
2. Those which are not (or portions of which are not) directly related to a Part D requirement but discuss the TSP standard;
3. Those which are not directly related to the TSP standard and do not discuss the TSP standard; and
4. Section 107 nonattainment/attainment redesignations.

Table 1 includes a list of pending SIP submittals and recommended actions. Table 2 includes a list of SIP submittals which have been proposed for approval or disapproval by the Environmental Protection Agency (EPA). Pending and proposed SIP's would be handled the same. Because SIP's are constantly being submitted and processed, these tables should be considered as indicative of the general TSP SIP status, not an absolute record.

NOTE: Tables 1 and 2 are not included in the Policy and Guidance Notebook.

With the PM<sub>10</sub> standard, a SIP written specifically to control TSP to meet a Part D nonattainment plan requirement is no longer mandatory. The State should be notified of the change in the standard and be given the option to withdraw, modify, or amend these SIP actions. The EPA will continue to process these revisions unless and until a State asks us to stop. An example of this situation would be the revision to the Michigan iron and steel regulations (#3047). The Michigan SIP included reasonably available control technology regulations for iron and steel sources which were submitted specifically to meet a previous Part D conditional approval. The EPA will continue to approve or disapprove this SIP action unless it is withdrawn by the State. If the proposal is judged to include more stringent provisions, our general policy would be to approve it. If it is judged to result in a relaxation, our general policy would be to disapprove it unless it is accompanied by an acceptable demonstration that the PM<sub>10</sub> standard will be attained and maintained.

Where only a portion of the SIP action refers to the old standard, it may be possible to revise the Federal Register notice to approve a portion of it; thus, we will work with the Regional Offices to develop appropriate revisions to the rulemaking. An example of this situation would be the Tennessee variance request (#3376) which refers to the TSP standard but was not prepared specifically to meet a Part D requirement.

If the SIP action is not directly related to the old standard and does not discuss the old standard, it will probably affect particulate matter generally. An example of this situation would be the revision to the North Carolina opacity regulations (#3380). The North Carolina regulations are not directly related to the old particulate matter standard. These can be processed as before.

We will continue to accept a request by the State to revise area designations for TSP from nonattainment to attainment. The requests will continue to be reviewed during the transition period for compliance with EPA's redesignation policies as issued in memorandums dated April 21, 1983, and September 30, 1985.

I have instructed my staff to process the remaining TSP SIP's as described herein. If you have any questions, please contact Ted Creekmore at (FTS) 629-5699.

Attachments

**NEDS Facility/Plant ID:**

County:

**Facility Name:**

Facility Location (Street, City, State, Zipcode):

Source Category of Facility (e.g., Petroleum Refinery):

**Base Year of Inventory (e.g., 1986):**

**Projected Attainment Year (e.g., 1992):**

**Total Facility Banked Emissions & Year Banked (e.g., 10 tons PM10 - 1987):**

[illegible]

- 1 The format presented in this table is recommended for inventorying point source facilities that emit TPM and PM10. Other formats with equivalent information may be substituted.  
2 Banked emissions should be indicated on a separate line from nonbanked emissions and labeled as such.  
3 Indicate both hours per day and hours per year of average actual process operation (averaged over most recent two years).  
4 Actual operating rate in units as specified in the Source Classification Codes (SCC) (e.g. thousand gallons burned/yr, tons ore hauled/yr, etc.).  
5 Actual total particulate matter (TPM) emissions in units of tons per year.  
6 Actual PM10 emissions in units of tons per year.  
7 Factor used to estimate increase in emissions due to growth. (e.g., 1.05)  
8 Baseline emissions (i.e., not accounting for effects of revised SIP strategy) projected for attainment year based on allowable emissions (including growth).  
9 Factor used to estimate percent control of PM10 emissions for process or operation resulting from revised SIP strategy (e.g., 90%).  
10 Determined by applying percent control (control factor) to projected baseline emissions.  
11 Regulation applied to the process as a result of the revised SIP.  
12 Emission limitation under applicable regulation (e.g., lbs PM10/MBtu).  
13 The projected year of compliance for applicable regulation (e.g., 1992).

**NEDS Facility/Plant IDs**

Source Category of Facility (e.g., Petroleum Refinery):

**County:**

**Base Year of Data (e.g., 1987):**

**Facility Name:**

**Total Facility Banked Emissions & Year Banked (e.g., 10 tons PM10 - 1987):**

Facility Location (Street, City, State, Zipcode):

[illegible]

- 1 The format presented in this table is recommended for inventorying point source facilities that emit TPM and PM10. Other formats with equivalent information  
may be substituted.
- 2 Banked emissions should be indicated on a separate line from nonbanked emissions and labeled as such.
- 3 Indicate both hours per day and hours per year of average actual process operation (averaged over most recent two years).
- 4 Actual operating rate in units as specified in the Source Classification Codes (SCC) (e.g. thousand gallons burned/yr, tons ore hauled/yr, etc.).
- 5 Actual total particulate matter (TPM) emissions in units of tons per year.
- 6 Allowable total particulate matter (TPM) emissions based on criteria in EPA Modeling Guidelines Table 9.1 for annual averaging period.
- 7 Actual PM10 emissions in units of tons per year.
- 8 Allowable PM10 emissions (estimated for existing TPM regulations/permits) based on criteria in EPA Modeling Guidelines Table 9.1 for annual averaging period.
- 9 Regulation applied to the process as a result of the revised SIP.
- 10 Emission limitation under applicable regulation (e.g., lbs TPM/MMBtu).

Group III Areas

Recommended Compilation, But No Submittal (except as needed to support assessments for emissions trading or other purposes under EPA purview).

- o Detailed point source data for facilities emitting 50 TPY or more of  $PM_{10}$ , based on actual emissions with any existing controls, as needed, for sources with potential for emissions trading.
  - Data compiled by entering applicable data in attached example format (version 2) or equivalent.
- o Existing PM inventory maintained and updated.
  - Primarily needed for PSD purposes.

Required Annual NEDS Emissions Data Reporting:

- o Actual annual emissions of PM/ $PM_{10}$ \* for point sources emitting 100 TPY or more of this pollutant.
  - Includes all such sources in each State, regardless of grouping.

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\* Reporting for PM through CY-87 data.  $PM_{10}$  thereafter.

Other Emission Inventory Recommendations

It is strongly recommended, for Group I areas, that a draft of the baseline inventory of actual emissions be submitted for EPA review at least six months before the SIP is due. In addition, all agencies are encouraged to develop PM emission inventories (within available time and resources) for future use in implementing the PM<sub>10</sub> ambient standards.

## ATTACHMENT I

### Emission Inventory Requirements

States and State-designated local agencies will be required to compile and submit certain PM and PM<sub>10</sub> emission inventory data to EPA. The following listing summarizes the required and recommended emission inventory data by area grouping.

#### Group I Areas

##### Required For Submittal With PM<sub>10</sub> SIP:

- o Base year annual inventory of actual point and area source PM and PM<sub>10</sub> emissions summarized by source category.
  - Base year selected based on most recent, high quality data available. PM data needed for PSD purposes.
- o Projected baseline annual inventory of allowable PM<sub>10</sub> emissions for attainment year summarized by source category.
  - Allowable emissions estimated from criteria in Table 9-1 of EPA Modeling Guideline, including any expected source changes through attainment year, except for effect of PM<sub>10</sub> SIP control strategy.
- o Projected PM<sub>10</sub> SIP strategy annual inventory of allowable PM<sub>10</sub> emissions for attainment year summarized by source category.
  - Same as projected baseline inventory, except that this inventory also includes effect of additional controls resulting from implementation of PM<sub>10</sub> SIP control strategy.
- o Detailed point source data for all facilities emitting 50 TPY or more of PM<sub>10</sub> based on uncontrolled or uncontrolled potential emissions.
  - Data to be submitted in attached example format (version 1) or equivalent. Detailed point source data needed to review attainment demonstration analysis and to establish baseline for potential emissions trading.

##### Required Annual NEDS Emissions Data Reporting:

- o Actual annual emissions of PM/PM<sub>10</sub>\* for point sources emitting 100 TPY or more of this pollutant.
  - Includes all such sources in each State, regardless of grouping.

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\* Reporting for PM through CY-87 data. PM<sub>10</sub> thereafter.

Group II Areas

Required for submittal on or before August 31, 1990, with determination report of PM<sub>10</sub> attainment/nonattainment status and of adequacy of current SIP to attain and maintain PM<sub>10</sub> NAAQS. Schedule for developing PM<sub>10</sub> inventory data required with Committal SIP by April 30, 1988.

- o Current year annual inventory of actual PM and PM<sub>10</sub> emissions summarized by source category.
  - Current year selected based on most recent, high quality data available. PM data needed for PSD purposes.
- o Current year annual inventory of allowable PM and PM<sub>10</sub> emissions summarized by source category.
  - Allowable emissions as calculated based on criteria in Table 9-1 of EPA Modeling Guideline. EPA will compare actual to allowable emissions to assess potential for not maintaining PM<sub>10</sub> NAAQS.

Required Compilation, But Submittal Not Required (except as needed to support assessments for emissions trading or other purposes under EPA purview).

- o Detailed point source data for facilities emitting 50 TPY or more of PM<sub>10</sub> based on actual emissions with any existing controls, as needed, for sources with potential for emissions trading.
  - Data compiled by entering applicable data in attached example format (version 2) or equivalent. Data needed to establish baseline for emissions trading.

Required Annual NEDS Emissions Data Reporting:

- o Actual annual emissions of PM/PM<sub>10</sub>\* for point sources emitting 100 TPY or more of this pollutant.
  - Includes all such sources in each State, regardless of grouping.

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\* Reporting for PM through CY-87 data. PM<sub>10</sub> thereafter.

the PM<sub>10</sub> network was partially in error. The information indicated that for national air monitoring stations (NAMS) and Group I State and local air monitoring stations (SLAMS) must be operational by August 1, 1988, and the Group II and III SLAMS (remainder of the network) must be operational by August 1, 1989. The regulation actually requires the NAMS and Group I and II areas to have PM<sub>10</sub> networks operational by August 1, 1988, and Group III SLAMS (remainder of the network) by August 1, 1989.

Additionally, it is important to reemphasize that the preferred approach to designing a PM<sub>10</sub> monitoring network is to review the monitoring objectives the network must address. The design should include an assessment of existing PM<sub>10</sub> concentrations and patterns, the location of PM<sub>10</sub> emission sources and source category areas, and the consideration of population and expected growth patterns. Consideration must also be given to meteorology and topography. If the existing TSP monitoring sites meet the PM<sub>10</sub> monitoring objectives the PM<sub>10</sub> network could consist of existing TSP sites only. If not, new PM<sub>10</sub> sites would be required. Further guidance on network design can be found in the PM<sub>10</sub> workshop notebook material entitled "PM<sub>10</sub> SLAMS Network Design."

#### EMISSION INVENTORIES

Several questions at the workshops concerned the emission inventory requirements. Therefore, we prepared summaries of the emission inventory requirements for each area group. They are shown in Attachment I.

#### COMMITTAL SIP's

- Q. What format are the States to use for the committal SIP's?
- A. The States should submit a letter committing the State to carry out the actions prescribed for Group II areas in the Federal Register notice of July 1, 1987 (52 FR 24681). The letter must be signed by the State official (agency, board, or governor) having the authority to obligate State resources for these purposes. The commitments will be incorporated by reference into the SIP.
- Q. When can a Group II area request an extension of the attainment date under section 110(e) of the Clean Air Act?
- A. If a State believes it may need an extension of the attainment date, it should include a statement in the committal SIP letter that a 2-year extension of the attainment date may be requested under section 110(e) of the Clean Air Act. If the State determines that the Group II area is violating the PM<sub>10</sub> NAAQS and it cannot develop a control strategy that will attain the NAAQS within 3 years, the State can then submit the request for the extension when it submits its SIP revision.

## REQUIREMENTS FOR GROUP III AREAS

- Q. Other than the Statewide SIP revisions, are there any other SIP revisions required for a Group III area?
- A. In addition to the statewide SIP requirements, for Group III areas, the State must cite the control measures it is relying upon to maintain the PM<sub>10</sub> NAAQS. Control measures that have not been approved by EPA must be submitted for approval and incorporation into the SIP. The Regional Offices should establish a schedule for submission of these revisions.

## USE OF AMBIENT PM<sub>10</sub> DATA

- Q. In the process of placing areas into three groups to prioritize PM<sub>10</sub> SIP development, a zone of uncertainty was placed around the PM<sub>10</sub> NAAQS when determining the probability that an area would violate the NAAQS. The PM<sub>10</sub> data collected with Sierra Anderson SA-321A instruments were discounted by 20 percent before calculating the probability of PM<sub>10</sub> nonattainment for an area. This concept was explained in footnote 7 on page 24680 of the Federal Register notice, July 1, 1987, and in Section 2 of the PM<sub>10</sub> SIP Development Guideline. How does a State consider the zone of uncertainty when developing the SIP?
- A. This procedure of discounting PM<sub>10</sub> data from SA-321A monitors was only to be used for the SIP prioritization process. When PM<sub>10</sub> data from SA-321A instruments are used to determine the attainment status of an area in accordance with 40 CFR 50, Appendix K, the data are to be taken at face value. The data can be discounted only if the State can demonstrate that the PM<sub>10</sub> monitor was influenced by coarse particles to the same extent as were the instruments in the Phoenix study conducted by EPA.
- Q. What happens to data that has been flagged as an exceptional event?
- A. High ambient values of PM<sub>10</sub> may be flagged by the State when they are due to exceptional events as described in the "Guideline on the Identification and use of Air Quality Data Affected by Exceptional Events" (Guideline). The EPA will review the basis for flagging the data and concur if the Guideline criteria are met. Use of the flagged data for SIP regulatory activities shall be considered on a case-by-case basis and discussed during the public review process. Exclusion of the flagged data would only be allowed if the responsible control agency determines in conjunction with a public review that it is inappropriate to use the data (Guideline, page 11).

cc: Regional Air Branch Chiefs  
 PM<sub>10</sub> Contacts  
 Monitoring Contacts  
 R. Campbell  
 C. Carter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUL 29 1987

MEMORANDUM

SUBJECT: State Implementation Plans for Sulfur Dioxide

FROM: Gerald A. Emison, Director *[Signature]*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, V, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Division  
Regions IV, VI  
Director, Air and Toxics Division  
Regions VII, VIII, X

A number of sulfur dioxide (SO<sub>2</sub>) State implementation plan (SIP) revision rulemaking actions with potential problems have recently been submitted for SIP processing. Several of these rulemaking actions establish SO<sub>2</sub> emission limitations but lack enforceable SO<sub>2</sub> compliance test methods and procedures.

The Environmental Protection Agency (EPA) requires that SO<sub>2</sub> SIP emission limitations be established consistent with the short-term 3-hour and 24-hour SO<sub>2</sub> national ambient air quality standards (NAAQS). When a State adopts an SO<sub>2</sub> emission limitation for its SIP without a stated averaging period associated with it, EPA has accepted a Method 6 stack gas test as the SIP compliance test method. The EPA also accepts continuous emissions monitoring and short-term fueling sampling and analysis (3-hour and 24-hour) as SO<sub>2</sub> SIP test methods. The EPA will accept separate emission limitations with approved test methods associated with each limitation.

As a minimum, make sure that there is a stack gas compliance test in the State's plan when you review and forward SO<sub>2</sub> rulemaking packages for Headquarters approval. If the action is an SO<sub>2</sub> SIP revision, it may reference the underlying EPA approved SIP for compliance test methods. If so, make sure the underlying SIP contains acceptable test methods and that the methods have been approved by EPA in the SIP.

cc: Air Branch Chief, Regions I-X  
John Seitz, SSCD  
Darryl Tyler, CPDD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711



3 0 100 1037

MEMORANDUM

SUBJECT: Ambient Air

FROM: G. T. Helms, Chief *Tom*  
Control Programs Operations Branch (MD-15)TO: Steve Rothblatt, Chief  
Air Branch, Region V

My staff and I have discussed the five ambient air cases which you submitted for our review on January 16, 1987. The following comments are our interpretation of the ambient air policy. However, this memorandum is not a discussion of the technical issues involved in the placement of receptors for modeling.

Our comments on each of the cases follow:

Case 1 (Dakota County, MN): This case involves two noncontiguous pieces of fenced property owned by the same source, divided by a public road. We agree that the road is clearly ambient air and that both fenced pieces of plant property are not.

Case 2 (Warrick County, IN): This case involves two large sources on both sides of the Ohio River. We agree that receptors should be located over the river since this is a public waterway, not controlled by the sources. We also agree that the river does indeed form a sufficient natural boundary/barrier and that fencing is not necessary, since the policy requires a fence or other physical barrier. However, some conditions must be met. The riverbank must be clearly posted and regularly patrolled by plant security. It must be very clear that the area is not public. Any areas where there is any question--i.e., grassy areas, etc.--should be fenced and marked, even if there is only a very remote possibility that the public would attempt to use this property.

However, we also feel that current policy requires that receptors should be placed in ALCOA and SIGECO property for modeling the contribution of each source's emissions to the other's ambient air. Thus, ALCOA's property--regardless of whether it is fenced--is still "ambient air" in relation to SIGECO's emissions and vice-versa.

Case 3 (Wayne County, MI): This case involves the air over the Detroit River, the Rouge River and the Short-cut Canal. We agree that the air over all three of these is ambient air, since none of the companies owns them or controls public access to them. Note, however, that one source's property--regardless of whether it is fenced--is the "ambient air" relative to another source's emissions.

Case 4 (Cuyahoga County, OH): This case involves LTV Steel's iron and steel mill located on both sides of the Cuyahoga River.

We do not feel that LTV Steel "controls" the river traffic in that area sufficiently to exclude the public from the river, whether it be recreational or industrial traffic. The fact that there is little or no recreational traffic in that area is not sufficient to say that all river traffic there is LTV traffic. The public also includes other industrial users of the river that are not associated with LTV.

It is difficult to tell from the map whether the railroad line is a through line or not. If the railroad yard serves only the plant then it would not be ambient air but the railroad entrance to the plant would have to be clearly marked and patrolled. However, if the line is a through line then that would be ambient air. We would need additional information to make a final determination.

The unfenced river boundaries should meet the same criteria as in Case 2 above.

Case 5 (involves the placement of receptors on another source's fenced-property): As mentioned above in Case 2, we feel that present policy does require that receptors be placed over another source's property to measure the contribution of the outside source to its neighbor's ambient air. To reiterate, Plant A's property is considered "ambient air" in relation to Plant B's emissions.

I hope that these comments are helpful to you and your staff. This memorandum was also reviewed by the Office of General Counsel.

cc: S. Schneeberg  
P. Wyckoff  
R. Rhoads  
D. Stonefield  
Air Branch Chiefs, Region I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

30 APR 1987

MEMORANDUM

SUBJECT: Ambient Air

FROM: G. T. Helms, Chief *John*  
Controlled Programs Operations Branch (MD-15)

TO: Bruce Miller, Chief  
Air Programs Branch, Region IV

My staff and I have discussed the five situations involving the definition of ambient air that you sent on December 18, 1986. The following comments represent our interpretation of the ambient air policy. However, this memorandum is not a discussion of the technical issues involved in the placement of receptors for modeling. Our comments on each scenario follow:

Scenario One: We agree with you that the road and the unfenced property are ambient air and could be locations for the controlling receptor.

Scenario Two: We agree with your determination in this case also.

Scenario Three: We agree with you that the road is ambient air. However, Area B is not ambient air; it is land owned or controlled by the company and to which public access is precluded by a fence or other physical boundary.

Scenario Four: We do not think that any of the barriers mentioned here are sufficient to preclude public access so as to allow the source to dispense with a fence. An example of an unfenced boundary that would qualify is a property line along a river that is clearly posted and regularly patrolled by security guards. Any area, such as grassy areas that might even remotely be used by the public, would have to be fenced even in this situation. We would not think that a drainage ditch would meet these criteria.

Scenario Five: Both fenced pieces of plant property, even though noncontiguous, would not be considered ambient air (see Scenario Three). The road, of course, would be ambient air. Again, ownership and/or control of the property and public access are the keys to ambient air determination.

-2-

I hope that these comments are helpful to you and your staff. This memorandum was also reviewed by the Office of General Counsel. Please call me if you have any comments.

cc: S. Schneeberg  
P. Wyckoff  
R. Rhoads  
D. Stonefield  
Air Branch Chiefs, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

17 APR 1987

MEMORANDUM

SUBJECT: Definition of VOC

FROM: G. T. Helms, Chief *Tom*  
Control Programs Operations Branch (MD-15)

TO: Chief, Air Branch, Regions I-X

Attached is a copy of a letter addressed to the State of Illinois Environmental Protection Agency, dated February 27, 1987, concerning the definition of "volatile organic compounds (VOC)."

As stated in the letter, "No VOC rules will be approved by USEPA unless VOC is substantively defined as all organic compounds except those that USEPA has listed as negligibly photochemically reactive in its Federal Register notices." This is USEPA's current policy.

In light of the post-1987 ozone policy and in order to ensure national consistency in the definition of VOC, State regulations with definitions that include a vapor pressure cutoff such as 0.1 mm Hg or 0.0019 PSIA that effectively exempts some photochemically reactive compounds from control must be revisited and revised as necessary.

The definition of VOC as cited in the letter or the definition cited in 40 CFR 60, Subpart A, 60.2, would be approved by USEPA; however, the recommended definition for VOC is as follows:

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator designates as having negligible photochemical reactivity. VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified under 40 CFR Part 60. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, an owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard.

Should you have any questions, please contact me (FTS 629-5526).

Attachment

cc: Ron Campbell  
Gerald Emison  
Jack Farmer  
John Rasnic  
B. J. Steigerwald  
Peter Wyckoff  
VOC Regulatory Contact, Regions I-X  
VOC Enforcement Contact, Regions I-X

*Copies -*  
*Bill P*  
*BJJ*  
*John*  
*Brooks*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
230 SOUTH DEARBORN ST.  
CHICAGO, ILLINOIS 60604



27 FEB 1987

REPLY TO THE ATTENTION OF

Michael Hayes, Manager  
Division of Air Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

Dear Mr. Hayes:

The purpose of this letter is to inform you of the United States Environmental Protection Agency's (USEPA) position on the definition of "volatile organic compounds (VOC)" [which is referred to in Illinois as "volatile organic material (VOM)"].

No VOC rules will be approved by USEPA unless VOC is substantively defined as all organic compounds except those that USEPA has listed as negligibly photochemically reactive in its Federal Register notices. A vapor pressure cutoff (e.g., 0.0019 psia) effectively exempts some photochemically reactive compounds from control and, therefore, a vapor pressure cutoff is not a suitable means to adjust the stringency of a rule. Instead, it would be more appropriate to develop suitable emission limits which reflect the application of reasonably available control technology.

The following definition, which has been proposed by the Illinois Environmental Protection Agency, would be approved by USEPA:

Any organic materials which participate in atmospheric photochemical reactions or are measured by the applicable reference methods specified under any subpart of 40 CFR 60 unless specifically exempted from this definition.

I would also like to inform you that the Ohio state rule definition of "volatile organic compound" has been revised (with an effective date of May 9, 1986) by the Ohio Environmental Protection Agency. The revised definition of "volatile organic compound" no longer contains a vapor pressure cutoff and is consistent with the above stated USEPA requirements.

Sincerely yours,

David Kee, Director  
Air and Radiation Division (5A-26)

cc: Darryl Tyler, CPD



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JAN 20 1987

MEMORANDUM

SUBJECT: Determination of Economic Feasibility

FROM: G. T. Helms, Chief  
Control Programs Operations Branch (MD-15)TO: Bruce Miller, Chief  
Air Programs Branch, Region IV

This is in response to your memorandum of December 23, 1986, requesting guidance in making economic infeasibility determinations for a company.

It is our opinion that averaging volatile organic compound emissions over a 30-day period in order to demonstrate compliance should not generally be allowed. If reasonably available control technology (RACT) as cited in the control technique guideline document is found to be unreasonable for a specific company, then on a case-by-case basis a less restrictive RACT determination can be made. This policy is articulated in the supplement to the general preamble on RACT (44 FR 53761, 9/17/79) (copy attached). RACT must be a case-by-case determination which should rely on the entire record. Further, any resultant new or revised emission limit developed as an alternative RACT should contain a daily compliance technique, not a long-term compliance technique. (Long-term averaging should never be employed to disguise the fact that a RACT emission limitation is being relaxed. Unless recordkeeping presents an insurmountable problem, adjustments should be made in the RACT number, not in the averaging time.)

You may not be aware that OAQPS reviewed and provided staff comments on Region IV's method for determining the economic feasibility/infeasibility of a company to comply with control strategies. As was stated in this June 19, 1985, memorandum from John Calcagni to me (copy attached) there are too many confounding factors to establish firm decision rules for technological or economic feasibility which would apply in every case.

It is hoped that this clarifies our recommendation for procedures to be followed in determining economic infeasibility for a company. If you have any questions on the policy for RACT, please contact me at FTS 629-5526.

Attachments

NOTE: The Federal Register notice and the 6/19/85 memorandum mentioned above are not included in the Policy and Guidance Notebook.

cc: John Calcagni  
Ron Campbell  
Darryl Tyler  
Chief, Air Branch, Regions I-X  
VOC Regulatory Contact, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JAN 8 1987

MEMORANDUM

SUBJECT: Clarification of Seasonal VOC Control Policy

FROM: *for* G. T. Helms, Chief  
Control Programs Operations Branch (MD-15) *John Salvo*

TO: Frank Giaccone, Chief  
Air Compliance Branch, Region II

This is in response to your memorandum of December 5, 1986, requesting clarification of my memorandum of September 29, 1986, to Bruce Miller, Region IV, concerning seasonal volatile organic compound (VOC) controls. I am sorry for the delay, but ozone strategy development and holidays have slowed us down.

Specifically, you requested our office provide a statement with respect to what EPA policy is regarding the subject of seasonal VOC controls, and what exceptions EPA Regional Offices can allow, if any.

Paragraphs 2 and 3 of our September 29, 1986, memorandum are to be interpreted as follows: Current policy dictates that seasonal control is not appropriate for EPA's ozone control program with two exceptions: (1) the use of gas-fired afterburners and (2) the use of cutback asphalt during periods when the temperature is below 50°F or during winter months. This is EPA's current policy and the exceptions Regional Offices can allow. There has been no change to this policy. The gas-fired afterburner provision was initiated in the mid-1970's during the "energy crunch." It is of questionable relevance today, especially because of fuel availability and in light of the toxic control implications when afterburners are shut down.

Paragraph 4 of our memorandum was intended to advise that no further or additional relaxation of this policy was allowable. Region IV had inquired if modification of SIP requirements (emission limits and/or extended averaging times) were allowable during seasonal periods (winter months) for compliance purposes. As indicated in the memorandum, our response was no.

It is hoped that this clarifies EPA's current seasonal VOC control policy. If you have any questions, please contact me at FTS 629-5526.

cc: Ron Campbell  
Steve Hitte  
John Rasnic  
Darryl Tyler  
Chief, Air Branch, Regions I-X  
VOC Enforcement Contact, Regions I-X  
VOC Regulatory Contact, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

10 DEC 1986

MEMORANDUM

SUBJECT: Rulemaking on State Implementation Plans (SIP's) for SO<sub>2</sub>

FROM: *for* G. T. Helms, Chief  
Control Programs Operations Branch (MD-15)

TO: Air Branch Chief, Region I-X

The Office of International Activities (OIA) has advised us that the Canadian Embassy must be informed of all SO<sub>2</sub> SIP revisions and redesignations before publication in the Federal Register. Therefore, Regional Offices must now submit a communications strategy with all proposed and final SIP rulemaking actions involving SO<sub>2</sub> that are sent to Headquarters for review.

Conrad Kleveno of the OIA will be the contact with the Canadian Embassy. Before a SIP revision is sent to the Office of the Federal Register for publication, Denise Gerth will contact him at the same time she contacts the Office of Public Affairs. He in turn will send a cover letter and copy of the Federal Register notice to the Canadian Embassy. Normally, press releases do not need to be submitted; however, if one is planned, please attach it to the communications strategy.

If you have any questions on this, please call me or Denise Gerth.

cc: Conrad Kleveno  
Denise Gerth  
Sharon Reinders

In order to conserve space, the Federal Register notice entitled:

Emissions Trading Policy Statement; General Principles  
for Creation, Banking and Use of Emission Reduction  
Credits (51 FR 43814, December 4, 1986)

is not included in the Air Programs Policy and Guidance Notebook.  
Please refer to this notice for EPA policy/guidance related to this  
subject.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

**AUG - 7 1986**


OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Policy on SIP Revisions Requesting Compliance Date  
Extensions for VOC Sources

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation

TO: Regional Administrators  
Regions I-X



A number of States have asked EPA to approve SIP revisions granting compliance date extensions for individual VOC sources in ozone nonattainment areas. The attached policy sets forth EPA's position on when approval of such SIP revisions is appropriate and what the States must demonstrate in order for EPA to approve them. Regional Offices should review the requests for SIP revisions for conformance to this policy. SIP revisions now pending at Headquarters will also need to be reviewed by the Regions in light of this policy.

Attachment

cc: Richard H. Mays, OECM  
Gerald A. Emison, OAOPS  
Alan Eckert, OGC  
Air Division Directors, Regions I-X  
Regional Counsels, Regions I-X

Policy on SIP Revisions Requesting Compliance Date  
Extensions for VOC Sources

In order to approve a source-specific compliance date extension, two tests must be met. First, a State must demonstrate that the extension will not interfere with timely attainment (attainment by the formally established attainment date) and maintenance of the ozone standard and, where relevant "reasonable further progress" (RFP) towards timely attainment. 1/ The attainment date will generally be December 31, 1982, or the date established under Section 110 where the State has adequately responded to a request for SIP revisions under §110(a)(2)(H), or December 31, 1987 in ozone extension areas. The demonstration may be based on a comparison between the margin for attainment predicted by the demonstration submitted with the approved ozone SIP 2/ and the increased emissions that would result under the proposed compliance date extension. 3/ If there is an adequate margin to absorb the increased emissions (and the extension would not interfere with RFP), then EPA may conclude that the compliance date extension will not interfere with the attainment and continued maintenance of the ozone standard.

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1/ The reference to a demonstration of RFP towards timely attainment is not intended to redefine RFP but only reaffirms that an RFP analysis is required.

2/ For areas where revisions to the Part D SIP are required (such as 1987 extension areas or SIP call areas) and those revisions have not been fully approved, the State would have to submit a demonstration the equivalent of that required for EPA approval of the ozone SIP. Without an approvable demonstration EPA cannot determine whether the individual compliance date extension will interfere with timely attainment and maintenance of the standard, or with RFP. A de minimus showing would not be acceptable, since in the aggregate even very small sources would contribute significantly to ozone formation.

3/ In making such a comparison it will be necessary to determine what, if any, portion of the margin has been utilized by new sources of VOCs that may have located in the area since the SIP was approved, as well as by existing VOC sources that may have already been granted compliance date extensions.

If the State or EPA believes that there has been a substantial change in the inventory of VOC sources or total VOC emissions since the ozone SIP was approved so that the margin of attainment has changed significantly, a revised demonstration in support of the source-specific SIP revision should be submitted. 4/

Second, time extensions also must be consistent with the requirement that nonattainment area SIPs provide for "implementation of all reasonably available control measures as expeditiously as practicable" [§172(b)(2)]. Expeditiousness should be demonstrated by determining when the source was first put on notice of the applicable requirement (e.g., adoption of the current regulation by the State) and the time that has elapsed since then. EPA has generally determined that for most VOC sources this period is less than three years. 5/ Any source-specific SIP revision for a compliance date extension within these timeframes may be presumed to be expeditious. Compliance date extensions for periods longer than these timeframes, however, should be closely scrutinized to determine whether or not they are truly expeditious. 6/ This should include an examination of the compliance status of other sources nationally in the same VOC source category (this examination would be the responsibility of the State), and the most expeditious means of compliance available (including add on control equipment, process change, or raw material improvement) irrespective of the method proposed in the SIP

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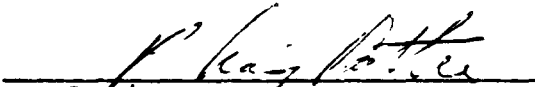
4/ Such a demonstration would be necessary, for example, in areas originally demonstrating attainment by 1982, but for which post-1982 monitoring data are indicating exceedances of the ozone standard or raising serious questions about the original prediction of attainment.

5/ For three source categories (can coating operations, graphic arts printing and automotive assembly plant paint shop operations), based on industry experience EPA has through policy statements concluded that expeditiousness may be longer than three years.

6/ The same holds true for review of individual compliance date extensions incorporated in any area-wide ozone SIP revisions submitted by a State (such as those being submitted pursuant to an EPA SIP call under Section 110(a)(2)(H)). Any change in the original deadline for an individual VOC source incorporated in an area-wide ozone SIP revision must be demonstrated to be expeditious (as well as not interfere with timely attainment and maintenance).

revision. Unless it can be shown that the original timeframe approved in the SIP did not allow sufficient time for an economically and technologically feasible compliance plan to be implemented, a SIP revision for a compliance date extension beyond the timeframes set forth above should be denied.

In conclusion, both the demonstration of timely attainment (including RFP where relevant) and maintenance and the expeditiousness tests must be met before a State SIP revision can be approved.

  
J. Craig Potter  
Assistant Administrator  
for Air and Radiation

**AUG - 7 1986**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

5/23/86

OFFICE OF  
AIR AND RADIATION

Ms. Nancy Maloley  
Commissioner, Department  
Environmental Management  
Suite 319  
311 West Washington Street  
Indianapolis, Indiana 46204

Dear Ms. Maloley: *Nancy*

I enjoyed our recent meeting and I have received your followup letter of April 28, 1986 requesting clarification of the Environmental Protection Agency's policy on use of 30-day averaging as a compliance method for the Indiana State Implementation Plan (SIP) for sulfur dioxide (SO<sub>2</sub>). In this connection, you raised the question of the use of a statistically-based method such as the one approved by EPA in the Arizona SO<sub>2</sub> SIP for smelters and upheld in Kamp v. Hernandez, 752 F.2d 1444 (9th Cir. 1985).

I understand the importance of this issue to the coal industry in your state, and of the concern that the significance of coal variability be factored into the establishment of emission limitations and appropriate compliance methods.

As you know, the current National Ambient Air Quality Standard (NAAQS) for SO<sub>2</sub> has both short term (i.e. 3-hour and 24-hour averages) as well as annual average components. Because, under the Clean Air Act, State Implementation Plans (SIPs) must demonstrate attainment of these short-term standards, EPA has had a long-standing policy to require emission limitations to be enforceable on a short-term basis to protect the short-term NAAQS. In recent years, EPA has not approved SO<sub>2</sub> 30-day averaging as a compliance method, unless accompanied by a short-term SO<sub>2</sub> limit established by a reference dispersion modeling analysis.

The Agency currently is in the process of reviewing the NAAQS for SO<sub>2</sub>, including consideration of a statistical revised standard. As part of that review, EPA also is reviewing the feasibility of using alternative, statistically-based demonstrations related to any such revised SO<sub>2</sub> standard. Because any change in our policy on methodology would have nationwide

implications for NAAQS attainment, we do not expect to change the current position, if at all, prior to our completion of the NAAQS review.

You specifically have asked for our position on whether multipoint rollback or other statistical techniques could be used to justify approval of 30-day averaging. As a general matter, we require analytical techniques that are technically and scientifically sound and that are practical and consistently applied in similar circumstances. Based on my current understanding, it appears that multipoint rollback itself would not be applicable for the type of situation presented by the Indiana SIP. You should be aware that EPA approved the multipoint rollback SIP in Arizona several years ago only after expending considerable time and effort on the particulars of each Arizona smelter. Although in most circumstances EPA considers the rollback approach to be technically less sound than approved modeling methods, the Agency finally approved that approach for Arizona as a result of a wide range of factors stemming from the very unusual nature of the smelter emission problems. As you know, the problems of smelters have proven particularly difficult, as demonstrated by Congress' own special treatment of smelters in section 119 of the Clean Air Act.

The Arizona smelters are isolated and are characterized by extreme variations in emission levels, resulting from the particular characteristic of the smelting process, the chemical composition of the ores, and other factors. Use of traditional modeling methods for these sources was complicated by the presence of associated fugitive emission sources and complex or mountainous terrain. Due to these limitations on the use of standard modeling techniques, the State turned to the Arizona rollback approach, which included, for example, collection of additional monitoring and emission data, additions to the existing monitoring network, study and commitment to a State fugitive emission control program, 80-90 percent emission control, and running 3-hour average compliance determined by continuous emission monitors (CEMs).

My understanding is that the Indiana SIP for SO<sub>2</sub>, in contrast, is dominated by utility power plants and large industrial boilers, whose emissions do not vary nearly so much as smelters and which do not have large associated fugitive emissions sources or complex terrain. Approved models already exist and have been used nationally to account for multiple source interactions and stack height adjustments (where stack heights greater than GEP must be discounted). The existing air quality modelling methods for establishing emission limitations have been used successfully in different state SIPs which have sources similar to Indiana.

At this point, I cannot give you much encouragement on trying to use the multipoint rollback approach or a similar method for the Indiana SIP. Any attempt to develop a statistical approach, as demonstrated by the Arizona experience, would require significant time and resource commitments from both the state and EPA for activities such as data development and analysis and program review. However, extensive attempts in the past to develop an alternative statistical approach to utility power plant attainment demonstrations did not produce an acceptable technique, so success is unlikely. The end result of any analysis still must be a successful demonstration of compliance with short-term standards when coal sulfur content exceeds the average limit. We prefer that development of a possible statistical approach not be attempted on an ad hoc basis because of the significant nationwide implications and the possible relationship with the SO<sub>2</sub> standard review. We also are concerned that there not be further delay in the time when Indiana will have a federally approved SIP.

The most straightforward way of resolving this issue would be for the state to remove the 30-day averaging method from the state SO<sub>2</sub> rule. Any subsequently developed compliance approach could be submitted as a source specific SIP revision under the alternative compliance method provision of the applicable Indiana regulation. Short-term SIP limitations for each source should be consistent with methods contained in EPA reference guidelines, using source test methods to measure compliance as specified in 40 CFR Part 60 Method 6. The EPA's policy and modeling guidance with regard to the requirements for approvable attainment demonstrations is contained in its Guideline on Air Quality Models.

As a final note, I want to point out a factor which, although unrelated to the merits of the methodology questions, is of concern to me and also should be of concern to your state. A new bill to establish acid rain control plans, H.R. 4567, was recently introduced in Congress with 150 co-sponsors. The Administrator testified on the bill, opposing its passage, while arguing a restrained approach to controls, based on the present uncertainties in our knowledge of acid precipitation. One of the principal reasons advanced by the Administrator for deferring action is that current evidence suggests that SO<sub>2</sub> emissions in the midwest are stable. Thus, we have time for the required further research without the need for additional SO<sub>2</sub> controls at this time. It would be unfortunate if, because of methodology changes or other reasons,

some states were perceived to significantly increase SO<sub>2</sub> emissions so that overall SO<sub>2</sub> emissions in the Midwest were to begin to trend upward, since such a trend would support those in Congress who are pressing for additional SO<sub>2</sub> controls before the facts are in. I am sure you are as concerned about this as I am.

I stand ready to discuss these matters further, or to assist you in any way I can to resolve the Indiana SO<sub>2</sub> SIP issue. I am sorry that I cannot be more encouraging on the particular approach used for Arizona smelters, but I hope that at least I have clarified EPA's current policy. Please do not hesitate to call on me if I can be of further service.

Sincerely,

/s/

J. Craig Potter  
Assistant Administrator  
for Air and Radiation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

11 APR 1986

MEMORANDUM

SUBJECT: Responses to Five VOC Issues Raised by the Regional  
Offices and Department of Justice

FROM: Gerald A. Emison, *[Signature]*  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Divisions Directors  
Regions VII, VIII and X

Attached are responses to five VOC issues identified by the Regional  
Offices and DOJ through the VOC Compliance Workgroup. These five issues  
are:

- VOC Recordkeeping
- Economic Feasibility for Non CTG Sources
- Type of Compliance Monitoring When Incineration Is Only  
Used Sporadically
- Transfer Efficiency
- Test Methods for Assessing VOC Compliance

This is the second group of responses that I have issued and brings  
the total number of responses issued by Headquarters to thirteen. (For  
more information on the background of the VOC issues, please see my  
February 28 memorandum to you with a similar title.) We are working with  
the appropriate Headquarters offices to expedite issuance of the remaining  
few VOC issues.

I appreciate your staffs' efforts in commenting on the various drafts  
of these issues and hope that you find them helpful in resolving some of  
the issues concerning VOC enforcement.

Attachment

cc: VOC Compliance Workgroup  
Regional Counsel, Regions I-X

NOTE: Attachments not included in the  
Policy and Guidance Notebook.

ISSUE:

"Is it Feasible to Request Daily Recordkeeping?"<sup>1</sup>

Response:

There are two parts to this question. The first is whether the SIP in question is properly interpreted to require daily recordkeeping, making it "legally" permissible to require daily records for compliance determination purposes. This paper will not address that issue.

The second part of the daily feasibility question is how practical will it be for the sources, financially and administratively, to keep records on a line-by-line, daily basis, since that is the basis of many VOC SIP provisions. This paper will first address the technical feasibility of maintaining these records and then reiterate EPA policy in this regard.

One must look at the various possible situations that can arise to determine the level of difficulty sources may encounter. These situations can be broken down into three basic types.

The first situation is those facilities that use only complying formulations which contain no on-site VOC dilution. These sources, by definition, are in compliance at all times because each coating used is in compliance with RACT and SIP requirements. Recordkeeping requirements for these facilities would be straightforward. They would only have to maintain records that show that they don't dilute or cut the coatings before applying them.

The second situation is represented by sources which have installed abatement equipment (add-on controls). The recordkeeping requirements for this category should not be new nor should they be as complicated as those required for the more complex plants. Generally, only routine operational parameters would have to be checked and recorded daily as described in the following "issue" on recordkeeping requirements. Automatic recorders and alarms could be used for some, if not all of the important parameters.

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<sup>1</sup> The first item deals with daily recordkeeping because it was specifically addressed in the question asked. However, the reader must be aware that the time interval required for recordkeeping is a function of SIP regulations.

The last situation will require the most effort to maintain adequate records. This situation is represented by job shops that use a large variety of complying and noncomplying coatings or ink formulations to meet SIP regulations, including "bubble" requirements. These facilities will have the most difficulty meeting a 24-hour recordkeeping requirement. Part of the difficulty is from the resistance by the sources to change present recordkeeping practices. For example, some companies tie their recordkeeping practices to their inventory procedures and take inventory only on a weekly or monthly basis. Also, other plants often record ink or coating use by the "job"<sup>2</sup> which may overlap from one 24-hour period into another. These procedures are generally not acceptable to meet daily recordkeeping requirements.

In some cases, significant modifications may be required in the operation of a process that may also require additional labor. However, these costs should not be taken at face value by compliance authorities since there may be significant process and emission control benefits to improved recordkeeping. A shop which keeps better records, daily, by the job or contemporaneously (real time), should have better cost control because it knows more about its process, inventory, and emission control. This would be true even if longer periods of averaging (greater than 24 hours) are allowed. This is especially true if the companies also institute better methods for determining the quantities of different formulations used. These methods could include continuously recording flow meters, totalizers, etc. for determining coating and VOC diluent use.<sup>3</sup>

Given the foregoing discussion, it is apparent that there are facilities which would have significant difficulties with recordkeeping on a daily basis (i.e., daily VOC emissions cannot be determined, or application of RACT is not economically or technically feasible on a daily basis). EPA has established

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<sup>2</sup> A "job" is usually defined as an order for a single identifiable product for a single customer. It will require set up time as the proper rolls or other equipment is installed. Hence the machine or line is down both before and after completion of a job.

<sup>3</sup> In addition, some recordkeeping problems can be alleviated if some type of automated bookkeeping is used by the source i.e., computerized records for coating and VOC use, process variables, and emission control parameters. This could greatly simplify the auditing of the process line coating usage and inventories, especially if the source has adequate monitoring and process control devices.

a policy addressing longer averaging times. Sources which desire a longer period must comply with the January 20, 1984 memorandum from John O'Connor entitled, "Averaging Times for Compliance with VOC Emission Limits". This memorandum sets forth specific requirements for approval of averaging times greater than 24 hours. Recordkeeping requirements are directly related to the compliance time interval i.e., in order for compliance authorities to make proper compliance determinations, sources must maintain records on the same basis as is required for these (compliance) determinations. Briefly the requirements of the memorandum are:

1. Daily VOC emissions cannot be determined or application of RACT is not economically or technically feasible on a daily basis.
2. Achieve real emission reductions consistent with RACT control levels.
3. Have an averaging time not to exceed thirty days.
4. Demonstrate that the new standards will not jeopardize attainment or the reasonable further progress (RFP) plan for the area.
5. Have an approved SIP with no violations of ambient standards or a revised SIP demonstrating ambient standards attainment and maintenance of RFP.

In conclusion, daily recordkeeping SIP requirements are appropriate except under conditions as articulated in John O'Connor's January 20, 1984, memorandum.

In addition, the requirement to maintain daily records needed to make emission compliance determinations, in and of itself, may not require a source to compute its emission on a daily basis. In such a case, where there is no emission computation requirement, the source must only maintain the records needed to make a compliance determination for the time interval set forth in the SIP. The relationships of reporting requirements to compliance verifications are addressed in the next two issues of this discussion.

## ISSUE:

"What Type of Recordkeeping Should be Required?"

## Response:

Recordkeeping requirements should be tailored to the source and to the applicable SIP emission limits or other Federal requirements. For this reason, it is not possible to establish a universally applicable policy. However, the following guidance should prove helpful in formulating recordkeeping requirements for particular sources.

Ideally (and currently in some SIPs) records should be kept for each line<sup>4</sup> on a contemporaneous basis. However, due to a mixture of different control methods, this may be difficult. Also SIPs generally require compliance on a line and specific time basis, and therefore, this would govern how records should be kept.<sup>5</sup>

Recordkeeping can generally be broken into two categories. The first category concerns the formulation of coatings, inks, adhesives, etc., and the second is information on the add-on control devices. Formulations data which are needed are fairly straightforward and include the following:

1. Properties of coatings, inks, etc., "as supplied" by coating manufacturing plants on a line-by-line basis. These properties are listed in EPA-450/3-84-019, "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and other Coatings".
2. Properties of coatings, inks, etc., "as applied" by manufacturing plants on a line-by-line basis. These properties are also listed in EPA-450/3-84-019.

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<sup>4</sup> The definition of a (production) line may vary depending on applicable regulations. NSPS regulations are fairly specific. Some cases may also be defined in the SIP which could also require RACT compliance on a coating by coating basis.

<sup>5</sup> This basis may be different due to individual SIP provisions or where the source has received EPA approval for different recordkeeping requirements consistent with the previously discussed January 20, 1984 John O'Connor memo. In addition, cross line averaging is allowed for can coaters where the SIP does not specifically prohibit such averaging, as stated in the December 8, 1980 Federal Register reference in the above John O'Connor memo.

3. Quantity of ink, coatings, etc., used. This information is generally needed on a line-by-line basis.
4. Type and quantity of dilution solvents used, generally needed on a line-by-line and coating by coating basis.
5. Transfer efficiencies of coating processes if different from those cited in regulations. Credit for higher transfer efficiency may need to be documented and approved by EPA in some cases. This is dependent on the CTG/NSPS category and the specific SIP requirements. More specific guidance in this area is given in the responses to the issues on transfer efficiency.

For add-on controls at least the following information<sup>6</sup> should be kept (checked and recorded daily) in order to assure continuous compliance:

1. Operational parameters on the capture system such as fan power use, duct flow, duct pressure etc.
2. Operational parameters on the control system. These will vary depending on the specific type and design of the device. The use of approved continuous emission monitoring (CEM), which is properly maintained and calibrated, may negate the need for some of the following information:
  - a. For carbon adsorbers: Bed temperature, bed vacuum pressure, pressure at the vacuum pump, accumulated time of operation, etc.
  - b. For refrigeration systems: Compressor discharge and suction pressures, condenser temperature, defrost brine temperature, etc.
  - c. For incinerator systems, flame temperature and accumulated times of operation of incinerator and respective process lines.

<sup>6</sup> This information is general in nature. The specific operating parameters will vary for each type of device and manufacturer. Specific sources of information which will be of use in determining important operating parameters include the following:

- (a) "Survey of Mechanical Reliability of Vapor Control Systems for Bulk Gasoline Terminals", EPA 340/1-85-0017
- (b) The Background Information Documents on the various VOC NSPS source categories.
- (c) The control equipment manufacturer's recommendations.

3. Data used to determine recovery rates of carbon adsorbers and refrigeration systems must be recorded on a daily basis if continuous recordings are not available. This will allow some recovery rates to be compared against VOC usage on the applicable lines.<sup>7</sup> Therefore, records of VOC usage should be maintained even where only add-on controls exist, especially if the source uses a mix of compliance methods.
4. If solvents are not reused or incinerated, ultimate disposal records should be kept.

Operational parameters should be checked by a source on a daily basis in order to assure proper operations. The substitution of continuous recordings, including emergency alarms for certain parameters, can be allowed for certain daily checks. Stack (performance) tests required after a system goes on line, must also be conducted if there are serious operational problems with the source, poor solvent recovery, or important changes in the process or control methods. In addition, since NSPS standards generally identify compliance and recordkeeping requirements, the compliance authority should review these standards when setting recordkeeping requirements for similar facilities regulated under SIP/RACT standards.

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<sup>7</sup> The compliance reviewer must also consider the hold-over (heel) of VOC in the carbon bed when making a review. This hold-over of VOC from one day into the next may give the appearance of excessively high recovery one day and usually low the next. This aberration, in and of itself, should not be considered a non-compliance situation.

## ISSUE:

"How Can or Should Recordkeeping be Verified When EPA Cannot Independently Determine Compliance?"

## Response:

This response provides guidance relative to verifying compliance of VOC sources. EPA and the States have at least six basic methods for verifying compliance of such sources. These are:

1. Walk through plant.
2. Checking records to make sure the company is complying using the proper formulation mix. This basically consists of auditing records and emission requirements.<sup>8</sup>
3. Checking operation and maintenance records as well as VOC recovery of add-on control systems.
4. Checking the operating permits, fire-safety inspections, and/or insurance company premium/ policies to assure low solvent coatings are used.
5. Testing emissions (stack tests).
6. Verifying (testing) formulations "as supplied" and "as applied" as defined in EPA-450/3-84-019.

Generally, the first method (walk through plant) is not acceptable by itself. As a result, inspections should include a combination of the above methods, especially methods 1, 2, 3 and 6 listed above. Item 2, confirmation of recordkeeping, is required to give companies the incentive to keep accurate records and submit accurate reports to compliance agencies. The confirmation of records should not be too difficult a problem for small shops because they either do not use a large number of formulations, use only complying coatings with little or no VOC diluents, or use only add-on controls.

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<sup>8</sup> This also includes those cases where records are kept on an item by item basis such as can coating where a "standard" coating use per item is used. However it is recommended that the actual coating used in a production run be checked every so often against the "standard".


The source may use "prorating of production" if a production run carries from one day into the next in order to compute emissions as regulations allow. This only applies if production is constant, or known for the required (SIP) time interval.

This relatively easy confirmation sometimes is not the case with larger sources. In some cases where the company has a number of lines using a large number of complying and noncomplying formulations, verification of compliance becomes a significant accounting effort. This is especially true if the situation is further complicated by add-on controls for some lines. However, compliance agencies must still check these sources. If lines or a group of lines can be separated out for auditing this can simplify the process so that only part of a plant need be audited.

In addition, where line-by-line auditing is especially difficult, an audit on a plant-wide basis may be a practical approach even where there is no plant-wide "bubble." Although this does not result in per line compliance, it can give a reasonable indication, a screening, whether a facility is even close to compliance. However, for compliance purposes, this overall plant-wide approach should not replace a line-by-line evaluation where such compliance is required by the SIP.

Therefore, some combination of the aforementioned methods may be required in assuring compliance of various sources. The auditing of process records and testing of formulations may be the only way to verify compliance in some cases, and the agency will have to initiate these procedures if it wants to determine compliance of these sources despite the significant additional resource demands required.

Much of the above agency resource demands may be minimized, or at least better focused, by requiring improved reporting from the source. Besides giving the compliance authorities some idea of what emissions are being emitted from a source, it would also require the source to make the computations to determine its emission rate. This in turn would give some assurance that the source is maintaining some type of records which can be used by EPA and State agencies in verifying compliance. Therefore, as a minimum, quarterly reporting of emission exceedances is strongly recommended wherever State regulations allow.

  
Gerald A. Emison, Director  
Office of Air Quality Planning  
and Standards

4-11-86

Date Signed

## Issue:

What criteria should be used to determine economic feasibility for non-CTG VOC sources? For CTG sources where recommended RACT is technically infeasible?

## Response:

EPA's definition of VOC RACT for ozone plans is the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. This is explained in greater depth in the September 17, 1979 supplement to the general preamble on the criteria for approval of Part D SIP revisions (44 FR 53761). Where EPA cannot rely on presumptive norms, RACT for a particular source is determined on a case-by-case basis considering the technological and economic circumstances of the individual source. Hence, whether or not a source is addressed by a CTG, no universally applicable decision rule can supplant case-by-case judgment on what constitutes RACT.

In evaluating economic feasibility for RACT, the Agency gives significant weight to cost-effectiveness. However, no specific cost effectiveness threshold exists to determine RACT. Numerous other factors (i.e., age of facility, quantity of emissions, nature of emissions, severity of existing air quality problem, extent of controls present, comparability to standard industry practice in related industries, cross media impacts, economic impacts, etc.) must be considered in establishing RACT. It is conceivable, given differing local circumstances, that a control option could be reasonably available in one location and unreasonable in another.



Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

4-11-86

Date Signed

**Issue:**

Where incineration is only used sporadically when high-solvent coatings are used, what type of compliance monitoring is required? Is efficiency of the incinerator impacted by sporadic use?

**Response:**

The temperature of the incinerator is of interest only during periods when the production process is operating. As a result, the guidance below is appropriate only when, for example, a printing press is actually printing.

The following records are essential for determining compliance.

- ° The periods of time when the process is operating.
- ° Periods of time when the average gas temperature of the incinerator is colder than 28°C (50°F) below the average temperature during the most recent successful performance test.
- ° If a catalytic incinerator is used, all periods when the average gas temperature of the device upstream of the catalyst bed is colder than 28°C (50°F) below the gas temperature during the most recent successful performance test.
- ° All periods when the average gas temperature across the catalyst bed is less than 80 percent of the temperature differential during the most recent successful performance test.

Sporadic operation of the incinerator should not affect its VOC destruction efficiency if the temperatures are raised to the operating levels used during the most recent successful performance test before the solvent-borne inks, paints, etc., are introduced to the line.

If a thermal incinerator has a brick-lined combustion chamber, it may not be practical to shut the incinerator down during periods when it is not needed because of the risk of spalling the brick lining if the temperature falls below about 500°C. The need to remain above about 500°C would minimize the potential fuel savings that would otherwise accrue from intermittent operation.

## Issue:

Should a source be required to retrofit thermocouple wells on an incinerator to permit temperature monitoring?

## Response:

Generally, yes. The object, of course, is to verify continuous operation under conditions consistent with those under which the incinerator successfully passed the performance test. The optimum location for a retrofit thermowell(s) may be different from the guidance above but shall be located so as to insure that it (they) reflect the operation of the incinerator.



Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

4-11-86

Date Signed

## Issue:

What is transfer efficiency?

## Response:

Transfer efficiency is a measure of paint waste. Specifically, it is the ratio of the amount of coating solids deposited on the coated part to the total amount of coating solids used. Transfer efficiency (TE) is an important factor in determining emissions from spray coating operations. When the TE of a spray coating operation increases, the amount of coating required to coat a part decreases, hence, less paint and VOC exits the spray gun and emissions decrease.

## Issue:

What baseline TE should be used?

## Response: ..

Baseline TEs have been established for use with the emission limits recommended in three control techniques guidelines (CTG): automobile and light-duty truck (guide coat and topcoat), large appliances, and metal furniture. The baseline TE for automobile and light-duty truck guidecoat and topcoat is 30 percent. This is the value measured at the two General Motors assembly plants in California that used the waterborne coatings on which the recommended emission limits were based. (Attachment 1).

The baseline TE for large appliance and metal furniture is 60 percent. This value was established based on a determination that hand-held electrostatic guns would achieve a TE of 60 percent in these industries and are available at reasonable cost. (Attachment 2).

Baseline TEs were also incorporated directly into the emission limits when the new source performance standards (NSPS) for these three industries were prepared about three years after the CTGs were written. These values are 39 percent for automobile guide coat, 37 percent for automobile topcoat, and 60 percent for large appliances and metal furniture. The baseline figures for the automobile industry are based on the actual TE measured at the General Motors assembly plant in Oklahoma City. This was a new facility that used the same

waterborne coatings that served as the basis for both the NSPS limits and RACT for guide coat and topcoat.

Issue:

How is credit to be calculated?

Response:

The effect of TE improvements is most easily taken into account by expressing the emission limit and actual emissions in terms of "mass of VOC per volume of solids applied (deposited on the substrate)." Calculations using the units of "mass of VOC per volume of coating less water" cannot correctly account for changes in transfer efficiency.

Since the emission limits adopted in most state implementation plans (SIPs) are in these last terms ("mass of VOC per volume of coating less water") that do not permit correction for changes in TE, clearly something must be done to permit the SIPs to provide TE credit. This can be done in either of two ways; with source specific SIP revisions or by adopting "equivalent" emission limits expressed as "mass of VOC per gallon of solids applied" as Michigan and Delaware have. Attachment 3 presents a number for "mass of VOC per gallon of solids applied" which is equivalent to the units used in the CTGs (mass of VOC per volume of coating less water) at the appropriate baseline transfer efficiency for the three industries.

Actual emissions in terms of "mass of VOC per gallon of solids applied" can also be calculated using the VOC Data Sheets.<sup>1</sup> First, determine the VOC content of the coating used in units of "mass of VOC per volume of coating solids (as applied)" then divide this result by the transfer efficiency. An example is provided in Attachment 4.

Determining the actual transfer efficiency of a coating line is very difficult. Several methods have been used by industry, but there is yet no widely accepted test procedure. Transfer efficiency is affected by numerous factors, such as the coating being sprayed, spray gun flow or pressure, and workpiece size and shape. These can change from job-to-job or day-to-day. In order to deal with the lack of test procedure, the NSPS for automobiles and light-duty trucks, large appliances,

and metal furniture provide tables of transfer efficiency values which reflect the type of spray equipment in use. These values are part of the standard, hence may be used for NSPS compliance calculations (Attachment 5).

We have recently learned that several new automobile topcoat lines are achieving only 1/3 to 1/2 of the TE predicted using the tables in the automobile coating NSPS. The severity of this "shortfall" from the table values appears to be very facility specific, and some automobile topcoat lines may achieve actual efficiencies much closer to the table values. Since actual automobile topcoat TE sometimes falls far short of table TE, table values cannot be relied on to give an accurate indication of actual emissions or whether real emission reductions consistent with SIP commitments are achieved. Consequently, unless the SIP specifically incorporates the NSPS table values for transfer efficiency, actual measured values should be used to determine compliance with SIP requirements. Similarly, projected actual TE values should be used to estimate emissions which will result from new or modified facilities.

Issue:

Can credit for improved transfer efficiency be obtained by coaters in other source categories?

Response:

This question is frequently asked by persons concerned with the industry EPA has referred to as "miscellaneous metal coaters." The answer is generally yes, although no baseline level was established for this industrial category because of its broad range of coated products. Since the configuration of the substrate can be the dominant variable in determining TE, previous guidance provided by EPA required that a case-by-case investigation be conducted to determine the unique baseline for that specific application. This guidance is provided in Attachment 6.

This guidance has proven cumbersome and frustrating to some sources that have installed modern, efficient spray application equipment. This is particularly true in those industries that, because of concerns over trade secrets, are unable to gain

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1 Procedure for Certifying Quantity of Volatile Organic Compounds Emitted by paint, Ink, and Other Coatings, EPA-450/3-84-019, December 1984.

insight into the TE experience of its competitors. To overcome this problem, we recommend States use a default baseline TE of 60 percent for most miscellaneous metal spray coaters. This value is consistent with that established for metal furniture and large appliance coaters.

This baseline value should be used only for spray coating operations, it should not be used to give TE credit to dip or flow coaters. Also, it would be inappropriate to use this baseline value for spray coating of interior surfaces such as steel pails and drums, tanks, and tank cars that may have inherently high TE. Use of 60 percent as a baseline could result in windfall or paper credits (i.e., no real emission reduction at these operations).

Coaters who believe the baseline TE for their industry should be less than 60 percent could still try to establish a source specific industry baseline using the guidance previously issued. The intent to allow miscellaneous metal coaters to take credit for TE improvements must be documented by the State's adopting the general baseline or source specific baseline into the SIP.



Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

4-11-86

Date Signed

Issue:

What are the appropriate test methods for assessing VOC compliance? Where are the gaps, if any, between the need in various contexts for measuring VOC compliance and actual State SIP test methods or EPA promulgated test methods?

Response:

The September 14, 1984, memorandum entitled, "Volatile Organic Compound (VOC) Test Methods or Procedures for Source Categories in Groups I, II, and III Control Techniques Guidelines (CTGs)" gives an updated list of recommended source test methods applicable to CTGs (see Attachment I). Some SIPs may list different methods endorsed by others such as the American Society for Testing and Materials (ASTM) or others. Some of these State requirements were published before EPA developed the methods presented in the attachment. When a SIP has approved a test method, EPA will abide by that method. Changes to these methods can only be made by a SIP revision. However, when the approved test method is different from the indicated EPA test method, we urge the States to modify their regulations to be consistent with the NSPS test methods.

The September 14, 1984, memorandum lists Method 24A for use with Graphic Arts CTGs. Method 24A was developed only for the publication rotogravure sector of the graphic arts industry. Method 24 shall be used for analysis of inks for flexography and rotogravure package printing.

When coatings are to be tested for VOC content, it is helpful if the results are reported on the VOC data sheet described in the document, "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," EPA-450/3-84-019, December 1984. Use of the VOC data sheet and its implementing instructions will ensure that VOC contents of coatings are analyzed and reported on a consistent basis.

Issue:

Can Reference Method 18 (gas chromatography/flame ionization detector) be substituted for Reference Method 25?

Response:

Yes, but only in limited situations where the solvent or VOC is a single compound or the identities of the components are known. Results of this method would be suspect if the gas

stream being tested contained a mixture of unknown organics. Two examples of the latter would be (a) an oven exhaust where a blend of "proprietary" (hence, unknown) solvents are evaporated from a coating, or (b) the exhaust stream of a combustion device that is or is suspected to be operating inefficiently.

It should be noted that Reference Method 25A, 25B, or 25C could also be substituted for Reference Method 25, and in some situations may be more desirable. Additional guidance on the appropriateness of a particular method may be obtained from George Walsh, Chief, Emissions Measurement Branch, ESED (MD-13, RTP, NC 27711).

Issue:

Is the variability of Reference Method 24, when used to analyze waterborne coatings, acceptable?

Response:

Yes. Certainly variability in a Reference Method is undesirable and we would prefer a more reproducible method. The variability in the analysis is the result of calculating the VOC as the difference between two large and independently measured values, the weight of total volatiles (water and VOC) and the weight of water. To overcome this inherent imprecision, one would have to either conduct a large number of duplicate tests in order to calculate a statistically valid average VOC content or measure VOC by an independent method. In 1980, the EPA proposed in the Federal Register another version of Reference Method 24 with an additional step, an independent measurement. All who commented on the Federal Register proposal rejected the alternative version because the additional step would be too costly.

Reference Method 24, consequently, remains the best enforcement tool available for determining the VOC content of coatings. The inherent imprecision of determining the VOC content of waterborne coatings for enforcement purposes is accommodated by adjusting the analytical results based on confidence limits calculated from the precision statement established for RM 24's constituent ASTM methods. This has a disadvantage. Some waterborne coatings test at high VOC values that may be effectively immune from citations when corrected by use of the precision adjustment. One should remember, however, that any waterborne coating provides a large emission reduction over almost any solvent-borne coating. To assure a clear understanding of the precision adjustment, a more detailed explanation was given in a February 14, 1986, memorandum from Jack Farmer to Ed Reich (see Attachment II).

Issue:

Can a Reference Method be developed for measuring the volume of solids in surface coatings?

Response:

Method 24 does not specify a procedure for experimentally determining the volume fraction of solids in a surface coating. When the method was originally proposed on October 5, 1979, it did include a procedure for experimentally determining the volume fraction of solids - the American Society for Testing and Materials (ASTM) D2697-73, Standard Method of Test for Volume Nonvolatile Matter in Clear or Pigmented Coatings. During the comment period, we received a very large number of comments concerning potential problems in the application of this procedure. As a result, it was deleted from Method 24 before its promulgation on October 3, 1980.

Note in Attachment III, the memorandum "Method for Measuring the Volume of Solids in Surface Coatings" dated January 24, 1986, from J. Farmer.



Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

7-11-86

Date Signed



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

March 28, 1986

MEMORANDUM

SUBJECT: Block Averages in Implementing SO<sub>2</sub> NAAQS

FROM: Gerald A. Emison *G. A. Emison*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Divisions, Regions I-X

As you know, the past Agency policy has been to use block averages in implementing the 3-hour and 24-hour SO<sub>2</sub> NAAQS. The question has arisen whether block averages are indeed the proper interpretation of the NAAQS. We have investigated this issue, and concluded that block averages are the proper interpretation. Thus, we will continue to use block averages in actions implementing the 3-hour and 24-hour SO<sub>2</sub> NAAQS. This statement of interpretation is for the purpose of providing needed guidance for current and future implementation decisions; it is not intended to initiate a reexamination of already approved implementation plans. In addition, States will continue to be permitted to develop requirements that are more stringent than Federal requirements, as provided by section 116 of the Act.

If this issue arises in any implementation decisions, e.g., SIP revisions, redesignations, etc., please contact Tom Helms at FTS 629-5526 for assistance. Tom and his staff, along with OGC, are available to assist you in responding to comments or preparing support documents on this issue.

cc: R. Campbell  
B. Steigerwald  
Chief, Air Branch, Regions I-X

Page No. 1  
03/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 111E  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 111E

\* PN111E-86-09-11-004

DELEGATION OF NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND NATIONAL  
EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AUTHORITY TO  
STATE/LOCAL AGENCIES

*Crenshaw*

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

11 SEP 1986

MEMORANDUM

SUBJECT: Delegation of New Source Performance Standards (NSPS) and  
National Emission Standards for Hazardous Air Pollutants (NESHAP)  
Authority to State/Local Agencies

FROM: Jack R. Farmer, Director *Jack*  
Emission Standards and Engineering Division (MD-13)

TO: David P. Howekamp, Director  
Air Management Division, Region IX

This guidance is in response to your memorandum requesting direction on which of the Administrator's discretionary authorities under 40 CFR Parts 60 and 61 can be delegated to State and local agencies (hereafter referred to as "States"). As you pointed out, we issued delegation guidance on NSPS on February 24, 1983 and on NESHAP on December 17, 1984 (both memos attached). The subparts about which you asked are those that have been promulgated since those two previous memoranda. In addition, we are including guidance on the revised Part 61 General Provisions that were published on November 7, 1985, and on five standards that have been promulgated since we received your request (three arsenic NESHAP and revisions to kraft pulp mill NSPS and asphalt concrete NSPS).

We are unable to provide guidance on NESHAP Subparts B, H, I, and K, since we do not have responsibility for radionuclides and radon-222. Please direct any questions to Sheldon Meyers, Director, Office of Radiation Programs (ANR-458c), U.S. Environmental Protection Agency, 401 M Street, N.W., Washington, D.C. 20460.

The authorities that may not be delegated to the States are listed below. All other authorities may be delegated. The criteria for determining which of the authorities can be delegated to States has not changed since our previous guidance and so are not reiterated here. If you have any questions about this guidance, please refer to the attached memos or contact John Crenshaw, FTS 629-5571.

<u>NSPS Subpart</u>	<u>Authorities Which May Not be Delegated to States</u>
VV -- SOCFI Equipment Leaks	60.482-1(c)(2) 60.484
WW -- Beverage Can Coating	60.496(a)(1) 60.493(b)(2)(i)(A)
GGG -- Petroleum Refinery Equipment Leaks	60.592(c)
JJJ -- Petroleum Dry Cleaning	60.623

No restrictions in delegation  
of the following NSPS subparts:

I (revised 1/24/86)  
 N (revised 1/2/86)  
 Na  
 AAa  
 BB (revised 5/20/86)  
 LL  
 RR  
 XX  
 FFF  
 HHH  
 LLL  
 OOO  
 PPP

<u>NESHAP Subpart</u>	<u>Authorities Which May Not be Delegated to States</u>
A -- General Provisions	61.04(b) 61.12(d)(1) 61.13(h)(1)(ii)
J -- Benzene Equipment Leaks	61.112(c)
N -- Arsenic, Glass Manufacturing	61.164(a)(2) 61.164(a)(3)
O -- Arsenic, Low Arsenic Feedstock Copper Smelters	61.172(b)(2)(ii)(B) SEP 61.172(b)(2)(ii)(C) 61.174(a)(2) 61.174(a)(3)
P -- Arsenic, High Arsenic Feedstock Copper Smelters	No restrictions
V -- Equipment Leaks	61.242-1(c)(2) 61.244

Your suggestion to provide delegation guidance along with each final rule is a good one. In the future, we will add a paragraph entitled "Delegation of Authority" to each NSPS and NESHAP regulation. That paragraph will indicate any authorities that may not be delegated to States or local agencies.

If I can be of further assistance, please do not hesitate to contact me.

## 2 Attachments

cc: Director, Air and Waste Management Division, Regions I-VIII,X  
 Rich Biondi, SSCD (EN-341)  
 Ron Campbell, OAQPS (MD-10)  
 Gerald Emison, OAQPS (MD-10)  
 Ed Reich, SSCD (EN-341)  
 Fred Renner, OAQPS (MD-10)  
 Charlie Carter, OGC (LE-132A)  
 Earl Salo, OGC (LE-132A)  
 B.J. Steigerwald, OAQPS (MD-10)  
 Darryl Tyler, OAQPS/CPDD (MD-15)  
 George Walsh, OAQPS/ESED (MD-13)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

February 24, 1983

MEMORANDUM

SUBJECT: Delegation of New Source Performance Standards Authority to States

FROM: Jack R. Farmer, Acting Director *Jack R. Farmer*  
Emission Standards and Engineering Division (MD-13)

TO: Allyn M. Davis, Director  
Air and Waste Management Division, Region VI

Your November 23, 1982, memorandum to Mr. Don R. Goodwin (copy attached) requested guidance on which of the Administrator's discretionary authorities under 40 CFR Part 60 can be delegated to the States. You identified 57 specific paragraphs which contain provisions that require the Administrator's approval. We have developed guidance on the authorities you identified plus several other authorities not specifically mentioned in your request.

Our guidance permits delegation to a State of all the Administrator's authorities under Part 60 except for any which require rulemaking in the Federal Register to implement or where Federal oversight is the only way to ensure national consistency in the application of standards. The division of State/EPA authority should be based on the principle of respecting the technical judgment of the State with EPA's role being primarily one of monitoring and evaluating overall program performance and providing assistance when necessary. Implementation decisions generally should be made by the State, while the Agency should make only those decisions that have the potential to alter the meaning of the standard or result in divergent application in different areas.

The authorities that should not be delegated to the States are listed below. All other authorities may be delegated. Of course, the decision of whether or not to delegate authority under any particular section rests with the Regional Office based on an assessment of the State's intentions and its legal and programmatic capability to implement the program. This guidance establishes those sections which from a legal and policy perspective are able to be delegated.

The decision-making authority that this guidance allows to be delegated to the States pertains to minor modifications to testing and monitoring methods. These authorizations appear in the regulations where the potential for advancements in test procedures, equipment, reagents, or analytical procedures was anticipated. The regulations, consequently, were structured to allow changes in sampling and measurement technology to be incorporated in an efficient and reasonable manner. The decision to make a minor change can generally be made by competent testing and laboratory personnel. Approval by an enforcement agency is needed to confirm that the change is minor in nature and provide a mechanism to prevent inexperienced testing and laboratory personnel from inadvertently making major changes to the method. Subsequent approval by the Administrator is not needed, because the minor changes do not affect the precision or accuracy of the method and, therefore, are not of national significance. The delegation, however, should require adequate documentation of any changes to testing or monitoring methods so that periodic auditing by EPA can confirm that this discretionary authority is not being abused.

#### Authorities Which May Not Be Delegated to States Under Section 111

1. Paragraph 60.8(b)(2) and 60.8(b)(3). In order to ensure uniformity and technical quality in the test methods used for enforcement of national standards, the Agency will retain the authority to approve alternative and equivalent methods which effectively replace a reference method. This restriction on delegation does not apply to 60.8(b)(1), which allows for approval of minor modifications to reference methods on a case-by-case basis. This authority allows, for example, a field engineer to approve deviations to methods that are necessary because of site-specific problems or circumstances. Requests for approval should be submitted to the Director, Emission Standards and Engineering Division. A technical review will be performed and any approved methods or changes to methods will be proposed and subsequently promulgated in the Federal Register. At such time, the alternative or equivalent methods become a part of 40 CFR Part 60 and are available for general use.

Some subparts include general references to the authority in 60.8(b) to approve alternative or equivalent standards. Examples include, but are not necessarily limited to, paragraphs 60.11(b), 60.274(d), 60.396(a)(1), 60.396(a)(2), and 393(c)(1)(i). These references are reminders of the provisions of paragraph 60.8 and are not separate authorities which can be delegated.

2. General Provisions 60.11(e). The granting of an alternative opacity standard requires a site-specific opacity limit to be adopted under 40 CFR Part 60. The Administrator may not delegate the authority for rulemaking.

3. Subpart S, 60.195(b). Development of alternative compliance testing schedules for primary aluminum plants is done by adopting site-specific amendments to Subpart S. This authority must be retained by the Administrator.

4. Subpart Da, 60.45a. Commercial demonstration permits allow an alternative emission standard for a limited number of utility steam generators. Delegation to the States is expressly prohibited in the subpart.

5. Subpart GG, 60.332(a)(3) and 60.335(a)(ii). These sections pertain to approval of customized factors (fuel nitrogen content and ambient air conditions, respectively) for use by gas turbine manufacturers in assembly-line compliance testing. Since each approval potentially could affect emissions from equipment installed in a number of States, the decision-making must be maintained at the Federal level to ensure national consistency. Notices of approval must be published in the Federal Register.

6. Equivalency Determinations, Section 111(h)(3) of Clean Air Act. Approval of alternatives to any design, equipment, work practice, or operational standard [e.g., 60.114(a) and 60.302(d)(3)] is accomplished through the rulemaking process and is adopted as a change to the individual subpart. This authority may not be delegated to the States.

7. Innovative Technology Waivers, Section 111(j) of the Clean Air Act. Innovative technology waivers must be adopted as site-specific amendments to the individual subpart. The authority to grant waivers may not be delegated. Any applications or questions pertaining to such waivers should be sent to the Director, Emission Standards and Engineering Division. [Note that responsibility for 111(j) has been transferred from the Stationary Source Compliance Division (SSCD) to the Emission Standards and Engineering Division (ESED).] States may be delegated the authority to enforce waiver provisions if the State has been delegated the authority to enforce NSPS.

8. Applicability Determinations. The majority of applicability determinations are expected to be routine in that there would be an established precedent to follow. Delegations should be conditioned to ensure that all interpretations of 40 CFR Part 60 (including Section 60.5) are consistent with those made by the EPA in the past. A compendium of all historical decisions is prepared by SSCD and distributed to the Regional Offices annually with updates made quarterly. These summaries should be sent routinely to each State or local agency that has been

delegated NSPS authority along with an explanation that these decisions represent NSPS policy. Any situations not clearly governed by precedent should be referred to the Regional Office for decision. As in the past, requests for applicability decisions should be forwarded to the Director, Stationary Source Compliance Division.

Attachment

cc: Air Waste and Management Division Directors,  
Regions I-V and VII-X  
✓ R. Campbell (MD-10)  
C. Elkins (ANR-443)  
S. Meyers (ANR-443)  
E. Reich (EN-341)  
F. Renner (MD-10)  
E. Salo (A-133)  
R. Shigehara (MD-19)  
B. Steigerwald (MD-10)  
G. Walsh (MD-13)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

DEC 17 1984

MEMORANDUM

SUBJECT: Delegation of NESHAP Authority to State/Local Agencies

FROM: Jack R. Farmer, Director *Jack R. Farmer*  
Emission Standards and Engineering Division (MD-13)

TO: David P. Howekamp, Director  
Air Management Division, Region IX

This is in response to your memorandum requesting guidance on which of the Administrator's discretionary authorities under 40 CFR Part 61 can be delegated to State and local agencies (hereafter referred to as "States"). You identified 121 specific paragraphs which contain provisions that require the Administrator's approval.

Our guidance permits delegation to a State of all the Administrator's authorities under Part 61, except for any which require rulemaking in the Federal Register to implement, or where Federal overview is the only way to ensure national consistency in the application of standards. The division of State/EPA authority should be based on the principle of respecting the technical judgment of the State with EPA's role being primarily one of monitoring and evaluating overall program performance and providing assistance when necessary. Implementation decisions generally should be made by the State, while the Agency should make only those decisions that have the potential to alter the meaning of the standard or result in divergent application in different areas.

This guidance permits the delegation of discretionary authority in the Asbestos standard pertaining to substitutions for certain control requirements [61.153(a)(4), 61.153(b)(3), 61.154(b)(1), 61.156(b)(3), 61.156(c)(2)]. These authorities were included in the regulation where the need for flexibility in determining control requirements was anticipated, recognizing that these decisions are most efficiently and reasonably made by the implementing agency. These decisions may be made outside the authority of Section 112(e) and do not necessarily require notice and opportunity for public comment. Approval by the Administrator is not required because the decisions are not of national significance. The delegation, however, should require adequate documentation of any decisions made under these paragraphs so that periodic auditing by EPA can confirm these discretionary authorities are not being abused.

The guidance also permits delegation of authority to approve minor modifications to testing and monitoring methods. Minor modifications pertain to contingencies that arise in the field and to authorizations that appear in the regulations where the potential for advancements in test procedures, equipment, reagents, or analytical procedures was anticipated. The regulations, consequently, were structured to allow changes in sampling and measurement technology to be incorporated in an efficient and reasonable manner. The decision to make a minor change can generally be made by competent testing and laboratory personnel. Approval by an enforcement agency is needed to confirm that the change is minor in nature and provide a mechanism to prevent inexperienced testing and laboratory personnel from inadvertently making major changes to the method. Subsequent approval by the Administrator is not needed, because the minor changes do not affect the precision or accuracy of the method and, therefore, are not of national significance. The delegation, however, should require adequate documentation of any changes to testing or monitoring methods so that periodic auditing by EPA can confirm that this discretionary authority is not being abused.

Part 61 stipulates that if reasonable grounds exist to dispute the results obtained by an equivalent or alternative source test method, the use of the reference method may be required, and the results of the reference method prevail [61.67(g), 61.70(c), 61.14(c)]. This authority may be delegated since the implementing agency is in the best position to make judgments about the reasonableness of test results obtained by alternative methods on a specific source. However, as specified in the guidance below, the approval or withdrawal of an equivalent or alternative test method is done by rulemaking and cannot be delegated.

Paragraphs 61.11 and 61.13, which deal with waivers for compliance dates and compliance testing, can be delegated if the State's enforcement and implementation procedures are adequate. Granting of waivers should be in writing and the States should provide copies of each written waiver to the Regional Office. Review of waivers should be part of the annual audit process.

Paragraphs 61.08(e)(2), 61.11(e), and 61.13(c) are basically statements clarifying the Administrator's authority and the relationship of certain provisions. States may want these same statements in their laws, but it should be made clear that we are not relinquishing our enforcement responsibilities through the delegation process. In the final analysis, the Administrator retains concurrent responsibility for the enforcement of the Act and any subsequent regulation developed under the Act.

The authorities that may not be delegated to the State are listed below. All other authorities may be delegated. Of course, the decision of whether or not to delegate authority under any particular section rests with the Regional Office based on an assessment of the State's intentions and its

legal and programmatic capability to implement the program. This guidance establishes those sections which from a legal and policy perspective are able to be delegated.

#### Authorities Which May Not Be Delegated To States Under Section 112

1. Paragraph 61.06. The majority of applicability determinations are expected to follow established precedents. Delegations should be conditioned to ensure that all interpretations of 40 CFR Part 61 are consistent with those made by the EPA in the past. A compendium of all historical decisions has been prepared by SSCD and distributed to the Regional Offices. These summaries should be sent to each State or local agency that has been delegated NESHAP authority along with an explanation that these decisions represent NESHAP policy. Any situations not clearly governed by precedent should be referred to the Regional Office for decision.

2. Paragraph 61.15. This paragraph is simply a statement about EPA's procedure for handling of Freedom of Information Act requests and confidential business information. Section 4.7, page 8, of the Good Practices Manual for Delegation of NSPS and NESHAP, February 1983, explains the options that are available to the Regions and the States for handling this question.

3. Paragraph 61.14. In order to ensure uniformity and technical quality in the test methods used for enforcement of national standards, the Agency will retain the authority to approve alternative and equivalent methods. Requests for approval should be submitted to the Director, Emission Standards and Engineering Division. A technical review will be performed and any approved methods or changes to methods will be proposed and subsequently promulgated in the Federal Register. At such time, the alternative or equivalent methods become a part of 40 CFR Part 61 and are available for general use. This restriction on delegation does not apply to case-by-case approval of minor modifications to sampling procedures or equipment that affect a single source.

4. Paragraph 61.53(c)(4). The list of approved design, maintenance, and housekeeping practices affect the meaning and intent of the standard. To ensure uniform application, the list is available only from EPA.

5. Equivalency Determinations, Section 112(e)(3) of the Clean Air Act. Approval of an alternative means of emission limitation to any design, equipment, work practice, or operational standard is accomplished through the rulemaking process and is adopted as a change to the individual subpart. This authority may not be delegated to the States. Certain paragraphs in Parts 61 refer to potential alternative standards or procedures for evaluating proposed alternatives. These paragraphs merely reiterate the point that alternative means of emission limitations can be considered and are not authorities that may be delegated. Examples of such paragraphs include 61.66, 61.112(c), 61.151(c)(2), 61.152(b)(3), 61.153(c), 61.154(b)(2), 61.156(d), 61.242-1(c)(2), 61.244.

On June 6, 1984, revisions were proposed to the General Provisions of Part 61 (49 FR 23498). The proposed revisions included some section number changes, and some sections were expanded. If you have questions or need additional guidance, please contact John Crenshaw (629-5571 FTS).

cc: Director, Air and Waste Management Division, Regions I-VIII, X  
R. Biondi, SSCD (EN-341)  
R. Campbell, OAQPS (MD-10)  
G. Emison, OAQPS (MD-10)  
E. Reich, SSCD (EN-341)  
F. Renner, OAQPS (MD-10)  
E. Salo, OGC (LE-132A)  
R. Shigehara, OAQPS/ESED (MD-19)  
B. Steigerwald, OAQPS (MD-10)  
D. Tyler, OAQPS/CPDD (MD-15)  
G. Walsh, OAQPS/ESED (MD-13)

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AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 112  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 112

\* PN112-86-10-01-009  
GUIDELINE S-26 - ENFORCEMENT OF THE ARSENIC NESHAP FOR GLASS  
MANUFACTURING PLANTS

\* PN112-88-03-31-010  
REVISED ASBESTOS NESHAP STRATEGY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 31 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Revised Asbestos NESHAP Strategy

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Michael S. Alushin *Elliot J. Gilbert for*  
Associate Enforcement Counsel for Air

TO: Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

Regional Counsels, Regions I-X

Attached is the revised strategy for the implementation and enforcement of the asbestos demolition and renovation requirements. The April 6, 1984 Asbestos Strategy Document was issued concurrently with the repromulgation of the asbestos NESHAP. The goal of the 1984 strategy was to attain 100% compliance through the implementation of an inspection plan. According to the 1984 strategy an inspection plan could consist of inspecting "all sources, all contractors, or any other program consistent with the Agency goal of 100% compliance." Because the annual notification rate has risen dramatically and is expected to be well above 50,000 for FY 88,

it is no longer feasible for most agencies to inspect all sites. Inspecting all contractors may be the best alternative for an effective inspection plan, however, the 1984 strategy did not fully describe how such a plan would be implemented. After auditing three Regional asbestos NESHAP enforcement programs, the Inspector General's office remarked that the 1984 strategy "does not provide additional criteria for developing an effective inspection strategy." The revised strategy provides the criteria for targeting inspections among a field of an estimated 5,000 contractors as opposed to selecting inspection sites from over 50,000 notifications. Inspection efforts focused on contractors should result in a more resource-effective enforcement program.

Major changes have been made to the original computer tracking system described in the draft revised strategy. In response to regional comments the national tracking system will be in DBASE III format rather than CDS. This will allow tracking of the number of notifications and associated compliance activity in each state, as opposed to worksite location for each notification. Regions will be expected to send quarterly reports of the data elements contained in APPENDIX A of the revised strategy to Headquarters, preferably through electronic transmission. The aggregated nationwide database information will be used to target inspections and promote enforcement options as described in the strategy.

A new section on outreach has been added to the strategy describing methods of communication with the regulated community. Other additions include new appendices on identifying non-notifiers, EPA technical assistance, generic 113(a) and temporary restraining orders, and finalized guidance on contractor listing. Each originally drafted section of the revised strategy has been modified to accommodate comments from the Regions, OTS, and ALAPCO.

Since the asbestos NESHAP program is primarily delegated to the States, the success of this strategy depends on implementation and cooperation from the States. It is important that the States understand that the tracking system

will contain a nationwide database of contractor compliance histories, and that the States will utilize this tracking system extensively. Any questions or comments should be addressed to Jim Engel of my staff at 382-2877.

Attachment

cc: Air Compliance Branch Chiefs  
Asbestos NESHAP Contacts  
William Becker  
Gerald Emison  
John Neylan  
David Kling  
Sims Roy

## Asbestos Demolition and Renovation Enforcement Strategy

### Introduction

Asbestos is recognized as a human and animal carcinogen and, combined with cigarette smoking, a powerful co-carcinogen. Malignant diseases caused by asbestos exposure include bronchial carcinoma, lung adenocarcinoma, pleural and peritoneal mesothelioma, alimentary tract carcinoma, and tumors of other sites. Asbestosis, a fibrotic lung disease caused by asbestos fibers, is also associated with long-term exposure.

These diseases are linked to ambient environmental exposures as well as to occupational exposures. To reduce ambient exposures and the accompanying health risk, EPA regulated asbestos under the National Emission Standards for Hazardous Air Pollutants (NESHAPS). This enforcement strategy document has been prepared in order to ensure compliance with the NESHAP standard. By specifying actions to be taken and a procedure to follow, this strategy will provide effective and uniform enforcement of the standard by Regions and delegated States. This strategy document is also intended to provide emphasis and assurances to Regional Offices and States that asbestos occupies a high priority and that EPA is totally committed to a strong enforcement posture.

### Background

EPA first promulgated the asbestos NESHAP on April 6, 1973. Parts of the standard were in the form of work practice (nonnumerical) requirements. The Supreme Court held, in Adamo Wrecking Company v. United States, 434 U.S. 275 (1978) that these were not emissions standards within the meaning of the 1970 Clean Air Act. Since EPA, at the time the asbestos regulations were promulgated, had authority to promulgate and enforce only emissions standards, the Court upheld dismissal of the criminal enforcement action brought against Adamo for violations of §112(c)(1)(B) of the 1970 Act.

On August 7, 1977, §112(e) was added to the Act to specifically authorize design, equipment, work practice, and operational standards. Although regulations promulgated since that time could contain work practice standards, there was doubt as to the way of dealing with regulations promulgated prior to that time. EPA repromulgated many of the asbestos work practice standards on June 19, 1978. However, some work practices were not repromulgated, and were not

considered enforceable by EPA. This led to confusion and greatly hindered litigation efforts. In an attempt to end this confusion and ensure all aspects of the asbestos NESHAP are enforceable, EPA repromulgated the entire asbestos standard in April of 1984.

The strategy document presented here addresses training, inspection techniques, judicial and administrative enforcement mechanisms, and other aspects essential for a successful program of compliance with the repromulgated regulations. Flexibility is provided so that the enforcing authority, be it the EPA Regional Office or the delegated State or local agency, may select other options, provided a high level of compliance is achieved. The strategy also is designed to ensure coordination between EPA Regions and their delegated States. Since 38 States presently have asbestos enforcement delegation, it is essential these States feel a part of the process and have the capability and desire to successfully enforce the standard.

An EPA Compliance Data System analysis showed that the number of demolition and renovation sources is greater than that of all other asbestos source categories combined, and the compliance status much worse. The strategy is thus limited to the renovation and demolition category. An additional reason for this limitation is that since renovations and demolitions are transitory operations, they are more difficult to inspect and require specific enforcement guidance. This limitation does not mean other asbestos sources should be ignored, but means rather that EPA believes the States have sufficient knowledge of these other sources to do a satisfactory job without additional guidance.

#### Summary of Regulations

Before discussing the components of an effective strategy, it is necessary to briefly outline the requirements of the demolition and renovation provisions. These provisions are found at 40 CFR Part 61 Subpart M. The owner/operator of a demolition or renovation is exempt, pursuant to §61.145(b) and (d), from emission reduction requirements if less than 80 linear meters (260 linear feet) of friable asbestos materials covering pipes or less than 15 m<sup>2</sup> (160 ft<sup>2</sup>) of friable asbestos material covering other facility components is involved, and notification provisions of §61.146(a), (b), and (c)(1)-(5) are met for demolitions.

Section 61.147 concerns the wetting, stripping and removal of friable asbestos. It provides that friable asbestos materials used on any pipe, duct, boiler, tank, reactor, turbine, furnace or structural member shall be adequately wetted during stripping, and then removed from the building. When prior authorization is obtained from EPA upon the appropriate demonstration made pursuant to §61.147(c)(1) and (2) of unavoidable equipment damage, a local exhaust ventilation and collection system may be used to prevent emissions to the outside air. Section 61.147(e) requires that stripped or removed asbestos materials be wet during all stages of demolition or renovation and related handling operations, and §61.147(f) allows alternatives to wetting during freezing temperatures. Section 61.145(c) exempts demolition operations, pursuant to a State or local order, on structurally unsound buildings from all requirements except those enumerated in the subsection.

In addition, §61.152 prohibits any visible emission from the collection, packaging, transporting, or depositing of asbestos from any demolition or renovation, and requires that asbestos waste be deposited at acceptable waste disposal sites. §61.156 prohibits visible emissions from an active waste disposal site except under specified and limited conditions. Because of regulatory limitations this strategy concentrates on asbestos removal operations as opposed to asbestos waste transportation and disposal. When the asbestos NESHAP is revised to allow for more attention to asbestos waste disposal requirements, Regions and states should increase their oversight of those requirements. In the interim the strategy should include a program of inspecting each disposal site to determine what are the usual practices with respect to waste handling. After these initial inspections, perform random multi-day inspections to observe the actual disposal of waste at each site, and determine who put waste into the landfill during the period of surveillance so that responsibility could be assigned to contractors if improper disposal practices are noted at the landfill.

### Strategy Components

1. Outreach - EPA and the delegated agencies could approach enforcement of the asbestos NESHAP by devoting resources entirely to catching owners/operators in the act of violating NESHAP requirements and taking appropriate enforcement measures. However, enforcement of the NESHAP could be easier and more effective if it is directed towards a regulated community aware of EPA requirements rather than a regulated community unsure of those requirements. By now owners/operators should be familiar with the NESHAP, but sometimes they could benefit from EPA guidance such as past EPA applicability determinations.

There are many methods of developing a compliance assistance component to an enforcement program. A pamphlet containing easy-to-understand explanations of the regulations and phone numbers of appropriate agency personnel who can provide further assistance can be distributed to removal contractors and anyone else concerned with the hazards involved with asbestos removal. Another way for EPA and delegated agencies to provide compliance assistance is to meet the regulated community in person. Seminars and demonstration workshops presented to contractors and owners and managers of commercial buildings can be greatly effective. In addition, discussion forums with school district administrators, architects, lenders, real estate groups, and insurance agency representatives can create a general public awareness of asbestos hazards and EPA regulatory requirements. Radio talk shows concerning asbestos hazards will produce the same effect. EPA's Hazard Abatement Assistance Branch (HAAB), formerly Asbestos Action Program, of the Office of Toxic Substances (OTS) offers technical assistance to the public through training seminars, telephone contact with the public, guidance documents, and other means which are all described in APPENDIX L. EPA and the delegated agencies should make a significant commitment to public education and outreach to create increased awareness and understanding of the regulations among the regulated community and an atmosphere of agency-contractor cooperation.

2. Contractor Training - Most states have established some type of contractor certification or training program for asbestos removal. Further, the Model Accreditation Plan under the Asbestos Hazard Emergency Response Act (AHERA) requires that all states establish accreditation programs for persons who inspect, develop management plans, or design or conduct response actions in schools. APPENDIX I lists the status of the state certification requirements for all states. States which have not yet adopted certification requirements for asbestos removal workers may have to make greater use of the

outreach methods described in Section 1 to educate contractors as to what inspectors expect to find at a removal site in order to verify compliance with the NESHAP. HAAB asbestos removal training is provided by the Office of Toxic Substances (OTS) in response to legislation enacted for the Asbestos in Schools program. The HAAB training centers and the training they provide are discussed on pages 4 - 6 of Appendix L. In addition to providing training on campus, some of these institutions schedule training sessions at other locations nationwide.

Regions should encourage states to adopt contractor certification requirements for NESHAP removal activity. Considering that contractors already need to be certified for removal work under the Asbestos Hazard Emergency Response Act (AHERA), a logical way for states to require certification under the NESHAP is by expanding the AHERA certification requirement to all demolition/renovation contractors.

3. Inspector Training - Inspector effectiveness at finding violations and documenting evidence at subject demolition and renovation sources is the basis for EPA's asbestos NESHAP enforcement program. The only way to ensure this effectiveness is to provide inspectors with training on inspection procedures and safety, and to familiarize them with the NESHAP and other pertinent regulations. To help accomplish this, SSCD has established the Asbestos NESHAP Inspection Workshop - a classroom training program available to the Regions and states. In light of the many changes in EPA asbestos enforcement since the Inspection Workshop began, SSCD is currently revising the Workshop Manual and will periodically review and update the revised manual in the future. This manual should be published in April 1988 for distribution to the Regions and delegated agencies.

Agencies should also consider sending their asbestos inspectors to one of the HAAB training centers identified in APPENDIX L so that their inspectors will be aware of what certified removal contractors are being taught about complying with the asbestos NESHAP. Because most asbestos NESHAP inspections are conducted by state and local inspectors, it is important to encourage the delegated agencies to send their inspectors to both the SSCD and HAAB training, as well as any contractor certification training provided at the state level.

4. Inspections - Inspections provide the foundation for all asbestos NESHAP enforcement actions for substantive violations, and are therefore of primary importance in enforcing the NESHAP. In most cases, it is necessary for the inspector to enter active removal areas both to determine compliance and to collect evidence of any non-compliance.

The following is a list of positive inspection techniques:

- ° Bring copies of the NESHAP regulations to the inspection site to leave with owner/operators and for the inspector's own reference;
- ° To the extent possible assess the site to be inspected, in compliance with Section 114 and 4th Amendment requirements, prior to making your presence known;
- ° Along with presenting credentials, provide a calling card for future reference by the facility owner/contractor;
- ° Clearly identify the line of authority between all parties involved, i.e., subcontractor, oversight contractor, general contractor, owner, etc.;
- ° Use a standard checklist and complete as much information as possible before entering a contaminated area in order to minimize the time in the contaminated area;
- ° In addition to asking the appropriate representative if he or she is aware of the regulations, ask them to verbally describe their understanding of the regulation;
- ° Carry only essential items into the contaminated area, items such as a clipboard can be left outside;
- ° Samples should be taken at every site inspected. When samples are taken, label immediately and log number onto the inspection checklist and log onto a chain-of-custody form;
- ° Photograph with waterproof automatic cameras;
- ° Estimate the amount of asbestos in linear or square feet by pacing off or using a tape measure;
- ° Always conduct a quick to-the-point wrap-up meeting and inform the owner/operator of findings, but do not interpret the regulation or make compliance determinations;
- ° To the extent possible reference all discussions to specific requirements in the regulation being enforced;
- ° Always wear appropriate safety gear.

The inspection techniques referred to three items which are especially important equipment for asbestos NESHAP inspectors - checklist, camera, and safety gear. This equipment, described below, is considered standard inspection gear.

- a) Checklist - In order to reliably document evidence of compliance status at each subject worksite, the inspector must enter all pertinent information onto a reasonably detailed checklist while the findings of the inspection are fresh in memory. The inspector should complete as much of the checklist as possible prior to entering the worksite. So as not to make the checklist an item requiring decontamination, the inspector should not bring the checklist inside the removal area, but instead complete the rest of the checklist entries immediately after conducting the inspection. A good checklist such as the example shown in Appendix H will provide the inspector an outline of what to look for during the inspection. In order to complete the checklist the inspector must enter the removal area. This reflects EPA's policy that inspectors should, whenever possible, observe asbestos work practices in progress in order to assess compliance. When the barrier to a containment area is transparent or when asbestos fibers are released outside the containment area, it may not be necessary to enter the removal area to observe work practices. However, because samples are to be taken during each inspection, it may still be necessary to enter such a site to collect samples.

If an inspection reveals NESHAP violations, the inspector should write a report summarizing the inspection and specifying the conditions unique to the work site which could not be entered onto the standardized checklist.

- b) Camera - Photographing removal activity can provide some of the strongest evidence of non-compliance. Supplying inspectors with reliable cameras is necessary to ensure that photographic evidence will contribute to the agency's cause should a civil action become necessary. Waterproof automatic cameras are especially useful in the wet environment found at many removal sites, and will endure decontamination showers.
- c) Safety Gear - EPA's most recent guidance concerning safety gear for asbestos inspectors is contained in the May 1987 "Interim Health and Safety Guidelines for EPA Asbestos Inspectors." These guidelines should be referenced to ensure inspector protection.

Inspections reported in the computer tracking system outlined in APPENDIX A and subsequently reported into SPMS must consist of sample collection and observation of work practices whenever possible. Regional and delegated agency inspectors should be attentive to the positive inspection techniques and implement them whenever possible as well. Of course, if an inspector arrives at an unfinished removal site when no removal activity is occurring, the inspector will be unable to present credentials and questions to the appropriate representative, observe work practices, and conduct a "wrap-up" meeting to inform the owner/operator of specific violations found, but will still be able to take samples and photographs and complete a standardized checklist as much as possible. It may still be possible to make a compliance determination based on the evidence presented.

5. Inspection Targeting - The number of notifications received by EPA and the delegated agencies has risen from 20,537 in 1985 to 29,087 in 1986, and in 1987 this figure rose to 43,496. Because of this tremendous increase, Regions and their delegated agencies must make more efficient use of inspectors' time by implementing a targeting system which strategically identifies which notifications or contractors to follow up with inspections.

The computer tracking system described in Appendix A is designed to assist agencies in targeting their inspections. The instructions contained in Appendix A establishes conventions for the input and retrieval of contractor records, and because the entire inspector targeting method which follows is based on the use of the computer tracking program, these instructions should be reviewed carefully. It will be required of all delegated enforcement agencies to use the tracking program for inspection targeting. Prioritizing inspections by identifying removal sites where violations are most likely to occur will enable Regions and their delegated agencies to make more efficient use of resources. Inspection priority should be based on a simple evaluation of computer tracking data involving the assessment of contractor compliance history. Tables 1 and 2 illustrate this sort of evaluation. Table 1 lists criteria discerned from the computer system, and criteria found on individual notifications to be prioritized, and gives numerical ratings for each criteria. By assigning numerical ratings to the tracking and notification criteria identified in Table 1, the inspection priority pertaining to each notification received can be determined by comparing the summation of the ratings to the rankings listed in Table 2. This evaluation, or a comparable method of evaluation, should be done for each removal activity to determine the need for inspecting each work site.

TABLE 1	<u>Tracking Criteria</u>	<u>Rating</u>
	Contractor is Listed as Described in Section 7 of this Document .....	10
	Contractor Violated at Least Once During 3 Most Recent Inspections ....	10
	Contractor has Not Been Inspected for Two Years .....	10
	Contractor has Not Been Inspected in past year .....	7
	Contractor is Not Certified by an Approved Accredited Program ...	3
	Contractor has a Recent Trend of Notification Violations ....	7
	<u>Notification Criteria</u>	
	No Notification Received .....	8
	Late Notice Received .....	6
	Notice Missing Location, Dates and/or Amount of Asbestos .....	6
	Notice Missing Other Items .....	4
	Worksite in Occupied Building or Area of High Population Density .....	5

TABLE 2	<u>Priority</u>	<u>Ranking</u>
	TOP Priority	10 or above
	HIGH Priority	5 - 9
	LOW Priority	0 - 4

An inspection targeting evaluation establishes inspection priority based on computer tracking data. It does not limit inspections to the criteria listed in Table 1. Citizen complaints cannot be recorded in the computer tracking system, but they should be followed up with inspections based on agency judgment.

#### Non-Notifiers

In addition to the criteria listed in Table 1, special attention should be given to removal jobs for which no notification was received. As documented in the Inspector General's asbestos NESHAP audit report, efforts to identify non-notifiers should include:

- Checking building permits or public works files;
- Reviewing waste disposal site records;
- Discussing consistent underbidders with national demolition contractors;
- Coordinating with state, county, and city departments of building and health, and with Federal offices such as OSHA and Department of Education;
- Reviewing publications such as National Wrecking and Salvage Journal, newspapers, and magazines.

Region 3 has researched the problem of identifying non-notifiers and has documented their findings in a report which has been incorporated as APPENDIX F. Seven licensing and permitting agencies and several landfills in Philadelphia, PA and Richmond, VA were visited and record/file reviews were conducted. In these two cities Region 3 found that reviewing records (e.g., manifests, contracts) at the landfills was the most productive method of identifying non-notifiers.

Because of differing levels of asbestos NESHAP enforcement funding among delegated agencies, some agencies will be capable of inspecting HIGH and TOP priority work sites as well as some LOW priority sites, while other agencies may be limited to inspecting mostly TOP priority sites. When delegated agencies are finding it increasingly difficult to maintain a high level of asbestos NESHAP inspections due to funding limitations, they should adopt cost effective alternative enforcement mechanisms which when combined with modest inspection levels, will allow these agencies to maintain or enhance their present enforcement posture. Such alternatives are discussed in the following section.

6. Program Alternatives - Some states have remarked that maintaining their established inspection levels is difficult because of many changing demands being placed on the program. In order to accomodate these states while maintaining or enhancing their established enforcement posture, Regions should seek an agreement which includes the incorporation of either of the following optional requirements into their state enforcement program coupled with the inspection targeting program outlined previously. When combined with a penalty policy of sufficient stringency for each violation type, the adoption of such requirements would be an acceptable state asbestos NESHAP enforcement program modification.

#### **I. Certification**

**This alternative entails the adoption of a state-wide contractor certification program, where the following minimum requirements would apply:**

At least one supervisor certified in asbestos removal shall be present at each affected NESHAP removal site when removal work is ongoing. Certification shall be attained only by satisfactory completion of training at a state-approved training program, one of the EPA-approved courses identified in APPENDIX L, or any equivalent course. Any state employing this enforcement alternative shall exercise

the authority to revoke the certification of any removal contractor found to be in violation of NESHAP requirements. When a contractor becomes listed as described in Section 6 of this document, certification should be revoked automatically. Certification requirements developed under AHERA, and expanded for all demolition and renovation activities, would meet this requirement. Each certification training course must include the following:

- a) Education about the hazards of asbestos exposure,
- b) Clarification of NESHAP requirements,
- c) Training in removal procedures,
- d) Training in transportation and disposal procedures,
- e) Safety training.

## II. Asbestos Manifest

Delegated agencies can implement this alternative by requiring waste shipment manifests for all asbestos waste shipments from affected sources. The manifest should be similar in detail and implementation as the Uniform Hazardous Waste Shipment Manifest (Appendix C), but specifically designated for asbestos containing waste. An asbestos manifest is a waste tracking form used to verify that asbestos waste is deposited at an approved waste site. Each removal operator enters information onto the manifest pertaining to the amount of asbestos waste, and the designated disposal site, for each waste shipment from a removal site. The transporter of the waste then acknowledges on the manifest that he has received the indicated amount of asbestos waste for shipment to the designated disposal site. Before the transporter hauls the waste, the removal operator keeps a copy of the manifest indicating that the transporter has received the waste for shipment to a NESHAP approved disposal site. When the transporter arrives at the disposal site, the disposal site operator acknowledges on the manifest that the asbestos as described by the generator was disposed of at the designated disposal site. At this point the manifest form is complete. Now, the original is sent to the delegated agency informing enforcement personnel that the waste was properly disposed, one copy is sent to the removal operator indicating regulatory compliance, and the other two copies are maintained by the transporter and the disposal site operator.

## III. Notification Fees

This alternative would require the owner/operator of a removal site to submit notification with a notification fee in an amount determined by the amount of asbestos containing material involved in the removal operation. For instance, if removal entails over 1000 linear feet or 5000 square feet of asbestos containing material, a \$500 notification fee may be required. For removals

involving less than 1000 linear feet or 5000 square feet but greater than 260 linear feet or 160 square feet a notification fee of \$250 may be required. If the delegated agency's asbestos removal regulation covers removal activities that involve levels of asbestos containing material less than that of EPA's threshold (260 linear feet or 160 square feet), a different fee would be required. By implementing this alternative delegated agencies can fund a significant level of their enforcement program depending on the level of fees required.

While these alternatives are not required as a mandatory part of an acceptable asbestos demolition and renovation enforcement program, they do represent examples of how state and local agencies can improve their knowledge of the regulated community. Although these options may have their own resource demands, implementation of these kinds of activities should ultimately allow state and local agencies to improve their compliance rates while maintaining a reasonable resource commitment.

Concurrent with the implementation of one of the above requirements, states must employ a penalty policy with fines of sufficient stringency for each violation type in order to achieve an acceptable enforcement alternative for maintaining enforcement posture when inspection levels suffer from budgetary restrictions. Enforcement alternatives are to be aggressively implemented by states seeking cost effective enforcement methods, and should not have the effect of diminishing the state enforcement posture. A penalty policy change without implementation is not acceptable. EPA and states must agree on a minimum acceptable level of state inspections and vigorous pursuance of violators.

7. Federal Enforcement Options - EPA has the authority to use administrative and/or judicial enforcement against asbestos NESHAP violators. Administrative actions may be taken when EPA has the opportunity to stop noncompliance and establish NESHAP practices. EPA cannot collect penalties administratively, although several states have that authority. Regions should encourage states which are able to collect administrative penalties to do so liberally.

The only way EPA can collect penalties is through judicial action. Considering that EPA and the delegated states are uncovering increasingly high numbers of violations, judicial actions taken against violators should be expected to increase also. However, nationwide, this has not been the case. The rate of asbestos NESHAP referrals has been relatively stagnant as the rate of violations uncovered continues to rise substantially. An intended effect of this strategy is to induce an increased rate of referrals from the Regions and delegated agencies.

Figure 1 on page 14 illustrates the various enforcement options. Choosing the appropriate option for each demolition/renovation source in violation, for which EPA takes the enforcement prerogative, means using administrative and/or judicial enforcement action, unless the matter can be resolved informally or should be referred to OSHA or another EPA program office.

## I. Administrative Actions

EPA can pursue administrative actions through Section 113(a)(3) orders or Section 303 orders, although Section 303 of the Act is seldom used in asbestos NESHAP enforcement. Notices of Violation (NOV)<sup>1</sup> are often issued by EPA to NESHAP violators, although NOV's issued by EPA have legal significance only when issued to violators of State Implementation Plans (SIP). Because the CAA does not require the use of NOV's for NESHAP sources, an NOV issued to a NESHAP source is nothing more than an informal warning.

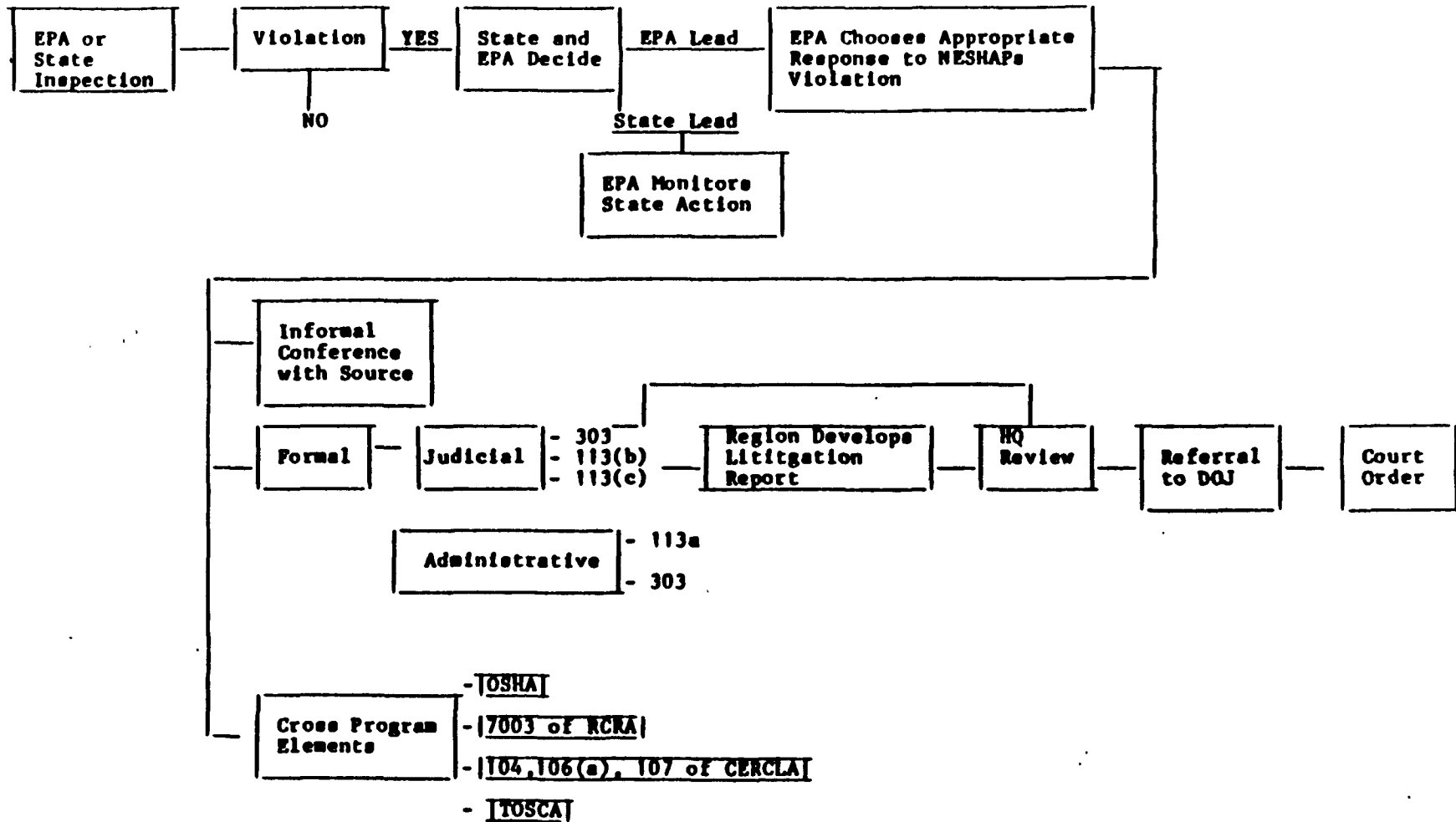
Section 113(a)(3) orders may be issued to violators when they are found out of compliance with substantive requirements while removal work is ongoing. In order to assist the Regions in this procedure, a generic 113(a)(3) order which can be issued in one day is presented in APPENDIX M. Also included in APPENDIX M is a generic temporary restraining order which can be used if the situation is considered serious enough. Section 113(a)(3) orders can require immediate compliance, and although EPA cannot collect penalties with the order, the issuance of a §113(a)(3) order subjects the source to penalty liability in a judicial action under §113(b). Section 113(a)(3) orders should also be issued to sources which continuously submit deficient notifications. Such an order prohibits further submittal of deficient notifications, and makes the contractor liable for penalties pursuant to the order as well as the NESHAP itself. Issuing an NOV in this situation does comparatively little. An example of a combined Section 113(a)(3) order/Section 114 Information Request is shown in Appendix D.

## II. Judicial Actions

Judicial action under the asbestos NESHAP can take the form of a civil action as provided for in Section 113(b), or a criminal action as provided for in Section 113(c). EPA can also pursue a civil action under Section 303, however, no Region has done this to date. The September 28, 1987 memorandum entitled "Procedures for Pre-Referral Settlement of Asbestos Demolition and Renovation Cases" (Appendix E) outlines procedures for negotiated settlement through judicial consent decree. These procedures are designed to facilitate

1 NOV is used here as a generic term to include letter of violation, finding of violation, notice of deficiency, etc.

FIGURE 1



the settlement process and enable Regions to increase judicial enforcement without straining resources.

EPA may bring a §113(b) civil action for injunctive relief requiring compliance with the regulations. EPA may also seek civil penalties of up to \$25,000 per day of violation. EPA's present asbestos NESHAP penalty policy is shown in Appendix B. Although civil actions under 113(b) do not ordinarily seek immediate injunctive relief, the broad grant of authority to "commence a civil action for a permanent or temporary injunction" encompasses temporary restraining orders and preliminary injunctions. In other words, the Government could proceed under 113(b) to seek immediate compliance with the asbestos standards, as well as civil penalties, provided it can satisfy the legal standard for immediate injunctive relief.

EPA can initiate a Section 113(c) criminal enforcement proceeding when there is evidence that a person knowingly violated the asbestos demolition and renovation requirements. A conviction under the criminal provision of the Clean Air Act can result in imprisonment of up to one year and/or a penalty of up to \$25,000 per day of violation, and greater sanctions are faced for a subsequent conviction. The effective use of the criminal provisions can provide a strong message to the regulated community that EPA does not tolerate blatant disregard for the asbestos NESHAP.

### III. Contractor Listing

Another useful enforcement option is contractor listing as described in 40 CFR §15.10 - 16. When EPA lists a contractor that contractor cannot be awarded any contract to perform work where Federal funds are involved. Also, a listed contractor cannot be subcontracted to remove asbestos by another contractor under contract with the federal government to perform asbestos removal. Contractors convicted of criminal NESHAP violations under CAA Section 113(c) are automatically listed as provided in §15.10 (Mandatory Listing). Under §15.11 (Discretionary Listing) EPA can list contractors which have violated a §113(a) administrative order, received any form of civil ruling from any court, or are the subject of a civil enforcement action from EPA. Additionally, if any person who owns or supervises a contractor firm is convicted of a criminal offense by any court, that contractor firm can be listed. Appendix K is intended to clarify the application of contractor listing. State certification requirements should require that state certification will be revoked if a contractor becomes listed.

8. Choosing Enforcement Option - When detected, each violation should be entered into the computer tracking system described in Appendix A so as to provide a record of violations listed by contractor. In order to assist in deciding when these records indicate that a particular enforcement action is appropriate, the following tables were constructed.

TABLE 1

<u>Notification Violation</u>	<u>Response</u>
No notification	113(a) order
Submittal of late notification which is not received in time to schedule inspection	113(a) order
Submittal of notification which is missing dates, location and/or amounts of asbestos	113(a) order
Submittal of an incomplete notice of removal (Minor violations)	*Enter deficiency on tracking system
Continued submittal of incomplete notifications (Minor violations)	113(a) order
Violation of Order	Civil Action

\* As stated previously, this is done for every violation type.

TABLE 2

<u>Substantive Violations*</u>	
Detected during early stages of removal	113(a) Order
i) Violation subsequently corrected	Consider Civil Action
ii) Violation continues	Civil Action
iii) Unsure whether or not violation corrected	Issue 114 Information Request and Consider Civil Action
Detected after removal or during final stages of removal	Issue 113(a) Order while writing civil referral package

\* Substantive violation is a work practice violation detected during inspection or from a §114 information request response.

9. Assessing Penalties - The Asbestos Demolition/Renovation Penalty Policy (Appendix B) provides the framework for assessing penalties for settlement purposes under the asbestos NESHAP. Consistent with the comprehensive penalty policy, the Region should determine a "preliminary deterrence amount" by assessing an economic benefit component and a gravity component. This amount may then be adjusted upward or downward by consideration of other factors, such as degree of willfulness and/or negligence, history of noncompliance, and ability to pay. As stated by the Inspector General's office, when resolving litigated cases contractors should be required whenever appropriate to provide a list of asbestos removal jobs for which the contractor did not get the bid, and the names of the successful contractors. Also, delegated agencies should be required to document any mitigating factors that result in penalty waivers or reductions.

10. Reporting - The format for SPMS reporting has been revised. The SPMS form shown in Appendix G provides the format which will now be required for SPMS reporting. Violations will be reported in terms of substantive violations (work practice violations discovered during inspection or from a §114 information request response) and notification violations (late notices, notices lacking dates, location and/or amount of asbestos in proper units). Also, the number of sources inspected will be reported. When reporting the number of referrals, include only those civil and criminal litigation actions initiated in the same Quarter as the SPMS report indicates. Collection referrals are not to be included.

Regions must ensure that there is no double-counting of notifications. The practice of reporting two notifications (one reported by the Region, and the other by the delegated agency) for one removal activity makes it impossible to correctly assess the number of removal jobs for which notification was submitted. The number of inspections reported from the delegated agencies should consist of only those inspections meeting the criteria for a reportable compliance inspection as described in Section 4 of this document.

11. Regional Oversight - Regional Offices should implement an oversight program to ensure that the delegated agencies are performing acceptable compliance inspections, and resolving violations appropriately. Performing joint EPA-state inspections is the best method to review delegated agency inspections and establish the criteria which constitute an acceptable compliance inspection. Each delegated state's program should be evaluated to assess inspector training and safety as well. For Regions with both delegated and undelegated states, Regional inspections should be concentrated in the undelegated states. Regions should construct written reviewable inspection programs which incorporate the inspection

criteria documented in Section 4 of this document as well as the targeting system established in Section 5 of this document. Regions should also ensure that delegated states do likewise. A written assessment of each delegated agency's compliance with grant conditions including the verification of program results should be made semi-annually by the Regions.

12. Cross-Program Coordination - In addition to being regulated under the NESHAP program, asbestos is regulated under OSHA provisions, the EPA Toxic Substances Control Act (TSCA) Title I, and TSCA Title II. Under TSCA Title I, the TSCA Worker Protection Rule regulates any asbestos abatement work (removal, encapsulation, or enclosure) performed by persons employed by state, county, or local government in those states without an OSHA delegated program or an EPA approved exempt program. These states are listed in Appendix J. The Office of Toxic Substances expects to extend coverage of its Worker Protection Rule to service personnel who, in the course of operations and maintenance activities, receive exposures comparable to those experienced by private sector service workers performing work subject to OSHA.

The OSHA provisions require an 8-hour time-weighted average airborne employee exposure of not greater than 0.2 fibers per cubic centimeter of air. Engineering controls, wet methods, respirators and special clothing are required. The Worker Protection Rule imposes the same major requirements of the OSHA provisions, but differs in that the Worker Protection Rule applies solely to activities involved in asbestos abatement, in contrast to the OSHA standard which applies generally to any construction activity involving exposure to asbestos. NESHAP inspectors can help OSHA's enforcement efforts by reporting the absence of required OSHA safety measures at inspected NESHAP removal sites. To help implement such an effort the standardized NESHAP inspection checklist (Appendix H) has a section for recording the presence or absence of required OSHA measures. When the negligence of OSHA requirements are noted by NESHAP inspectors, OSHA should be notified as soon as possible. When the negligence of OSHA requirements are observed at a NESHAP site where removal work is being done by state or local government employees at one of the states listed in Appendix J, in addition to notifying OSHA, the inspector should ensure that the TSCA Regional Asbestos Coordinator (RAC) is notified as well for possible violations of the Worker Protection Rule.

Under TSCA Title II, the Asbestos Hazard Emergency Response Act (AHERA) requires local educational agencies (LEAs) to inspect school buildings for asbestos containing material, and develop and implement managerial plans. Persons designing and conducting response actions (i.e., removal, encapsulation, enclosure, or repair) in a school building must be accredited for that activity.

EPA NESHAP and TSCA programs in the Regions should be coordinated to maximize information collection and sharing, consolidate compliance assistance efforts, and unify enforcement activities among all the Agency's asbestos programs. Pilot programs should be initiated to formally or informally coordinate NESHAP and TSCA activities in the field. In Region VII, a full-time technical assistant under the Senior Environmental Employment program of the American Association of Retired Persons (AARP) acts as liason between NESHAP and TSCA efforts. In Region X, the NESHAP coordinator and the TSCA RAC voluntarily coordinate program activities to maximize resources and provide a more unified presence to the affected public.

When a NESHAP inspector inspects a renovation taking place at a school, the inspector should ascertain whether or not site supervisors and removal workers are accredited under the EPA Model Plan required by AHERA. If AHERA accreditation requirements have not been met, this should be reported to the TSCA RAC. Considering that most TSCA inspections are performed by AARP personnel who are restricted from entering removal sites when work is ongoing, TSCA can benefit greatly from any pertinent information obtained by the observations of NESHAP inspectors inside the removal area. If the TSCA program develops a pamphlet describing AHERA record-keeping and clearing response action requirements, NESHAP inspectors can hand these out at schools they inspect. NESHAP inspectors can also verify if transportation and disposal of asbestos wastes from these schools is in accordance with NESHAP/DOT requirements. Also, NESHAP personnel should inform the TSCA section when a notification is received from a school.

EPA TSCA inspectors should notify the NESHAP Regional Asbestos Coordinator (RAC) whenever apparent violations of wetting, bagging, no visible emissions, and/or disposal requirements at NESHAP removal sites are observed by their inspectors. TSCA inspectors can also provide the NESHAP RAC with a list of known removals based on records inspections. OSHA inspectors should also notify the NESHAP RAC when potential NESHAP violations are observed.

As members of the Federal Asbestos Task Force established in June 1983, EPA and OSHA are mandated to develop a unified federal approach for the regulation of asbestos. The preceding coordination recommendations are examples of objectives which should be agreed to in writing by the EPA offices and OSHA to memorialize that this type of cooperation will take place.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
AIR AND RADIATION

OCT - 1 1986

MEMORANDUM

SUBJECT: Guideline S-26 - Enforcement of the Arsenic NESHAP  
for Glass Manufacturing Plants (40 CFR Part 60 Subpart N)

FROM: Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, V and IX

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII

The attached guideline is being forwarded to you to assist you in the implementation and enforcement of the arsenic National Emission Standards for Hazardous Air Pollutants (NESHAPS) for glass manufacturing plants (Subpart N).

If you have any questions or comments on this guideline, please contact Doreen Cantor in the Stationary Source Compliance Division at FTS 382-2674.

  
Edward E. Reich

Attachment

cc: Michael Alushin  
Bob Ajax  
George Walsh

Stan Cuffe  
Ron Myers  
Jan Myers  
Jim Engel

S-26 - GUIDELINE FOR THE ENFORCEMENT OF THE  
ARSENIC NESHAP REGULATIONS  
FOR GLASS MANUFACTURING PLANTS

This guideline is being issued to assist the Regional Offices in the enforcement of one of the NESHAP regulations for the control of arsenic emissions. Three types of facilities are required to be controlled by these regulations: (1) glass manufacturing plants, (2) primary copper smelters, and (3) arsenic trioxide and metallic arsenic production facilities. This guideline addresses glass manufacturing plants only.

Arsenic was declared a hazardous air pollutant on June 5, 1980. Regulations were proposed for the control of arsenic under Section 112 of the Clean Air Act, National Emission Standards for Hazardous Air Pollutants (NESHAPS) 40 FR 59532, on August 22, 1983. These regulations were promulgated on August 4, 1986. Since this regulatory framework has been previously utilized for the control of asbestos, beryllium, mercury, vinyl chloride, and benzene, additional helpful information is available in Guidelines S-17 thru S-20, which offer some general guidance relative to the procedural requirements of the NESHAP program.

Summary of Requirements

The standard covers each glass melting furnace that uses commercial arsenic as a raw material, except that pot furnaces (refractory vessels in which glass is melted by indirect heating and where the openings are covered with refractory stoppers during melting) are exempted. Each owner or operator must either 1) vent all inorganic arsenic emissions from each glass melting furnace to a control device and reduce emissions by at least 85%, the level of reduction achievable by an electrostatic precipitator or fabric filter (§61.162(a)(2) and (b)(2)), or 2) maintain uncontrolled (i.e. preceeding an add-on control device) arsenic emissions at 2.5 Mg/year (2.75 TPY) or less for existing plants (§61.162(a)(1)), or at 0.4 Mg/year (0.44 TPY) or less for new plants (§61.162(b)(1)).

If the owner or operator intends to meet the standard by using a control device, s/he is required to continuously monitor opacity and temperature, and to submit semiannual reports of excess opacity. An owner or operator may bypass the control device for a limited period of time for designated purposes such as maintenance of the control device, upon prior approval from the Regional Office.

If the owner or operator intends to meet the standard by limiting uncontrolled arsenic emissions, s/he is required to calculate the uncontrolled arsenic emissions semiannually, and to report if the emission rate is above the applicable limit.

#### A. Source Notification

The Regional Offices should notify all potentially affected sources immediately following the promulgation of the arsenic NESHAP regulations, or immediately upon identification of affected sources anytime after promulgation (see guideline S-17 for example notification). A list of all known glass manufacturing plants using arsenic as a raw material is attached (Table 1). This list includes 75 furnaces at 27 plants, and includes both controlled and uncontrolled furnaces, and furnaces emitting arsenic at levels both above and below the threshold of 2.5 Mg/yr. This regulation would require two of these furnaces to install additional controls or reduce arsenic usage, and would require at least six furnaces to maintain their present controls. However, this list may not be exhaustive, and it includes many emission estimates. Since new plants may have been constructed, additional plants may have begun using arsenic as a raw material, and some plants may be unidentified as of yet, additional investigation should be made to complete the list. Also, a number of companies are investigating the possibility of reducing or eliminating arsenic in soda-lime batch formulations, which may reduce the number of affected facilities. Preferably, all glass plants should be notified of the regulations, because they will become subject if they begin using arsenic as a raw material in the future. All affected sources should be coded into CDS.

B. Determination of Compliance (40 CFR 61.164)

1. Initial Report (40 CFR 61.10)

The owner or operator of each existing source is required to submit an initial report to the Administrator by November 2, 1986. This initial report should include:

- name and address of the owner or operator,
- source location,
- brief description of the nature, size, design, and method of operation (including capacity and emission points),
- the average weight of arsenic processed per month over the previous 12 months as determined by direct measure or materials balance,
- a description of the existing control equipment (including efficiency), and
- a statement of the feasibility of complying with the standard by November 2, 1986.

If the owner or operator is unable to comply with the standard within the 90-day period, s/he may apply for a waiver of compliance (See Guideline S-19). Sources which need to install control equipment may be granted a waiver for up to two years if the time is needed for purchase and installation. Reasonable compliance schedules for installing fabric filters and ESP's are attached (Table 2).

For any source for which a performance test is required, the owner or operator must notify EPA at least 30 days before the test and must submit the results to EPA within 60 days of the test, as indicated in the next section.

For any source which can demonstrate compliance by means of an emission calculation alone, the owner or operator must submit to EPA by September 18, 1986 (or within 45 days of start-up or modification) a written report of the calculated estimates of arsenic emissions. (NOTE: In the proposal, this report was required to be submitted within 90, rather than 45, days. Sources may be unprepared for this change and may require more time.)

For new and modified sources (for which construction or modification commenced after July 20, 1983, including any existing furnace which begins to use arsenic - see following discussion), the owner or operator must apply for approval to construct or modify (required by §61.07) and provide process and emission data so that EPA may determine if the source will be able to comply with the standard. After approval, the owner or operator is required to notify EPA of the anticipated and actual start-up dates as indicated in §61.09.

Determination of Whether a Source is "Modified" based on Arsenic Usage

Background Information

"Modification" is defined in the General Provisions, 40 CFR §61.02 as "any physical change or change in the method of operation . . . which increases the amount of any hazardous air pollutant . . . or which results in the emission of any hazardous air pollutant not previously emitted, except that . . . an increase of the production rate, if such increase does not exceed the operating design capacity . . . (or) an increase in hours of operation . . . (shall not be considered a change in the method of operation)".

"New source" is defined as "any stationary source, the construction or modification of which is commenced after (proposal)".

The preamble to the promulgated standards (Federal Register Vol. 51, No. 149, August 4, 1986, p. 27997) states "(s)ince proposal, the use of arsenic in some glass melting furnaces has been eliminated and the Agency believes that this trend is likely to continue. The companies that operate these furnaces have indicated that they do not plan to resume using arsenic. The cutoff applied to new or modified glass melting furnaces is based on consideration of cost and economic factors and has been retained in the promulgated standard to discourage reintroduction of arsenic in furnaces that have recently eliminated its use and to discourage future use. The Agency believes that this is appropriate to prevent risks from increasing near those furnaces that have recently eliminated arsenic use and because reasonable alternatives to exceeding this cutoff level are available at these facilities. These include the use of low-arsenic glass recipes and the use of controlled furnaces for production of those glass types which would result in uncontrolled emissions of arsenic of more than 0.4 Mg (0.44 ton) per year.

### Discussion

Many furnaces subject to the arsenic NESHAP will typically melt a variety of glasses with different arsenic contents and emission factors. It is necessary to determine whether furnaces will become modified sources, and thus subject to the more stringent emission limit, on the basis of these changes in the method of operation.

The above information indicates that if a furnace has never used arsenic and starts arsenic use any time after proposal, that furnace should be considered a modified source.

If a furnace has used arsenic in the past, but has ceased its use, it becomes a modified source at any point after proposal that it resumes the use of arsenic. Because arsenic usage is to be calculated as a rolling 12-month average every 6 months, if a furnace does not use arsenic during any such 12-month period, (starting from the 12-month period immediately preceeding proposal) that furnace should be considered a non-arsenic furnace, and any addition of arsenic in the future will cause this furnace to become subject to the more stringent standard for new and modified furnaces.

If a furnace has continuously used arsenic since the 12-month period before proposal, it would be a modified source if arsenic emissions increase above previous levels. Operating records should be reviewed to determine if there has been any 12-month rolling average where arsenic emissions were higher than a previous 12-month period. If so, the source should be considered modified. If not, the semiannual rolling averages calculated by the source should routinely be monitored to see that emissions do not increase in the future. If emissions do increase, the source is modified and is required to either install controls or change operation in some way so that uncontrolled emissions will be limited to 0.4 Mg/yr arsenic.

There are several exceptions to this:

(1) A source may argue that this period of lowest arsenic emissions is not representative of the typical operation of that furnace. These claims should be evaluated on a case-by-case basis. However, if the reason for the low arsenic emissions was that the furnace was successfully using a substitute for arsenic, then the lower emission rate should be considered representative operation.

(2) If the increase in arsenic emissions is due solely to an increase in production, then the furnace should not be considered "modified". However, this refers to the production rate and hours of operation of the furnace, not for the individual glass types. Therefore, if a furnace has increased production of a high-arsenic glass but at the same time has decreased production of a low-arsenic or non-arsenic glass such that overall arsenic emissions increase but total production remains constant, then the furnace should be considered modified.

In summary, for all furnaces which choose to demonstrate compliance with the 2.5 Mg/yr uncontrolled arsenic emission standard for existing sources, their operating records for the period from August 22, 1982 (12 months before proposal) to the present, as well as all future semiannual calculations of uncontrolled arsenic emissions, should be reviewed to determine whether the furnace has been modified because of these changes in operation.

2. Emission Test (40 CFR 61.164)

By November 2, 1986 (or within 90 days of startup for a new source), the owner or operator must test emissions from the source unless a waiver of emission testing is obtained under §61.13 (See Guideline S-20).

The owner or operator must provide the Regional Office at least 30 days prior notice of the emission test and demonstration of the opacity monitoring system, if applicable.

Emission tests are to be conducted while the source is operating under conditions that are representative of those from which the maximum arsenic emissions will result, as may be specified by the Regional Office. Usually, this will be under conditions representative of the expected maximum (allowable) production rate. However, for sources melting more than one type of glass, or for sources with multiple furnaces emitting to a single control device, the emission test should be conducted while the source is operating at the expected maximum production rates for the glass types generating the greatest amounts of arsenic. Furnaces producing non-arsenic glass should also be operating during the emission test, as would be representative of a source's usual operation. Another test may be required later if source operation changes so that the original testing operating conditions are no longer representative of "worst case" operation.

The owner or operator must furnish the Regional Office with a written report of the emission test results and associated calculations within 60 days of the test, and must retain records of emission test results and other data needed to determine emissions for two years.

Furnaces with Uncontrolled Arsenic Emissions Above  
2.5 Mg/yr (existing) or 0.4 Mg/yr (new or modified)  
(§61.164(e))

Unless an alternative test method is approved (refer to Guideline S-18 for procedure), the owner or operator of each furnace must demonstrate compliance with the 85% arsenic reduction requirement in §61.162(a)(2) or (b)(2) by using Method 108 to determine the concentration of arsenic in the inlet and outlet gas streams to the control device. Each emission test is to consist of three 60-minute test runs, each consisting of simultaneous testing of the inlet and outlet gas streams. The gas streams must contain all of the gas exhausted from the gas melting furnace.

The percent reduction for each run will be computed as follows:

$$D = \frac{(C_b - C_a) \times 100}{C_b}$$

D = percent emission reduction

C<sub>b</sub> = arsenic concentration in stack gas entering the control device, as measured by Method 108

C<sub>a</sub> = arsenic concentration in stack gas exiting the control device, as measured by Method 108

The average percent reduction is equal to the arithmetic mean of the results for the three runs, and must be equal to or greater than 85% for the source to be in compliance.

Furnaces with Uncontrolled Arsenic Emissions Under  
2.5 Mg/yr (existing) or 0.4 Mg/yr (new or modified)  
(§61.164(c) and (d))

If less than 8.0 Mg arsenic/year (8.8 TPY) is added to an existing furnace, or less than 1.0 Mg arsenic/year (1.1 TPY) is added to a new or modified furnace, the owner or operator will usually be able to demonstrate compliance with the uncontrolled emission limits by an emission calculation only. A theoretical arsenic emission factor should be calculated for each type of glass produced during the 12-month period, as follows:

$$T_i = (A_{bi} \times W_{bi}) + (A_{ci} \times W_{ci}) - A_{gi}$$

$T_i$  = theoretical uncontrolled arsenic emission factor (g/kg) for each glass type (i)

$A_{bi}$  = fraction by weight of arsenic in fresh batch for each glass type (i)

$W_{bi}$  = weight (g) of fresh batch melted per kg of glass produced for each glass type (i)

$A_{ci}$  = fraction by weight of arsenic in cullet for each glass type (i)

$W_{ci}$  = weight (g) of cullet melted per kg of glass produced for each glass type (i)

$A_{gi}$  = weight (g) of arsenic per kg glass produced for each glass type (i)

The theoretical uncontrolled arsenic emissions for the 12-month period is estimated as follows:

$$Y_i = \frac{(T_i \times G_i)}{10^6}$$

$Y_i$  = theoretical uncontrolled arsenic emission estimate for the 12-month period for each glass type (Mg/yr)

$T_i$  = theoretical uncontrolled arsenic emission factor for each type of glass produced during the 12-month period (as calculated above)

$G_i$  = kg of each arsenic-containing glass type (i) produced during the 12-month period

The total theoretical uncontrolled arsenic emissions for each 12-month period is equal to the sum of these emission estimates ( $Y_i$ ) for each glass type produced. If this is equal to or less than 2.5 Mg for existing plants, or 0.4 Mg for new plants, the source is in compliance and no emission testing is required. If the total is above these limits, then the source is required to test as described below.

The following procedure is required for existing sources using more than 8.0 Mg arsenic/year, new sources using more than 1.0 Mg arsenic/year, and for sources using less than these amounts but which are unable to demonstrate compliance solely by the calculation procedure above. The theoretical uncontrolled arsenic emission factors ( $T_i$ ) and estimates ( $Y_i$ ) should again be calculated for each glass type produced during the 12-month period as described above. Emission testing, using Method 108, must then be conducted during production of the glass type with the highest theoretical uncontrolled arsenic emissions. The actual uncontrolled arsenic emission factor should be computed as follows:

$$R_a = \frac{E_a}{P}$$

$R_a$  = actual uncontrolled arsenic emission factor (g/kg)

$E_a$  = actual uncontrolled arsenic emission rate, from Method 108 (g/h)

$P$  = rate of glass production (kg/h), determined by dividing the weight of glass pulled from the furnace during the emission test by the number of hours taken to perform the test

A furnace correction factor ( $F$ ) to relate the theoretical and actual uncontrolled arsenic emission factors should be calculated as follows ( $R_a$  and  $T_i$  should be the same glass type):

$$F = \frac{R_a}{T_i}$$

The total uncontrolled arsenic emission rate for the 12-month period should be computed by applying this furnace correction factor to all of the theoretical emission factors, as follows:

$$U = \sum_{i=1}^n \frac{(T_i \times F \times G_i)}{10^6}$$

U = total uncontrolled arsenic emission rate (Mg/year)

n = number of arsenic-containing glass types produced during the 12-month period

If the total uncontrolled arsenic emission rate is less than 2.5 Mg/yr for an existing furnace, or 0.4 Mg/yr for a new furnace, the source is in compliance. If the total is above these values, then the source is in violation and must install controls. However, the source may opt to conduct Method 108 tests on the remaining glass types compute type-specific correction factors, and attempt to demonstrate compliance in that way.

Example 1:

If the glass type produced during the Method 108 test is the only glass type to be produced for the initial 12-month period, then the actual arsenic emission factor can simply be multiplied by the amount of glass produced to calculate total yearly arsenic emissions. (If less than 8.0 Mg (or 1.0 Mg) arsenic/year were added to the furnace, a Method 108 test would be unnecessary.)

Ea = .045 lb/hr (from Method 108)

P = 900 lb/hr

$Ra = \frac{Ea}{P} = \frac{.045}{900} = .1 \text{ lb As/ton glass}$

Total yearly arsenic emissions = (Ra) (annual production) = (.1 lb/ton)(4000 ton/yr) = .2 TPY As

Example 2:

If two or more glass types are produced, a theoretical arsenic emission factor, based on a materials balance, should be calculated for every type of glass that will be produced. This should be multiplied by the correction factor to calculate an actual arsenic emission factor for each type of glass. Each actual arsenic emission factor should then be multiplied by the amount of that glass that will be produced to calculate yearly arsenic emissions for each glass type, and the results summed to calculate total yearly arsenic emissions.

Assume 3 types of glass (A,B,C) are produced in one furnace

For Glass A, from above,  $R_a(A) = .1 \text{ lb As/ton glass}$

Annual production of Glass A = 3000 TPY

Theoretical arsenic emission factor ( $T_A$ ) =  
.08 lb As/ton glass

Correction factor =  $\frac{.1}{.08} = 1.25$

For Glass B,  $T_B = .075 \text{ lb/ton}$

$R_a(B) = (.075)(1.25) = .09 \text{ lb/ton}$

Annual production of Glass B = 500 TPY

For Glass C,  $T_C = .4 \text{ lb/ton}$

$R_a(C) = (.4)(1.25) = .5 \text{ lb/ton}$

Annual production of Glass C = 750 TPY

Total yearly arsenic emissions

=  $(R_a(A))(A's \text{ annual production}) + (R_a(B))(B's \text{ annual production}) + (R_a(C))(C's \text{ annual production})$

=  $(.1 \text{ lb/ton})(3000 \text{ TPY}) + (.09 \text{ lb/ton})(500 \text{ TPY}) + (.5 \text{ lb/ton})(750 \text{ TPY})$

=  $.15 \text{ TPY} + .021 \text{ TPY} + .19 \text{ TPY} = .36 \text{ TPY}$

The Test Methods in Appendix B of Part 61 are to be used unless an alternative method has been approved by the Director of the Emission Standards and Engineering Division. If the results obtained by an alternative method are thought to be inaccurate, the Regional Office may require the use of a reference method. If the results obtained by the reference method do not agree with those of the alternative method, the results obtained by the reference method will prevail.

C. Emission Monitoring (40 CFR 61.163)

An owner or operator complying with §61.162(a)(2) or (b)(2) must install, calibrate, maintain, and operate

- 1) a continuous monitoring system for measuring opacity of the exhaust gas and
- 2) a monitoring device for the continuous measurement of the temperature of the gas entering the control device.

These should be installed, and their operational status verified, prior to the emissions test. A report of the CEM evaluation should be furnished to the Regional Office within 60 days of the evaluation. The purpose of the transmissometer will be to indicate when the control device may not be operating properly and emissions may be exceeding the applicable limit. The reference method used to demonstrate compliance with the emission limitation remains Method 108. As described in the following discussion, a sourcespecific opacity limit is to be derived for each individual facility, which will be based on the opacity during an emissions test demonstrating compliance. This level would be viewed as indicative of a properly operated and maintained control device.

Opacity should be monitored during each of the three runs of the emission test. During the emission test, process and control equipment should be operated so that opacity is minimized, as may be specified by the Regional Office. Monitoring results should be reduced to 6-minute averages, and a source-specific opacity limit corresponding to the 97.5% upper confidence level of a normal or lognormal (whichever is more representative) distribution of the average opacity values should be determined. Temperature of the gas entering the control device should also be monitored during each test run, and 15-minute temperature averages should be determined. An owner or operator may redetermine both these values if this procedure is repeated during each test run of an emission test demonstrating compliance.

All continuous monitoring systems should be in continuous operation as described in §61.163(f). All opacity data should be reduced to 6-minute averages, not including data from periods of breakdowns, repairs, calibration checks, and zero and span adjustments. Fifteen-minute averages of temperature should also be calculated.

The Regional Office may approve, after receipt and consideration of written application, an alternative continuous monitoring system (parameter-based, etc.) to replace the CEM.

D. Recordkeeping (40 CFR 61.165)

All owners or operators of glass melting furnaces using arsenic as a raw material are subject to recordkeeping and reporting requirements. Each owner or operator must retain for a minimum of two years the following information:

- 1) all measurements, including continuous monitoring for opacity and temperature,
- 2) all calculations used for emission estimates and all records of emission test data,
- 3) all monitoring system performance evaluations, including calibration checks and adjustments,
- 4) occurrence and duration of all startups, shutdowns or malfunctions of furnace,
- 5) all malfunctions of air pollution control system,
- 6) all periods when any continuous monitoring system or device is inoperative,
- 7) all maintenance and repairs made to each air pollution control system, continuous monitoring system, or monitoring device, and
- 8) if permission to bypass the control device is obtained, the dates the control device is bypassed and steps taken to minimize arsenic emissions during that period.

Additionally, each owner or operator of a glass plant complying with §61.162(a)(1) or (b)(1) must determine and record every six months:

- 1) the uncontrolled arsenic emission rate for the preceeding 12-month period (or 6-month period, for the first determination) using measured or calculated arsenic emission factors (as applicable) multiplied by each respective glass production rate, and

- 2) an estimate of the uncontrolled arsenic emission rate for the forthcoming 12-month period, taking into consideration anticipated changes in production rates, glass types, and other factors.

For these semiannual determinations, it would not be necessary to conduct a Method 108 test again. The initial correction factor could be applied again to calculate the measured arsenic emission factor for each glass type.

E. Reporting (40 CFR 61.165)

Each owner or operator complying with §61.162(a)(2) or (b)(2) must submit written reports to the Administrator semiannually if excess opacity occurred during the preceeding six-month period. An occurrence of excess opacity is any 6-minute period where the average opacity exceeded the source-specific opacity level. Excess opacity reports would not be used to cite a source in violation, but would alert enforcement personnel that the control device may not be operated and maintained properly and to indicate that an inspection and/or emission test may be appropriate. All semiannual reports should include:

- 1) magnitude of excess opacity, conversion factors used, dates and times of each occurrence,
- 2) specific identification of excess opacity occurring during start-ups, shutdowns, and malfunctions, and
- 3) dates and times of each period when the continuous monitoring system was inoperative (except for zero and span checks) and the nature of repairs or adjustments.

These reports must be postmarked by the 30<sup>th</sup> day following the end of the six-month period.

An owner or operator may apply to the Regional Administrator for approval to bypass the control device for limited periods, as described previously. This application must be submitted at least 60 days before the bypass period is to begin, and should include:

- 1) name and address of owner or operator,
- 2) location of source,
- 3) description of nature, size, design, and operation of source,
- 4) the reason it is necessary to bypass the control device,
- 5) the length of time needed to bypass the control device,

- 6) steps that will be taken to minimize arsenic emissions during the bypass,
- 7) the quantity of emissions that would be released if no steps were taken to reduce emissions,
- 8) the expected reduction in emissions due to steps taken during the bypass to minimize emissions, and
- 9) the type of glass to be produced during the bypass and an explanation of why non-arsenic or lower-arsenic glass could not be melted during the bypass period.

If an owner or operator of a source complying with the 85% arsenic reduction requirement wishes to reduce arsenic usage and comply with the uncontrolled arsenic emission limitation instead, s/he should notify the Regional Office of this change and include the necessary calculations and emission test data to demonstrate that uncontrolled emissions will remain below 2.5 (or 0.4) Mg/year.

Each owner or operator complying with §61.162 (a)(1) or (b)(1) must report the uncontrolled arsenic emission rate if uncontrolled arsenic emissions exceed 2.5 Mg/yr for existing plants, or 0.4 Mg/yr for new plants. If estimates show that arsenic emissions have exceeded 2.5 (or 0.4) Mg/yr for the preceeding 12-month period (or 6-month period, in a first report following the compliance demonstration), this is a violation and must be reported within 10 days of the end of the 6-month reporting period. If estimates show that arsenic emissions will exceed 2.5 (or 0.4) Mg/yr, the owner or operator must comply with §61.162 (a)(2) or (b)(2) and, within 10 days, notify the Regional Office of the anticipated date of the emission test.

Table 1: Emission Control for Arsenic Using Glass Plants

Plant No.	Name/Location	Number of Furnaces	Expected Compliance Method <sup>a,b</sup>
1	Corning, Martinsburg, WV	1	PR <sup>c</sup>
2	Corning, Charleroi, PA	1	PR
	Corning, Charleroi, PA	1	CU
3	Corning, Fall Brook, NY	2	PR
	Corning, Fall Brook, NY	3	UEL
4	Corning, State College, PA	1	PR
5	GTE-Sylvania, Central Falls, RI	1	PR
6	North American Phillips, Danville, KY	1	PR
7	Blenko Glass, Milton, WV	1	UEL
8	Brooke Glass Co., Wellsburg, WV	2	UEL
9	Corning, Corning, NY	2	UEL
10	Davis-Lynch Glass, Start City, WV	1	UEL
11	Fenton Art Glass, Williamston, WV	4	UEL
12	Fostoria Glass, Moundsville, WV	1	UEL
13	GTE, Versailles, KY	1	UEL
14	Indiana Glass, Dunkirk, IN	9	UEL
15	Jeanette Shade & Novelty, Jeanette, WV	3	UEL
16	Nourot Glass, Benica, CA	2	UEL
17	Owens-Illinois, Shreveport, LA	3	UEL
18	Owens-Illinois, Mt. Pleasant, PA	1	UEL
19	Owens-Illinois, Pittston, PA	2	UEL
20	Owens-Illinois, Toledo, OH	9	UEL
21	Paul Wissnach Galss, Paden City, WV	5	UEL
22	Peltier Glass Co., Ottawa, IL	6	UEL
23	RCA, Circleville, OH	2	UEL
24	Scandia Glass Works, Kenava, WV	2	UEL
25	Shott Optical, Duryea, PA	3	UEL
26	Vandermark Merritt Glass, Flemington, NJ	1	UEL
27	Westmoreland Glass Co., Pittsburgh, PA	4	UEL

<sup>a</sup> UEL = Uncontrolled Emission Limit (2.5 Mg/yr)  
 PR = Percent Reduction (85%)  
 CU = Cease Arsenic Use

<sup>b</sup> Some of the furnaces emitting under 2.5 Mg arsenic/year also have control devices, and may comply using either method

<sup>c</sup> Needs to install controls

Plants that are believed to have removed arsenic after proposal and which would be subject to 0.4 Mg arsenic/year emission limit if arsenic is re-introduced into glass:

1. American Stemware Corp.
2. Anchor-Hocking, Lancaster, OH
3. Anchor-Hocking, Clarksburg, OH
4. Anchor-Hocking, Baltimore, MD
5. Corning, Charleroi, PA (Soda-Lime furnace only)
6. Harvey Industries, Clarksburg, WV
7. Wheaton Industries, Millsville, NJ

Plants known to have used arsenic, but which were closed at last report:

1. Seneca Glass Company, Morgantown, WV
2. Sloan Glass, Inc., Culloden, WV

TABLE 2: Compliance Schedules

<u>Time (days)</u>	<u>Fabric Filter</u>	<u>ESP</u>
Contracts awarded or purchase orders issued	60	60
Fabrication	270	360
Shipping	30	30
Installation	240	150
Start-up	40	40
Sampling, analysis, report	90	90
Total	730	730

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 113  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 113

- \* PN113-86-01-17-027  
ISSUES #3(E) AND #5 OF THE VOC ISSUE RESOLUTION PROCESS: ESTABLISHING  
PROOF OF VOC EMISSIONS VIOLATIONS, AND BUBBLES IN CONSENT DECREES  
RESOLVING CIVIL ACTIONS UNDER SECTION 113(b) OF THE CLEAN AIR ACT
- \* PN113-86-04-11-028  
TIMELY AND APPROPRIATE ENFORCEMENT RESPONSE GUIDANCE
- \* PN113-86-04-11-029  
GUIDANCE ON FEDERALLY-REPORTABLE VIOLATIONS FOR STATIONARY AIR SOURCES
- \* PN113-86-04-22-030  
TRANSMITTAL OF NATIONAL PROGRAM GUIDANCE - ENFORCEMENT APPLICATIONS OF  
CONTINUOUS EMISSION MONITORING SYSTEM DATA
- \* PN113-86-06-02-031  
113(d)(4) LETTER TO CAN MANUFACTURERS INSTITUTE
- \* PN113-86-08-07-032  
POLICY ON THE AVAILABILITY OF LOW-SOLVENT TECHNOLOGY SCHEDULES IN CLEAN  
AIR ACT ENFORCEMENT ACTIONS
- \* PN113-86-08-22-033  
SAMPLE FEDERAL REGISTER LANGUAGE FOR PROPOSAL AND FINAL DCO'S
- \* PN113-87-01-09-034  
LETTER TO TOM BISPHRAM ON CDS DATA REPORTING REQUIREMENTS
- \* PN113-87-03-25-035  
REVISED CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY
- \* PN113-87-05-07-036  
REACTIVATION OF NORANDA LAKESHORE MINES' RLA PLANT AND PSD REVIEW
- \* PN113-87-06-25-037  
PROPER AND TIMELY REVIEW OF STATE IMPLEMENTATION PLAN (SIP) REVISIONS
- \* PN113-87-07-06-038  
SMALL VOC SOURCE COMPLIANCE STRATEGY - FINAL
- \* PN113-87-09-11-040  
REPORTING REQUIREMENTS AND SUPPLEMENTAL GUIDANCE: SMALL VOC SOURCE  
COMPLIANCE STRATEGY
- \* PN113-87-09-02-041  
REVIEW OF STATE IMPLEMENTATION PLANS AND REVISIONS FOR ENFORCEABILITY  
AND LEGAL SUFFICIENCY

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 113  
(VOLUME 2)

- \* PN113-87-11-23-042  
SETTLING ENFORCEMENT ACTIONS IN CLEAN AIR ACT NONATTAINMENT AREAS  
AGAINST STATIONARY SOURCES WHICH WILL NOT BE IN COMPLIANCE BY THE  
APPLICABLE ATTAINMENT DATE
- \* PN113-87-12-31-043  
GUIDANCE ON EVALUATING CLEAN AIR ACT ENFORCEMENT OF STATE  
IMPLEMENTATION PLAN VIOLATIONS INVOLVING PROPOSED STATE REVISIONS
- \* PN113-87-10-08-044  
POLICY ON CORRECTING THE CONDITION GIVING RISE TO LISTING UNDER THE  
CONTRACTOR LISTING PROGRAM
- \* PN113-88-03-02-045  
REVISIONS TO VOLATILE HAZARDOUS AIR POLLUTANT (VHAP) CIVIL PENALTY  
POLICY
- \* PN113-88-03-11-046  
LISTING ASBESTOS DEMOLITION AND RENOVATION COMPANIES PURSUANT TO  
SECTION 306 OF THE CLEAN AIR ACT
- \* PN113-88-03-31-047  
TRANSMITTAL OF OAQPS INTERIM CONTROL POLICY STATEMENT
- \* PN113-88-03-31-048  
TRANSMITTAL OF REISSUED OAQPS CEMS POLICY
- \* PN113-88-03-31-049  
IMPLEMENTATION OF RULE EFFECTIVENESS STUDIES
- \* PN113-88-06-30-050  
ASBESTOS CONTRACTOR LISTING
- \* PN113-88-07-05-051  
TRANSMITTAL OF SO2 CONTINUOUS COMPLIANCE STRATEGY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 5 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Transmittal of SO<sub>2</sub> Continuous Compliance Strategy

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III, and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

Air and Radiation Division Director  
Region V

Attached is the final version of the SO<sub>2</sub> Continuous Compliance Strategy. As you may recall, a draft compliance strategy for SO<sub>2</sub> sources was distributed for comment May 1, 1987. Subsequently a draft SO<sub>2</sub> Continuous Compliance Strategy was circulated February 26, 1988. Based on the comments received on these two documents this final strategy emerged.

The latest Regional review (February 26th draft) indicated only minimal changes were necessary. The decision point table used to determine appropriate action for noncompliers has been simplified and additional discussion has been added concerning resource allocation procedures. Also, the overall document has been streamlined somewhat and clarified as much as possible.

As discussed in the "Introduction", an approach is presented for gathering and analyzing SO<sub>2</sub> data in a nationally consistent manner to help State/local agencies and Regional Offices make decisions about noncompliers. As such, it should help agencies to allocate scarce resources more effectively. Please note, that while the strategy is designed to provide flexibility, any actions taken must be consistent with all applicable enforcement guidance. Bob Marshall (FTS 382-2862) is SSCD's contact.

Attachment

## SO<sub>2</sub> CONTINUOUS COMPLIANCE STRATEGY

### INTRODUCTION

This strategy provides State/local agencies and EPA Regional Offices with guidance on making decisions about SO<sub>2</sub> noncompliers. It divides SO<sub>2</sub> violators into two groups. The first group consists of marginal noncompliers requiring additional information before launching an enforcement action. The second group are sources significantly out of compliance for which an enforcement action should be considered. Numerical percentages, related to degree of noncompliance are used to indicate the appropriate type of follow-up action (See DECISION POINTS AND RECOMMENDED FOLLOW-UP ACTIONS, p.4).

The strategy is specifically designed not to impose any additional burdens; rather, its purpose is to ensure consistent, efficient and effective utilization of existing compliance resources. Current regulatory requirements are used to determine excess emissions, averaging time, monitoring methods and degree of violation. Previously issued guidance and standardized procedures provide an adequate basis for fully implementing this strategy. Specifically, any actions taken should be consistent with the documents entitled "Timely and Appropriate Enforcement Response Guidance" which was issued by the Office of Air and Radiation on April 11, 1986, "Enforcement Applications of Continuous Emission Monitoring Data" which was issued by the Stationary Source Compliance Division and the Air Enforcement Division on April 22, 1986; and, the "OAQPS CEMS Policy" statement, which was reissued on March 31, 1988. Copies of these guidance packages are contained in the Air Program Policy and Guidance Noted or may be obtained by contacting the Stationary Source Compliance Division. \* \*\* \*\*

This strategy does not change any underlying emission standards or requirements. It establishes no rights or privileges for the regulated sources nor does it change the definition of a violation. The goal for compliance remains at 100 percent. Further, the level of compliance activity identified by this strategy should be thought of as a minimally acceptable program. Agencies are encouraged to implement more rigorous activities as they deem appropriate.

\* PN 113-86-04-11-028

\* \* PN 113-86-04-22-030

\* \* \* PN 113-88-03-31-048

## APPLICABILITY

This strategy applies to Class A SO<sub>2</sub> sources such as; coal & oil-fired utility and industrial boilers, smelters, refineries, steel mills, sulfuric acid plants, and pulp mills which are regulated by SIPs, NSPS or PSD/NSR permits.

## DECISION POINTS FOR SO<sub>2</sub> NONCOMPLIERS

The data analysis table on page 4 provides numerical decision points and recommended follow-up actions for different types of compliance problems that may be identified by stack test reports or self-reporting mechanisms. Stack test reports, such as Method 6 for NSPS sources, clearly establish the compliance status of a source in a legally enforceable form. Therefore, such a violating source should be immediately ranked using the prioritization scheme described on page 4; and, an active enforcement action initiated, if appropriate.

The three categories of self-monitoring reports submitted by sources are: 1) reports from SO<sub>2</sub> continuous emission monitoring systems (CEMS), 2) fuel sampling and analysis reports (FSA), and, 3) other reports, such as malfunction/bypass, fuel supply or inspection data. Using information from these reports, the percent of noncompliance is computed based on the length of time in violation. Length of time refers either to excursions above the regulatory limit or lack of monitoring information due to data collection and/or transmission problems (See page 3). The percent of noncompliance is then compared to values in the table and the designated follow-up actions pursued.

As an example, consider a Subpart Da Electric Utility steam generator that failed to meet the 1.2 lbs/MM BTU emission limit for one 24 hr. period (based on a 30 day rolling average). Under the table heading "CEM AND/OR FSA IS THE EMISSION COMPLIANCE METHOD" and subheading "EMISSION LIMIT EXCEEDED", the percent of time is greater than 1% [i.e., 24 hr./ (90 days x 24 hr) = 1.1%]. Therefore, the source should be scheduled for enforcement consistent with the prioritization scheme developed on page 5. This does not mean an automatic enforcement action must ensue, but it does place the source in-line for future actions as resources may permit.

It should be noted that many of these sources would qualify as significant violators should any violation be determined to have occurred. Therefore, these decision points should be used to identify SO<sub>2</sub> significant violators. Assuming a source meets the other criteria for such a designation, these decision points delineate a degree of noncompliance that would automatically place a source on the significant violator list. Additionally, existing guidance including those addressing federally reportable violations, timely & appropriate enforcement actions and SPMS commitments should be imposed.

DECISION POINTS AND RECOMMENDED FOLLOW-UP ACTIONS  
(Based on Quarterly Data)

- If the percent is less than that shown below, acquisition of more data is recommended before proceeding with enforcement actions.
- If the percent is greater than or equal to the numerical value below, a prioritization procedure should be used to rank the importance of the violation and then the designated enforcement activity initiated.

DESCRIPTION OF VIOLATION	DECISION POINT
1. <u>STACK TEST DATA</u>	
Emission Limit Exceeded	Proceed with enforcement prioritization ranking.
2. <u>CEMS AND/OR FSA IS THE EMISSION COMPLIANCE METHOD</u> (LT = Length of Time)	
EMISSION LIMIT EXCEEDED Formula: (LT In Violation/LT of Operation) x 100%	1%
EMISSION REDUCTION SHORTFALL Formula: Percent of time not meeting emission reduction requirement. Formula: (LT In Viol./LT of Oper.) x 100%	1%
DATA ACQUISITION SHORTFALL, FOR LONG AVERAGING TIMES. Formula: (LT of Data Inadequacy/LT of Operation) x 100%	1%*
DATA ACQUISITION SHORTFALL, FOR SHORT AVERAGING TIMES. Formula: (LT of Data Inadequacy/LT of Operation) x 100%	5%
3. <u>CEMS AND/OR FSA IS NOT EMISSION COMPLIANCE METHOD</u> (LT = Length of Time)	
EMISSION LIMIT EXCEEDED Formula: (LT In Violation/LT of Operation) x 100%	5%
EMISSION REDUCTION SHORTFALL Formula: Percent of time not meeting emission reduction requirement. Formula: (LT In Viol./LT of Oper.) x 100%	5%
DATA ACQUISITION SHORTFALL, FOR LONG AVERAGING TIMES. Formula: (LT of Data Inadequacy/LT. of Operation) x 100%	5%
DATA ACQUISITION SHORTFALL, FOR SHORT AVERAGING TIMES. Formula: (LT of Data Inadequacy/LT of Operation) x 100%	5%

\*Data Acquisition shortfall reflects the percentage of time a source supplies data not meeting the standards set by the applicable rule (e.g., if data rule requires monitor availability 22 of 30 days; then data acquisition shortfall is the difference between 22 days and the lesser number of days actually provided.)

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4. MALFUNCTION/BYPASS DATA:  
(LT = Length of Time)

EMISSION LIMIT EXCEEDED  
(Except Copper Smelters) 5%

Formula: (LT. In Violation/LT of Operation) x 100%

EMISSION LIMIT EXCEEDED  
(Copper Smelters Only) 1%

Formula: (LT In Violation/LT of Operation) x 100%

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## DATA COLLECTION

For those sources exhibiting performance less than the indicated amount in the table, collection of more data is recommended. Acquire more data means the source should be contacted to determine the specific nature of the apparent problem and the corrective action taken. Often clarification of such problems can be achieved through informal means (e.g., telephone) and additional review of existing data. However, if the available data is not useful or conclusive, then a more formal mechanism is indicated. Formal approaches include using Section 114 of the Clean Air Act, or similar state authority, conducting a monitor audit or an on-site inspection. This formal approach should be consistent with the priorities in the CMS strategy. Should an inspection be the preferred mechanism, such inspection would be scheduled using the "Compliance Monitoring Strategy for FY 89." Once the data is collected and analyzed, the agency should determine whether to proceed with an enforcement action.

## ENFORCEMENT

The requirement to initiate enforcement means that the frequency of the violation is great enough that remedial measures are appropriate. In this case, traditional enforcement measures according to EPA's current practices should be implemented.

Due to various limitations, an EPA Regional Office or State/local agency may not be able to address all SO<sub>2</sub> noncompliers immediately. Therefore, an enforcement prioritization scheme should be developed. Since each agency has unique problems and commitments with respect to SO<sub>2</sub>, a number of different approaches are permissible.

General considerations for any prioritization scheme include:

- Air quality
- Nonattainment vs. Attainment status
- Potential emission reductions
- SPMS commitments

Inclusion of these general factors and their applicability for prioritizing sources is left to each agency's discretion.

Specific factors that can be used to prioritize SO<sub>2</sub> sources requiring remedial action include:

- Source compliance history
- Source's compliance rate compared to others in its category.
- Actual emission rate
- Control technology limitations
- O&M practices
- Frequency and magnitude of the violations

These specific factors should be woven into the overall scheme developed under the general considerations. Each agency should formulate it's own prioritization scheme as soon as practicable.

In addition, sources designated by the chart on page 4 should be prioritized for inspection consistent with their ranking under the CMS process. Any sources subsequently inspected and found to be in violation should then be prioritized for enforcement action consistent with existing guidance. The results are, of course, reported through the Compliance Data System.

#### DATA BASE REQUIREMENTS

All data reported on an affected unit should be entered into the appropriate data system following existing guidance (i.e., enforcement actions in CDS and EER data in the CEMS Subset of CDS). Guidance issued by SSCD on July 9, 1987 on the CEMS Subset and Attachment B to "Second Quarter FY 88 SPMS Reporting Instructions for the Stationary Source Compliance Program", (March 15, 1988) provide instructions on the input of unit-specific data, and the information to be reported through the CEMS Subset.

#### SUMMARY


A strategy to maintain a high level of SO<sub>2</sub> compliance must be incorporated into each yearly planning cycle. It is recognized that resource limitations effectively prevent an aggressive follow-up to each and every violation. Therefore, to more efficiently utilize EPA funding, this strategy has been devised as a means to prioritize resource expenditures. In essence, very minor violations require only more data collection rather than immediate enforcement actions. Other violations are treated in a more traditional fashion.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 30 1988

OFFICE OF  
AIR AND RADIATIONMEMORANDUM

SUBJECT: Asbestos Contractor Listing

FROM: John S. Seitz, Director   
Stationary Source Compliance Division  
Office of Air Quality Planning and StandardsTO: James T. Wilburn  
Deputy Director  
Air, Pesticides and Toxics Management Division  
Region IV

I am writing in response to your April 1, 1988 memo about the asbestos contractor listing policy. You raised the concern that an asbestos contractor may not remain in violation for long enough to be listed, or may not stay listed for very long since a contractor can petition for de-listing upon demonstration of compliance. You pointed out that most asbestos violations are short lived. Since other air compliance staff may share your concern, I am sending copies of this response to all air management division directors.

We discussed this problem in developing the new asbestos contractor listing policy. We believe that the short duration of most violations will not preclude EPA from using the contractor listing sanction effectively against those companies which have repeated violations. Under 40 C.F.R. § 15.11 EPA may place a facility on the list if EPA "determines that there is a record of continuing or recurring noncompliance with clean air (or water) standards. . ." (emphasis added).

If the facility violating the NESHAP is an asbestos demolition and renovation (D&R) company, then the "facility" to be listed is that asbestos D&R company. Contractor listing is an appropriate sanction to use against asbestos D&R companies with a history of several violations over a period of time.

These violations may be at different demolition sites, as long as the same company "facility" is responsible for the violations.<sup>1/</sup> Such a company has a "record of recurring noncompliance" for the purposes of a listing action.

If an asbestos company has been placed on the list in a discretionary listing action and then petitions to be removed from the list, § 15.21 requires the Listing Official to remove the facility from the list if the Assistant Administrator has determined that "the condition(s) which gave rise to the discretionary listing have been corrected" or "the facility is on a plan for compliance which will insure that the condition(s) which gave rise to the discretionary listing will be corrected." The Office of Enforcement and Compliance Monitoring has issued a policy about what constitutes "correcting the condition giving rise to listing".<sup>2/</sup>

In the case of an asbestos D&R company which has repeatedly violated the asbestos NESHAP, we would not consider that the company had demonstrated that it had "corrected the condition giving rise to the listing" merely by sending proper notice on its next job and/or using proper work practices the next time an inspector visits the site. One day or moment of compliance is no guarantee that the contractor will be in compliance the next day or moment nor does it guarantee correction of the conditions giving rise to the listing. Where there have been recurring violations in the past, EPA should require the company to demonstrate that it has taken adequate steps to ensure that violations do not occur in the future.

To illustrate this point, consider a power plant that may have repeated, but not continuous, particulate violations. The compliance provisions of a consent decree for a power plant might require that the company install an ESP or bag-house and, in addition, require that certain operation and maintenance measures be taken and that quarterly reports of CEM data be submitted to EPA to demonstrate that the power plant is now operating in continuous compliance with the standard.

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<sup>1/</sup> For a more complete discussion defining asbestos D&R company "facility", see "Defining 'Violating Facility' for the Purpose of Listing Asbestos Demolition and Renovation Companies," March 11, 1988 at 11-13. [ATTACHMENT TO PN 113-88-03-11-046]

<sup>2/</sup> "Policy on Correcting the Condition Giving Rise to Listing under the Contractor Listing Program", Attachment WW to the Contractor Listing Protocols, October 8, 1987.

[SEE PN 113-87-10-08-044]

Similarly, with an asbestos D&R company, we should require a demonstration that steps have been taken to ensure that the systemic problems which caused recurring violations have been solved. Depending on the particular requirements of the asbestos NESHAP that the company has been violating, EPA could require the asbestos D&R company to do one or more of the following:

- Institute new office procedures which assure that the required notices are sent out on time. Demonstrate that this has been done by maintaining records of all notices which have been sent and agree to an EPA audit of these records.
- Develop or have developed a written asbestos control program such as the one in the attached model consent decree provision II.
- Develop and implement a training program for asbestos D&R workers, and have every worker (including managers) take the training course. Keep records of which workers have taken the course.
- Demonstrate to EPA that the company has the equipment needed to comply with the NESHAP regulations, such as water tank trucks with hoses and spray equipment and metal drums for storing and disposing of asbestos.

Attached is a model consent decree with the language and programs we suggest to demonstrate compliance. If you have any suggestions for improvements, we would welcome them.

A discretionary listing action always has a prerequisite enforcement action. If the defendant and EPA have agreed to the terms of a consent decree which incorporates the needed remedies before the company is listed, the recommending Regional office may withdraw the Recommendation to List. Once a company has been notified of a proposed listing, a listing action is resolved only by a determination that the conditions giving rise to the listing have been corrected.

This determination may be based on a certification by the Regional program office that the facility has taken all necessary remedial action and is now in compliance, or it may be based on a signed consent decree which obligates the company to take the needed remedial action in the future.

I hope this discussion has addressed your concerns. If you still have some questions about the asbestos D&R company listing program, you may want to talk to Tracy Gipson in the Contractor Listing Program (FTS 475-8780) or Charlie Garlow or Justina Fugh in the Air Enforcement Division (FTS 475-7088 or 382-2864).

#### Attachments

Policy on Correcting the Condition Giving Rise to Listing  
under the Contractor Listing Program

#### Model Consent Decree Provisions

cc: Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF LOUISIANA

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	
AMALGAMATED PROPERTY OWNERS,	)	Civil Action No.
	)	
INC. and	)	
	)	
XYZ DEMOLITION CONTRACTORS,	)	
	)	
INC.,	)	
	)	
Defendants	)	

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CONSENT DECREE

Plaintiff, United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), having filed a Complaint alleging violations of the National Emission Standard for Hazardous Air Pollutants ("NESHAP") for asbestos, codified at 40 C.F.R. §61.140 et seq., and the Clean Air Act, 42 U.S.C. §7401 et seq., and requesting permanent injunctive relief and civil penalties;

And Defendant having duly filed an Answer denying the claims of the plaintiff; [if appropriate]

And Plaintiff and Defendant having agreed that settlement of this action is in the public interest and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this action and thus avoiding protracted litigation costs and expenses;

And Plaintiff and Defendant having moved this Court to enter this Consent Decree, subject to the provisions of 28 C.F.R. §50.7;

NOW THEREFORE, before the taking of any testimony, upon the pleadings, without adjudication of any issue of fact or law, and with no finding or admission of liability against or by the Defendant, and upon consent of the parties to this Consent Decree, it is hereby Ordered, Adjudged, and Decreed as follows:

I.

JURISDICTION

This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§1331, 1345, and 1355, and 42 U.S.C. §7413(b) and over the parties consenting to this Consent Decree. Venue is proper in this Court. The Complaint states a claim upon which relief may be granted against the Defendant.

II.

DEFINITIONS AND PARTIES

A. "Defendants" shall mean Amalgamated Property Owners, Inc., and XYZ Demolition Contractors, Inc.

B. "Plaintiff" shall mean the United States of America and the United States Environmental Protection Agency.

C. Terms used in this Consent Decree which are defined in 42 U.S.C. §7412(a), 42 U.S.C. §7602, 40 C.F.R. §61.02, and 40 C.F.R. §61.141 shall have the meanings contained therein.

D. Defendant Amalgamated Property Owners, Inc. (APO) is a corporation organized under the laws of the State of Delaware. APO owns property in several states, including the facility identified in the Complaint in this action.

E. Defendant XYZ Demolition Contractors, Inc. (XYZ) is a corporation organized under the laws of the State of Louisiana. The company is engaged in the business of demolition throughout various states including Louisiana. XYZ "operated" the facility identified in the Complaint in that XYZ performed demolition activities at the site.

F. Defendants are "persons" within the meaning of Section 302(e) of the Clean Air Act, 42 U.S.C. §7602(e).

### III.

#### APPLICABILITY

A. The undersigned representatives of each party to this Consent Decree certifies that he or she is fully authorized by each party whom he or she represents to enter into the terms and conditions of this Decree, and to execute and legally bind that party to it.

B. The provisions of this Consent Decree shall apply to and be binding upon the Defendants, as well as their officers, directors, agents, servants, employees, successors, and assigns, and all persons, firms and corporations having notice of this Consent Decree and who are, or will be, acting pursuant to this Consent Decree, or on behalf of, in concert with or in participation with the Defendant to this action in furtherance of this Decree.

C. The provisions of this Consent Decree shall apply to all of Defendant APO's facilities in all states, territories, and possessions of the United States of America.

D. The provisions of this Consent Decree shall apply to all of Defendant XYZ's demolitions or renovations in all states, territories, and possessions of the United States of America.

E. Defendants shall condition any and all contracts for demolitions or renovations subject to this Decree during its effective period on compliance with the terms of this Decree.

#### IV.

#### ALLEGATIONS

A. Plaintiff alleged that APO hired XYZ to demolish a scotch tape store at 1000 Main Street in Plain Dealing, Louisiana. The facility contained in excess of 80 linear meters of friable asbestos material as defined in 40 C.F.R. §61.141, and therefore the demolition operation was subject to the asbestos NESHAP, 40 C.F.R. §61.140 et seq.

B. Plaintiff alleged that XYZ commenced demolition of the facility on or about March 17, 1987, without either Defendant having submitted notice of the operation to EPA, in violation of 40 C.F.R. §61.146. Plaintiff further alleged that the Defendants failed to comply with certain work practice requirements set forth in 40 C.F.R §§61.147 and 61.152.

V.

COMPLIANCE PROGRAM

A. Defendants shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos in 40 C.F.R §61.140 et seq. Defendants shall submit written notification for demolition or renovation operations to be postmarked or delivered at least ten (10) days before each demolition or renovation begins if the amount of asbestos is as stated in 40 C.F.R §61.145(a), or at least twenty (20) days before each demolition or renovation begins if the amount of asbestos is as stated in 40 C.F.R. §61.145(b).

B. In the case of an emergency renovation as defined in 40 C.F.R. §61.141, Defendants shall provide written notice to the appropriate EPA regional office and the appropriate delegated state or local air pollution control agency as early as possible prior to the commencement of any renovation operation involving asbestos. [Optional]

C. Defendant XYZ shall, on and after the date of entry of the Consent Decree, implement the office procedure set forth as Attachment 1 to this Consent Decree to ensure compliance with the notice requirements for demolition and renovation operations subject to the asbestos regulations, and shall use the notification format set forth as Attachments 2 and 3 to comply with this Consent Decree. [Optional, but suggested if there have been notice violations.]

D. All notifications required by this Consent Decree shall be sent by certified mail or hand delivery to the appropriate EPA Regional office and the appropriate delegated state or local air pollution control agency. Defendants shall maintain records of said notifications together with proof of mailing by certified mail for the duration of this Decree.

E. This Consent Decree in no way affects the Defendant's responsibility to comply with any State, Federal or local laws or regulations or any Order by the Court, including compliance with all applicable NESHAPS requirements, and enforcement of any such NESHAP requirements made applicable by reason of any revision of the Clean Air Act and its implementing regulations.

[Optional provisions. Sections II (Notification), III (Asbestos Control Program), and IV (Asbestos Training Program) of the Geppert decree, attached, are recommended as targets for settlement with contractors where appropriate, such as multiple violations or situations in which the contractor has a large number of work crews and inadequate centralized management of them.]

#### VI.

#### CIVIL PENALTY

Defendants shall pay a total civil penalty (penalty in accordance with penalty policy). Said payment shall be in full satisfaction of Plaintiff's claims alleged in the Complaint in this action. Payment shall be made by cashier's or certified check payable to "Treasurer of the United States of America" and tendered within 30 days after final entry of this Decree to the United States Attorney for the Middle District of Louisiana, [Address]. Defendants shall send a copy of the check to the Office of Regional Counsel [Address], and to the Land and Natural Resources Division, U.S. Department of Justice [Address]. Civil penalty payments under this decree are not tax deductible.

[Optional provisions. Sections VI.B, VI.C, VIII, and IX of the PC&J decree, attached, are recommended if it is necessary to provide for an installment schedule for payment of civil penalties, particularly if there is any concern about the solvency of the defendant.]

VII.

CONTRACTOR DEBARMENT AND SUSPENSION

[Optional provision. Section VII of the PC&J decree, attached, may be a useful negotiating tool against contractors which do business with the Federal government. However, the Office of Inspector General, Suspension and Debarment Branch (FTS 475-8960) should be consulted prior to making any commitments regarding suspension or debarment proceedings.]

VIII.

STIPULATED PENALTIES

[Applicable to items other than violations of the regulations, such as the training program or asbestos control program in Geppert decree.]

A. Defendant XYZ shall pay stipulated penalties of \$1,000 per day for each day of noncompliance with any provision of Sections \_\_\_\_ of this Consent Decree.

B. All payments of stipulated penalties shall be made within thirty (30) days of the date of noncompliance by cashiers's or certified check made payable to the "Treasurer of the United States" and mailed to the United States Attorney for the Middle District of Louisiana. A copy of the letter forwarding such check, together with a brief description of the noncompliance, shall be mailed to the Office of Regional Counsel, EPA Region VI, and to the Land and Natural Resources Division, U.S. Department of Justice.

C. Nothing contained herein shall be construed to prevent or limit the rights of the plaintiff to obtain any other remedy, sanction, or relief which may be available to it by virtue of Defendant's failure to comply with this Consent Decree, the Clean Air Act, or the asbestos NESHAP.

IX.

FORCE MAJEURE

[Optional - may be inserted if demanded by Defendants. Section IX of the Geppert decree, attached, is recommended.]

X.

TERMINATION

This Consent Decree shall terminate 3 years from the date of its entry, provided the Defendant has complied with its terms. The United States shall have the right to seek extension of this period in the event of any violation of the Decree. The Court will retain jurisdiction over this matter to enforce the provisions of this Decree.

XI.

PUBLIC NOTICE

Each party consents to entry of this Consent Decree, subject to the public notice and comment requirements of 28 C.F.R. §50.7.

XII.

COSTS

Each party shall bear its own costs.

For Plaintiff - United States of America:

\_\_\_\_\_  
F. HENRY HABICHT II  
Assistant Attorney General  
Land and Natural Resources Division  
United States Department of Justice

Dated: \_\_\_\_\_

\_\_\_\_\_  
THOMAS L. ADAMS, JR.  
Assistant Administrator for  
Enforcement and Compliance Monitoring  
United States Environmental Protection  
Agency

Dated: \_\_\_\_\_

\_\_\_\_\_  
Assistant United States Attorney  
Middle District of Louisiana

Dated: \_\_\_\_\_

\_\_\_\_\_  
Trial Attorney  
Land and Natural Resources Division  
Environmental Enforcement Section  
United States Department of Justice

Dated: \_\_\_\_\_

\_\_\_\_\_  
For Defendant XYZ Demolition  
Contractors, Inc.

Dated: \_\_\_\_\_

\_\_\_\_\_  
For Defendant Amalgamated Property  
Owners, Inc.

Dated: \_\_\_\_\_

ENTRY OF THE COURT

Judgment entered in accordance with the foregoing Consent  
Decree this \_\_\_\_ day of \_\_\_\_\_, 1987.

BY THE COURT:

\_\_\_\_\_  
United States District  
Judge



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 31 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Implementation of Rule Effectiveness Studies

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

This memorandum transmits the final rule effectiveness protocol and requests that you implement the protocol beginning in FY 89 in your region.

The protocol is the result of several months of development through discussions with many regional, state and local air pollution control personnel and incorporates the study concepts and procedures that are being used successfully in Region IX and California.

As many of you are aware, we initially proposed this procedure as a part of the ozone strategy and it was to be used in large part as the rebuttal for an eighty percent effectiveness for all new ozone SIPs. However, we have made

the decision to implement this protocol independent of the ozone strategy because of the general applicability of the procedure and the protocol's usefulness as a logical follow on to the planning and implementation process of any SIP.

I am requesting that each region commit to at least one rule effectiveness evaluation in an ozone non-attainment area for FY 89. The FY 89 regional stationary source budget allocates 15 FTE for 12 evaluations. In addition we earmarked Section 105 monies for the state's use in participation of these studies.

We have not identified a rule or category of sources for evaluation, however, we do recommend that you select a part of the SIP in the nonattainment area that either has suspected problems or contributes at least 5% of the emission reductions of the SIP strategy. I urge you to work closely with your states to identify that part of the program with the highest potential payback.

Lastly, I direct your attention to the national overview section on page three of the protocol. Please forward your proposed final protocol to the national overview manager for comment before going final with a specific study and feel free to consult the manager as questions or issues arise during development of a final study.

Attachment

cc: Jerry Emison  
John Calcagni  
Air Branch Chiefs

March 24, 1988

## Rule Effectiveness Study Protocol

### (1) Purpose and Goals

The purpose of this protocol is to provide the States and EPA with criteria and procedures for conducting a rule effectiveness study. In the context of this protocol, "rule effectiveness" means the extent to which a rule actually achieves (or has the capability of achieving) desired emission reductions, both in terms of the reductions projected for that rule, as well as the reductions that would ordinarily be achieved if the rule were properly implemented.

Principal goals of a rule effectiveness study conducted according to this protocol are: (1) to determine the effectiveness of rules for a specific source category in a specific nonattainment area according to the quantitative criteria set forth in this protocol, and (2) to identify specific implementation problems that should be addressed by the State and EPA to achieve greater rule effectiveness in the future.

### (2) Application

A State or EPA may use this protocol at its own initiative to evaluate a rule, and to take or require corrective action based on that evaluation. If a State wishes to claim new emissions reduction credits in its SIP based upon corrective action in response to a rule effectiveness study, these credits must first be verified in a subsequent study.

This protocol may not be used to justify a relaxation of minimum program implementation requirements (including, for example, the frequency and quality of inspections, timely enforcement, and the correct application of rules through testing, permitting and other source specific determinations).

### (3) General Approach

Any rule effectiveness study conducted by the State or EPA must be conducted in accordance with the provisions of this protocol.

Each study will occur in two phases: a field inspection phase, in which inspections are conducted (after a selective file review) and compliance determinations are made (to the extent possible) for a representative sample of sources in a nonattainment area; and an office investigation phase, in which further analysis is undertaken of program implementation elements that are not susceptible to comprehensive evaluation in a field inspection study.

Field inspections will be used to calculate or measure emissions at sources included in the sample, and to determine the percentage effectiveness of the regulations involved by comparing the actual to the allowable emissions at each source. A separate program effectiveness determination will also be made by comparing the State's projected reductions for the source category to the reductions actually achieved.

A follow-up office investigation will supplement field inspections for the purpose of identifying specific program implementation problems that should be addressed by the State and/or EPA. The following potential program problem areas will be evaluated in both phases of the study: regulatory standards, regulation enforceability, permits, variances, inspection procedures, compliance determinations, enforcement procedures, source and emissions inventories, source files and data management, training, and agency resources management.

This protocol requires that detailed criteria and procedures be developed for conducting each area of evaluation. Example checklists and guidelines for developing these criteria and procedures are included as attachments to the protocol. All detailed criteria and procedures developed as a part of a specific study will be incorporated in the protocol.

(4) Coordination between the State and EPA

Whenever the State or EPA has decided to conduct a rule effectiveness study, the following coordination shall occur.

(a) Opportunity to Participate

An opportunity to participate in the study shall be given to all non-initiating agencies with jurisdiction over the nonattainment area.

(b) Preliminary Notice and Meeting

The initiating agency shall notify other affected agencies of the decision to conduct the study and identify the purpose of the study, the source category(s) and rule(s) affected, and the anticipated study schedule. At the election of any affected agency, a preliminary management level meeting may be called to discuss the study.

(c) Final Protocol Preparation and Review

1. Preparation of Proposed Final Protocol

Whenever a rule effectiveness study will be conducted by the State or EPA, the initiating agency shall prepare and submit to the other agency(s) for prior review a proposed final protocol including the detailed procedures and criteria that will be followed when conducting the study. These criteria and procedures shall address each element of this protocol and shall incorporate, at a minimum, the criteria and procedures included in Attachments A-G, which may be modified as necessary to incorporate unique considerations that apply to the specific State.

The reviewing agency shall review and respond to the proposed final protocol within two weeks of its receipt. In the response, the reviewing agency shall indicate all areas of disagreement or areas warranting clarification and specify areas where the proposed criteria and procedures are considered defective. The initiating agency should then confer with the reviewing agency to resolve all areas of potential disagreement and take appropriate corrective steps to ensure the validity of the study.

## 2. National Overview

Rule effectiveness study overview will be conducted by the Compliance Monitoring Branch of EPA's Stationary Source Compliance Division. The overview objective will be to promote rule effectiveness study quality and consistency on a national level through protocol review and comment.

Following the completion of a proposed final protocol (including all revisions resulting from prior review), the initiating agency shall forward the protocol to the National Rule Effectiveness Study Overview Manager. The Overview Manager will provide written comments, if any, within two weeks of receipt of the proposed final protocol. He will also forward the protocol to selected State and EPA reviewers, who based on their experience and knowledge may also provide additional verbal or written comments.

Correspondence concerning national overview should be addressed to the National Rule Effectiveness Study Overview Manager, Stationary Source Compliance Division (EN-341), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C., 20460.

## 3. Final Protocol

The initiating agency is responsible for the development of a final protocol that ensures the validity of a rule effectiveness study.

A State's failure to correct protocol deficiencies identified during protocol review may restrict the use of study results as support for emission reduction credits. Likewise, EPA's failure to correct protocol deficiencies may restrict the use of study results as a justification for requiring corrective action by the State.

A protocol may be revised or amended during a study by agreement of the initiating and reviewing agencies. Following adoption by the initiating agency, a copy of the final protocol, and any revisions or amendments, shall be forwarded to the National Rule Effectiveness Study Overview Manager.

### (d) Additional Areas Requiring Prior Coordination and Review

The following areas, in addition to those indicated in subparagraph 4(c), require coordination and review prior to initiating the study.

1. Study Team Identified. The initiating agency shall identify its study team, and provide a description of the background and qualifications of the lead investigator; the specific inspectors included in the study shall also be identified.

2. All Regulations and Policies Identified. All regulations and policies affecting the study should be identified and clearly defined in terms of their applicability to sources included in the study. For example, all express or implied exemptions should be specifically indicated; compliance test procedures should also be specified, along with applicable averaging times, and

all limitations affecting source compliance. In addition, all legal requirements limiting inspection and enforcement activities should be specified.

3. Sources Identified. Sources selected for the field study shall be named, and the reviewing agency shall be given an opportunity to propose further sample stratification to ensure that the sample is representative.

(e) Conflict Resolution

1. During the Investigation

If a conflict occurs during the study regarding the interpretation of agency policies, regulation requirements, inspection procedures, compliance determination criteria, file data, and similar matters, the issue shall be immediately raised to EPA and State managers for resolution. If the conflict must be resolved to complete a specific investigation, the specific investigation shall stop until agreement between the State and EPA is reached. In such a case EPA and State managers shall meet to resolve the conflict within 48 hours. If after 48 hours the conflict is still unresolved, the conflict shall be presented for resolution to the highest level agency managers with direct program implementation responsibility (the EPA Regional Administrator and the State Department Director).

2. After the Investigation

If an unresolvable study team conflict occurs after completion of the investigation phase regarding specific findings and conclusions, and the conflict affects the final percentage effectiveness determination, the conflict shall be resolved in one of two manners: (1) EPA and State managers may resolve the issue by agreement, without further evaluation; or (2) the study team may conduct an additional evaluation to resolve the conflict.

(5) Study Team Selection

The study team may include members of the local, State and Regional agencies with jurisdiction over the specific nonattainment area. However, the team shall include a lead technical investigator, who will be responsible for all technical findings. To the extent possible, the lead technical investigator should have no current responsibility for inspecting sources included in the study.

The lead investigator shall be highly skilled and experienced in the implementation of the rule selected for study. Qualifications shall include the capability to conduct all levels of inspection and compliance analysis, including the ability to conduct emissions testing. Qualifications shall also include significant, recent field inspection experience for all or most types of facilities subject to the regulation, and should include enforcement case development experience.

To ensure an effective evaluation of the State's field inspection procedures, the study team should include the inspector normally responsible for inspecting each source selected as a part of the field study.

(6) Source Category Selection

An agency may select any source category for a rule effectiveness evaluation using this protocol. If an agency wishes to study a limited number of source categories to support a SIP call, SIP revision, or other agency action related to a need for additional VOC reductions, the selection of these categories should be based on the following criteria:

- o Categories representing the largest quantities of emission credits in the existing SIP.
- o Categories where known or suspected implementation deficiencies are correctable and will provide significant emission reductions.
- o Categories where implementation deficiencies are identifiable and measurable with a reasonable commitment of agency resources based on the study approach selected.
- o Categories where study findings will be transferrable to other similar categories.

(7) Source Selection

The following source selection procedure is intended to ensure that a representative sample of sources is selected for the purpose of quantifying the percentage effectiveness of specific regulations.

(a) Sample Selection

Utilizing the best available source inventory for the selected category, select a sample of sources that is representative for the category, unless a representative sample cannot be obtained. In the latter case, select all sources in the inventory. See Attachment A. This selection will be used for the purpose of quantifying emissions and calculating a percentage effectiveness.

(b) Sample Review

Review the source sample prior to initiation of the study to determine whether major problems throughout the source category have been excluded from consideration. If so, redesign the sampling procedure to include the additional stratification required to ensure appropriate consideration of major problem areas. In such a case, the initiating and reviewing agencies should agree on the modified selection procedure. See Attachment A.

(8) Preliminary File Review

The study team should collect and review all relevant State and EPA regulatory information relating to sources included in the sample. This includes all regulations, permits, variances, enforcement agreements, etc., that establish specific requirements. The study team should also collect and review all State and EPA regulation interpretation guidelines that apply to each source, as well

as procedures and policies governing inspections, compliance testing, and enforcement.

(9) Field Inspection Phase

Each source included in the sample will be inspected by the Study Team. If conditions at the source prevent an inspection during normal operating conditions, this should be noted in the inspection report, but the best inspection that is reasonable under the circumstances should occur in any case.

All inspections should be unannounced and designed to apprehend ongoing violations (especially those susceptible to operator control during an inspection). Exceptions may be justified to ensure that a source is operating, to allow for necessary preparation at the source, to ensure that key plant personnel or records will be available, etc. In such a case, prior communication with the source should be made as close in time as possible to the actual inspection.

During the field inspections, the study team shall conduct the following evaluations.

(a) Rule Application Evaluation

1. Deviations from State Requirements

The team shall determine whether the State regulatory requirements that should apply to a facility do in fact apply, or whether they have been applied in a manner that results in less or greater than the anticipated control.

2. Deviations from Federal Guidelines

Where the State requirement is different from the Federal guideline (where, for example, the State requirement is more stringent, or the State interprets its requirement so that it is less stringent than EPA's interpretation), the team shall also determine the extent to which the State requirement, as applied, results in less or greater than the control that would be achieved if the Federal guideline applied.

(b) State Inspection Procedures Evaluation

Inspectors should be asked to conduct a normal inspection, or if a normal inspection would not be adequate for the study, to describe how the inspection is normally conducted at each facility. The lead investigator will observe the inspection, but take the necessary steps to ensure that the inspection is adequate to achieve the field inspection study objectives.

The team shall determine whether the normal State inspection procedures are adequate to identify actual or potential violations. Specific failures should be documented and evaluated in terms of potential excess emissions. Failures related to faulty agency guidelines or policies, faulty rules, or faulty procedures conducted at a specific site should be clearly differentiated.

(c) Compliance Determinations

The study team shall determine the compliance status of the facility with the SIP, differentiating between procedural requirements and emission requirements. If the SIP is inconsistent with Federal policy on SIP content, the study team shall also determine whether the facility would be in compliance if the SIP were consistent with Federal policy.

Each SIP violation shall be separately identified and documented. The study team may use its discretion in conducting or requiring stack testing; however, a decision not to require stack testing (where relevant) shall be clearly supported in each inspection report.

(d) Emissions Quantification

The actual and allowable emissions shall be calculated (to the extent possible) for all sources inspected during the study, according to the detailed criteria and procedures reflected in the final study protocol. Allowable emissions shall be defined by the SIP. If the SIP is inconsistent with Federal policy on SIP content, the study team shall also calculate the emissions that would be allowable if the SIP were consistent with Federal policy.

If the study team wishes to identify other reducible emissions for the purpose of documenting potential additional emission reduction credits, these emissions shall also be calculated according to the procedures reflected in the final study protocol, and shall be clearly supported by field inspection results.

(e) Quality Assurance

Effective quality assurance procedures shall be observed in all emissions calculation and measurement related activities and shall be included as a part of the detailed criteria and procedures included in the final protocol.

(f) Inventory Evaluation

Operating and emissions data in the EPA and State source/emission inventories shall be verified by an actual, on-site investigation, and discrepancies shall be clearly identified. Discrepancies affecting the State's attainment strategy shall also be clearly indicated.

(10) Office Investigation Phase

(a) Follow-up to Field Investigations

Deficiencies identified in the field that are related to agency procedures and policies should be confirmed by an office review of the appropriate written documents and by interviews with agency managers responsible for the development and implementation of the procedures and policies.

(b) Minimum Program Implementation Requirements

The detailed criteria and procedures included in the final protocol shall address EPA's minimum program implementation requirements. Where continuing

deficiencies are identified, specific corrective measures shall be proposed in the final study report.

If EPA initiates the study, EPA may elect to rely on the most recent National Air Audit as a basis for identifying program implementation deficiencies. If the State conducts the study, the State may propose to rely on the most recent National Air Audit. However, EPA may elect, instead, to conduct a new audit; and if EPA so elects, the latter audit will be controlling.

The State may use this study, if the results so indicate, as support for proposing the modification of EPA minimum program implementation requirements applicable to that State and submit a proposal to that effect as a part of the study report.

It is essential that a State meet minimum EPA program implementation requirements whether or not additional emission reduction credits are justified based on the results of a field study conducted pursuant to this protocol.

(11) Inventory Accuracy Demonstration

An inventory accuracy demonstration for the selected source category shall be conducted as a part of the rule effectiveness study. This demonstration shall include the following elements:

(a) Field Investigation Follow-up

Where the field investigation resulted in inventory discrepancies, the State shall take the following actions.

1. Reconciliation

Reconcile the individual discrepancies and, if appropriate, revise the emissions inventory to reflect this reconciliation.

2. Representativeness Evaluation

Determine whether the discrepancies represent a more extensive problem with the inventory for other sources not included in the sample. If so, take one of the following corrective actions:

- o identify and resolve each individual source discrepancy, or
- o adjust the inventory baseline and revise the SIP in accordance with EPA guidelines to reflect the reconciliation, assuming that the discrepancies are representative of the entire source category.

(b) Search for Potentially Omitted Sources

1. Survey of Exempt Sources

Conduct a letter survey of exempt sources to determine whether the grounds for exemption still apply. For a large source category, an initial survey may be

conducted for a ~~small~~ sample of the sources. If the response indicates a need for general agency follow-up (i.e., exemptions are unwarranted in other than an unusual, isolated case), a complete survey of all exempt sources shall be undertaken.

## 2. Ground Survey

Conduct a ground survey in a sample grid of the study area to determine whether unregistered sources exist.

## 3. Other Measures

Conduct a comparison of alternative source lists and take other appropriate steps to determine whether unidentified sources or emissions exist.

## 4. Results

If the ground survey sample indicates that one percent or more of the real emissions have been omitted from the inventory base for that area, the State shall increase the entire inventory baseline by the percentage identified and revise the SIP in accordance with EPA guidelines. All new emissions identified by the letter survey of exempt sources, the ground survey, and other measures shall be included in the State's emissions inventory.

## (12) Corrective Action

### (a) Minimum Program Implementation Requirements

Where the study identifies implementation problems that are inconsistent with EPA minimum program implementation requirements, the problems shall be corrected whether or not they may result in additional emission reductions.

### (b) Correctable Problems

The study team should determine and identify which problems are clearly correctable, and propose feasible corrective action options, with comments on the advantages and disadvantages of each option. Specific consideration should be given to the relative costs and benefits of each option to the agency. Specific consideration should also be given to options requiring the adoption of more effective control requirements, and to regulation changes that will alleviate compliance monitoring and enforcement constraints (for example, improved record keeping and reporting requirements).

The study team should calculate the emissions reduction that can be achieved by the recommended corrective action, if possible, and state the assumptions upon which this calculation is based.

### (c) Uncorrectable Problems/Correctability Unknown

If problems are known not to be correctable, or if the correctability of a problem cannot be determined, this should be clearly indicated along with the basis for that determination.

(d) Study Follow-up

The study shall include a planned follow-up audit within one year after its completion to determine if corrective actions were implemented and whether the actions resulted in the improvements anticipated.

(13) Reports

(a) Inspection Summary Report

A separate summary report shall be completed for each source inspection. This report should include a summary of specific findings and recommendations, and all compliance or emissions calculations with supporting data. See Attachment F.

(b) Final Study Report

A final study report shall be completed which identifies the percentage effectiveness of each regulation evaluated in the study, and which describes all source compliance and agency implementation problems that were identified, whether they are correctable or not, the proposed corrective action, any other required or proposed program implementation improvements, a summary of reasons for why other problems are not (or may not) be correctable, and a summary of reducible emissions associated with specific corrective action and other implementation improvements. The final study report shall also include the schedule for a planned follow-up audit. See Attachment G.

Any deviations from the study protocol should be identified and explained in the final study report.

Members of the study team may provide nonconcurring opinions which will be included as an attachment to the report.

Attachments

Attachment A: Source Inspection Selection Procedures

Attachment B: ~~Example~~ Field Inspection Procedure Checklists -- Graphic Arts

Attachment C: ~~Example~~ Compliance Determination and Emissions Calculation Checklists -- Graphic Arts

Attachment D: Percentage Effectiveness Calculation Guideline

Attachment E: Minimum Program Implementation Requirements

Attachment F: Example Inspection Summary Report Checklist -- Graphic Arts

Attachment G: Example Final Study Report Outline

March 24, 1988

Rule Effectiveness Study Protocol

SUMMARY OF ATTACHMENTS

[ATTACHMENTS NOT INCLUDED  
IN NOTE BOOK]

Attachment A: Source Inspection Selection Procedures

This attachment describes procedures for selecting a statistically representative sample of sources in each category. It is expected as a part of the final protocol development and review process that the initiating and reviewing agencies will agree on the final selection as "representative" for the purposes of each study.

Attachment B: Example Field Inspection Procedure Checklists -- Graphic Arts

This attachment provides checklists for use by a lead investigator in evaluating the adequacy of inspection procedures at facilities covered by CTG's. In addition to outlining compliance evaluation checks, the checklists also provide for an evaluation of agency source files, previous regulation applicability determinations, exemption status, inventory adequacy, and other determinations useful to the overall study.

Attachment C: Example Compliance Determination and Emissions Calculation Checklists -- Graphic Arts

This attachment summarizes accepted EPA methods for measuring emissions and determining compliance for the graphic arts CTG categories as an example to be followed in protocols for other source categories. Only compliance test methods approved as part of a SIP or promulgated by EPA may be used to measure emissions and determine compliance status as part of a rule effectiveness study. These methods should be clearly identified prior to initiating any field investigations and should be incorporated within the final study protocol.

Attachment D: Percentage Effectiveness Calculation Guideline

This attachment outlines the procedure and assumptions for calculating the overall percentage effectiveness of a rule as a result of a rule effectiveness study conducted pursuant to this protocol.

Attachment E: Minimum Program Implementation Requirements

This attachment provides guidance on how to identify relevant EPA minimum program implementation requirements for purposes of a rule effectiveness study.

Attachment F: Example Inspection Summary Report Checklist -- Graphic Arts

This attachment provides an outline of the report for each inspection conducted during the study. The graphic arts category is used for illustration.

Attachment G: Example Final Study Report Outline

This attachment provides a generic outline of a final rule effectiveness study report.



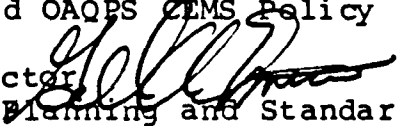
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

31 MAR 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Transmittal of Reissued OAQPS CEMS Policy

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards

TO: Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Region I, III and IX

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

Air and Radiation Division Director  
Region V

Attached is the OAQPS policy on Continuous Emission Monitoring Systems (CEMS) data. This policy was originally issued on July 28, 1987. However, because of the late transmittal date, FY 1988 implementation of the policy was done voluntarily. The policy, after minor streamlining, is being reissued at this time to insure implementation during FY 1989. It has been streamlined by removing the outdated section called "Future Actions."

In accordance with the Operating Year Plan, FTEs and LOE contract funds have been allocated to the Regional Offices for CEMS and compliance monitoring activities. Implementation of this strategy should help you utilize these available resources more efficiently and effectively.

Furthermore, note that tracking SO<sub>2</sub> CEMS requirements is an element of the FY 1989 Strategic Planning and Management System (SPMS). The FY 1989 SPMS requires determination and reporting of the compliance status of SO<sub>2</sub> sources subject to CEMS requirements. Specifically, these sources are to be identified, and their compliance status determined with respect to CEMS installation, certification, report submission and emission limits. While SO<sub>2</sub> sources are emphasized in SPMS, this measure should be carried out for all sources with CEMS requirements.

If you wish to discuss this further, please contact me or Louis Paley of SSCD at FTS 382-2835.

Attachment

cc: John Calcagni, AQMD  
Jack R. Farmer, ESD  
William Laxton, TSD  
Don R. Clay, OAR  
Bruce Armstrong, OPAR  
Paul M. Stolpman, OPAR  
Michael S. Alushin, AED  
Alan W. Eckert, OGC  
CEMS Technical Coordinators




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

31 MAR 1988

OFFICE OF  
AIR AND RADIATION

SUBJECT: CEMS Policy

APPROVED: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards

DATE:

Purpose

This states the OAQPS policy, which is effective immediately, on the use of Continuous Emission Monitoring Systems (CEMS) data and provides specific guidance as to how that policy should be implemented.

Definition

CEMS is one of several self-monitoring techniques used by regulatory agencies to monitor continuous compliance of sources. Sampling and analysis of sulfur in fuel to assess SO<sub>2</sub> compliance of sources and recordkeeping for assessment of compliance with volatile organic compound (VOC) emission limitations are two other self-monitoring techniques.

Information

As the air compliance program resolves initial compliance problems and sources install control equipment, efforts to assure continuous compliance become increasingly important. Based on the review of State and Regional programs that promote the use of CEMS, OAQPS has found that CEMS is a valuable tool for assuring continuous compliance. Self-monitoring techniques should be integrated into the air compliance program as a means of assessing stationary source continuous compliance with air quality regulations.

Some of the States which effectively use CEMS data in compliance monitoring and in supplementing or supporting enforcement actions are Washington (with SO<sub>2</sub> and total reduced sulfur data) and Tennessee (with opacity monitoring data). Ohio has a comprehensive program for requiring CEMS in operating permits which has resulted in installation of CEMS on a wide variety of source types. Pennsylvania and Indiana have highly structured CEMS programs, including penalty programs based on reported excess emissions.

### Policy

OAQPS is committed to promoting, encouraging and utilizing CEMS data as a compliance assessment measure. Our Office is also committed to the use of CEMS in direct enforcement where CEMS is the compliance test method and for supporting enforcement where CEMS is not the compliance test method. OAQPS encourages the use of CEMS data by States in compliance monitoring and in supplementing or supporting enforcement actions. If it is technically feasible, CEMS requirements should be incorporated into NSR preconstruction reviews, operating permits and resolutions of enforcement actions including consent decrees and administrative orders.

CEMS should be used to assure continuous compliance of sources in both attainment and nonattainment areas. Resources should be allocated to monitor continuous compliance of sources in areas where the greatest environmental benefit is likely to occur. Therefore, priority should be given to NESHAPS sources subject to continuous monitoring requirements (currently 40 CFR 61, subparts F, N, O and V) and to SIP (including major and minor NSR sources) and NSPS sources in nonattainment areas (for the pollutant for which the area is in nonattainment). Next, CEMS should be used to monitor the continuous compliance of NSPS and PSD sources in attainment areas. Sources with excessive emission limit excursions identified by CEMS data should be targeted for follow-up action (on-site inspection or §114 letter). Where CEMS is the compliance test method, CEMS data should be used to identify significant violators. These sources will then be tracked in accordance with the "Timely and Appropriate Enforcement Response Guidance," issued by OAR on April 11, 1986.

There are two different types of CEMS data - direct compliance monitoring data and excess emissions monitoring data. Where CEMS is the compliance test method, the status of the source is established and documented by CEMS data. Compliance status determined by CEMS data should be coded in the Compliance

Data System (CDS). Violations identified by direct compliance monitoring data require appropriate enforcement action including the assessment of penalties. There are plans to modify the CEM Subset of CDS to allow for entry of direct compliance monitoring data. Use of CEMS data for direct enforcement where CEMS is the compliance test method is discussed in "Guidance: Enforcement Applications of Continuous Emission Monitoring System Data," issued by OAQPS and OEMM on April 22, 1986.

The second type of CEMS data is where CEMS is not the compliance method. In these cases, CEMS data should be used to monitor the continuous compliance of sources and to initiate follow-up action including on-site inspections, requesting further information, and issuing a notice of violation. This application is also discussed in the aforementioned guidance.

### Conclusion

CEMS is an important technique for monitoring the continuous compliance of stationary sources. It should be an expanding component of the air compliance program. Evaluation of CEMS data has been shown to be effective for identifying sources with continuous compliance problems and has allowed agencies to utilize their compliance monitoring resources more effectively.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 31 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Transmittal of OAQPS Interim Control Policy Statement

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

Air and Radiation Division Director  
Region V

Attached is the final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. Comments solicited from the Air Compliance and Air Programs Branch Chiefs, OECM, and SSCD by a memorandum of January 20, 1988, have been addressed, resulting in a few minor language clarifications and one change to the policy.

The change resulted from a comment on the requirement to maintain existing controls in the interim. In lieu of maintaining the operation of the existing control equipment during the interim period, allowance has been made for installing interim controls which may be more effective in reducing emissions. The usage of interim controls may not result in a delay of the installation of the final control equipment.

Also, clarification has been made concerning the installation of redundant equipment on new control systems. Design requirements mentioned in this policy apply to those sources which require continuous operation of the process equipment. Temporary shutdown during maintenance periods is always a possible compliance alternative to adding redundant control equipment. The policy now states this specifically.

One notable recommended change has not been included. The comment was made that performance bonds should not be applied to activities which may be beyond the control of the source, such as the delivery of materials. Installation of control equipment frequently involves the activities of several contractors and requires careful scheduling to avoid delays. Late delivery of equipment can have a serious adverse effect on the ability of a source to meet a tight installation schedule. A source must take the necessary steps to select the most reliable, rather than the lowest cost vendor, to ensure that schedules are met.

Thank you for your assistance with the development of this policy statement. If you have questions concerning it, please contact Pam Saunders of my staff at FTS 382-2889, EMail EPA6264.

Attachment

## INTERIM CONTROL POLICY

### PURPOSE

The purpose of this policy is to provide uniform criteria for developing final compliance requirements, schedules, and interim requirements for sources in situations where failing, deteriorating or inadequate air pollution control equipment must be replaced or upgraded.

### APPLICABILITY

This policy applies to situations where a determination to rebuild or replace existing control equipment has been made. Situations mentioned in this policy may also be subject to applicable civil penalties as stated in the Civil Penalty Policy.

### OBJECTIVES

The objectives of this policy are to require subject sources to:

1. Minimize and continuously monitor emissions during the interim period;
2. Attain final and continuing compliance as quickly as feasible using all available means;
3. Maintain continuous compliance in the future by appropriate design of the final control system, including the continuous monitoring of excess emissions.

### POLICY

#### INTERIM MEASURES

Interim measures combined with continued operation and maintenance of existing controls must be required wherever existing controls are inadequate. During the interim period until the new or upgraded control equipment is operational and the source is in compliance, emissions from the source must not be allowed to increase. The existing though inadequate control equipment must remain operational to the maximum extent possible, including being maintained and

repaired, until such time that construction or tie-in of new equipment requires its shutdown or removal. In lieu of maintaining the existing though inadequate control equipment, interim controls which offer a higher degree of emission reduction and are readily and reasonably available may be installed. The use of such interim controls shall not unduly delay the installation of final control equipment.

When existing control equipment must be taken off line to tie-in or complete construction of new or upgraded equipment, additional interim controls or other interim measures are required to ensure no increase in excess emissions occurs during the tie-in period. Such measures may include installation of additional temporary control equipment or operational controls, e.g., curtailment of production rates, relocation of production to complying process lines or facilities, purchase of power or product elsewhere as needed, or temporary shutdown.

The source should be required to implement an interim continuous emissions monitoring program, to enable the agency to monitor the emissions performance of the source during the interim period.

#### COMPLIANCE REQUIREMENTS

All compliance schedules must contain specific milestones for design, construction, installation and operation of new or rebuilt control equipment. The milestones should reflect the shortest feasible schedule for achieving compliance and should include, but not be limited to, the following:

1. Submittal of a control plan, including necessary permit applications, to agency;
2. Award of major contract(s) to vendors;
3. Delivery of materials or control equipment;
4. Initiation of off-site fabrication or on-site construction or installation of the control equipment;
5. Completion of installation or rebuilding of control equipment;

6. Testing and demonstration of final compliance by the source.

Performance bonds or stipulated penalties must be associated with every milestone specified in the schedule. To promote an expeditious schedule, the use of prefabricated equipment or the use of double or triple shifts for the construction or installation of equipment should be considered.

CONTINUOUS COMPLIANCE AND MONITORING REQUIREMENTS

A fundamental principle of this policy is that the source must make every possible effort to maintain continuous compliance after the new or rebuilt equipment becomes operational. To assure continuous compliance during future maintenance periods, all new or upgraded equipment must normally include spare compartments (or units) and parts (or equipment) that can maintain emissions at a compliance level while the remainder of the equipment is being replaced, repaired, or maintained. In lieu of this, those sources that do not require continuous availability of the process equipment may shut down during such periods.

To assure the ability of the agency to monitor continuous compliance in the future, the source must periodically report excess emissions to the appropriate air pollution control agency. This may be accomplished by requiring the installation, operation and reporting of data from continuous emissions monitoring equipment. These requirements are to be set out specifically in the compliance agreement.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 11 1988

MEMORANDUM

SUBJECT: Listing Asbestos Demolition and Renovation Companies  
Pursuant to Section 306 of the Clean Air Act

FROM: Michael S. Alushin *M.S. Alushin*  
Associate Enforcement Counsel  
Air Enforcement Division

John S. Seitz, Director *John Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Terrell E. Hunt, Director *Terrell E. Hunt*  
Office of Enforcement Policy  
Office of Compliance Analysis and Program Operations

TO: Addressees

We urge you to consider listing, under Section 306 of the Clean Air Act, contractors who are violators of the asbestos demolition and renovation (D&R) standards, 40 C.F.R. Part 61, Subpart M. Since significant amounts of federal money are involved in asbestos removal, we think that you will find that contractor listing can be an effective sanction against recalcitrant violators. It will deprive them of the privilege of contracting or subcontracting with federal agencies or with any other entity which has received federal grants or loans for asbestos removal.

Contractors convicted of criminal violations under § 113 (c)(1) will be automatically listed under the Mandatory Listing provisions, 40 C.F.R. § 15.10. Under 40 C.F.R. § 15.11, EPA has the discretion to list contractors who

- have violated an administrative order under § 113(a) or (d), § 167 or § 303,
- have been issued a Notice of Noncompliance under § 120,
- have been issued any form of civil ruling by a federal, state or local court, as a result of noncompliance with clean air standards,

- have been convicted by a state or local court of any criminal violations of the CAA or by a federal court for criminal violations under § 113(c)(2) (for making false statements, records or reports); or
- have had a civil judicial enforcement action filed against them in federal district court for CAA violations.

Asbestos D&R contractors differ from the traditional "stationary sources" of air pollution, because each job is done at a different construction site, generally owned by someone other than the asbestos D&R company. Therefore, the enclosed legal memorandum was prepared to clarify the application of the contractor listing regulations to asbestos D&R contractors.

This memorandum addresses the question of whether the business address of an asbestos D&R company may be listed as the "violating facility" when placing an asbestos D&R company on the List of Violating Facilities under Section 306 of the Clean Air Act. It concludes that the business address of an asbestos D&R company, rather than the address of the demolition site, should be used to identify the "violating facility" when placing an asbestos D&R company on the List of Violating Facilities.

We need your help to make this program a success. To get off to a good start, establishing some clear precedents, we need your nomination of candidates for listing. We hope to start with contractors with both egregious substantive violations and notice violations. If a nationwide or very large contractor has distinct regional or other sub-divisions, you should consider whether naming the smaller unit as the "listed facility" is more appropriate (cf. page 6 of the enclosed legal memorandum for a discussion of this aspect). Please contact Rich Biondi in SSCD (382-2826) or Charlie Garlow (475-7088) or Justina Fugh (382-2864) in OECM-Air to consult about potential candidates for listing before sending a formal recommendation to list to Headquarters.

**Addressees:**

Regional Counsels  
Regions I-X

Air Management Division Directors  
Regions I, III, & IX

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

Air and Radiation Division Director  
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cc: Thomas L. Adams, Jr.  
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Asbestos Enforcement Contacts  
Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

11/1/88

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE MONITORING

MEMORANDUM

SUBJECT: Defining the "Violating Facility" for Purposes of  
Listing Asbestos Demolition and Renovation Companies  
Pursuant to Section 306 of the Clean Air Act

QUESTION PRESENTED: Can EPA use the business address or the  
address of some other property used by an asbestos  
demolition and renovation company to identify the  
"violating facility" when placing the company on the  
List of Violating Facilities?

ANSWER PRESENTED: The business address or the address of some  
other property used by an asbestos demolition and  
renovation company may be used to identify the  
"violating facility," rather than the address of  
the particular site involved in the violating activity,  
when placing an asbestos demolition and renovation  
company on the List of Violating Facilities. Under  
the definition in § 15.4, the "facility" includes  
"any ... location or site of operations ... to be  
used in the performance of a contract, grant or loan."

## DISCUSSION

### Background

Section 306(a) of the CAA (42 U.S.C. § 7606(a)) prohibits federal agencies from entering into any contract for goods, materials or services with a person who has been convicted of certain violations of the CAA if the contract is to be performed at "any facility at which the violation which gave rise to such conviction occurred if such facility is owned, leased or supervised by such person." This section provides the statutory authority for mandatory listing of CAA violators.

Section 306(c) of the CAA (42 U.S.C. § 7606(c)) is the statutory basis for the discretionary listing of CAA violators. It directs the President to issue an order:

(1) requiring each Federal Agency ... to effectuate the purpose and policy of [the CAA] in such contracting or assistance activities, and (2) setting forth procedures, sanctions, penalties, and such other provisions ... necessary to carry out such requirement.

Section 508(c) of the Clean Water Act (CWA) (33 U.S.C. § 1368) as amended on October 18, 1982, by Pub. L. 95-500, §2, contained an almost identical provision.

These provisions were implemented by Executive Order 11,738, issued on September 12, 1973 (38 Fed. Reg. 25,161). The Order states that it is the policy of the Federal Government

to assure that each Federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each Federal agency empowered to extend Federal assistance ... shall undertake such procurement

and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the [Clean Water Act].

Exec. Order No. 11,738, 35 Fed. Reg. 25,161 (1973)

On April 16, 1975, EPA promulgated regulations at 40 C.F.R. Part 15 (40 Fed. Reg. 17,124) which provide procedures for insuring that Executive Branch agencies conduct their procurement and assistance programs in accordance with the President's responsibility for ensuring compliance with CAA and CWA standards. These regulations authorize EPA to suspend or bar "facilities" which are violating the CAA or the CWA from receiving Federal contracts or subcontracts, grants or loans, by placing them on a List of Violating Facilities. The regulations require mandatory listing of violating "facilities" after the owner or operator is convicted for criminal violations under § 113(c)(1) of the CAA or § 309(c) of the CWA. They provide for discretionary listing of facilities where there are continuing and recurring civil violations of the CAA or CWA.

The EPA List of Violating facilities is published in the Federal Register twice a year and is updated in the Federal Register whenever a facility is added to the list or removed from the list. The List is also transmitted to Federal agencies with assistance responsibilities and to the General Services Administration, which publishes a consolidated list of barred, suspended or ineligible contractors.

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1/ These regulations were revised on September 5, 1985 (50 Fed. Reg. 36,188).

### The Problem

The question which this memorandum addresses is what is the "facility" to be placed on the List in the case of an asbestos demolition and renovation company which has a history of continuing and recurring violations of the National Emission Standard for Asbestos (hereafter the Asbestos NESHAP) or which is owned or operated by a person who has been convicted of a criminal violation of the Asbestos NESHAP.<sup>2/</sup> Since asbestos demolition and renovation companies provide services, it is sometimes more difficult to identify the "facility" of an asbestos demolition and renovation company than it is to identify the "facility" of a company which produces goods. Goods are generally produced in one or more buildings owned or leased by the producer. Sometimes services are provided at a location owned or leased by the provider. In other cases, services are provided at a location owned or leased by the purchaser of the service.

Asbestos demolition and renovation companies which violate the asbestos NESHAP regulations generally do so in the course of performing a contract to demolish or renovate a building which is owned or leased by someone else. If the contractor violates the asbestos regulations, the violations are most likely to occur at the demolition or renovation site. Listing

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<sup>2/</sup> Asbestos NESHAP regulations, issued pursuant to § 112 of the Clean Air Act, are codified at 40 C.F.R. Part 61, § 61.140 et seq.

the address of the property at which the demolition or renovation work occurred as the "violating facility" would not accurately identify the asbestos demolition and renovation company which performed the work and, therefore, would not accomplish the intended purpose of CAA § 306(a) -- to assure that persons or corporations convicted of a knowing violation of CAA standards or limitations are ineligible to enter into Federal contracts until the continuing or recurring violation has been corrected.<sup>3/</sup>

The issue is whether CAA § 306 and the regulations promulgated to implement this section, 40 C.F.R. Part 15, permit EPA to list, as a "facility", the executive office (or similar address) of the person (or company) providing the services and taking the action that violated the CAA.

#### Definition of Facility

EPA regulations implementing the Contractor Listing Program are found at 40 C.F.R. Part 15. Section 15.11 authorizes the Listing Official to "place a facility on the List" under stated conditions. Section 15.4 defines "facility":

"Facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location or site of operations owned, leased or supervised by an applicant, contractor, grantee, or borrower to be used in the performance of a contract grant or loan. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location or site shall be deemed to be a facility,

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<sup>3/</sup> Of course, in cases where the owner of the building which was renovated or demolished has also violated the asbestos NESHAP, the building may also be listed as a "violating facility".

except where the Assistant Administrator determines that independent facilities are located in one geographic area. (emphasis added).

For the purposes of the Contractor Listing Program, the "facility" of a company includes any location used by the company to produce the particular goods or provide the particular services which the government may wish to purchase or assist others to purchase under a particular contract.<sup>4/</sup> To determine whether a particular "building, plant, installation ... location or site" is part of a "facility" at which a violation giving rise to a criminal conviction occurred, or is part of a "facility" which has a record of continuing or recurring noncompliance with clean air (or water) standards, one should look at the relationship of the "building, plant, installation ... location or site," to the production of the goods or services which the government might procure or assist others in procuring. Depending on circumstances, the relevant "facility" may or may not include all locations owned by a company. If several different locations are involved in manufacturing a particular product or

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<sup>4/</sup> A different definition of "facility" is used in the Asbestos NESHAP, 40 C.F.R. § 61.141. That definition should be used for the purpose of determining whether the owner or operator of an asbestos demolition and renovation company complies with the NESHAP. If the Agency determines that the owner or operator of the company violated any of the requirements of the NESHAP, then the definition in 40 C.F.R. § 15.4 should be used to determine what the "violating facility" is.

in supplying a particular service, all of those locations together make up the "facility".<sup>5/</sup>

#### The Legislative History

This definition of "facility" is consistent with the purpose of § 306, which was designed to be a sanction available to EPA against those who would provide goods and services to the Federal government using noncomplying facilities. Section 306 of the CAA is derived from Senate bill S. 4358. Section 306(a) of the Senate bill read as follows:

Sec. 306(a) Any person (1) required to comply with an order issued by a Federal court pursuant to this Act who fails to comply within the time period specified in such order, or (2) convicted by a Federal court for knowing violation of any applicable schedule or timetable of compliance, emissions requirement, prohibition, emission standard, or standard of performance, shall be ineligible to enter into any contract with any Federal agency for the procurement of goods, materials, and services to perform such work at or with any facilities subject to such action by the court which are owned, leased or supervised by such person. Such ineligibility shall continue until the Secretary [of HEW] certifies compliance with such order, or that the conviction giving rise to the violation has been corrected. (emphasis added).

S. 4358, 91st Cong., 2d Sess. § 306 (1970).

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<sup>5/</sup> Where a company has several different divisions or factories or regional offices, each producing particular goods or services independently from each other, each would be a separate facility; and if one of those divisions or factories or regional offices is violating the CAA or the CWA, that particular unit of the company is the only one that would be placed on the List of Violating Facilities.

The Senate Committee on Public Works issued a report to accompany S. 4358, in which the following explanation of Section 306 was given:

The Committee considered proposals offered by Senator Muskie and Senator Cook to assure that the Federal Government does not patronize or subsidize polluters in its procurement practices and policies.

Section 306 would make any person or corporation who fails to comply with a court order issued under this Act or who is convicted of a knowing violation of any schedule or timetable of compliance, emission requirement, prohibition, emission standard, or standard of performance, ineligible for a Federal contract for any work to be done at the polluting facility....

This section would be limited, whenever feasible and reasonable, to contracts affecting only the facility not in compliance, rather than the entire corporate entity or operating division.

There might be cases where a plant could not participate in a Federal contract due to a violation but another plant owned by the same company might bid and transfer other work to the first plant. This type of action would circumvent the intent of this provision. In this case, the company's second facility should also be barred from bidding until the first plant returns to compliance.

There would also be instances where a second plant within a corporation was seeking a contract unrelated to the violation at the first plant. In such a case, the unrelated facility should be permitted to bid and receive Federal contracts. (emphasis added).

S. Rept. No. 1196, 91st Cong., 2d Sess. 39 (1970).

Section 306 of S. 4358 was passed by the Senate without change. A companion bill in the House, H.R. 17255, 91st Cong., 2d Sess. (1970), had no provision about procurement policies. In conference, the provision making persons convicted of knowing violations of the CAA ineligible for Federal contracts or assis-

tance was retained. In lieu of the provision of the Senate bill extending ineligibility to persons subject to, but not complying with, court orders, the conference committee substituted a more general requirement that "the President shall cause to be issued an order (1) requiring each Federal agency ... to effectuate the purpose and policy of this chapter in such contracting and assistance activities,..."6/

#### The Executive Order

The President complied with this mandate by issuing Executive Order No. 11,602 on June 29, 1971. E.O. No. 11,602 was superseded by Executive Order No. 11,738, on September 10, 1973.7/ Exec. Order 11,738 sets forth the following Federal

6/ When the CAA amendments were reported out of the conference committee, the conference report on Section 306 stated:

The conference substitute is more limited than the Senate provision. It provides that persons convicted of a knowing violation of standards or limitations shall be ineligible to enter into Federal contracts until the Administrator certifies that the violation has been corrected. The remainder of the conference substitute follows the Senate amendment by requiring the President to issue an order requiring Federal agencies (1) to assist in the implementation of this act and (2) to establish sanctions for non-compliance.

Conference Report No. 1783 (to accompany H.R. 17255), 91st Cong. 2d Sess. (Dec. 17, 1970), reprinted in 1970 U.S. Code Cong. & Ad. News 5356, 5389.

7/ Exec. Order No. 11,738, 38 Fed. Reg. 25,161 (1973), amended Exec. Order 11,602, 36 Fed. Reg. 12,475 (1971), by adding the words "Federal Water Pollution Control Act" to § 1 and changing references to "the Act" in §§ 2, 4, 6 and 9 to "the Air Act" and adding references to "the Water Act." Exec. Order 11,738 also adds § 11, which requires that regulations issued pursuant to CWA § 508 shall be uniform with regulations issued pursuant to CAA § 306 to the maximum extent possible.

## procurement policy:

Section 1. Policy. It is the policy of the Federal Government to improve and enhance environmental quality. In furtherance of that policy, the program prescribed in this Order is instituted to assure that Federal agencies are empowered to enter into contracts for the procurement of goods, materials or services or to extend Federal assistance by way of grants or contracts in such a manner that will result in effective enforcement of the Clean Air Act ... and the Federal Water Pollution Control Act. ... (emphasis added).

Section 2 of the Order states, in part:

(b) In carrying out his responsibilities under this Order, the Administrator shall ... designate facilities which have given rise to a conviction for an offense under section 113(c)(1) of the Air Act ... [and] publish and circulate ... lists of those facilities, together with the names and addresses of the persons who have been convicted of such offenses ... (emphasis added).

Section 3 prohibits any Federal agency from entering into any contract with or extending any assistance to any facility which has been listed pursuant to CAA § 306. Section 4 requires that all Federal procurement regulations

... issued by any agency of the Executive Branch shall ... be amended to require ... inclusion of a provision requiring compliance with the Air Act, the Water Act, and standards issued pursuant thereto in the facilities in which the contract is to be performed, or which are involved in the activity or program to receive assistance. (emphasis added).

Section 5 authorizes the Administrator of the Environmental Protection Agency "to issue such rules, regulations, standards and guidelines as he may deem necessary and appropriate to carry out the purposes of this Order." Sections 1 and 5 of

Exec. Order 11,738, together with § 306(c) of the CAA (and § 508(c) of the CWA), provide the authority for the discretionary listing program. EPA's Contractor Listing regulations, codified at 40 C.F.R. Part 15, implement the Executive Order.

### Discussion

As defined in 40 C.F.R. § 15.4, a "facility" includes any building, location, or site to be used in the course of performing the contract or loan. While the buildings or sites at which work is performed are often also the buildings or sites at which a violation occurs, the fact that the violation may occur "off-site", i.e., at a location owned or operated by a customer, does not mean that such locations are not part of the "facility" "to be used in the performance of" a contract. The "facility" of a contractor also includes the business address which the company uses in its contracts, even if the business address is simply a post office box.

As Congress recognized, a company may be violating the CAA or CWA at one "facility" and have other complying "facilities" which are not involved in the production of the same goods and services. Congress differentiated between entirely uninvolved "facilities", on the one hand, and involved "facilities", e.g., where a sister "facility" "B" was used to circumvent a ban on goods or services produced at "facility" "A".

The definition of "facility" in § 15.4 implements that concept. If an asbestos demolition and renovation company has

two or more divisions which operate independently of each other, each division would, at least presumptively, be a separate "facility" under the definition found in § 15.4. If only one of the divisions is convicted of criminal violations of the asbestos NESHA or if only one of the divisions has a record of continuing or recurring noncompliance with the asbestos NESHA, only that division of the company would be placed on the List of Violating Facilities, absent the kind of situation described by Congress.

This is the only way that an asbestos demolition and renovation "facility" can be defined which is consistent with the intent of the statutes, the executive orders, and the regulations. A contrary interpretation would fail to "effectuate the purpose and policy of [the CAA] in [the government's] contracting and assistance activities" as required by § 306. The "facility" concept is intended to carry out, not to thwart, the intent of § 306. While the business address of the "facility" will often coincide with the address of the site where violations occurred, there is no requirement in § 306 that it do so. Listing is intended broadly to sanction "persons" who continue to violate the CAA by depriving them of access to Federal contracts for goods and services and to federal grants and loans. Congress did not intend to limit this sanction to contractors who engage in violative conduct on property that they happen to own or control. So long as the business address of the asbestos

13.

demolition and renovation company is fairly associated with the activity which is the violating conduct, that address may be used to identify the "facility" to be placed on the List, notwithstanding that additional, related work (and the actual violations) occurred elsewhere.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR -2 1988

MEMORANDUM

SUBJECT: Revisions to Volatile Hazardous Air Pollutant (VHAP)  
Civil Penalty Policy

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443)

Thomas L. Adams, Jr.  
Assistant Administrator for Enforcement  
and Compliance Monitoring

TO: Addressees

Attached is the new Volatile Hazardous Air Pollutant (VHAP) Civil Penalty Policy. This policy is a new Appendix VI to the March 25, 1987 Revised Clean Air Act Stationary Source Civil Penalty Policy.

Major features in the policy are penalties for:

- 1) Reporting violations involving initial and semi-annual reports;
- 2) Monitoring, inspection and testing violations, including annual, monthly, weekly and daily requirements;
- 3) Failure to repair detected leaks within the appropriate time frames;
- 4) Failure to use certain protective devices on various pieces of equipment such as compressors and open-ended valves or lines;
- 5) Violations of the record-keeping requirements; and
- 6) Untagged equipment in VHAP service and untagged leaking VHAP equipment.

This policy applies to determining the gravity component of the civil penalty settlement amount for VHAP cases. The general Stationary Source Civil Penalty Policy should continue to be used to make adjustments, if appropriate, to arrive at a penalty settlement amount.

The policy was devised to address issues raised by the Regions and the Department of Justice. A draft of this policy was distributed to the Regions and to DOJ for comment on February 19, 1987.

As you can see from the attached summary of comments submitted by DOJ, the Regions and Headquarters, considerable effort has been invested in this project. We attempted to accommodate every comment except where there was a direct conflict in the suggestions (e.g., \$25,000 versus \$15,000 for initial report), in which case we chose a compromise position.

We appreciate the considerable efforts which you and your states have made to comment on the proposed policy and to enforce the VHAP regulations. Please continue to emphasize enforcement of these important public health standards.

Questions regarding this policy should be addressed to Charles Garlow of the Office of Enforcement and Compliance Monitoring at FTS 475-7088.

#### Attachments

#### Addressees:

Regional Administrators, Regions I-X

Regional Counsels, Regions I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides, and Toxics Management Division Directors  
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Regions I-X

VHAP NESHAP Contacts

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Thomas Gallagher, NEIC  
Gerald Emison, OAQPS  
Jack Farmer, OAQPS  
David Buente, DOJ  
Bill Becker, STAPPA-ALAPCO

## Summary of Comments on Draft VHAP Penalty Policy

DOJ: Existing policy may generate insufficient penalty figures.

Economic benefit component should not be referred to as "negligible", but "difficult to determine".

Where incomplete report filed, but missing information supplied, without prompting, give credit.

List separate penalty for monitoring/testing procedures performed incorrectly.

List failure to file initial source report (40 C.F.R. §61.10).

Include separate penalty for failure to mark equipment "in-benzene" service.

Clarify failure to keep records in a log pursuant to 40 C.F.R. §61.246.

Region III: VHAP/VOC emissions may be more harmful in ozone non-attainment area.

Flesh out recordkeeping penalty re: Subpart A, initial reports.

Clarify how daily computation works.

For first time violation of reporting allow a range for size of source.

Region IV: Clarify application of VHAP policy to vinyl chloride.

Region V: Make penalties for semi-annual reports \$15,000 instead of \$25,000.

\$25,000 maximum is appropriate for monitoring violations because of greater risk of harm to environment.

\$25,000 maximum for failure to repair leaks is similarly appropriate.

Reduce \$25,000 to \$15,000 for failure to identify VHAP equipment in initial report.

Failure to put a required device on VHAP equipment should have the recommended \$15,000 penalty.

Reduce \$25,000 to \$15,000 for recordkeeping violation.

Region VI: Add \$25,000 fine for failure to submit initial report (40 C.F.R. §61.10) and failure to submit this report within 90 days after the effective date (40 C.F.R. §61.247(a)).

Increase penalties for daily monitoring violations, especially lengthy violations.

Clarify VHAP penalty policy application in vinyl chloride cases.

Does this mean we do not have to calculate the benefit component any more?

Region VII: Add penalty for failure to tag leaking equipment 40 C.F.R. §61.246(b).

Add penalty for violation of alternative leak detection program's two percent allowable leaks 40 C.F.R. §61.243-1.

These violations are very similar to NSPS Subpart VV. Why not establish a penalty policy for that subpart also?

Headquarters: Treat initial report the same as semi-annual report.

Open-ended valves should be capped; include that in failure to equip.

A weekly inspection on the 8th day is too late for the previous week, so list one penalty for the week (e.g., \$1000) and then add \$150/day for each day after that if the report comes in late. Same with other reports (monthly, annual).

## APPENDIX VI

### Volatile Hazardous Air Pollutant Civil Penalty Policy

This policy shall be used to determine the gravity component of the civil penalty settlement amount for cases enforcing the National Emission Standard for Equipment Leaks (Fugitive Emission Sources), 40 C.F.R. Part 61, Subpart V, which applies to volatile hazardous air pollutants (VHAP) and the general reporting requirements of Subpart A. It is to be used in lieu of the scheme for determining the gravity component set forth in the general Clean Air Act Stationary Source Civil Penalty Policy. It is intended as a supplement to the Vinyl Chloride Civil Penalty Policy for vinyl chloride cases. In those vinyl chloride cases in which the vinyl chloride and VHAP civil penalty policies are inconsistent (such as the \$25,000 penalty for failure to timely submit a complete semi-annual report under the vinyl chloride policy versus the \$15,000 penalty for the same violation under the VHAP policy) the vinyl chloride penalty policy should be applied.

The preliminary deterrence amount for VHAP cases, as for other stationary source cases, consists of a gravity component and a benefit component. Adjustments for degree of willfulness or negligence, degree of cooperation, history of noncompliance, ability to pay, litigation practicalities, and "other unique factors" should be made, if appropriate, in accordance with the Stationary Source Civil Penalty Policy. Additionally, adjustments may be considered because a company's VHAP/VOC emissions or potential emissions are more serious in a nonattainment area for ozone. Reporting penalties could be adjusted depending on the number of VHAP sources, that is, whether a plant has few or numerous valves and pumps.

The gravity component of the penalty reflects the seriousness of the violation. A separate scheme has been developed for VHAP cases partly because the economic benefit component may be difficult to determine, although if the economic benefit can be calculated, it should be. In addition, several factors in the general policy, such as the level of violation as a percentage above the standard, do not directly apply to VHAP cases. The hazardous nature of VHAPs is reflected in establishing a substantial gravity component.

The attached chart addresses six major types of requirements in the VHAP standard:

1) Reporting. A source is required to submit initial and semiannual reports which include, among other things, a listing of equipment in VHAP service, records of leaks from certain pieces of equipment and repairs of leaks, and results of performance tests.

2) Monitoring, inspection, and testing. The standard includes four types of such requirements: annual testing, such as testing from certain requirements, under §61.242-2(e)(3); monthly monitoring, such as monitoring of valves under §61.242-7(a); weekly inspection, such as visual inspection of a pump under §61.242-2(a)(2); and daily checking, such as checking a sensor on a compressor seal system under §61.242-3(e)(1).

3) Repair of leaks. The standard generally requires that a source, upon detection of a leak from regulated equipment, make a first attempt at repair within 5 calendar days of detection and complete the repair as soon as practicable but not later than 15 calendar days after detection. Since violations of these requirements appear to present the greatest potential for emissions of VHAPs, the associated penalties are substantial.

4) Equipment standards. Certain pieces of equipment must comply with requirements that specify that they be equipped with certain devices, sometimes as an alternative to another standard. For example, a compressor must be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, with certain exceptions, in accordance with §61.242-3(a). One allowable alternative is that the compressor be equipped with a closed-vent system capable of capturing and transporting any leakage to a control device, in accordance with §61.242-3(h). Another example is open-ended valves which must be capped or otherwise secured.

5) Recordkeeping. A source must keep records of a number of items, including leaks and attempts to repair leaks, design parameters of certain equipment, and dates of startups and shutdowns of closed-vent systems and control devices.

6) Marking equipment - Equipment in VHAP service must be tagged and leaking equipment must be separately or additionally tagged.

The chart assigns a gravity component for each violation. For equipment standards, noncompliance with respect to each piece of affected equipment (e.g., pump, compressor, etc.) constitutes a separate violation for purposes of this policy. For monitoring, inspection, and testing provisions, noncompliance with respect to each requirement (e.g., monthly monitoring of pumps, monthly monitoring of valves) constitutes a separate violation. Do not count each pump or valve as a separate violation if not monitored. The gravity component for the case as a whole is the sum of the numbers associated with all the violations in the case.

Type of Volation

Penalty

REPORTING

Initial Report

Failure to submit initial report for new or existing source	\$25,000
Late submission of initial report	\$500/day up to \$25,000
On-time but incomplete initial report. Estimate percentage of information missing. If missing information submitted without prompting \$400/day, up to the figure calculated above	\$25,000 x % of infor- mation missing

Semi-annual Reports

Failure to submit semiannual report	\$15,000 per report
Late submission of semiannual report [If submitted only in response to prompting by EPA or delegated agency, regard as failure to submit report]	\$150/day up to 15,000 per report
On-time but incomplete semiannual report - estimate percentage of information missing. If missing information submitted without prompting by the government \$125/day up to the figure calculated above.	\$15,000 x % of infor- mation missing

Type of Violation

Penalty

Non-response

Failure to respond to prompting  
(written requests) regarding reports

\$25,000

MONITORING, INSPECTION, AND TESTING

Annual requirement

\$10,000 + \$250/day up  
to \$25,000 total

Monthly requirement

\$5,000 + \$250/day (up  
to \$7500 total for  
missed month)

Weekly requirement

\$500 + \$150/day up to  
\$1500 total for  
missed week

Daily requirement

\$100/day for each day  
missed for first  
10 daily inspections  
missed.

\$500/day for each daily  
inspection missed  
thereafter.

For any monitoring,  
inspection or testing  
timely performed, but  
performed incorrectly,  
assess 50% of the  
above penalties

REPAIR OF LEAKS

Failure to make first attempt  
at repair within specified time

\$5000/day up to \$25,000  
per leak

Failure to complete repair within  
specified time

\$5000/day up to \$25,000  
per leak

Violations of alternative standards  
for valves in VHAP service  
pursuant to 40 CFR §61.243

\$5000/day up to \$25,000

Type of Violation

Penalty

EQUIPMENT STANDARDS

Failure to equip with required device

\$15,000 per item inade-  
quately equipped

RECORDKEEPING

Failure to keep records in logs  
pursuant to 40 C.F.R. §61.246  
for period associated with  
semiannual report

\$25,000 per semiannual  
period

Incomplete records - estimate per-  
centage of information missing

\$25,000 per semiannual  
period x % of infor-  
mation missing

FAILURE TO MARK (TAG) EQUIPMENT

Mark equipment in VHAP service

\$100/day per piece of  
equipment up to  
\$5,000

Mark leaking equipment

\$500/day per piece of  
equipment up to  
\$5,000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

PN 113-87-10-08-044

October 8, 1987

MEMORANDUM

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE MONITORING

SUBJECT: Policy on Correcting the Condition Giving Rise to  
Listing Under the Contractor Listing Program

FROM: Thomas L. Adams, Jr.  
Assistant Administrator for Enforcement  
and Compliance Monitoring

TO: Assistant Administrator for Air and Radiation  
Assistant Administrator for Water  
General Counsel  
Inspector General  
Regional Administrators, Regions I-X  
Regional Counsels, Regions I-X

ISSUE PRESENTED: What constitutes correcting the condition  
giving rise to listing within the meaning of 40 CFR §§15.20 and  
15.21.

BACKGROUND: The Environmental Protection Agency (EPA) is provided authority under §306 of the Clean Air Act (CAA), 42 U.S.C. §7606, §508 of the Clean Water Act (CWA), 33 U.S.C. §1368, Executive Order 11738 and 40 CFR Part 15 (49 Fed. Reg. 30628) to prohibit any facility owned, leased or supervised by a person convicted of violating §113(c)(1) of the Clean Air Act, 42 U.S.C. §7413(c)(1), or §309(c) of the Clean Water Act, 33 U.S.C. §1319(c), or found to be a source of continuing or recurring CAA or CWA violations despite previous enforcement actions, from receiving any federal contract or subcontract. The prohibition against the use of such facilities continues in the case of a listing action resulting from a criminal conviction "until the Administrator certifies that the condition giving rise to such conviction has been corrected." 42 U.S.C. §7606, 33 U.S.C. §1368.

This statutory requirement is implemented by regulations requiring the Assistant Administrator for Enforcement and Compliance Monitoring, as delegatee of the Administrator, to certify that the condition giving rise to listing has been corrected, see 40 CFR §§15.20 and 15.21(a)(2), before a facility may be removed

from the EPA List of Violating Facilities (the List).<sup>1</sup> However, the statute and its legislative history provide no definitive guidance on how that phrase should be interpreted, and the question is not addressed in the regulations. The legislative histories of the Clean Water Act and Clean Air Act provide that a purpose of the contractor listing program is to ensure that "the Federal Government will not patronize or subsidize polluters through its procurement practices and policies." S. Conference Rep. No. 1236 (to accompany S. 2770, the senate version of the Clean Water Act), 92nd Congress, 2d Session, reprinted in 1972 U.S. Code Cong. & Ad. News 3776, 3824. The regulations provide:

"It is the policy of the Federal Government to improve and enhance environmental quality. This regulation is issued to ensure that each agency in the Executive Branch of the Federal Government that is empowered to enter into contracts for the procurement of goods, materials or services or to extend Federal assistance by way of grant, loan, or contract undertakes such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act...and the Clean Water Act...and does not favor firms where production costs may be lower due to noncompliance." 40 CFR §15.1.

In addition to the policies cited above, implementation of the contractor listing program should be carried out in a manner that achieves the following three goals: (1) compliance with environmental regulations and swift resolution of environmental problems; (2) fair and equitable treatment of the regulated community; and (3) deterrence. Furthermore, the administrative challenges associated with the program can be exacerbated or

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<sup>1</sup> The Contractor Listing Program is composed of two parts: (1) mandatory listing pursuant to 40 CFR §15.10 which occurs automatically upon conviction under §113(c)(1) of the Clean Air Act or §309(c) of the Clean Water Act and (2) discretionary listing pursuant to 40 CFR §15.11 based on continuing or recurring noncompliance with clean air or clean water standards despite previous enforcement actions. A facility listed under the mandatory listing program may only obtain removal from the list on the basis of correcting the condition which gave rise to listing. A facility listed under the discretionary listing program may be removed from the List by correcting the condition giving rise to listing as well as other means. Except where otherwise indicated, the policies contained in this document apply to requests for removal following mandatory or discretionary listing.

reduced depending on the procedures EPA follows to determine if a facility is entitled to removal from the List.<sup>2</sup>

**PURPOSE:** Two approaches have been proposed for defining what would be necessary to certify that the condition giving rise to listing has been corrected and grant a facility's request for removal from the List following mandatory or discretionary listing. The Physical Correction Approach defines correcting the condition giving rise to listing as requiring the facility to come into compliance with the statutory and regulatory provisions whose violation led to listing. The Scheduled Correction Approach defines correcting the condition giving rise to listing as requiring the facility to be subject to an independently enforceable agreement to perform all corrective action in accordance with a schedule for compliance established by EPA.

EPA has not formally adopted any definition of what constitutes correcting the condition giving rise to listing. To date, the listing program has generally required Physical Correction in determining whether a facility is entitled to be removed from the List. However, the approaches identified in this policy document are not mutually exclusive. Formal adoption of the Physical Correction Approach and Scheduled Correction Approach would give EPA greater flexibility in carrying out the contractor listing program and will better permit EPA to achieve its broader goals of enhancing compliance and improving the environment.

The purpose of this policy document is to present these two approaches, identify the rationale supporting each approach, establish criteria for applying each, and identify four nonexclusive mechanisms for meeting the requirements of the second approach. The policies established in this policy document would apply to requests for removal filed following mandatory or discretionary listing.

**CRITERIA:** Any definition of what is necessary to certify that the condition giving rise to mandatory listing has been corrected must provide for the following:

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<sup>2</sup> As the legislative history to §508 of the Clean Water Act acknowledged: "The effectiveness of this section would depend on fast, accurate dissemination of information. All Federal agencies would have to be rapidly apprised of any abatement order or conviction which would bar a facility from eligibility for Federal contracts. The Administrator would also have to act expeditiously to certify that a facility had achieved compliance, and notify all Federal agencies of that fact. Delays in reporting such information, leading to inaccurate public disclosures, would quickly render this section unworkable." S. Rep. No. 414 (to accompany S. 2770, the senate version of the Clean Water Act), 92nd Congress, 2d Session, reprinted in 1972 U.S. Code Cong. & Ad. News 3668, 3749-3750.

- Enforceability - There must be adequate incentives for the facility to correct the condition and there must be an efficient means for EPA, at its sole discretion, to enforce the requirement to take corrective action.
- Verifiability - There must be sufficient credible and verifiable information generated by a source other than the violator to permit EPA to make an independent judgment that the condition has been corrected.
- Certainty - There must be sufficient assurance that the facility will be in compliance with the statutory and regulatory requirements associated with the conviction to permit the Assistant Administrator for Enforcement and Compliance Monitoring to certify that the condition that gave rise to listing has been corrected.
- Certification by the Violator - A responsible executive of the facility must certify, subject to the sanctions of 18 U.S.C. §1001, that the condition has been corrected.

The two approaches, and the manner in which they meet these criteria, are described below.

PHYSICAL CORRECTION APPROACH: In order to correct the condition that gave rise to listing, a facility must demonstrate that it is presently in compliance with the specific statutory and regulatory requirements which were the subject of the criminal conviction or judicial order in the underlying criminal or civil enforcement action.

Discussion: The Physical Correction Approach would require a listed facility to come into compliance with the statutory and regulatory requirements whose violation led to listing before a request for removal would be granted. This approach provides enforceability by conditioning removal from the List on the completion of all corrective action. Verifiability is provided through an inspection of the facility by EPA, the state or an independent, credible third-party. Certainty that the facility will be in compliance with the statutory and regulatory requirements associated with the violation is ensured since compliance must be demonstrated before the request for removal is granted. Finally, an officer of the facility will be required to submit a written statement, subject to the criminal sanctions provided by 18 U.S.C. §1001, certifying that all corrective action has been completed before removal is granted.

SCHEDULED CORRECTION APPROACH: In order to correct the condition that gave rise to mandatory listing, a facility must be subject to an independently enforceable obligation to take all steps necessary to bring the facility into compliance with the specific statutory and regulatory requirements which were the subject of the criminal conviction or judicial order in the underlying criminal or civil enforcement action and to carry out any addi-

tional corrective action which EPA may identify. During the period that the facility is engaged in scheduled correction, it must use reasonable interim control practices identified by EPA to reduce discharges. If the facility fails to come into compliance according to the schedule set by EPA, the Agency, at its sole discretion, may automatically place the facility back on the List.

Discussion: The Scheduled Correction Approach would permit EPA to grant a facility's request for removal from the List if the facility's future compliance is ensured by an appropriate independently enforceable obligation to carry out the necessary corrective action identified by EPA. It allows earlier removal from the List with compliance ensured by an enforceable obligation other than the listing sanction plus EPA's right to automatically relist the facility immediately on the basis of the Agency's determination that the facility has not met the compliance schedule.

This approach can be implemented using alternative mechanisms which impose an independently enforceable obligation on the facility to complete all corrective action. Four nonexclusive options for implementing this approach are described below. This policy does not prefer the use of one mechanism over another and no inference should be drawn from the order in which the options are listed. EPA retains the sole discretion to grant removal under the Scheduled Correction Approach and the sole discretion to determine which mechanism can be used to meet the requirements of the Scheduled Correction Approach in each case.

CONSENT DECREE MECHANISM: If a facility is subject to a judicially enforceable federal or state consent decree containing an acceptable compliance schedule and the facility acknowledges EPA's right to automatically place it back on the List for failing to meet that schedule, EPA will have sufficient assurance of the facility's future compliance to certify that the condition giving rise to mandatory listing has been corrected.

Discussion: The contempt power of the court and EPA's right to automatically relist the facility provide the means for enforcing the facility's obligation under the consent decree to complete corrective action. The court's contempt powers and EPA's relisting rights also provide certainty that all corrective action will be accomplished. Verifiability is provided through an appropriate inspection and an officer of the facility must submit a written statement, subject to 18 U.S.C. §1001, certifying that all corrective action has been taken before EPA will join in a motion to dissolve the consent decree. If the consent decree is modified without EPA approval, the Agency will not be bound by the modification and will retain the right to relist the facility according to the terms originally agreed upon by EPA.

**PROBATION ORDER MECHANISM:** If, in cases involving a criminal conviction, an acceptable compliance schedule is included in the probation order issued by the court and the facility acknowledges EPA's right to automatically place it back on the List for failing to meet that schedule, EPA will have sufficient assurance of the facility's future compliance to certify that the condition giving rise to mandatory listing has been corrected.

**Discussion:** The contempt power of the court and EPA's right to automatically relist the facility provide the means for enforcing the defendant's obligation to complete the corrective action embodied in the court's probation order and provide certainty that all corrective action will be completed. Verifiability is provided by inspections to determine if the defendant is complying with the terms of probation and the defendant or an appropriate officer of the facility must submit a written statement, subject to 18 U.S.C. §1001, or make an oral statement in open court while subject to sanctions for false statement equivalent to 18 U.S.C. §1001, certifying that all corrective action has been taken before the defendant is released from probation. If the terms of probation are modified without EPA approval, the Agency will not be bound by those modifications in carrying out the listing program and will retain the right to relist the facility according to the terms originally agreed upon by EPA.

**ADMINISTRATIVE ORDER PLUS PERFORMANCE GUARANTEE MECHANISM:** If a facility is subject to a federal or state Administrative Order that contains an acceptable compliance schedule, the facility provides an acceptable performance guarantee and the facility acknowledges EPA's right to automatically place it back on the List for failing to meet the compliance schedule, EPA will have sufficient assurance of the facility's future compliance to certify that the condition giving rise to mandatory listing has been corrected.

**Discussion:** This approach provides enforceability through judicial enforcement of the administrative order and EPA's right to automatically relist the facility. Certainty that the corrective action will be completed is provided by a performance guarantee, such as a performance bond, that makes a third party responsible for completing the corrective action identified in the administrative order. Verifiability is provided through appropriate inspections and an officer of the facility will be required to submit a written statement, subject to 18 U.S.C. §1001, certifying that all corrective action has been completed before the administrative order will be dissolved. If the administrative order is modified without EPA approval, the Agency will not be bound by those modifications in carrying out the listing program and will retain the right to relist the facility according to the terms originally agreed upon by EPA.

PERMIT AUTHORITY MECHANISM: If a compliance schedule is included in a permit issued by EPA or the State, the facility provides an acceptable performance guarantee, and the facility acknowledges EPA's right to automatically place it back on the List for failing to meet the compliance schedule, EPA will have sufficient assurance of the facility's future compliance to certify that the condition giving rise to mandatory listing has been corrected.

Discussion: Enforceability is provided through the ability to rescind the permit and relist the facility. Certainty is provided through the performance guarantee. Verifiability is ensured through the normal regulatory inspection schedule. An officer of the facility will be required to submit a written statement, subject to 18 U.S.C. §1001, certifying that the corrective action has been completed before EPA will modify the permit to terminate EPA's right to relist the facility. If the permit is modified without EPA approval, the Agency will not be bound by those modifications in carrying out the listing program and will retain the right to relist the facility according to the terms originally agreed upon by EPA.

APPLICABILITY: The policies and procedures established in this document are intended solely as guidance for government personnel. They are not intended, and cannot be relied upon, to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. EPA reserves the right to act at variance with these policies and procedures and to change them at any time without public notice.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 31 1987

MEMORANDUM

SUBJECT: Guidance on Evaluating Clean Air Act Enforcement of  
State Implementation Plan Violations Involving Proposed  
State Revisions

FROM: Michael S. Alushin *Michael S. Alushin*  
Associate Enforcement Counsel for Air  
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: See Below

In light of the Fifth Circuit's decision in American Cyanamid which interpreted State Implementation Plan ("SIP") revision processing requirements, we are providing some criteria for you to consider when deciding on appropriate enforcement responses where SIP revisions are pending. This guidance also suggests how the Regions should apply the criteria in developing enforcement cases. Some of the criteria involve a straightforward application of facts; other criteria involve the application of variable equitable considerations to the unique circumstances of each case. We have attached a case evaluation form for your assessment of each case. The format is designed to allow us to assess national trends in SIP revisions. Please evaluate the facts of individual cases based on the criteria, then complete and include the form with all litigation reports in SIP enforcement cases.

Background

Section 110 of the Clean Air Act requires each state to prepare a SIP for the attainment and maintenance of National Ambient Air Quality Standards, and to submit the SIP to EPA for approval. The Administrator is required by Section 110(a)(2) to

act on initial submissions within four months. Section 110(a)(3) provides the procedure for EPA action on SIP revisions, but has no similar explicit deadline for EPA action. As discussed more fully below, three federal circuit courts have concluded that the four-month deadline applicable to initial SIP submissions impliedly applies to SIP revisions. The Sixth Circuit has suggested that this time limitation does not apply to SIP revisions.

The Act also authorizes the Administrator to initiate enforcement proceedings against any person in violation of any requirement of an applicable SIP, i.e., the implementation plan, or the most recent revision thereto, which has been approved by EPA. Two federal circuit courts have limited Section 120 enforcement when final EPA action on a SIP revision has been pending for more than four months. However, the Northern District of California held that it lacked subject matter jurisdiction and refused to rescind notices of violation although a SIP revision had been pending at EPA for more than four months.

EPA currently reviews approximately 150 to 200 SIP revisions each calendar year. The review of each of these revisions routinely requires more than four months to complete. Under EPA's current workload model, a final SIP revision decision is scheduled to be published within 14 months of submission. In fact, however, less than 50% of these revisions are processed within fourteen months, and some revisions have taken four to five years to process. Although delays have often resulted from the submission by states of incomplete SIP revision packages, internal delays at EPA also affect the timing. Additionally, OMB review of proposals to disapprove submitted revisions may cause further delays in the process.

We recently evaluated the extent to which pending SIP revisions are affecting enforcement. In a preliminary July, 1987 survey of active civil judicial SIP actions (i.e., cases which had been referred and filed other than those where a consent decree had been entered by a court), 44 of the 81 cases were found to be affected by SIP revisions pending at EPA or revisions promulgated by states pursuant to alleged generic SIP revision authority and not submitted for EPA review. The numbers may change with further investigation of the circumstances pertaining to each revision, but it seems that a substantial proportion of the cases are affected.

Even if EPA takes administrative steps to streamline and further standardize the SIP review process, or if Congress passes legislation extending the current statutory time period, cases will continue to be affected by pending SIP revisions. The Agency's workload can be expected to increase as a result of



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

NOV 23 1987

MEMORANDUM

SUBJECT: Settling Enforcement Actions in Clean Air Act  
Nonattainment Areas Against Stationary Air Sources  
Which Will Not Be In Compliance By The Applicable  
Attainment Date

FROM: Thomas L. Adams, Jr. *Thomas L. Adams, Jr.*  
Assistant Administrator for Enforcement  
and Compliance Monitoring

J. Craig Potter  
Assistant Administrator  
for Air and Radiation *J. Craig Potter*

TO: Addressees

This memorandum lists special factors to be considered, and requirements to be imposed, in settling enforcement actions in Clean Air Act nonattainment areas against sources that will not be in compliance by the applicable attainment date. These requirements apply where the source is violating emission limitations for the pollutant(s) for which the area has been designated nonattainment. These requirements, which supplement those of other general policy, are appropriate because these sources are continuing to illegally contribute to the nonattainment status of the area after the date that attainment was supposed to have been reached. The policy observes that shutdown by the specific attainment date may be the appropriate relief in some cases, but lists factors and requirements in considering whether an expeditious compliance schedule going beyond the attainment date may be appropriate in others.

This memorandum affects actions under Section 113(b) of the Clean Air Act in nonattainment areas where the area was to have attained by December 31, 1982. It supersedes the September 20, 1982 policy titled "Enforcement Action Against Stationary Air Sources Which Will Not Be In Compliance By December 31, 1982." It also applies to those sources in areas which are projected to, but will fail to, reach attainment by December 31, 1987. Finally, the policy applies to areas with attainment dates set beyond December 31, 1987 which pass without attainment. No such areas in the last category currently exist but we expect that new attainment dates will be set for certain areas.

## Legal Issues

The Clean Air Act requires areas to plan for attainment of the primary ambient air quality standards for criteria pollutants (e.g. ozone, carbon monoxide, sulfur oxides, particulate matter) by December 31, 1982. Certain ozone and carbon monoxide nonattainment areas received extensions until December 31, 1987 pursuant to Section 172 of the Act. Many sources are unlikely to achieve timely compliance by even this later date. Sources which are out of compliance beyond the attainment date in a nonattainment area not only violate the specific state regulation but also contribute to the area's continuing nonattainment status. This contribution becomes an important factor to consider in enforcement efforts against these sources.

Our view that a shutdown of the source is not necessarily mandatory in all cases is based on the view that a district court generally has equity power to fashion relief that allows a source in violation of an environmental statute to continue in operation while taking steps to come into compliance.<sup>1/</sup> The Supreme Court has been careful to point out that the full scope of the courts' discretion should be recognized in the absence of Congressional intent to the contrary.<sup>2/</sup> Our review of the Clean Air Act and the legislative history convinced us that Congress did not intend to limit the courts' traditional discretion and thus depart from established principles. Of course, some courts may decide, independent of EPA's view, to shut a source down. Recognizing that a court may or may not accept EPA's recommendation, this policy sets forth criteria to determine the specific equitable relief the Agency should seek in such cases.

<sup>1/</sup> Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982). See also Amoco Production Co. v. Village of Gambell, No. 85-1239, slip op. at 9 and 10 (U.S.S.C. March, 1987).

<sup>2/</sup> Congress did limit the district courts' equitable power regarding sources which had obtained relief under the Steel Industry Compliance Extension Act of 1981 ("SICEA"). EPA has always argued that the December 31, 1985 deadline in that Act is absolute except in a few very limited situations involving force majeure. That position was recently supported by dictum in U.S. v. Wheeling Pittsburgh, No. 86-3456, slip op. at 15 (3rd Cir. May 18, 1987), where the court stated, "It is evident therefore from the language of the statute and its legislative history that Congress placed great significance on the [SICEA] compliance dates and intended to limit, if not entirely eliminate, the district courts' equitable discretion to extend compliance."

### Threshold Criteria To Evaluate Extension of Non-Compliance

As a general rule, the goal of any EPA enforcement action against a source in a primary nonattainment area is to bring the source into compliance as expeditiously as possible, but no later than the approved attainment date. EPA will not recommend entry of a consent decree that allows the source to remain in operation and out of compliance beyond the attainment date unless, at a minimum, all of the following threshold criteria are met: 1) the source must be unable to comply by the attainment date other than by shutdown, 2) the source must demonstrate that there is a public interest in its continued operation which outweighs the environmental cost of an additional period of noncompliance, 3) if there is any doubt about the source's financial condition, the source must demonstrate that it will have sufficient funds to be able to comply expeditiously, and 4) the source must be, and must have been, undertaking good faith efforts to comply.

The following is a more complete discussion of each of the criteria.

#### Criterion 1 - Inability to Comply by Attainment Date

This evaluation must conclude that the source is physically unable to install controls by the attainment date. This conclusion should be fully documented. Financial constraints which prevent a company from moving quickly to comply should not play a role here.

#### Criterion 2 - Public Interest and Environmental Costs

The determination of public interest must be made on a case-by-case basis and should include consideration, at a minimum, of the type of business, the magnitude of excess emissions, the amount of time needed to comply, the public service nature of the source (e.g. hospitals, electric utilities), the adverse public consequences which would result from closure (e.g., significant unemployment impact), and the impact on public health and welfare. The burden is on the source to provide information on the benefits of its continued operation and to show that those benefits outweigh the environmental cost of an additional period of noncompliance. We expect that in some cases the Agency will not find the public benefit sufficient and will not agree to continued operation beyond the attainment date based on this criterion.

### Criterion 3 - Financial Condition of Source

Regional Administrators should exercise judgment to determine whether sufficient uncertainty exists as to the healthy financial status of the source to warrant a detailed economic analysis. This analysis should determine whether the source can pay for the pollution control equipment. Headquarters has the technical support, primarily through its "ABEL" computer model, to assist in making this determination. The lack of ability to pay for the pollution control equipment in this case will not merely affect the penalty requested by EPA but should result in the shutdown of the source. If a source is not financially able to complete an expeditious control program, then it should not be allowed to operate with excessive emissions in a nonattainment area. Expeditious compliance is a key requirement for continued operation.

### Criterion 4 - Prior Good Faith Efforts To Comply

Finally, you must determine whether the source has been and is currently undertaking good faith efforts to comply with applicable emissions standards. In most cases, the sources have been aware of the state requirements for a number of years and so "good faith" must be manifested by actual efforts that have been reasonably effective. Although in some cases there may be an overriding interest in continued operation of the source under an expeditious compliance schedule, generally a prior history of disregard for environmental obligations should militate against further extensions.

We wish to emphasize that this policy should not be seen a general invitation to renegotiate consent decrees. Sources which have already made a commitment, in the settlement of an enforcement action, to come into compliance by the attainment date or sooner should be required to do so unless the relevant circumstances clearly and convincingly warrant a modification. In cases where a consent decree already exists, EPA should file a contempt action if the source is violating the terms of the existing decree.

### Specific Requirements for a Consent Decree Allowing Post-Attainment Date Compliance

The terms of general policy on consent decrees must be followed.<sup>1/</sup> In addition, the Agency should insure, at a minimum, that the decree incorporates the following elements (some of which are listed to reemphasize certain of the general policy requirements).

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<sup>1/</sup> This guidance titled "Guidance For Drafting Judicial Consent Decrees," issued on October 19, 1983, is GM #17 in the General Enforcement Policy Compendium of the Office of Enforcement and Compliance Monitoring.

1) The source commits to comply with requirements for at least Reasonably Available Control Technology ("RACT") if no Part D plan is in force where one is required. The consent decree should indicate that RACT limitations acceptable to EPA remain in effect and that the court retains jurisdiction to enforce this provision until such time as a Part D plan satisfying the requirements of Section 172 is approved by EPA and becomes effective. Then the source may apply to the Court for a modification of the decree to conform with the approved requirements..

2) The compliance schedule contains enforceable increments of progress.

3) The consent decree requires interim emission limitations and controls to the extent possible. Emission reductions, while not mandated in every case, should be required where possible.

4) The consent decree includes monitoring requirements.

5) The consent decree includes reporting requirements, including timely reporting to EPA of the completion of each increment in the schedule.

6) The consent decree provides for stipulated penalties. At a minimum, these penalties should apply to failure to implement interim controls, failure to meet increments of progress in the compliance schedule, and failure to demonstrate final compliance.

7) The consent decree contains provisions preventing increases of emissions from the source. However, production increases may be allowed so long as emissions per unit of production are decreased. This will allow a company to respond to increased business while at the same time providing an additional incentive to reduce emissions.

8) The consent decree requires payment of a significant cash civil penalty. The general Clean Air Act Stationary Source Civil Penalty Policy ("Penalty Policy") of course applies.<sup>3/</sup> The fact that the area is nonattainment beyond the attainment date should be viewed as an aggravating factor under Section III.E. of the Penalty Policy and should result in a higher gravity component.

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<sup>3/</sup> The current "Penalty Policy" was issued March 25, 1987 and will replace the policy issued September 12, 1984 found at V(Y) in the Clean Air Act Compliance/Enforcement Guidance Manual -- Compendium of Operative Policies.

9) The consent decree explicitly reserves the right to seek further injunctive relief, including shutdown of the facility, if the source does not comply with the order.

10) Source compliance extensions beyond the attainment date are not allowed for sources which a company does not intend to control. The CAA requires expeditious shutdown of these sources.<sup>4/</sup> Expeditious shutdown applies only if the company is not building a replacement facility. If the company is replacing the existing unit and commits to commencing and completing construction of the new facility as expeditiously as practicable, then EPA may agree to delay shutdown of the violating source until the replacement facility is constructed and operable, provided that the other criteria in the "shutdown" policy and this policy are met. In implementing this approach the Region will need to consider the effect of any Clean Air Act sanctions which may limit construction of new facilities in the area.

11) Compliance through use of low-solvent technology is still governed by the August 6, 1986 "Policy on the Availability of Low-Solvent Technology Schedules in Clean Air Act Enforcement Actions," except that the statement in that policy requiring compliance by the end of 1987 is modified by the present policy.

#### Deferral to State Action

The principles set forth in this memorandum should also be used in conjunction with "timely and appropriate" guidelines to evaluate the adequacy of state administrative or judicial enforcement action addressing these sources.<sup>5/</sup>

<sup>4/</sup> See the "Clean Air Act Enforcement Policy Respecting Sources Complying By Shutdown," issued November 27, 1985 found in the Clean Air Act Compliance/Enforcement Guidance Manual-- Compendium of Operative Policies at Part I (L).

<sup>5/</sup> See "Guidance on 'Timely and Appropriate' EPA/State Enforcement Response for Significant Air Violators" issued June 28, 1984 found in the Clean Air Act Compliance/Enforcement Guidance Manual -- Compendium of Operative Policies at Part I(I).

Addressees:

Regional Administrators  
Regions I-X

Deputy Regional Administrators  
Regions I-X

Regional Counsel  
Regions I-X

Regional Counsel Air Contacts  
Regions I-X

Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air and Toxics Division Directors  
Regions VII, VIII and X

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 23 1987

MEMORANDUM

SUBJECT: Review of State Implementation Plans and Revisions  
for Enforceability and Legal Sufficiency

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation

Thomas L. Adams Jr.  
Assistant Administrator for Enforcement  
and Compliance Monitoring

Francis S. Blake  
General Counsel  
Office of General Counsel

TO: Addressees

One critical function that your offices perform is to assure that regulations developed for stationary sources by the States under the Clean Air Act are enforceable and legally sufficient. Our regulations require that the state implementation plans ("SIPs") must "be adopted as rules and regulations enforceable (emphasis added) by the State agency" (40 C.F.R. §51.281 (1987)). We are concerned that review of SIPs for enforceability has not been receiving adequate attention. The Agency sometimes experiences difficulties in its efforts to enforce the current rules because they are not sufficiently clear. The Regional Offices are at the forefront of the federal SIP approval process. The purpose of this memorandum is to remind you of the importance of doing the review necessary to assure that all SIP plans and revisions are enforceable and in conformance with the Act. Please do not forward for approval SIPs which fail to satisfy the enforceability criteria in this memorandum.

Background

Recent information indicates that the attention being paid to SIP approvals is declining, particularly for enforceability. The Office of General Counsel reviews regulations as to their adequacy under applicable law and Agency policy, but not for enforceability. This void is not being filled by other offices. Often, the problems with enforcing the regulations are not immediately obvious and only become known where a case or issue focuses on the particular regulation. At the October 1986

Annapolis meeting of Air Program Directors and Regional Counsel Air Branch Chiefs, a number of problems in recent enforcement cases due to difficulty in interpreting and enforcing regulations were discussed. With the recent work being done to address the nonattainment problem, it is even more critical that regulations be clear and enforceable.

It is appropriate that the Regional air compliance staff and the Regional Counsel's Office have primary responsibility for this enforceability review because they have the most direct experience in compliance and rule interpretation. They also have resources allocated through their workload models specifically for SIP review.

#### Timing of Review

The Regions should try to review developing State SIP provisions prior to final approval by the State, when the provisions are at their most malleable stage. In line with this, each Region should provide its States with a copy of the implementing guidance associated with this memorandum and a briefing which outlines the enforceability requirements for new SIP submittals. If we provide the States with more explicit guidance and make earlier contacts to resolve problems, we can avoid instances where EPA is pressured to settle for a flawed regulation only because it is better than its predecessor.

#### Enforceability Criteria

Your review should ensure that the rules in question are clearly worded and explicit in their applicability to the regulated sources. Vague, poorly defined rules must become a thing of the past. SIP regulations that deviate from this policy are to be disapproved pursuant to Section 110(a) of the Clean Air Act, with appropriate references in the C.F.R. Specifically, we are concerned that the following issues be directly addressed. The rule should be clear as to who must comply and by what date. The effect, if any, of changed conditions (e.g., redesignation to attainment) should be set forth. The period over which compliance is determined and the relevant test method to be used should be explicitly noted. Provisions which exempt facilities under certain sizes or emission levels must identify explicitly how such size or level is determined. Also, provisions which allow for "alternate equivalent techniques" or "bubbles" or any other sort of variation of the normal mode of compliance must be completely and explicitly defined and must make clear whether or not EPA case-by-case approval is required to make such a method of compliance federally effective.

Conclusion

SIP revisions should be written clearly, with explicit language to implement their intent. The plain language of all rules, as well as the related Federal Register notices, should be complete, clear and consistent with the intended purpose of the rules. Specific review for enforceability will be a further step in improving the overall SIP process and structure.

We have attached detailed guidance to assist you in implementing this memorandum.

Attachment

Addressees:

Regional Administrators  
Regions I-X

Regional Counsels  
Regions I-X

Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

cc: Deputy Regional Administrators  
Regions I-X

Regional Counsel  
Air Contacts  
Regions I-X

Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI, IX

Air Program Branch Chiefs  
Regions I-X

Darryl Tyler, Director  
Control Programs Development Division

Gerald Emison, Director  
Office of Air Quality Planning and Standards

-4-

cc: John S. Seitz, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Alan W. Eckert  
Associate General Counsel  
Air Division

Michael S. Alushin  
Associate Enforcement Counsel  
Air Enforcement Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 23 1987

MEMORANDUM

SUBJECT: Review of State Implementation Plans and Revisions  
for Enforceability and Legal Sufficiency

FROM: Michael S. Alushin *M. S. Alushin*  
Associate Enforcement Counsel  
for Air Enforcement

Alan W. Eckert *Alan W. Eckert*  
Associate General Counsel  
Air and Radiation Division

John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Addressees

This is to provide implementing guidance on the memorandum issued by J. Craig Potter, Thomas Adams and Francis Blake on this date relating to review of SIP plans and revisions for enforceability and legal sufficiency. We urge you to provide copies of these memoranda to your State Agency Directors.

Applicability

This guidance applies to all SIP proposals which have not completed the state or local agency legal and procedural requirements for SIPs. For proposals that have not yet been submitted to the Regional office for action, the state and local agencies have forty-five (45) days from the date of this guidance to submit such proposals for review in order for the proposal to be considered under previous procedures. SIP packages currently in Headquarters will undergo the usual review but will be returned to the Regions if they contain deficiencies which raise significant questions as to whether the regulation would be enforceable.

Enforceability Criteria

The notion of enforceability encompasses several concepts. At the most basic level, a regulation must be within the statutory authority of the promulgating agency. For example, some states have statutory restrictions or prohibitions on the promulgation of regulations more restrictive than the federal counterpart.

Although we should generally defer to a State's interpretation of the scope of its authority, when there is real doubt we should, at a minimum, consult the responsible State Attorney to be certain the issue has been considered and resolved. When appropriate, an opinion letter should be obtained from the State Attorney General.

Please ensure that the following additional issues are directly addressed.

- ° Applicability

It should be clear as to whom the regulation applies. The SIP should include a description of the types of affected facilities. The rule should also state in which areas the rule applies (entire state, specific counties, nonattainment, etc.) and advise the reader that State administrative changes require a formal SIP revision. Also, some regulations might require a certain percentage reduction from sources. The regulation should be clear as to how the baseline from which such a reduction is to be accomplished is set. In some cases it may be necessary for enforcement purposes and independent of Clean Air Act requirements for the SIP to include an inventory of allowable and actual emissions from sources in the affected categories in order to set the above baseline.

- ° Time

The regulation should specify the required date of compliance. Is it upon promulgation, or approval by EPA, or a future date certain? Future effective dates beyond the approved or proposed attainment date should not be allowed unless the related emissions reductions are not needed for attainment. Also, the regulation should specify the important dates required of any compliance schedule which is required to be submitted by the source to the state.

- ° Effect of Changed Conditions

If changed circumstances effect an emission limit or other requirement the effect of changed conditions should be clearly specified. However, you should not approve state regulations which tie the applicability of VOC control requirements to the nonattainment status of the area and allow for automatic nullification of the regulations if the area is redesignated to an attainment status. Such regulations should continue to apply if an area is redesignated from nonattainment to attainment status unless a new maintenance demonstration supporting a change in the rule's applicability is submitted and approved by EPA.

° Standard of Conduct

The regulation must be sufficiently specific so that a source is fairly on notice as to the standard it must meet. For example, "alternative equivalent technique" provisions should not be approved without clarification concerning the time period over which equivalency is measured as well as whether the equivalency applies on a per source or per line basis or is facility wide.

° Incorporation by Reference

Some federal regulations are inappropriate for adoption by reference. For example, a state intending to enforce PSD regulations adopted by reference must adopt 40 C.F.R. §52.21, not 40 C.F.R. §51.166, as only the former is written in a form imposing obligations on permit applicants. Even then, changes may have to be made to take into account the difference between the State's situation and EPA's.

° Transfer Efficiency

Some states have attempted to provide particular VOC sources with relaxations of compliance limits in return for improvements in the efficiency with which the sources use the pollutant producing material. Any rules allowing transfer efficiency to be used in determining compliance must be explicit as to when and under what circumstances a source may use improved transfer efficiency as a substitute for meeting the SIP limit. Such provisions must state whether EPA approval is required on a case-by-case basis. Also, such provisions may not simply reference the NSPS auto coating tables for the transfer efficiency. The improvement should be demonstrated through testing and an appropriate test method should be set forth. Implied improvements noted by the NSPS auto coating TE table are not to be accepted at face value.

° Compliance Periods

SIP rules should describe explicitly the compliance time frame associated with each emission limit (e.g. instantaneous, stack test, 3 hour average or daily). The Regions should not assume that a lack of specificity implies instantaneous compliance. The time frame or method employed must be sufficient to protect the standard involved.

° Equivalency Provisions and Discretionary Emission Limits

Certain provisions allow sources to comply via "bubbles" or "alternate equivalent techniques" or through mechanisms "as approved by the Director." These provisions must make it

clear as to whether EPA approval of state granted alternative compliance techniques is required on a case-by-case basis in order for the changed mode of compliance to replace the existing federally enforceable requirement. If EPA case-by-case approval will not be required, then specific, objective and replicable criteria must be set forth for determining whether the new arrangement is truly equivalent in terms of emission rates and ambient impact. Such procedures must be consistent with the control levels specified in the overall SIP control strategy and must meet other EPA policy requirements, including the "Emissions Trading Policy", 51 Fed. Reg. 43814 (1986), in relevant instances.

° Recordkeeping

The SIP must state explicitly those records which sources are required to keep to assess compliance for the time frame specified in the rule. Records must be commensurate with regulatory requirements, and must be available for examination on request. The SIP must give reporting schedules and reporting formats. For example, these rules must require daily records if the SIP requires daily compliance. Additionally, the record-keeping must be required such that failure to do so would be a separate violation in itself.

° Test Methods

Each compliance provision must list how compliance is to be determined and the appropriate test method to be used. The allowable averaging times should be explicit. Both the test method and averaging times employed must be sufficient to protect the ambient standard involved.

° Exemptions

If sources under a certain size are exempted from control requirements, the regulation must identify how the size of a particular source is to be determined.

° Malfunction and Variance Provisions

Any malfunction or variance exemptions must be clear in their substantive application and in how they are triggered. The rule must specify what exceedances may be excused, how the standard is to be applied, and who makes the determination.

Conclusion

We appreciate your attention to this matter and hope that the specific review for enforceability will be a further step in improving the overall SIP process and structure. To assist you, we have attached an enforceability checklist. This checklist should be included as part of your technical support packages in all future SIP packages.

Please contact the appropriate staff attorney in the Office of General Counsel or the Office of Enforcement and Compliance Monitoring should you have any questions concerning issues of enforceability in particular instances. Please contact Tom Helms, OAQPS, FTS-629-5526, for other questions concerning implementation of this guidance.

Attachment

Addressees:

Regional Administrators  
Regions I-X

Regional Counsels  
Regions I-X

Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

cc: Deputy Regional Administrators  
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Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI, IX

Air Program Branch Chiefs  
Regions I-X

Darryl Tyler, Director  
Control Programs Development Division

Gerald Emison, Director  
Office of Air Quality Planning  
and Standards

# P APPROVABILITY CHECKLIST- ENFORCEABILITY

Attachment

SIP Package No. \_\_\_\_\_ Date Rec. \_\_\_\_\_ Date Due \_\_\_\_\_

STATE: \_\_\_\_\_

Subject Matter: \_\_\_\_\_

(Specific Provision and Description)

Enforceability Analysis	State Submittal (list responses)	EPA Requirement	Approvability (Approvable or Not)
<p>1. Applicability</p> <p>a. What sources are being regulated?</p> <p>b. What are criteria for exemption?</p> <p>c. Is calculation procedure for exemption clearly specified?</p> <p>d. Is emission inventory listed in the background document of the attainment demonstration?</p>		<p>Clarity</p> <p>Clarity</p> <p>Example calculation or clear explanation of how to determine exemption (line by line, etc.)</p> <p>Inventory including allowable and actual emissions in source category should be included, for enforcement purposes and independent of any Clean Air Act requirements, in the attainment demonstration if such data is necessary for determining baselines in regulations.</p>	

Enforceability Analysis	State Submittal	EPA Requirement	Approvability (Approvable or No
<p>e. Is the averaging time(s) used in the rule different from that of the ambient standard?</p> <p>f. What are the units of compliance (lbs VOC per gallon of solids applied less water, grains per standard cubic foot?)</p> <p>g. Is bubbling or averaging of any type allowed? If yes, state criteria. Could a U.S. EPA inspector independently determine if the criteria were met? Does EPA have to approve each case?</p>		<p>The averaging time in the rule must be consistent with protecting the ambient standard in question. Normally, it should be equal to or shorter than the time associated with the standard. Longer term averaging is available only in limited instances provided that the ambient standard is not compromised.</p> <p>Clearly stated in the rule</p> <p>Explicit description of how averaging, bubbling, or equivalency is to be determined. VOC equivalency must be on a "solids applied" basis. Any method must be independently reproducible. Provision must be explicit as to whether EPA case-by-case approval required. If provision intended to be "generic" then EPA bubble policy must be met.</p>	

Enforceability Analysis	State Submittal	EPA Requirement	Approvability (Approvable or Not)
<p>h. If there is a redesignation, will this change the emission limitations? If yes, which ones and how?</p>		<p>Regulation may not automatically allow for self nullification upon redesignation of area to attainment. New maintenance demonstration required in order to drop regulation.</p>	
<p>2. Compliance Dates</p>			
<p>a. What is compliance date?</p>		<p>Must not be later than approved or about to be approved date of attainment unless emission reductions not necessary for attainment. In some cases, it will be necessary for the regulation to specify dates in compliance schedules that are required to be submitted by source to state.</p>	
<p>b. What is the attainment date?</p>			
<p>3. Specificity of Conduct</p>			
<p>a. What test method is required?</p>		<p>Test method must be explicitly stated.</p>	
<p>b. What is the averaging time in compliance test method?</p>		<p>Averaging time and application of limit must be explicit.</p>	
<p>c. Is a compliance calculation or evaluation required? (i.e., daily weighted average for VOC).</p>			
<p>d. If yes to "c," list the formula, period of compliance, and/or evaluation method.</p>		<p>Formula must be explicit.</p>	

Enforceability Analysis	State Submittal	EPA Requirement	Approvability (Approvable or Not)
<p>4. Incorporation by Reference</p> <p>a. What is state authority for rulemaking?</p> <p>b. Are methods/rules incorporated by reference in the right manner.</p>			
<p>5. Recordkeeping</p> <p>a. What records are required to determine compliance?</p> <p>b. In what form or units (lbs/gal, gr/dscf, etc.) must the records be kept? On what time basis (instantaneously, hourly, daily)?</p> <p>c. Does the rule affirmatively require the records be kept?</p>		<p>Clarity</p> <p>Records to be kept must be consistent with units of compliance in the performance requirements, including the applicable time period.</p> <p>There must be a clear separately enforceable provision that requires records to be kept.</p>	

Enforceability Analysis	State Submittal	EPA Requirement	Approvability (Approvable or Not)
<p>6. Exemptions</p> <p>a. List any exemptions allowed.</p> <p>b. Is the criteria for application clear?</p> <p>7. Malfunction Provisions</p>		<p>Must be clearly defined and distinguishable from what constitutes a violation.</p> <p>Rule must specify what exceedances may be excused, how the standard is to be applied, and who makes the determination.</p>	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 11 1987

OFFICE OF  
AIR AND RADIATIONMEMORANDUM

SUBJECT: Reporting Requirements and Supplemental Guidance:  
Small VOC Source Compliance Strategy

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Radiation Division Director  
Region V

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

Attached please find the reporting requirements and supplemental guidance for the Small VOC Source Compliance Strategy issued July 6, 1987.

The reporting requirements have been added to the program so that SSCD can monitor the implementation of the strategy, follow the progress of small VOC sources towards compliance, and act as a clearinghouse for dissemination of transferable compliance promotion information. Attachment 1 details the due dates and data to be forwarded to SSCD.

The supplemental guidance expands upon the basic information appearing in the strategy. As explained, a nontraditional three step approach has been developed involving compliance promotion, selected inspections and enforcement. The traditional

compliance approach of inspection, violation detection and timely resolution is difficult to apply to small VOC sources. There are far too many sources and the costs to achieve compliance could outweigh the benefits. Since compliance promotion is very different than our traditional approach, some additional explanation is required. We have attached supplemental guidance addressing this component of the strategy (Attachment 2).

Compliance promotion consists of State and local agencies (along with EPA Regional Offices) implementing a campaign to ensure that small sources and the general public are aware of the program and understand the VOC air quality requirements. The exact nature of the compliance promotion campaign will depend on the methods of information dissemination that exist for the small VOC source category being addressed. In any case, a compliance promotion campaign should be inexpensive, use mass media techniques for information dissemination, track sources by name and address, inform them of their regulatory responsibilities in a comprehensible, practical manner, and reinforce the air pollution control agency's intentions by using the public media (e.g., TV, newspaper, radio, etc.) to educate the Public.

Some suggested techniques for approaching small VOC sources may be found in Appendix A and B of the strategy and are supplemented by Attachment 2 of this memorandum.

If you desire further guidance or have any questions or comments, please contact Bob Marshall at FTS 382-2862.

Attachments

cc: Workgroup Members

ATTACHMENT 1

SMALL VOC SOURCE COMPLIANCE STRATEGY  
REPORTING REQUIREMENTS

To ensure timely implementation and to secure the necessary statistics, each Region conducting a small VOC source program should provide periodic reports in writing to the Director of SSCD. The data collected during this effort will be used to develop improved compliance statistics on selected small VOC source categories and to determine if and where small sources are serious impediments to ozone NAAQS attainment.

<u>Due Date</u>	<u>Information Required</u>
September 30, 1987	List the source categories selected in each of the targeted ozone nonattainment areas in your Region. Also, provide a short description of any other small VOC source activities planned in FY 88.
April 1, 1988	<p>A) A short description of compliance promotion activities, selected inspections and enforcement actions planned and conducted to date. Include a CDS printout of the 27 (minimum) targeted sources, listing SNME, STRT, CYNM, STAB, ZIPC, PCMS, PCLS, PLLT, ATPE, DTSC, DTAC. For large numbers of sources subject to compliance promotion activities, provide total number contacted or planned to be contacted by category in each area. SSCD will issue under separate cover examples of report formats to be followed in sending this information to us.</p> <p>B) A description of any information or approaches that may assist other Regions.</p>
September 1, 1988	Final results of your efforts. Provide the same information as the mid-year report but updated.

## ATTACHMENT 2

### SMALL VOC SOURCE COMPLIANCE STRATEGY SUPPLEMENTAL GUIDANCE - COMPLIANCE PROMOTION

The general thrust of compliance promotion is explained in the main body of the strategy on pages 3-5. Appendix D of the strategy contains hypothetical examples for the categories of service station stage I and degreasers.

To investigate what other approaches might be most effective, SSCD arranged to have National Analysts conduct "focus group" interviews with owner/operators of three types of small sources: service stations stage I, miscellaneous metal parts coaters and dry cleaners in the cities of Philadelphia, Houston and Los Angeles. Combining the summarized results of these projects with research into specific local area needs make apparent what compliance promotion techniques would be most effective for small VOC sources in general. Some of National Analysts' findings are as follows. For further information on the National Analysts study, contact Bob Marshall at FTS 382-2862.

#### SERVICE STATIONS STAGE I

##### Advisory Inspections

Present research indicates that gasoline handlers are rarely informed about or understand the rationale for an air pollution control agency's involvement in stage I controls. At present, retailers perceive there are neither penalties nor incentives for aggressively maintaining vapor balance systems. Advisory inspections statistically selected can provide detailed information on possible costs incurred by their system's inefficiencies along with cost-benefit data on repairs (i.e., similar to home energy audits). However, please make sure you understand the limits of advice that can be offered during such inspections.

##### Certificates

Certification of vapor balance systems meeting applicable standards would reinforce owners/operators' motivation while giving truck drivers confidence that they need not worry about delays, spills or short deliveries resulting from connecting vapor recovery hoses to potentially malfunctioning systems. This should be offered by local agencies and would require periodic updating. No efforts at first-stage vapor recovery can fully succeed unless gasoline handlers can be persuaded that they have no need to release trapped vapors in order to ensure that truck compartments are fully drained and delivered to the retailer.

### Pamphlets

Since urban areas have thousands of retail gasoline outlets, a good way to summarize and explain our concerns and their legal obligations may be a mass mailing of a simple brochure. An example of such a brochure for wood stoves is enclosed. Mailing lists including printed labels can be inexpensively purchased from "Yellow Pages" vendors.

The need for informational pamphlets explaining EPA requirements and methods of achieving compliance is strongly indicated.

### MISCELLANEOUS METAL PARTS COATERS

#### Training

Ultimately, many or most metal coaters will have to change the types of materials or processes they employ in order to meet increasingly stringent standards. While some metal coaters can convert their operations to powder technology, the most environmentally sound alternative, others must continue to rely on liquid coatings. Of this latter group, many can benefit from conversion to water-borne coatings. Either alternative involves investment in new equipment and retraining of personnel. Agencies can help metal coaters with both of these needs, through helping them arrange training opportunities through Regional workshops or community/junior college programs designed to help metal coaters take the most effective advantage of new technologies.

#### Advisory Inspections

Metal coaters are generally unclear about what the applicable rules and standards are in their particular locality and aspect of the industry. A way to clarify this would be for agencies to do advisory site visits. Problems and solutions should be discussed with plant managers and recommendations made concerning what should be done to comply with applicable regulations. Such an effort made to clarify misunderstandings between agency officials and metal coaters, and about what is expected of each party, would help eliminate questionable practices. It would also help create a new climate of team work between regulatory agencies and metal coaters. However, please check with your Regional Counsel as to the limits of advice that can be offered.

## DRY CLEANERS

### Pamphlet

Agencies can elicit dry cleaners' voluntary compliance with VOC regulations without resorting to adversarial tactics. Economic considerations already prompt cleaners to take the initiative in VOC control, although they are constrained by the cost of upgrading their plants for maximum efficiency.

Dry cleaners state that they would eagerly cooperate with environmental agencies if agencies would reciprocate by cooperating with them. The major complaint among cleaners is that regulations are not directly communicated to them and they are generally framed in obtuse, bureaucratic language. Lack of clear, direct communication makes it difficult or impossible for the cleaners to figure out which rules apply to his equipment and what he must do to bring that equipment into compliance. Hence, an informational pamphlet explaining methods of achieving compliance would be helpful.

### Certificates

Certification of plants meeting current regulatory standards would reinforce dry cleaners VOC control efforts and give them confidence that they will not be subject to unwarranted sanctions. Similar to other inspection certificates (as for elevators), the certificate could be offered by local agencies for a fee and require periodic updating. This would give dry cleaners a sense of protection against arbitrary penalties during the period in which the certificate is in force as long as the terms of the certificate are followed and would have the additional benefit of relieving the tension between agencies and dry cleaners associated with random inspection and imposition of fines. Certificates could stipulate required upgrading, maintenance schedules and regulations themselves.

### Advisory Inspections

A way to implement effective compliance promotion techniques would be for control agency representatives to visit dry cleaning plants, inspect their equipment and make concrete recommendations. Again, please be aware there may be limits as to the advice that can be offered. Check with your Regional Counsel first. Certified or registered letters from regulatory agencies would be a second means of providing owners and managers with official communications.

### Periodic Statewide Seminars

Rumors and uncertainty about proposed changes in VOC regulations have a destructive effect on relationships between agencies and dry cleaners and tend to reduce motivation for voluntary compliance with existing standards. "Outreach" programs designed to inform cleaners of proposed changes and provide timely notice of new standards scheduled to go into effect would have a beneficial effect on this situation. Mailings to cleaners would be helpful in this regard, but should be supplemented by Regional meetings. Although they cannot substitute for direct in-person or mail contact, Regional meetings would be a good supplementary means by which agencies could communicate forthcoming changes and give dry cleaners a sense of participation in the VOC control process.

### SUMMARY

Small VOC source categories may be viewed as two general types. First, there are those source categories which have trade associations, industry publications such as newsletters, or periodic meetings that provide an existing formal communication link. Working with a trade association or similar communication link will greatly facilitate the identification, notification, and education of small VOC sources. Second, there are those source categories that have no formal communication link within their industry. Sources in these categories will require individual notification (such as letters or telephone calls) by the air pollution control agency, peer pressure, or an environmentally aware Public to promote a willingness by the source to understand and comply with their air pollution control obligations.

In general the methods of disseminating information to specific categories will depend on the numbers of sources and funds available as well as other factors mentioned in Appendix A of the strategy. The decision to implement a particular communications approach should be based on the following hierarchy:

- 1) Contact trade associations and manufacturers.
- 2) Develop and mail informational pamphlets.
- 3) Perform advisory visits.
- 4) Arrange seminars and training opportunities.




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 28 1987

OFFICE OF  
AIR AND RADIATION

SUBJECT: CEMS Policy and FY 1988 Guidance

APPROVED: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards

DATE:

Purpose

This states the OAQPS policy, which is effective immediately, on the use of Continuous Emission Monitoring Systems (CEMS) data and provides specific guidance as to how that policy should be implemented. It also provides instructions for meeting FY 1988 Strategic Planning and Management System (SPMS) and Regional oversight requirements.

Definition

CEMS is one of several self-monitoring techniques used by regulatory agencies to monitor continuous compliance of sources. Sampling and analysis of sulfur in fuel to assess SO<sub>2</sub> compliance of sources and recordkeeping for assessment of compliance with volatile organic compound (VOC) emission limitations are two other self-monitoring techniques.

Information

As the air compliance program resolves initial compliance problems and sources install control equipment, efforts to assure continuous compliance become increasingly important. Based on the review of State and Regional programs that promote the use of CEMS, OAQPS has found that CEMS is a valuable tool for assuring continuous compliance. Self-monitoring techniques should be integrated into the air compliance program as a means of assessing stationary source continuous compliance with air quality regulations.

Some of the States which effectively use CEMS data in compliance monitoring and in supplementing or supporting enforcement actions are Washington (with SO<sub>2</sub> and total reduced sulfur data) and Tennessee (with opacity monitoring data). Ohio has a comprehensive program for requiring CEMS in operating permits which has resulted in installation of CEMS on a wide variety of source types. Pennsylvania and Indiana have highly structured CEMS programs, including penalty programs based on reported excess emissions.

### Policy

OAQPS is committed to promoting, encouraging and utilizing CEMS data as a compliance assessment measure. Our Office is also committed to the use of CEMS in direct enforcement where CEMS is the compliance test method and for supporting enforcement where CEMS is not the compliance test method. OAQPS encourages the use of CEMS data by States in compliance monitoring and in supplementing or supporting enforcement actions. If it is technically feasible, CEMS requirements should be incorporated into NSR preconstruction reviews, operating permits and resolutions of enforcement actions including consent decrees and administrative orders.

CEMS should be used to assure continuous compliance of sources in both attainment and nonattainment areas. Resources should be allocated to monitor continuous compliance of sources in areas where the greatest environmental benefit is likely to occur. Therefore, priority should be given to NESHAPS sources subject to continuous monitoring requirements (currently 40 CFR 61, subparts F, N, O and V) and to SIP (including major and minor NSR sources) and NSPS sources in nonattainment areas (for the pollutant for which the area is in nonattainment). Next, CEMS should be used to monitor the continuous compliance of NSPS and PSD sources in attainment areas. Sources with excessive emission limit excursions identified by CEMS data should be targeted for follow-up action (on-site inspection or §114 letter). Where CEMS is the compliance test method, CEMS data should be used to identify significant violators. These sources will then be tracked in accordance with the "Timely and Appropriate Enforcement Response Guidance," issued by OAR on April 11, 1986.

There are two different types of CEMS data - direct compliance monitoring data and excess emissions monitoring data. Where CEMS is the compliance test method, the status of the source is established and documented by CEMS data. Compliance status determined by CEMS data should be coded in the Compliance

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Data System (CDS). Violations identified by direct compliance monitoring data require appropriate enforcement action including the assessment of penalties. There are plans to modify the CEM Subset of CDS to allow for entry of direct compliance monitoring data. Use of CEMS data for direct enforcement where CEMS is the compliance test method is discussed in "Guidance: Enforcement Applications of Continuous Emission Monitoring System Data," issued by OAQPS and OECM on April 22, 1986.

The second type of CEMS data is where CEMS is not the compliance method. In these cases, CEMS data should be used to monitor the continuous compliance of sources and to initiate follow-up action including on-site inspections, requesting further information, and issuing a notice of violation.

#### Future Action

The FY 1988 SPMS requires determination and reporting of the compliance status of SO<sub>2</sub> sources subject to CEMS requirements. Specifically, these sources should be identified and their status determined with respect to CEMS installation, certification, and report submission. While SO<sub>2</sub> sources are emphasized in SPMS, this measure should be carried out for all sources with CEMS requirements.

An OAQPS Regional Oversight System will be implemented in FY 1988. This system will be a broader management system than SPMS and will include tracking all NESHAPs sources with CEMS requirements and all SIP and NSPS sources with CEMS requirements in nonattainment areas. NSPS sources with CEMS requirements in attainment areas will also be tracked. As part of the overall compliance monitoring program, it is expected that the Regional Offices will review Excess Emission Reports (EERs) and enter EER summary data into the CEM Subset. It is a minimum requirement that States with delegated authority provide EPA with the information needed to permit entry of summary EER data into the CEM Subset. Guidance on the minimum reporting requirements to the CEM Subset was issued on July 8, 1987.

Headquarters will conduct a mid-year review in FY 1988 of the data in the CEM Subset. The purpose of this review will be to assure that sources with continuous compliance problems are identified, are receiving proper follow-up attention, and if appropriate, have been placed on the significant violators list. Our findings and recommendations will be reported to the Regional Offices.

As part of our FY 1987 program, an electronic bulletin board has been developed. In FY 1988, this bulletin board will include a summary of NSPS and SIP source categories with CEMS requirements and a list of applicable CEMS guidance available.

### Conclusion

CEMS is an important technique for monitoring the continuous compliance of stationary sources. It should be an expanding component of the air compliance program. Evaluation of CEMS data has been shown to be effective for identifying sources with continuous compliance problems and has allowed agencies to utilize their compliance monitoring resources more effectively.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

6 JUL 1987

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Small VOC Source Compliance Strategy-Final

FROM: Gerald A. Emison, Director *G. A. Emison*  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Radiation Division Director  
Region V

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

Attached for your implementation in FY 88 is EPA's small VOC source compliance strategy. The strategy provides a process for identifying VOC categories that are dominated by small sources who are important contributors to ozone nonattainment for specific areas. The focus of the strategy is on the three components of a nontraditional compliance approach for addressing small VOC sources, i.e., compliance promotion, statistically derived inspections, and swift enforcement.

The objectives are to increase the compliance levels of small VOC sources by improved enforcement presence and by compliance promotion, to collect compliance information for assessing the scope of small source emissions contribution to ozone nonattainment, and to determine the level of effort needed in subsequent years. The first component of the strategy can be broadly defined as compliance promotion, which consists of air pollution control agencies implementing

a campaign to ensure that small sources and the general public are aware of the program and understand the VOC air quality requirements. The second component is a program of randomly-selected compliance inspections that provide State and local agencies and EPA with compliance information on small sources, and establishes a minimum enforcement presence. At least 27 compliance inspections should be conducted for each targeted VOC source category. The third component of the strategy is to expeditiously bring small VOC violators back into compliance. Bringing enforcement actions against small sources may become a sensitive issue, but enforcement is necessary to maintain the credibility of our ozone attainment efforts. At this time, we are not including small VOC violators with those violators subject to the "timely and appropriate" guidance, but we do expect violations by small VOC sources to be resolved swiftly, i.e., within 120 days.

Implementation of this strategy will be focused on 16 ozone nonattainment areas (areas that have ozone design values greater than or equal to 0.16 ppm and populations greater than one million). However, implementation of this strategy need not and should not be limited to these 16 areas. At least one VOC source category that is dominated by small sources for each of the 16 areas should be targeted for a compliance promotion campaign. A minimum of 27 randomly-selected inspections should be conducted for each selected category of sources. This effort is part of the FY 88 performance-based air grants.

Comments were received from STAPPA/ALAPCO and State/local agencies. A number of valid concerns and constructive remarks were expressed in these comments and have been incorporated into this final strategy. The chairmen of the enforcement committees of STAPPA/ALAPCO had major concerns with the strategy. However, replies by California, New York, Illinois and Texas demonstrated their desire to implement (or continue) a small source VOC compliance strategy. For copies of the original responses, please contact Bob Marshall (FTS-382-2862).

We hope you find the strategy helpful in carrying out this part of an ozone reduction program. If you have any questions or comments, please call Howard Wright (FTS-382-5870).

Attachment

## Small VOC Source Compliance Strategy

### Purpose

The purpose of this strategy is three fold:

- ° To begin implementation of the National Ozone Strategy in nonattainment areas through enhanced compliance monitoring and enforcement efforts.
- ° To focus those efforts on specific small VOC source categories that appear to directly preclude a nonattainment area from achieving the NAAQS for ozone.
- ° To develop credible compliance statistics on selected small VOC source categories to determine if and where small sources are serious impediments to ozone NAAQS attainment.

### Introduction

One of the most complex challenges facing air pollution control agencies is achieving nationwide attainment of the ozone air quality standard. In 1986, the Clean Air Scientific Advisory Committee concluded, after reviewing the latest ozone data, that the current short-term health standard had little or no margin of safety, and that more lasting health effects might result from long-term exposure. Also, studies have confirmed that ozone has significantly decreased the yield of several important agricultural crops, has caused severe damage to some trees in the West, and is potentially playing a role in the forest decline in the East.

For these reasons, EPA's air program has made ozone one of four top-priority goals. Many urban areas are ozone nonattainment areas and will remain nonattainment for the foreseeable future unless additional measures are implemented. In those areas where the ozone problem is the worst, more stringent control programs will be required.

To systematically address this need, EPA is developing a National Ozone Strategy. An important objective of this strategy is to improve the effectiveness of our existing regulations and programs. To support this objective, the

stationary source compliance program is increasing its compliance monitoring and enforcement efforts in nonattainment areas. The principal Federal focus to date has been on Class A VOC sources. Even though substantial progress has been made to increase the compliance rates of these large VOC sources, additional action is required. For nonattainment areas, addressing the compliance of small VOC sources is the appropriate next step towards achieving the ozone standard. In some areas, this effort is already underway. In others, this strategy will serve as the impetus to initiate action.

#### Small VOC Source Contribution to the Ozone Problem

A number of VOC source categories are made up of mostly small sources. A small VOC source is defined as any source with maximum potential uncontrolled emissions of less than one hundred tons per year. For the purposes of this document, a VOC industrial category where greater than 75 percent of the sources are small, based on the above definition, will be considered a small source category, and in our judgment, contribute the vast majority of that category's VOC emissions.

The traditional approach to ensuring compliance of stationary sources is to inspect all sources of Federal interest within a reasonable timeframe, to formally report specific types of violations, and to resolve significant violations in a timely and appropriate manner. This approach, which was developed to address a manageable number of large sources, is impractical for addressing large numbers of small sources. Consequently, cost-effective nontraditional methods must be identified and implemented to enhance the compliance of small sources.

#### Nontraditional Approach to Small VOC Sources

The strategy to address compliance problems of small VOC sources will consist of three components. They are: (1) compliance promotion, (2) selected inspections, and (3) swift enforcement. Prior to FY 1988, EPA Regional Offices and State/local air pollution control agencies must decide which ozone nonattainment areas will require emission reductions from small VOC source categories. Once these areas are identified, appropriate small VOC source categories must be targeted for compliance promotion activities, selected inspections, and appropriate enforcement action in FY 1988. Also, the compliance data gathered from these activities will be the basis for an evaluation of the effectiveness, efficiency, and in fact the need to continue this strategy.

The SIP emission inventories should be used to identify the ozone nonattainment areas where small VOC sources are significant contributors to nonattainment. The emission inventories should provide each VOC source category's percentage of the total emission inventory and percentage of the total emission reduction required to meet the attainment demonstration.

For the purposes of this initial approach, we would like the strategy to focus on at least one of six small VOC source categories. Appendix A contains information profiles for these categories. For every ozone nonattainment area where one or more of these six small VOC source categories are significant contributors of VOC emissions, those areas should be identified as requiring small source compliance activity. A "significant contributor" of VOC emissions means the category's emissions are greater than one percent of the reduction required to meet the attainment demonstration.

Some nonattainment areas will have many small VOC source categories that significantly contribute to the emission inventory but not have adequate resources in FY 1988 to address each category. Therefore, in FY 1988, as a minimum, for each nonattainment area identified as having potential small VOC source problems, at least one small VOC source category should be selected for application of nontraditional approaches. It need not be one of the six listed in Appendix A. However, we would appreciate some justification as to why another category was selected. Such a justification should include evidence the selected category is dominated by small sources and its emissions are greater than one percent of the reduction required to meet the attainment demonstration.

#### 1. Compliance Promotion Campaign

The first component of the nontraditional approach to ensuring compliance of small VOC sources can be broadly defined as compliance promotion. In general, this consists of State and local agencies (along with EPA Regional Offices) implementing a campaign to ensure that small sources and the general public are aware of the program and understand the VOC air quality requirements.

The rationale for developing a compliance promotion campaign is based on the assumption that many small sources are not aware that their VOC emissions are regulated, but they would comply if notified of the VOC air quality requirements. Under this assumption, a large emission reduction can result from implementing

a low cost campaign to increase awareness of small sources of VOC regulations. Also, as information is gathered on the compliance status of small sources, this assumption can be evaluated for its effectiveness and appropriate adjustments can be made to the campaign.

The exact nature of the compliance promotion campaign will depend on the methods of information dissemination that exist in the small VOC source category being addressed. However, a compliance promotion campaign should perform three functions:

- ° Identify small VOC sources - make a record of the company name, the address of the facility, and the type and production process.
- ° Notify small VOC sources - inform sources of air quality requirements including needed control equipment or process change.
- ° Inform the general public through a community-wide communication strategy on the health effects of ozone, the relative contribution of small source categories to the problem, and the agency's program for minimizing the public health effects of VOC emissions from both large and small emitters. In addition, upfront publicity on the need for compliance will reduce the opportunities for small sources to allege inequities in enforcement.

If it is appropriate, supplemental information should be provided to small sources such as the steps they have to take to come into compliance, or the community benefits gained by their compliance.

In regard to information dissemination to sources, small VOC source categories are of two general types. First, there are those source categories which have trade associations, industry publications such as newsletters, or periodic meetings that provide an existing formal communication link. Working with a trade association or similar communication link will greatly facilitate the identification and notification of small VOC sources. Second, there are those source categories that have no formal communication link within their industry. Sources in these categories will require individual notification (such as letters or telephone calls) by the air pollution control agency, peer pressure, or an environmentally aware public to promote a willingness by the source to understand and comply with their air pollution control obligations.

As mentioned earlier, Appendix A contains background information on six small VOC source categories that are major contributors of emissions. Five out of the six categories have trade associations which should be contacted and made a part of any compliance promotion campaign.

The solvent metal cleaning (degreasing) source category does not have a central trade association. In this case, the air quality control agency will have to use the Chamber of Commerce, yellow pages, or market publications to identify and locate these small VOC sources. Notifying these sources of their VOC emission requirements can be done by letters, pamphlets, phone calls or by whatever means is practical.

Specific examples of compliance promotion approaches, sample brochures and other nontraditional inducements concerning small VOC source compliance will be sent out as supplementary guidance. In addition, personal interactions with industry representatives have yielded valuable insight, this will be incorporated in the supplementary guidance as well.

## 2. Selected Inspection Program

The second component of the small source strategy is a selected inspection program that will provide State and local agencies and EPA with compliance information, and will establish a minimum enforcement presence. Programmatic resource limitations will not allow inspections of all small VOC sources even over a long period of time (five years is considered a long period of time). Instead, a compliance data base can be developed by inspecting a relatively low number of small sources from selected small VOC source categories.

By using statistical sampling, reliable estimates of the compliance rates of small VOC sources for targeted source categories can be made. The air pollution control agency will need to conduct compliance monitoring inspections on a randomly-selected number of small VOC sources. For the purposes of this strategy, a relatively low number of inspections is required to adequately estimate the compliance rate of all the small VOC sources in a category. Using sound statistical procedures, the minimum number of randomly selected inspections required for each targeted VOC source category is twenty seven. Appendix B provides details as to how the number "27" was derived as well as providing a table of other values for selected confidence levels if an agency elects to do more than the minimally acceptable number of inspections. In addition, Appendix B references several other statistics sources that provide further information on the techniques used.

To make the estimate of the compliance rates as reasonably accurate as possible, the inspection must be at least a Level Two (a minimally-acceptable inspection as defined in the Inspection Frequency Guidance). The compliance data collected from the selected inspections will be the basis for the determination of categorical compliance rates, for periodic evaluations, and for appropriate adjustments to the strategy.

A fundamental assumption of the strategy is the existence of significant noncompliance of VOC regulations by small sources. One of the objectives of the strategy, however, is to evaluate the accuracy of this assumption. For the purposes of this strategy, a seventy percent or less estimated compliance rate for a small VOC source category is considered a significant compliance problem. Source compliance as always in the Air program is determined by the worst case emission point at a facility.

Conducting selected inspections (as randomly as possible) of small sources in at least one VOC source category will provide an adequate estimate of the compliance rate for all of the small sources in that category. If the inspections show the compliance rate to be higher than seventy percent, shifting resources toward other VOC categories should be considered. However, if the compliance estimate is less than seventy percent, additional resources should be directed at that category, if possible.

A seventy percent compliance rate is a rule-of-thumb to provide some bench mark for this effort. Most likely, there will be circumstances where focusing solely on source categories with lower compliance rates will conflict with focusing on source categories that may actually have higher emission reduction potential, but also have higher overall compliance rates. We would expect a reasonable interpretation to be made in terms of committing additional resources rather than blindly following compliance rates alone.

Besides providing a basis for making adjustments to the strategy, data from the selected inspections can be used to evaluate the effectiveness of the small source compliance strategy, and in particular, the compliance promotion efforts. One indicator that the small VOC source strategy is effective will be increasing compliance over time by small sources. Higher compliance rates reported by follow-up inspections may indicate that the nontraditional approaches are working.

### 3. Enforcement Follow-up

The third component of the strategy is to bring small VOC violators back into compliance. Bringing enforcement actions against small sources may become a sensitive issue, but enforcement is necessary to maintain the credibility of the Agency's ozone initiative.

The compliance and enforcement efforts in implementing the asbestos demolition and renovation NESHAP program is an example of a successful program addressing generally small companies. One important element of the asbestos enforcement program is media exposure given to issuing enforcement actions to violators. Because media exposure increases enforcement presence and credibility, it should also be an element in the small VOC source compliance strategy. Media exposure of resultant enforcement actions will reemphasize the need for compliance both to the source as well as the general public.

Another useful tool is an administrative fines program. Such a program can serve to deter sources from committing violations as well as encouraging violators to regain compliance. Important advantages of such a program are speed, flexibility, and certainty. Flexibility to set penalties appropriate to the nature of the violation is the key feature in an effective administrative fines program. Certain States do not have an administrative fines program and should be encouraged to develop one in light of the above listed advantages of such a program. States may otherwise be reluctant to expend resources on resolving violations by small sources if the only mechanism for accomplishing such a resolution is a judicial civil action. A report on the "Initial Design Considerations for a Model State and Local Administrative Fines Program" is available from EPA under publication number EPA-340/1-83-018a.

EPA is able under Section 120 of the Clean Air Act to assess penalties administratively against sources solely to recoup the economic benefit gained by the source due to its noncompliance. However, the Section 120 administrative penalty program is not an appropriate enforcement method, in most cases, to address violations of small VOC sources because of its limited applicability.

### Implementation

By September, 1987, Regional Offices working with their States must provide the Stationary Source Compliance Division with the names of the nonattainment areas and the associated VOC source categories where compliance promotion campaigns and selected inspections will be conducted. In FY 1988, most air pollution control agencies will begin implementing this strategy.

To support implementation of the small VOC source compliance strategy, EPA has specifically earmarked Section 105 grant funds in FY 1988. In addition, the Agency will evaluate the implementation of this strategy through the NAAS and the Regional review programs in FY 1989.

At a minimum, EPA expects implementation of compliance promotion campaigns and selected VOC inspections conducted for the 16 areas listed in Appendix C. However, small VOC source compliance activities should not be limited to just these areas. Regional Offices and air pollution control agencies, using emission inventories and other information, should identify and address all ozone nonattainment areas with potential small VOC source problems.

It is important to note that EPA's inspection frequency guidance provides air pollution control agencies with the opportunity to develop an alternative inspection plan in lieu of biennial inspections of Class A2 SIP sources. The alternative inspection plan has two conditions: the total inspection plan must be based on the same resource expenditures as would be required to inspect all Class A2 SIP sources on a biennial basis, and all Class A2 SIP sources must be inspected at least once every five years. This approach will allow agencies to redirect inspection resources to small VOC sources.

During FY 1988, information from all small VOC sources that had a compliance inspection conducted as a result of this strategy must be entered into the Compliance Data System (CDS). This information will form the data base to improve our targeting of small VOC source compliance efforts in FY 1989. The information expected to be entered into CDS includes source location information, air program, class, SIC code, inspection dates, any enforcement actions that resulted, and

compliance status. In lieu of entering the specified data in CDS, air pollution control agencies can send a copy of the small VOC source inspection reports conducted pursuant to this strategy to the appropriate EPA Regional Offices. With such information, we will be able to evaluate the strategy's effectiveness in FY 1989.

Finally, violations by small VOC sources detected as a result of the selected inspections program must be resolved within 120 days. This timeframe should be adequate for resolving most small VOC source violations. These violations should be addressed administratively or informally to the extent possible.

An example of how this strategy can be applied is in Appendix D.

Appendix A

SOURCE CATEGORY PROFILE

SOLVENT METAL CLEANING

Source Description	Solvent metal cleaning (degreasing) involves using organic solvents to remove oils, greases, and other soils from metal surfaces.
Facility Description	<p>Three types of solvent degreasers are affected:</p> <ul style="list-style-type: none"><li>a. Cold cleaner: batch loaded, nonboiling solvent degreasers.</li><li>b. Open top vapor degreaser: batch load, boiling solvent degreaser.</li><li>c. Conveyorized degreaser: Continuously loaded, conveyorized solvent degreaser, either boiling or nonboiling.</li></ul> <p>Open top vapor degreasers smaller than 1 m<sup>2</sup> of open area are exempt from the application of refrigerated chillers or carbon adsorbers. Conveyorized degreasers smaller than 2.0 m<sup>2</sup> of air vapor interface are exempt from a requirement for a major control device.</p>
Number of Facilities	<p>Estimates of the number of solvent degreasers nationwide for the year 1974 are:</p> <ul style="list-style-type: none"><li>a. Cold cleaners (CC) - 1,220,000.</li><li>b. Open top vapor degreasers (OT) - 21,000.</li><li>c. Conveyorized degreasers (CD) - 3,700.</li></ul>
Emissions	<p>Estimates of annual nationwide emissions are:</p> <ul style="list-style-type: none"><li>a. CC - 380,000 Mg/yr (410,000 ton/yr)</li><li>b. OT - 200,000 Mg/yr (221,000 ton/yr)</li><li>c. CD - 100,000 Mg/yr (110,000 ton/yr)</li></ul> <p>which represent about 2.5 percent of estimates VOC emissions nationwide.</p> <p>Average emission rates per degreaser:</p> <ul style="list-style-type: none"><li>a. CC - 0.3 Mg/yr (0.3 ton/yr).</li><li>b. OT - 10 Mg/yr (11 ton/yr.)</li><li>c. CD - 27 Mg/yr (30 ton/yr).</li></ul>

## SOURCE CATEGORY PROFILE

## SOLVENT METAL CLEANING (Cont.)

Control Options and Costs	Almost all CC can achieve RACT by use of properly design and operator training. OT and CD usually require carbon	
	<u>Annualized Average Costs</u>	
	CC - High Volatility	\$1
	CC - Low Volatility	\$26
	OT	\$360
	CD	(\$1,100)

## COMPLIANCE STRATEGY INFORMATION

Organizations	Highly diversified process used in large number of manufact industries - no central trade association or other organiza known other than the ASTM subcommittee on degreasers.
Manufacturers	Safety-Kleen, Barron-Blakslee, Inc., Delta Industries, Graymills Corp., Detrex Corp., Kleer-Flo Company.
Cross Media	RCRA, Local Fire Marshal, OSHA.
Other	Mailing lists, pamphlets, seminars, operator certificates, te. "Hotline", administrative fines, statistical targeting.

# SOURCE CATEGORY PROFILE

## GASOLINE SERVICE STATIONS - STAGE I

Source Description	A gasoline service station is a retail outlet that dispenses, for profit, gasoline, oil and maintenance services to the general public.
Facility Description	Transfer of gasoline from delivery trucks to service station storage tanks.
Number of Facilities	Estimated to be 180,000 retail gasoline service stations nationwide. There are 240,000 other gasoline dispensing outlets.
Emissions	<p>For transfer of gasoline to service storage tanks, VOC emissions estimated to be 400,000 Mg/yr (440,000 ton/yr) which represents about 1.5 percent of estimated VOC emissions nationwide.</p> <p>Without vapor controls, individual facility VOC emissions are estimated to be 1.4 kg/1,000 liters (11.5 lb/1,000 gal) of throughput. For a typical facility having a throughput of 151,000 liter/mo (40,000 gal/mo) VOC emissions would be 2.5 Mg/yr (2.8 ton/yr) for Stage I.</p>
RACT Reductions	Stage I control can reduce transfer losses by 95+ percent and total facility losses by 50 percent.

# SOURCE CATEGORY PROFILE

## GASOLINE SERVICE STATIONS - STAGE I (Cont.)

Control Options and Costs	<p>Emission limits in terms of equipment specifications. Recommended controls are submerged fill of storage tanks, vapor balance between truck and tank, and a leak free truck and vapor transfer system.</p> <p><u>Annualized Average Costs</u></p> <p>Service station, tank truck and terminal (\$200) per service station</p>
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## COMPLIANCE STRATEGY INFORMATION

Organizations	American Petroleum Institute, Fire Marshall Association, National Fire Protection Association, Major Oil Refineries, local service station dealers association.
Manufacturers	
Cross Media	Fire Marshals (National and local), RCRA
Other	Mailing lists, pamphlets, tank truck operator training, administrative fines, statistical targeting. Note: gas stations usually have cold cleaners (degreasers).

# SOURCE CATEGORY PROFILE

## SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS

Source Description	This category is comprised of job shop and original equipment manufacturing industries which apply coatings on metal substrates, except those industries which were covered by other CTG documents.	
Facility Description	<p>Coating application area, flashoff areas, dryers, and ovens for manufacturers of:</p> <ul style="list-style-type: none"> <li>a. Large farm machinery</li> <li>b. Small farm machinery</li> <li>c. Small appliances</li> <li>d. Commercial machinery</li> <li>e. Industrial machinery</li> <li>f. Any other industrial category, which coats metals, under SIC major groups 33-39, inclusive.</li> </ul> <p>Except those facilities which are covered by other CTGs.</p>	
Number of Facilities	96,000	
Emissions	<p><math>9.0 \times 10^5</math> Mg/yr (<math>1 \times 10^6</math> tons/yr) estimated for 1977, which represents about 5.0 percent of stationary source estimated emissions.</p> <ul style="list-style-type: none"> <li>a. An emission factor of 0.66 kg VOC/l coating less water (3.5 lb VOC/gal coating less water) can be expected from a facility utilizing a coating composed of 75 percent organic solvent, 25 percent solids by volume.</li> <li>b. For facilities utilizing an electrodeposition process the VOC emission factor is 0.36 kg VOC/l coating less water (3.0 lb/gal).</li> </ul>	
RACT Reductions	<p>Process modification</p> <p>Exhaust gas treatment</p>	<p><u>Percent reduction in VOC emissions</u></p> <p>(coating/equipment change) 50-98</p> <p>90+</p>

## SOURCE CATEGORY PROFILE

### SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS (Cont.)

Control Options and Costs	The majority of sources can switch to LST at little or no additional expense. If exhaust gas treatment is required, the annualized cost could exceed \$30,000 per coating line.
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### COMPLIANCE STRATEGY INFORMATION

Organizations	Association of Finishing Processes of SME.
Manufacturers	Dupont, PPG Industries and other major coating suppliers, General Motors Corp., and other auto parts manufacturers, Whirlpool Corp. and other major appliance manufacturers.
Cross-Media	
Other	Numberous Publications - "High Solids Coating", "Products Finishing", "Powder Finishing World", etc.

# SOURCE CATEGORY PROFILE

## PERCHLOROETHYLENE DRY CLEANING SYSTEMS

Source Description	The dry cleaning industry is segregated into three categories: (1) coin-operated, (2) commercial, and (3) industrial. The principal steps in the dry cleaning process are identical to those of ordinary laundering in water: (1) one or more washes (baths) in solvent; (2) extraction of excess solvent by spinning; and (3) drying by tumbling in an air stream.		
Facilities Description	Affected facilities are coin-operated, commercial, and industrial dry cleaning systems which utilize perchloroethylene as solvent.		
Number of Facilities	Coin-op	14,900	
	Commercial	44,600	
	Industrial	230	
Emissions	Coin-op	21,400 Mg/yr	(23,500 tons/yr)
	Commercial	123,000 Mg/yr	(135,000 tons/yr)
	Industrial	13,600 Mg/yr	(15,000 tons/yr)
	The estimated 158,000 Mg VOC/yr is 0.9 percent of total stationary source estimated emissions.		
	<u>Uncontrolled VOC emissions</u>		
	<u>Type of plant</u>	<u>kg/yr</u>	<u>(lb/yr)</u>
	Coin-op	1,460	(3,200)
	Commercial	3,240	(7,200)
	industrial	32,400	(72,000)
RACT Reductions	Carbon adsorption applied to commercial and industrial plants will reduce overall VOC emissions by 40-75 percent.		

# SOURCE CATEGORY PROFILE

## PERCHLOROETHYLENE DRY CLEANING SYSTEMS (Cont.)

Control Options and Costs	Carbon adsorber, waste handling and leak stoppage.  <u>Annualized Average Costs</u>  Medium Size Plant                      \$300
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## COMPLIANCE STRATEGY INFORMATION

Organizations	National Institute of Dry Cleaning, International Fabricare Institute, National Fire Protection Association, Institute of Industrial Launderers.
Manufacturers	Hoyt Manufacturing, Inc., RR. Street and Company, Marvel Manufacturing Co., Washex Machinery, Inc., American Laundry Machinery, W.M. Cissel Manufacturing, Co., VIC Manufacturing Co, Challenge - Cook Brothers, Inc.
Cross Media	Osha, Fire Marshal
Other	Publications - IFI Special Reporter, newsletters, mailing lists, pamphlets, administrative fines, statistical targeting.

# SOURCE CATEGORY PROFILE

## BULK GASOLINE PLANTS

Source Description	A "bulk plant" is defined as a gasoline distribution facility having a daily gasoline throughput of 76,000 liter (20,000 gal) or less per day. The daily gasoline throughput at a typical size bulk plant is 14,000 to 17,000 liter/day (4,000 to 5,000 gal/day).														
Facility Description	Gasoline storage tanks, knockout tank and loading racks. Facilities which deliver over 20,000 gal/day are covered under the CTG for terminals.														
Number of Facilities	There were 23,367 bulk plants in 1972 according to the Bureau of Census. Current estimates are about 18,000 bulk gasoline plants nationwide.														
Emissions	<p>Estimated annual emissions are 150,000 Mg/yr (168,000 ton/yr) which represent about 0.6 percent of estimated VOC emissions nationwide.</p> <p>A facility with three storage tanks would have VOC emissions approximating 4.4 kg/day (120 lb/day) plus a range of 0.2 to 3.0 g/1,000 liters throughput (2.0 to 25.0 lb/1,000 gal). For a typical size facility having a throughput of 18,900 liter/day (5,000 gal/day) average VOC emissions are estimated to be 15 Mg/yr (17 ton/yr).</p>														
RACT Reductions	<p>Emission limits recommend in terms of equipment specification alternatives:</p> <ol style="list-style-type: none"><li>1. Submerged fill of outgoing tank trucks.</li><li>2. Alternative 1 + vapor balance for incoming transfer.</li><li>3. Alternative 2 + vapor balance for outgoing transfer.</li></ol> <table><tr><th>Emission Reductions</th><th>Total Plant</th><th>All Transfers</th></tr><tr><td>Alternative 1</td><td>22 percent</td><td>27 percent</td></tr><tr><td>Alternative 2</td><td>54 percent</td><td>64 percent</td></tr><tr><td>Alternative 3</td><td>77 percent</td><td>92 percent</td></tr></table>			Emission Reductions	Total Plant	All Transfers	Alternative 1	22 percent	27 percent	Alternative 2	54 percent	64 percent	Alternative 3	77 percent	92 percent
Emission Reductions	Total Plant	All Transfers													
Alternative 1	22 percent	27 percent													
Alternative 2	54 percent	64 percent													
Alternative 3	77 percent	92 percent													

# SOURCE CATEGORY PROFILE

## BULK GASOLINE PLANTS (Cont.)

### COMPLIANCE STRATEGY INFORMATION

Control Option and Cost	<p>In long term ozone problem areas alternative 3 should be required for all bulk gas plants.</p> <p style="text-align: center;"><u>Annualized Average Costs</u></p> <p style="text-align: center;">4,000 gal Bulk Gas Plant      \$1,000</p>
Organizations	American Petroleum Institute.
Manufacturers	Zink McGill, Rheem Superior, Edwards Engineering, Southwest, Ind.
Cross-Media	Fire Marshal
Other	Mailing lists, pamphlets, administrative fines, statistical targeting, telephone "Hotlines".

# SOURCE CATEGORY PROFILE

## COATING OF FABRIC AND VINYL

Source Description	Fabric coating involves the application of decorative or protective coatings to a textile substrate.
Facility Description	Fabric and vinyl surface coating lines including the applicator areas and the drying ovens. Fabric coating includes all types of coatings applied to fabric. Vinyl coating refers to any printing decorative, or protective topcoat applied over vinyl coated fabric or vinyl sheets.
Number of Facilities	No reliable estimates available at this time.
Emissions	<p>Estimated annual emission from fabric coating operations are 100,000 Mg/yr (110,000 ton/yr). The vinyl segment of the fabric industry emits about 36,000 Mg/yr (40,000 ton/yr). Fabric coating represents about 0.4 percent of the estimated VOC emissions nationwide.</p> <p>Average source annual VOC emissions are estimated to be 850 Mg (940 ton).</p> <p>About one-half the coating facilities emit less than 100 ton/yr of VOC.</p>
RACT Reduction	<p>The actual percent reduction will vary depending on the solvent content of the existing coatings and the control method selected. Implementation of the recommended control methods can reduce VOC emissions by 80 to 100 percent.</p>

## SOURCE CATEGORY PROFILE

## COATING OF FABRIC AND VINYL (Cont.)

	COMPLIANCE STRATEGY INFORMATION
Control Options and Costs	<p>Incineration or carbon adsorption is the most desirable control option in a majority of applications.</p> <p style="text-align: center;"><u>Annualized Average Costs</u></p> <p>Coating Lines                      \$70,000</p>
Organizations	Chemical Fabrics and Film Association.
Manufacturers	Alden Rubber Co., Truck Industries, Ford Motor Company and other auto and furniture manufacturers, General Tire and Rubber, Co., Dennison Manufacturing Co., Anchor Continental.
Cross Media	
Other	Administrative fines, statistical sampling, mailing lists, pamphlets, individual source inspections.

## Appendix B

### Statistical Procedures for Selected Inspection Program

By using statistical sampling, reliable estimates of the compliance rates of small VOC sources for targeted source categories can be made. The air pollution control agency will need to conduct compliance monitoring inspections on a randomly-selected number of small VOC sources. For the purposes of this strategy, a relatively low number of inspections is required to adequately estimate the compliance rate of all small VOC sources in a category. A useful formula for determining the appropriate sample size is the following:

$$N = \frac{t^2 PQ}{R^2}; \text{ where}$$

N is the number of selected inspections in the sample.

t is the t-statistic that sets the level of confidence associated with the estimated compliance rate.

P is the initial estimate of the compliance rate.

Q is the initial estimate of the noncompliance rate.

R is the reliability or precision of the compliance rate estimate.

To use this formula, it is necessary to make an initial estimate of the small VOC source compliance rate for the targeted category. In most cases, the air pollution control agency will not have enough information to make an accurate initial estimate. Therefore, a fifty percent compliance rate should be used, thus erring on the side of conducting more inspections. The t-statistic sets the level of confidence of the compliance rate estimate. The appropriate level of confidence will be a decision made by the Regional Office or air pollution control agency, but the minimum level of confidence is seventy percent. A t-statistic equal to 1.04 sets the level of confidence at seventy percent. The precision of the compliance rate estimate is determined by R. The range of the estimate can be no greater than plus or minus ten percent in absolute terms. An example sample estimate using a 50 percent compliance rate plus or minus 10 percent would mean you can say that you are 70% confident that the true population compliance rate is between 40% and 60%.

Plugging these numbers into the formula will yield the minimum number of selected inspections required for each targeted VOC source category.

$$N = \frac{t^2 PQ}{R^2} = \frac{(1.04)^2 (.5) (.5)}{(0.1)^2} = 27.04$$

Therefore, the minimum number of randomly selected inspections required for each targeted VOC source category is twenty seven.

If the Regional Office or air pollution control agency wants compliance rate estimates with higher levels of confidence and greater precision, more inspections will be required. For an example, an agency has targeted a VOC source category that requires high compliance for the urban area to achieve the ozone standard. Existing information indicates the compliance rate of small VOC sources is approximately seventy percent, but the agency wants to accurately confirm this information. They decide to set the level of confidence at ninety-five percent and the precision at plus or minus five percent.

$$N = \frac{t^2 PQ}{R^2} = \frac{(1.96)^2 (.7) (.3)}{(.05)^2} = 322.69$$

To have this level of confidence and precision, the agency will need to conduct 323 selected inspections.

The following table (Table A) shows the number of inspections required at different confidence levels assuming two different compliance scenarios. It is provided as an aid in determining the level of effort you may want to commit to this program. However, the minimally acceptable level is 27 annual inspections per source category.

The Agency's Statistical Policy Branch is available to provide technical assistance to the Regional Offices on random sampling techniques and on statistical estimation of compliance rates. If you have any questions or concerns on this statistical treatment or need assistance, please contact:

Mel Kollander  
Statistical Policy Branch (PM-223)  
Office of Policy, Planning and Evaluation  
US Environmental Protection Agency  
(202) 382-2734

For further reference, see:

Cochran, William G., Sampling Techniques, 2nd Edition, John Wiley & Sons, Inc., 1966, page 75; or

Hansen, Morris H., Horwitz, William N., and Maclow, William G., Sampling Survey Methods and Theory, John Wiley & Sons, 1953, page 128.

Table A: Number of Inspections at Different Confidence Levels.

Scenario 1: When  $P = 0.5$ ,  $Q = 0.5$ , and  $R = 0.1$ , the number of inspections at a specified level of confidence is as follows:

<u>Level of Confidence</u>	<u>t-statistic(t)</u>	<u>Number of Inspections</u>
70%	1.04	27
80%	1.28	41
90%	1.64	67
95%	1.96	96
99%	2.58	166

Scenario 2: When  $P = 0.7$ ,  $Q = 0.3$ , and  $R = 0.05$ , the number of inspections at a specified level of confidence is as follows:

<u>Level of Confidence</u>	<u>t-statistic(t)</u>	<u>Number of Inspections</u>
70%	1.04	91
80%	1.28	138
90%	1.64	226
95%	1.96	323
99%	2.58	559

### Appendix C

Areas with Ozone Design Values greater than or equal to  
0.16 PPM and Populations greater than one million

<u>Area</u>	<u>Design Value</u>	<u>Population</u> (in millions)
1. Los Angeles	0.36	10.6
2. Houston	0.25	2.6
3. Greater Connecticut	0.23	1.0
4. New York	0.22	16.3
5. San Diego	0.21	1.7
6. Chicago	0.20	6.8
7. Philadelphia	0.18	4.8
8. Baltimore	0.17	1.8
9. Milwaukee	0.17	1.4
10. San Francisco	0.17	4.6
11. Atlanta	0.16	1.6
12. Boston	0.16	3.2
13. Dallas-Ft. Worth	0.16	2.5
14. Phoenix	0.16	1.4
15. St. Louis	0.16	1.9
16. Washington, D.C.	0.16	2.8

## Appendix D

### Hypothetical Examples

#### Small VOC Source Strategy for a Nonattainment Area City

As previously discussed, attainment of the NAAQS for ozone is virtually impossible in long term ozone problem areas (LTOZPAs) unless small VOC sources are effectively controlled. Since the character of the small source problem varies significantly from LTOZPA to LTOZPA, each nonattainment area should develop its own plan to address the problem.

Relatively large reductions are projected in the SIPs for service stations stage I and degreasers. However, there is no way to verify, expect or even hope that these reductions have occurred. These sources are not inspected, and general ignorance by the owner/operator of their obligations seems to exist.

A comprehensive methodical approach towards controlling these sources is clearly a necessity and each source category has unique problems requiring innovative solutions. Each nonattainment area should develop customized approaches tailored to meet the needs of each source category. As examples of the application of general strategy principles to individual categories, specific strategies for service stations stage I and degreasing follow.

#### Strategy for Service Stations Stage I

##### Background

- 1) 420,000 gas stations nationwide.
- 2) Compliance measures center around tank trucks unloading fuel into underground storage tanks.
- 3) Tank trucks and gas stations frequently owned by major oil refineries. Independent gas stations may be owned and operated by various business organizations from "one pump carryout stores" to large "gas-and-goes".

##### Strategy Assumptions

- 1) To set-up a full blown enforcement program would be too costly and very inefficient. A streamlined approach is essential.

- 2) Major oil refineries and taxation authorities have reason to provide assistance towards implementing the program described below.

### Proposed Program

Compliance Promotion: The primary impediment is the enormous number of sources. Since the major oil refineries own a large percentage of the gas stations, cost efficient compliance promotion is possible. Distributing pamphlets describing regulatory obligations and solutions through a small number of centralized points would be very resource efficient. Although there is little reason for them to be highly cooperative, the major oil refineries should be willing to distribute compliance related information if it helps them to avoid noncompliance. Teamster unions may also be interested in providing seminars for their jobbers. If improper tank truck hook-ups are causing unlawful emissions, then a certificate of training may prove desirable.

The remaining independent gas station owners present a special problem. Direct contact through some mechanism seems inevitable. Since gas stations are retail businesses, a retail sales tax authority would have a complete computerized mailing list that could be used for pamphlet distribution. Very small additional funds would be required to automate the "mailouts".

Selected Inspections: Inspecting all gas stations is not practical. Fortunately, the control measures for gas stations involve equipment specifications and gasoline transfer procedures. Once the tank truck and underground tanks have a matching coupling configuration, compliance is easy. In this situation, regular reporting is completely unnecessary. Hence, the only surveillance action recommended is a random Level 2 inspection to check for proper equipment installation. In high compliance areas, 24 manhours every sixty days may be sufficient (inspect about 27 gas stations and/or tank truck couplers). If widespread noncompliance is consistently noted, proceed to the Enforcement component below. Widespread noncompliance would be defined as a categorical noncompliance rate estimated to be greater than 30 percent.

Enforcement: If widespread noncompliance exists, "high visibility", aggressive enforcement may be very effective. Pick at random some noncompliers from different areas of the city and build a strong enforcement presence (e.g., do level

3 inspections, provide evidence of the special efforts to notify made by EPA, reiterate the contribution of gas stations to the ozone problem, etc.). By "word-of-mouth", these enforcement actions would soon be known to all gas station owners. Since these are retail outlets, press releases to local community newspapers may also prove effective.

After each major enforcement initiative a return to the normal surveillance activity for three months would allow sufficient time for installation of the proper control equipment. If widespread noncompliance is again noted, a repeat of this enforcement initiative would be appropriate.

### Strategy for Degreasers

#### Background

- 1) 1,300,000 degreasers nationwide. 1,220,000 of these are cold cleaners.
- 2) Degreasers used in hundreds of different types of industries to clean metal parts prior to coating, assembling or repairing.
- 3) OSHA and RCRA have regulations in place.
- 4) Small number of manufacturers.

#### Strategy Assumptions

- 1) Far too many sources to implement a traditional compliance program.
- 2) Coordinated cross-media inspection programs in the past have proven difficult to design and implement.
- 3) No trade associations known.

Compliance Promotion: The compliance problems for degreasers are similar to those for Service Station - Stage I. Approximately 1,300,000 degreasers operate in roughly 500,000 establishments. Knowledge of air pollution requirements may be nonexistent.

A two stage approach to inform users of their responsibilities is suggested. First, there exists a relatively small number of manufacturers who have been responsive to RCRA requirements. The manufacturers of cold cleaners, commonly

used in gas stations, either sell, service or lease ready-to-use units. Convenient, cost-efficient distribution of pamphlets through these manufacturers is highly recommended. In addition, all units produced should have affixed to them clear instructions for proper use and a summary of penalties for misuse.

Secondly, a majority of the cold cleaners can be found in gas stations. The pamphlet for service stations stage I should include a section addressing degreasing.

The EPA should develop the pamphlet and initiate contact with the six manufacturers listed in the source category profile.

Selected Inspections and Enforcement: The suggested surveillance and enforcement program is conceptually identical to that proposed for service stations - stage I. Surveillance consists of a periodic inspection of randomly selected sources using Level 2 techniques. This should be coordinated with your gas station inspection program, but not limited to gas stations. Enforcement should be highly publicized. For details on this approach, please see strategy for service stations - stage I.




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 25 1987

MEMORANDUM

SUBJECT: Proper and Timely Review of State Implementation Plan (SIP) Revisions

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division, Regions I, III, IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides, and Toxics Division, Regions IV, VI  
Director, Air and Radiation Division, Region V  
Director, Air and Toxics Division, Regions VII, VIII, X

We need your assistance to speed up reviewing and processing of SIP revisions that are associated with an enforcement action. This aspect is important in light of the recent American Cyanamid court decision<sup>1</sup> which held that the Environmental Protection Agency (EPA) may not assess penalties under section 120 of the Clean Air Act (CAA) where the source is in compliance with a proposed SIP revision that has been awaiting action by EPA for longer than 4 months. We are concerned that the same results could be achieved by a source in a similar situation when confronted with a civil penalty in the application of section 113 of the CAA. Therefore, it is necessary for SIP reviewers to process these actions quickly. Several Federal Register notices are in Headquarters or in the Regions which have technical and policy problems that must be corrected before publication. We ask that you make a special effort to ensure that SIP packages which you forward for processing are complete before leaving your office. They will be accorded a similar priority in Headquarters.

Several States have expressed concern over EPA's apparent lack of timeliness in processing SIP revisions. Unfortunately, some State-submitted packages are incomplete or inaccurate. In these cases if the State does not provide the correct information promptly, the Federal Register notice should propose disapproval, citing the lack of supporting material as one reason for disapproval. As you process SIP actions, it is important that EPA policy be correctly stated in all notices and that the review be complete, accurate, and correct. Any deviations or unusual circumstances

<sup>1</sup> Decision of the Fifth Circuit in American Cyanamid Co. v. EPA, No. 85-4899 (5th Cir. Feb. 20, 1987)

should be explained and justified in the Federal Register notice. For example, the baseline for the SIP revisions should be explained and calculated correctly. Apparent inconsistencies and errors should be expeditiously checked with the State and either corrected or identified as a basis for disapproval. Where the facts or policies may be misunderstood, they should be explained. Many times the State has submitted insufficient information, documentation, or justification for an action. The EPA cannot give the appearance of delay while attempting to negotiate corrections with the State.

The following are some of the problems that I would like for you to pay particular attention to as you process SIP revisions. First, the revisions must include emission limits which are legally enforceable. Second, many orders or permits at EPA are missing proper emission limits, production limits, test methods, recordkeeping, and reporting requirements. Finally, many actions are not clearly explained and the technical calculations (for baselines and/or modeling) do not support the SIP revision. If SIP revisions do not meet the basic requirements, then they should be expeditiously processed for disapproval. We cannot afford to delay our rulemaking actions by waiting for the State to correct the problems, but must expeditiously process whatever we have.

My staff will continue to work with you to resolve these problems. We appreciate your support and assistance in this matter.

cc: Regional Administrator, Regions I-X  
Regional Counsel, Regions I-X  
Chief, Air Branch, Regions I-X  
Chief, Air Compliance Branch, Regions I-X  
C. Potter  
M. Alushin  
R. Biondi  
R. Brenner  
R. Campbell  
D. Clay  
A. Eckert  
S. Farrell  
B. Gilbert  
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R. Ossias  
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J. Seitz  
P. Stolpman  
B. Steigerwald  
D. Tyler  
P. Wyckoff



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAY 27 1987

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Reactivation of Noranda Lakeshore Mines' RLA  
Plant and PSD Review

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: David P. Howekamp, Director  
Air Management Division, Region IX

Pursuant to your recent request, this memorandum addresses the status of Noranda Lakeshore Mines' roaster leach acid (RLA) plant in Arizona. Noranda is contemplating startup of the RLA plant which has been shut down since 1977. The company contends that the shutdown was not intended to be permanent, and therefore believes that the plant should not be subject to PSD review.

Whether or not a source which has been shut down is subject to PSD review upon reactivation depends on whether the shutdown is considered permanent. EPA evaluates permanence of shutdowns based on the intent of the owner or operator. The facts and circumstances of the particular case, including the duration of the shutdown and the handling of the shutdown by the State, are considered as evidence of the owner or operator's intent. This decisionmaking framework follows the policy on plant reactivation which EPA set forth in 1978. The September 6, 1978 memorandum which initiated this policy states: "A shutdown lasting for two years or more, or resulting in removal of the source from the emissions inventory of the State, should be presumed permanent. The owner or operator proposing to reopen the source would have

the burden of showing that the shutdown was not permanent, and of overcoming any presumption that it was." Several memoranda later issued by SSCD (August 8, 1980; October 3, 1980; July 9, 1982) applied this shutdown/reactivation policy.

In the case of Noranda's RLA plant, your staff has provided the following information. The RLA plant, previously owned by Hecla Mining Company, was shut down by Hecla in 1977 due to market conditions. Reports issued by Hecla at the end of 1977 stated that the RLA facility could be operational within one week. However, due to poor economic conditions Hecla decided to terminate their lease for the RLA plant. In 1979 Noranda purchased the facility, but never operated the RLA plant due to similar economic problems; the RLA plant itself has not operated since 1977. The RLA plant was deleted from Noranda's operating permits in 1980, and Noranda's remaining operating permits were surrendered in 1984. In 1986, the RLA plant was removed from the State's emission inventory. Your staff has also indicated that the roaster may need at least several hundred thousand dollars worth of work before being operable, and could not come on line for approximately four months.

Since the RLA plant has been shut down for well over 2 years and has been removed from the State's emission inventory, EPA presumes that the shutdown was permanent. However, Noranda has submitted documentation to Region 9 seeking to demonstrate that the shutdown was not intended to be permanent. Included is a 1980 statement of intent for long term operation of the facility, evidence of some search for toll concentrates of sufficient quality to allow operation, and evidence of some level of custodial maintenance. The question which now arises is whether the information submitted is sufficient to rebut the presumption of a permanent shutdown.

EPA evaluates the permanence of the shutdown based on the demonstrated intent of the owner or operator to reopen the source. Facts and circumstances surrounding the shutdown, including duration of the shutdown and the handling of the shutdown by the source and State, are evidence of the owner's intent. In Noranda's case, the significant amount of time that has elapsed, as well as Noranda's failure to maintain the operating permit, removal of the RLA plant from the emissions inventory, and the time and capital that must be invested in the rehabilitation of the plant in order to make it operable, are evidence that the shutdown was intended to be permanent.

There is not sufficient evidence of intent to reopen the source to regard this as a temporary shutdown. Therefore, SSCD concurs with Region 9's determination that the source, for PSD purposes, is permanently shut down, and must meet Federal PSD requirements for construction and operation.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

cc: Wayne Blackard, Region IX  
Nancy Harney, Region IX  
Bruce Armstrong, OPAR  
NSR Contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MR 25

MEMORANDUM

SUBJECT: Revised Clean Air Act Stationary Source Civil Penalty Policy

FROM: Thomas L. Adams, Jr. *Thomas L. Adams*  
Assistant Administrator for Enforcement  
and Compliance Monitoring

J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443) *J. Craig Potter*

TO: Addressees

Attached is a copy of the revised Clean Air Act Stationary Source Civil Penalty Policy. Thank you for the comments submitted on the draft. The offices which submitted comments will receive a separate memo detailing the disposition of individual suggestions. The policy is effective immediately for all cases which have been filed or referred to the Department of Justice in which the U.S. has not yet communicated a settlement penalty amount to the source owner or operator.

Attachment

Addressees:

Regional Administrators, Regions I-X

Regional Counsels, Regions I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, V, and IX

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

Richard Mays  
Senior Enforcement Counsel

Thomas Gallagher, Director  
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Rich Robinson, LEPB

Bruce Rothrock, OCAPO

David Buente, DOJ

Bill Becker, STAPPA-ALAPCO

CLEAN AIR ACT  
STATIONARY SOURCE  
CIVIL PENALTY POLICY

March 25, 1987

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## Clean Air Act Stationary Source Penalty Policy

### I. INTRODUCTION

Section 113(b) of the Clean Air Act, 42 U.S.C. §7413(b), provides the Administrator of EPA with the authority to commence a civil action against certain violators to recover a civil penalty of up to \$25,000 per day. Since July 8, 1980, EPA has been assessing civil penalties for Clean Air Act violations under Section 113(b) based on the considerations listed in the statute and the guidance provided in the Civil Penalty Policy issued on that date.

On February 16, 1984, EPA issued a new Policy on Civil Penalties and a Framework for Statute-Specific Approaches to Penalty Assessments. The Policy focuses on the general philosophy behind the penalty program. The Framework provides guidance to each program on how to develop medium-specific penalty policies. The Air Enforcement program followed the Policy and the Framework in drafting the Clean Air Act Stationary Source Penalty Policy, which was issued on September 12, 1984. This policy amends the September 12, 1984 policy, incorporating EPA's experience in calculating and negotiating penalties during the past two years.

This document provides guidance to be used in calculating the civil penalty EPA will require in settlement of enforcement actions taken pursuant to Title I of the Clean Air Act. It reflects the considerations enumerated in §113(b) of the Clean Air Act. It applies only to initial enforcement actions in district court and is not meant to control the penalty amount requested in actions to enforce existing consent decrees.<sup>1/</sup> The required use of this guidance is also limited to pre-trial settlement of enforcement actions. Once a case proceeds to trial, EPA attorneys are not bound by this document, except the policy on mitigation projects in Section IV. In a trial, government attorneys may find it relevant and helpful to introduce a penalty calculation under this policy, as a point of reference in a demand for appropriate penalties. However, once a case goes to trial, they should ask for a larger penalty than the minimum settlement figure as calculated under the policy.

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<sup>1/</sup>In these actions, EPA will normally seek the penalty amount dictated by the stipulated penalty provisions of the consent decree. If a consent decree contains no stipulated penalty provisions, the case development team should propose penalties suitable to vindicate the authority of the court.

The general policy applies to most Clean Air Act violations. There are some kinds of violations, however, that have characteristics which make the use of the general policy inappropriate. These are treated in separate guidance, included as appendices. Appendix I covers violations of permit requirements. Appendix II deals with the gravity component for vinyl chloride violations. Appendix III covers the benefit and gravity components for asbestos demolition and renovation violations. (The general policy applies to other NESHAPs violations.) The general policy applies to violations of volatile organic compound regulations where the compliance plan involves installation of control equipment. Separate guidance is provided for VOC violators which comply through reformulation (Appendix IV).

This penalty policy contains two sections. The first section describes how to achieve the goal of deterrence through penalty components that 1) remove the economic benefit of noncompliance and 2) reflect the gravity of the violation. The second section provides adjustment factors so that both a fair and equitable penalty will result and there will be a swift resolution to the environmental problem. Adjustment factors apply only to the gravity component. Except in extraordinary circumstances, as described below, the lowest possible settlement penalty will be the calculated economic benefit of noncompliance.

This guidance tells how to calculate minimum settlement figures for the internal use of Agency negotiators. Consequently, the penalty figures in negotiations should not necessarily be as low as the minimum figure. The final settlement amount should go no lower than the calculated minimum unless the reasons for the deviation are proper and documented.

All penalties paid pursuant to this penalty policy are not deductible for federal tax purposes, and should be specifically delineated as such.

The procedures set out in this document are intended solely for the guidance of government personnel. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States. The Agency reserves the right to act at variance with this policy and to change it at any time without public notice.

This penalty policy is effective immediately with respect to all cases which have been filed in court or referred to the Department of Justice in which a penalty offer has not been transmitted to the opposing party.

## II. THE PRELIMINARY DETERRENCE AMOUNT

The February 16, 1984 Policy on Civil Penalties establishes deterrence as an important goal of penalty assessment. More specifically, it says that any penalty should, at a minimum, remove any significant benefits resulting from noncompliance. In addition, it should include an amount beyond removal of economic benefit to reflect the seriousness of the violation. That portion of the penalty which removes the economic benefit of noncompliance is referred to as the "benefit component;" that part of the penalty which reflects the seriousness of the violation is referred to as the "gravity component." When combined, these two components yield the "preliminary deterrence amount."

This section of the document provides guidelines for calculating the benefit component and the gravity component. It will also discuss the limited circumstances which justify settling for less than the benefit component. The uses of the preliminary deterrence amount will be explained in subsequent portions of this document.

### A. THE BENEFIT COMPONENT

In order to ensure that penalties remove any significant economic benefit of noncompliance, it is necessary to have reliable methods to calculate that benefit. The existence of reliable methods also strengthens the Agency's position in both litigation and negotiation. This section sets out guidelines for computing the benefit component. It first addresses costs which are delayed by noncompliance. Then it addresses costs which are avoided completely by noncompliance. It also identifies issues to be considered when computing the benefit component for those violations where the benefit of noncompliance results from factors other than cost savings. This section concludes with a discussion of the proper use of the benefit component in developing penalty figures and in settlement negotiations.

In enforcement actions against nonprofit public entities such as municipalities or publicly-owned utilities, the economic benefit should be calculated. The full economic benefit component need not be automatically used in computing the penalty, however. Treatment of the economic benefit component in determining appropriate penalties in actions against municipalities and publicly-owned utilities is discussed further in Section II.A.3.b of this policy dealing with settling cases for an amount less than the economic benefit because of compelling public concerns.

### 1. Benefit from delayed costs

In many instances, the economic advantage to be derived from noncompliance is the ability to delay making the expenditures necessary to achieve compliance. For example, a facility which fails to install a scrubber will eventually have to spend the money needed to install the scrubber in order to achieve compliance. But, by deferring these capital costs until EPA or a State takes an enforcement action, that facility has achieved an economic benefit. Among the types of violations which may result in savings from deferred cost are the following:

- ° Failure to install equipment needed to meet emission control standards.
- ° Failure to effect process changes needed to lessen pollution.
- ° Testing violations, where the testing still must be done to demonstrate achieved compliance.
- ° Application of monitoring equipment.

The economic benefit of delayed compliance should be computed using the "Methodology for Computing the Economic Benefit of Noncompliance," which is Technical Appendix A of the BEN User's Manual. This document provides a method for computing the economic benefit of noncompliance based on a detailed economic analysis. The method is a refined version of the method used in the previous Civil Penalty Policy issued July 8, 1980, for the Clean Water Act and Title I of the Clean Air Act. BEN is a computer program available to the Regions for performing the analysis.

### 2. Benefit from avoided costs

Many kinds of violations enable a violator to avoid permanently certain costs associated with compliance. These include cost savings for:

- ° Operation and maintenance of equipment that the violator failed to install.
- ° Failure to properly operate and maintain existing control equipment (or process equipment if it affects pollution control).
- ° Failure to employ a sufficient number of adequately trained staff.

- ° Failure to establish or follow precautionary methods required by regulations or permits.
- ° Process, operational, or maintenance savings from removing pollution equipment.
- ° Failure to conduct testing which was once necessary but is not any longer.
- ° Failure to install, operate, and maintain monitoring equipment.

The benefit from avoided costs must also be computed using methodology in Technical Appendix A of the BEN User's Manual.

The benefit from delayed and avoided costs is calculated together, using the BEN computer program, to arrive at an amount equal to the economic benefit of noncompliance for the period from the first provable date of violation until the date of compliance.

3. Settling cases for an amount less than the economic benefit

As noted above, settling for an amount which does not remove the economic benefit of noncompliance can encourage people to wait until EPA or the State begins an enforcement action before complying. For this reason, it is general Agency policy not to settle for less than this amount. There are three general areas (described below) where settling for less than the economic benefit may be appropriate. However, in any individual case where the Agency decides to settle for less than the economic benefit, the litigation team<sup>2/</sup> must detail those reasons in the case file and in any memoranda accompanying the settlement. Following are circumstances in which EPA can settle for less than the economic benefit:

a. Benefit component involves insignificant amount

It is clear that assessing the benefit component and negotiating over it will often represent a substantial commitment of resources. Such a commitment of resources may not be warranted in cases where the magnitude of the benefit

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<sup>2/</sup> The litigation team consists of the attorneys assigned to the case from EPA Headquarters, the EPA Region, the Department of Justice Environmental Enforcement Section, and the U.S. Attorney's Office. The recommendation of the litigation team must be unanimous. Any of the litigation team members may defer to the other members of the team. If a unanimous position cannot be reached, the matter should be escalated and a decision made by EPA and Department of Justice managers, as required.

component is not likely to be significant, (e.g., not likely to have a substantial financial impact on the violator.) For this reason, the litigation team has the discretion not to seek the benefit component where it appears that the amount of that component is likely to be less than \$5,000. In exercising that discretion, the litigation team should consider the following factors:

- ° Impact on violator: The likelihood that assessing the benefit component as part of the penalty will have a noticeable effect on the violator's competitive position or overall profits. If no such effect appears likely, the benefit component should probably not be pursued.
- ° The size of the gravity component: If the gravity component is relatively small, it may not provide a sufficient deterrent, by itself, to achieve the goals of this policy. In situations like this, the case development team should insist on including the benefit component in order to develop an adequate penalty.

In certain classes of violations, the penalty will contain no economic benefit component. Most of these classes of violations are handled in the appendices to this penalty policy. However, in a case of a non-recurring operation and maintenance violation which is being handled under this policy, the most appropriate way to settle the matter is often a small penalty. It makes little sense to assess in detail the economic benefit for each individual violation because the benefit is likely to be so small. Therefore, for these violations, the economic benefit component need not be computed.

b. Compelling public concerns

The Agency recognizes that there may be some instances where there are compelling public concerns that would not be served by taking a case to trial. In such instances, it may become necessary to consider settling a case for less than the benefit component. This may be done only if it is absolutely necessary to preserve the countervailing public interests. Such settlements might be appropriate where the following circumstances occur:

- ° Removal of the economic benefit would result in plant closings, bankruptcy, or other extreme financial burden, and there is an important public interest in allowing the firm to continue in business. Alternative payment plans should be fully explored before resorting to this option. Otherwise, the Agency will give the perception that shirking one's environmental

responsibilities is a way to keep a failing enterprise afloat. This exemption does not apply to situations where the plant was likely to close anyway, or where there is a likelihood of continued harmful noncompliance.

- ° In enforcement actions against nonprofit public entities such as municipalities and publicly-owned utilities, assessment of the civil penalty threatens to disrupt continued provision of essential public services.

#### c. Litigation practicalities

Regardless of the type of violations a defendant has committed or a particular defendant's reprehensible conduct, EPA can never demand more in civil penalties than the statutory maximum (twenty-five thousand dollars a day) multiplied by the number of days of violation for each violation. Note that for purposes of computing both the statutory maximum penalty and the minimum settlement amount, the period of noncompliance begins with the earliest provable day of violation and ends with the projected date of compliance. The Agency realizes that in certain cases, it is highly unlikely the EPA will be able to recover the full economic benefit in litigation. This may be due to applicable precedent, competing public interest considerations, or the specific facts, equities, evidentiary issues or legal problems pertaining to a particular case. For example, although a source is in violation of an applicable standard and is, as such, legally liable, it could have been working with a state agency in good faith to pursue a State Implementation Plan (SIP) revision, being told by the State that it would get a SIP revision. Then, the source learns that EPA will not approve the SIP revision. In such a situation it may be unrealistic to expect EPA to obtain a penalty settlement which it could not achieve through litigation. The litigation team may pursue a lower penalty amount after receiving the approval of the Associate Enforcement Counsel for Air.

#### d. Concurrent §120 action

EPA will not usually seek to recover the economic benefit of noncompliance from one violation under both §113 and §120. Therefore, if a §120 action is pending or has been concluded against a source for a particular violation and a §113 penalty settlement amount is being calculated for that same violation, the economic benefit component need not be included for the period from the date of issuance of the §120 Notice of Noncompliance to the date of compliance. Economic benefit can be assessed from the date of the earliest provable violation to the date the NON was issued.

In these cases, EPA should not automatically settle the §113 action for less than the economic benefit. The statute allows dual recovery for the economic benefit, and so each case must be considered on its individual merits. Thus the Agency may settle for less than the economic benefit in the §113 action if the litigation team determines such a settlement equitable and justifiable.

- e. Offset for penalties paid to state or local agencies for the same violation

While EPA will not automatically subtract any penalty amount paid by a source to a state or local agency for the same violation that is the basis for EPA's enforcement action, EPA may do so if circumstances suggest that it is appropriate.

## B. THE GRAVITY COMPONENT

As noted above, the Policy on Civil Penalties specifies that a penalty, to achieve deterrence, should remove any economic benefit of noncompliance, and should also include an amount reflecting the seriousness of the violation. Section 113(b) instructs EPA to take these factors into consideration in setting the appropriate penalty amount. Factors reflecting the seriousness of the violation are referred to as the "gravity component." The purpose of this section of the document is to establish an approach to quantifying the gravity component.

Assigning a dollar figure to represent the gravity of violation is a process which must, of necessity, involve the consideration of a variety of factors and circumstances. Nevertheless, the relative seriousness of different violations can be fairly accurately determined in most cases. This can be accomplished by reference to the goals of the Clean Air Act to protect and enhance the quality of the nation's air resources and the facts of each particular violation. Thus, linking the dollar amount of the gravity component to these objective factors is a useful way of insuring that violations of approximately equal seriousness are treated the same way. The objective factors are designed to reflect considerations listed in §113(b) of the Clean Air Act as those appropriate for the court in determining the amount of a civil penalty. The considerations set out in the statute are: size of the business, economic impact of the penalty on the business, and seriousness of the violation (as well as any other factors.)

The specific objective factors in this civil penalty policy designed to measure the seriousness of the violation and reflecting the considerations of the Clean Air Act are as follows:

- ° Actual or possible harm: This factor focuses on whether (and to what extent) the activity of the defendant actually resulted or was likely to result in the emission of a pollutant in violation of the level allowed by an applicable State Implementation Plan or federal regulation.
- ° Importance to the regulatory scheme: This factor focuses on the importance of the requirement to achieving the goal of the Clean Air Act and its implementing regulations. For example, the NSPS regulations require owners and operators of new sources to do emissions testing and report the results within a certain time after start up. If a source owner or operator does not report the test results, EPA would have no way of knowing whether that source is complying with NSPS requirements.
- ° Size of violator: The gravity component should be increased, in proportion to the size of the violator's business.

The assessment of the first gravity factor listed above, actual or possible harm arising from a violation, is a complex matter. For purposes of ranking violations according to seriousness, it is possible to distinguish violations within a category on the basis of certain considerations, including the following:

- ° Amount of pollutant: Adjustments for the amount of the pollutant are appropriate.
- ° Sensitivity of the environment: This factor focuses on the location where the violation was committed. For example, excessive emissions in a nonattainment area are usually more serious than excessive emissions in an attainment area.
- ° Toxicity of the pollutant: Violations involving highly toxic pollutants are more serious and should result in relatively larger penalties.
- ° The length of time a violation continues: The longer a violation continues uncorrected, the greater is the risk of harm.

The following dollar amounts assigned to each factor should be added together to arrive at the total gravity component:

1. Actual or possible harm

a. Level of violation:

0-30% above standard	\$4,000
30-60% " "	8,000
60-90% " "	12,000
90-120% " "	16,000
120-150% " "	20,000
150-180% " "	24,000
180-210% " "	28,000
210-240% " "	32,000
240-270% " "	36,000
270-300% " "	40,000
over 300% " "	40,000 + 4,000 for each 30% increment above standard

This factor should be used only for emission violations, and not procedural violations. Normally the highest documented level of violation should be used. If that level, in the opinion of the litigation team, is not representative of the period of violation, then the highest documented level that EPA determines to be representative should be used.

In addition, for sources with high allowable emission rates, the litigation team may increase this factor based on the gross volume of emissions, if that volume alone represents a particular threat to public health or welfare.

b. Toxicity of the pollutant: Violations of NESHAPs regulations not handled by separate guidance or violations involving other pollutants for which EPA has announced that it intends to promulgate a NESHAP: \$15,000.

c. Sensitivity of environment (for SIP and NSPS cases only)

i. Primary non-attainment area	\$15,000
ii. Secondary nonattainment area	10,000
iii. Attainment area Class I	\$ 5,000
iv. Attainment area Class II or III	2,000

d. Length of time of violation

To determine the length of time of violation, violations should be assumed to be continuous from the first provable date of violation until the date of the compliance demonstration if there have been no significant process or operational changes. If the source has affirmative evidence, such as Continuous Emission Monitoring data, to show that the violation was not continuous, appropriate adjustments should be made.

0-6 mo.	\$ 2,000
7-12 mo.	4,000
13-18 mo.	7,000
19-24 mo.	10,000
25-30 mo.	14,000
31-36 mo.	18,000
37-42 mo.	23,000
43-48 mo.	28,000
49-54 mo.	34,000
55-60 mo.	42,000

## 2. Importance to regulatory scheme

The following violations are so important to the regulatory scheme that additional penalties must ensue:

Monitoring, record keeping and reporting requirement violations: \$15,000

(If there is more than one reporting violation, multiply the number of violations by \$15,000.)

Operation and maintenance practices which result in violations. \$15,000

## 3. Size of violator

Net current assets:

under \$100,000:	\$1,000
\$100,001 - \$1,000,000:	\$2,000
\$ 1,000,001 - \$5,000,000:	\$8,000
\$ 5,000,001 - \$20,000,000:	\$12,000
\$20,000,000 - \$40,000,000:	\$20,000
\$41,000,000 - \$70,000,000:	\$40,000
over \$70,000,000:	\$65,000

The process by which the gravity component was computed must be memorialized in the case file. Combining the benefit component with the gravity component yields the preliminary deterrence amount.

### III. ADJUSTING THE GRAVITY COMPONENT

The second goal of the Policy on Civil Penalties is the equitable treatment of the regulated community. One important mechanism for promoting equitable treatment is to include the benefit component discussed above in a civil penalty assessment. This approach would prevent violators from benefiting economically from their noncompliance relative to parties which have complied with environmental requirements.

In addition, in order to promote equity, the system for penalty assessment must have enough flexibility to account for the unique facts of each case. Yet it still must produce consistent enough results to treat similarly-situated violators similarly. This is accomplished by identifying many of the legitimate differences between cases and providing guidelines for how to adjust the preliminary deterrence amount when those facts occur. The application of these adjustments to the preliminary deterrence amount prior to the commencement of negotiation yields the initial minimum penalty settlement amount. During the course of negotiation, the litigation team may further adjust this figure based on new information learned during negotiations to yield the adjusted minimum penalty amount.

Nevertheless, it should be noted that equitable treatment is a two-edged sword. While it means that a particular violator will receive no higher penalty than a similarly situated violator, it also means that the penalty will be no lower.

The purpose of this section is to establish additional adjustment factors to promote flexibility while maintaining national consistency. This section sets out guidelines for adjusting the gravity component to account for some factors that frequently distinguish different cases. Those factors are: degree of willfulness or negligence, degree of cooperation, history of noncompliance, ability to pay, and other unique factors. These adjustment factors apply only to the gravity component and not to the economic benefit component. Violators bear the burden of justifying mitigation adjustments they propose based on these factors.

For each factor there are three suggested ranges of adjustment. The first, a 0-30% adjustment of the gravity component, is within the absolute discretion of the litigation team. The second, a 31-50% adjustment, is only appropriate in unusual circumstances. The third range, beyond 50% and up to 100% adjustment is only appropriate in rare circumstances. Adjustments in the latter two ranges, unusual and rare circumstances, will be subject to scrutiny in any performance audit. The litigation team may wish to reevaluate these adjustment factors as the negotiations progress. This allows the team to reconsider evidence used as a basis for the penalty in light of new information.

The total gravity component can be adjusted upward or downward by as much as 50% at the absolute discretion of the litigation team based on one or a combination of factors. However, if the full 50% adjustment is made by the litigation team based on less than all of the factors, no further adjustment to the gravity component may be made based on these adjustment factors within the absolute discretion of the litigation team. For example, if the litigation team decides to lower the gravity component 30% based on a source's extremely cooperative attitude, and 20% based on ability to pay, there may be no further adjustment to the gravity component at the absolute discretion of the litigation team. The litigation team may, however, make a larger adjustment in an unusual or rare circumstance if the reasons for doing so are documented in the litigation file and are approved by the Associate Enforcement Counsel for Air. A detailed discussion of these factors follows.

#### A. DEGREE OF WILLFULNESS OR NEGLIGENCE

This factor should be used only to raise a penalty. Although the Clean Air Act is a strict liability statute for civil actions, so that willfulness or lack thereof is irrelevant to the determination of legal liability, this does not render the violator's willfulness or negligence irrelevant in assessing equitable considerations to arrive at an appropriate penalty. Knowing or willful violations can give rise to criminal liability, and the lack of any negligence or willfulness would indicate that no addition to the penalty based on this factor is appropriate. Between these two extremes, the willfulness or negligence of the violator should be reflected in the amount of the penalty.

In assessing the degree of willfulness or negligence, all of the following points should be considered:

- ° How much control the violator had over the events constituting the violation.
- ° The foreseeability of the events constituting the violation.
- ° The level of sophistication within the industry in dealing with compliance issues or the accessibility of appropriate control technology (if this information is readily available). This should be balanced against the technology-forcing nature of the statute, where applicable.
- ° Whether the violator in fact knew of the legal requirement which was violated.

#### B. DEGREE OF COOPERATION

The degree of cooperation of the violator in remedying the violation is an appropriate factor to consider in adjusting the penalty downward. Such adjustments are mandated by both the goals of equitable treatment and swift resolution of environmental problems. There are two areas where this factor is relevant.

##### 1. Prompt reporting of noncompliance

Cooperation can be manifested by the violator promptly reporting its noncompliance. Assuming such self-reporting is not required by law, such behavior should result in the mitigation of the penalty.

##### 2. Prompt correction of environmental problems

The Agency should provide incentives for the violator to commit to correcting the problem promptly. This correction must take place before litigation is begun, except in extraordinary circumstances.<sup>3/</sup> But since these incentives must be consistent with deterrence, they must be used judiciously.

The circumstances under which the penalty is reduced depend on the type of violation involved and the source's response to the problem. A straightforward reduction in the amount of the gravity component of the penalty is most appropriate in those cases where either: 1) the environmental

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<sup>3/</sup>For the purpose of this document, litigation is deemed to begin when an Assistant United States Attorney files a complaint in court.

problem is actually corrected prior to initiating litigation, or 2) ideally, immediately upon discovery of the violation. Under this approach, the reduction typically should be a substantial portion of the unadjusted gravity component.

In general, the earlier the violator instituted corrective action after discovery of the violation and the more complete the corrective action instituted, the larger the penalty reduction EPA will consider. Swift resolution of environmental problems will be encouraged if the violator clearly sees that it will be financially disadvantageous for the violator to litigate without remedying noncompliance.

The Clean Air Act was conceived by Congress as a technology-forcing statute, and so unavailability of applicable control technology is not an excuse for not complying with emission requirements. If appropriate pollution control equipment is not readily available on the commercial market, a source owner or operator must enlist skilled engineers to devise new kinds of pollution control equipment that will do the job. The uniqueness and difficulty presented by the requirement to control the emissions from a particular source, however, will affect the size of penalty the Agency deems appropriate. If a source owner has been spending money and effort in a good faith, documentable program to install equipment that will control the source's air pollution but the source remains out of compliance even after these efforts, the litigation team may decide to reduce the gravity component. The technological efforts chosen for compliance must be viewed as having a good chance for compliance in order to have this factor count toward mitigation.

Ordinarily, a contractor's failure to perform as required by the contract is not considered to be a factor out of a source's control. A source must bear the responsibility of selecting a contractor reliable enough to perform the required tasks satisfactorily.

In all instances, the facts and rationale justifying the penalty reduction must be recorded in the case file and included in any memoranda accompanying settlement.

### C. HISTORY OF NONCOMPLIANCE

Where a party has violated a similar environmental requirement before, this is usually clear evidence that the party was not deterred by a previous governmental enforcement response. Unless one of the violations was caused by factors entirely out of the control of the violator, this is an indication that the penalty should be raised.

In deciding how large these adjustments should be, the case development team should consider the following points:

- ° How similar the previous violation was.
- ° How recent the previous violation was.
- ° The number of previous violations.
- ° Violator's response to previous violation(s) in regard to correction of the previous problem and attempts to avoid repetition.

Nevertheless a violation should generally be considered "similar" if a previous enforcement response should have alerted the party to a particular type of compliance problem. Some facts that indicate a "similar violation" was committed are as follows:

- ° The same permit was violated.
- ° The same substance was involved.
- ° The same process points were the source of the violation.
- ° The same statutory or regulatory provision was violated.
- ° A similar act or omission (e.g. same kind of emission limitation from same piece of equipment.)

For purposes of this section, a "prior violation" includes any act or omission for which a formal state, local, or federal enforcement response has occurred (e.g., notice of violation, warning letter, complaint, consent decree, consent agreement, or final order). It also includes any act or omission for which the violator has previously been given written notification, however informal, that the Agency believes a violation exists.

In the case of large corporations with many divisions or wholly-owned subsidiaries, it is sometimes difficult to determine whether a previous instance of noncompliance should trigger the adjustments described in this section. New ownership often raises similar problems. In making this determination, the litigation team should ascertain who in the organizational unit had or reasonably should have had control or oversight responsibility for violative conduct. In those cases where there is a close relationship between defendants, the violation will be considered part of the compliance history.

In general, the litigation team should begin with the assumption that if the same corporation was involved, the adjustments for history of noncompliance should apply. In addition, the team should be wary of a party changing operators or shifting responsibility for compliance to different groups as a way of avoiding increased penalties. The Agency may find a consistent pattern of noncompliance by many divisions or subsidiaries of a corporation even though the facilities are at different geographic locations. This often reflects, at best, a corporate-wide indifference to environmental protection. Consequently, the adjustment for history of noncompliance should probably apply unless the violator can demonstrate that the other violating corporate facilities are under totally independent control.

#### D. ABILITY TO PAY

The Agency will generally not request penalties that are clearly beyond the means of the violator. Therefore EPA should consider the ability to pay a penalty in arriving at a specific final penalty assessment. (With regard to the Benefit Component, this consideration is given under Section II.A.3.b.) At the same time, it is important that the regulated community not see the violation of environmental requirements as a way of aiding a financially-troubled business. EPA reserves the option, in appropriate circumstances, of seeking a penalty that might contribute to a company going out of business.

For example, it is unlikely that EPA would reduce a penalty where a facility refuses to correct a serious violation. The same could be said for a violator with a long history of previous violations. That long history would demonstrate that less severe measures are ineffective.

The financial ability adjustment will normally require a significant amount of financial information specific to the violator. The litigation team should assess this factor after commencement of negotiation with the source if the source raises it as an issue.

The burden to demonstrate inability to pay, as with the burden of demonstrating the presence of any mitigating circumstances, rests on the defendant. If the violator fails to provide sufficient information, then the litigation team should disregard this factor in adjusting the penalty. The Office of Enforcement Policy (NEIC) has developed the capability to assist the Regions in determining a firm's ability to pay. This is done through the computer program, ABEL.

When it is determined that a violator cannot afford the penalty prescribed by this policy, a next step is to consider a delayed payment schedule. Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business. EPA's computer program, ABEL, can calculate a delayed payment amount for up to three years.

Consider straight penalty reductions as a last recourse: If this approach is necessary, the reasons for the litigation team's conclusion as to the size of the necessary reduction should be made a part of the formal enforcement file and the memorandum accompanying the settlement.<sup>4/</sup>

Consider joinder of the violator's individual owners: This is appropriate if joinder is legally possible and justified under the circumstances. Joinder is not legally possible for SIP cases unless the prerequisites of §113 of the Clean Air Act have been met -- issuance of an NOV to the person and documentation of violation thirty days after NOV issuance. The circumstances where individual joinder is appropriate should be considered to be present only when discovery shows that stockholders have used the corporate form as a subterfuge to avoid personal liability.

Regardless of the Agency's determination of an appropriate penalty amount to pursue based on ability to pay considerations, the violator is still expected to comply with the law.

#### E. OTHER UNIQUE FACTORS

The litigation team has absolute discretion to adjust penalties up or down for factors not anticipated here. Adjustments beyond the absolute discretion range in this category, as in other adjustment categories, must be approved by the Associate Enforcement Counsel for Air. In addition, they will be allowed primarily for compelling public policy concerns or litigation practicalities as discussed in Section II.A.3.c., above. The rationale for the reduction must be expressed in writing in the case file and in any memoranda accompanying the settlement.

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<sup>4/</sup>If a firm fails to pay the agreed-to penalty in a judicial final order, then the Agency must follow the Federal Claims Collection Act, 31 U.S.C. §3701 et seq., procedures for obtaining the penalty amount.

#### IV. CALCULATING A PENALTY IN CASES WITH MORE THAN ONE VIOLATION

EPA often takes an enforcement action against a stationary source for more than one violation of the Clean Air Act. If the violations are emission violations and the the result of separate activities, then separate penalties should be calculated according to the method set forth in this policy above and added together to arrive at the total minimum settlement amount.

For example, consider the case of a plant which makes laminated particle board. The particle board plant is found to emit particulates in violation of the SIP particulate emission limit and the laminating line which laminates the particle board with a vinyl covering is found to emit VOC in violation of the SIP VOC emission limit. The penalty for the particulate violation should be calculated using the economic benefit of not complying with that limit (capital cost of particulate control, etc. determined by running the BEN computer model) and then the gravity component for this violation calculated using all the factors in the penalty policy. After the particulate violation penalty is determined, the VOC violation should be calculated in the same manner. The two penalties would then be added together to arrive at the total penalty.

This penalty calculation should be contrasted with the case where there is more than one violation, but only one is an emission violation and the others are procedural violations related in some way to the emission violation. For example, consider a case where, pursuant to Section 114, EPA issues a request for information about SO<sub>2</sub> emissions to a source which has a coal-burning boiler. The source does not respond. Four months later, EPA issues an order under §113(a) requiring the source to comply with the §114 letter. The source does not respond. Six months later, EPA inspects the source and determines that the source is violating the SIP SO<sub>2</sub> emission limit.

In this case, separate economic benefits should be calculated, if applicable. Thus, if the source enjoyed any benefit from not responding to the §114 letter or obeying the §113(a) order, that should be calculated. If not, only the economic benefit from the SO<sub>2</sub> emission violation should be determined. In determining the gravity component, the penalty should be calculated as follows:

1. Actual or possible harm

- a. level of violation - use only emission violation
- b. toxicity of pollutant - use only emission violation
- c. sensitivity of environment - use only emission violation
- d. length of time of violation

separate calculation of time for each violation.  
§114 violation continues to run even after §113(a)  
order is issued until these requirements are satisfied.

2. Importance to regulatory scheme

Reporting requirements:

2 reporting requirement violations at \$15,000 each

Operation and maintenance violations - if SO<sub>2</sub> emission violation is the result of O&M problems, add \$15,000.

3. Size of violator

One figure based on the source's assets.

V. MITIGATION PROJECTS IN SETTLEMENT OF GOVERNMENT CLAIMS

The United States of America has entertained, as part of Clean Air Act enforcement case settlements in the past, defendants' proposals to mitigate cash penalty demands in exchange for the performance of environmentally beneficial projects. This practice of giving environmental "credits" is expressly discouraged in all cases, and will be considered a viable settlement option only in exceptional circumstances.

In situations where they are allowed, the acceptance of mitigation projects for environmentally beneficial expenditures is subject to certain conditions. The Agency has designed these conditions to prevent the abuse of this procedure.

Most of the conditions below applied in the past, but some are new. All of these conditions must be met before mitigation projects may be accepted:

(1) The activity must be initiated in addition to all regulatory compliance obligations.

The project may not be an activity which is otherwise required by law. The project may not be a substitute for full compliance -- it must be designed to provide an environmental benefit beyond the benefits of full compliance.

(2) The activity is most likely to be an acceptable basis for mitigating penalties if it closely addresses the environmental effects of the defendant's violation.

Preferably, the project will address the risk or harm caused by the violations at issue. In general, qualifying activities must provide a discernible response to the perceptible risk or harm caused by defendant's violations which are the focus of the government's enforcement action.

(3) The defendant's cost of undertaking the activity, taking into account the tax benefits that accrue, must be commensurate with the degree of mitigation.

In order to attain the deterrent objectives of the civil penalty policy, the amount of the penalty mitigation must reflect the actual cost to the defendant. With consideration of tax benefits, the actual cost of the project may exceed the value of the mitigation.

(4) The activity must demonstrate a good-faith commitment to statutory compliance.

One test of good faith is the degree to which the defendant takes the initiative to identify and commence specific, potential mitigation projects. In addition, the project must be primarily designed to benefit the environment rather than to benefit the defendant.

(5) Mitigation based on the defendant's activity must not detract significantly from the general deterrent effect of the settlement as a whole.

The government should continue to consider mitigation projects as the exception rather than the rule. Efforts should be made to eliminate any potential perception by the regulated community that the government lacks the resolve to impose significant penalties for substantial violations. The government should seek penalties in conjunction with mitigation activities which deter both the specific defendant and also the entire regulated community. Accordingly, every settlement should include a substantial monetary penalty component.

(6) Judicially-enforceable consent decrees must meet the statutory and public interest criteria for consent decrees and cannot contain provisions which would be beyond the power of the court to order.

A proposed consent decree should not include provisions which would be beyond the power of the court to order under the particular statute which had been violated. Additional guidance on the appropriate scope of relief might be found in the statute, the legislative history or the implementing regulations.

The Agency should exercise case-by-case judgment in deciding whether to accept a mitigation project based upon the above criteria and, in addition, based upon consideration of the difficulty of monitoring the implementation of the proposed project in light of the anticipated benefits of the project.

## VI. EXAMPLES

### Example 1:

#### I. Facts:

Company A runs its manufacturing operations with power produced by its own coal-fired boilers. The boilers are major sources of sulfur dioxide. The State Implementation Plan has a sulfur dioxide emission limitation for each boiler of .68 lbs. per million B.T.U. The boilers were inspected by EPA on March 19, 1983, and the SO<sub>2</sub> emission rate was 2.53 lbs. per million B.T.U. A NOV was issued for the SO<sub>2</sub> violations on April 10, 1983. EPA again inspected Company A on June 2, 1983 and found the SO<sub>2</sub> emission rate to be unchanged, in excess of the allowable emission rate. Company A had never installed any pollution control equipment on its boilers, even though personnel from the state pollution control agency had contacted Company A and informed it that the company was subject to state air pollution regulations. The state had issued an administrative order on September 1, 1981 for SO<sub>2</sub> emission violations at the same boilers. The order required compliance with applicable regulations, but Company A had never complied with the state order. Company A is located in a primary nonattainment area. Company A has net current assets of \$760,000.

#### II. Computation of penalty

##### A. Economic benefit component

EPA used the BEN computer model in the standard mode. To use this computer model, the Region had to supply values for each of six parameters. These are:

1. Initial Capital Investment
2. Initial Annual O&M Expense
3. First Month of Noncompliance
4. Compliance Date
5. Penalty Payment Date
6. One-Time Nondepreciable Expenditure

If the company had provided EPA with data specific to it, EPA could have input additional parameters. However, since the company did not do so, EPA used standard values for the following parameters:

1. Investment Tax Credit Rate
2. Income Tax Rate
3. Inflation Rate
4. Discount Rate
5. Useful Life
6. Amount Financed with Industrial Development Bonds

The economic benefit component calculated by the computer model was \$243,500.

B. Gravity component

1. Actual or possible harm

- a. Amount of pollutant: between 90-120%  
above standard \$16,000
- b. Toxicity of pollutant: No penalty for this  
component.
- c. Sensitivity of the environment: \$15,000
- d. Length of time of violation.

Measured from state order issuance on September 1, 1981 to compliance date in consent decree, September 1, 1985. (If consent decree or judgment order is filed at a later date, this element, as well as elements in economic benefit component must be recomputed.)  
48 mon. - \$28,000

2. Importance to regulatory scheme.

No penalty for this component because violation is not reporting requirement or operation & maintenance problem.

3. Net current assests: \$2,000.

All the parts of the gravity component are now added to yield the preliminary deterrence amount:

\$16,000  
15,000  
28,000  
61,000  
\$61,000

This is added to the economic benefit component:

\$243,500 economic benefit  
+61,000 gravity  
\$304,500

### C. Adjustment Factors

#### 1. Degree of willfulness/negligence

Because Company A was on notice of its violations and, moreover, disregarded the state administrative order to comply with applicable regulations, the gravity component is increased 20%.

20% of \$61,000 = \$12,200

#### 2. Degree of Cooperation

No adjustments were made in the category because Company A was not cooperative.

#### 3. History of noncompliance

Gravity component increased 20% here because Company A violated state order issued for same violation.

20% of \$61,000 = \$12,200.

#### 4. Ability to pay

No adjustment here because Company A did not provide EPA with financial information indicating inability to pay.

Since each gravity factor was adjusted by no more than 30% and the total gravity component by no more than 50%, this adjustment can be made at the absolute discretion of the litigation team.

Initial penalty figure: \$291,500 initial penalty  
+24,400 adjustments  
\$315,900

Company A paid the U.S. Treasury \$315,900.

Example 2:

I. Facts:

Company B produces charcoal from wood waste at its plant, located in an attainment Class II area. Company B is a major source of particulate emissions. It has current net assets of \$74,000. Regulations in the State Implementation Plan limit particulate emissions to 3.39 lbs. per hour. Company B installed a fume incinerator at its plant in 1978. On November 1, 1982, EPA inspected Company B and found the particulate emission rate to be 4.27 lbs. per hour. EPA issued an NOV on January 5, 1983. An EPA inspection on March 10, 1983, showed that Company B continued to be in violation.

Company B had discovered, when it initially began to try to control the emissions at its charcoal plant in 1975, that no appropriate control equipment was available for sale anywhere. It had to design and build all the pollution control equipment it needed to install. Company B began doing research and planning and testing various configurations of fume incinerators to try to find the solution to its particulate emission problem. In 1978, Company B finally believed it had come up with an effective control system and that it was in compliance with state regulations. In 1983, off-the-shelf technology to control emissions from Company B's charcoal operation still did not exist. As soon as the Company received its NOV, however, it hired engineering consultants to design a more effective duct system for the fume incinerator. These consultants were successful in designing a system which was installed in January, 1984. Company B performed an EPA-observed stack test on February 1, 1984 which showed a particulate emission rate of 3.05 lbs. per hour.

Company B has been in a very strained financial situation for the last three years. The company's management has been considering filing for Chapter 11 bankruptcy protection. Company B has not made a profit for the past two years.

II. Computation of penalty

A. Benefit component

The economic benefit was calculated by running the BEN computer model (See Example 1 for inputs.)

The economic benefit derived from the computer calculation was: \$43,480.

B. Gravity component

1. Actual or possible harm

- a. Amount above the standard:  
4.27 lbs./hr. is approximately 20% above 3.39  
lbs./hr. so this component is \$4,000
- b. Toxicity of pollutants: No penalty here.
- c. Sensitivity of environment; Class II - attainment  
area \$2,000
- d. Length of time of violation  
November 1, 1982 - February 1, 1984: 15 months  
of violation: \$7,000

2. Importance to regulatory scheme

No penalty here because violation not connected  
with operation and maintenance practices or  
reporting requirements

3. Size of violator

Net current assets - \$74,000 = \$1,000

Total gravity factors: \$14,000;

Preliminary Deterrence Amount

Preliminary Deterrence Amount	43,480
	+14,000
	<u>\$57,480</u>

C. Flexibility - Adjustment Factors

1. Degree of willfulness or negligence

No adjustment upward here for willfulness or negligence.

2. Degree of Cooperation

Because Company B was so prompt in correcting its  
problem once it received the NOV, unlike Company  
A, and because of Company B's good efforts to  
comply, the gravity component was mitigated by  
50%.

50% of \$14,000 = \$7,000

\$ 14,000  
-7,000  
\$ 7,000

3. History of noncompliance

No adjustment here because Company B had no previous history of noncompliance.

4. Ability to Pay

Because of Company B's financial situation, the gravity component was reduced 50%.

\$ 7,000  
-7,000  
\$ 0

The gravity component, in this case, is reduced to 0.

Because the litigation team wanted to mitigate the gravity component by more than 30%, the EPA headquarters attorney discussed the facts of the case with the Associate Enforcement Counsel for Air and obtained the AEC's concurrence on this mitigation before settlement negotiations began.

The initial penalty figure presented at settlement negotiation was \$43,480. If Company B raises its ability to pay during settlement negotiations, the case development team will consider it at that time in the context of Section II.A.3.b. That adjustment factor has already been given full consideration with regard to the Gravity Component.

Example 3:

I. Facts:

Company C, located in a primary nonattainment area, commenced construction in January 1982. It began its operations in April 1983. It runs a coal-fired boiler subject to the NSPS regulations for fossil-fuel-fired steam generators (40 CFR Part 60 Subpart D). The boiler is a major source of particulates and SO<sub>2</sub>. Subpart D requires that boiler emissions of SO<sub>2</sub> not exceed 1.2 lbs. per million BTU. General NSPS regulations require that a source owner or operator subject to NSPS fulfill certain notification and recordkeeping functions (40 CFR §60.7), conduct performance tests (40 CFR §60.8) and conduct specified continuous monitoring (40 CFR §60.13).

Company C is believed to be in compliance for SO<sub>2</sub> based on coal-sampling data and the fact that it has installed the proper pollution control equipment. However, although §60.8 requires Company C to test within 180 days of startup, or by October 1983, the company had not conducted performance tests as of September 1, 1984.

Company C also failed to notify EPA of the date it commenced construction within 30 days after such date (February, 1982) or the date of anticipated startup between 30-60 days prior to such date (March, 1983) or the date of actual startup within 15 days after such date (April, 1983) (40 CFR §60.7). Continuous emission monitoring equipment was installed, but continuous monitoring certification has never been done, and so the requirement that it be done within 30 days after performance testing (November, 1983) was not fulfilled either. Company C is now sending EPA CEM reports.

Company C ignored two letters from EPA, one dated November, 1983 and one dated March, 1984 informing it that it was subject to NSPS requirements. It did negotiate with EPA after the complaint was filed on September 1, 1984, and agreed to a consent decree requiring all testing and reporting to be done by December 1, 1984. Company C has assets of \$7,000,000.

## II. Computation of penalty

### A. Benefit component

The Region determined that the economic benefit component was very likely to be less than \$5,000. Therefore, it was not calculated.

### B. Gravity component

#### 1. Actual or possible harm

a. Amount of pollutant: not an emission violation  
- 0.

b. Toxicity of pollutant: No penalty for this component

c. Sensitivity of the environment: \$15,000

d. Length of time of violation

1) Performance testing: October, 1983 -  
December 1984: 14 months

- 2) Failure to report commencement of construction February 1982 - November 1983: 21 months (date of EPA's first letter to Company)
  - 3) Failure to report actual startup April, 1983 - November 1983: 7 months
  - 4) Failure to perform CEM certification November 1983 - December 1984: 13 months
- Total: 14 + 21 + 7 + 13 = 55 months = \$20,000

The second and third elements are ended in November, 1983 even though the source never sent the notices because, in November, 1983, EPA informed the source that it had actual notice, which might appear to make notice by the source unnecessary.

2. Importance to regulatory scheme

Reporting requirements violations: \$15,000

3. Size of violator: \$12,000

All the parts of the gravity component are now added:

0
0
15,000
20,000
15,000
12,000
<u>62,000</u>

This is added to the economic benefit component

0	economic benefit
62,000	gravity
<u>\$62,000</u>	preliminary deterrence amount

C. Adjustment factors

1. Degree of willfulness/negligence

Because Company C was on notice of its violations and disregarded the requirements to comply, even though it would have been easy for them to do so, the gravity component is increased 30%.

30% of \$62,000 = \$18,600

2. Degree of Cooperation

No adjustments were made in this category because Company C was not cooperative.

3. History of noncompliance

No past history of noncompliance

4. Ability to pay

No adjustment here because Company C did not provide EPA with financial information indicating inability to pay.

Total penalty

\$62,800 preliminary deterrence amount

18,600 adjustment

\$80,600 initial penalty figure

Company C paid the U.S. Treasury \$80,600.

VII. CONCLUSION

Treating similar situations in a similar fashion is central to the credibility of EPA's enforcement effort and to the success of achieving the goal of equitable treatment. This document has established several mechanisms to promote such consistency. Yet it still leaves enough flexibility for tailoring the penalty to particular circumstances. Perhaps the most important mechanisms for achieving consistency are the systematic methods for calculating the benefit component and gravity component of the penalty. Together, they add up to the preliminary deterrence amount. The document also sets out guidance on uniform approaches for applying adjustment factors to arrive at an initial penalty amount prior to beginning settlement negotiations or an adjusted penalty amount after negotiations have begun.

Nevertheless, if the Agency is to promote consistency, it is essential that each case file contain a complete description of how each penalty was developed. This description should cover how the preliminary deterrence amount was calculated and any adjustments made to the preliminary deterrence amount. It should also describe the facts and reasons which support such adjustments. Only through such complete documentation can enforcement attorneys, program staff and their managers learn from each other's experience and promote the fairness required by the Policy on Civil Penalties.

Thomas L. Adams, Jr.  
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Assistant Administrator for Enforcement  
and Compliance Monitoring

J. Craig Potter  
J. Craig Potter  
Assistant Administrator for Air and Radiation

## APPENDIX I

### Penalty Policy for Violations of Certain Clean Air Act Permit Requirements for the Construction or Modification of Major Stationary Sources of Air Pollution

#### I. Introduction

EPA's Clean Air Act Stationary Source Civil Penalty Policy applies generally to stationary sources of air pollution which violate requirements enforceable under Section 113 of the Clean Air Act when such violations are the result of a failure to make capital expenditures and/or failure to employ operation and maintenance procedures which are necessary to achieve compliance. The general policy does not, however, specifically address violations of permit requirements related to the construction or modification of major stationary sources under the prevention of significant deterioration (PSD) program and the nonattainment area new source review program.

This document outlines a penalty policy which applies to certain permit-related violations of the Clean Air Act and provides a method of calculating a minimum settlement amount for such violations. This "Permit Penalty Policy" was originally issued in February 1981 to deal with a subject area not covered by the 1980 penalty policy. It has been revised for inclusion in the 1987 policy to reflect more realistic penalty amounts.

As illustrated by the examples, a source may have violated a new source requirement which makes it subject to this Permit Penalty Policy, and, in addition, violated a regulation subject to the general policy or another appendix. If this is the case, the Permit Penalty Policy should be used to find the minimum settlement figure for the permit violation(s) and the general policy or applicable appendix should be used to establish a penalty amount for the other violation(s). These two figures should be added together to produce an appropriate overall settlement amount. It is also important to note that the policy outlined in this document, like the general stationary source civil penalty policy, is used to set a minimum settlement figure. Therefore, the penalty actually negotiated for can always be higher than the figure derived through use of this Permit Penalty Policy.

## II. The Permit Penalty Policy

The Permit Penalty Policy covers cases involving sources which begin construction or operation without first obtaining the required PSD or nonattainment new source permit, as well as those which construct or operate in violation of such valid permits. Construction proceeding in compliance with an invalid permit is considered to be, in the context of this penalty policy, construction without a permit.

In these cases, when the source is operating and has enjoyed an economic benefit from noncompliance, that benefit should be calculated as directed in the general stationary source civil penalty policy. As directed by the general policy, however, the Regional Office may decide not to calculate the economic benefit if that office decides that the economic benefit is likely to be below \$5,000. The gravity component is then calculated based on the matrix contained in this permit penalty policy. Construction in the absence of a permit or in violation of a permit has been assigned a scale of dollar values on a matrix. The matrix also provides for the assessment of an additional penalty for certain specified violations of substantive permit preconditions or requirements. The appropriate dollar value for a violation is dependent on an estimate of the total cost of air pollution control at those facilities of the source for which the permit is required.<sup>1/</sup> This value is then multiplied by the number of months of violation.<sup>2/</sup> When there are multiple permit-related

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1/ "Total cost of air pollution control" should include, where relevant, pollution control equipment costs, design costs, operation and maintenance costs, differential cost of complying fuel v. noncomplying fuel, and other costs pertaining to adequate control of the new source. Total cost is to be determined by examination of what would have been required as BACT (for a PSD violation) or LAER (in the case of an Offset Policy or Part D violation). When construction is done in phases, the operative amount is the total cost of air pollution controls for the entire project. If a source has installed partial control before the enforcement action commenced, that part of the cost can be subtracted from the total costs.

2/ Month-by-month accrual of penalties was selected for purposes of convenience and for consistency with the general policy. Any fraction of a month in violation is counted as a full month of violation unless circumstances present a case for mitigation of this rule.

violations, a penalty figure is calculated for each violation and the individual penalty figures are added together to produce one minimum settlement figure. In those cases where a source subject to a valid permit violates only the requirements of Section 173(1) and/or Section 173(3) (requirements for construction permits in nonattainment areas), the appropriate penalty amount is determined by reference only to the matrix column(s) citing the violation(s).

The economic benefit component and the gravity component are added together to determine the preliminary deterrence amount. This initial amount should then be adjusted, using the general stationary source civil penalty policy factors which take into consideration individual equitable considerations (Part III of the general policy.) This will yield the initial penalty figure.

The period of civil penalty liability will, of course, depend upon the nature and circumstances of the violation. For example, if a source has begun actual construction without a required permit or under an invalid permit, the penalty period begins on the date the source began construction and continues either until the source obtains a valid permit, notifies the State or EPA that it has permanently ceased construction and the project has been abandoned, or the State issues a federally enforceable construction permit containing operating restrictions which keep the source below the new source review applicability threshold.<sup>3/</sup> A temporary cessation in construction does not toll the running of the penalty period. The Agency may, however, consider mitigation of the calculated civil penalty if a source ceases construction within a reasonable time after being notified of the violation and does not resume construction until a valid permit is issued. If a source violates a permit condition, the period of penalty liability for purposes of calculating a settlement figure begins on the first date the violation can be documented and will cease when the violation is corrected.

EPA realizes that in certain cases, it is highly unlikely that the Agency will be able to obtain the full amount of the initial penalty figure in litigation. This may be due to applicable precedent, competing public interest considerations,

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<sup>3/</sup>The period of liability is not to be confused with the period of continuing violation for Section 113 notice of violation (NOV) purposes. A source which constructs without a valid permit is in continuing violation of the Clean Air Act for NOV purposes until it receives a valid permit or it dismantles the new construction.

or the specific facts, equities, or evidentiary issues pertaining to a particular case. In such a situation it is unrealistic to expect EPA to obtain a penalty settlement which it could not achieve through litigation. The litigation team must receive the approval of the Associate Enforcement Counsel for Air in order to propose settling for less than the minimum penalty amount from the matrix because of litigation practicalities.

PERMIT PENALTY POLICY MATRIX  
MINIMUM SETTLEMENT FIGURES  
(per month of violation)

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TOTAL COST OF AIR POLLUTION CONTROL FOR NEW OR MODIFIED SOURCE (\$ THOUSANDS)	PSD SOURCES	
	CONSTRUCTION OR OPERATION WITHOUT A PERMIT OR IN VIOLATION OF A VALID PERMIT	INCREMENT EXCEEDED
less than 50	\$ 2,000	\$ 7,000
50-150	4,000	11,000
150-500	7,000	16,000
500-1,500	11,000	18,000
1,500-5,000	16,000	21,000
5,000-15,000	22,000	25,000
15,000-50,000	29,000	31,000
over 50,000	37,000	39,000

PART D AND OFFSET INTERPRETATIVE RULING SOURCES

TOTAL COST OF AIR POLLUTION CONTROL FOR NEW OR MODIFIED SOURCE (\$ THOUSANDS)	CONSTRUCTION OR OPERATION WITHOUT A PERMIT OR IN VIOLATION OF A VALID PERMIT	FAILURE TO SATISFY §173(1) OR OBTAIN OFFSETS	VIOLATION OF SECTION 173(3) OR CONDITION 2
less than 50	\$ 2,000	\$ 3,000	\$ 2,000
50-150	4,000	4,000	3,000
150-500	7,000	6,000	4,000
500-1,500	11,000	9,000	4,000
1,500-5,000	16,000	11,000	5,000
5,000-15,000	22,000	13,000	7,000
15,000-50,000	29,000	15,000	11,000
over 50,000	37,000	17,000	12,000

(Add numbers when multiple categories apply)

### EXAMPLE CASES

The following hypothetical cases illustrate how the matrix is used to calculate a minimum settlement figure.

#### PSD SOURCE

##### I. Facts

On July 1, 1985, an existing major source began construction of a modification to its plywood manufacturing plant. The modification will result in a significant net emission increase of particulate matter. The source had not obtained or filed for a PSD permit as of the date construction began.

On July 2, 1985, EPA investigators discovered the construction during a routine inspection of the plywood plant. The EPA Regional Office determined that the modification was subject to PSD review and issued a Notice of Violation on August 1, 1985. The NOV cited the PSD regulations and outlined possible enforcement alternatives.

The source received the NOV on August 5, 1985, and contacted the Regional Office on August 10, 1985. On August 30, 1985, the Region and the source held a conference at which the source stated that it had been aware of the need for PSD review and permitting prior to construction. The source also stated that it would file an application for a permit but that it would not cease construction during the review process.

On October 1, 1985, the source filed a PSD application. During the review process the Region discovered that the source had no plans to install pollution control devices. The Region also determined that without BACT, the modification's particulate emissions would result in an exceedance of the particulate matter increment in the source's area of impact. The source, when informed of the BACT problem, indicated it would install the necessary controls.

However, throughout the review process the source continued construction of the modification. On December 1, 1985, the source began operation of the modified source without the required permit and without controls.

On January 15, 1986, the source was issued a PSD permit. On February 28, 1986, the source ceased operation of the plywood plant to connect the pollution control equipment called for in the PSD permit. The source resumed operation on March 15, 1986, in a manner consistent with the PSD permit conditions.

## II. Computation of Penalty

### A. Benefit Component

The penalty calculation begins with a calculation of the economic benefit of noncompliance (using the BEN model) for the period of operation without a permit (December 1, 1985 - January 15, 1986). BEN calculated a penalty of \$6,400.

### B. Gravity Component

This component of the penalty is calculated by initially assessing the total cost of air pollution control equipment at the modification. For purposes of this example, assume BACT costs \$140,000.

Next, the PSD Matrix must be consulted and the type and number of matrix categories determined. In this example the source (1) began construction without a permit, (2) operated the plant without a PSD permit and (3) exceeded the growth increment for particulate matter. Therefore, this source is subject to both of the columns of dollar values under the heading "PSD Sources."

Once the type, number and dollar values of the penalty are determined, these figures are multiplied by the number of months in violation. The sums are then added together to produce the matrix penalty amount.

In this example, the source's period of construction without a permit runs from July 1, 1985, until operations began on December 1, 1985 (5 months). The period of operation without a permit runs from the time the source began operation (December 1, 1985) to the date the source received a permit (January 15, 1986) (2 months). The source also exceeded the area growth increment for particulate matter during the period of operation from December 1, 1985, to February 28, 1986 (3 months).<sup>4/</sup>

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<sup>4/</sup> It is important to note that some aspects of the matrix do not necessarily track the statutory provisions regarding violations. For example, there is no Clean Air Act provision which makes increment exceedance, in and of itself, a violation by an individual source. (The SIP must protect the increment. The method used is PSD review with permit conditions such as BACT, fuel use limitations, etc.) However, as a portion of the gravity component, considering the seriousness of the violation if a source operates and thereby violates the increment due to failure to go through PSD review as required, an added penalty is appropriate.

The matrix penalty figure for this source's PSD related violations, based on a \$140,000 total cost of control estimate, is:

- for the 5 month period of construction without a permit,  
5 x \$4,000 = \$20,000
- for the 2 month period of operation without a permit,  
2 x \$4,000 = \$8,000
- for the 3 month period of operation during which the  
increment was exceeded,  
3 x \$11,000 = \$33,000
- matrix penalty figure =  
\$20,000 + \$8,000 + \$33,000 = \$61,000

This is added to the economic benefit component

\$ 6,400	economic benefit
61,000	gravity
<u>\$67,400</u>	preliminary deterrence amount.

#### C. Adjustment Factors

##### 1. Degree of willfulness/negligence

Because the source knew it needed a PSD permit and commenced construction without applying for a PSD permit, the gravity component is increased 10%

10% of \$61,000 = \$6,100

##### 2. Degree of cooperation

No adjustment

##### 3. History of noncompliance

No past history of noncompliance

##### 4. Ability to pay

No adjustment here because the source did not provide EPA with financial information indicating inability to pay.

Total Penalty

\$67,400 preliminary deterrence amount  
+ 6,100 adjustment  
\$73,500 initial minimum penalty figure

The source paid the U.S. Treasury \$73,500.

Section 173 and Offset Policy Sources

I. Facts

On December 1, 1984, a plywood manufacturing company began operation of a modification at its plant which is located in a nonattainment area for particulate matter. The modification is subject to new source review permitting and, in fact, the source has obtained a valid NSR permit from the State. The permit specifies 1) that the applicant has demonstrated that all other major stationary sources owned or operated by the applicant in the State are in compliance with the Act, 2) what constitutes required LAER, and 3) what offsets (internal)<sup>5/</sup> would be required to be obtained prior to start-up or commencement of operation. (These requirements are found in Section 173 of the Clean Air Act.)

In March of 1985, the Regional Office learned that the source did not install controls on a certain piece of process equipment and therefore did not have LAER as specified in the State permit. On April 1, 1985, the Region issued an NOV for failure to comply with the terms of the permit by not installing LAER prior to start-up. At an April 15, 1985, conference between EPA and the source, the source agreed to meet the terms of its permit and to demonstrate compliance. On November 15, 1985, the equipment had been installed and a performance demonstration showed that the source was in compliance with the LAER limit specified in the permit.

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<sup>5/</sup> In light of the Supreme Court decision in Chevron U.S.A. Inc. v. NRDC, \_\_\_ U.S. \_\_\_, 104 S. Ct. 2778 (1984), a state may choose to adopt a plant-wide definition of source in nonattainment areas. In such instances, sources obtaining internal offsets may be exempt from nonattainment new source review requirements.

## II. Computation of penalty

### A. Benefit Component

The BEN model determined that the economic benefit from operating without LAER controls from December 1, 1984 until November 15, 1985 was \$63,400.

### B. Gravity Component

First the cost of the pollution control equipment must be determined. In this case, LAER costs \$110,000. Since the plant operated from December 1, 1984 until November 15, 1985 without LAER, the period of violation is 12 months. The matrix yields a gravity component of  $12 \times 4,000 = \$48,000$ . The other two categories of the NSR matrix need not be used because there were no violations in these categories.

The gravity component is added to the economic benefit component

\$63,000 economic benefit  
+ 48,000 gravity  
\$111,400 preliminary deterrence amount

### C. Adjustment factors

#### 1. Degree of willfulness

No adjustment here. At the NOV conference, EPA learned that the company had had serious, but temporary economic reverses that prevented it from installing the control equipment.

#### 2. Degree of cooperation

No adjustments here.

#### 3. History of compliance

No past history of noncompliance.

#### 4. Ability to pay

No adjustment here because the company had reversed its financial losses and was currently financially healthy.

Total penalty - initial penalty target figure same as preliminary deterrence amount.

Because the State had intervened in the case and had gathered the evidence of violation, the U.S. split the penalty with the State.

The Company paid \$55,700 to the U.S. treasury and \$55,700 to the State.

## APPENDIX II

### Vinyl Chloride Civil Penalty Policy

The attached chart shall be used to determine the gravity component of the civil penalty settlement amount for cases enforcing the National Emission Standard for Vinyl Chloride. It is to be used in lieu of the scheme for determining the gravity component set forth in the general Clean Air Act Stationary Source Civil Penalty Policy.

The settlement penalty for vinyl chloride cases, as for other Clean Air Act cases, consists of a gravity component and an economic benefit component. Adjustments for degree of willfulness or negligence, degree of cooperation/noncooperation, history of noncompliance, ability to pay, "other unique factors," and litigation practicalities should be made, if appropriate, in accordance with the Stationary Source Civil Penalty Policy.

The gravity component of the penalty reflects the seriousness of the violation. A separate scheme was developed for vinyl chloride cases because several of the factors in the general policy, such as length of time of violation, whether the area is primary non-attainment, and level of violation as a percentage above the standard largely do not apply to vinyl chloride cases. Also, the hazardous nature of the pollutant and the difficulty in determining economic benefit are reflected by establishing a substantial gravity component.

The vinyl chloride gravity component is therefore tied to the amount of vinyl chloride released in a given incident, which is used as a measure of the seriousness of each violation. Also, for relief valve discharges, manual vent valve discharges, and 10 ppm violations, an adjustment factor is to be used to account for excessive frequency of discharges in a given time, which is a reflection of poor performance regardless of the amount of vinyl chloride discharged to the atmosphere. The frequency adjustment factor differs from the adjustment factor for history of noncompliance, which reflects violations occurring prior to those which are the subject of the current enforcement action.

The chart is to be applied as follows: For each violation, assign a dollar amount based on the type and magnitude of violation as described in the chart. Relief valve discharges, manual vent valve discharges and violations of 10 ppm standards should then be grouped by calendar years. If the number of these violations is three or more in any calendar year, the total penalty for that period should be multiplied by the appropriate "frequency adjustment factor." The total gravity component for the case is

the sum of the penalty numbers for each violation, adjusted where appropriate to account for excessive frequency. The settlement penalty for the case as a whole cannot exceed the statutory maximum of \$25,000 per day per violation. Sample calculations are attached to this policy.

The economic benefit component may be impractical to determine in vinyl chloride cases, depending on the nature of the violations. The benefit component should be determined if feasible, e.g., where a pattern of violations indicates a need for specific technology, equipment, or procedures, or where the defendant has chosen a "fix" to address a series of violations.

This revised policy shall apply to all pending and future vinyl chloride cases.

Relief Valve Discharges, Manual Vent Valve Discharges, Violations  
of 10 ppm Standards

Emissions

<u>Pounds of VC released</u>	<u>Penalty</u>
0 - 100	\$ 1000
>100 - 2000	2000
>2000 - 5000	5000
>5000 - 7500	10,000
>7500 - 10,000	15,000
over 10,000	25,000

Frequency Adjustment Factors

<u># Of Violations in Calendar Year</u>	<u>Multiplier</u>
3	1.5
4+	2

Failure to Report

<u>Size of Release Not Reported (lbs.)</u>	<u>Penalty</u>
0-100	\$ 2000
100-500	5000
500-1000	10,000
1000-2000	20,000
over 2000	25,000

Graduated scale for late reporting (if not in response to direct  
request from State or EPA) - 10-day discharge reports  
(as percentage of penalty for failure to report)

Within 2 months (from discharge)	25% of penalty
2-4 months	50% " "
4-6 months	75% " "
over 6 months	100% " "

## Stripping Violations and Reactor Opening Loss Violations

### Stripping

<u>Magnitude of Violation</u>		<u>Penalty</u>
<u>Suspension/Latex</u>	<u>Dispersion</u>	
400-500 ppm	2000-2500 ppm	\$ 1000
500-600	2500-3000	2000
600-700	3000-3500	3000
700-800	3500-4000	4000
800-900	4000-4500	5000
900-1200	4500-6000	10000
1200-1400	6000-7000	15000
1400-1600	7000-8000	20000
over 1600	over 8000	25000

### Reactor Opening Loss

Penalty = \$1000/violation (for each reactor)

### Failure to Measure

Penalty = Maximum penalty amount for each type of violation  
= \$25000 (stripping)  
= \$1000 (reactor opening loss)

### Failure to Submit Complete Semiannual Report

Penalty = \$25000

Graduated scale for late semiannual report (if not in response to direct request from State to EPA)

Within 2 months	\$ 6,250
2-4 months	12,500
4-6 months	18,750
Over 6 months	25,000

### Example 1

ABC Chemical Corporation owns a polyvinyl chloride plant in Louisiana. The United States has filed an enforcement action alleging relief valve discharge violations, failure to report relief valve discharges, reactor opening violations, and stripping violations. The settlement penalty is determined as follows:

#### Gravity Component

<u>Relief Valve Discharges</u>		<u>Penalty/Discharge</u>	
July 6, 1981	446 lbs.	\$2,000	x 1.5 = \$7,500
August 15, 1981	1250 lbs.	\$ 2,000	
November 30, 1981	46 lbs.	\$1,000	
March 17, 1982	127 lbs.	\$2,000	x 1 = \$12,000
July 15, 1982	6271 lbs.	\$10,000	
Subtotal for Relief Valve Discharges			\$19,500

#### Failure to Report

Failed to report July 6, 1981 discharge	\$5,000
Report August 15, 1981 discharge 1 month late - 25% x \$20,000	<u>5,000</u>
Subtotal for reporting	\$10,000

#### Reactor Opening Loss Violations

77 reactor opening loss violations	\$77,000
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#### Stripping Violations (Suspension)

January, 17, 1982	556 ppm	\$2,000
July 10, 1982	421 ppm	\$1,000
August 19, 1982	494 ppm	<u>\$1,000</u>
Subtotal for stripping		\$4,000

Total Gravity Component \$110,500

Benefit Component

None determined

Preliminary deterrence amount

\$110,500

Adjustments

Negligence

Add 30% of gravity component - emission  
violations generally due to  
repetition of same cause  
+ 30% (110,500)

+ \$ 33,150

Minimum penalty settlement amount

---

\$143,650

## Example 2

Polynesian Polymers, Inc., owns a polyvinyl chloride plant in Texas. The United States has filed an enforcement action alleging relief valve and manual vent valve discharge violations, reporting violations, and reactor opening loss violations. The settlement penalty is determined as follows:

### Gravity Component

#### Relief Valve and Manual Vent Valve Discharges

		<u>Penalty/Discharge</u>	
July 6, 1983	271 lbs.	\$ 2,000	-
July 15, 1983	621 lbs.	2,000	-
August 21, 1983	710 lbs.	2,000	-
November 1, 1983	6,221 lbs.	10,000	-
January 17, 1984	7,721 lbs.	15,000	-
			x 2 = 32,000
			-
			x 1 = 17,000
November 30, 1984	526 lbs.	2,000	-
January 14, 1985	2,771 lbs.	5,000	-
July 19, 1985	4 lbs.	1,000	-
December 21, 1985	172 lbs.	2,000	-
			x 1.5 = 12,000
			-
Subtotal for Relief Valve Discharges			\$ 61,000

#### Failure to Report

Failed to report Nov. 1, 1984 discharge \$25,000

Failed to report Nov. 30, 1984 discharge 10,000

Subtotal for reporting \$ 35,000

## APPENDIX III

### Asbestos Demolition and Renovation Civil Penalty Policy

The Clean Air Act Stationary Source Civil Penalty Policy provides guidance for determining the amount of civil penalties EPA will seek in pre-trial settlement of enforcement actions under Title I of the Act. Due to certain unique aspects of asbestos demolition and renovation cases, separate guidance is provided here for determining the gravity and economic benefit components of the penalty. Adjustment factors should be treated in accordance with the general stationary source penalty policy.

If the Region is referring a civil action under Section 113(b) against a demolition or renovation source, it should recommend a civil penalty settlement amount. Consistent with the general penalty policy, the Region should determine a "preliminary deterrence amount" by assessing an economic benefit component and a gravity component. This amount may then be adjusted upward or downward by consideration of other factors, such as degree of willfulness and/or negligence, history of noncompliance, ability to pay, and litigation practicalities. Since there is a wide variation in the size of demolition contractors, ability to pay may be an important adjustment factor in some instances.

The "gravity" component should account for factors such as the environmental harm resulting from the violation, the importance of the requirement to the regulatory scheme, and the size of the violator. Since asbestos is a hazardous air pollutant, the gravity factor associated with substantive violations (i.e., failure to adhere to work practices or to prevent visible emissions from waste disposal) should be high. Also, since notification is essential to Agency enforcement, a notification violation should also warrant a high gravity component.

#### Gravity Component

The attached chart sets forth the gravity component of the penalty settlement figure for notification violations and for violations of substantive requirements for control of asbestos emissions. The figures in the first line of the chart apply as a general rule to failure to notify, including those situations in which substantive violations occurred and those instances in which EPA has been unable to determine if substantive violations occurred. The reduced amounts in the second line of the chart apply only if the Agency can conclude, from its own inspection, a State inspection, or other reliable information, that the source complied with substantive requirements.

Where notification is made late, the Region has discretion to seek a lesser penalty. The penalty should reflect the degree to which the Region's ability to evaluate substantive compliance has been hampered. If notification is late but still allows sufficient opportunity to monitor the entire project, little or no penalty is warranted. If notification is given so late as to preclude any evaluation of substantive compliance, the Region should determine a penalty as if no notice were given.

Regions should exercise discretion in penalizing a timely notification which is incomplete. A notification can be so insufficient as to be tantamount to no notice, in which case the Region should determine the penalty as if there were no notice. Again, the important factor is the impact the company's action has on our ability to monitor substantive compliance.

Penalties for substantive violations are based on the particular regulatory requirements violated. The figure is the sum of the penalty assigned to a violation of each set of requirements: removal, wetting, and stripping, 40 C.F.R. §61.147; collection, packaging, and transporting of asbestos-containing waste material, §61.152(b); and disposal of wastes at an acceptable site, §61.152(a). The figure also depends on the amount of asbestos involved in the operation, which relates to the potential for environmental harm associated with improper removal and disposal. There are three categories based on the amount of asbestos, expressed in "units," a unit being the threshold for applicability of the substantive requirements. If a job involves friable asbestos on pipes and other facility components, the amounts of linear feet and square feet should each be separately converted to units, and the numbers of units should be added together to arrive at a total. Where the only information on the amount of asbestos involved in a particular demolition or renovation is in cubic dimensions (volume), the amount can be converted to square dimensions by dividing the volume by the estimated thickness of the asbestos material.

Gravity components are adjusted based on whether the violation is a first, second, or subsequent offense. By "second" or "subsequent" offense, we mean that the company has violated the regulations after previously being notified by the State or EPA of asbestos NESHAP violations. This prior notification could range from simply a warning letter to the filing of a judicial enforcement action. A "second" violation could even occur at the same job as the first one if, after being notified of violations by the State or EPA

and having an opportunity to correct such violations, the company continues to violate the regulations. If the case involves multiple potential defendants and any one of them is involved in a second or subsequent offense, the penalty should be derived based on the second or subsequent offense. In such instance, the Government should try to get the prior-offending party to pay the extra penalties attributable to this factor. (See discussion below on apportionment of the penalty.)

The Region should consider enhancing the gravity component in situations where the duration of the violation increases the potential harm. This would be particularly appropriate where the source allows asbestos waste material to stay on site without any effort to collect and dispose it for a significant period of time.

#### Benefit Component

This component is a measure of the economic benefit accruing to the contractor, the facility owner, or both, as a result of noncompliance with the asbestos regulations. Information on actual economic benefit should be used if available. The attached chart provides figures which may be used as a "rule of thumb" to determine the costs of removing and disposing asbestos in compliance with §61.147 and §61.152, where actual information is difficult to obtain or is suspect. The figures are based on rough cost estimates which the Office of Air Quality Planning and Standards has developed in considering revisions to the asbestos standard. These estimates are within a range of numbers that OAQPS has considered in determining the economic impact of the asbestos demolition and renovation requirements. Also, if any party ultimately pays to have all or part of the job done in compliance, actual expenditures can be used to offset the benefit of noncompliance.

#### Apportionment of the Penalty

This policy is intended to yield a minimum settlement penalty figure for the case as a whole. In some cases, more than one contractor and/or the facility owner will be named as defendants. In such instances, the Government should generally take the position of seeking a sum for the case as a whole, which the multiple defendants can allocate among themselves as they wish.

It is not necessary in applying this penalty policy to allocate the economic benefit between the parties precisely. The total benefit accruing to the parties should be used for this component. Depending on the circumstances, the economic

benefit may actually split among the parties in any combination. For example, if the contractor charges for compliance with asbestos removal requirements and fails to comply, the contractor has derived a savings and the owner has not. If the contractor underbids because it does not factor in compliance with asbestos requirements, the facility owner has realized the full amount of the financial savings. (In such an instance, the contractor may have also received a benefit which is harder to quantify - obtaining the contract by virtue of the low bid.)

There are circumstances in which the Government may try to influence apportionment of the penalty. For example, if one party is a second offender, the Government may try to assure that such party pay the portion of the penalty attributable to the second offense. If one party is known to have realized all or most of the economic benefit, that party may be asked to pay for that amount. Other circumstances may arise in which one party appears more culpable than others. We realize, however, that it may be impractical to dictate allocation of the penalties in negotiating a settlement with multiple defendants. The Government should therefore adopt a single "bottom line" sum for the case and should not reject a settlement which meets the bottom line because of the way the amount is apportioned.

Apportionment of the penalty in a multi-defendant case may be required if one party is willing to settle and others are not. In such circumstances, the Government should take the position that if certain portions of the penalty are attributable to such party (such as economic benefit or second offense), that party should pay those amounts and a reasonable portion of the amounts not directly assigned to any single party. However, the Government should also be flexible enough to mitigate the penalty somewhat to account for the party's relative cooperativeness. If a case is settled as to one defendant, a penalty not less than the balance of the settlement figure for the case as a whole should be sought from the remaining defendants. This remainder can be adjusted upward, in accordance with the general Civil Penalty Policy, if the circumstances warrant it. Of course, the case can also be litigated against the remaining defendants for the maximum attainable penalty.

#### Other Considerations

We expect that each Region may want to develop its own strategy (some have already done so) for targeting enforcement action against violators of the asbestos demolition and renovation requirements. The policy is intended to give

Regions flexibility to incorporate, as part of a coherent strategy, a practice of addressing first-time notice violations where there is at least probable compliance with substantive requirements through findings of violation or administrative orders. There is also the potential for "pre-settling" judicial actions for modest penalties for such violations.

On the other hand, the policy penalizes substantive violations and repeat violations in a significant way. Penalties should generally be sought for all violations which fit these categories. If a company knowingly violates the regulations, particularly if the violations are severe or the company has a prior history of violations, the Region should consider initiating a criminal enforcement action.

#### Examples

Following are two examples of application of this policy.

##### Example 1

XYZ Associates hires America's Best Demolition Contractor to demolish a building containing 1300 linear feet of pipe covered with friable asbestos, and 16,000 square feet of siding and roofing sprayed with asbestos. Neither company notifies EPA or State officials prior to commencing demolition of the building. Tipped off by a citizen complaint, EPA inspects the site and finds that the contractor has not been wetting the asbestos removed from the building, in violation of 40 C.F.R. §61.147. In addition, the contractor has left a pile of dry asbestos waste material on site, and the inspector observes visible emissions in violation of §61.152(b). The contractor has also not deposited the waste in an acceptable disposal site, in violation of §61.152(a). At the time of the inspection 75% of the asbestos has already been removed from the building and handled improperly. After discussion with EPA officials, XYZ Associates hires another contractor to properly dispose of the asbestos wastes and to remove the remaining 25% of the asbestos in compliance with the asbestos NESHAP.

Neither XYZ Associates nor America's Best Demolition Contractors has ever been cited for asbestos violations by EPA or the State. Both parties have sufficient resources to pay a substantial penalty.

The penalty is computed as follows:

Gravity Component

No notice (first time)	\$10,000
Violations of §61.147, §61.152(b), and §61.152(a) (100 + 5 = 105 units of asbestos)	+45,000
	<u>\$55,000</u>

Economic Benefit

\$4/sq. foot x 16,000 sq. feet + \$4/linear foot x 1300 linear feet	\$69,200
---	----------

Offset by actual expenditure by XYZ to remove 25% of asbestos in compliance with NESHAP (25% x \$69,200)	-17,300
	<u>\$51,900</u>

Preliminary deterrence amount	\$106,900
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Adjustment factors - Prompt correction of environmental problem (-30% of gravity component)	\$-16,500
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Minimum penalty settlement amount	\$ 90,400
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Example 2

Consolidated Conglomerates, Inc., hires Bert and Ernie's Trucking Company to demolish a building which contains 10,000 linear feet of friable asbestos on pipes. Neither party gives notice to EPA or to the State prior to commencement of demolition. An EPA inspector, acting on a tip, visits the site after the building has been totally demolished. He finds a large pile of dry asbestos-containing waste material on site. The inspector learns that the demolition had been completed at least three weeks before he inspected the site.

Consolidated Conglomerates is a corporation with assets of over \$100 million and annual sales in excess of \$10 million. Bert and Ernie's Trucking is a limited partnership of two brothers who own two trucks and have less than \$250,000 worth of business each year. This contract was for \$50,000. Bert and Ernie's was once previously cited by the State Department of Environmental Quality for violations of asbestos regulations.

The penalty is computed as follows:

Gravity Component

No notice (2nd violation)	\$25,000
Violations of §61.152(b) and §61.152(a) (2nd violation); no direct evidence of violation of §61.147 (app. 38.5 units)	\$40,000
Aggravation of hazard due to duration of disposal violation - + 25% of substantive violations (25% x \$40,000)	\$10,000
	<u>\$75,000</u>

Benefit Component

\$4/linear foot x 10,000 linear feet	\$40,000
--------------------------------------	----------

Preliminary deterrence amount	
	<u>\$115,000</u>

No adjustment factors	
Minimum settlement penalty amount	\$115,000

Apportionment of the Penalty

The penalty in this case has been increased by \$35,000 because it involves a second violation by the contractor. Ordinarily, the Government should try to get Bert and Ernie's to pay at least that amount of the penalty. However, Consolidated Conglomerate's financial size compared to the contractor's will probably dictate that Consolidated pay most of the penalty.

## Asbestos Demolition/Renovation Penalty Policy

### Gravity Component

<u>Notification</u>	<u>1st Violation</u>	<u>2nd Violation</u>	<u>Subsequent</u>
No notice	\$10-12,000	\$20-25,000	\$25,000
No notice but probable substantive compliance	\$0-5,000	\$10-15,000	\$25,000

Late notice - discretion - if tantamount to no notice, use above table

Incomplete notice - discretion - if tantamount to no notice, use above table

### Substantive Violations

<u>Total amount of asbestos involved in the operation</u>	<u>1st Violation</u>	<u>2nd Violation</u>	<u>Subsequent</u>
≤ 10 units	\$5,000	\$15,000	\$25,000
> 10 units but ≤ 50 units	\$10,000	\$20,000	\$30,000
> 50 units	\$15,000	\$25,000	\$35,000

unit = 260 linear feet or 160 square feet - if both are involved, convert each amount to units and add together

Apply matrix separately to violation of §61.147, §61.152(b), and §61.152(a)  
- add together

Enhance if duration of offense aggravates hazard - e.g., failure to dispose of asbestos - containing wastes.

### Benefit Component

For asbestos on pipes:

- \$3 per linear foot of asbestos for wetting of friable asbestos and packaging of wastes - §61.147, §61.152(b)
- \$1 per linear foot of asbestos for transporting and disposal of wastes - §61.152(b), §61.152(a)

\$4 per linear foot for both

For asbestos on other facility components:

- \$3.50 per square foot for wetting of friable asbestos and packaging of waste
- \$ .50 per square foot for transporting and disposal of wastes
- \$4.00 per square foot for both

## APPENDIX IV

### CLEAN AIR ACT PENALTY POLICY AS APPLIED TO STATIONARY SOURCES OF VOLATILE ORGANIC COMPOUNDS WHERE REFORMULATION TO LOW SOLVENT TECHNOLOGY IS THE APPLICABLE METHOD OF COMPLIANCE

#### Introduction

This addendum provides guidance for calculating the civil penalties EPA will require in pre-trial settlement of district court enforcement actions, pursuant to Title I of the Clean Air Act (CAA), against sources of volatile organic compounds (VOC's) in violation of State Implementation Plan emission limitations, where low solvent technology (LST) is an acceptable control strategy for achieving compliance. If compliance using LST is the control strategy chosen by the source and if it can be implemented expeditiously, the penalty analysis methodology set forth in this appendix must be used. If compliance using LST is not the compliance strategy chosen by the source, or if LST cannot be accomplished expeditiously or is not available, the penalty must be calculated according to the general Clean Air Act Stationary Source Civil Penalty Policy, (hereinafter CAA Penalty Policy), based on the costs of add-on controls.

A separate policy for arriving at a penalty figure in VOC cases where LST is an acceptable control strategy is necessary because penalties calculated pursuant to the general CAA Penalty Policy in such instances are insufficient to deter violations.<sup>1/</sup> The general CAA Penalty Policy focuses upon recapturing

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<sup>1/</sup> Penalties must be high enough to have the desired specific and general deterrent effects. They must also be, to the extent possible, objective in order to ensure fairness. The general CAA Penalty Policy, relying on the cost of pollution control equipment, does not provide such penalties in the case of VOC sources using LST. Indeed VOC penalties have been much smaller than the penalties collected in other CAA cases. A sample of VOC sources, with total sales in the \$10,000,000 range, have had civil penalties ranging from \$2,000 to \$45,000. By comparison, a company cited for TSP violations, with sales in 1983 of \$4,656,000, will be asked to pay a minimum of \$75,000 in penalties.

the economic savings of non-compliance based upon the typically substantial capital expenditures and operation and maintenance costs of the necessary pollution control equipment. The capital costs of implementing LST are by comparison relatively small, and in many cases LST actually results in a net economic savings.<sup>2/</sup>

This guidance, therefore, sets forth an objective methodology for arriving at a substantial cash penalty figure in cases not requiring the expenses associated with add-on technology. Specifically, in all VOC cases including those where a source may choose to come into compliance using LST as a control option, Regions must base their pre-negotiation penalty calculations for the Economic Benefit Component on the cost of add-on controls. Once negotiations begin, the Region may recalculate the penalty figure using the alternative methodology in this Appendix where applicable based on information to be supplied by the source. The Economic Benefit Component will be re-calculated based on the cost of LST as a control option. An additional penalty component (hereinafter referred to as the Production Component) must thereafter be calculated by multiplying the dollar amount of sales on the non-complying lines as reported by the source, by the average return on sales for the industry, to be supplied by NEIC. The average return on sales is the norm for the industry for net profits after taxes divided by total sales. Industry-specific average return on sales multipliers are available from the Information Services Office at NEIC in Denver, FTS 776-5124 (contact Charlene Swibas). NEIC will require the following information from the Region to calculate the average return on sales multiplier for an individual source: (1) type of VOC source, (2) total assets or number of employees, and (3) dollar amount of sales produced on the non-complying lines by year. In this regard, EPA should advise sources that it is to their benefit

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<sup>2/</sup> Although substantial capital expenditures are required for VOC sources using add-on technology to come into compliance, sources having the option of using low solvent or water-based technology derive economic savings by coming into compliance. For example, reformulation to LST generally involves only minor mechanical and process modifications costing less than \$10,000. (See note 4 infra.) These small outlays are recaptured by subsequent cost savings. For example, water-based coatings are usually less expensive. Similarly, high solid emulsion-LSTs, although perhaps more expensive on a volume basis, are more efficient when properly applied, requiring fewer coatings. Reduced VOC emissions result in further indirect savings in the form of lower employee health problems and absenteeism, reduction in the cost and amount of OSHA-required ventilation, and lower fire insurance rates. Finally, the vast majority of VOC sources having LST as a readily available option for compliance make only small investments in R&D, expenditures which are, moreover, fully tax deductible.

to supply EPA with detailed information such as a plant specific breakdown of assets rather than company-wide reports, and line-by-line sales figures. This will help ensure that the penalty is limited to sales from production on their non-complying lines as opposed to their total sales. When verifiable line-by-line production information is not available, the Regions must base their estimates on sources' total sales as reported in company books and annual reports. In addition, the Production Component figure may be adjusted to reflect the source's actual return on sales where this figure can be established from reliable information.

The total of the Production and Economic Benefit Components should be compared to the penalty that would have been imposed were the source coming into compliance using add-on controls. In no event should the total of the Economic Benefit and Production Components exceed the penalty amount based solely on the cost of add-on controls.

This policy may be used in all situations involving LST as an acceptable compliance option, including those where the source is granted an expeditious schedule to continue development of LST, but may ultimately have to comply using add-on controls. In those situations where the source will comply through a combination of LST and add-on controls, the penalty may be adjusted in accordance with this Appendix only to the extent the two compliance options and the source's financial data are segregable on a line-by-line basis.

No other adjustments to the Economic Benefit and Production Components may be made other than as contemplated in the general CAA Penalty Policy. These adjustments are described in Section II.A.3. of the general policy. In addition, in all cases the Gravity Component should be estimated in accordance with the general CAA Penalty Policy. This policy is based upon the principles established by the CAA Penalty Policy and general Agency policies.

The Production Component formula produces penalties which automatically account for the size of the source and correlate with the emissions volume from non-complying lines. Moreover, attaching a source's after tax net profits on noncomplying production helps to ensure a meaningful penalty without impinging on employee salaries, necessary operating costs, or tax deductions for good faith pollution control expenditures such as R & D on LST.

Removing the profitability of non-complying production is particularly appropriate in cases where LST is an acceptable control strategy due to the ease with which many such sources could have come into compliance, as well as the competitive advantage some VOC sources obtain from non-compliance. For example, many paper coating concerns have continued to use high solvent coatings due to the versatility such solutions afford in meeting customer preferences such as color brightness. Such VOC sources are, thus, probably able to capture a larger share of the market due to their noncompliance. Similarly, metal furniture coaters have had high solid emulsion-LSTs available for many years. Many sources have, however, delayed the minimal costs and process changes necessary to come into compliance, perhaps enabling these businesses, in the short run, to offer their products at a slightly reduced price.<sup>3/</sup>

What follows is the specific methodology to be applied in calculating civil penalty settlement amounts in actions against sources of VOC where LST is an acceptable control strategy.

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<sup>3/</sup> Use of high solid emulsion-LST requires installation of a \$5-7,000 emulsion heater, retraining of employees to apply the thicker emulsion, and installation of a larger or more efficient metal washing system to prevent pitting. As is noted above, however, these costs are in the long run recaptured by the economic savings associated with high solid emulsion-LST. (See note 2 supra.)

Alternative Methodology for Calculating VOC Penalties Where LST  
is the Applicable Method of Compliance

ECONOMIC BENEFIT COMPONENT\*

+

PRODUCTION COMPONENT

total sales from production on non-complying lines  
x industry norm return on sales

---

Compare this figure to the penalty based on the  
cost of add-on controls as the control option. Use the  
lower of the two figures.

+

Settlement Adjustments to Production Component\*\*  
substitute the source's actual return on sales  
for the average industry return on sales

+

GRAVITY COMPONENT\*

+

Settlement Adjustments to Gravity Component\*

---

ADJUSTED MINIMUM PENALTY FIGURE

\* See, Clean Air Act Civil Penalty Policy for the procedures to follow in making these calculations. Note, however, that the CAA Penalty Policy permits Regions in their discretion not to seek to recover the Benefit Component when it is likely to be less than \$5,000. This Appendix contemplates including the Economic Benefit Component along with the Production Component even where the Economic Benefit is estimated to be less than \$5,000. If the combination of both the Economic Benefit and Production Components is estimated to be less than \$5,000, it is not necessary for the case development team to include either one in the minimum settlement penalty amount.

\*\* Note that the considerations described in Section II.A.3 of the general policy may also be applied in adjusting the Production Component, as well as the Economic Benefit Component.

## APPENDIX V

### Air Civil Penalty Worksheet

A. Benefit Component:  
(enter from computer calculation) \_\_\_\_\_

B. Gravity Component:

1. Actual or possible harm

a. Amount above standard: \_\_\_\_\_

b. Toxicity of pollutant: \_\_\_\_\_

c. Sensitivity of environment \_\_\_\_\_

d. Length of time of violation \_\_\_\_\_

2. Importance to regulatory scheme: \_\_\_\_\_

3. Size of violator: \_\_\_\_\_

Total gravity component: \_\_\_\_\_

Preliminary deterrence amount: \_\_\_\_\_

(sum of benefit and gravity components) \_\_\_\_\_

C. Flexibility-Adjustment Factors:

1. Degree of willfulness or negligence:

total gravity component x any  
augmentation percentage \_\_\_\_\_

2. Degree of cooperation:

total gravity component x any mitigation  
percentage \_\_\_\_\_

3. History of noncompliance:

total gravity component x any  
augmentation percentage \_\_\_\_\_

4. Ability to pay:

any mitigation amount \_\_\_\_\_

5. Other unique factors:

total gravity component x any mitigation  
or augmentation percentage

\_\_\_\_\_

All augmentation (+) and mitigation (-)  
amounts added: (if negative, cannot  
exceed total gravity component)

\_\_\_\_\_

D. Initial Minimum Settlement Amount:  
Preliminary Deterrence Amount + or -  
Sum of Flexibility Adjustment Factors:

\_\_\_\_\_

JAN - 9 1987

Mr. Tom Bispham  
Air Quality Administrator  
Dept. of Environmental Quality  
800 Southwest 6  
Portland, Oregon 97204

Dear Tom:

Because of an issue raised at the recent STAPPA/ALAPCO meeting in Nevada, I thought reissuance of currently applicable minimum CDS data reporting requirements is appropriate. Please find enclosed:

1. A memo dated April 10, 1984 from me to addressees titled "CDS Data Requirements."
2. A memo dated April 25, 1984 from me to addressees titled "Adjustment to the April 10, 1984 Memorandum on CDS Data Requirements."
3. A memo dated August 5, 1986 from me to others titled "Pollutant-Specific Compliance Status Reporting."

Whereas these memos are certainly not the only Headquarters-required CDS guidance, I believe they most directly address the issue discussed in Nevada as I understood it. Please note that the only point level compliance status (CMST) tracking required is for new sources that have more than one regulated emission point with different start-up dates. That is, for example, a power plant that has three NSPS boilers; one started up in 1975, (Subpart D), another started up in 1984 (Subpart Da) and the third still under construction. This facility should have the point level CMST as well as the SREG, PLUT, and PPDS data elements maintained in CDS to distinguish between the three affected units, the different operational status, and it being subject to different NSPS subparts. However, since three of these four data elements

are essentially static, one-time only data entry information, this requirement is not considered onerous.

Also, note that in the 1986 memo, I expanded the PCMS tracking to all violating Class A SIP sources from only Class A1 SIP sources.

If there are further comments or questions, please call me.

Sincerely yours,

John R. Basnic, Acting Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Enclosures

EN-341:H.Wright:mrd:1-5-97:Rm.3202:382-2810:Draft#1:1-8-87:  
Final#1.

ATTACHMENT 2  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 10 1984

SUBJECT: CDS Data Requirements

OFFICE OF  
AIR, NOISE AND RADIATION

FROM: John Rasnic, Chief *J. R. Rasnic*  
Compliance Monitoring Branch

TO: Addressees

SSCD over the years has issued numerous CDS guidance documents for reporting compliance data. However, we have been advised that because of this proliferation of guidance, together with new regional organizations and personnel involved with CDS, the basic reporting requirements may be unknown or unclear. Therefore, we are presenting in this memorandum the currently applicable minimum information requirements to be maintained in CDS. All data elements, as described below, must have a value assigned and maintained up to date. Please resolve any data deficiencies as soon as possible.

CDS data requirements are focused on three main air programs. For all NESHAP, NSPS and Class A SIP sources, these data elements must be maintained:

<u>Data Element Name</u>	<u>Abbreviation</u>
Region	REGN
Source Name	SNME
Address	STRT
City Name	CYNM
County Name	CTNM
State Abbreviation	STAB
Zip Code	ZIPC
Air Program Code	APCD
Air Program Status	APST
Pollutant Air Quality Control Indicator	PAQC
Pollutant (Source Level)	PLLT
Standard Industrial Class Code	SICC
Source Classification	CLAS
Source Compliance Status	SCMS
Action Type*	ATPE*
Date Achieved**	DTAC**

\* Only those actions defined in the August 2, 1983 memo on the CDS National Action Conversion program (attached) are required to be maintained.

\*\* A date achieved must be entered for all completed actions (ATPE).

As you can see, only three data elements frequently change with time - SCMS, ATPE, and DTAC. The remainder are relatively stable and need to be ascertained usually only once.

Requirements in addition to those listed above exist for certain NESHAP, NSPS and Class A SIP sources. The footnotes explain the necessary applications.

<u>Data Element Name</u>	<u>Abbreviation</u>
SIP Code	SIPC <sup>1</sup>
Pollutant Compliance Status	PCMS <sup>2</sup>
NEDS Source Classification Code	SCC <sup>3</sup>
Process Description	PRDS <sup>4</sup>
Pollutant (point level)	PLUT <sup>4</sup>
State Regulation	SREG <sup>4</sup>
Compliance Status (point level)	CMST <sup>4</sup>
Pollutant Classification	PCLS <sup>5</sup>

I hope this summary will assist in defining and establishing a complete, minimally acceptable CDS data base. If you have any questions or comments about the requirements, please contact me at FTS 382-2826 or Howard Wright at FTS 382-2831.

#### Footnotes:

- 1 For any NESHAP, NSPS and Class A SIP source with SCMS=5, the final compliance date (under ATPE=05) of the compliance schedule must also be included.
- 2 For all violating NESHAP, NSPS and Class A1 SIP sources, the violating pollutant must be indicated.
- 3 Required for all non-utility boilers, i.e., SICC #4911.
- 4 For all new source program-subject facilities that have more than one emission point with different start-up dates.
- 5 Presently only required for regulated Class A VOC sources.

Attachment

Addressees:

Air Program Branch Chiefs, Regions I-X

Air Compliance Branch Chiefs, Regions II, III, V, VII, and IX

CDS Managers, Regions I-X



ATTACHMENT 1  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 25 1984

OFFICE OF  
AIR, NOISE AND RADIATION

MEMORANDUM

SUBJECT: Adjustment to the April 10, 1984 Memorandum on  
"CDS Data Requirements".

FROM: John Rasnic, Chief  
Compliance Monitoring Branch

TO: Addressees

In discussions with some of you, I believe two points in the attached memorandum need further elaboration. One, whenever the air program NESHAP on either page 1 or 2 is discussed, it is meant to refer only to "operating nontransitory NESHAP - subject sources". Specifically excluded from the mandatory CDS data requirements at this time are renovation, demolition, or spraying NESHAP sources.

Secondly, all requirements identified in the April 10 memorandum are applicable only to sources covered by federally approved, promulgated, or enforceable Air regulations.

If you have other questions or comments, please contact me at FTS 382-2826 or Howard Wright at FTS 382-2831.

Attachment

Addressees:

Air Program Branch Chiefs, Regions I-X  
Air Compliance Branch Chiefs, Regions II, III, V, VII, and IX  
CDS Managers, Region I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 05 1986

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Pollutant-Specific Compliance Status Reporting

FROM: John Rasnic, Chief *Howard Wright for*  
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI, and IX

Air Program Branch Chiefs  
Regions I, VII, VIII, and X

CDS Contacts, Regions I-X

There has been considerable guidance (attached) issued from the Stationary Source Compliance Division (SSCD) on the reporting of the Pollutant Compliance Status (PCMS). The guidance states that all violating Class A SIP, NSPS and operating NESHAP sources must be tracked in CDS by the pollutant-specific compliance status, i.e., PCMS and PLLT on card 3 must be maintained current for such sources. It also stands to reason that when such violating sources are returned to compliance, the PCMS for each affected regulated pollutant is also modified to reflect that event as well.

However, an analysis conducted by the Compliance Analysis Section (CAS) has identified many sources where this basic compliance information is erroneous. In too many cases, the PCMS is not compatible with the SCMS. This adversely impacts the credibility of our compliance reporting program. I think it is particularly important that the compliance reporting guidance be implemented in a consistent, uniform, and correct fashion. Therefore, I am asking you to ensure the guidance on this subject is adhered to such that the integrity of our program is maintained.

SSCD has become increasingly sensitive to the absence or incompatibility of basic compliance data. In light of this situation, we intend on monitoring our national guidance in a more careful manner. I believe it will be to your benefit as well.

If you have any questions regarding this memo, please contact Howard Wright at 382-2826.

Attachments (4)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
AIR AND RADIATION

AUG 22 1986

MEMORANDUM

SUBJECT: Sample Federal Register Language for Proposal and Final DCOs

FROM: John B. Rasnic, Chief *John B Rasnic*  
Compliance Monitoring Branch  
Stationary Source Compliance Division

TO: Air Compliance Branch Chiefs  
Regions II-VI, IX

Air Programs Branch Chiefs  
Regions I, VII, VIII, X

It has recently come to our attention that the April 26, 1983, guidance entitled "Procedures for Review and Federal Register Publication of DCOs under Section 113(d) of the Clean Air Act" inadvertently did not include sample Federal Register language. Attached is sample Federal Register language for both proposal (see Attachment I) and final (see Attachment 2) notices. Both have been manually updated to reflect recent changes required by our Federal Register Office to all Federal Register notices. Please follow this sample language beginning immediately.

If you have any questions, please call your SSCD Regional Liaison.

Attachments

cc: Vicki Reed, Federal Register Officer

ATTACHMENT I



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAY 9 1978

OFFICE OF ENFORCEMENT

MEMORANDUM

SUBJECT: Federal Register Notices Proposing  
Approval, Disapproval, or Issuance  
of Administrative Orders under  
Section 113(d) of the Clean Air Act

FROM: Director  
Division of Stationary Source  
Enforcement

TO: Enforcement Division Directors  
Regions I-X

Reactions to several notices of proposed rulemaking for delayed compliance orders have indicated the need to amend the sample Federal Register notices included with the March 10, 1978, memorandum from the Deputy Assistant Administrator for General Enforcement entitled "Procedures for Federal Register Publication of Proposed and Final Agency Action on Administrative Orders under Section 113(d) of the Clean Air Act". The attached sample notices reflect, among others, the following changes:

1. At the request of the General Services Administration's Office of Federal Register, the "Summary" portion of the notice has eliminated all references to legal citations, and has simplified the explanation of the purpose of the rulemaking action and the effect of a delayed compliance order.
2. At the request of EPA's Office of General Counsel, language has been added to the "Supplementary Information" portion of the notice informing the public that the provisions of 40 CFR Part 65 will be promulgated by EPA in the near future, and that they will contain the procedure for EPA's issuance, approval, and disapproval of orders under Section 113(d) of the Clean Air Act. This language must be included in all proposal notices until Part 65 is promulgated by the Agency.
3. A reference to the authority under which EPA proposes the rulemaking action has been added at the conclusion of the notice.

4. The subject heading of the notice has been amended.
5. The name of the Regional Administrator should be typed under his or her signature.

Please also note that the amendatory language, which must appear in all notices proposing issuance of federal delayed compliance orders, should be included after the signature of the Regional Administrator, and that the content of the order need not be typed by the Regional Office. If the proper instructions are noted, the order will be incorporated into the notice by the Office of Federal Register. Amendatory language need not be included in notices proposing approval or disapproval of State orders. (The State order may be included in the "Supplementary Information" portion of the notice.)

Please use the attachments as a guide for all future notices of proposed rulemaking concerning the issuance, approval, and disapproval of delayed compliance orders. Except as modified herein, the above referenced memorandum of March 10, 1978, remains in effect. If you should have any questions, please contact Charles Hungerford of my staff at FTS 755-2570.



Edward E. Reich

Attachments

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 65]

[Docket No. \_\_\_\_]\*

STATE AND FEDERAL ADMINISTRATIVE  
ORDERS PERMITTING A DELAY IN  
COMPLIANCE WITH STATE  
IMPLEMENTATION PLAN REQUIREMENTS

Proposed Delayed Compliance  
Order for [Source], [Location]

AGENCY: Environmental Protection Agency

ACTION: Proposed Rule

SUMMARY: EPA proposes to issue an administrative order to the [name of source]. The order requires the company to bring air emissions from its [type of process] in [location] into compliance with certain regulations contained in the federally-approved [name of State] State Implementation Plan (SIP). Because the company is unable to comply with these regulations at this time, the proposed order would establish an expeditious schedule requiring final compliance by [date]. Source compliance with the Order would preclude suits under the federal enforcement and citizen suit provision of the Clean Air Act for violation of the SIP regulations covered by the Order. The purpose of this notice is to invite public comment and to offer an opportunity to request a public hearing on EPA's

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\* optional

Sample EPA  
Dec Approval  
Notice

proposed issuance of the order. [If it is anticipated that there will be significant public interest in holding a hearing, the notice could set its date, time, and place as a substitute for offering the opportunity to request a hearing. The following sections of the notice should be modified accordingly. This will eliminate the need for a second notice to announce the hearing].

DATES: Written comments must be received on or before [thirty days after Federal Register notice is published], and requests for a public hearing must be received on or before [fifteen days after Federal Register notice is published]. All requests for a public hearing should be accompanied by a statement of why the hearing would be beneficial and a text or summary of any proposed testimony to be offered at the hearing. If there is significant public interest in a hearing, it will be held after twenty-one days prior notice of the date, time, and place <sup>is announced in the Federal Register</sup> ~~of the hearing has been given in this publication.~~

ADDRESSEES: Comments and requests for a public hearing should be submitted to Director, Enforcement Division, EPA, Region [\_\_\_\_], [address of the Regional Office]. Material supporting the order and public comments

received in response to this notice may be inspected and copied (for appropriate charges) at this address during normal business hours.

FOR FURTHER INFORMATION CONTACT: [Include the name, address, and telephone number of the contact person. Generally, this should be the person in the Regional Office with the greatest knowledge of the order].

SUPPLEMENTARY INFORMATION: [Name of source] operates a [type of plant] at [city, State]. The proposed order addresses emissions from [applicable emission points] at this facility, which are subject to [complete citation to the regulation covered by the order]. The regulation limits the emissions of [type of criteria pollutant], and is part of the federally-approved [name of State] State Implementation Plan. The order requires final compliance with the regulation by [date], and the source has consented to its terms. [If applicable, also indicate that the source has agreed to meet the order's increments during the period of this informal rulemaking and/or that the source has satisfied particular increments contained in the order].

The proposed order satisfies the applicable requirements of Section 113(d) of the Clean Air Act (the Act). If the

order is issued, source compliance with its terms would preclude further EPA enforcement action under Section 113 of the Act against the source for violations of the regulation covered by the order during the period the order is in effect. Enforcement against the source under the citizen suit provisions of the Act (Section 304) would be similarly precluded. [If the order, in accordance with Section 113(d)(1)(D), sets a final compliance date after July 1, 1979, the following sentence should be included: However, in the event final compliance is not achieved by July 1, 1979, source compliance with the order will not preclude assessment of any noncompliance penalties under Section 120 of the Act, unless the source is otherwise entitled to an exemption under Section 120(a)(2)(B) or (C)].

Comments received by the date specified above will be considered in determining whether EPA should issue the order. Testimony given at any public hearing concerning the order will also be considered. After the public comment period and any public hearing, the Administrator of EPA will publish in the Federal Register the Agency's final action on the order in 40 CFR Part 65.

~~[If the notice will be published before 40 CFR Part 65 is promulgated, the following paragraph must be included: The provisions of 40 CFR Part 65 will be promulgated by EPA~~

soon, and will contain the procedure for EPA's issuance, approval, and disapproval of an order under Section 113(d) of the Act. In addition, Part 65 will contain sections summarizing orders issued, approved, and disapproved by EPA. A prior notice proposing regulations for Part 65, published at 40 FR 14876 (April 2, 1975), will be withdrawn, and replaced by a notice promulgating these new regulations.]

~~(Authority: 42 U.S.C. 7413, 7601.)~~

\_\_\_\_\_  
Date

\_\_\_\_\_  
[name of Regional Administrator]

\_\_\_\_\_  
[Regional Administrator]  
Region [ ]

In consideration of the foregoing, it is proposed to amend  
40 CFR Chapter 1, as follows:

Part 65 - DELAYED COMPLIANCE ORDERS

1. The authority citation for Part 65 continues to read as follows: Authority: 42 U.S.C. 7413, 7601.
- ~~1. By adding §65. [\*] to read as follows:~~
2. Section [\*] is amended by adding the following entry to the table to read as follows:  
§65. [\*] Federal delayed compliance orders  
issued under Section 113(d)(1), (3), and  
(4) of the Act.

[Order No. [docket no.]]

(Please insert entire contents of the order)

\* see next page

The following subsections have been assigned to the various States:

State	*Federal Order	Approved State Order	Disapproved State Order
Alabama	\$65.50	\$65.51	\$65.52
Alaska	65.60	65.61	65.62
Arizona	65.70	65.71	65.72
Arkansas	65.80	65.81	65.82
California	65.90	65.91	65.92
Colorado	65.100	65.101	65.102
Connecticut	65.110	65.111	65.112
Delaware	65.120	65.121	65.122
District of Columbia	65.130	65.131	65.132
Florida	65.140	65.141	65.142
Georgia	65.150	65.151	65.152
Hawaii	65.160	65.161	65.162
Idaho	65.170	65.171	65.172
Illinois	65.180	65.181	65.182
Indiana	65.190	65.191	65.192
Iowa	65.200	65.201	65.202
Kansas	65.210	65.211	65.212
Kentucky	65.220	65.221	65.222
Louisiana	65.230	65.231	65.232
Maine	65.240	65.241	65.242
Maryland	65.250	65.251	65.252
Massachusetts	65.260	65.261	65.262
Michigan	65.270	65.271	65.272
Minnesota	65.280	65.281	65.282
Mississippi	65.290	65.291	65.292
Missouri	65.300	65.301	65.302
Montana	65.310	65.211	65.212
Nebraska	65.320	65.321	65.322
Nevada	65.330	65.331	65.332
New Hampshire	65.340	65.341	65.342
New Jersey	65.350	65.351	65.352
New Mexico	65.360	65.361	65.362
New York	65.370	65.371	65.372
North Carolina	65.380	65.381	65.382
North Dakota	65.390	65.391	65.392

State	*Federal Order	Approved State Order	Disapproved State Order
Ohio	65.400	65.401	65.402
Oklahoma	65.410	65.411	65.412
Oregon	65.420	65.421	65.422
Pennsylvania	65.430	65.431	65.432
Rhode Island	65.441	65.441	65.442
South Carolina	65.450	65.451	65.452
South Dakota	65.460	65.461	65.462
Tennessee	65.470	65.471	65.472
Texas	65.480	65.481	65.482
Utah	65.490	65.491	65.492
Vermont	65.500	65.501	65.502
Virginia	65.510	65.511	65.512
Washington	65.520	65.521	65.522
West Virginia	65.530	65.531	65.532
Wisconsin	65.540	65.541	65.542
Wyoming	65.550	65.551	65.552
Guam	65.560	65.561	65.562
Puerto Rico	65.570	65.571	65.572
Virgin Islands	65.580	65.581	65.582
American Samoa	65.590	65.591	65.592

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 65]

[Docket No. \_\_\_\_]\*

*Sample State  
DCC Proposal  
Notice*

STATE AND FEDERAL ADMINISTRATIVE  
ORDERS PERMITTING A DELAY IN  
COMPLIANCE WITH STATE  
IMPLEMENTATION PLAN REQUIREMENTS

Notice of [Proposed Approval;  
Proposed Disapproval; Receipt] of an  
Administrative Order Issued  
By [name of issuing authority]  
To [name of source]

AGENCY: Environmental Protection Agency

ACTION: Proposed Rule

SUMMARY: EPA [proposes to approve; proposes to disapprove;  
has received] an administrative order issued by  
the [name of issuing authority] to [name of source].  
The order requires the company to bring air emissions  
from its [type of process] in [location] into compliance  
with certain regulations contained in the federally-  
approved [name of State] State Implementation Plan  
(SIP) by [date]. Because the order has been issued to  
a major source and permits a delay in compliance with  
provisions of the SIP, it must be approved by EPA  
before it becomes effective as a delayed compliance  
order under the Clean Air Act (the Act). If approved  
by EPA, the order will constitute an addition to the  
SIP. In addition, a source in compliance with an

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\* optional

approved order may not be sued under the federal enforcement or citizen suit provisions of the Act for violations of the SIP regulations covered by the Order. The purpose of this notice is to invite public comment on [EPA's proposed approval of; EPA's proposed disapproval of; whether EPA should approve] the order as a delayed compliance order.

DATE: Written comments must be received on or before [30 days after Federal Register notice is published].

ADDRESSEES: Comments should be submitted to Director, Enforcement Division, EPA, Region [\_\_\_\_], [address of Regional Office]. The State order, supporting material, and public comments received in response to this notice may be inspected and copied (for appropriate charges) at this address during normal business hours.

FOR FURTHER INFORMATION CONTACT: [Include name, address, and telephone number of the contact person. Generally, this should be the person in the Regional Office with the greatest knowledge of the order].

SUPPLEMENTARY INFORMATION: [Name of source] operates a [type of plant] at [city, State]. The order under consideration addresses emissions from [applicable emission points] at the facility, which are subject to [complete citation to the regulation covered by

the order]. The regulation limits the emissions of [type of criteria pollutant], and is part of the federally approved [name of State] State Implementation Plan. The order requires final compliance with the regulation by [date] through [brief summary of the control strategy and/or increments; interim requirements may also be summarized]. [If applicable, indicate that the source has consented to the terms of the order and/or that the source has satisfied particular increments contained in the order].

Minimum summary must reference increments, cite final compliance date, mention interim requirements

[A separate paragraph summarizing prior federal or State enforcement actions may be included.]

Because this order has been issued to a major source of [pollutant] emissions and permits a delay in compliance with the applicable regulation, it must be approved by EPA before it becomes effective as a delayed compliance order under Section 113(d) of the Clean Air Act (the Act). EPA may approve the order only if it satisfies the appropriate requirements of this subsection. [The region may briefly indicate whether the elements of the appropriate paragraphs of subsection 113(d) are met. However, to save time, this summary may be omitted and a State order may be routinely noticed without prior Regional Office evaluation.]

If the order is approved by EPA, source compliance with its terms would preclude federal enforcement action under

- 4 -

Section 113 of the Act against the source for violations of the regulation covered by the order during the period the order is in effect. Enforcement against the source under the citizen suit provision of the Act (Section 304) would be similarly precluded. If approved, the order would also constitute an addition to the [name of State] SIP. [If the order, in accordance with Section 113(d)(1)(D), sets a final compliance date after July 1, 1979, the following sentence should be included: However, in the event final compliance is not achieved by July 1, 1979, source compliance with the order will not preclude assessment of any noncompliance penalties under Section 120 of the Act, unless the source is otherwise entitled to an exemption under Section 120(a)(2)(B) or (C)].

All interested persons are invited to submit written comments on the proposed order. Written comments received by the date specified above will be considered in determining whether EPA may approve the order. After the public comment period, the Administrator of EPA will publish in the Federal Register the Agency's final action on the order in 40 CFR Part 65.

~~[If the notice will be published before 40 CFR Part 65 is promulgated, the following paragraph must be included: The provisions of 40 CFR Part 65 will be promulgated by EPA~~

soon, and will contain the procedure for EPA's issuance, approval, and disapproval of orders under Section 113(d) of the Act. In addition, Part 65 will contain sections summarizing orders issued, approved, and disapproved by EPA. A prior notice proposing regulations for Part 65, published at 40 FR 14876 (April 2, 1975), will be withdrawn, and replaced by a notice promulgating these new regulations.]

~~(Authority: 42 U.S.C. 7413, 7601.)~~

\_\_\_\_\_  
Date

\_\_\_\_\_  
[name of Regional Administrator]

\_\_\_\_\_  
[Regional Administrator]  
Region [\_\_\_\_]

Note: Entire contents of State order may be printed here. If this is done then the order must be preceded by the boilerplate language shown on pg 5 of the sample EPA ACO proposal notice that begins with: "In consideration of ...".



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

August 7, 1978

OFFICE OF ENFORCEMENT

MEMORANDUM

Subject: Procedures for Proposal and Promulgation of  
Delayed Compliance Orders

From: Director  
Division of Stationary Source Enforcement

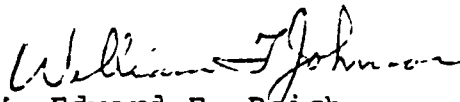
To: Enforcement Division Directors  
Regions I-X

The July 27, 1978, memorandum from the Assistant Administrator for Enforcement entitled "Enforcement Under the Clean Air Act Amendments -- Orders Under Sections 113(a) and 113(d)," summarizes EPA policy on the use of administrative orders as enforcement actions. Appendix A to that memorandum sets forth criteria for federal issuance of, and federal action on State, delayed compliance orders (DCOs) under Section 113(d) of the Clean Air Act. Currently, all Federal Register packages regarding DCOs are reviewed within the Division of Stationary Source Enforcement (DSSE) before transmittal to the Agency's Federal Register Officer for publication. Effective August 8, 1978, direct transmittal of Federal Register documents regarding typical Section 113(d)(1) DCOs to the Federal Register Officer (PM-212) is to be implemented in the same manner as "normal" SIP revision documents. DSSE will no longer review these documents before publication; rather, any DSSE comments will be transmitted to the Regional Office during the 30-day comment period provided in the informal proposed rulemaking procedure.

A new 40 CFR Part 65, establishing procedural regulations for, and a format for codification of, DCO actions, is currently undergoing "red border" review by the Assistant Administrators and is expected to be promulgated the week of August 21. Attached for your use are sample Federal Register preambles and amendatory language for final rulemaking actions on DCOs for which necessary proposal action has been completed. These samples address final rulemaking DCO actions which occur both before and after promulgation of Part 65. By memoranda of March 10 and May 9, 1978,

sample Federal Register documents for proposed federal DCO actions were sent to you. With the exception of signature by the Administrator (rather than the Regional Administrator), the requirements for proposal regarding the number of copies, certification, etc., are applicable to final Federal Register DCO documents as well. These requirements are set forth in the memorandum of March 10, 1978, entitled "Procedures for Federal Register Publication of Proposed Final Agency Action on Administrative Orders Under Section 113(d) of the Clean Air Act".

All DCO actions, proposed and final, involving orders under Sections 113(d)(3) and (4) remain subject to DSSE review for national consistency prior to publication. <sup>1/</sup> My staff will provide assistance in the development of these orders and on unique issues involved in federal action on Section 113(d)(1) orders, and their transmittal will be under procedures for "special" action. With regard to DCOs, "special actions" will require only OE/DSSE concurrence and will normally be accomplished within 5 days of DSSE receipt. Supporting materials for Section 113(d)(3) and (4) orders must be included in these packages, which are to be sent directly to DSSE. DSSE will forward approved "special" DCO packages directly to the Federal Register officer for publication. However, typical Section 113(d)(1) orders will not be reviewed by DSSE prior to their proposal publication in the Federal Register and will be considered "normal" action. This procedure should minimize delay in the implementation of this program. Please call Chuck Hungerford at FTS 755-2570 if you should have any questions on this matter.

  
for Edward E. Reich

Attachments

cc: James Parker, PM-212  
Federal Register Officer

Michael James, OGC

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<sup>1/</sup> Section 113(d)(5) orders continue to be processed in accordance with earlier guidance which Regional Offices have been implementing.

TITLE 40 - Protection of the Environment  
CHAPTER 1 - ENVIRONMENTAL PROTECTION AGENCY

PART 65 - DELAYED COMPLIANCE ORDERS

Delayed Compliance Order for [Source], [Location].

AGENCY: Environmental Protection Agency

ACTION: Final Rule

SUMMARY: The Administrator of EPA hereby issues a Delayed Compliance Order to the [name of source]. The Order requires the company to bring air emissions from its [type of process] at [location] into compliance with certain regulations contained in the federally-approved [name of state] State Implementation Plan (SIP). [name of source] compliance with the Order will preclude suits under the federal enforcement and citizen suit provisions of the Clean Air Act for violation(s) of the SIP regulations covered by the Order during the period the Order is in effect.

DATES: This rule takes effect on [date of publication in the FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT:

[Include the name, address and telephone number of the contact person. Generally, this should be the person in

the Regional Office with the greatest knowledge : the Order].

ADDRESSES: The Delayed Compliance Order, supporting material, and any comments received in response to a prior FEDERAL REGISTER notice proposing issuance of the Order are available for public inspection and copying during normal business hours at:

[Include the address and appropriate room number of the Regional Office]

[If appropriate, also include the following sentence: The record of a public hearing concerning the proposed order held on [date of hearing] at [location of hearing] is also available for public inspection and copying during normal business hours at the above address].

SUPPLEMENTARY INFORMATION:

On [date proposal notice appeared in the Federal Register], the Regional Administrator of EPA's Region [relevant number] Office published in the FEDERAL REGISTER, [Federal Register citation], a notice setting out the provisions of a proposed delayed compliance order for [name of source]. The notice asked for public comments and offered the opportunity to request a public hearing on the proposed Order. [Indicate whether or not any public comments or requests for a public

hearing were received in response to the proposal notice. If comments were received by the Regional Office, summarize the substance of the comments and indicate why or why not, and how, the proposed Order was amended in consideration of the comments. If the Regional Office received requests for a public hearing, indicate why or why not a public hearing was held. If a public hearing was held, note the date of notice in the Federal Register announcing the hearing, the time and place the hearing was held, and summarize the substance of the comments submitted at the hearing. Explain why or why not, and how, the proposed Order was amended in consideration of the comments.]

Therefore, [or, if comments have been received, In consideration of the comments received on the proposed Order,] a delayed compliance order effective this date is issued to [name of source] by the Administrator of EPA pursuant to the authority of Section 113(d) [appropriate subsection] of the Clean Air Act, 42 U.S.C. 7413(d)(   ). The Order places [name of source] on a schedule to bring its [type of process] at [location] into compliance as expeditiously as practicable with [citation to the regulation covered by the order], a part of the federally-approved [name of State] State Implementation Plan. The Order also imposes [include as appropriate. . . interim requirements which meet Sections 113(d)(1)(C) and 113(d)(7) of the Act,

and emission monitoring and reporting requirements. If any of the three elements are absent, include a finding that their inclusion in the Order would be unreasonable]. If the conditions of the Order are met, it will permit [name of source] to delay compliance with the SIP regulations covered by the Order until [date for compliance set by the Order]. The company is unable to immediately comply with these regulations.

~~if the notice will be published before 40 CFR Part 65 is promulgated, the following two paragraphs must be included:~~

~~Compliance with the order by [name of source] will preclude federal enforcement action under Section 113 of the Act for violations of the SIP regulations covered by the Order during the period the Order is in effect. Citizen suits under Section 304 of the Act are similarly precluded. If the Administrator determines that [name of source] is in violation of a requirement contained in the Order, one or more of the actions required by Section 113(d)(9) of the Act will be initiated. Publication of this notice of final rulemaking constitutes final Agency action for the purposes of judicial review under Section 307(b) of the Act.~~

~~The provisions of the Order will be summarized, as set forth below, in 40 CFR Part 65. The provisions of 40 CFR Part 65 will be promulgated by EPA soon, and will contain the procedures~~

for EPA's issuance, approval, and disapproval of orders under Section 113(d) of the Act. In addition, Part 65 will contain sections summarizing the orders issued, approved, and disapproved by EPA. A prior notice proposing regulations for 40 CFR Part 65, published at 40 FR 149876 (April 2, 1975), will be withdrawn, and replaced by a notice promulgating these new regulations.]

EPA has determined that the Order shall be effective upon publication of this notice because of the need to immediately place [name of source] on a schedule for compliance with the applicable requirement(s) of the [name of State] State Implementation Plan.

~~(Authority: 42 U.S.C. 7413(d), 7601)~~

Dated: \_\_\_\_\_

\_\_\_\_\_  
Douglas M. Costle  
Administrator

If the notice will be published after 40 CFR Part 65 is promulgated, or if a prior final notice issuing an Order to a source in the particular State has been previously published, the amendatory language should read as follows:

In consideration of the foregoing, Chapter 1 of Title 40 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 65 continues to read as follows: Authority: 42 U.S.C. 7413, 7601, Part 65 - DELAYED COMPLIANCE ORDERS

2. Sec. [1] is amended by adding the following entry to the table to read as follows:  
\$65.[ ]<sup>1</sup> Federal delayed compliance orders issued under Section 113(d)(1), (3), and (4) of the Act.

Source	Location	Order No.	Date of FR proposal	SIP regulation involved	Final compliance date
*	*	*	*	*	*
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

<sup>1</sup> Fill in appropriate subsection as supplied by 40 CFR Part 65 or the May 9, 1978, memorandum entitled "Federal Register Notices Proposing Approval, Disapproval, or Issuance of Administrative Orders Under Section 113(d) of the Clean Air Act".

Sample State DCO

Final Notice

TITLE 40 - Protection of the Environment

CHAPTER 1 - ENVIRONMENTAL PROTECTION AGENCY

PART 65 - DELAYED COMPLIANCE ORDERS

[Approval, Disapproval] of a Delayed Compliance  
Order Issued by [name of issuing authority]  
to [name of source]

AGENCY: Environmental Protection Agency

ACTION: Final Rule

SUMMARY: The Administrator of EPA hereby [approves, dis-  
approves] a Delayed Compliance Order issued by [name of  
issuing authority] to the [name of source]. The Order  
requires the company to bring air emissions from its [type  
of process] at [location] into compliance with certain  
regulations contained in the federally-approved [name of  
state] State Implementation Plan (SIP). [Insert the  
following sentence if the Order is approved: Because of the  
Administrator's approval, [name of source] compliance with  
the Order will preclude suits under the federal enforcement  
and citizen suit provisions of the Clean Air Act for viola-  
tion(s) of the SIP regulations covered by the Order during  
the period the Order is in effect.

DATES: This rule takes effect on [date of publication in  
the FEDERAL REGISTER].

For further information contact:

[Include the name, address and telephone number of the contact person. Generally, this should be the person in the Regional Office with the greatest knowledge of the Order].

ADDRESSES: A copy of the Delayed Compliance Order, any supporting material, and any comments received in response to a prior FEDERAL REGISTER notice proposing [approval, disapproval] of the Order are available for public inspection and copying during normal business hours at:

[Include the address and appropriate room number of the Regional Office]

SUPPLEMENTARY INFORMATION:

On [date proposal notice appeared in the Federal Register], the Regional Administrator of EPA's Region [relevant number] Office published in the FEDERAL REGISTER, [Federal Register citation], a notice proposing [approval, disapproval] of a delayed compliance order issued by [name of issuing authority] to the [name of source]. The notice asked for public comments by [date the public comment period expired] on EPA's proposed [approval, disapproval] of the Order.  
[Indicate whether or not any public comments were received

in response to the proposal notice. If comments were received by the Regional Office, summarize the substance of the comments and indicate why or why not the proposed action was changed in consideration of the comments].

Insert the following paragraph if the Order is approved:

Therefore, [or, if comments have been received, In consideration of the comments received on EPA's proposed action,] the delayed compliance order issued to [name of source] is approved by the Administrator of EPA pursuant to the authority of Section 113(d)(2) of the Clean Air Act, 42 U.S.C. 7413(d)(2). The Order places [name of source] on a schedule to bring its [type of process] at [location] into compliance as expeditiously as practicable with [citation to the regulation covered by the order], a part of the federally-approved [name of State] State Implementation Plan. The Order also imposes [include as appropriate. . . interim requirements which meet Sections 113(d)(1)(C) and 113(d)(7) of the Act, and emission monitoring and reporting requirements. If any of the three elements are absent, include a finding that their inclusion in the Order would be unreasonable]. If the conditions of the Order are met, it will permit [name of source] to delay compliance with the SIP regulations covered by the Order until [date for compliance set by the Order]. The company is unable to immediately comply with these regulations.

Insert the following language if the Order is disapproved:

Therefore, [or, if comments have been received, in consideration of the comments received on EPA's proposed action,] the delayed compliance order issued to [name of source] is disapproved by the Administrator of EPA pursuant to the authority of Section 113(d)(2) of the Clean Air Act, 42 U.S.C. 7413(d)(2). [Specifically explain the basis for the disapproval]. Because of the Administrator's disapproval, the Order is not effective under Section 113(d) of the Clean Air Act.

~~[If the notice will be published before 40 CFR Part 65 is promulgated, the following two paragraphs must be included:~~

~~(The entire first paragraph should be included if the Order is approved. If the Order is disapproved, only the last sentence in the paragraph should be included in the notice.)~~

~~Because the Order has been approved by EPA, compliance with its terms will preclude federal enforcement action under Section 113 of the Act for violations of the SIP regulations covered by the Order during the period the Order is in effect. Citizen suits under Section 304 of the Act are similarly precluded. If the Administrator determines that [name of source] is in violation of a requirement~~

contained in the Order, one or more of the actions required by Section 113(d)(9) of the Act will be initiated. Publication of this notice of final rulemaking constitutes final Agency action for the purposes of judicial review under Section 307(b) of the Act.

The provisions of the Order will be summarized, as set forth below, in 40 CFR Part 65. The provisions of 40 CFR Part 65 will be promulgated by EPA soon, and will contain the procedures for EPA's issuance, approval, and disapproval of orders under Section 113(d) of the Act. In addition, Part 65 will contain sections summarizing the orders issued, approved, and disapproved by EPA. A prior notice proposing regulations for 40 CFR Part 65, published at 40 FR 149876 (April 2, 1975), will be withdrawn, and replaced by a notice promulgating these new regulations.]

Insert the following language if appropriate:

EPA has determined that its [approval, disapproval] of the Order shall be effective upon publication of this notice because of the need to immediately place [name of source] on a schedule which is effective under the Clean Air Act for compliance with the applicable requirement(s) of the [name of State] State Implementation Plan.

~~(Authority: 42 U.S.C. 7413(d), 7601)~~

Dated: \_\_\_\_\_

\_\_\_\_\_  
Douglas M. Costle  
Administrator

If a notice approving an order will be published after 40 CFR Part 65 is promulgated, or if a prior final notice approving an Order for a source in the particular State has been previously published, the amendatory language should read as follows:

In consideration of the foregoing, Chapter 1 of Title 40 of the Code of Federal Regulations is amended as follows:

Part 65 - DELAYED COMPLIANCE ORDERS

1. The authority citation for Part 65 continues to read as follows:  
Authority: 42 U.S.C. 7413, 7601.

~~2. By amending § 65.111 to read as follows:~~  
2. Section 111 is amended by adding the following entry to the table to read as follows:  
§ 65.111 EPA Approval of State delayed compliance orders issued to major stationary sources.

*	*	*	*	*	
Source	Location	Order No.	SIP regulation(s) involved	Date of FR proposal	Final compliance date
* * *					
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

<sup>1</sup> Fill in appropriate subsection as supplied by 40 CFR Part 65 or the May 9, 1978, memorandum entitled "Federal Register Notices Proposing Approval, Disapproval, or Issuance of Administrative Orders Under Section 113(d) of the Clean Air Act".

ENVIRONMENTAL PROTECTION

AGENCY

[40 CFR Part 65]

[Docket No. \_\_\_\_]\*

STATE AND FEDERAL ADMINISTRATIVE ORDERS  
PERMITTING A DELAY IN COMPLIANCE WITH  
STATE IMPLEMENTATION PLAN REQUIREMENTS

Proposed Delayed Compliance Order  
for [source], [location]

AGENCY: Environmental Protection Agency

ACTION: Withdrawal of notice of proposed rulemaking

SUMMARY: The purpose of this notice is to withdraw a prior  
FEDERAL REGISTER notice proposing a Delayed Compliance  
Order for [name of source] at [location]. This action is  
being taken because [name of source] is no longer in  
violation of the [name of State] State Implementation  
Plan provisions covered by the proposed Order.

DATE: This withdrawal is immediately effective.

FOR FURTHER INFORMATION CONTACT:

[Include the name of the person in the Regional  
Office with the greatest knowledge of the order]

---

\*optional

SUPPLEMENTARY INFORMATION:

A FEDERAL REGISTER notice published at \_\_\_\_\_ FR \_\_\_\_\_  
[date] solicited public comments and offered the opportunity  
to request a public hearing on a proposed Delayed Compliance  
Order to be issued by EPA to [source] at [location]. [Name  
of source] has subsequently achieved compliance with the  
[name of State] State Implementation Plan regulations  
covered by the Order. [Indicate how compliance was demon-  
strated ie source test].

In consideration of the foregoing, the proposal published  
in the FEDERAL REGISTER (\_\_\_\_FR\_\_\_\_) on [date] entitled  
"Proposed Delayed Compliance Order for [source], [location]",  
is hereby withdrawn.

Dated: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
(Name)  
Regional Administrator  
Region [\_\_\_\_]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG - 7 1986

MEMORANDUM

SUBJECT: Policy on the Availability of Low-Solvent Technology  
Schedules in Clean Air Act Enforcement Actions

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443) *J. Craig Potter*  
*Richard H. Meyer*  
Acting Assistant Administrator  
for Enforcement and Compliance Monitoring

TO: Regional Administrators  
Regions I-X

Your staffs have requested resolution of the issue of when low-solvent technology (LST) schedules can be considered as an available method of compliance in cases brought to abate emissions of volatile organic compounds (VOC). They also asked for guidance on what period of time should be given in a compliance schedule. In response, we have determined the following Agency policy.

Background

In earlier guidance addressing options for VOC control, EPA encouraged the low solvent (reformulation) approach. Though compliance dates in the SIPs were generally December 31, 1982, EPA recognized when the earlier guidance was issued that it could take longer than December 31, 1982 for sources to develop and implement complying coatings. Through surveillance and enforcement activities by the States and EPA in recent years, it became evident that many sources had not made serious efforts to find complying coatings or, in some instances, efforts directed toward complying coatings failed to yield desirable results. Often, sources were not vigorously pursuing the alternative of installing add-on controls. As a result we now face extended non-compliance, increased VOC enforcement activity,

and a need to issue specific guidance or that is an acceptable schedule for VOC violators where pursuit of LST is being considered. It must be emphasized that more than five years have passed since the VOC regulations were first adopted by the States. With the ozone attainment dates already past in many areas and less than two years away in extension areas, it is critically important to assure compliance in an expeditious manner.

### Policy

LST schedules may be used in EPA enforcement actions as long as the following five conditions are met:

1. The schedule must be expeditious. It can provide no more than three-months from the date of filing of the complaint (or equivalent State action in cases where the State is pursuing the enforcement action) for a source to demonstrate compliance using complying coatings.
2. Add-on controls must be part of the schedule with a commitment to implementation should the LST program fail. The add-on control program can extend up to an additional twelve months. It must begin at the end of the three-month (or shorter) LST schedule and have increments of progress encompassing: commencing engineering studies, ordering control equipment, commencing installation of control equipment, completing installation, and demonstrating compliance.
3. Final compliance cannot extend beyond December 1987.
4. Stipulated penalties must be part of the schedule for failure to meet incremental dates of the add-on control program.
5. Civil penalties must be obtained. (This requirement is established by previous policies such as the September 20, 1982 Post-1982 Enforcement Policy and the June 28, 1984 "timely and appropriate" guidance for the air program. These policies are located at Sections V.R. and I.I. respectively in the Clean Air Act Policy Compendium.) Penalties assessed by EPA must be consistent with the September 12, 1984 CAA Stationary Source Civil Penalty Policy, as amended, and penalties assessed by States must be consistent with the June 26, 1984 guidance by the Deputy Administrator entitled "Implementing the State/Federal Partnership in Enforcement: State/Federal Enforcement Agreements." These policies are located at

Sections V.Y. of the Clean Air Act Policy Compendium and Tab GM-41 of the General Enforcement Policy Compendium, respectively.

Schedules resolving State enforcement actions will be evaluated in light of this policy to determine the appropriateness of EPA deferring to the State resolution. A State enforcement resolution should include at least conditions (1), (2), (3) and (5) of those required in EPA actions.

This policy is effective on the date of this memorandum, except for the following limited situation. To allow for a smooth transition, ongoing State settlement negotiations where greater than three-month LST schedules are being considered will be accepted as long as the other elements of this policy for a State enforcement resolution are satisfied. This limited exception will terminate ninety days from the date of this guidance.

This policy is not applicable to schedules issued pursuant to Section 113(d). Approvability of those schedules is dependent upon meeting the requirements of Section 113(d). However, in making a determination of expeditiousness for a DCO, the concepts outlined in conditions (1) and (2) of this guidance should be followed.

If you have any questions on this policy, please call your Regional liaison contact in OAQPS's Stationary Source Compliance Division or OECM's Air Enforcement Division.

cc: Air Division Director, Regions I-X  
Regional Counsel, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

**JUN - 2 1986**

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: 113(d)(4) Letter to Can Manufacturers Institute

FROM: John Rasnic, Chief *Rich Biondi/fn*  
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs  
Regions I, VII, VIII and X

Attached is a letter I sent to Robert Gere of the Can Manufacturers Institute (CMI) on April 22, 1986. This was in reply to his December 20, 1985 letter requesting 113(d)(4) delayed compliance orders for CMI member companies to allow the industry additional time to continue development of complying end-sealing compounds for metal cans. Please note that although my reply summarizes the primary requirements of Section 113(d) as they relate to the CMI situation, they also may be used to evaluate other 113(d)(4) requests by specifying the necessary information each source seeking an order must provide to support the Agency's finding that its innovative technology proposal meets all of the statutory criteria.

We expect that several can coaters will now apply to their individual states or Regions for innovative technology orders. In the interest of national consistency, Headquarters should be aware of how individual Regions are interpreting the key requirements for issuance of an innovative technology DCO. For example, a primary question which we have interest in is whether or not the technology being proposed can qualify as "new," given the existing Philippine technology (this technology was improperly referred to as "South Korean" in the Gere letter). Once the industry receives the attached response, presumably any individual source which applies will provide sufficient facts and rationale for the Agency to make this determination.

Also, there is some question as to whether or not two or more sources can receive a DCO for developing a technology that is arguably the same. We are requesting an OGC opinion on this question, and it will facilitate OGC's deliberations to have specific applications to look at.

For these two reasons, and to generally expedite SSCD's formal concurrence in any innovative technology DCO a state or Region proposes to issue (see Kathleen Bennett's April 26, 1983 memo entitled "Procedures for Review and Federal Register Publication of Delayed Compliance Orders Under Section 113(d) of the Clean Air Act"), Regions should keep Headquarters apprised of applications received and the Regions' intended disposition of them. Contacts in Headquarters are Kevin Bell in SSCD (FTS-382-2869) and Jane Souzon in OECM, Air Enforcement Division (FTS-475-7088).

Attachment

cc: Regional Counsel, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 22 1986

OFFICE OF  
AIR AND RADIATION

Robert A. Gere  
Co-Chairman  
CMI Environmental Quality Committee  
1625 Massachusetts Avenue, N.W.  
Washington, DC 20036

Dear Mr. Gere:

This is in reply to your December 20, 1985 letter in which you requested that the Agency grant your member companies a Delayed Compliance Order (DCO) under Section 113 (d)(4) of the Clean Air Act (CAA) to allow the industry additional time to continue development of complying end-sealing compounds for metal cans. Your letter was not procedurally correct in its approach to the DCO process. The following information is supplied to facilitate your application for a DCO by outlining requirements of the process in more detail.

It is important to note at the outset that Section 113 (d)(4) does not permit the issuance of a "blanket" DCO to cover numerous sources within a particular business group or industrial category. This means that DCO's must be applied for and issued on a source-by-source basis. Application should be made to the appropriate State or EPA Regional Office with a courtesy copy to me to expedite the Headquarters concurrence role in the process.

It may be useful to your members for them to have a brief summary of the primary requirements of Section 113(d) as they relate to the situation you describe. The following outlines these requirements which are found in Sections 113(d)(4)(A)-(D) of the CAA, as amended August 1977. Each source seeking an order must provide the information necessary to support the Agency's finding that its innovative technology proposal meets all of the statutory criteria.

Criterion A(1)

"the source will expeditiously use new means of emission limitation..." (Section 113 d(4)(A))

### Discussion

To determine whether or not the proposed technology qualifies as "new means", the source must explain specifically a) what the proposed technology is (a detailed description of the technology is needed) and b) in what sense or aspect it is "new". We are aware that there is an existing low solvent technology presently in use by some South Korean canning operations similar to yours. If your proposed "new means" is a reformulation, please state specifically why you believe it can qualify as "new" despite the existence of this technology.

### Criterion A(2)

"...which [new means] the Administrator determines is likely to be adequately demonstrated (within the meaning of Section 111(a)(1) of this title) upon expiration of the order" (Section 113(d)(4)(A))

### Discussion

The source should provide information to enable the Agency to determine 1) the likelihood that the new means will be adequately demonstrated, and 2) how long development will take. This information should include a statement as to the present state of development, what steps remain to be taken, what problems are foreseen, and why the source believes adequate demonstration is likely within the predicted time period. Please note that if an extended research and development period is needed, it may be difficult to meet this test.

### Criterion B

"such new means of emission limitation is not likely to be used by such source unless an order is granted under this subsection", Section 113(d)(4)(B))

### Discussion

The source should submit a statement explaining why it would not attempt to use the "new means" unless a DCO is issued to that source.

### Criterion C

"such new means of emission limitation is determined by the Administrator to have a substantial likelihood of--

- (i) achieving greater continuous emission reduction than the means of emission limitation which, but for such order, would be required; or

- (ii) achieving an equivalent continuous reduction at lower cost in terms of energy, economic, or nonair quality environmental impact; and..." (Section 113(d)(4)(C))

#### Discussion

The source should identify the conventional means it would otherwise use, and which subsection it is claiming as the basis for its DCO. If subsection (ii) is the basis for the claim, the source should document the relative emissions, energy, or cost reduction involved.

#### Criterion D

"compliance by the source with the requirement of the applicable implementation plan would be impractical prior to, or during, the installation of such new means". (Section 113(d)(4)(D))

#### Discussion

The source should submit information on why it is impracticable to comply with the SIP by using an existing means of control. This information should specifically include a discussion of why the source could not use the South Korean technology referred to in discussion of Criterion A(1) as an interim means of compliance.

#### Additional Information

The existence of the South Korean technology is also relevant to the requirements of Section 113(d)(7), which requires that any source receiving an order shall use the "best practicable system or systems of emission reduction... for the period during which such order is in effect and shall comply with such interim requirements as the Administrator determines are reasonable and practicable." An applicant should state any reasons why it is impracticable to use existing technology during the period that the "new means" is being developed.

In addition to the information needed to make positive findings with regard to Criteria A through D above, the source should include in its submission a proposed compliance schedule containing increments of progress which require compliance with the requirement postponed as expeditiously as practicable. The increments in this schedule should be stated as specific actions or achievements which clearly demonstrate the progress of the new technology as it is developed. This will assist the Agency in developing the schedule required by Section 113(d)(6). When developing this schedule, the Agency has the

option of including interim requirements that 1) prohibit the source from allowing its emissions to increase during the period of the compliance schedule required by Section 113(d)(6) if those emissions are contributing to the violations, and 2) prohibit the source from expanding production or obtaining new customers unless complying coatings are used.

In closing, please note that language in the Clean Air Act following section 113(d)(4)(D) specifies that an order "... shall provide for final compliance with the requirement in the applicable implementation plan as expeditiously as practicable, but in no event later than five years after the date on which the source would otherwise be required to be in full compliance with the requirement". Therefore, an order cannot extend more than five years beyond the final compliance date specified for a source or source category in the state implementation plan.

The Agency wants to encourage the use of innovative technology but issuance of DCO's is discretionary. In exercising this discretion, we are concerned about the ozone standard attainment date of December 1987. For any proposed order extending beyond this attainment date, we need a justification for the extension, such as substantial benefit to the environment from the new technology development, or application of the technology to a wider range of sources, resulting in higher compliance rates.

We appreciate your interest in innovative technology as a means of emission control. Please contact me at 382-2826 if you have any questions.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Rich Biondistr", is written over the typed name "John Rasnic".

John Rasnic, Chief  
Compliance Monitoring Branch  
Stationary Source Compliance Division

cc: Richard Torrito



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 22 1986

MEMORANDUM

SUBJECT: Transmittal of National Program Guidance -  
Enforcement Applications of Continuous Emission  
Monitoring System Data

FROM: Edward E. Reich, Director *EE Reich*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Michael S. Alushin *M.S. Alushin*  
Associate Enforcement Counsel  
Air Enforcement Division

TO: Addressees

Attached is final enforcement guidance advocating increased use of continuous emission monitoring system (CEMS) data for direct Federal enforcement of stationary source air pollution requirements. This guidance directly supports EPA's Continuous Compliance Strategy.

The guidance points out many important uses to which EPA can put CEMS data, both where CEMS is, and is not, the official compliance test method ("Compliance Method"). Since the guidance may be helpful to State and local agencies, the Regional Offices may forward it to them at their discretion.

Issues Raised by Commenters

On January 31, 1986, Headquarters sent out for comment a draft document entitled "Program Guidance on Enforcement Application of Continuous Emission Monitoring System Data". Six Regional Offices, ESED, CPDD and OGC commented on the draft of the guidance. In general, the commenters supported the draft. Some commenters sought clarifications or disagreed with certain elements of the draft. Commenters raised the following key issues:

- ° Can CEMS data stand alone as the basis for issuing a Notice of Violation ("NOV") or Finding of Violation ("FOV")? Yes. Section 113(a)(1) of the Clean Air Act expressly permits the Administrator to issue an NOV "on the basis of any information available to him..." See Section III(B) and footnote 4 at page 3 of the Guidance.
- ° If an NOV does not spur compliance, must EPA issue a second NOV based on Compliance Method data to support further enforcement actions? A second NOV is not necessarily required. If a litigation referral is developed, however, it should include proof of violation based on Compliance Method data. See Section III(B) at page 4.
- ° Can EPA rely on CEMS data alone to issue a §113(a) administrative order where CEMS is not the Compliance Method? No. EPA should not issue an order for violation of an emission limit without having at least some Compliance Method data showing a violation of that limit.
- ° Are CEMS Data as Reliable as Compliance Method Data? CEMS data are likely to be as reliable and credible as Compliance Method data. See Section III(B) and footnote number 6 at pages 4 and 5.

Please direct any comments or questions about the guidance to Louis Paley (SSCD) or Laurence Groner (AED) at 382-2835 or 382-2820, respectively.

Attachment

Addressees

Regional Counsels  
Region I - X

Air Management Division Directors  
Region I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division Directors  
Region IV and VI

Air and Toxics Division Directors  
Region VII, VIII and X

Air Branch Chiefs  
Region I - X

Air Compliance Branch Chiefs  
Region II, III, IV, V, VI and IX

CEMS Enforcement Workgroup

Jerry Emison, OAQPS

Jack Farmer, ESED

George Walsh, ESED

Roger Shigehara, ESED

Darryl Tyler, CPDD

Rodney Midgett, EMSL/RTP

Darryl von Lehmden, EMSL/RTP

Earl Salo, OGC

Joseph Lees, DOJ

Reed Neuman, DOJ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

W. J. H. C. N. E. A. 20460

APR 22 1986

MEMORANDUM

SUBJECT: Guidance: Enforcement Applications of Continuous Emission Monitoring System Data

FROM: Edward E. Reich, Director *E. E. Reich*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

Michael S. Alushin *M. S. Alushin*  
Associate Enforcement Counsel  
Air Enforcement Division

TO: Addressees

I. Purpose and Application

The purpose of this guidance is to increase the use of continuous emission monitoring system ("CEMS") data in the Agency's compliance and enforcement program.<sup>1/</sup> EPA intends in this way to strengthen its efforts to ensure that sources comply with applicable law on a continuous basis and to enforce against those that do not.

This document addresses the following three enforcement applications for CEMS data:

- 1) the governing regulation specifies CEMS as the official compliance test method ("Compliance Method"), e.g., the Reference Method for the Standards of Performance for New Stationary Sources (NSPS);
- 2) the governing regulation specifies some method other than CEMS as the Compliance Method; and

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<sup>1/</sup> "CEMS" as used in this guidance principally means instrumental or manual continuous emission monitoring systems. Furthermore, as with any other data, "CEMS" as used in this guidance assumes that EPA confirms that the specific data, normally available from the source, are reasonably accurate and precise. This information includes data such as those acquired during Performance Tests, Performance Specification Tests, and periodic calibrations of the CEMS. For additional information see 6/.

- 3) the governing regulation concerns proper operation and maintenance, recordkeeping, and other requirements where no test method would be specified.

This guidance applies to any Federally-enforceable regulation or other requirement governing emissions, operations and maintenance ("O&M"), and monitoring and reporting procedures for stationary sources of air pollution. It should be read together with the attached document entitled "Guidance Concerning EPA's Use of Continuous Emission Monitoring Data" (August 12, 1982).<sup>2/</sup>

## II. Conclusion

EPA can put CEMS data to a variety of important enforcement uses, irrespective of whether the legal requirement being enforced specifies CEMS as the Compliance Method. For example, EPA can rely on CEMS data alone to issue Findings of Violation ("FOVs") and Notices of Violation ("NOVs").

However, the legal requirement must specify CEMS as the Compliance Method in order for EPA to rely on CEMS data alone to refer a case to the Department of Justice ("DOJ"), to prove a violation of an emission limitation in Federal district court, or to issue a Notice of Noncompliance ("NON") under §120. The same is true if EPA is to rely on CEMS data alone to issue an administrative order respecting emissions violations under §113(a).

On technical grounds, CEMS data typically are at least comparable to Compliance Method and inspection data derived from equally well-executed and quality-assured monitoring. CEMS data certainly are more representative of actual continuous emissions than are some traditional sources of compliance data, such as emission factors and engineering calculations.

## III. Discussion

### A. Where the Governing Regulation Specifies CEMS as the Compliance Method

CEMS is the Compliance Method in NSPS Subparts Da (covering new electric steam generators), P, Q and R (covering new non-ferrous smelters), and in certain SIP provisions, Federally-

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<sup>2/</sup> The 1982 guidance clarifies, among other things, the circumstances under which CEMS constitutes the applicable Compliance Method and the role played by CEMS under State Implementation Plans ("SIPs") which do not identify any Compliance Method.

enforceable compliance orders and permits. For sources covered by these provisions, EPA can rely on CEMS data alone to take all of the following enforcement actions:

1. Devise a priority list for inspections and other investigative activities;
2. Issue NOVs to SIP sources, or FOVs to non-SIP sources;<sup>3/</sup>
3. Document that a violation has continued 30 days beyond the date of the NOV in SIP cases;
4. Quantify the severity of violations for penalty calculation purposes, in negotiation or litigation;
5. Issue an administrative order under §113(a);
6. Issue a §120 NON;
7. Formally refer a case to the DOJ for filing as a civil or criminal action; and
8. Prove a violation in civil or criminal litigation in Federal district court.

B. Where the Governing Regulation Specifies Some Method Other Than CEMS as the Compliance Method

Here, CEMS data still can be very useful in initiating and supporting cases alleging emission violations. The Agency can rely on CEMS data alone to take any of the first four enforcement actions listed at Section III(A) above.

For example, EPA can use CEMS data standing alone as the basis for issuing an NOV or FOV for violation of an emission limitation.<sup>4/</sup> Proof of the existence of a violation of an emission limit for purposes of a compliance order or litigation virtually always must be based on Compliance Method data. However, issuance of an NOV or FOV requires a less rigorous evidentiary showing.

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<sup>3/</sup> While some Regional Offices do issue FOVs, it should be noted that EPA has no legal obligation to do so.

<sup>4/</sup> The Clean Air Act expressly permits the Administrator to issue an NOV "on the basis of any information available to him ... that any person is in violation of any requirement of an applicable implementation plan". 42 USC §7413(a)(1).

If after issuance, the source fails to come into compliance with the emission regulation, EPA normally must acquire Compliance Method evidence before it takes any of the last four enforcement actions listed at Section III(A) above.<sup>5/</sup> However, a second NOV is not necessary under these circumstances, assuming that there is evidence that a sufficient relationship exists between the CEMS data and the Compliance Method data.

In addition, CEMS data also can be used in support of emission violation cases to quantify emission levels and to document that a violation continued 30 days beyond the NOV issuance date. While EPA is frequently prepared to argue that any particular day should be considered a day of violation in the absence of emission data per se, CEMS data should serve to strengthen the government's case.

We believe that courts will generally accept non-Compliance Method CEMS data as an indicator of the magnitude and duration of emission violations because they represent emissions comparably to Compliance Method data.<sup>6/</sup>

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<sup>5/</sup> However, in most circumstances a Regional Office may rely on non-Compliance Method CEMS data alone to support a referral where it constitutes a pre-negotiated settlement agreement, referred for the single purpose of lodging with the court. The exception would be in situations where adverse public comments on the decree may be expected, and that could lead the government not to request the court to enter the decree. In such exceptional circumstances, the referral must be based upon Compliance Method data.

<sup>6/</sup> We assume that CEMS and Compliance Method data will be reliable and comparable to each other. This assumption is based principally upon three facts. First, the Agency requires sources to acquire and report reliable data (whether CEMS or Compliance Method). With respect to CEMS, this is accomplished by requiring sources to: (a) purchase, install and operate the CEMS in accordance with specific location criteria and performance standards; (b) demonstrate achievement of the Performance Specifications by comparing the CEMS and the Compliance Method results; (c) implement (at least daily) calibrations and O&M procedures; and (d) operate the CEMS during all Performance Tests. (If doubts remain, EPA can require additional comparative tests using §114.)

Second, the Agency has acquired data from numerous sources. Such data document the fact that sources are able to, and generally do report reliable and comparable data to agencies. Such documentation includes data acquired: (a) during the (footnote <sup>6/</sup> continued on page 5)

of course, CEMS data provide an altogether appropriate basis upon which to issue a §114 request for Compliance Method data.

C. Where No Compliance Method Is Specified by the Governing Regulation

This Section applies exclusively to requirements which govern violations of other than emission regulations. Here, the Agency may rely upon CEMS data alone to enforce directly various O&M, monitoring, recordkeeping and reporting requirements set out in NSPS regulations, SIPs, and Federally-enforceable orders and permits.

For example, Section 60.11(d) of the NSPS regulations establishes a general "good practices" O&M requirement. This requirement identifies no specific compliance method. Rather, it states that the "determination of whether acceptable ... procedures are being used will be based on information ... which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source." (Emphasis added.) Similar language is contained in many SIPs. CEMS data alone are sufficient to prove violations of such O&M requirements.

IV. Recommendations

CEMS provides a very useful and versatile source of enforcement data. EPA can use such data to take many traditional enforcement actions, often even when CEMS is not specified as the Compliance Method. Therefore, we encourage Regional Offices to use CEMS data consistent with the aforementioned paragraphs.

In addition, we encourage Regional Offices to:

- A. Make CEMS data acquisition and evaluation a standard operating procedure;

(continuation of footnote 6/)  
development of the CEMS Performance Specifications and (Proposed) Appendix F of Part 60 (Quality Assurance Requirements for SO<sub>2</sub> CEMS); (b) by receipt of hundreds of Performance Specification Test Results; and (c) while performing quality assurance and compliance audits of CEMS. (See, e.g., EPA publications entitled "Summary of Opacity and Gas CEMS Audit Programs" (EPA-340/1-84-016, September 1984); and "A Compilation of SO<sub>2</sub> and NO<sub>x</sub> Continuous Emission Monitor Reliability Information" (EPA-340/1-83-012, January 1983).)

Third, all certifications of visible emission observers are based upon quantitative comparisons between observers and "smoke schools'" opacity CEMS.

- B. Cite CEMS data as supplementary evidence of violations in each NOV or §113(a) administrative order issued whenever the CEMS data substantiate the primary evidence; and
- C. Incorporate CEMS into ongoing enforcement actions (e.g., (1) consider requiring chronic violators to install and use CEMS; (2) cite CEMS procedural violations whenever they exist; and (3) cite the source for failure to properly operate and maintain its facility, based upon CEMS data).

Attachment

Addressees

Regional Counsels  
Region I - X

Air Management Division Directors  
Region I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division Directors  
Region IV and VI

Air and Toxics Division Directors  
Region VII, VIII and X

Air Branch Chiefs  
Region I - X

Air Compliance Branch Chiefs  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 12 1982

OFFICE OF  
AIR, NOISE AND RADIATION

MEMORANDUM

SUBJECT: Guidance Concerning EPA's Use of Continuous  
Emission Monitoring Data

FROM: Kathleen M. Bennett *Kathleen M. Bennett*  
Assistant Administrator for Air, Noise and Radiation

TO: Directors, Air and Waste Management Divisions,  
Regions II-IV, VI-VIII, and X

Directors, Air Management Divisions,  
Regions I, V and IX

This memorandum addresses EPA's use of Continuous Emission Monitoring (CEM) data in enforcement of NSPS and SIP emission and operating and maintenance (O&M) provisions and in other general EPA activities. It provides guidance as to when, as a legal matter, continuous emission monitoring constitutes the test method associated with an emission limitation. It is not intended to preclude the exercise of reasoned discretion by an enforcing agency based on a review of the representativeness of the data and the circumstances giving rise to the excess emissions.

Use of CEMs that are Specified as the Source Compliance Test Method

In each instance where CEMs have been promulgated or approved by the Agency as an official method to determine source compliance with the applicable emission limitations, the Agency can rely upon CEM data when making compliance determinations. CEMs have been specifically prescribed as the method to establish emission violations for one or more pollutants in the following instances:

- ° NSPS electric utility steam generating units, regulated by 40 CFR Part 60 Subpart Da;
- ° NSPS primary nonferrous smelters, regulated by 40 CFR Part 60 Subparts P, Q and R;
- ° NSPS stationary gas turbines, regulated by 40 CFR Part 60 Subpart GG;
- ° various sources regulated by permits, orders, or consent decrees in which CEM has been specifically designated as the test method;

4/0

- various types of sources which are regulated by SIPs (e.g., Nevada SIP, 40 CFR §52.1475(d)) where the State has specified CEM as the test method.

Some sources object to EPA's reliance upon CEM data to enforce SIP emission provisions for source categories for which EPA has not specified the use of CEMs in comparable NSPS regulations. Such an objection is not legally supportable, since States have the right to specify their own methods in their SIPs, even if they are different from those imposed by EPA for NSPS sources. Section 1.0 of Appendix P to 40 CFR Part 51 delineates that SIPs may specify that CEM data be used "directly or indirectly for compliance determinations or any other purpose deemed appropriate by the State." The Agency can rely upon CEM data for compliance determinations whenever such methods are specified in the EPA-approved SIP.

#### Use of CEMs in SIPs where an Emission Compliance Test Method is Not Specified

There are some instances when SIPs do not specify a compliance test method. When that occurs, the applicable regulation, 40 CFR §52.12(c)(1), states that for the purpose of Federal enforcement:

"sources subject to plan provisions which do not specify a test procedure... will be tested by means of the appropriate procedures and methods prescribed in Part 60 of this chapter; unless otherwise specified in this part."

Generally, Part 60 does not specify CEM as the compliance test method and therefore EPA cannot use CEM data to determine source compliance with a SIP emission limitation. However, in accordance with §52.12(c)(1), CEM data would be the applicable test method for the two categories of sources for which it is the NSPS performance test method, nonferrous smelters (as in Subparts P, Q and R); and stationary gas turbines (as in Subpart GG).

The Agency shall rely upon CEM data to determine a source's compliance status with a SIP emission limit for smelters (for SO<sub>2</sub>) and for stationary gas turbines (for NO<sub>x</sub>). Since CEM is the only compliance test method specified in Part 60 for these source categories, CEM is clearly the "appropriate" method under Part 60 for purposes of §52.12(c)(1).

In addition, there is some ambiguity regarding the appropriate procedures for fossil-fuel-fired steam generators prescribed in Part 60 because Part 60 contains two significantly different types of SO<sub>2</sub> and NO<sub>x</sub> performance test methods. Specifically, Subpart D specifies

Reference (stack test) Methods 6 and 7 as the performance test methods for SO<sub>2</sub> and NO<sub>x</sub> emissions, respectively. However, Subpart Da specifies use of CEM data to determine compliance with the SO<sub>2</sub> and NO<sub>x</sub> emission standards.

The Agency shall rely upon the performance test methods specified in Subpart D (Reference Methods 6 and 7) to determine a source's compliance status with SIP SO<sub>2</sub> and NO<sub>x</sub> emission limits for fossil-fuel-fired steam generators. For this category of sources, it is more consistent with the development of the SIPs to use these methods since they are the traditional compliance test methods for this source category. (For new sources actually subject to Subpart Da, we would not expect this issue to arise since new source permits should specify the applicable test method.)

#### Use of CEM's where State Regulations Contain Discretionary Authority as to Compliance Test Methods

A problem in interpreting the SIP continually arises because most SIPs specify test methods (often adopting EPA methods by reference) but also allow for discretionary acceptance of an "equivalent" or an appropriate "alternative" by the State. Relying on such language States have accepted CEM data as an adequate demonstration of compliance and have used such data to determine the existence of a violation.

Since EPA's enforcement authority is guided by State regulations specifically approved in the SIP, questions have been raised as to whether EPA will independently apply State discretionary authority and interpret what is reasonable as an "equivalent" or "alternative" compliance test method, or, if not, whether EPA may follow the State's lead, if the State chooses to allow CEM as the test method.

The answer is that EPA will not independently exercise such authority. Only when the State has exercised such authority to adopt CEM as a test method and when the exercise of that authority has been reflected in the SIP, will EPA use CEM as the test method.

#### Use of CEM Data for Determining Potential Operations and Maintenance (O&M) Violations

NSPS regulations (40 CFR 60.11(d)) specify that "at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operation and maintenance procedures are being used will be based on information

available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source." Many SIP's have similar provisions requiring proper operation and maintenance. Use of CEM data, while not necessarily conclusive, is a valid indicator of compliance with requirements such as §60.11(d) and can be used as such.

#### Use of CEMs as a General Compliance Monitoring Tool

CEMs can provide the Agency with useful data for circumstances other than those delineated above. For instance, CEM data can be used to: (1) screen a source's compliance status (with both emission limitations and O&M requirements); (2) select which sources should be inspected or compliance (stack) tested; (3) document the severity (e.g., duration, magnitude and frequency) of a source's excess emissions; and (4) document that a compliance test was performed during "non-representative" operating conditions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
AIR AND RADIATION

APR 11 1986

MEMORANDUM

SUBJECT: Guidance on Federally-Reportable Violations for  
Stationary Air Sources

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443)

A handwritten signature in cursive script, appearing to read "J. Craig Potter".

TO: Regional Administrators  
Regions I - X

Attached is guidance on what constitutes a Federal-reportable violation for stationary air sources. This guidance is the culmination of an extended effort initiated in FY 1985 within the Agency and with representatives of State and local air agencies. This guidance should be implemented in FY 1987 through your State enforcement agreements or similar appropriate vehicle. Once implemented, it should improve immeasurably our understanding of, and ability to deal with, the problem of assuring continuous compliance by stationary air sources.

Traditionally, compliance status information is reported to EPA by States on a "snapshot" basis. This means the State reports the compliance status of the source (based on the most recent assessment) as of the end of the reporting period, generally quarterly. Thus EPA would know the source's compliance status only as of the end of each reporting period. It would not know of any changes in compliance status which took place during the period not reflected by the status as of the end of the period.

This was not a serious problem when the focus of the compliance program was on obtaining initial compliance and compliance status changed only infrequently. However, as the focus has broadened to include maintaining continuous compliance, the current method of reporting is inadequate. For instance, a source could go in and out of compliance multiple times within a reporting cycle due to poor operation and maintenance practices. Yet, if it were in compliance at the period's end, under the snapshot approach the source would be reported in CDS as being in compliance with no record of the continuous compliance problems having occurred.

This results in an understating of the true noncompliance rate and makes it more difficult to assess and improve the effectiveness of the program. It also tends to mask compliance problems of intermittent violators, sometimes delaying assuring that those sources are brought into continuous compliance.

The attached guidance addresses this problem by requiring that information be provided on many violations which occur and are resolved wholly within the reporting period. This will significantly improve our understanding of the true compliance picture for those sources and what actions are being taken to resolve the violations.

This guidance was accepted by STAPPA at its March 18 Board of Directors meeting. It was not accepted by the ALAPCO Board of Directors. However, given the fundamental importance of improving the current system and the willingness of STAPPA to accept the guidance, we believe it is important to implement the guidance in FY 1987 as planned.

I think it is particularly important that the guidance be implemented in the spirit in which it is intended. Concerns have been expressed about highly obtrusive Federal enforcement actions and undue reporting burdens. To address these concerns, I would like to provide the following guidance.

Where a newly-identified violation has already been resolved at the time of reporting to EPA, an EPA enforcement action would rarely be warranted. (Even under the timely and appropriate response guidance, such violations would normally be resolved before EPA issues a Notice of Violation.) If the violation appears to be an isolated one, no EPA action is warranted. If, however, the violation is part of a pattern of such violations by the source, it is certainly appropriate to raise the matter with the State or local agency and to assure that action is taken to resolve the pattern of persistent violations.

Relative to the reporting of information to EPA, this guidance necessarily requires reporting of additional data to EPA for inclusion in the Compliance Data System (CDS). Such data, once received, must be entered into CDS in a timely manner. The guidance also requires that certain additional information about the violation be made readily available to EPA upon request. This information should be requested only when essential for a clearly-defined purpose and with full sensitivity to the potential resource burdens information requests create.

- 3 -

I believe implementation of this guidance constitutes an important milestone for our air compliance program. I look forward to working with you and our State and local agency colleagues in assuring its successful implementation in FY 1987.

Attachment

GUIDANCE ON FEDERALLY-REPORTABLE VIOLATIONS  
FOR STATIONARY AIR SOURCES

INTRODUCTION

A basic objective of the Federal EPA's air program is to ensure national consistency in the interpretation and implementation of the Clean Air Act. Nowhere is consistency more critical than in the area of enforcement. The primary enforcement responsibility of the Act clearly lies with the States. <sup>1/</sup> However, EPA has a well-defined and important role as well.

The Agency is charged by the Act with assuring that State programs enforcing State Implementation Plans and, where delegated, NSPS and NESHAPS standards, are adequately and consistently implemented and regulations enforced. This responsibility has been met through various State program oversight activities (NAAS), grant negotiations, and by requiring the reporting of certain State compliance monitoring and enforcement activities. The primary existing mechanism by which State actions are reported to EPA is through the Compliance Data System (CDS). A continuing problem with this oversight function is that while there is a mechanism for tracking data on violations, EPA has never clearly defined in national guidance what it considers to be a reportable violation.

While a State agency's legal obligation to enforce its regulations is clear, some discretion exists on what violations should be reported, and when and how such violations are to be reported. Such discretion generally allows the agency to direct limited resources to areas of greatest need and to respond more equitably to different types and magnitudes of violations. However, it can also lead to excessively variable practices on what to report as a violation and when to report it, resulting in unequal treatment of sources.

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<sup>1/</sup> "State" as used throughout this guidance also refers to local agencies where they have enforcement authority.

All Regions have developed approaches in working with State agencies on reporting of violations. However, in the absence of national guidance, inconsistencies exist from Region to Region, and State to State, regarding what constitutes a reportable violation, when and how it is entered in CDS, and what information is necessary to support the reported violation. It is the intent of this guidance to address the basis of these inconsistencies and minimize their impact. It is not the intent of this guidance to require compliance status information for purposes of the Agency routinely overriding basic State enforcement responsibility and decision making.

The task of developing the above mentioned national guidance is divided into five basic issues:

- ° What is a Federally-reportable violation, i.e., which violations does EPA want reported to it by the State?
- ° What specific information about reportable violations does EPA require to effectively monitor the universe of violating sources? How will the minimum information to be reported on violators be transmitted to EPA?
- ° At what frequency must minimum information on violators be reported to EPA?
- ° How will the compliance status of reported violators be tracked?
- ° How will EPA use the information provided to it by the State?

These issues are addressed in the following sections. They deal only with State reporting of fundamental data about violators of Federally-enforceable air requirements. For the purposes of this guidance, violators include significant violators as well as all other violators that meet the criteria discussed below.

The scope of reporting and reporting procedures and frequency required by this guidance do not supercede the monthly informal consultations and monthly updating of CDS required for sources subject to the "Guidance on 'Timely and Appropriate' EPA/State Enforcement Response for Significant Air Violators", dated June 1984.

#### REPORTABLE VIOLATION

The task here is not to establish what constitutes a violation, but rather to assess whether a violation of a Federally-enforceable requirement should be reported by the State to EPA. That is, all detected violations are not of immediate Federal concern. However, certain violations are. National guidance that permits the States to make this distinction is provided below.

For a violation to be reportable to EPA, two conditions must be met. First, the source must either be an NSPS or NESHAPS facility or, if a SIP source (including those subject to NSR and PSD regulations), be classified A1 or A2 (by the EPA definition of class).

Secondly, to be Federally-reportable, a violation must also meet at least one of the following criteria 2/:

1. Any emissions or significant procedural violation of a State consent decree, court order, or administrative order, which was issued by the State to resolve a Federally-enforceable violation.

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2/ For the purpose of this guidance, specific terms used in the above criteria are defined in the following manner:

- ° An emissions violation includes not only a violation of numerical emissions limitations but also violations of other requirements that directly impact the amount of allowable emissions, such as equipment standards, work practice standards, and sulfur-in-fuel limitations.
- ° A significant procedural violation of a State consent decree, court order, or administrative order includes failure by the source to accomplish or maintain interim emission reductions and failure to achieve interim increments of progress which jeopardizes the ability of the source to meet the final compliance dates.
- ° A significant procedural NSPS violation includes such source activities as failure to install a Continuous Emission Monitoring System (CEMS) or other monitoring equipment, failure to conduct timely performance tests, and failure to conduct appropriate monitoring and associated recordkeeping. It does not include a failure to report on time such activities as start of construction or operation and late reporting of quarterly compliance reports.
- ° A continuing violation (emission or significant procedural) shall include violations which, while not necessarily continuous for seven days (i.e., 168 or more hours), reoccur regularly or intermittently, and have not been adequately addressed or resolved by the source. A violation of this nature shall become reportable if it cannot be or is not resolved within seven days after the enforcement agency first becomes aware of the violation. Such a violation is Federally-reportable even if a source is in compliance on the last day of the reporting period, i.e., at the time of the traditional static "snapshot."
- ° A significant procedural SIP violation includes such source activities as failure to install CEMS, failure to obtain required permits (NSR and PSD), and the like.

2. Any violation of a NESHAPS requirement, emissions or procedural.
3. Any emissions or significant procedural violation of an NSPS requirement continuing for, or likely to continue for, at least seven days.
4. Any emissions or significant procedural violation of a Federally-approved or Federally-promulgated SIP requirement (including an NSR or PSD regulation) continuing for, or likely to continue for, at least seven days.

Any violation determined through a Continuous Emission Monitoring System (CEMS) or any other continuous monitoring device or method, where such device or method is the official emissions compliance test method prescribed by a Federally-enforceable SIP, NSPS, or NESHAPS requirement, would be covered by and reportable under one of the criteria specified above.

#### REPORTABLE VIOLATION DATA

In order for EPA to carry out its national program oversight responsibility, the State must provide adequate information about the reported violation and their enforcement position in a timely fashion to assure EPA that the violation is being properly addressed. Because this places a reporting burden on the State, only essential information needed to satisfy the EPA oversight mission will be required. A portion of these data, as discussed later, will be tracked through CDS.

At a minimum, the following information, where applicable, must be provided or made available to EPA for all reportable violations. The information for items 1-3 must be reported to EPA in all instances. Items 4-6 need not be regularly reported to EPA, however, they must be made readily available upon EPA's request.

1. Source and emission point identification data;
2. Nature of violation (i.e., pollutant and emissions or procedural violation), location of violation (i.e., point, process or unit), and the Federally-enforceable regulation that has been violated;
3. Method and date of initial detection, e.g., stack test, quarterly compliance report, inspection report, malfunction report;
4. Duration and magnitude if emissions violation;
5. Known/possible causes of violation, e.g., lack of proper O&M, emergency release; and
6. State enforcement position and timeframe of expected action.

Once a source has been returned to compliance, the method of compliance verification and the date of compliance achievement must as well be reported in all instances to EPA according to the same frequency as reporting violations.

If the Region receives copies of State inspection reports, these may serve in lieu of the above-listed minimum information if the State inspection reports provide sufficiently detailed information, at the required reporting frequency, to permit EPA to meet its mission as stated in this guidance.

The minimum information detailed for items 1-3 above should be entered into CDS in a timely fashion. The information required to be regularly reported or made available to EPA from States on all reportable violations may be transmitted either by personal communications, manual reports, or through CDS. However, for items 4 and 5, it will be sufficient if the information is made available to EPA during an onsite visit if the State prefers.

#### FREQUENCY OF REPORTING

The information required by this guidance to be reported to EPA must be reported on at least a quarterly basis. For newly reported violators, the initial quarterly report should consist of the minimum information discussed under the "Reportable Violation Data" section, to the extent it is available at that time. Subsequent quarterly reports should at least consist of compliance status changes that occurred during the past quarter. All such information shall be reported to EPA not more than 45 calendar days after the close of the quarter the information became known to the State.

#### METHODS OF COMPLIANCE TRACKING

The compliance status of reported violators will be tracked in CDS by two procedures. One will be the traditional static "snapshot" based on the most recently observed compliance assessment of the source, generally meant to be the compliance status of record as of the end of the quarterly reporting period. This compliance status is defined to be the most recently confirmed assessment of source compliance of Federally-regulated processes, emission points, or units for all Federally-regulated air pollutants.

The second compliance indicator is intended to track the performance record of such sources, i.e., a more continuous assessment of compliance, insofar as that information is available to the enforcement agency. For instance, a source could

go in and out of compliance multiple times within a quarter's reporting cycle. Yet, if it was in compliance at quarter's end, under the snapshot approach, the source would be reported in CDS as being in compliance with no record of the continuous compliance problems having occurred. A great deal of valuable information about a source's operational characteristics, and difficulties, is lost using such traditional static compliance reporting methods. In addition, a static assessment of compliance does not lend itself to an evaluation of truly representative operating conditions when a physical site visit is made, nor does it encourage source practices that maintain compliance on a more continuous basis.

To accommodate this second assessment procedure, a continuous compliance status indicator code will be entered in CDS. With the addition of such an indicator, not only will we know a source's static compliance status, but we will as well know its compliance picture during the reporting period even though its static compliance status may not indicate a violation at quarter's end. The actual form, mechanics, and schedule of CDS modifications necessary to monitor the continuous compliance history of sources will follow in more detailed guidance at a later date. However, the concept is to enable agencies to more effectively monitor the continuous compliance practices of problem sources.

#### EPA USE OF DATA

EPA has a bonafide mission of national program oversight. The type and amount of information EPA is requiring the State to provide about reportable violations through this guidance is necessary to achieve that mission. More specifically, EPA will use these data to:

1. Maintain a nationally consistent and uniform Federal/State compliance program;
2. Assess the State's ability to implement and enforce compliance with the Act;
3. Identify the national air compliance program's strengths and weaknesses, and improve the program in areas where the data indicate a need;
4. Determine what is a "realistic" noncompliance rate; and
5. Provide EPA Regions with more detailed background data for monthly conferences with their States.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 11 1986

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Timely and Appropriate Enforcement Response Guidance

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443) *J. Craig Potter*

TO: Regional Administrators  
Regions I - X

Attached is revised guidance on timely and appropriate enforcement response for significant air violators. This guidance should be used in your negotiation of State enforcement agreements for FY 1987.

The only substantive change to the current guidance made by the revision is to extend the coverage to include NESHAPs sources. NESHAPs violators were not initially covered because it was felt that the 120-day timeline for resolution of such violations was too long. However, by not including NESHAPs violators, they were not covered by the mandatory penalty provision or the monthly consultation provisions of the national guidance (although many State enforcement agreements extended such provisions to NESHAPs violators.) To remedy this, starting in FY 1987, NESHAPs sources will be subject to the penalty, data transfer, and consultation requirements of the guidance but not the timeline. The timeline will continue to be inapplicable since, as indicated in the guidance, action against NESHAPs sources should proceed more quickly than the timeline would permit.

This change was accepted by STAPPA and ALAPCO at their mid-winter meetings in Jackson, Wyoming. It should improve both the consistency and the effectiveness of our compliance program. If you have any questions about interpretation or implementation of the guidance, please call Ed Reich, Director, Stationary Source Compliance Division, at 382-2807.

Attachment

April 1986

GUIDANCE ON TIMELY AND APPROPRIATE STATE/EPA ENFORCEMENT  
RESPONSES FOR SIGNIFICANT AIR POLLUTION VIOLATORS

I. Scope of Guidance

- A.1. It is assumed that States\* will address any violations of air pollution regulations within their jurisdictions (except for non-delegated Federal standards). By focusing on a limited group of violators for purposes of this guidance, it is not intended to detract from the importance of addressing other violators and the right and responsibilities of the States and EPA for doing so.
2. This guidance is an initial step towards clarifying mutual expectations of the respective parties of the Federal-State partnership in the enforcement of air pollution control requirements for stationary sources. It is fully expected that it will be modified and expanded in future years to reflect experiences in its initial implementation and the evolution of the air program itself.
3. In accordance with the Deputy Administrator's memorandum of April 9, 1984 on Forging an Effective State/Federal Enforcement Relationship, this national guidance will serve as the framework for State-specific agreements reflecting the parties' mutual expectations. As that memorandum states, "[t]he Regions will have to accommodate differences among States, for example, where their administrative procedures require different timelines for enforcement action."
- B.1. This guidance applies to the following classes of significant violators:
  - (a) Class A SIP violators in nonattainment areas in violation for the pollutant for which the area is nonattainment, and

\* "State" as used throughout this paper also refers to local agencies where they have enforcement authority.

- (b) NSPS violators (where delegated) and sources operating in violation of Part C (PSD) and Part D (nonattainment areas) permit requirements.
  - (c) NESHAPS violators (where delegated). However, the timeline and NOV provisions in Sections II and III are inapplicable to NESHAPS violations since action against such sources must proceed more quickly than the timelines would permit.
2. This guidance does not apply to emergency episodes or sources constructing without a valid PSD or Part D permit where required (or in violation of such a permit). In the case of emergency episodes, the seriousness of the violation would normally require expedited action. In the case of a source constructing without a required PSD or Part D permit or in violation of a permit, options for obtaining relief may be foreclosed by allowing the source to continue to construct and, therefore, expedited action may be essential.

## II. Timelines for Enforcement Action

- A.1. The clock starts (i.e., day zero) 30 days after the date of the inspection or receipt of a source self-monitoring report which first identifies the violation. This provides sufficient time for an evaluation of the inspection or source report data to determine if a violation exists. If, during this 30-day period, the State determines that a stack test or a sample analysis is required to determine or confirm the violation, the clock does not start until the date of receipt of the stack test or sample analysis report.
- 2. Any serious problems occurring earlier in the process would be identified and addressed in the National Air Audit System process rather than under these timelines.
- B. By day 45, the source should be notified of the violation and its need to remedy it by the State in writing or in a documented conversation (in any form the State feels is appropriate).
- C. By day 120, the source shall either be in compliance, on a legally-enforceable expeditious State administrative or judicial order, be subject to a referral to

the State attorney general or for a State adjudicatory enforcement hearing, or be subject to a proposed SIP revision which has at least been scheduled for a State hearing and which EPA staff-level review shows is likely to be approved. For cases where penalties are required (see IV below), penalties must also be addressed as part of the State action if it is to be sufficient to obviate further EPA action.

- D. If a schedule is established, the State will monitor compliance with that schedule and report on progress in accordance with established reporting requirements. If a referral is made, EPA will continue to monitor the progress of the case to and after filing. If a SIP revision is initiated, EPA will monitor the progress of the revision through the State administrative process. If a case or SIP revision becomes unduly delayed, EPA will discuss this with the State and may choose to initiate a parallel Federal action. No formal timelines are being established for this stage of the enforcement process, however.
- E. If none of the actions specified in C. have occurred by day 120, EPA will discuss with the State the status of the State's actions and its expectations. If discussions with the State suggest that the State is close to resolving the violation or that further deferral is otherwise appropriate, EPA will continue to defer to enable the State to complete its action. If EPA determines that further deferral is not justified, it will proceed with its own action at this point.
- F. When EPA takes the lead in a case, it will act to get the source in compliance, on a schedule, or subject to a Section 120 action or judicial referral within 120 days of its assumption of the lead. EPA will encourage continued State participation even where EPA takes the lead. The possibility of a joint action should be considered as an alternative to a unilateral EPA action where feasible.

### III. Issuance of NOV's by EPA

- A. At day 90, EPA (after consultation with the State on the progress of the case to date) may take one of the following actions as circumstances dictate:
  - (a) Initiate case development activities through an inspection or issuance of a Section 114 letter. (This will be less likely to be

required if the State provides sufficient documentation to support an NOV, as provided in II.C.)

- (b) advise the source that EPA will issue an NOV in 30 days if the source does not reach an acceptable resolution with the State before then. (This should be used only where such an action by EPA is likely to be of significant value in prompting the source to reach an acceptable agreement with the State).
  - (c) issue the NOV, if requested by the State or if it is clear that a resolution will not be reached by the State by day 120 and that the environmental significance of the source warrants EPA action at this point.
- B. EPA will routinely issue NOVs, if not already issued, on (or shortly after) day 120 if the violations are still unresolved at that point. This is not intended as a criticism of the State action but only as expression of EPA concern to reinforce State efforts and as a necessary legal prerequisite to further EPA action. (NSPS sources will receive letters of violation rather than NOVs).
- C. Any NOV issued on day 120 will be issued only after consultation with the State. If there is some particularly compelling reason why the NOV should not be issued to a source at day 120, EPA will defer its issuance but this is not expected to be the case in the vast majority of cases. EPA will rely wherever possible on information provided by the State according to mutually-agreed upon procedures.
- D. In addition, EPA may immediately issue an NOV to any source subject to this guidance where it finds the violation rather than the State. (This would not apply to violations discovered in joint inspections.) However, prior to a decision on issuance of the NOV, EPA will discuss with the State the circumstances of the violation and ascertain the reason why the violation had not been reported by the State. EPA will also resolve in consultation with the State who will take the lead for the source and the nature and timing of follow-up action.

- E. Any NOV issued in a case where the State still has the lead will indicate that EPA is still looking to the State to resolve the matter and further EPA action will be required only in the absence of an acceptable, prompt resolution by the State.
- F. EPA will transmit a copy of all NOV's it issues to the State in whose jurisdiction the source is located. If the violation clearly impacts upon the air quality of an adjacent State, EPA will transmit of a copy of the NOV to the State as well.

#### IV. Penalties

A cash penalty of sufficient magnitude appropriate to the violation is required as an element of the resolution of the following classes of violations. If the penalty is not obtained by the State, an EPA action will be brought. If the State believes it can obtain a compliance schedule but not the penalty, a joint action could be appropriate.

The classes of violations subject to this guidance for which an appropriate cash penalty is required are:

- (a) Class A SIP violators in nonattainment areas in violation for the pollutant for which the area is nonattainment unless on an EPA-approved DCO or subject to an approvable SIP revision;
- (b) Sources which violate Part D, PSD, and NSPS requirements after the date the source was required to demonstrate compliance. (This would not apply during periods which the regulations or permit specifically provide for "debugging" prior to demonstration of compliance, such as the 180-day start-up period for NSPS sources provided for in 40 CFR Section 60.8);
- (c) Violators of NESHAPs requirements;
- (d) Sources which violate State or Federal administrative or judicial schedules, thus requiring an extension of the final compliance date;
- (e) Violators which the State or EPA determines are repeat violators.

This requirement would not be applicable to de minimis violations or violations arising from force majeure circumstances.

V. Consultation and Data Transfer

- A. EPA and States would initiate or continue at least monthly informal consultations to discuss compliance efforts. During these discussions, information exchange relative to obtaining compliance and penalties would occur. This exchange would include at least the following items.
  - (a) The State would identify any newly-found violators subject to this guidance.
  - (b) The State would identify sources notified of noncompliance during the month consistent with Section II.B.
  - (c) The State would identify violators where action had been taken, consistent with Section II.C., including penalties where required by Section IV.
  - (d) The State would discuss the status of other enforcement actions pending or in progress if requested by EPA.
  - (e) EPA would identify sources for which it had completed action and provide the status for other sources where action is pending or in progress.
  - (f) EPA would identify any sources it had found in violation and confer with the State in accordance with III.D.
- B. The CDS would be updated by EPA and/or the State on a monthly basis to reflect:
  - (a) Compliance status changes for newly-identified violators which are in violation on the last day of the month prior to the consultation and which were (or are expected to be) in that status for 7 days or more.
  - (b) Sources notified of noncompliance.
  - (c) Sources with completed enforcement actions, including any schedules and incremental dates for returning to compliance.
  - (d) Sources found to be in compliance with final limits.

- C. Inspection results other than those affected by the above will be provided in accordance with current practices and EPA accountability system requirements.
- D. EPA and the State will share inspection results and monitoring reports for use in enforcement proceedings to the extent practicable. State personnel should be encouraged to provide evidence, including testimony, for Federal proceedings. Federal personnel should similarly support State enforcement proceedings.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN 17 1986

OFFICE OF ENFORCEMENT  
AND COMPLIANCE  
MONITORING

MEMORANDUM

SUBJECT: Issues #3(e) and #5 of the VOC Issue Resolution Process: Establishing Proof of VOC Emissions Violations, and Bubbles in Consent Decrees Resolving Civil Actions Under Section 113(b) of the Clean Air Act

FROM: Courtney M. Price *Courtney M. Price*  
Assistant Administrator for Enforcement  
and Compliance Monitoring

TO: Regional Counsels  
Regions I-X

Air Management Division Directors  
Region I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxic Management Division  
Directors,  
Region IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

In the attached memoranda, I am answering two questions that you identified as important issues in our Clean Air Act enforcement effort to reduce emissions of volatile organic compounds ("VOC"). Specifically, this guidance responds to issues #3(e), and #5 of the nineteen issues listed in a May 20, 1985 memorandum titled "Results of May 3 VOC meeting."

The issues addressed by this guidance concern how to establish proof of VOC emission violations (issue #3(e)) and the relationship between pending or potential bubble applications and consent decrees (issue 5). The main theme of the guidance on issue #3(e) is to encourage the use of Section 114 of the Clean Air Act to obtain information where data is not otherwise available to prove violations under the applicable test method. The principle point of the guidance on issue #5 is to emphasize that the current SIP governs until any amendments are federally effective.

This guidance is part of an Agency-wide effort to address VOC enforcement issues and should be considered in conjunction with the responses to the other VOC issues, which will be distributed by the responsible EPA offices as they are developed.

One major comment regarding issue 3(e) was repeated by several commentors during the second round of review and is worth mentioning briefly here. The comments suggested that rather than attempting to fix recordkeeping problems through §114 requests, EPA should work towards incorporating better recordkeeping requirements in the state implementation plans. For example, EPA could issue SIP deficiency notices where the SIP does not provide for recordkeeping requirements adequate to determine if the source is in compliance with the SIP.

Our response to issue 3(e) is designed to deal with those interim problems concerning recordkeeping which arise prior to the resolution of the more fundamental concern of poorly drafted SIP recordkeeping requirements. The issue of how to improve the SIP's is being addressed by the Control Programs Development Division. The attached guidance is intended to advise you of the tools available to obtain better evidence of violations, and my office's policy concerning the use of those tools, until such time as they may become unnecessary because of corrective SIP revisions.

I appreciate the efforts of the Regions in commenting on the various drafts of the two following documents and hope that you find them helpful in resolving some of the issues concerning VOC enforcement.

Attachments

ISSUE NUMBER 3(e): How are VOC emissions to be calculated over a chosen averaging time when a company is not required to, or does not, maintain records directly pertinent to that unit of time?

RESPONSE: This issue is presented when the period for assessing compliance under the SIP with the VOC emission limitation (e.g., a source must meet a percent VOC limitation over a 24 hour period or instantaneously) does not correspond to the records maintained by the source (e.g., records of VOC usage are kept by the source only on a monthly basis). The issue is also presented in other contexts. For example, a SIP may require line-by-line compliance while the source records are maintained only on a plant wide basis. The issue is important because compliance determinations for many types of VOC sources rely upon the records of VOC usage kept by the individual company.

Where the SIP itself requires records to be maintained that correspond to the SIP emission limitations, corrective action can be taken under Section 113 of the Clean Air Act to require the source to keep the proper records. This action can consist of the issuance of an administrative order under Section 113(a), or the initiation of a judicial action under 113(b). The remainder of this memorandum addresses the situation where the SIP does not contain such a record keeping requirement.

There are four recommended techniques available to determine source compliance with VOC SIP emission limitations in the absence of a SIP record keeping requirement for source records which correspond to the SIP emission limitations. These four different techniques are primarily useful in four different contexts.

The first technique consists of the use of mathematical algorithms. A description of two different types of available algorithms is attached (attachment 1). Both apply various mathematical computations to monthly or yearly data to produce a figure representing the minimum number of days that a source had to be out of compliance with the SIP emission limit. This calculation is statistically based and does not identify the particular days that a source was in violation. Use of the algorithms may be helpful in settlement discussions with the source and in determining a settlement penalty.

Use of the results of the algorithms in a different context, to prove violations at a trial or hearing, presents several issues. Defendants can be expected to argue that the Government may prove violations only through the use of the appropriate test method, which would be the method specified

in the federally-approved SIP, or if there is none, the appropriate EPA test method in 40 CFR Part 60 (see 40 CFR §52.12(c)). To overcome this point, the Government would have to argue that violations can also be proven through expert opinion testimony under the Federal Rules of Evidence, Rule 702 (Testimony by Experts), 703 (Basis of Opinion Testimony by Experts), and 704 (Opinion on Ultimate Issue). In order to use the results of the algorithms as evidence of violations at a trial, the Government should be prepared to prove the statistical validity of the algorithms through expert testimony, and to show through the opinion of an expert, based upon the results of the algorithms, that the source had to be in violation for a given number of days. The Government would not be able to prove precisely which days a company was out of compliance nor which lines (or how many lines) were out of compliance. The Government would be able to show, based on the source's total VOC output and the restrictions provided in SIP, that at least one of the lines at the source was out of compliance for a certain minimum period of time. Sole reliance on algorithms has the negative effect of calculating violations on an averaging basis in what may be the absence of any SIP provision authorizing averaging.

Because of these potential issues of proof and the effect of averaging out some violations by using algorithms, steps should be taken to obtain the data necessary to calculate emissions under the applicable test method. Thus, the second recommended technique to determine source VOC compliance is to use Section 114 of the Clean Air Act to request currently existing source records which can be used to develop the data necessary to make compliance determinations under the applicable test method. Items such as sales slips, invoices, production records, solvent orders, etc., may be available and useful in developing the necessary data for the test method calculations. Once a case has been filed discovery can also be used to supplement the information obtained under Section 114.

The third recommended technique to determine source VOC current and future compliance is the issuance of a request under Section 114 requiring the source to prospectively keep the necessary records. This technique is the most straightforward of the three and the one that should generally be pursued. It may be the only option in the case where sources have not kept records in a form which can be used, directly or indirectly, to determine compliance under the applicable test method. It may also be the only realistic option where the use of existing records to develop the necessary data for the test method calculations would be unduly time-consuming and burdensome for the Agency.

Under the authority of Section 114, EPA may require a source to establish and maintain records reasonably required to determine compliance with the SIP (Section 114(a)(1)(A) and (B)). By issuing such a request, EPA would impose an obligation on a source to keep and maintain those records which are necessary to calculate compliance determinations under the applicable test method. The requested record keeping should be in a format consistent with the SIP emission requirements. Thus, if the SIP requires compliance on a line-by-line basis and on a 24 hour average, the records should be kept on the basis of individual lines using no more than 24 hour averaging. Also, the required measurements as to VOC content should be consistent with applicable EPA test methods. For example, EPA should require in the Section 114 request that data on the VOC content of a particular coating or ink is produced through a measuring process identical to EPA's method 24 or 24 A in 40 C.F.R. §60 App. A.

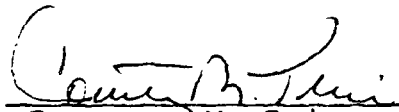
As a fourth technique, Section 114 may also be used to require a source to sample emissions in accordance with the methods prescribed by EPA (Section 114(a)(1)(D)). Thus, Section 114 may be used to require a source to conduct an emissions test in accordance with the applicable test methods. This type of Section 114 request would probably be the most appropriate where compliance determinations are made on the basis of emissions testing as opposed to an analysis of the VOC content of the individual coatings used. In certain situations where it is unclear whether the coating or ink supplier is using proper test methods, EPA may want to require the user of those coatings to run tests for VOC content using EPA's approved test methods.

In conclusion, algorithms exist and are available to estimate the minimum number of days a company was out of compliance with SIP VOC emission limitations in the absence of company records which are necessary to make compliance determinations under the applicable test method. The results of the algorithms are primarily useful for purposes of settlement discussions or for identifying sources which should be required to submit information under §114. While this guidance does not preclude using algorithms and expert opinion testimony to prove violations at a trial, the Government should be prepared to prove at least some days of violation through the applicable test method in the event that expert opinion evidence is rejected by the judge. The records necessary to develop this proof under the applicable test method can be sought through a Section 114 request for information where the company has data which can be used

to develop the necessary records. Such records can also be developed on a prospective basis through a requirement imposed under the authority of Section 114 requiring the source to maintain the necessary records. Finally, Section 114 can also be used to require source testing of emissions.

Future litigation reports based upon VOC SIP emission limitation violations should, if at all possible, either contain proof of violations using the applicable test method covering at least part of the period of time the source is alleged to be in violation of the emission limitation or should contain a cause of action based upon a source's failure to comply with a previous request issued under Section 114 for source records or testing. Prior to the referral of a report, the authority granted EPA under Section 114 should be used, where necessary, to obtain the data needed to establish some days of violation under the applicable test method. Through the use of Section 114, the Government should either have the evidence needed to prove specific violations, or, if a source fails to comply with the Section 114 request, a basis to proceed under Section 113(b)(4) for violation of Section 114. Litigation reports relying solely upon algorithms to evidence violations are appropriate only if, after diligent effort to obtain more detailed data, statistical proof through the use of algorithms remains the only available technique.

If you have any questions concerning this guidance, please contact Burton Gray at FTS 382-2868.



Courtney M. Price  
Assistant Administrator

JAN 17 1986

ISSUE NUMBER 5: How Can EPA Include A Bubble In The Context Of A Consent Decree?

RESPONSE: EPA cannot endorse a consent decree which contains a schedule for compliance with a bubble until EPA has promulgated final approval of the particular bubble as a SIP revision (or until the bubble has been approved by the State if the bubble is granted under a generic bubble provision). This position is supported by existing Agency policy ("Guidance for Drafting Judicial Consent Decrees" issued on October 19, 1983), Section 113 of the Clean Air Act and case law.

A consent decree must require final compliance with the currently applicable SIP. The Agency's "Guidance For Drafting Judicial Consent Decrees," states that consent decrees must require final compliance with applicable statutes or regulations. Other than interim standards, a decree should not set a standard less stringent than that required by applicable law or regulation, because a decree is not a substitute for regulatory or statutory change. (See page 11 of the Guidance.)

Section 113(b)(2) of the Act, 42 U.S.C. 7413(b)(2), provides EPA with the authority to initiate civil actions to obtain injunctive relief to correct source violations of the SIP. A settlement of such an action must include a requirement to comply with the SIP provisions that formed the basis of the request for injunctive relief. The settlement cannot require final compliance with a provision not yet a part of the federally approved SIP.

Case law also supports the proposition that the SIP may only be changed through certain specific procedures and that absent those procedures, no change can be effected to the original SIP emission levels. Train v. Natural Resources Defense Council, 421 U.S. 60 (1975). The SIP, as approved through a formal mechanism by EPA, sets the official emission limits and remains the federally enforceable limit until changed. Ohio Environmental Council v. U.S. District Court, Southern District of Ohio, Eastern Division, 565 F.2d 393 (6th Cir. 1977).

A decree may contain a general provision recognizing that either party may petition the court to modify the decree if the relevant regulation is modified, as would be the case with a bubble. The following language is an example of such a reopener clause where EPA approval of the individual bubble is required.

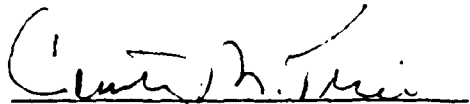
If EPA promulgates final approval of a revision to the applicable regulations under the State Implementation Plan, either party may, after the effective date of the revision, petition the Court for a modification of this decree.

If a federally approved generic procedure is applicable, the reopener clause should be modified to reflect the particular generic procedures.

If a SIP revision that affects a decree's compliance schedule is finally approved, decree language, as indicated above, may permit the source to petition the court for a modification of the schedule. A source is relieved from its obligation to meet the existing schedule only upon final approval by EPA, or by the state if under a federally approved generic bubble regulation, of the SIP revision and only upon a modification of the decree. The consent decree may not contain a clause which would automatically incorporate any future bubble.

It is important to note in the above context that consent decree compliance schedules must be as expeditious as practicable in terms of implementing a control strategy to achieve compliance with the existing SIP and may not add in extra time to provide for final EPA action on a request for a SIP revision. The "Guidance for Drafting Judicial Consent Decrees" states on page 12 that, "The decree should specify timetables or schedules for achieving compliance requiring the greatest degree of remedial action as quickly as possible." The concept of expeditiousness was taken from §113(d)(1) (applicable to compliance schedules in Delayed Compliance Orders) which was added to the Clean Air Act by the Amendments of 1977. The principle was incorporated into Agency guidance issued shortly after the 1977 amendments pertaining to compliance schedules in judicial consent decrees, e.g., "Enforcement Against Major Source Violators of Air and Water Acts" - April 11, 1978 (see pg. 4), and "Section 113(d) (12) of the Clean Air Act" - August 9, 1973 (see pg. 2).

If you have any questions concerning this guidance please contact Burton Gray of AED at FTS 382-2868.

  
Courtney M. Price  
Assistant Administrator

JAN 17 1986



PN 114-88-03-31-006

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 31 1986

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Compliance Monitoring Strategy for FY 89

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Regions IV and VI

Air and Radiation Division Director  
Region V

Air and Toxics Division Directors  
Regions VII, VIII and X

I am transmitting to you the attached Compliance Monitoring Strategy (CMS) for implementation in FY 89. This strategy is the culmination of a multi-year effort that focused on addressing some very important issues of the Air compliance program. I feel the CMS makes major strides in guiding our surveillance activities in a direction that will dramatically improve the program.

As you know, the Compliance Monitoring Strategy will replace the Inspection Frequency Guidance (IFG) in FY 89. The CMS emphasizes flexibility with accountability. This strategy recommends developing a comprehensive inspection plan that identifies all sources or source categories committed to be inspected by the State agency (means State or local agency throughout) during their fiscal year.

The State inspection plan must address national priorities and may also include inspections not normally of EPA concern. The plan, to fully utilize the flexibility offered, will be organized around four groups of sources.

Group I: Traditional stationary sources such as Class A and known Class B SIP, NSPS, and operating NESHAPs sources.

Group II: Asbestos D&R Strategy contractors.

Group III: Small VOC Compliance Strategy sources.

Group IV: Sources of State concern.

#### High Points of the New Strategy

New features of the Compliance Monitoring Strategy are the following.

(1) Ability to address local air pollution concerns.

The CMS provides State agencies with the discretion to address significant local air pollution concerns such as citizen complaints, odor problems, and other localized toxic, hazardous, and nuisance issues. These types of concerns may not be national priorities, but are legitimate resource expenditures under this strategy. Group IV is where local issues and new State-specific initiatives may be addressed.

(2) Use of inspection targeting.

The concept of inspection targeting provides an approach to systemically direct resources toward the most significant problems. The approach employed is a PC-based model using multiple targeting criteria to determine inspection frequency. The targeting model accepts source specific targeting data supplied by the State inspector in such areas as plant emissions, compliance information, and air quality factors. The model assigns values to these data, and mathematically combines the values to produce a ranking of sources to be inspected along with the estimated resource costs.

(3) Account for the total inspection activity.

This strategy will credit a program for its total inspection activity. The total State inspection resource budget must be provided to EPA for this key aspect to be accomplished effectively.

(4) Maintain minimum resource expenditure levels in the inspection program.

Minimum resource expenditure levels for Group I sources are defined to be the average inspection effort over the last three years. The levels for Group II asbestos D&R contractors are those reported in the SPMS for the latest fiscal year. Group III resource levels are the minimum number of inspections required by the Small VOC Source Compliance Strategy or supplied by the State, whichever is larger. Group IV levels are generally supplied by the State.

5) Focus on national priorities.

Each year the Compliance Monitoring Strategy will reflect the Air program's stated national priorities as identified in EPA's Operating Year Guidance. These national priorities are encompassed by Groups I, II, and III.

Comments

The responses I reviewed from both State and EPA personnel were universally supportive of the general approach in the CMS. I thank you for your time. The kinds of concerns expressed typically revolved around the following issues.

1. Targeting model input data may not be known by the inspector.

Since the model's input is often qualitative and is so critical to effective source compliance understanding, the lack of such data is a key finding. In addition, experience has shown that such a structured model helps guide an inspector toward the needed data to carry out effective source inspections and provides supervisors with valuable management control information.

2. More resources (Regional and State) will be needed to implement the CMS with targeting.

Our experience has shown that initially more time is required to establish the source inventory, to develop a working database, and to negotiate a plan. However, the initial resource commitment is very dependent upon the current condition of an agency's database. Thereafter, the resource burden is greatly reduced.

Given a principal aim of targeting is to be a more focused use of scarce resources, targeting over time, is expected to realize a resource savings. A program using targeting should find and correct more problems than a program that does not. Therefore, resources may actually go further because of more effective use.

3. The Inspection Frequency Guidance (IFG) should remain an option.

We recognize in some cases, as mentioned in the CMS, the current IFG will be a more viable means for States to meet their inspection commitments. Therefore, the IFG is the alternate approach. However, we strongly encourage the use of the CMS with targeting whenever possible. To further promote the CMS, we intend to monitor, in which States and for what reasons, the CMS is not used.

One final observation, after reviewing the comments I found a more comprehensive reading of the strategy should answer any remaining questions. It became apparent that inadequate attention was given to reviewing the strategy because so many questions and comments were already answered in the draft CMS. I will be happy to discuss with anyone issues associated with implementing and interpreting the CMS, but please read it carefully first.

#### Next Steps

SSCD has arranged to conduct Regional training (States may be invited as well) in the use of the inspection targeting model and provide on-call technical support. Please contact Howard Wright at FTS 475-7034 to schedule training. To effectively coordinate ten Regions training, Mr. Wright would like to know what Regional dates are suitable for this one day training session. Please notify him of your preferred dates by April 22, 1988.

- 5 -

The diskette containing the model along with the Description and Explanation document will be distributed at the training sessions. For technical support in the model's operation, please contact Perrin Quarles Associates, Inc. at 804-979-3700.

Attachment

cc: Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI and IX

Air Program Branch Chiefs  
Regions I, VII, VIII and X

# Compliance Monitoring Strategy

## Introduction

The Inspection Frequency Guidance (IFG) will be replaced in FY 1989 by the Compliance Monitoring Strategy (CMS), which provides a more flexible approach for determining State<sup>1</sup> inspection commitments. The CMS emphasizes flexibility with accountability. This strategy recommends the development of a comprehensive inspection plan that identifies all sources or source categories committed to be inspected by the State agency during their fiscal year.

## Strategy Components

The CMS has five parts.

### (1) Objectives

The Compliance Monitoring Strategy has five objectives.

- To provide the ability to address significant local concerns where they differ from national priorities.
- To ensure effective national oversight of the air compliance monitoring program, to permit its evaluation, and to establish a feedback mechanism.
- To promote the importance of enforcement presence through effective compliance monitoring activities.
- To ensure an adequate level of resource commitment.
- To assure emission standards are met through effective use of compliance monitoring activities.

### (2) Requirements

Sources subject to this strategy, if its flexibility is to be fully utilized, are the following.

Group I: Traditional stationary sources - Class A and known Class B SIP, NSPS, and operating NESHAPs sources.

Group II: Asbestos D&R Strategy contractors.

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<sup>1</sup> means State or local agency throughout.

Group III: Sources subject to the Small VOC Source Compliance Strategy.

Group IV: Sources of State concern.

The national priorities must be met, or in cases where exceptions are justified, the rationale for the exceptions must be agreed to by EPA. Groups I, II, and III will encompass the national priority categories in FY 1989. However, national priorities may change from year to year.

In FY 1989, the national priorities are the following.

- Class A sources emitting VOC in ozone nonattainment areas. (Group I)
- Class A1 sources emitting TSP, SO<sub>2</sub>, CO, or NO<sub>x</sub> in nonattainment areas. (Group I)
- Class A sources emitting any criteria pollutant in attainment or unclassified areas that have known or suspected compliance problems. (Group I)
- Lead SIP and operating NESHAP sources. (Group I)
- Asbestos demolition/renovation contractors per the revised Asbestos Strategy dated March 31, 1988. (Group II)
- Small VOC sources per the Small VOC Source Compliance Strategy dated July 6, 1987. (Group III)

Inspection quality under this strategy must be Level II or higher, as defined by EPA guidance. Furthermore, this strategy will credit a program for its total inspection activity. That is, this approach will account for the total federally-funded compliance monitoring effort including, where it is mutually agreed, the substitution of non-federally regulated source inspections (Group IV) for federally regulated (Group I). It will be necessary to present the rationale for this substitution and to enter only the substituted Group IV sources into CDS.

The inspection targeting model will be run by States wishing to use the flexibility this strategy offers to determine the inspection commitment for Group I sources and those Group IV sources that will be substituted for Group I source inspections. Inspector-supplied data on emissions, air quality compliance history, inspection level, inspection time and inspection frequency are inputs into the model for these sources. The output of the targeting model is a priority ranking of sources to be inspected with cumulative resource needs. Attachment 1 provides further details on the inspection targeting model. Training in the use of the model will be provided at EPA's Regional Offices upon request.

The asbestos and small VOC source strategy requirements, where applicable, will be used to determine the inspection commitments for Groups II and III.

Recognizing the significant departure this strategy is from the IFG, it is expected to take more than one year for widespread implementation of the inspection targeting approach. For that reason, Headquarters will closely monitor the implementation of the CMS to assess progress and to make necessary adjustments. Therefore, the Regions are required to report in which States, and for what reasons, the inspection targeting approach is not used. This information should be submitted annually to SSCD along with each State's inspection plan.

The strategy requires a minimum inspection resource base (baseline) be established for each group. It will be used by the EPA Regions as a benchmark to evaluate their States' inspection plan submittals. The minimum baseline for each State is established in FY 1989 in the following way.

Group I: The average number of inspections from the last three years, as reported in CDS.

Group II: The number of inspections in the last fiscal year, as reported in SPMS.

Group III: The number of inspections the Small VOC Source Compliance Strategy requires, or, supplied by the State, whichever is larger.

Group IV: The number of inspections supplied by the State.

The total level, i.e., the summation of the minimum baselines for Groups I-IV, used to establish the baseline in FY 1989 shall not be reduced in subsequent years.

### **(3) State Inspection Plan Submittal.**

Each inspection plan submittal will present how that State will address national priorities and will justify exceptions to the national priorities. The plan will also identify specific sources to be inspected, allocate the total inspection budget among source groups, and cover other issues that are necessary to meet the Compliance Monitoring Strategy objectives and requirements.

The targeting model should be used to determine Group I and specific Group IV sources to be included in this inspection plan as well as their priority of inspection. Groups II and III will be addressed by their national strategy requirements and by the resources allocated to each group. For other Group IV source inspections, a block resource allocation will be made by the State in their plan submittal.

These steps will allow the State agency to develop their initial comprehensive inspection plan, which will be submitted to the EPA Region for review. To justify exceptions to national priorities, the State must submit the basis for their decisions, such as the inspection targeting model inputs and results.

#### **(4) Final Inspection Plan Negotiation**

The final comprehensive State inspection plan will be agreed to by both the EPA Region and the State. This plan will result in the State's inspection commitment to EPA for FY 1989. The resources necessary to fulfill this commitment are provided by the Section 105 federal grant and State matching funds.

The final mutually accepted plan will have two parts.

**(a) Inspection commitments and associated resource allocations.**

- Group I sources will be identified by name.
- Group II contractors will be identified by name.
- Group III sources will be identified by category with the estimated resources allocated to this group.
- Group IV sources will be identified by name if they are to be traded off for Group I source inspections, otherwise an estimated resource allocation will be assigned this group.

**(b) Accountability measures such as data to be reported in CDS to measure the States fulfillment of their inspection plan commitments. (see Reporting and Evaluation component).**

The EPA Region and State will use the following to finalize the plan.

- State-supplied input and output from the inspection targeting model's ranking of Groups I and IV sources.
- National strategies for asbestos D&R and small VOC sources.
- Other EPA-established national priorities.
- State-supplied inspection resource budgets by group.
- Baseline EPA estimates of inspection resource budgets by group. This gives EPA a benchmark to assess the State-supplied inspection resource budget.

## **(5) Reporting and Evaluation**

Improving upon the current IFG, this strategy will emphasize effective and timely reporting of accountability measures, evaluate each year's results of plan implementation, and build the resulting recommendations into guidance for the upcoming operating year.

The principal data management tool EPA will use for evaluating the implementation of this strategy is the CDS. The specific sources, as well as data needed for evaluation, should in most cases be tracked in the CDS.

The data that must be kept current and complete in the CDS for Groups I, II, and III sources and those specific Group IV sources that are substituted for Group I inspections, consistent with existing CDS guidance, include the following.

- source identifier and location information.
- current and historic compliance status.
- key enforcement actions such as inspections and source tests completed, EERs submitted, and malfunction reports.
- pollutant specific classification for all Class A sources and for any sized VOC source in an ozone nonattainment area.
- nonattainment and attainment status code (PAQC).
- pollutant code (PLLT).
- air program code.
- inspection flag.

For other Group IV sources that are not of federal concern, a year end accounting of resources consumed versus the beginning of the year block resource allocation estimates should be discussed at the time of the plan evaluation. This is part of the total inspection activity assessment and provides a complete picture of resource use in the inspection program. These other Group IV sources are not tracked in the CDS.

Additional mechanisms that will be used to monitor and evaluate the implementation of this strategy will be the National Air Audit System and the Section 105 compliance guidelines. The NAAS is presently being revised to accommodate the CMS. The Section 105 compliance guidelines are under development and will be issued this year.

### **Alternate Approach**

In the event that a State and EPA Region cannot work out an inspection plan using the recommended strategy approach, the current Inspection Frequency Guidance plus the Asbestos D&R and Small VOC Source Compliance Strategies will determine the State inspection commitments for the upcoming year. See Attachment 2 for the full text of the current IFG.

For those States that use the current IFG to identify their FY 1989 inspection commitments, an inspection plan must still be submitted to and accepted by the EPA Region. These plans will basically be limited to Groups I, II, and III sources.

The fundamental differences between a State inspection plan developed using the current IFG and one using the full CMS will be the following.

- Group IV source inspections will generally not be in an IFG-based inspection plan.
- An IFG-based inspection plan will not capture an agency's total inspection activity.
- Specific focus on national priorities is not as well defined in an IFG-based inspection plan.

While offering this alternate approach, EPA strongly recommends using the full CMS with inspection targeting whenever possible. However, it is recognized that for such reasons as the lack of suitable software and hardware, a small, easily managed regulated community, an adequate resource base for comprehensive inspection coverage, and an inspection program tied to an operating permit fee system, the CMS with inspection targeting will not be universally appropriate.

## **Responsibilities**

### **(1) EPA Headquarters**

EPA Headquarters is responsible for the annual implementing guidance for the Compliance Monitoring Strategy. It will be issued to the Regional Offices before April of the preceding fiscal year.

In addition, ongoing refinement and training in the use of the inspection targeting model is Headquarters responsibility. It is expected that as more agencies become familiar with the value of targeting to their program, the model will sell itself. After initial training, some level of ongoing support will be necessary for the users of this tool. Headquarters will provide that support.

Finally, Headquarters will evaluate and report the previous year's implementation of the strategy to the Air compliance community in the second quarter of the next fiscal year. The results will be incorporated into the annual implementing guidance and any strategy modifications.

### **(2) EPA Regional Offices**

The Regions are charged with negotiating, approving, and submitting to Headquarters by August the individual State inspection plans for the upcoming federal fiscal year. Along with the inspection plans, the Regions are required to report to Headquarters in which States, and for what reasons, the inspection targeting approach is not used.

In addition, the Regions must ensure that the applicable sources scheduled to be inspected per the negotiated inspection plan are entered and flagged in

CDS on time. The Regions are also responsible for ensuring the appropriate data necessary for evaluation are in CDS or are reported to EPA in a complete and timely fashion.

### **(3) State Agencies**

The State agencies are responsible for providing information and for running the inspection targeting model, where applicable. They are also responsible for meeting the commitments of their negotiated inspection plans. Finally, the State agencies are responsible for ensuring the appropriate data are reported in a timely and complete fashion to the Regional Office or directly into CDS.

When preparing an inspection plan submittal, it is recommended the State use the inspection targeting model for ranking Group I sources, and those Group IV sources that may be substituted for Group I source inspections, on a State-wide level. The inputs and results are then presented at the inspection plan negotiation meeting with EPA.

For local districts that have direct Section 105 grantee status, it is recommended that such districts be ranked using the inspection targeting model separately from other districts in their State. In such a State, the State-wide ranking should be an aggregation of individual local grantee district rankings with the rest of the State. However, as a general practice, running district by district rankings and aggregating them to the State level is discouraged. To do this diminishes a management benefit of the inspection targeting model that allows identifying where current resource distributions may need reallocation.

### **For Assistance**

The EPA Headquarters contact for this strategy is Howard Wright. He can be reached at (202) 475-7034. The contractor for the inspection targeting model is Perrin Quarles of Perrin Quarles Associates, Inc. He can be reached at (804) 979-3700.

## Attachment 1

**Further Details on the Inspection Targeting Model**

The inspection targeting model is jointly funded by Regions V, VIII, and SSCD. It is being piloted in Michigan and Colorado. These efforts have provided a refined product ready for more widespread application,

The model is a computerized program which ranks sources for inspection priority based on information supplied by State agency inspectors. It currently runs on a standard XT or AT personal computer and on an Apple Macintosh. Approximately 3 megabytes of storage capacity and 512 RAM are required to run the program for a 2,500 source database. The program is menu-driven and requires no special computer knowledge.

**What Information is Needed to Use the Model?**

Targeting data for each source normally include:

- Source identification and classification information
- Size data (for targeted pollutants)
- Last inspection results
- Other recent compliance history (to the extent available)
- The inspector's assessment of potential upset conditions at the source (with four options)
- The inspector's rating of O&M practices at the source (with four options)
- NAAQS attainment status
- Relative contribution of the source to air quality problems (with four options)
- Whether there are multiple compliance problems and/or multiple pollutant impacts
- The desired inspection frequency for the source
- The required inspection time and relative inspection difficulty for the source
- Other unique targeting considerations that the inspector feels should be considered, as well as the inspector's own rating of the source's inspection priority (on a 1 to 4 scale).

**What is Needed to Implement the Program?**

The following steps are necessary to start up and maintain the program.

- Compile a list of sources that will be eligible for inspection targeting.

The State must identify all NSPS and NESHAPs sources and all sources over a minimum size (e.g., 10 tpy actual uncontrolled emissions). Inspectors should review this list to make sure that important sources have not been omitted. This review may occur when the inspectors are completing individual data forms. Our experience has shown for the typical State, this

pre-screening of the inventory may take 10 working days of total inspector time during the initial year.

- Prepare targeting data forms for each source included on the targeted source list.

Basic source identification information can be compiled by administrative staff using information normally available in agency reports, emissions inventories, and the like. A data form for each source may be partially filled out by administrative staff, then forwarded to inspectors responsible for the individual sources. Compliance and other unique targeting information would be provided by the inspectors.

To minimize misinterpretation and inconsistency among inspectors and to ensure maximum efficiency, a half-day meeting or work session should be scheduled to review the data form and answer questions. All inspectors should participate. The forms should then be filled out by the inspectors, and checked by a designated reviewer or manager.

If all inspectors participate, the initial meeting and data form completion process should take no more than 3 working days for each inspector.

- Enter targeting data into the computer program.

After targeting data forms have been completed, computer entry may be performed by clerical staff. Initial entry should be made by one person, then checked by another person to ensure accuracy. Experience indicates that initial data entry should require an average of approximately 2 minutes per form and verification should require approximately 1 minute per form.

- Generate ranking and planning reports.

A ranking report may be generated by simple menu driven computer commands. The length of time required to generate the report is dependent on the number of sources and the computer capability. A typical XT processor at 6 mh without a math coprocessor will normally process a 500-source database in 2-3 hours. The printing of the report may be generated in 10-30 minutes depending on the speed and type of printer and computer. These time requirements are significantly reduced by using a 80286 or 80386 based computer system.

- Maintain the database.

Once established, the database may be fairly easily maintained. As new inventory, compliance, or air quality data are obtained, these may be entered directly into the computerized database by inspectors or field support staff. It is also possible to edit the hard copy form for data entry by clerical staff.

Maintaining the program may be accomplished in a single annual update, or it may be accomplished as new data are obtained (e.g., immediately following an inspection). Editing and reentry require less than one-half of the time per form that was required for initial completion and entry.

### **Summary**

The model itself is easy to use for anyone. It was designed for use by inspectors and managers with very limited computer skills. There is a help file accessible at any time as data are being input.

When the ranking and estimated inspection times are coupled with the known resource base, the actual sources planned to be visited annually can easily be determined. As a result, an inspection plan is born. This plan can serve the State agency as an effective management tool for its own inspectors as well as serve to meet the EPA's Compliance Monitoring Strategy requirements.

Final refinement of the targeting model is completed. It is available to all EPA Regions for your testing and familiarization prior to implementation in FY 1989. It is on a floppy disk with accompanying documentation and will be distributed at the time of the Regional training. Headquarters will continue to support this activity with on-call technical assistance.

## Attachment 2

**Inspection Frequency Guidance****INTRODUCTION**

The inspection is the primary compliance assurance method presently available in the air program for validating source performance. Therefore, EPA believes it is imperative that an effective inspection program be implemented in all States. The following guidance on the expected frequency of inspections is intended to balance the need for a nationally-uniform data base to enable an evaluation of the effectiveness of the program with the needs of State and local agencies to make optimal use of their limited resources to address the varied and unique air quality problems faced by each State and locality.

**CRITERIA FOR INSPECTION**

The frequency of an inspection shall be determined by which requirements are applicable (SIP, NSPS, NESHAPs) and, for SIP and NSPS sources, by whether the source is a Class A1 or A2 source. In cases where more than one program requirement is applicable, the source must be inspected based on the highest frequency of inspection for any of the applicable requirements. It is imperative that all sources be identified by source classification (if applicable) and appropriate air program (SIP, NSPS, NESHAPs) and that these data be duly entered and maintained in EPA's Compliance Data System (CDS).

**DEFINITION OF AN INSPECTION**

For the purpose of this guidance, a minimally-acceptable State or local compliance inspection (Level II) is an onsite visit to the operating source to assess compliance with at least applicable federal air pollution control requirements. At a minimum, a compliance inspection must be performed for all federally-regulated air pollutants emitted by the source. Also, a source that is regulated for visible emissions should be evaluated using an acceptable reference method. Where a source is federally-regulated for more than opacity, a compliance inspection involving only a visible emissions observation is not generally considered to be a minimally-acceptable compliance inspection.

As part of the minimally-acceptable source compliance inspection, an inspector must record the process operating conditions and, if appropriate, the control device conditions to determine if any significant change has occurred since the last inspection or any process or control operation outside normal or permitted conditions has occurred. It is expected that minimally-acceptable compliance inspections would also include at least an operations log check of process and control equipment including continuous emission monitoring systems logs. It should be noted that these requirements for a minimally-acceptable inspection do not require the direct measurement of operating conditions by the inspector.

## **CLASS A1 SIP SOURCES**

All operating Class A1 SIP sources regulated under the Clean Air Act shall be inspected annually. Annually is construed to mean at least one onsite visit is made to each such source between October and September, corresponding to the federal fiscal year.

There are four permissible exceptions to the Class A1 annual inspection requirement. The first is for sources whose operations are seasonal in nature (e.g., alfalfa dehydrators) and which do not operate more than 90 days per year. This operating time restriction does not need to be included in a permit for a source to qualify. However, the nature of its business should clearly preclude the source from operating more than 90 days per year. To qualify for this exception, a seasonal source should be well-controlled, should not have a history of noncompliance, and should not be located in a nonattainment area for a pollutant that is the determining pollutant for the Class A1 classification. All seasonal sources must in any event be inspected at least once every five years.

The second category is for Class A1 SIP gas-fired combustion facilities (gas turbines, boilers, and internal combustion sources) which are regulated only for sulfur dioxide emissions and which can operate in compliance with the sulfur dioxide emissions limitations without controls.

The third category is Class A1 NSPS and PSD gas turbines that are regulated only for NOx emissions. An annual compliance determination for these sources can be accomplished through record checks without an annual onsite inspection of equipment.

The last category is oil-fired or coal-fired industrial boilers which are Class A1 SIP sources only because of their sulfur dioxide emissions and which can operate in compliance with the sulfur dioxide emission limitations without either controls or use of low sulfur fuel.

To be excepted, sources in these latter three categories should not have a history of noncompliance. All excepted sources shall be inspected at least once every five years.

Exceptions to the annual inspection requirement should be communicated by the Regional Office to EPA's Stationary Source Compliance Division (SSCD) at the start of the inspection year and the data base properly adjusted by the Regional Offices for subsequent analysis and reporting. Regional Offices are encouraged to discuss with SSCD any novel issues which may arise in their discussions with their States.

## **CLASS A2 SIP SOURCES**

Except as noted below, operating Class A2 sources regulated under the Clean Air Act shall be inspected biennially. However, a State may propose a modified inspection scheme to its EPA Regional Office which presents at least the same level of resource commitment but which the State believes is more

responsive to the needs of its air quality program. This can consist of any combination of additional Class A1 SIP inspections, Class A2 SIP inspections, and inspections of other sources regulated under the Clean Air Act. This could include Class B SIP sources in those areas where they are particularly significant. EPA Regional Offices and their States are free to establish whatever approach is best suited to their situation as long as the following conditions are met:

- SSCD must receive information copies of such agreements at the start of fiscal year.
- The State must demonstrate that the modified approach is based on at least the same resource expenditures as would be required to inspect all Class A2 SIP sources on a biennial basis.
- All operating Class A2 SIP sources must be inspected at least once every five years.

### **NSPS SOURCES**

Any operating NSPS-subject source which is Class A1 in size shall be inspected at least once every federal fiscal year. All other NSPS sources shall be treated as Class A2 sources.

### **NESHAPs SOURCES**

All operating nontransitory NESHAP-subject sources shall be inspected at least once every federal fiscal year.

### **ALTERNATIVES TO CONDUCTING PERIODIC ONSITE INSPECTIONS**

An alternative to an onsite visit for purposes of satisfying inspection frequency guidance by the State for any SIP or NSPS source is the use of continuous emission monitoring Excess Emission Reporting (EER) on a quarterly basis in lieu of periodic inspection requirements. An EER is a suitable alternative to an onsite inspection if EER data from the source is at least equivalent to the information that could be obtained from a minimally-acceptable inspection as previously defined. EER data must be submitted for all pollutants emitted by the source for which the source is regulated. The intended use of the EER alternative must be agreed upon between the State and the EPA Regional Office and EPA must receive the name and CDS numbers of all sources covered by the alternative.

Another alternative to an onsite inspection is available for sources whose compliance is based solely on the characteristics of the fuel oil burned (typically percentage of sulfur in the fuel). This alternative is an inspection of the fuel oil supplier's records and a sampling of the supplier's product. To realize the saving of inspector time, a source's fuel oil suppliers must be known and fixed over time. If a source purchases fuel oil from the spot market, has many suppliers, or has suppliers which are not easily monitored by the State, this alternative may not be appropriate.

Page No. 1  
03/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 114  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 114

\* PN114-88-03-31-006  
COMPLIANCE MONITORING STRATEGY FOR FY 89

Page No. 1  
09/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 123  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 123

- \* PN123-86-02-11-011  
PRIORITY FOR REVIEW OF PARTICULATE MATTER SOURCES FOR COMPLIANCE  
WITH REVISED STACK HEIGHT REGULATIONS
- \* PN123-86-02-11-012  
CLARIFICATION OF EXISTING GUIDANCE ON DISPERSION MODELING  
REQUIREMENTS FOR PLANTS WITH "TALL STACKS" AND OTHER PROHIBITED  
DISPERSION TECHNIQUES
- \* PN123-87-09-03-013  
TECHNICAL SUPPORT FOR STACK HEIGHT NEGATIVE DECLARATIONS
- \* PN123-87-10-09-014  
PROCESSING OF STACK HEIGHT NEGATIVE DECLARATIONS
- \* PN123-88-01-07-015  
STACK HEIGHT EMISSIONS BALANCING - FINAL POLICY STATEMENT (FR  
CITATION)
- \* PN123-88-05-17-016  
APPLICATION OF THE INTERIM POLICY FOR STACK HEIGHT REGULATORY  
ACTIONS
- \* PN123-89-04-20-017  
LETTER TO JOHN PROCTOR FROM G. EMISON



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 123-89-04-20-017

APR 25 1989

Mr. John P. Proctor  
Bishop, Cook, Purcell and Reynolds  
Law Offices  
1400 L Street, N.W.  
Washington, D.C. 20005-3502

Dear Mr. Proctor:

Your letter of February 23, 1989 to Administrator Reilly was referred to me for response. The issues you describe were previously raised to the attention of the Environmental Protection Agency's (EPA's) Region III Office. You now question Region III's rejection of your position that the best available retrofit technology (BART) emission rate used in determining the creditable stack height can be ignored for purposes of setting the facility's operating rate as long as the operating rate is consistent with the national ambient air quality standards (NAAQS). The response provided to you by Region III on October 6, 1988 was extensively discussed with this office and with the Office of General Counsel, and we fully endorse Region III's conclusions and supporting rationale.

In your letter you stated that the sole basis for conducting a fluid modeling study is to justify credit for stack height above formula height, and that nothing requires States to rely on the BART emission rate to determine the appropriate operating rate. Actually, as noted by Region III, before such credit may be considered, the preamble to the stack height regulation is clear that the operating rate must be limited to the BART or new source performance standards (NSPS) rate. The preamble to the stack height regulation also notes that an emission limit more stringent than BART/NSPS may be needed because the sources must also meet the NAAQS and prevention of significant deterioration requirements.

We agree with Region III's conclusion that NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir 1988), does not support your position. In your February 23, 1989 letter to Administrator Reilly, you raise a new argument not presented to Region III. You argue that the court recognized that operating emission limitations are to be determined after stack height credit has been calculated, based on the court's acknowledgement that Congress imposed technology-based limits in some situations, and EPA has authority to mandate such limits for modeling demonstrations to determine stack height credit. From this you conclude that a technology-based emission rate used for fluid modeling is relevant only to that modeling.

In response, we point out first that the court's discussion of technology-based emission limitations (838 F.2d at 1241) was in reference to NRDC's control-first position and not related to fluid modeling as you suggest. We believe that the opinion indicates clearly that the court regarded the presumptive NSPS emission limit as a limit that must be complied with once the fluid modeling was completed ("We find the attempt of industry to bar control-first no stronger than NRDC's effort to require it in the within-formula context." 838 F.2d at 1241; ". . . industry petitioners assert that in order to use the NSPS presumption, EPA must be able to point to substantial evidence that it is attainable by most of the affected sources. But as EPA allows any source to use a higher emissions rate when NSPS is infeasible, there is no need for any sort of generic demonstration that it is normally so." id at 1242).

Second, in quoting EPA's statement about the significance of fluid modeling demonstrations, the court was merely citing with approval EPA's rationale for refusing to grandfather demonstrations undertaken and approved prior to adoption of the 1985 regulations. This in no way implies a finding by the court that the presumptive NSPS requirement (or higher BART limit) is not the constraining limit. Neither of these references provides support to your position.

In conclusion, we are in full agreement with the position taken by Region III that sources seeking credit above formula height must meet an emission rate consistent with BART/NSPS. While final action as to any particular source would necessarily await a State implementation plan revision, I hope the above responds to your inquiry. Staff in our Region III Office are available to assist you and your client, and I suggest that you contact them directly if you have further questions.

Sincerely,

Gerald A. Emison  
Director  
Office of Air Quality Planning  
and Standards

cc: Charles Carter, OGC  
Thomas Maslany, Region III  
Marcia Mulkey, Region III

bcc: Robert Bauman, AQMD  
Jesse Baskerville, Region III  
John Calcagni, AQMD

Pat Embrey, OGC  
Eric Ginsburg, AQMD  
Doug Grano, AQMD

SDPMPB:DGrano:DataTech/PROCTOR2:PFinch:RTP(MD-15):629-5255:4-4-89  
Control Number OAQPS-464 Due Date: 4-3-89



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

MAY 17 1988

MEMORANDUM

SUBJECT: Application of the Interim Policy for Stack Height  
Regulatory Actions

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Chief, Air Branch  
Regions I-X

On April 22, 1988, J. Craig Potter, Assistant Administrator for Air and Radiation, issued a memorandum entitled, "Interim Policy on Stack Height Regulatory Actions" (Attachment A). The memorandum requests that the Regional Offices review with their States all regulatory actions involving dispersion credits and determine the appropriate action consistent with the policy. The purpose of today's memorandum is to provide guidance in carrying out the interim policy.

In general, actions taken at this time to approve or disapprove statewide stack height rules which are affected by the remand must include the qualification that they are subject to review and modification on completion of EPA's response to the court decision. Permits issued under the prevention of significant deterioration or new source review programs should also contain caveat language for sources which may be affected by the remand. Attachment B contains example boilerplate language to be inserted into permits and regulatory packages. Note that States must commit to including the caveat before EPA will take final action on packages affecting permitting authority. Those actions not involving the remanded provisions may proceed as usual.

In contrast to our policy regarding the processing of stack height rules, our policy for source-specific State implementation plan (SIP) revisions is to avoid proceeding with actions which may need to be retracted later. You are advised to consult with my staff and the Office of General Counsel staff prior to submitting such rulemaking packages. Affected sources must be deleted from negative declaration packages prepared under the 1985 stack height regulations before EPA can proceed with action on them.

My staff has applied the policy when reviewing packages currently in Headquarters (Attachment C). While proposals to approve (or disapprove) State rules will remain on the Headquarters clock, the Regional Offices are requested to review these packages and provide appropriate boilerplate as soon as possible. Negative declaration packages and final actions on State rules are being returned to the Regional Office clock as more substantial revisions and commitments may be required. The redesignation packages currently in Headquarters which contain sources affected by the remand are being placed on formal hold.

If you have any questions regarding the April 22 policy, today's guidance, or disposition of the SIP's, please contact Janet Metsa (FTS 629-5313) or Doug Grano (FTS 629-0870).

#### Attachments

cc: R. Bauman  
R. Campbell  
C. Carter  
G. McCutchen  
J. Pearson  
J. Sableski

bcc: B. Armstrong  
P. Embrey  
G. Foote  
E. Ginsburg  
✓ ~~D.~~ Grano  
N. Mayer  
J. Metsa  
S. Reinders  
R. Roos-Collins  
SO<sub>2</sub> SIP Contacts  
Stack Height Contacts, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 22 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Interim Policy on Stack Height Regulatory Actions

FROM: J. Craig Potter *W. Ray Cunningham*  
Assistant Administrator  
for Air and Radiation (ANR-443)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Management Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

On January 22, 1988, the U.S. Court of Appeals for the District of Columbia issued its decision in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988), regarding the Environmental Protection Agency's (EPA's) stack height regulations published on July 8, 1985 (50 FR 27892). Subsequent petitions for rehearing were denied. Although the court upheld most provisions of the rules, three portions were remanded to EPA for review:

1. Grandfathering pre-October 11, 1983 within-formula stack height increases from demonstration requirements [40 CFR 51.100(kk)(2)];
2. Dispersion credit for sources originally designed and constructed with merged or multiflue stacks [40 CFR 51.100(hh)(2)(ii)(A)]; and
3. Grandfathering of pre-1979 use of the refined  $H + 1.5L$  formula [40 CFR 51.100(ii)(2)].

A number of pending State implementation plan (SIP) and other rulemaking actions may be affected by this decision in advance of EPA's promulgation of further revisions of the stack height regulations. This includes not only rulemaking packages developed to respond to the 1985 stack height regulations, but also such actions as issuance of new source review (NSR) and prevention of significant deterioration (PSD) permits, permit modifications, SIP revisions

dealing with specific source emission limitations, and redesignations under section 107 of the Clean Air Act. Consequently, until resolution of litigation and completion of any rulemaking activity to respond to the court decision, the following policy will be applied.

In general, actions to approve States' rules may proceed provided appropriate caveat language is inserted which notes that the action is potentially subject to review and modification as a result of the recent court decision. Actions addressing State permitting authority should require States to provide notice that permits are subject to review and modification if sources are later found to be affected by revisions to stack height regulations. Where States currently have the authority to issue permits under fully-approved or delegated NSR and PSD programs, any permits issued prior to EPA's promulgation of revised stack height regulations should provide notice as described above that they may be subject to review and modification. Regional Office staff are requested to contact their State officials and notify them accordingly. Where EPA has retained authority to issue permits, it should also insert appropriate cautionary language in the permit.

The EPA will try to avoid taking source-specific actions that may need to be retracted later. Such actions may include certain emission limitations and good engineering practice demonstrations which reflect dispersion credit affected by the remand. The EPA may approve these State submittals on a case-by-case basis, with the explicit caution that they and the sources affected by them may need to be evaluated for compliance with any later revisions to the stack height regulations, as a result of the litigation. The EPA will continue to process, under normal procedures, any source-specific actions which do not involve the remanded provisions.

Requests for redesignation of areas from nonattainment to attainment which are affected by any of the remanded provisions of the stack height regulations will be put on hold until EPA has completed any rulemaking necessary to comply with the court's remand. This is due to the issue of whether EPA has authority to unilaterally change attainment designations.

During this interim period, the Regional Office staff should review with their States all regulatory actions involving dispersion credits and identify those actions or sources affected by the remanded provisions. The Region should consult with their States on appropriate action for all such packages, consistent with this policy.

If you have any questions regarding the application of this policy, please contact Doug Grano at FTS 629-0870 or Janet Metsa at FTS 629-5313.

cc: D. Clay  
A. Eckert  
J. Emison  
D. Grano  
J. Metsa

## Attachment B

The following boilerplate, or variations tailored to suit particular situations, should be used in rulemaking actions affected by the stack height remand.

### General Addition

"The EPA's stack height regulations were challenged in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). On January 22, 1988, the U.S. Court of Appeals for the D.C. Circuit issued its decision affirming the regulations in large part, but remanding three provisions to the EPA for reconsideration. These are:

1. Grandfathering pre-October 11, 1983 within-formula stack height increases from demonstration requirements [40 CFR 51.100(kk)(2)];
2. Dispersion credit for sources originally designed and constructed with merged or multiflue stacks [40 CFR 51.100(hh)(2)(ii)(A)]; and
3. Grandfathering pre-1979 use of the refined  $H + 1.5L$  formula [40 CFR 51.100(ii)(2)]."

### Addition for Stack Heights Rules Packages

"Although the EPA generally approves [State's] stack height rules on the grounds that they satisfy 40 CFR Part 51, the EPA also provides notice that this action may be subject to modification when EPA completes rulemaking to respond to the decision in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). If the EPA's response to the NRDC remand modifies the July 8, 1985 regulations, the EPA will notify the State of [ ] that its rules must be changed to comport with the EPA's modified requirements. This may result in revised emission limitations or may affect other actions taken by [State] and source owners or operators."

### Additions for Stack Negative Declaration Packages

"The EPA is not acting on \_\_\_\_\_ sources (identified in table form or by asterisk) because they currently receive credit under one of the provisions remanded to the EPA in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir 1988). The [State] and EPA will review these sources for compliance with any revised requirements when the EPA completes rulemaking to respond to the NRDC remand."

Additions for Stack Height Emission Limitation Changes or  
Good Engineering Practice Demonstration

The OAQPS and OGC will provide language on a case-by-case basis when the EPA is acting on a source-specific package which is affected by the remand.

Language for Proposed NSR and PSD SIP Approvals

"Under this program, [State] will be issuing permits and establishing emission limitations that may be affected by the court-ordered reconsideration of the stack height regulations promulgated on July 8, 1985 (50 FR 27892). For this reason, EPA requires that the State include the following caveat in all potentially affected permit approvals until the EPA completes its reconsideration of remanded portions of the regulations and promulgates any necessary revisions:

'In approving this permit, [name of agency] has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators.'

[State] must make an enforceable commitment to include this caveat in all affected permits before the EPA can take final action approving the [NSR or PSD] program."

Language for Final NSR and PSD SIP Approvals

"Under this program, [State] will be issuing permits and establishing emission limitations that may be affected by the court-ordered reconsideration of the stack height regulations promulgated on July 8, 1985 (50 FR 27892). For this reason, the EPA has required that the State include the following caveat in all potentially affected permit approvals until the EPA completes its reconsideration of remanded portions of the regulations and promulgates any necessary revisions:

'In approving this permit, [name of agency] has determined that the application complies with the applicable provisions of the stack height regulations as revised by the EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when the EPA revises the regulations in

In order to conserve space, the Federal Register notice entitled:

. Stack Height Emissions Balancing; Final  
Policy Statement (53 FR 480, January 7, 1988)

is not included in the Air Programs Policy and Guidance Notebook. Please refer to this notice for EPA policy/guidance related to this subject.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

9 OCT 1987

MEMORANDUM

SUBJECT: Processing of Stack Height Negative Declarations

FROM: G. T. Helms, Chief *G. T. Helms*  
Control Programs Operations Branch

TO: Chief, Air Branch  
Regions I-X

The purpose of this memorandum is to clarify and revise some points in my September 3, 1987, memorandum entitled "Technical Support for Stack Height Negative Declarations." That memorandum included a list of minimum requirements for determining adequate documentation with three additional guidance documents attached. One of the attachments was the August 28, 1987, memorandum from Charles Carter of the Office of General Counsel (OGC) and me to Bruce Miller of Region IV, entitled "Documentary Support for Deficiencies in Stack Height Review Packages." Because several actions are being delayed by inadequate documentation, we sent copies of the August 28 memorandum to all ten Regions as examples to alert them to these problems.

The Tennessee State implementation plan (SIP) was used as an example because we believed it had deficiencies that were common to other negative declaration packages. The use of the Tennessee evaluation as an example was not intended to single out Region IV as having more problems with documentation than other Regions, although the tone of the memorandum might have given this impression. I am sorry for this misrepresentation.

In a recent conference call with OGC and Region IV, Region IV suggested three clarifications and revisions to the guidance that we included in the August 28, 1987, and September 3, 1987, memorandums. We believe these should be incorporated. They are as follows:

1. The requirement for a list of sources evaluated for negative declarations applies only to sources greater than 65 meters.
2. For grandfathering documentation, the date the source was built is not essential, but the type and date of the documentation that the source was built prior to December 31, 1970, must be listed. However, whenever the actual construction date is submitted by the State, it should be included.

NOTE: Attachments 1 and 2 are not included in the Policy and Guidance Notebook.

3. It is not necessary that a Region give assurances that they are confident the documentation is adequate; however, regional management should be satisfied that the State submission meets the requirements of the stack height regulation.

We also agreed during the conference call that the Delaware negative declaration (#3356) (See Attachment 1) includes a good tabular form to present the good engineering practice (GEP) review in a Federal Register notice or the accompanying technical support document (TSD). Attachments 2 and 3 present expanded tables for stacks over 65 meters and for sources over 5000 tons per year. The notice does not have to include tables in these formats, but the information required in them should be discernable from the notice and/or TSD. For example, the Delaware table in Attachment 1 is a shortened version of Attachment 2, since no stacks exceeded GEP.

I hope this memorandum clarifies my past correspondence and gives you a better understanding of the documentation necessary for processing stack height negative declarations. If you have any questions, please call Ted Creekmore (629-5699) or me (629-5526). Thank you for your patience during the processing of these complex SIP revisions.

#### Attachments

cc: Charles Carter  
Pat Embrey  
Sharon Reinders  
Richard Roos-Collins  
Ted Creekmore  
Dave Stonefield  
Eric Ginsberg  
John Silvasi



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

03 SEP 1987

MEMORANDUM

SUBJECT: Technical Support for Stack Height Negative Declarations

FROM: Tom Helms, Chief *Tom*  
Control Programs Operations BranchTO: Chief, Air Branch  
Regions I-X

Several negative declarations for the stack height requirements are currently under review. Many of these actions are being delayed because we are concerned that the documentation each submittal should contain to support the grandfathering, good engineering practice calculation, and review of sources with emissions over 5000 tons/year, etc., is inadequate. Because of the many actions involved and the potential for major effort to upgrade the documentations, I believe that detailed minimum requirements for documentation should be set forth. After discussing the technical support issue with my staff and the Office of General Counsel, I suggest the following minimum requirements for determining adequate documentation for, and processing of, these proposals.

## 1. Technical Support Requirements for Negative Declarations:

- a. States should compile documentation and submit it to the Region or make it available at State offices,
- b. The Federal Register notice should cite where documentation is readily available to the public (docket or State),
- c. Federal Register packages and technical support documents (TSD) must contain a basis for each conclusion regarding each stack covered by the regulations. The notice or TSD should include the following:
  - ° A statement describing when the stack was built and how we know it was built, and what formula and models were used and why.
  - ° A list of sources evaluated for the negative declaration with the citation of documentation listed by source (FPC-67 form, map, design specification, etc.).
- d. Regions should have discussed the contents of the documentation with the States and should be satisfied that it meets minimum EPA requirements.

NOTE: Attachments 1 - 3 are not included in the Policy and Guidance Notebook.

2. Documentation Needed by EPA Headquarter's Reviewers Before Concurrence:

- a. The TSD as described in 1c above.
- b. The Region's assurance that they are confident the documentation is adequate and a list of sources with citation of documentation included in the Federal Register notice or docket.
- c. We do not need to see all the State's referenced material (maps, FPC forms, etc.) just a summary as an indication that the documentation exists.

As additional guidance, I have attached a memorandum which includes a detailed list of documentation requirements and a detailed review of the Tennessee SIP revision (Attachment 1). Much of the Tennessee memorandum is based on Appendix G to the Stack Height Workshop Manual (Attachment 2) and an October 10, 1985, memorandum from Tom Helms to the Regional Air Branch Chiefs (Attachment 3). We encourage you to use the Appendix G Form as a minimum in preparing the TSD. Please call me (629-5526) or Ted Creekmore(629-5699) if you wish to to discuss any specific issues.

Thanks.

Attachments

cc: Charles Carter  
Pat Embry  
Sharon Reinders  
Richard Roos-Collins  
Ted Creekmore  
Dave Stonefield



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

FEB 11 1986

MEMORANDUM

SUBJECT: Clarification of Existing Guidance on Dispersion  
Modeling Requirements for Plants With "Tall Stacks"  
and Other Prohibited Dispersion Techniques

FROM: Darryl D. Tyler, Director *Darryl*  
Control Programs Development Division (MD-15)

TO: Director, Air Division, Regions I-X

The purpose of this memo is to clarify EPA's guidance on the dispersion analysis requirements that are necessary to implement the revised stack height regulations (see EPA's Stack Height Workshop Manual dated October 1985) and, second, to respond to questions on whether dispersion modeling is required in the context of checking for prohibited dispersion credit if a source's emission limitation was not developed by means of a case-specific dispersion analysis.

In cases where stack height credit and/or dispersion credit changes and a dispersion analysis has been performed in any context, that analysis must to be reviewed to determine if the model inputs reflect credit for stack height(s) above good engineering practice (GEP) or any other prohibited dispersion technique(s). (Review of the model inputs applies to both the specific source(s) for which the analysis is conducted and nearby point sources as performed for a new or renewed permit, a new source review/ prevention of significant deterioration national ambient air quality standard attainment or increment analysis, a State plan to propose revision of its federally approved State implementation plan (SIP) emission limitations, justification of the current SIP limitations, or any attainment/nonattainment redesignation(s), etc.)

If the analysis reflects credit for prohibited dispersion techniques, then the source(s) need to be remodeled without the prohibited credit(s) and revised emission limitation established in the event that the analysis shows an attainment or increment problem. If a source's emission limit was established by ambient air quality considerations such as rollback, modeling is required to demonstrate consistency with the stack height

regulation because credit for prohibited dispersion techniques is reflected in the monitored value. If a source has never been analyzed for dispersion, then it is not necessary to conduct a dispersion analysis now.

It is a State responsibility to demonstrate (1) that the SIP limit does not consider the results of dispersion analyses, (2) that the source has never been evaluated for dispersion credit, or (3) that existing or new analyses are consistent with guidance. Regions are encouraged to provide assistance to States in this endeavor if the impacted agency so desires. It is always appropriate for an individual State or Region to request or initiate a modeling analysis where one does not exist if there is reason to believe that a source's emission limitation is inconsistent with the stack height regulations. However, EPA is not calling for an across the board modeling analysis from every source.

Please pass this information along to your States. If you have any questions on implementing this guidance, please call Sharon Reinders at FTS 629-5526 or Eric Ginsburg at FTS 629-5540.

cc: Regional Administrator, Regions I-X	G. Emison
Chief, Air Branch, Region I-X	T. Helms
Regional Stack Height Contact, Regions I-X	D. Rhoads
R. Brenner	B. J. Steigerwald
R. Campbell	J. Tikvart
C. Carter	P. Wyckoff
C. Elkins	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

FEB 11 1986

MEMORANDUM

SUBJECT: Priority for Review of Particulate Matter Sources for Compliance With Revised Stack Height Regulations

FROM: Darryl D. Tyler, Director *Darryl*  
Control Programs Development Division (MD-15)

TO: Director, Air Management Division  
Regions I-X

In response to requests from a number of Regional Offices, I would like to clarify the applicability of the revised stack height regulations to particulate matter sources and to provide guidance on conducting reviews of these sources.

As indicated in the preamble to the revised regulations, we intend to review pollutants other than SO<sub>2</sub>--specifically TSP--to determine the appropriateness of a de minimis exemption from prohibitions against the use of dispersion techniques. Until a decision is made to adopt such an exemption, however, the prohibitions remain applicable to all stationary sources of TSP. Recognizing that time and resources will not allow the review of all potentially affected sources within the period prescribed by the Clean Air Act, I am requesting that you give highest priority to the review of affected SO<sub>2</sub> sources. Following this, larger TSP sources should be reviewed, such as primary smelters, steel mills, etc., where prohibited dispersion techniques could readily be employed. This is a clarification of my August 7, 1985, memorandum wherein we requested a review of the above sources as a "first cut." The TSP sources with stacks less than the 65 meter de minimis height should be reviewed only after reviews of all affected SO<sub>2</sub> sources and larger TSP sources have been completed. It is our expectation that a decision will be made regarding a de minimis size exemption before it becomes necessary to review this last category of sources.

If you or your staff have any questions about this guidance, please call Eric Ginsburg at (FTS) 629-5540 or Sharon Reinders at (FTS) 629-5526.

cc: R. Bauman (MD-15)  
R. Campbell (MD-10)  
C. Carter (LE-132A)  
T. Helms (MD-15)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

12 NOV 1987

MEMORANDUM

SUBJECT: Incorporation by Reference

FROM: G. T. Helms, Chief *Tom*  
Control Programs Operations Branch

TO: Chief, Air Branch  
Regions I-X

The Office of the Federal Register (OFR) has recently advised us that commitment letters are not acceptable for incorporation by reference because they are not regulatory in nature.

Instead, the OFR has informed us that the Code of Federal Regulations (CFR) can be amended by adding a new section or amending an existing section to add the commitment; the "Identification of Plan" paragraph should not be amended.

Attached is an example of a CFR page that the OFR has reviewed and approved and the commitment letter from the State of Minnesota that was the basis for this sample regulatory text. Please note that the core paragraph from the letter should be quoted in the new section that is being added to the CFR.

If you have any questions on incorporation by reference procedures, call Denise Gerth at 629-5550. Thank you for your cooperation.

Attachments

cc: Betty Abramson  
Walter Bishop  
Ted Creekmore  
Tom Diggs  
Pat Embrey  
Greg Foote  
Denise Garth  
Dean Gillam  
Laurie Kral  
Carol LeValley.  
Sandy McLean  
Bob Miller  
Rich Ossias  
Carolyn Payne  
Sharon Reinders  
Julie Rose  
John Silvasi  
Marcia Spink  
Rebecca Taggart  
Paul Truchan

cc: Chief, Air Branch Regions I-X  
R. Campbell  
D. Rochlin  
J. Silvasi  
T. Creekmore  
K. Woodard  
D. Stonefield  
J. Yarn  
D. deRoeck  
B. Gilbert  
J. Sableski  
B. Bauman  
P. Wyckoff

response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators.'

[State] has made an enforceable commitment to include this caveat in all affected permits by letter dated [\_\_]. This commitment is being incorporated into the Code of Federal Regulations for the State of [\_\_] as part of EPA's approval action."

See Attachment D for sample CFR amendment.

The Regional Offices are requested to contact those States that currently have permitting authority and request that they include similar language in any permits issued until EPA has completed its reconsideration of the stack height regulations and has promulgated any necessary revisions.

# Attachment C

<u>State</u>	<u>AQMD #</u>	<u>Description</u>	<u>Disposition</u>
AZ/CA/NV	3059	Promulgation of Stack Height Regs.	HQ
AZ/CA/NV	3210	App. and Disapp. of Stack Height Req.	RO
SC	3243	Negative Declaration	RO
MS	3330	Mississippi's Negative Declaration	RO
NJ/NY/VI	3418	Stack Height Revisions	RO
WA	3480	Stack Height Rules	HQ
MD	3543	Negative Declaration	RO
AR	3548	Stack Height Rules	HQ
OH	3570	Stack Height Regulations	HQ
TX	3572	Stack Height Regulations	HQ
LA	3592	Revisions to Stack Height Rules	HQ
DE	3600	Stack Height Regulations	HQ
OH	3334	Redesignation of Galia County to Attainment	Hold
SD	3618	Administrative Rules	RO
CO	3623	Negative Declaration	RO

40 CFR Part 52, Subpart Y, is amended as follows:

1. The authority citation for Part 52 continues to read as follows

AUTHORITY: 42 U.S.C. 7401-7642

2. A new Section 52.1237 is added as follows:

§52.1237 Stack Height Regulations

The State of Minnesota has committed to conform to the Stack Height Regulations as set forth in 40 CFR Part 51. In a letter to Mr. David Kee, EPA, dated January 14, 1987, Mr. Thomas J. Kalitowski of the Minnesota Pollution Control Agency stated:

Minnesota does not currently have a stack height rule, nor do we intend to adopt such a rule. Instead, we will conform with the Stack Height Regulation as set forth in the July 8, 1985 Federal Register in issuing permits for new or modified sources. In cases where that rule is not clear, we will contact U.S. EPA Region V and conform to the current federal interpretation of the item in question.

Page No. 1  
03/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 126  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 126

\* PN126-89-01-11-005  
LETTER TO THOMAS JORLING REGARDING INTERSTATE AIR POLLUTION CRITERIA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN 11 1989

OFFICE OF  
AIR AND RADIATION

Mr. Thomas C. Jorling  
Commissioner, New York Department  
of Environmental Conservation  
50 Wolf Road  
Albany, New York 12233

Dear Mr. Jorling:

This is in response to your petition of November 17, 1987 which we have been reviewing. Pursuant to your request of December 15, 1987, we postponed any action on the petition until it had been supplemented; the supplement which we subsequently received was dated July 15, 1988. This letter addresses the petition's claim which was filed pursuant to section 126 of the Clean Air Act (Act). The rest of the claims in the petition were filed under the Administrative Procedure Act. The Environmental Protection Agency (EPA) will respond to the other claims (not filed under section 126) in the context of issuing our post-1987 ozone and carbon monoxide policy, which will provide the guidance necessary to correct the ozone and carbon monoxide nonattainment problem in the northeastern States.

In our view, the claim filed under section 126 makes only the minimal showing adequate to initiate the section 126 hearing process. Therefore, I must advise you that our preliminary review indicates that substantial supplemental information and documentation will be necessary to justify a favorable finding under that statutory provision.

As you know, EPA has described the specific criteria for relief under section 126 in its rulemakings on the petitions filed in 1980 and 1981 by the States of Pennsylvania, New York, and Maine. See 49 FR 34851 (September 4, 1984) and 49 FR 48152 (December 10, 1984). Briefly, the criteria for relief are:

- a. The petition must address a pollutant for which a standard is established under section 109 of the Act.
- b. The petition must identify the geographic area for which the petitioner is seeking relief.

- c. The petition must demonstrate that a national ambient air quality standard (NAAQS) is violated, or that a prevention of significant deterioration (PSD) increment (where applicable) is exceeded in the area of concern.
- d. The petition must identify the major stationary sources which are located in upwind States, and against which the petitioner is seeking relief.
- e. The petition must demonstrate that the identified sources significantly contribute to that violation of the NAAQS or PSD increment. To that end, the petition must provide evidence which tracks or predicts the atmospheric dispersion of the emissions from the identified sources, and must estimate the contribution from the identified sources to the level of pollution causing the violation. In addition, the petition must address the factors listed in 49 FR 34859 col. 2, and demonstrate that the contribution from the identified sources is significant.

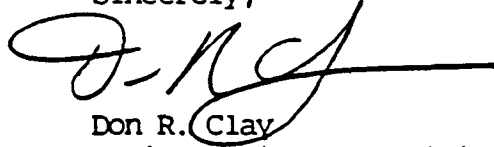
The burden of satisfying the above criteria is on the petitioner, under New York et al. v. EPA, 852 F.2d 574 (D.C. Cir. 1988). Our preliminary review suggests that your petition lacks the specificity and evidence required to satisfy criteria (d) and (e). Such information is necessary in order for the Administrator to craft a proper remedy under section 126.

Your petition cites modeling and meteorological charts showing that ozone and its precursors are transported interstate up the eastern seaboard. It discusses the Oxidant Modeling for the New York Metropolitan Area Project prediction that the New York metropolitan area would be nonattainment even if all volatile organic compound (VOC) emissions in New Jersey, New York, and Connecticut were eliminated. However, it does not clearly identify the specific major stationary sources against which action under section 126 is sought; nor does it provide any numerical estimates of the contribution of these particular major stationary (as distinct from minor stationary, mobile, and areawide) sources to the violations of the ozone standard in New York. In this circumstance (where you allege contributions from nine upwind States), such an estimate will need to be based on a reliable source-receptor analysis which clearly demonstrates the significant contributions of identified sources to downwind NAAQS or PSD violations. As you are probably aware, this would require extensive data on emissions (particularly VOC species data from individual sources) and long-range air transport data.

Please advise me whether you would prefer to prepare supplemental evidence responsive to criteria (d) and (e), or whether you desire EPA to schedule a hearing on the section 126 claim in the petition as submitted. Should you still desire EPA to schedule the hearing, please advise me of a date you would consider appropriate.

I appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

A handwritten signature in dark ink, appearing to read "D. R. Clay", with a long horizontal stroke extending to the right.

Don R. Clay  
Acting Assistant Administrator  
for Air and Radiation

cc: William J. Muszynski  
Gerald A. Emison

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 165  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 165

- \* PN165-86-11-24-016  
NEED FOR A SHORT-TERM BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS  
FOR THE PROPOSED WILLIAM A. ZIMMER POWER PLANT
- \* PN165-87-02-27-017  
PLANTWIDE DEFINITION OF MAJOR STATIONARY SOURCES OF AIR POLLUTION
- \* PN165-87-04-08-018  
CLARIFICATION OF NEW SOURCE REVIEW POLICY ON AVERAGING TIMES FOR  
PRODUCTION LIMITATIONS
- \* PN165-87-04-22-019  
HUNTSVILLE INCINERATOR - DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY  
(BACT)
- \* PN165-87-06-26-020  
OPERATIONAL GUIDANCE ON CONTROL TECHNOLOGY FOR NEW AND MODIFIED  
MUNICIPAL WASTE COMBUSTORS(MWCs)
- \* PN165-87-09-22-021  
IMPLEMENTATION OF NORTH COUNTY RESOURCE RECOVERY PSD REMAND
- \* PN165-87-12-01-022  
IMPROVING NEW SOURCE REVIEW (NSR) IMPLEMENTATION
- \* PN165-86-07-07-024  
PREVENTION OF SIGNIFICANT DETERIORATION (PSD) DEFINITION OF  
"MODIFICATION"
- \* PN165-86-10-21-025  
APPLICABILITY OF PSD TO PORTIONS OF A PLANT CONSTRUCTED IN PHASES  
WITHOUT PERMITS
- \* PN165-86-12-01-026  
NEED FOR EMISSION CAP ON COMPLEX NETTING SOURCES
- \* PN165-87-01-29-027  
IMPLEMENTATION OF THE REVISED MODELING GUIDELINE FOR PREVENTION OF  
SIGNIFICANT DETERIORATION (PSD)
- \* PN165-87-08-05-028  
IMPLEMENTATION OF REVISED PREVENTION OF SIGNIFICANT DETERIORATION (PSD)  
PROGRAM FOR PARTICULATE MATTER
- \* PN165-87-10-06-029  
EMISSIONS FROM LANDFILLS

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 165  
(VOLUME 2)

- \* PN165-88-04-25-030  
LAER EMISSION LIMITS FOR AUTOMOBILE AND LIGHT-DUTY TRUCK TOPCOAT OPERATIONS
- \* PN165-88-06-07-031  
RESPONSE TO REQUEST FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY DETERMINATION
- \* PN165-88-07-05-032  
AIR QUALITY ANALYSIS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
- \* PN165-88-07-28-033  
SUPPLEMENTAL GUIDANCE IN IMPLEMENTING THE NORTH COUNTY PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REMAND
- \* PN165-88-08-29-034  
TRANSFER OF TECHNOLOGY IN DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
- \* PN165-88-09-09-035  
APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NEW SOURCE PERFORMANCE STANDARDS (NSPS) TO THE WISCONSIN ELECTRIC POWER COMPANY (WEPCO) PORT WASHINGTON LIFE EXTENSION PROJECT
- \* PN165-88-10-14-036  
LETTER TO JOHN BOSTON FROM LEE THOMAS ON WEPCO DETERMINATION
- \* PN165-89-02-15-037  
GUIDANCE ON EARLY DELEGATION OF AUTHORITY FOR THE NITROGEN DIOXIDE (NO2) INCREMENTS PROGRAM
- \* PN165-89-02-28-038  
GUIDANCE ON DETERMINING LOWEST ACHIEVABLE EMISSION RATE (LAER)
- \* PN165-89-03-16-039  
USE OF ALLOWABLE EMISSIONS FOR NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) IMPACT ANALYSES UNDER THE REQUIREMENTS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
- \* PN165-89-03-31-040  
APPLICATION OF BUILDING DOWNWASH IN PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT ANALYSES
- \* PN165-89-04-10-041  
PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY TO SULFUR DIOXIDE (SO2) EMISSIONS FROM INCINERATION OF TOTAL REDUCED SULFUR (TRS) COMPOUNDS

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 165  
(VOLUME 2)

- \* PN165-89-02-15-042  
LETTER TO JOHN BOSTON FROM DON CLAY ON WEPKO DETERMINATION
- \* PN165-89-06-13-043  
TRANSMITTAL OF BACKGROUND STATEMENT ON "TOP-DOWN" BEST AVAILABLE  
CONTROL TECHNOLOGY (BACT)
- \* PN165-89-08-24-044  
GUIDANCE ON IMPLEMENTING THE NITROGEN DIOXIDE (NO2) PREVENTION OF  
SIGNIFICANT DETERIORATION (PSD) INCREMENTS
- \* PN165-89-09-18-045  
REQUEST FOR CLARIFICATION OF POLICY REGARDING THE "NET EMISSIONS  
INCREASE"
- \* PN165-89-02-24-046  
CUT-OFF DATE FOR DETERMINING LAER IN MAJOR NEW SOURCE PERMITTING
- \* PN165-89-08-09-047  
LAER DETERMINATION FOR A PREVIOUSLY CONSTRUCTED SOURCE
- \* PN165-89-09-11-048  
LETTER TO CHRISTOPHER J. DAGGETT FROM GERALD A. EMISON ON USE OF UREA  
INJECTION FOR NOX CONTROL FROM MUNICIPAL WASTE COMBUSTORS
- \* PN165-90-01-18-049  
LETTER TO MORTON STERLING OF DETROIT EDISON FROM GERALD E. EMISON
- \* PN165-90-06-08-050  
LETTER TO JOHN BOSTON FROM WILLIAM G. ROSENBERG ON WEPKO DETERMINATION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 8 1990

OFFICE OF  
AIR AND RADIATION

Mr. John Boston  
President  
Wisconsin Electric Power Company  
Post Office Box 2046  
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

On January 19, 1990, the United States Court of Appeals for the Seventh Circuit in Wisconsin Electric Power Co. v. Reilly, Nos. 88-3264 and 89-1339, issued its decision regarding a challenge by Wisconsin Electric Power Company (WEPCO) to two final determinations issued by the Environmental Protection Agency (EPA). In these determinations, EPA concluded that WEPCO's proposed renovations to its Port Washington power plant would be subject to new source performance standards (NSPS) and prevention of significant deterioration (PSD) requirements.

In its decision, the court upheld all but one of the positions advanced by EPA in the NSPS and PSD applicability determinations. However, the court rejected EPA's position on the issue of whether the "actual-to-potential" method--referred to by the court as the "potential to emit concept"--should be used to calculate emissions increases for PSD purposes in this case. Consequently, the Seventh Circuit vacated and remanded the PSD determination to EPA for further action consistent with the court's decision.

As you know, EPA decided to acquiesce in the court's holding rather than seek rehearing. This letter constitutes EPA's revised PSD applicability determination in response to the court's remand order.

The Agency believes that the court's principal instruction--that EPA consider past operating conditions at the plant when addressing modifications that involve "like-kind replacements"--can be reasonably accommodated within the present regulatory framework without further litigation in this case. The net result of the court's ruling is the recognition of a subcategory of "like-kind replacements" under the "major modification" definition of EPA's new source review provisions.

As explained below, EPA will employ an "actual-to-actual" method to calculate emissions increases for WEPCO's proposed renovations to its Port Washington power plant. The outcome in this case is that WEPCO will not be subject to PSD review for

sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), carbon monoxide, or hydrocarbons. However, there will be a significant net increase in actual emissions of nitrogen oxides (NO<sub>x</sub>), and WEPCO must obtain a PSD permit for that pollutant.

## I. BACKGROUND

### A. Factual Background.

The WEPCO owns and operates five coal-fired, steam-generating units at its Port Washington facility near Milwaukee. All units had an original design capacity of 80 megawatts when they were placed in service between 1935 and 1950. However, due to age-related deterioration and loss of efficiency, both the physical capability and actual utilization of the plant have declined over time. Unit 5 was shut down completely due to a cracked rear steam drum. Consequently, by 1987, WEPCO was faced with removing the units from service as they reached their planned retirement dates beginning in the early 1990's, unless it undertook a costly "life extension" program to restore the physical and economic viability of the units and extend their useful life for approximately 20 years. The WEPCO proposed such a life extension to include replacement of the steam drums, air heaters, and other major capital improvements totaling over \$80 million. It should be noted that this program is not a pollution control project (i.e., it is not intended to add on or improve pollution control systems even though modest improvements to the particulate matter control devices are a part of the program).

In a series of applicability determinations in 1988 and 1989, EPA ruled that the renovations planned under WEPCO's life extension program would constitute a "modification" for purposes of the NSPS provisions of the Clean Air Act (Act), and a "major modification" under the PSD provisions of the Act. Thus, WEPCO would have had to install some level of control equipment or physical capacity restriction to avoid NSPS coverage for three of the five units proposed to be renovated. As to PSD, the company would have had to accept operational restrictions or lower emissions rates to "net out" of review. Regarding SO<sub>2</sub>, for example, WEPCO could have almost doubled its projected level of future operations without triggering PSD review. However, WEPCO did not want to be constrained by new source requirements, and so sought review in the Seventh Circuit Court of Appeals.

### B. The Court's Decision.

#### 1. Physical Change.

The court unequivocally agreed with EPA that the replacement of steam drums, air heaters, and other major components was a nonroutine "physical change," and thus met the first of two tests for a modification under NSPS and PSD. The Agency found that the

renovations proposed by WEPCO were exactly the type of industrial changes that were meant to be addressed by the NSPS and PSD programs. In upholding EPA's finding that a physical change would occur, the court strongly endorsed EPA's reading of the basic congressional intent in adopting the modification provisions of the NSPS and PSD programs, because to rule otherwise "would open vistas of indefinite immunity from the provisions of NSPS and PSD" (slip op. at 11). The court also relied on the reasonableness of EPA's consideration of the magnitude, purpose, frequency, and cost of the work in upholding EPA's finding that the renovations are not "routine" (slip op. at 14-18). In addition, the court rejected WEPCO's argument that the renovations could not be deemed a modification for NSPS purposes because they did not constitute a "reconstruction" under 40 CFR 60.15 (slip op. at 18-20).

## 2. NSPS Emissions Increase.

The court upheld EPA's decision that there would be an increase in hourly emissions at three of the units, and thus for those three units, WEPCO met the second test for NSPS applicability. The Agency had argued that the regulations require NSPS emissions increases to be determined by comparing the current (pre-change) hourly emissions capacity of each affected facility with the post-renovation hourly emissions capacity of each unit. The Seventh Circuit agreed, and rejected WEPCO's argument that original design capacity or past "representative" capacity no longer achievable at the plant should be used for the baseline emissions rate (slip op. at 20-25).

## 3. PSD Emissions Increase.

The regulatory preamble to the PSD regulations provides that the set of emissions units that have "not begun normal operations" includes both "new or modified" units (45 FR 52676, 52677, 52718) (1980). Consequently, EPA used the "actual-to-potential" calculus in evaluating WEPCO's life extension project. The court rejected this methodology in the case of WEPCO's "like-kind replacement," asserting that EPA's reasoning was circular (slip op. at 28). [In addition, the court held (slip op. at 27 n. 11) that the exemption in 40 CFR 52.21(b)(2)(iii)(f) for emissions increases due to expanded operations did not apply, because WEPCO's increased operations were directly tied to the life extension project.] Instead, the court ruled that EPA should recalculate post-change emissions considering past operating conditions where it is possible to make a more realistic assessment of future emissions (slip op. at 29-31). Alternatively, the court stated that EPA could conduct new rulemaking to explicitly apply the "actual-to-potential" calculus to "like-kind replacements" (slip op. at 30).

## II. THE WEPCO DECISION IN THE CONTEXT OF THE PSD PROVISIONS

The Seventh Circuit held that EPA could not wholly disregard past operating history and automatically apply the actual-to-potential methodology for determining PSD applicability to WEPCO's "like-kind replacements." In describing the WEPCO changes as "like-kind replacements" and limiting its decision to such changes, the court did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of new and modified sources not covered by this subcategory of change. The recent decision in Puerto Rican Cement Co. v. EPA, 889 F.2d 292 (1st Cir. 1989), explicitly upheld EPA's position that the actual-to-potential concept should be applied to "modified" emissions units. The First Circuit case involved the modernization and reconfiguration of existing emissions units [see 889 F.2d at 293 (company planned to "convert kiln No. 6 from a 'wet' to a 'dry' cement-making process, and to combine that with Kiln No. 3")]. A key issue was whether EPA properly held that the "modified" units had "not begun normal operation" and therefore the actual-to-potential concept applied in calculating emissions increases. The First Circuit affirmed EPA's position that the actual-to-potential concept should be applied to the company's "modified" units. Puerto Rican Cement, 889 F.2d at 297. Consequently, the court found that both the language and expressed purpose of the regulations indicate that EPA applied the regulations properly in using the actual-to-potential test for a proposed modification. The Seventh Circuit in WEPCO did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of changes not covered by the subcategory of changes (like-kind replacements) created by the court.<sup>1</sup> Therefore, in the case of nonroutine physical or

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<sup>1</sup> EPA will leave to future case by case applicability determinations what is a "like-kind replacement." But for guidance of the parties, EPA presently considers that only for projects that are genuine "like-kind replacements" can future emissions projections be calculated using "estimated future actual emissions" in lieu of potential to emit. EPA does not consider "like-kind replacements" to mean the entire replacement (or reconstruction) of an existing emissions unit with an identical new one or one similar in design or function. Rather, EPA considers "like-kind replacements" to encompass the replacement of components at an emissions unit with the same (or functionally similar) components. Under this interpretation of the term, new components that perform essentially the same function as old ones will be viewed as "like-kind replacements." In addition, even if the design or purpose of a new component is identical to that of an old one, if the new component is part of a project that will fundamentally change the production process at an existing stationary source, this would be beyond the scope of a "like-kind replacement." Under either of those

operational changes at an existing major source which are not specifically "like-kind replacements" in nature, EPA will continue to apply the actual-to-potential test for PSD applicability purposes.

### III. THE AGENCY'S RESPONSE TO THE COURT'S REMAND ORDER

#### A. The PSD Baseline Emissions.

Determining the "baseline" level of actual emissions before a physical or operational change is a necessary first step to determine if emissions increase as a result of the physical change. The Agency's regulations define the baseline for PSD purposes, as follows:

In general, actual emissions as of a particular date shall equal the average rate, in tons-per-year (tpy), at which the unit actually emitted the pollutant during a 2-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period [see 40 CFR 52.21(b)(21)(ii)].

The purpose of the definition is to establish a baseline that is "representative" of "normal" source operations prior to the change. The Agency historically has followed a presumption

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circumstances, it would be unreasonable to rely on pre-modification usage patterns to estimate future levels of capacity utilization. Instead, in such cases, EPA believes that it is reasonable to assume that in the absence of federally-enforceable limits on hours of operation or production rates, the new components may result in a substantial increase over historical levels of utilization of the emissions unit following modification [see Puerto Rican Cement, supra, 889 F.2d at 297 ("a firm's decision to introduce new, more efficient machinery may lead the firm to decide to increase the level of production")]. and will compare pre-modification actual emissions to post-modification potential emissions. In addition to this circumstance, there are cases in which sources that undergo changes that qualify as add-on control systems would, under certain circumstances, be exempt from new source review. See Letter to Timothy J. Method, Assistant Commissioner, Indiana Department of Environmental Management, from David Kee, EPA Region V, January 30, 1990.

that the most recent 2 years should be used, but has allowed another period where the source demonstrates that recent operations are abnormal [see 40 CFR 52.21(b)(21)(ii); see also 45 FR 52676, 52718 (1980)]. The WEPCO baseline period is an example of this. In this instance, plant utilization was disrupted by physical problems that led to nonroutine physical changes to remedy those problems. Consequently, EPA determined that a period prior to the onset of such problems was representative of normal operations, and as required by its regulations, used this period to establish the baseline. The period used was also within the contemporaneous period specified in 40 CFR 52.21(b)(3)(ii). It should be emphasized that, in the WEPCO case, the parties and the court agreed that 1983-84 (prior to discovery of steam drum cracks) should be the baseline years (slip op. at 26); these years had an average 29 percent utilization rate. We continue to believe this is the appropriate baseline period for the Port Washington renovation.

#### B. Calculating Post-Change Emissions Under PSD.

The court concluded that "EPA's reliance on an assumed continuous operation as a basis for finding an emissions increase is not properly supported" (slip op. at 30). Although the court held that EPA cannot, in this case, wholly disregard past operating conditions at the plant, it also held that EPA could not reasonably rely on the company's own unenforceable projection of operating conditions (slip op. at 29). The court remanded the question of PSD applicability to EPA for further proceedings not inconsistent with its decision.

Before the court remanded EPA's determination, it attempted to ascertain whether, in fact, the proposed project would be a major modification even using the assumptions least likely to result in an emissions increase. The court felt (and we agree) that such a "best" case scenario for WEPCO would assume that the "present hours and conditions" would not change at all following the renovations (despite, of course, WEPCO's own estimates of at least tripling of utilization over current levels) (slip op. at 31, n. 14). The court, however, lacked the data to make this calculation, so it could not determine whether a major modification would result using a set of assumptions most favorable to WEPCO. Therefore, the court remanded the determination to EPA for further consideration.

A conceivable interpretation of the court's opinion is that EPA must calculate WEPCO's post-modification emissions increases based on "present hours and conditions." However, for the reasons discussed below, EPA believes that this interpretation is incorrect. Under such an interpretation, EPA would determine WEPCO's post-renovation annual emissions in tons per year (tpy) by simply projecting into the future the hours of operation and conditions (i.e., hourly emissions rate) that existed just before

the renovations. This is the interpretation urged by WEPCO in a February 9, 1990 letter to EPA. Such a calculus will always result in exactly the same level of emissions before and after the physical change, and thus would always exempt "like-kind replacements" from PSD review. In addition, calculating emissions increases using this assumption would flatly contradict the record in this case. The WEPCO has stated that it will greatly increase capacity utilization over both current levels and the baseline levels used in the previous determinations. Capacity utilization in terms of heat input to the plant (based on nameplate capacity) during 1978-1979 was about 40 percent (Record item 7.4, WEPCO Submission, April 19, 1988 meeting with EPA). During the 1983-1984 baseline period, it was approximately 27 percent. *Id.* It has since declined to less than 10 percent (1988-1989 data). *Id.* The WEPCO has advised the State of Wisconsin that it intends to return to a forecasted 42 percent utilization level in the years following renovation, with an upper maximum forecast of 50 percent [Letter from Walter Woelfle, WEPCO, to Dale Zeige, Wisconsin Department of Natural Resources, March 29, 1990, Table 7 (enclosed)]. It would be wrong to assume that unit 5 would not be operated at all in the future when an explicit purpose of the renovation is to bring the unit back on line at its original design capacity; moreover, unit 5 is presently inoperative. Most importantly, this methodology is not fairly discernible from any reading of the current regulations. In addition, using "present hours and conditions" would disregard planned changes at WEPCO that will affect the post-renovation hourly emissions rate [e.g., increased capacity, lowering of sulfur content, and enhancement of the electrostatic precipitators (ESP)].

The court upheld EPA's position that increased utilization in the future that is linked to construction or modification activity should not be excluded in determining post-renovation emissions. Nevertheless, the court told EPA not to automatically assume 100 percent utilization in the future when historical data are available. The WEPCO has definite plans to return the plant to historical levels of utilization that are well above baseline levels of utilization, and which could not be physically or economically attained but for the renovation project. Accordingly, EPA believes it is consistent with the court decision for EPA to base its remand decision on these facts and not rely on the present hours and conditions as conclusive of post-renovation emissions. After a thorough review of the possibilities, EPA has concluded that the court intended that estimates of future emissions for WEPCO's "like-kind replacements" should consider historic pre-renovation operating hours and production rates, as well as other relevant factors, in estimating future utilization levels, and should also consider the increased capacity, switching to lower-sulfur fuel, and other changes affecting the hourly emissions rate for PSD purposes. Consequently, for WEPCO's "like-kind replacements," EPA will

compare representative actual emissions for the baseline period to estimated future actual emissions based on all the available facts in the record. Specifically, in calculating post-renovation actual emissions, this approach takes into account 1) physical changes and operational restrictions that would affect the hourly emissions rate following the renovation, 2) WEPCO's pre-renovation capacity utilization, and 3) factors affecting WEPCO's likely post-renovation capacity utilization.

To quantify WEPCO's estimated future actual emissions after the proposed changes EPA relied heavily on projected and historical operational data (e.g., fuel consumption, MMBTU consumed) representative of the source. Specifically, the Agency considered available information regarding (1) projected post-change capacity utilization filed with public utility commissions; (2) Federal and State regulatory filings; (3) the source's own representations; and (4) the source's historical operating data. As described below, EPA determined an appropriate utilization factor for future operations and combined this with post-change emissions factors (to the extent they are or will be made federally enforceable) to estimate a future level of annual emissions for the purpose of determining whether the proposed physical and operational changes would be considered a major modification for PSD purposes. Where a significant emissions increase is projected to occur, WEPCO could voluntarily agree to federally-enforceable limits on any aspect of its future operation (including physical capacity and hours of operation) to ensure that no significant emissions increase will occur.

#### IV. THE AGENCY'S REVISED PSD APPLICABILITY DETERMINATION

##### A. Estimated Future Actual Emissions.

The Agency has revised its October 14, 1989 PSD applicability determination for WEPCO's proposed Port Washington renovation based on a "representative actual" to "estimated future actual emissions" comparison (as outlined above). As previously discussed, estimated future actual emissions projections take into account the likelihood that the plant will operate in the future as it has in the past.

The stated purpose of WEPCO's renovations is to refurbish the power plant units to an "as-new" condition in terms of their capacity, efficiency, and availability. Consequently, EPA has used actual, historical, operational data representative of the plant's past operations, approximating an "as-new" configuration, to calculate "estimated future actual emissions." The Agency has verified these data by comparison to WEPCO's own projections of post-renovation capacity utilization and industry averages.

As to the emissions factors used to calculate future emissions, EPA has used WEPCO's own emissions factors for future

hourly emissions rates. These emissions factors are based on WEPCO's own assumptions regarding future sulfur in fuel and control technology performance levels. However, since these assumptions go beyond current State implementation plan (SIP) requirements, they must be made federally enforceable for EPA to continue to consider them for PSD applicability purposes.

Operational data (i.e., heat input) from the years 1978-1979 show a capacity utilization factor of 42 percent. These data points represent the closest projection of WEPCO's operational characteristics, approximating an "as-new" state, as currently available to EPA. The data currently available to us regarding WEPCO's past operational levels are limited to a 10-year period. The Agency believes that these historical levels of operation are representative of the plant's past operations in an "as-new" condition. In addition, the 1978-79 data points appear consistent with WEPCO's own projection of future operations for the year 2010 (as submitted to the Wisconsin Department of Natural Resources on March 29, 1990) and common capacity levels for the utility industry, in general, for new units. However, by this letter, EPA is requesting that WEPCO submit operational data from previous years (i.e., pre-1978), if such data show heat input levels notably higher than the 1978-1979 levels.

As previously mentioned, to calculate future emissions levels for each pollutant, EPA assumed that the amount of future coal consumed in terms of heat input to the plant would be comparable to WEPCO's annual average 1978-1979 coal-consumption figure. On March 29, 1990, WEPCO submitted to the Wisconsin Department of Natural Resources information which contained estimates of future emissions for different levels of coal and heat input to the plant. The Agency used these estimates to establish future emissions based on 1978-1979 heat-input values. Again, it is important to note that EPA's calculation of "estimated future actual emissions" is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the emissions factors (based on control technology performance levels and sulfur in fuel) used to calculate future emissions are made federally enforceable. Otherwise, the calculation of estimated future actual emissions for each pollutant will need to be revised by EPA based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions in the current SIP would result in higher projected future emissions than assumed in EPA's calculations and, consequently, could affect the indicated PSD applicability finding.

## B. Revised Finding

In sum, EPA has considered past operations at WEPCO's Port Washington plant in estimating future actual emissions. Specifically, EPA has relied on the 42 percent utilization level (in terms of heat input) during 1978-1979. The Agency believes this is a reliable indicator of future utilization because it is consistent both with WEPCO's own projections of post-renovation operations and typical industry usage. The Agency has also considered post-renovation emissions rates on the assumption that they will be made federally enforceable. Compared to the 1983-1984 baseline period, those hourly rates are lower for SO<sub>2</sub> and PM, and unchanged for NO<sub>x</sub>. The 42 percent estimated post-renovation capacity utilization is substantially higher than the 29 percent utilization level during the baseline period. However, in calculating total annual actual emissions, that increased usage is offset for SO<sub>2</sub> and PM by the decreased hourly emissions rates resulting from improvements to control systems and the use of low sulfur coal. Consequently, WEPCO is not subject to PSD review for those pollutants.

In the case of NO<sub>x</sub>, there will be a direct correlation between increased utilization resulting from the renovations and increased actual emissions. Hence, WEPCO is subject to review for that pollutant and must obtain a PSD permit. The company should contact the Wisconsin Department of Natural Resources regarding the processing of a permit application for NO<sub>x</sub>. Due to insufficient source-specific information regarding emissions factors, PSD applicability for PM-10, lead, and noncriteria pollutants listed at 40 CFR 52.21 (b)(23)(i) and (ii) cannot be determined at this time. The PSD applicability for these pollutants should also be based on the "actual-to-actual" emissions test described herein.

This PSD applicability determination applies to WEPCO's currently planned renovations to units 1-5 (see Enclosure A), or, if WEPCO no longer wishes to proceed with renovating unit 5, only the renovation of units 1-4 (see Enclosure B). However, a decision to cancel the currently planned renovations to unit 5 could result in a PSD review for that unit should WEPCO reconsider renovating it some time in the future.

It is our understanding that WEPCO proposes to avoid triggering NSPS for SO<sub>2</sub> and PM at units 1 and 4 by using dry sorbent injection and improving the existing ESP's to offset the potential emissions increases of these pollutants. To the extent that the controls are federally enforceable, and no increase in hourly emissions would occur at maximum capacity, WEPCO can use these options to avoid triggering NSPS for PM and SO<sub>2</sub> at units 1 and 4. However, the two units are still subject to the NSPS requirements for NO<sub>x</sub>. Unit 5 cannot, however, avoid triggering

NSPS for any pollutant and, therefore, is subject to the NSPS requirements for NO<sub>x</sub>, SO<sub>2</sub>, and PM.

Sincerely,

A handwritten signature in dark ink, appearing to read "William G. Rosenberg", written over the typed name.

William G. Rosenberg  
Assistant Administrator  
for Air and Radiation

3 Enclosures

PORT WASHINGTON POWER PLANT  
MAY 1989 FORECAST  
Units 1 - 5

PORT WASHINGTON POWER PLANT  
UPPER MAXIMUM FORECAST  
Units 1 - 5

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	825,288	0.24	365,548
1996	941,779	0.27	415,332
1997	1,081,002	0.31	475,624
1998	1,114,313	0.32	490,868
1999	1,247,296	0.36	546,546
2000	1,349,329	0.38	589,569
2001	1,391,882	0.40	608,621
2002	1,481,464	0.42	646,417
2003	1,420,120	0.41	620,153
2004	1,432,122	0.41	625,174
2005	1,431,412	0.41	624,904
2006	1,460,471	0.42	637,519
2007	1,488,124	0.42	649,133
2008	1,481,423	0.42	646,909
2009	1,463,981	0.42	638,750

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	1,074,957	0.31	473,981
1996	1,202,460	0.34	528,838
1997	1,341,074	0.38	587,412
1998	1,390,470	0.40	609,237
1999	1,501,584	0.43	654,718
2000	1,600,500	0.46	696,483
2001	1,651,930	0.47	718,252
2002	1,748,046	0.50	760,000
2003	1,690,000	0.48	735,000
2004	1,690,000	0.48	734,000
2005	1,690,000	0.48	734,000
2006	1,710,000	0.49	741,000
2007	1,720,000	0.49	748,000
2008	1,720,000	0.49	747,000
2009	1,695,000	0.48	737,000

## Enclosure A

### Revised PSD Applicability Determination Port Washington Power Plant Renovation of Units 1-5

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Estimated Future Actual Emissions (2)</u>	<u>Net Emissions Change</u>	<u>PSD Significance Level</u>	<u>Subject to PSD Review (3)</u>
Particulate matter (4) (5)	328	323	-5	25	no
Sulfur dioxide (4)	24,236	15,919	-8,317	40	no
Nitrogen oxides (5)	2,592	3,405	813	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

**Other Regulated Pollutants:** Due to insufficient source-specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average historic firing rate (approximately  $17 \times 10^6$  Mbtu per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Sulfur dioxide controls applied to unit 5 at 75 percent sulfur dioxide removal to comply with NSPS Subpart Dc. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-5 to calculate future emissions (based on particulate and SO<sub>2</sub> control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.

## Enclosure B

### Revised PSD Applicability Determination Port Washington Power Plant Renovation of Units 1-4

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Estimated Future Actual Emissions (2)</u>	<u>Net Emissions Change</u>	<u>PSD Significance Level</u>	<u>Subject to PSD Review (3)</u>
Particulate matter (4) (5)	328	339	11	25	no
Sulfur dioxide (4)	24,236	18,505	-5,731	40	no
Nitrogen oxides (5)	2,592	3,396	804	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

**Other Regulated Pollutants:** Due to insufficient source specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average, historic-firing rate (approximately  $17 \times 10^6$  Mbtu per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Unit 5 inoperative. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-4 to calculate future emissions (based on particulate and SO<sub>2</sub> control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JAN 18 1990

Mr. Morton Sterling, Director  
Environmental Protection  
Detroit Edison Company  
200 Second Avenue, 482 WCB  
Detroit, Michigan 48226

Dear Mr. Sterling:

This is a followup to the October 19, 1989 meeting during which Detroit Edison further discussed its position that the addition of natural gas firing capacity to the Greenwood Unit I Power Plant should not be subject to a prevention of significant deterioration (PSD) review. At the meeting, you requested that Environmental Protection Agency (EPA) Headquarters review Region V's previous determination that the proposed fuel conversion was a "major modification" for PSD purposes.

As you are aware, in a letter dated December 20, 1988, EPA Region V concluded that the proposed conversion of the oil-fired Greenwood Unit to dual capacity for oil and gas firing would subject the plant to a PSD review for nitrogen oxides ( $\text{NO}_x$ ). The Region's conclusion was based on a determination that 1) the source was not capable of firing natural gas prior to January 6, 1975 (and therefore was not covered by the PSD exemption for modifications under 40 CFR 52.21(b)(2)(iii)(e)(1)); and 2) there would be a significant net increase of  $\text{NO}_x$  resulting from the change. As you have requested, we have reevaluated this finding in light of the additional information submitted by Detroit Edison during the October 19 meeting.

The information presented by Detroit Edison indicates that the emissions unit at the source was initially designed and permitted to fire both oil and gas. However, there is no evidence to demonstrate that the source as a whole had, or at any time initiated construction on, the equipment necessary to deliver natural gas to the combustion unit. Without such equipment, it would not be possible for the source to utilize natural gas as an alternate fuel. Consequently, it is our view that the source was not capable of accommodating natural gas prior to January 6, 1975. Therefore, the changes necessary to accommodate the firing of natural gas at the Greenwood Plant would, for PSD purposes, be considered a "physical change" to the source.

As requested, we have also evaluated the net emissions change at the source that would result from the modification. It is Detroit Edison's position that the large decreases in "allowable" emissions of sulfur dioxide, particulate matter, and  $\text{NO}_x$  when burning natural gas rather than oil as a result of the modification, warrants special consideration. Specifically, Detroit Edison feels that the use of a cleaner fuel at the Greenwood Plant warrants a finding that there is no increase in actual emissions and accordingly no "major modification."

Under the PSD regulation, a "major modification" occurs when the physical or operational change at the source (in this case the installation of natural gas handling facilities and the firing of natural gas) would result in a significant net emissions increase for any regulated pollutant at the source. Whether the proposed use of natural gas at the Greenwood Plant would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical or operational change. Where, as here, the source has not yet begun operations firing natural gas, "actual emissions" after the change to natural gas firing are deemed to be the source's "potential to emit" for that fuel [see 40 CFR 52.21(b)(21)(iv)]. Potential annual NO<sub>x</sub> emissions when firing natural gas at the Greenwood Plant greatly exceed its current actual emissions. Therefore, as a result of the ability to fire natural gas after the change, the emissions of NO<sub>x</sub> at the source would experience a "significant net emissions increase," within the meaning of the PSD regulations. The fact that current annual "allowable emissions" for the Greenwood Plant when firing oil may greatly exceed future allowable (or potential) emissions when firing natural gas is not relevant for PSD applicability purposes. See Puerto Rican Cement Co., Inc. v. EPA No.89-1070 (First Circuit) (slip op. October 31, 1989).

In summary, our review indicates that Region V correctly applied the PSD applicability criteria.

The PSD requirements include an air quality and additional impact analysis and the application of best available control technology (BACT). The BACT requirement applies to "each proposed emissions unit at which a net emissions increase would occur as a result of a physical change or change in the method of operation in the unit" [see 52.21(j)(3)]. Consequently, although the addition of gas firing would subject the source as a whole to a PSD review, the requirement to apply BACT is applicable only to those emissions units at the source which undergo both a physical or operational change and a significant net emissions increase. It appears that the only emissions unit at the Greenwood Plant affected by the proposal to fire gas would be the existing boiler. Historically, it has been EPA's policy that where the individual boiler being converted is capable of accommodating the alternate fuel, BACT would not apply.

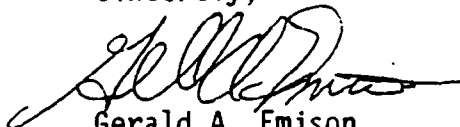
In this case, in addition to the physical changes at the source necessary to deliver natural gas to the existing boiler, a number of canes capable of burning natural gas would be installed in the existing burner assemblies. Modifications to the unit's overfired air duct are also planned. We also understand that there will be no changes in the present oil burning system, which will be retained.

Our review indicates that, by itself, the addition of gas canes to the burners is not a physical change or change in the method of operation in the unit and, consequently, would not subject the boiler to a BACT review. Therefore, if the sole change to the boiler is the addition of the canes, then, in this case, the only requirements necessary for a PSD permit are an air quality analysis, additional impacts analyses, and (if applicable) a Class I impact analysis--the application of BACT is not required. However,

the information submitted by Detroit Edison indicates that changes to the boiler's overfired air duct are also planned. At this time, without additional information on the nature and scope of the work to be done on the overfired air duct, we cannot determine whether these are physical or operational changes to the boiler that are necessary to make the boiler capable of accommodating natural gas. If the ducting work is necessary for this purpose, then a BACT analysis would likely be required.

In addition, it is unclear from the information submitted whether Detroit Edison plans to undertake further modifications to the boiler which would allow 100 percent load when firing natural gas. Currently, the unit as presently configured has the potential of achieving only 75 percent load when firing natural gas. To achieve a higher load, substantial modifications to the unit apparently would be required. These types of physical changes to the boiler likely would require a full PSD review, including a BACT analysis for the boiler. The BACT analysis would require that the source evaluate the use of all available additional air pollution controls for reducing NO<sub>x</sub> emissions. The analysis would consider retrofit costs for add-on controls and the fact that gas is a relatively clean-burning fuel. Consequently, in this case, it is possible that the currently planned use of a low-NO<sub>x</sub> burner design may be BACT for gas firing. However, such a conclusion would have to be demonstrated through the requisite BACT analysis. I have asked Region V to work with you should you need assistance in preparing the analysis.

Sincerely,



Gerald A. Emison

Director

Office of Air Quality Planning  
and Standards

cc: J. Calcagni, EPA/AQMD  
D. Kee, EPA/Region V  
G. Foote, EPA/OGC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

SEP 11 1989

Mr. Christopher J. Daggett  
Commissioner  
State of New Jersey  
Department of Environmental Protection  
CN 402  
Trenton, New Jersey 08625-0402

Dear Mr. Daggett:

This is in response to your August 15, 1989 letter to Administrator William Reilly regarding the use of urea injection in place of ammonia injection for the control of nitrogen oxides ( $\text{NO}_x$ ) from municipal waste combustors (MWC's). You wish to know if the Environmental Protection Agency (EPA) would accept urea injection as either innovative control technology or best available control technology (BACT) for  $\text{NO}_x$  control from MWC's. Also, you ask if EPA would approve of its use at the proposed Passaic Resource Recovery Facility (PRRF) and how such approval would likely affect the current administrative review process for  $\text{NO}_x$  control from the source.

In recent BACT determinations for MWC's, EPA has accepted ammonia injection as the best and the most appropriate control technology for  $\text{NO}_x$  control. Consequently, ammonia injection, or a comparable technology in terms of emissions reduction and other impacts, would currently qualify as BACT. Therefore, at the present time, if it were adequately shown in an application for a MWC that urea injection would be comparable to (or better than) ammonia injection in terms of performance and impacts, urea injection could be determined to represent BACT. It is important to note, however, that in the future a more stringent level of control could, of course, supplant ammonia injection as the "top" control level.

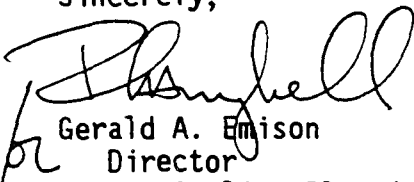
The prevention of significant deterioration (PSD) regulations, in addition to establishing specific provisions for BACT and modeling requirements, set out criteria for determining whether a proposed control technology is innovative. For PSD purposes, "innovative control technology" is defined at 40 CFR 52.21(b)(19) as "any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving a greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts." Our initial review of the limited data available to us indicates that there have been over 20 field demonstrations of urea injection worldwide on a range of combustor and fuel types (including two MWC facilities). Although it has not been applied commercially to a MWC facility in the United States, urea injection has been applied commercially to a MWC facility in Basel, Switzerland, and a carbon monoxide (CO) boiler in California. Preliminary indications are that its commercial application at a

MWC may provide for comparable (or greater) NO<sub>x</sub> control at a lower cost. As to urea injection being considered innovative technology, EPA cannot, however, rule on the issue until presented with source-specific information and written justification from the applicant and State addressing 1) why urea injection should be considered as not having been adequately demonstrated in practice, 2) how the technology fulfills the other innovative technology criteria [as defined at 40 CFR 52.21(b)(19)], and 3) how it will be applied to the source.

As you are aware, the PSD permit for PRRF is currently before the Administrator as a result of his decision to review the State's BACT determination respecting NO<sub>x</sub> emissions. Moreover, a petition challenging the same determination (and others) was also received from Beth Israel Hospital and United Passaic Organization. Although a decision by the State to amend the permit for the purpose of revising the BACT determination to require either ammonia or urea injection (assuming they are comparable) would probably moot the NO<sub>x</sub> issue, the amendment itself would be subject to applicable public participation procedures, including appeal procedures under 40 CFR 124.19. Therefore, the permit could not become effective until those procedures have been satisfied.

I have asked Region II to take the lead and work with you in evaluating any information the State or applicant may wish to present for the purpose of demonstrating urea injection as BACT or innovative control technology, either at PRRF or another MWC facility. If you have any further questions in regard to this matter, please contact Conrad Simon, Director, Air and Waste Management Division, Region II, at (212) 264-2301.

Sincerely,

  
Gerald A. Emison  
Director  
Office of Air Quality Planning  
and Standards

cc: Conrad Simon  
Frank E. Ferruggia  
Robert J. Burcin  
Ronald L. McCallum

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 9 1989

OFFICE OF  
AIR AND RADIATIONMEMORANDUM

SUBJECT: LAER Determination for a Previously Constructed Source

FROM: John S. Seitz, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Thomas J. Maslany, Director  
Air Management Division  
Region III

This is in response to your memorandum of November 8, 1988, requesting guidance on when LAER should be evaluated for a previously constructed source. To clarify what you stated in your November 8 memorandum, the permitting agency makes the initial LAER assessment at the time of the completed application. However, this is not to say that LAER is determined at the time of complete permit application, since evaluation of LAER continues until the final permit is issued.

With respect to sources subject to NSR but constructed without undergoing review, your second option applies. Making the initial LAER assessment should take into consideration any technologies, practices or SIP limits in effect as of the date of the complete permit. Consistent with our policy for BACT/LAER evaluation, failure of a source to comply with the permitting requirements is not a basis for grandfathering the date for determining the appropriate LAER to some date other than the date of complete application. Further, the final LAER determination is not made until the issuance of the final permit.

If you have questions, please contact Scott Throwe of my staff at FTS-382-2811.

cc: Gary McCutchen, NSR Section  
Judy Katz, OECM  
Greg Foote  
NSR Contacts, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 18 1990

MEMORANDUM

SUBJECT: Ozone and Carbon Monoxide Design Value Calculations

FROM: William G. Laxton, Director  
Technical Support Division (MD-14)

*Bill Laxton*

TO: See Below

In discussions related to the Clean Air Act legislation, design values for ozone and carbon monoxide are receiving particular attention. Previously, it sufficed to designate areas as either attainment or nonattainment but now areas will be further classified into different categories based upon the magnitude of the appropriate design value. This additional classification step places added emphasis on the need to accurately determine these design values. The classification will be done according to concentration cutpoints, and on a schedule, specified in the legislation.

Obviously, once this process is set in motion we will be working very closely with you to develop these design values. However, I thought it would be appropriate to reiterate our design value computation procedures in advance to help people anticipate the types of data review questions that may arise. The computation procedures stated here are consistent with our previous methods. There are differences between the procedures for ozone and carbon monoxide because the ozone National Ambient Air Quality Standard (NAAQS) is structured in terms of expected exceedances while the carbon monoxide NAAQS uses the older "once per year" format. The most apparent difference is that the CO design values are based upon 2 years of data while design values for ozone use 3 years. Another difference is that the ozone NAAQS uses the daily maximum ozone value while the CO NAAQS considers running 8-hour averages so that, even though they must be non-overlapping, it is possible to have more than one CO exceedance per day. Because of these differences, it is convenient to discuss each pollutant separately. With respect to terminology, you may hear the CO design value approach referred to as "the highest of the second highs", while the ozone design value is frequently simplified as "the fourth high in 3 years."

One point to remember is that all locations within an area have to meet the standard (NAAQS). Therefore, when we do our evaluations, we look at each individual site to make sure that every site meets the standard. A separate design value is developed for each site that does not meet the NAAQS, and the highest of these design values is the design value for the area.

## Carbon Monoxide

CO design values are discussed in terms of the 8-hour CO NAAQS, rather than the 1-hour NAAQS, because the 8-hour NAAQS is typically the standard of concern. However, a 1-hour design value would be computed in the same manner. For 8-hour CO, we simply look at the maximum and second maximum (non-overlapping) 8-hour values at a site for the most recent 2 years of data. These values may be readily found on an AIRS AMP450, "Quick Look", printout. Then we choose the highest of the second highs and use this as our design value for that site. We then look at all design values within an area and the highest of these serves as the design value for the area. Note that, for each site, individual years of CO data are considered separately to determine the second maximum for each year - CO data are not combined from different years. It is probably worth commenting on this. The CO NAAQS requires that not more than one 8-hour average per year can exceed 9 ppm (greater than or equal to 9.5 ppm to adjust for rounding). We evaluate attainment over a 2-year period. If an area has a design value greater than 9 ppm, it means there was a monitoring site where the second highest (non-overlapping) 8-hour average was greater than 9 ppm in at least 1 year. Therefore, there were at least two values above the standard during 1 year at that site and thus the standard was not met.

### Hypothetical Case (two CO sites in an area)

		(8-Hour Averages)		
		MAX	2nd High	
SITE 1	1987	14.6	8.9	
	1988	13.9	10.9	
				<u>10.9 is the Design Value for Site 1</u>

		(8-Hour Averages)		
		MAX	2nd High	
SITE 2	1987	12.2	11.1	
	1988	10.8	10.4	
				<u>11.1 is the Design Value for Site 2</u>

11.1 ppm would be the design value for the area.

## Ozone

The form of the ozone NAAQS requires the use of a 3-year period to determine the average number of exceedances per year. In its simplest form, the ozone standard requires that the average number of exceedances over a 3-year period cannot be greater than 1.0. An area with four exceedances during a 3-year period, therefore, does not meet the ozone standard because four exceedances in 3 years averages out to more than once per year. Now, if the fourth highest value was equal to the level of the ozone standard, i.e. 0.12 ppm, then the area would have no more than three exceedances during the 3-year period and the average number of exceedances per year would not be greater

than one. This assumes no missing data and is how the fourth high value in 3-years came to be used as the design value. Actually, an adjustment is specified in the ozone NAAQS to account for missing data in determining the expected exceedances for ozone. Because of considerations associated with control strategy modeling, the following basic approach for ozone design values has been in use since 1981. If there are 3 complete years of ozone data, then the fourth highest daily maximum during the 3-year period is the design value for that site. If only 2 complete years of data are available, then the third highest is used and, if only one complete year is available, then the second highest is used. In this approach, a year of ozone data is considered complete if valid daily maximums are available for at least 75 percent of the ozone season. Note that because of the form of the ozone NAAQS, data are combined over multiple years but they are not combined from different sites.

Hypothetical Case (two O<sub>3</sub> sites in an area, each year at least 75% complete)

		FOUR HIGHEST DAILY MAXIMUM VALUES			
		Max	2nd Hi	3rd Hi	4th Hi
SITE 1	1986	.127	.123	.122	.110
	1987	.129	.124	.121	.116
	1988	.142	.136	.134	.115

The design value for Site 1 is 0.129 ppm, the fourth highest daily maximum value during the three year period.

		FOUR HIGHEST DAILY MAXIMUM VALUES			
		Max	2nd Hi	3rd Hi	4th Hi
SITE 2	1986	.110	.100	.095	.090
	1987	.110	.100	.095	.090
	1988	.180	.175	.160	.110

The design value for Site 2 is 0.110, the fourth highest value during the three year period.

0.129 ppm would be the design value for the area.

There are a few additional comments warranted on the ozone example. First, note that data from each site was treated independently in computing the design value for that site. Assuming no missing data, the second site would meet the ozone NAAQS but the area would not because the other site shows that the NAAQS is not being met. Also, it should be noted that the high

values for a year are considered even if the data for that year did not satisfy the 75 percent data completeness criterion. For example, if a site had 2 years of data that met the 75 percent data completeness requirement and 1 year that did not, then the third highest value during the 3-year period would be the design value because there were only 2 complete years of data but the data from all 3 years would be considered when determining the third highest value. This ensures that valid high ozone measurements in a particular year are not ignored simply because other data in that year were missing. When computing data completeness, the number of valid days can be increased to include days that may be assumed to be less than the standard level as stated in the ozone NAAQS. Also, for new sites that have just come on line, the 75 percent data completeness requirement for the start-up year may be applied beginning with the first day of actual monitoring as long as the data set is at least 75 percent complete for June through August..

A final practical complication that must be addressed in determining ozone design values is the case where a site reports data but has no year that meets the 75 percent data completeness requirement. Admittedly, this is an unusual situation but, for the sake of completeness, it needs to be addressed. At the same time, however, the reason for this consistent data completeness problem should be examined because ozone monitoring data completeness is typically greater than 90 percent. In general, if a site has no complete years of data and fewer than 90 days of data during the 3-year period, the design value will be determined on a case by case basis. In such cases, the data base is so sparse that it would be extremely difficult to describe general rules that would apply and a careful evaluation would have to be made to determine why this situation occurred and what is the most appropriate way to use the data. For a site without a single complete year of data but at least 90 days of data during the 3-year period, the following steps are followed in determining the ozone design value:

1. Divide the number of valid daily maximums during the 3-year period by the required number of monitoring days per year. As noted earlier, the number of valid days can be increased by including the number of days that may be assumed to be less than the standard level as specified in the ozone NAAQS.
2. Add 1.0 to the above total and then use the integer portion of the result as the rank of the design value.

These steps are not as complicated as they may initially appear. For example, suppose a site with a required ozone monitoring season of 214 days each year reports 0, 121, and 130 valid days of ozone data during the 3-year period. Step 1 would give  $(0+121+130)/214=1.17$ . In Step 2, 1.0 is added to this total giving 2.17. The integer portion of 2.17 is 2 and so the design value is the second highest value during the three year period. Again, this type of situation should not occur that often and the reasons for the data completeness problems should be identified.

When discussing data completeness for ozone, it is important to recognize that monitoring sites are occasionally discontinued for valid

practical reasons. In such cases, if data are available from another site that is representative of the same situation, then data from the discontinued site may be superceded by data from the other site. The intent is to ensure that a single year of data from a monitor that was discontinued 2 years ago, does not dictate the design value if data are available from another, equally representative, site. This is not intended to eliminate the missing data penalty when a site is discontinued and there is no data available from a similar monitor.

I have not discussed certain basic data handling conventions, such as computing 8-hour CO averages with missing data, determining the non-overlapping second maximum 8-hour average, or the definition of a valid daily maximum 1-hour ozone daily maximum. All of these conventions have been in place since the 1970's and are routinely incorporated into AIRS outputs so I have not bothered to discuss these points.

Addressees:

Director, Environmental Services Division, Regions I-VIII, X  
Director, Office of Policy and Management, Region IX  
Director, Air Management Division, Region III  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides and Toxics Management Division, Regions I and IV  
Director, Air and Radiation Division, Region V  
Director, Air, Pesticides and Toxics Division, Region VI  
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

cc: J. Calcagni (MD-15)  
R. Campbell (MD-10)  
T. Curran (MD-14)  
D. DeVoe (ANR-443)  
J. Farmer (MD-13)  
T. Helms (MD-15)  
W. Hunt (MD-14)  
S. Meiburg (MD-11)  
R. Ossias (LE-132A)

FEB 28 1990

MEMORANDUM

SUBJECT: Lowest Achievable Emission Limits (LAER) for Ozone  
Nonattainment Areas

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

We are aware that certain old LAER emission limits are less stringent than reasonably available control technology (RACT) that have been more recently established for some new stationary sources in the ozone nonattainment areas of various Regions. This is an expected result of control technology continuing to improve. The old LAER limits do not preempt RACT in these cases, and in fact, the more recent RACT limits may redefine LAER for future determinations.

This memorandum is intended to clarify that in ozone nonattainment areas, the State cannot rely on a LAER determination applied a number of years ago to meet the RACT requirements of section 172(b)(2) of the Clean Air Act, since it is possible that the "old LAER" is less stringent than more recently established RACT. Even though such sources were subjected to LAER as new sources when constructed, they are now existing sources and are thus subject to RACT regulations. The intent is not to "reopen" a prior LAER permit (even one that was improperly made); RACT, however, is intended to apply in addition to old permit requirements. In these cases, a source subject to several requirements simultaneously must meet the most stringent requirement; in some cases, it is conceivable that the RACT requirements would override a requirement of the permit (which would be left intact). In Regions where this situation exists, Regional Offices should, under their post-1987 State implementation plan (SIP) calls, ask States to correct existing regulations to require a RACT level of control where such control is more stringent than the previous LAER level of control. States should make this correction as expeditiously as practicable in conjunction with "leveling the playing field" requirements.

The problem of LAER being less stringent than RACT has generally arisen where LAER for a new or modified source has been determined to be equivalent to the applicable new source performance standard (NSPS). In at least one NSPS, 30-day averaging is allowed in place of daily averaging, and "table values" are utilized for transfer efficiency instead of actual transfer efficiency determinations. The NSPS is less stringent than RACT in such cases.

This situation may also occur where a State submitted as part of its ozone SIP a negative declaration (i.e., no applicable sources of the category exist in the State) and thus did not develop a RACT regulation for the source category. Subsequently, a new source of that category was constructed in the nonattainment area.

Other cases of this may occur, such as where source-specific SIP revisions for a source category have been issued and emission limits for NSPS have been allowed in place of RACT.

Previous guidance memorandums have been sent to Regional Offices concerning this problem [see attached memorandums from Gerald A. Emison to William A. Spratlin, dated December 1, 1988 entitled "RACT Requirements in Ozone Nonattainment Areas" and from G. T. Helms, to Steve Rothblatt, dated March 2, 1989 entitled "Reasonably Available Control Technology (RACT) for New Automobile Assembly Plants"]. Those memorandums relate only to automobile assembly plants; today's memorandum, however, covers all RACT categories.

Should you have any questions on this matter, please contact G. T. Helms (FTS 629-5527) or John Silvasi (FTS 629-5666).

#### Attachments

cc: J. Berry  
D. Cole  
J. Farmer  
T. Helms  
S. Holman  
V. Katari  
L. Kesari  
W. Laxton  
E. Lillis  
G. McCutchen  
R. Ossias  
S. Schneeberg  
J. Seitz  
J. Silvasi  
G. Wood  
S. Wyatt  
Chief, Air Branch, Regions I-X  
VOC Regulatory Contacts, Regions I-X  
VOC Enforcement Contacts, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

2

10 APR 1989

PN 165-89-04-10-041

MEMORANDUM

SUBJECT: Prevention of Significant Deterioration (PSD)  
Applicability to Sulfur Dioxide (SO<sub>2</sub>) Emissions  
from Incineration of Total Reduced Sulfur (TRS)  
Compounds

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Winston A. Smith, Director  
Air, Pesticides, and Toxics Management Division,  
EPA Region IV

This is in response to your memorandum of March 16, 1989 in which you requested answers to questions concerning PSD applicability to SO<sub>2</sub> emissions resulting from a boiler modification at Union Camp Corporation's Savannah, Georgia, kraft pulp mill. The issue, in general, is whether an increase in emissions of one pollutant at a source is exempt from PSD review when it results from the addition of an air pollution control device or a change in the method of operation of the source to reduce emissions of another pollutant. According to your memorandum, the Georgia Environmental Protection Division has contested Region IV's position that PSD would apply to an increase of SO<sub>2</sub> emissions on the order of several thousand tons per year (tpy) from the pulp mill's power boiler as the result of incinerating TRS compounds. You asked whether Union Camp's power boiler would be subject to PSD for SO<sub>2</sub> and whether best available control technology (BACT), ambient air impact, and increment consumption analyses would be required. You also asked whether any grandfathering provisions are applicable to sources that may have constructed under a permit that did not contain a BACT analysis for power boiler SO<sub>2</sub> emission increases resulting from incineration of TRS compounds. In addition you requested: (1) a count of agencies with approved section 111(d) TRS plans indicating which ones have interpreted these rules similar to Florida; and (2) a list of sources that have not been required to undergo a BACT analysis under conditions similar to the Union Camp situation in question.

On July 7, 1986, the Office of Air Quality Planning and Standards sent to all Regional Air Division Directors a \* memorandum addressing this very issue (see attached). The memorandum also appears as item number 4.32 in the New Source Review PSD and Nonattainment Area Guidance Notebook. The

\* 7/7/86 MEMO NOT ATTACHED, SEE PN 165-86-07-07-024

memorandum makes clear that the new source performance standard exemption of certain changes to a source's emission control systems (and resulting emissions increase) from inclusion in the definition of "modification" does not apply to the definition of "modification" under PSD. Because the modifications to the power boiler at the Union Camp mill result in an emissions increase exceeding the significance level (40 tpy) for triggering PSD applicability as defined in 40 CFR 52.21(b)(23)(i), the emissions increase is subject to a full PSD review, including "top-down" BACT, air quality impact, and increment consumption analyses.

State agencies and permit applicants should have been aware within six months of issuance of the policy explained in the July 7, 1986, memorandum. Therefore, no grandfathering is needed for sources permitted after January 7, 1987. In cases where a pulp mill or other source is constructing or operating based on a permit that erroneously exempted emission increases of a pollutant from PSD review, the source is subject to enforcement action by the State or local agency. Appropriate enforcement action would include requiring the source to perform any analyses required under full PSD review that were not done for the approved permit. The reviewing authority may, of course, using the complete PSD analyses submitted by the source, consider energy, environmental, and economic impacts in determining BACT. Under no circumstances may emissions cause or contribute to a violation of any national ambient air quality standard or PSD increment.

Concerning State TRS plans, the Code of Federal Regulations, Part 62, lists States with approved plans. I suggest that you refer to this Part to determine the status of the States' section 111(d) TRS plans. Also, we are not aware of any other similar sources that may have been issued a permit without undergoing a BACT analysis. However, this memorandum will be sent to the Regional Offices with a request that, if any Region is aware of sources which may have been issued a permit without undergoing a BACT analysis, they contact you directly. In addition, we will post it on the NSR electronic Bulletin Board and request that the Regions send a copy to the States.

If you have any more questions concerning PSD applicability at the Union Camp pulp mill, please contact Sam Duletsky in our New Source Review Section at FTS 629-0873.

#### Attachment

cc: E. Lillis  
G. McCutchen  
S. Duletsky  
D. Painter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

Ed

31 MAR 1989

PN 165-89-03-31-040

MEMORANDUM

SUBJECT: Application of Building Downwash in Prevention of Significant Deterioration (PSD) Permit Analyses

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: William B. Hathaway, Director  
Air, Pesticides, and Toxics Division (6T)  
Region VI

Thank you for your memorandum of March 8, 1989 in which you urge consideration of changes to EPA's current policy of applying building downwash to background sources in PSD modeling. Your memorandum describes problems associated with the collection of building dimension data necessary for downwash modeling, and you suggest that EPA might issue rules and provide funding to collect this building data. Alternatively, you believe that downwash modeling should not be required for any background sources.

Members of my staff are currently analyzing several approaches for handling background sources. This will be the subject of a future conference call with the Regional Offices. In the interim, some of our concerns regarding this issue and your specific suggestions are discussed below.

The Guideline on Air Quality Models notes that background concentrations are an essential part of the total air quality concentration to be considered in determining source impacts and therefore requires certain background sources to be fully modeled. The Guideline indicates that "... all sources expected to cause a significant concentration gradient in the vicinity of the source or sources under consideration for emission limit(s) should be explicitly modeled." This guidance provides considerable flexibility and requires judgment to be exercised by the reviewing agency in identifying which background sources should be fully modeled. The burden of collecting building dimension data may be mitigated somewhat by application of this judgment. We are exploring the development of additional guidance to better assist in this judgment. However, I caution that it may not be possible to establish many objective "bright line" tests that will eliminate the need for Regional Office judgment in individual cases.

I realize that information needed to model background sources is frequently not contained in the State's existing emission inventory. In some cases the applicant will need the reviewing agency to assist in collecting the data. However, I am not convinced that we must undertake a national effort to issue regulations or to fund the States/Regional Offices to collect the data. It is important to note that the PSD rules place this burden primarily on the proposed source, not the regulatory agencies.

Your memorandum suggests that the PSD analyses could ignore building downwash effects. I do not believe that the PSD rules and the Guideline allow this alternative. Further, since it is not unusual to find a national ambient air quality standards (NAAQS) violation caused by downwash, the PSD analysis must carefully consider that possibility. If a proposed source contributes to a NAAQS violation caused by downwash from a background source, the permit cannot be issued. On the other hand, not every source potentially subject to downwash must be evaluated. Therefore, we are pursuing alternatives to better define the range within which detailed modeling should be required.

In summary, please be assured that we are sensitive to the issues raised in your memorandum and that we will coordinate with Region VI in this effort. If you have any questions, please contact me or have your staff contact Doug Grano at 629-5255.

cc: R. Bauman  
D. deRoeck  
E. Ginsburg  
D. Grano  
W. Laxton  
✓ E. Lillis  
J. Tikvart  
D. Wilson  
J. Yarbrough



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

16 MAR 1983

PN 165-89-03-16-039

MEMORANDUM

SUBJECT: Use of Allowable Emissions for National Ambient Air Quality Standards (NAAQS) Impact Analyses Under the Requirements for Prevention of Significant Deterioration (PSD)

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)  
William B. Laxton, Director  
Technical Support Division (MD-14)

TO: Thomas J. Maslany, Director  
Air Management Division, Region III

William B. Hathaway, Director  
Air, Pesticides, & Toxics Div., Region VI

This memorandum is in response to recent requests from your offices for clarification of the Environmental Protection Agency's (EPA) policy concerning the implementation of the PSD air quality impact analysis under 40 CFR 51.166(k) [also §52.21(k)]. Of specific concern is the question of whether the required analysis for new major sources and major modifications is to be based on actual or allowable emissions from existing background sources. This memorandum sets forth the position that allowable emissions should generally be used. However, as explained below, certain allowances may be made, primarily with respect to the evaluation of impacts on the long term NAAQS, to consider an existing source's actual annual operations. This position best resolves the inconsistencies between previous written guidance for PSD and the guidance applicable to NAAQS attainment demonstrations for State implementation plans (SIP's).

The PSD regulations at 40 CFR 51.166(k) stipulate that "allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases... would not cause or contribute to air pollution in violation of [any national ambient air quality standard (NAAQS)]." (Emphasis added.) While this provision clearly requires the use of allowable emissions for the new or modified source, it offers no similarly explicit requirement regarding emissions to be used for existing source contributions.

Nationally, States and EPA Regional Offices have utilized several interpretations which have lead to a consistency problem in implementing the requirement for a NAAQS demonstration under 40 CFR 51.166(k). Some States presently accept the use of actual source emissions for existing background point sources, and reference EPA guidance to support their position. Regions, on the other hand, encourage the use of emissions estimates more closely reflecting legally allowable emissions.

Available EPA guidance for PSD, which dates back to 1980, supports the use of actual emissions to project the air quality impacts caused by existing point sources. Specifically, the "Prevention of Significant Deterioration Workshop Manual" (EPA-450/2-80-081, October 1980) states that "actual emissions should be used... to reflect the impact that would be detected by ambient air monitors" for the PSD NAAQS analysis. However, because many sources typically emit at rates well below their legally allowable emission rate on an annual basis, we now believe that the use of actual emissions to demonstrate NAAQS attainment could substantially underestimate the potential air quality impacts resulting from existing sources.

The EPA's policy for demonstrating stationary point source compliance with the NAAQS for SIP purposes clearly requires the use of emissions which are more closely tied to allowable emissions. The model emission input data requirements for such SIP demonstrations are contained in Table 9-1 of the "Guideline for Air Quality Models (Revised)" (GAQM), EPA-450/2-78-02R, July 1986. For "nearby background sources" an adjustment to the allowable emission rate<sup>1</sup> may be made only for determinations of compliance with the annual and quarterly NAAQS, and only with respect to the annual operating factor. For "other background sources" an adjustment to both the operating level and the operating factor, as explained in Table 9-1, could be made for determinations of compliance with the long term and short term NAAQS.

The referenced model emission input data requirements for existing point sources are contained in the GAQM which has undergone rulemaking and is incorporated by reference in EPA's PSD regulations under Parts 51 and 52. Although a footnote in Table 9-1 indicates that the model input data requirements may not apply to PSD NAAQS analyses, we now believe that such requirements should be applied to PSD rather than using actual emissions as indicated in the 1980 PSD guidance. Thus,

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<sup>1</sup>Emission rates for model input consist of three components: 1) the emission limit, e.g., #/mmBtu; 2) the operating level, e.g., mmBtu/hour; and 3) the operating factor, e.g., hours/day, hours/year.

compliance demonstrations for PSD and for stationary source control strategies under SIP's will be accomplished in a consistent manner.

In order to apply Table 9-1 in the GAQM to PSD NAAQS analyses, certain clarifications need to be provided. First, the proposed major new source or major modification must be modeled at its maximum allowable emission rate. Second, the existing facility to which a major modification has been proposed, but whose actual emissions (not including emissions from the proposed modification) will remain unchanged, may be considered as the "stationary point source subject to SIP emission limit(s)..." to determine the model emission input requirements. Portions of the existing facility where the emission rate is expected to increase as a result of the proposed modification should be modeled at the allowable emission rate. Finally, background point sources 1) having already received their construction permit but not yet in operation, or 2) with less than two years of operational history, should also be modeled at their allowable emission rate.

Of course, an analysis which demonstrates no contravention of the standards, based entirely on maximum allowable emissions rates (including full operation for the entire year) for all modeled point sources is acceptable. If a violation of any NAAQS is revealed by this type of analysis, then the adjustments described above may be made in cases where it can be shown to the satisfaction of the permit granting agency that historical operating levels and/or operating factors will be representative of future conditions.

This use of Table 9-1 of the GAQM for accomplishing the required PSD NAAQS analysis will supersede the various procedural interpretations presently being applied. Since different procedures are currently in use, we believe that it is necessary to provide a grace period for implementing the required procedure. Consequently, modeling analyses for any PSD application submitted to the reviewing agency on or after October 1, 1989 should be based on legally allowable emissions or must use the model emission input data requirements contained in Table 9-1 of the GAQM as clarified above for PSD purposes.

cc: Air Branch Chief, Regions I-X  
New Source Review Contacts  
Regional Modeling Contacts  
E. Lillis  
J. Tikvart  
T. Helms  
B. Bauman



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

*Lillis*  
*RL*

28 FEB 1989

PN 165-89-02-28-038

MEMORANDUM

SUBJECT: Guidance on Determining Lowest Achievable  
Emission Rate (LAER)

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: David Kee, Director  
Air & Radiation Division, Region V

This is in response to your memorandum of January 6, 1989, requesting additional information on determining LAER. The following responses are in the same order and format as the questions in your letter.

1. Economic Feasibility of LAER

Traditionally, little weight has been given to economics in LAER determinations, and this continues to be the case. The extract in your memorandum from the record of the House and Senate discussion of the Clean Air Act (Act) contains the sentence:

"If the cost of a given control strategy is so great that a new major source could not be built or operated, then such a control would not be achievable and could not be required by the Administrator."

We interpret this statement in the record to be used in a generic sense. That is, that no new plants could be built in that industry if emission limits were based on levels achievable only with the subject control technology. However, if some other plant in the same (or comparable) industry uses that control technology, then such use constitutes de facto evidence that the economic cost to the industry of that technology control is not prohibitive. Thus, for a new source in that same industry, LAER costs should be considered only to the degree that they reflect unusual circumstances which, in some manner, differentiate the cost of control for that source from the costs of control for the rest of that industry. These unusual circumstances should be thoroughly analyzed to ensure that they really do represent compelling reasons for not requiring a level of control that similar sources are using. Therefore, when discussing costs, applicants should compare the cost of control for the proposed source to the costs for source(s) already using that level of control.

a. You asked whether LAER for a coating operation would necessarily require add-on controls if low solvent coatings are used which produce volatile organic compound (VOC) concentrations of 20-100 ppm, and also whether LAER for a boiler would be both low sulfur coal and scrubbing.

Your questions pose hypothetical issues of whether sources which have selected fuels or process materials with inherently low emissions should be forced to utilize add-on controls as well. It is difficult and potentially misleading to respond to such hypothetical situations, since certain factors not presented may alter the response (source type, pollutant, emission rate, economics, etc). Nevertheless, the following generalizations can be made.

Sources are required to meet LAER as defined in the Act, which is essentially a waste gas stream limit. For a coating operation, this may mean low (or no) VOC solvent coatings, high transfer efficiencies, an add-on control device on the gas stream, or some combination of these. Of course, use of either of the first two will affect gas stream concentrations, which in turn can influence decisions on whether additional control is needed to meet the intent of LAER requirements. A LAER requirement for low sulfur coal would depend, at least in part, on whether such fuel was available and in use in the nonattainment area in question. A final determination depends on the specific case.

b. You ask whether permit applicants can put air pollution control costs "on the margin," even though many other variables could affect project viability, and whether States and Regions have the expertise needed to adequately evaluate a claim of economic non-viability.

It is true that many permit applicants present the cost of emissions controls as marginal costs and argue that they cannot afford such controls. However, these issues were addressed in the April 22, 1987 memorandum on determining best available control technology (BACT).<sup>1</sup> Since costs play less of a role in LAER than in BACT determinations, we believe the issues are adequately addressed in that memorandum, so we will not repeat them here.

## 2. Achievability of Existing State Implementation Plan (SIP) Limitations

The most stringent emissions limitation contained in a SIP for a class or category of source must be considered LAER, unless a) a more stringent emissions limitation has been achieved in practice, or b) the SIP limitation is demonstrated by the owner or operator of the proposed source to be unachievable [Act, section 171(3)].

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<sup>1</sup> Huntsville Incinerator - Determining BACT, from Gary McCutchen, CPDD, to Bruce Miller, Region IV, dated April 22, 1987. [See section 8.15 of the New Source Review Prevention of Significant Deterioration and Nonattainment Area Guidance Notebook.]

There is, of course, a range of certainty in such a definition. The greatest certainty for a proposed LAER limit exists when that limit is actually being achieved by a source. However, a SIP limit, even if it has not yet been applied to a source, should be considered initially to be the product of careful investigation and, therefore, achievable. A SIP limit's credibility diminishes if a) no sources exist to which it applies; b) it is generally acknowledged that sources are unable to comply with the limit, and the State is in the process of changing the limit; or c) the State has relaxed the original SIP limit. Case-by-case evaluations need to be made in these situations to determine the SIP limit's credibility.

The same logic applies to SIP limits to which sources are subject but with which they are not in compliance. Noncompliance by a source with a SIP limit, even if it is the only source subject to that specific limit, does not automatically constitute a demonstration that that limit is unachievable. The specific reasons for noncompliance must be determined, and the ability of the source to comply assessed. However, such noncompliance may prove to be an indication of nonachievability, so the achievability of such a SIP limitation should be carefully studied before it is used as the basis of a LAER determination.

### 3. LAER and Performance Specifications

Your question about the use of company-mandated product specifications (for coatings) in determining LAER for sources of VOC is too hypothetical to address, given various site-specific factors that could exist. Each case must attempt to differentiate between product (and materials) specifications that are simply desired by an applicant (which would generally not be considered relevant) and specifications that are required (e.g., an industry standard). However, your interpretation of my August 29 memorandum is correct, in that a permit applicant would have to demonstrate that the presumptive LAER could not be met by some other combination of coatings, transfer efficiency, and add-on control.

### 4. If Presumptive LAER Cannot be Achieved

We generally concur with your requirement that where a presumptive SIP-based LAER is not achievable, the applicant must meet the more stringent of the two limits defined in your memorandum. However, case-by-case factors may also affect the decision.

Please contact Gary McCutchen (FTS 629-5592) if you have any questions on the information provided in this memorandum and Allen Basala (FTS 629-5622) if you need assistance in evaluating the economics of specific permit applications.

cc: A. Basala	T. Helms
E. Lillis ✓	R. Biondi
G. McCutchen	G. Foote
E. Noble	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

EL  
(2)

PN 165-89-02-15-037

FEB 15 1989

MEMORANDUM

SUBJECT: Guidance on Early Delegation of Authority for the  
Nitrogen Dioxide (NO<sub>2</sub>) Increments Program

FROM: *for* Gerald A. Emison, Director *G. Emison*  
Office of Air Quality Planning and Standards

TO: Louis F. Gitto, Director  
Air Management Division, Region I

This is in response to your memorandum of December 23, 1988 to Don Clay, in which you requested guidance on the procedures to be followed in advancing the effective date of 40 CFR Part 52 for the NO<sub>2</sub> prevention of significant deterioration (PSD) increments to enable States seeking delegation of authority to implement the NO<sub>2</sub> increments prior to November 17, 1990. Specifically, you requested guidance on two questions:

1. How do States with delegated authority initiate the process of advancing the general effective date of 40 CFR 52.21?
2. What are the appropriate Environmental Protection Agency (EPA) rulemaking procedures for carrying out a State's request?

As you noted in your memorandum, the preamble to the NO<sub>2</sub> increments regulation promulgated on October 17, 1988, gave delegated States the opportunity to request authority to implement the requirements of the NO<sub>2</sub> increments regulation as early as the effective date of the 40 CFR 51.166 regulation (October 17, 1989). Otherwise, the NO<sub>2</sub> increment requirements do not become effective in delegated States until 25 months after promulgation (November 17, 1990).

The Office of General Counsel (OGC) and the Office of Air Quality Planning and Standards (OAQPS) have jointly developed the procedures outlined herein for advancing the date at which delegated States can assume responsibility for implementing the NO<sub>2</sub> increment requirements. This explanation should answer your specific questions regarding the procedures to use.

In answer to your first question, a State desiring delegation of the NO<sub>2</sub> increment provisions of the revised 40 CFR Part 52 PSD program must submit an amended PSD delegation agreement to its Region for review and approval. The form of this proposed amendment may follow that of the PSD delegation agreement now in force. It should contain an explanation of how the State plans to meet the new NO<sub>2</sub> increment requirements. In particular, it must demonstrate that the State has adequate legal authority under State law to accept the delegation. Also, the amended delegation agreement must address how increment consumed since the February 8, 1988 baseline date will be determined and possible exceedances corrected, and how increment consumption in the future will be tracked. In addition, in accordance with the discussion in the preamble to the final rule (53 FR 40659), the amended delegation agreement or an accompanying document must contain a stipulation by the appropriate State official that the State does not intend to submit the necessary Part 51 SIP revisions within 21 months of the promulgation of the NO<sub>2</sub> increment regulations. Such a stipulation would not, however, prevent the State from later changing its mind and submitting Part 51 revisions within the allotted time.

Some States may not be able to demonstrate adequate legal authority under State law to accept delegation. For example, a State may be prohibited from adopting any rule more stringent than EPA's, and this could be interpreted by the State to preclude accepting delegation of EPA rules which, although they have been promulgated, are not yet in effect. There is no mechanism available to EPA to enable such States to adopt the NO<sub>2</sub> increments prior to EPA's effective date.

As to the second question, when an acceptable application for early delegation has been received from a State, the Region should place a direct-final notice in the Federal Register, unless it anticipates adverse public comment. Although Headquarters' review of NO<sub>2</sub> PSD SIP revisions is not required, we would be willing (and OGC would like) to review at least the first of these notices. The notice should explain that the effective date of 40 CFR Part 52 is being advanced for that State as provided for in EPA's promulgation of the NO<sub>2</sub> increments regulation. An accompanying revision to the Part 52 subpart for the State in question should provide that: "The provisions of section 52.21 (b) through (w), including revisions promulgated on October 17, 1988, at 53 FR 40671, are hereby incorporated and made a part of the applicable State plan for the State of \_\_\_\_\_."

Regardless of whether a State desires delegation of the NO<sub>2</sub> increment regulations prior to (or on) the general effective date of the revised 40 CFR 52.21, the Region should use that opportunity to review the current delegation and revise it, as appropriate, to ensure consistency with EPA policies.

If you have any questions about the guidance provided in this memorandum, please contact Eric Noble at FTS 629-5362, Gary McCutchen at FTS 629-5592, or Greg Foote at FTS 382-7625.

cc: D. Clay  
E. Claussen  
G. Foote  
E. Lillis  
G. McCutchen  
E. Noble  
Air Division Director, Regions II-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 14 1988

THE ADMINISTRATOR

Mr. John W. Boston  
Vice President  
Wisconsin Electric Power Company  
Post Office Box 2046  
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

As you requested in our meeting on September 15, 1988, I have made final determinations regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) requirements to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). For the reasons discussed below, I have determined that, as proposed, the renovations at Port Washington are subject to both PSD and NSPS requirements. However, EPA remains willing to work with you regarding methods of compliance. As we have discussed, one alternative would be to reconfigure the project such that no emissions increases would occur. My staff is ready to meet with you to discuss these matters at any time.

I. BACKGROUND

On September 12, 1988, David Kee, Director, Air and Radiation Division, EPA Region V, wrote you regarding PSD and NSPS coverage of the Port Washington renovations. Enclosed with that letter was a memorandum dated September 9, 1988 from Don R. Clay, Acting Assistant Administrator, addressing the background of the Port Washington project, and analyzing at some length the relevant interpretative issues. For purposes of brevity, I will not repeat that material here, but rather incorporate it by reference. \*

The September documents concluded that the life extension project, as proposed, likely would be subject to PSD and NSPS requirements. However, EPA also stated that final applicability determinations could not be provided at that time in the absence of certain factual information. In our subsequent meeting you requested that EPA furnish final determinations, and agreed to provide the necessary additional information. You also asked EPA to reconsider certain of the conclusions in Don Clay's memorandum. These matters are discussed below.

\* SEE PN 165-88-09-09-035

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## II. FINAL DETERMINATIONS

Your staff has responded to our requests for additional information, and I want to thank you for WEPCO's continued cooperation in doing so. Based on this, and the other information in EPA's files, I now make the following final determinations:

(1) The life extension project, as proposed, will render WEPCO's Port Washington plant subject to the PSD requirements of Part C of the Clean Air Act as a major modification within the meaning of the Act and the EPA regulations at 40 C.F.R. § 52.21.

(2) The proposed life extension project will render each of the five steam generating units at the Port Washington plant subject to the NSPS requirements of section 111 of the Clean Air Act as a modification within the meaning of the Act and the EPA regulations at 40 C.F.R. Part 60.

In reconsidering the memorandum and letter of September 9 and 12, I have taken a careful look at the issues you raised in our meeting: whether the renovations are routine; whether EPA has treated similar projects in a different fashion; and whether there would be an emissions increase due to a physical or operational change. However, I find no reason to depart from the reasoning of the September documents. Accordingly, I conclude that WEPCO's life extension project, if carried out as proposed, will involve a substantial and non-routine renewal of the Port Washington facilities that will significantly increase both hourly maximum and annual emissions of air pollutants.

Specifically, regarding the nature of the proposed work at Port Washington, I find that these renovations constitute physical changes for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), and physical and operational changes for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a). I find further that these changes do not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. (See 40 C.F.R. §§ 52.21(b)(2)(iii) and 60.14(e)).

Regarding the emissions changes from the life extension project, based upon the emissions data and certain factual assertions submitted by WEPCO, I find that the Port Washington renovations will result in a significant net increase in emissions of several pollutants for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), (b)(3), and (b)(21). I find further that the renovations will result in an increase in the emission rate of several pollutants at each of units 1-5 for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a) and (b).

- 3 -

Enclosures A and B detail the emissions changes underlying these findings for PSD and NSPS purposes. As indicated above, EPA's calculations and determinations are based on data supplied by WEPCO. We will use the data in Enclosures A and B in the event you would like to work with us to establish an acceptable arrangement for satisfying PSD and NSPS requirements through the addition or enhancement of pollution control equipment, physical capacity restrictions, or, in the case of PSD, federally enforceable limitations on potential emissions.

### III. DISCUSSION

As you requested, I have reconsidered the question of whether the physical and operational changes at Port Washington are routine, whether applying PSD and NSPS here would be inequitable in light of EPA's past treatment of renovation projects, and whether the renovations will result in emissions increases. These matters are addressed below, as is EPA's reasoning with respect to the baselines for calculating the PSD and NSPS emissions increases reflected in Enclosures A and B.

Regarding the question of routineness, the renovations involve the replacement of steam drums, air heaters, and other major components that are integral to the continued operation of the source. The work will not simply maintain the facilities in their current state, but rather will significantly enhance their present efficiency and capacity, and substantially extend their useful economic life. In addition, the work called for here is rarely, if ever, performed. Moreover, this work is costly, both in relative and absolute terms. Based on these and other factors, I reaffirm Don Clay's findings on the non-routine character of the Port Washington changes. The September 9 memorandum contains a complete discussion of EPA's reasoning on this issue.

On the related equity question, I find no inconsistency here with EPA's prior determinations regarding routine and non-routine changes. I note initially that PSD and NSPS applicability determinations are made on a case-by-case basis. Thus, it is very difficult to analogize to other projects, which almost inevitably present significant factual differences. Nevertheless, my staff has reviewed the additional material you submitted on September 19, and September 27, 1988 regarding certain other renovation projects, and has informally surveyed EPA Regional Offices and state agencies.

I have concluded that none of the four steam drum replacements identified in your September 19 submission are sufficiently similar to the Port Washington project to support determinations of nonapplicability in this matter. The Carolina

- 4 -

Power and Light case involved a faulty steam drum replaced prior to the initial start-up of a new unit, and would not have increased emissions for PSD or NSPS purposes. The Great Western Sugar example did not involve a utility boiler, and was too small to be affected by NSPS. The Ashland Oil facility was not at a utility, involved a waste heat boiler that was not fossil-fuel fired, and hence, was not an emissions unit subject to PSD or NSPS. The Algoma Steel Co. facility was not a utility boiler, and not located in the United States.

In addition, the informal survey conducted by the Office of Air and Radiation disclosed no closely analogous cases that were ever reviewed by EPA headquarters for purposes of PSD or NSPS applicability. In particular, EPA found no examples of steam drum replacement at aged electric generating facilities. Moreover, EPA could find no examples in which the Agency had analyzed and issued an applicability determination for a "life extension project" for any category of major source. Regarding the four utility projects identified in your September 27 submission, I note that they do not involve steam drum replacement. In addition, permit applications were not submitted to the state agencies for the Duke Power and Texas Utilities projects you cite. Consequently, they were not reviewed by any air pollution control agency. The Cincinnati Gas and Electric project was reviewed by the state, but not EPA. The state determined, and EPA Region II concurred, that the Hydraco Enterprises project was not subject to PSD based on a net decrease in emissions of all pollutants. Our informal survey and review of the projects you identified reveal that major construction activities undertaken by utilities that may be subject to Clean Air Act requirements have not been brought to the attention of EPA. The Agency is considering what steps may be necessary to address this situation.

EPA has discovered only two state agency determinations addressing life extension questions in a manner possibly inconsistent with EPA's analysis of the Port Washington project. These instances, which apparently were not brought to EPA's attention prior to the states' determination, do not create an inequity that would justify a different conclusion by EPA in this case.

As to the question of emissions increases at Port Washington, I believe that EPA has properly interpreted the PSD and NSPS regulations as applying to increases in emissions due to increases in hours of operation or production rate, where, as here, such operational or production increases are closely related to physical or operational changes. A contrary interpretation would allow even massive emissions increases stemming from significant new capital investment -- as distinguished from routine fluctuations in the business cycle --

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to escape scrutiny under the Clean Air Act simply because the new investment did not involve an inherently more polluting production process. I do not believe that Congress intended such a result.

I would like to point out that the figures on emissions increases in Enclosures A and B reflect my conclusions regarding the proper points in time from which to calculate emissions changes. For PSD, I have determined under 40 C.F.R. § 52.21(b)(21)(ii) that the two-year period of 1983 and 1984 -- prior to the source curtailments due to discovery of cracks in the rear steam drums -- are more representative of normal source operations than the most recent two-year period. This conclusion is appropriate in light of WEPCO's historical operations.

As to NSPS, there is no "representative emissions" concept under that program. Rather, under the circumstances presented by this case, the baseline emission rates for units 1-5 are determined by hourly maximum capacity just prior to the renovations. At this time, EPA is relying on the actual operating data you submitted to determine current maximum capacity. Although EPA is certainly open to further discussion on this point, the information contained in your September 27 and October 11, 1988 submissions is inadequate to support WEPCO's assertions that higher-than-actual capacities could be achieved on an economically sustainable basis. For example, you indicate that operation at higher levels at units 1-4 "could increase equipment deterioration thus causing further damage." Regarding Unit 5, you state that "safety concerns" dictated the decision to shut down that unit. Based on this information, we are unable to rely on WEPCO's statements as to maximum "achievable" capacity in determining the emissions changes at each of these units. Thus, for example, in the case of unit 5, the current capacity must be regarded as zero.

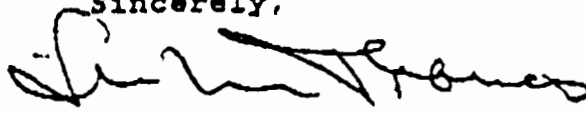
#### IV. CONCLUSION

In adopting the PSD and NSPS programs, Congress intended to address the type of long-term capital investments in pollution-emitting facilities at issue in the Port Washington life extension project. Thus, as proposed, these renovations would be subject to the requirements of both programs. However, as indicated above, my staff remains ready to work closely with WEPCO to discuss specific pollution control equipment and permitting measures that would minimize the cost to WEPCO of complying with the requirements of the Clean Air Act. I have asked Don Clay to work with you in seeking a final resolution of the compliance issues by December 1.

- 6 -

Again, thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lee M. Thomas", written in a cursive style.

Lee M. Thomas

**Enclosures**

cc: Senator Robert W. Kasten, Jr.  
Representative F. James Sensenbrenner, Jr.  
Don Clay, EPA (ANR-445)  
David Kee, Air & Radiation Div., Region V

## Enclosure A

## PSD Applicability

## Port Washington Power Plant Renovation Project

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Potential Emissions (2)</u>	<u>Net Emissions Increase</u>	<u>PSD Level</u>	<u>Subj to PSD Revi</u>
Total suspended particulate	170	283 (3)	108	25	yes
Sulfur dioxide	24,236	52,621 (3)	28,385	40	yes
Nitrogen oxides	2,991	8,201	5,210	40	yes
Carbon monoxide	144	397	253	100	yes
Hydrocarbon	17	47	30	40	no
Beryllium	0.0016	0.005	0.0034	0.0004	yes
Chlorides	38	98	60	3	yes

NOTE: PSD applicability for the other PSD regulated pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) has not been determined at this time.

- 1) Average emissions for two-year period defined by calendar years 1983 and 1984.
- 2) As calculated by WEPCO based on 1992 coal type, actual emissions after ESP, and an annual capacity utilization factor of 90%.
- 3) An EPA estimate of potential emissions, based on existing federally enforceable limits (i.e., applicable SIP), may be higher. The indicated PSD applicability determination would, however, not change.

## Enclosure B

NSPS Applicability  
Port Washington Power Plant Renovation Project

FULL LOAD EMISSIONS AT CURRENT CAPACITY  
(BEFORE RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO2 (LBS/HR)	1417	1828	2043	1580	-0-
PM (LBS/HR)	15	16	12	12	-0-
NOx (LBS/HR)	480	352	289	221	-0-

FULL LOAD EMISSIONS AT FUTURE CAPACITY  
(AFTER RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO2 (LBS/HR)	2046	2037	2088	2269	2695
PM (LBS/HR)	16	16	12	17	15
NOx (LBS/HR)	696	392	297	316	369

SUBJECT TO NSPS (AFTER RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO2 (LBS/HR)	YES(a)	YES(a)	YES(a)	YES(a)	YES
PM (LBS/HR)	YES(b)	NO	NO	YES(b)	YES
NOx (LBS/HR)	YES(c)	YES(c)	YES(c)	YES(c)	YES(c)

## Notes:

(a) With less add-on control than NSPS requirement, emissions (lb/hr) would not increase and NSPS would not apply.

(b) Because of planned ESP upgrade, PM emissions (lb/MM Btu) after renovation are expected to be less than NSPS requirement. However, NSPS would require CEMS for opacity.

(c) Because arch-fired boilers are used at Port Washington, current NOx emissions (lb/MM Btu) are expected to be less than NSPS requirements. However, NSPS would require a CEMS for NOx.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 9 1988

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPCO) Port Washington Life Extension Project

FROM: Don R. Clay, Acting Assistant Administrator  
for Air and Radiation (ANR-443)

TO: David A. Kee, Director  
Air and Radiation Division, Region V

This is in further response to your March 25, 1988 memorandum requesting guidance on PSD applicability regarding the proposed renovation of the Port Washington Power Plant by the WEPCO. I have also addressed the question whether the renovations proposed for this facility would subject the individual units to Subpart Da of the NSPS.

Based on the information presented in your memorandum, subsequent written information received from WEPCO, information provided by the State of Wisconsin, and other information contained in the Environmental Protection Agency's (EPA's) files on this matter, I have concluded that, as proposed, this renovation project would not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. It also appears that the project would increase emissions within the meaning of these two programs. Thus, the renovation project likely would be subject to PSD review as a major modification of an existing stationary source and that the renovations proposed for units 1-5 at this facility probably would subject the individual units to Subpart Da of the NSPS as a modification. However, WEPCO has not yet requested EPA to make an applicability determination. In any case, it would not be possible to make final applicability determinations at this point, for three basic reasons.

First, EPA must be supplied sufficient data regarding the various pollutants emitted by the Port Washington facilities to determine, on a pollutant-specific basis, how the proposed renovations would affect emissions levels. Second, WEPCO might avoid both PSD and NSPS applicability by adding or enhancing pollution control equipment, or in the case of PSD, restricting

operations below maximum potential such that the emissions increases necessary to trigger applicability would not occur. The WEPCO should discuss its plans in this regard with EPA. Third, regarding NSPS applicability to unit 1, additional information is necessary to determine whether a physical or operational change would occur.

Thus, although this memorandum will serve to answer many of the questions necessary to reaching final determinations, you should advise WEPCO that ultimately applicability depends upon changes in emissions after the renovations and whether the company decides to take the steps which would enable it to lawfully avoid coverage. Also, NSPS coverage of unit 1 can only be determined after an evaluation of the additional information regarding the work to be performed. In addition, as to NSPS, WEPCO should be advised to submit a formal request pursuant to 40 CFR 60.5 if it desires a final applicability determination.

As the need for further factual development here suggests, determinations of PSD and NSPS applicability are fact-specific, and must be made on a case-by-case basis. This memorandum provides a framework for analyzing the proposed changes at Port Washington and gives EPA's views on relevant issues of legal interpretation. It should also be useful in assessing other so-called "life extension" projects in the future. However, any such project would need to be reviewed in light of all the facts and circumstances particular to it. Thus, a final decision regarding PSD and NSPS applicability here would not necessarily be determinative of coverage as to other life extension projects.

If you have any further questions regarding the discussion or conclusions in this memorandum, please have your staff contact David Solomon of the New Source Review Section at FTS 629-5375.

## I. Background

As mentioned in your March 25 request, the five coal-fired units at Port Washington began operation in 1935, 1943, 1948, 1949, and 1950, respectively. Each unit was initially rated at 80 megawatts electrical output capacity. In recent years, however, the performance of the units began to deteriorate due to age-related degradation of the physical plant. In particular, inspections performed by a WEPCO consultant in 1984 revealed extensive cracks originating from the internal surfaces of the rear steam drums and boiler bank boreholes in units 2, 3, 4, and 5, creating significant safety concerns. Because of these safety concerns and other age-related problems, in 1985 the operating levels of units 2, 3, and 4 were reduced, and unit 5 was removed from service. As a result of the plant's deteriorating condition, the maximum rated physical capacities of units 1, 2, 3, and 4 at this time are 45, 65, 75, and 55 megawatts, respectively.

The life extension project includes extensive capital improvements to the common facilities and each of the individual units, including replacement of the rear steam drum in units 2, 3, 4, and 5. The renovation work will restore the physical and operational capability of each unit to its original 80 megawatt nameplate capacity, and extend the useful life of the units well beyond the planned retirement dates that would otherwise apply. Upon completion of the project, WEPCO intends to substantially increase the actual operations at the Port Washington plant.

## II. PSD Applicability

The life extension project at Port Washington is subject to preconstruction review and permitting under the Act's PSD provisions if it is a "major modification" within the meaning of the Act and EPA's regulations. The PSD regulations at 40 CFR 52.21 govern this determination because Wisconsin has been delegated PSD permitting authority under the provisions of 52.21(u). The definition of "major modification" in 52.21(b)(2)(i) requires an analysis of several factors. These factors may be grouped under two general questions. Will the work entail a "physical change in or change in the method of operation of a major stationary source"? If so, will the change "result in a significant net emissions increase of any pollutant subject to regulation under the Act" [see 52.21(b)(2)(i)]? The Port Washington facility is an existing major stationary source because it emits well in excess of the PSD threshold amount for several pollutants.

### A. Physical Change or Change in the Method of Operation

This requirement of a major modification is satisfied if either a physical or operational change would occur.

#### 1. Physical Change

The renovation work called for under the proposed life extension project at Port Washington would constitute a "physical change" at a major stationary source. The clear intent of the PSD regulations is to construe the term "physical change" very broadly, to cover virtually any significant alteration to an existing plant. This wide reach is demonstrated by the very narrow exclusion provided in the regulations: other than certain uses of alternate fuels not relevant here, only "routine maintenance, repair and replacement" is excluded from the definition of physical change [see 52.21(b)(2)(iii)(a)].

In determining whether proposed work at an existing facility is "routine," EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding. In this case, all of these factors suggest that the work required under WEPCO's life extension project appears not to be "routine." The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose

of maintaining the plant in its present condition. Rather, this is a highly unusual, if not unprecedented, and costly project. Its purpose is to completely rehabilitate aging power generating units whose capacity has significantly deteriorated over a period of years, thereby restoring their original capacity and substantially extending the period of their utilization as an alternative to retiring them as they approach the end of their useful physical and economic life. The most important factors that would support these conclusions are outlined below.

a. The project would involve the replacement of numerous major components. The information submitted by WEPCO shows that the company intends to replace several components that are essential to the operation of the Port Washington plant. In particular, as noted above, WEPCO would replace the rear steam drums on the boilers at units 2, 3, 4, and 5. According to WEPCO, these steam drums are a type of "header" for the collection and distribution of steam and/or water within the boilers. They measure 60 feet long, 50.5 inches in diameter, and 5.25 inches thick, and their replacement is necessary to continue operation of the units in a safe condition. In addition, at each of the emissions units, WEPCO plans to repair or replace several other integral components, including replacement of the air heaters at units 1, 2, 3, and 4. The WEPCO also plans to renovate major mechanical and electrical auxiliary systems and common plant support facilities. The WEPCO intends to perform the work over a 4-year period, utilizing successive 9-month outages at each unit.

In its July 8, 1987 application for authority to renovate to the Public Service Commission of Wisconsin (PSC), WEPCO described the life extension project and explained its purpose and necessity. The WEPCO took care to distinguish the proposed renovation work from routine maintenance that did not require PSC approval, explaining that:

. . . [work items] falling into the category of repetitive maintenance that are normally performed during scheduled equipment outages do not require specific commission approval and, accordingly, are not included in this application.

Thus, WEPCO's own earlier characterization of this project supports a finding that the planned renovations are not routine.

b. The purpose of the project is to significantly enhance the present efficiency and capacity of the plant and substantially extend its useful economic life. In its application to the PSC, WEPCO pointed out that due to age-related deterioration, total plant capability had declined by 40 percent. The company noted that the currently planned retirement dates for the Port Washington units, as set forth in its Advance Plan filed with the State, ranged from 1992 to 1999. However, WEPCO asserted that "extensive renovation of the five units and the plant common facilities is needed if operation of the plant is to be continued." In any event, WEPCO stated that the renovation work would allow the Port Washington plant to generate power at its designed capacity until the year 2010, and thus "represents a life extension of the units."

In contrast, in its July 29, 1988 letter to EPA headquarters (pages 9-13), WEPCO characterized the renovation work as the timely, routine correction of equipment problems--principally, the steam drum cracks. However, the information presented leads to the conclusion that this is not the case. While replacement of the steam drums is necessary to restore lost generating capacity, that is not the only work proposed to be done. Based upon maximum capacity figures for past years, it appears that the units had experienced deterioration in physical generating capacity even prior to the discovery of the steam drum cracks in 1984. Thus, WEPCO proposes a wide-ranging project encompassing a broad array of tasks that would not only correct the steam drum problem, but correct other age-related deterioration that is essentially independent of the steam drums. Such other work (e.g., replacement of air handlers) apparently is also necessary as a practical matter to restore original nameplate capacity. Thus, it appears that even if WEPCO had undertaken this renovation work immediately following discovery of the steam drum cracks, it would have been proper to characterize the proposed work as a nonroutine life extension project.<sup>1</sup>

c. The work called for under the project is rarely, if ever, performed. The WEPCO's application to the PSC asserted that the work to be performed under the life extension project was not frequently done:

Generally, the renovation work items included in this application are those that would normally occur only once or twice during a unit's expected life cycle.

The EPA asked WEPCO to submit information regarding the frequency of replacement of steam drums, the largest category of work item called for under the project. WEPCO reported that to date, no steam drums have ever been replaced at any of its coal-fired electrical generating facilities. WEPCO did point out that it had replaced other "headers" comparable in design pressure and function. However, the largest of these was 16 inches in

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<sup>1</sup>It is important to note in this regard that not all renovation, repair, or "life extension" projects would properly be characterized as modifications potentially subject to PSD and NSPS. For example, nonroutine repairs to correct unexpected equipment outages, even of major components such as steam drums, would not be subject to NSPS if they did not increase the maximum capacity of the affected facility as it existed prior to the outage. Conversely, undertaking a program of repair and maintenance properly characterized as routine would not subject a facility to the Act's requirements.

diameter, and EPA does not believe that they are comparable in diameter, wall thickness, function, or importance to the rear steam drums at Port Washington.<sup>2</sup>

d. The work called for under the project is costly, both in relative and absolute terms. The latest information supplied by WEPCO is that the renovation work at Port Washington will cost \$87.5 million, of which at least \$45.6 million is designated as capital costs.<sup>3</sup> The WEPCO reports that, in terms of annualized costs, the renovation project will cost \$7.8 million, as compared to \$51.6 million for a new 400 megawatt plant. Thus, renovation costs represent approximately 15 percent of replacements costs.

## 2. Change in the Method of Operation

The renovation work at Port Washington would not constitute a "change in the method of operation" within the meaning of the PSD regulations. However, it is clear that the "physical change" and "operational change" components of the "major modification" definition are discrete and independent. Thus, as explained below, PSD still applies if there is a physical change that will significantly increase net emissions.

In addition, the regulations exclude from the definition of physical or operational change "an increase in the hours of operation or in the production rate" [see 40 CFR 52.21(b)(2)(iii)(f)]. The preamble to the rule [45 FR 52676, 52704 (August 7, 1980)], makes it clear that this exclusion is intended to allow a company to lawfully increase emissions through a simple change in hours or rate of operation up to its potential to emit (unless already subject

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<sup>2</sup>The WEPCO's July 29, 1988 letter to EPA stated (on page 13) that after further investigation, the company "learned of several examples" of steam drum failure and replacement. However, WEPCO provides no further details, other than noting that in one instance, the drum failed during initial testing and was replaced. Replacement of a failed component at a new facility presumably would not increase emissions from the facility, and probably would be viewed as routine if the alternative was to forego operation of that new facility. Under such circumstances, it is unlikely that the replacement would trigger the Act's requirements.

<sup>3</sup>The WEPCO's July 8, 1987 application to the PSC included a project cost estimate of \$83.9 million, of which \$45.6 million was designated as capital costs. A more recent cost estimate provided to EPA by WEPCO indicates that several work items are now deemed unnecessary, such that the cost of the original project is now estimated at \$70.5 million. However, all but \$89,000 of these reductions are designated as "maintenance" items. The recent submission also relates that the scope of the original project has now been expanded to include flue gas conditioning equipment and associated air heater work costing approximately \$17 million. Although WEPCO has not broken down these additional costs into capital and maintenance (or "expense") expenditures, it would appear that most, if not all, of this additional work would be classified as capital costs. Thus, it is highly likely that actual capital costs would be significantly higher than \$45.6 million.

to any federally enforceable limit) without having to obtain a PSD permit. Thus, emissions increases at Port Washington associated with increased operations would not, standing alone, subject WEPCO to PSD requirements. However, as discussed in greater detail below, the exclusion for increases in hours of operation or production rate does not take the project beyond the reach of PSD coverage if those increases do not stand alone but rather are associated with non-excluded physical or operational changes.

In its March 17, 1988 letter to Region V and its July 29, 1988 letter to EPA Headquarters, WEPCO asserted that the exclusion for increases in operational hours or production rate also would serve to render PSD review not applicable to the renovation work proposed at Port Washington because the project's purpose was to restore the original design capacity of 80 megawatts per unit, but not to exceed that level. However, a plant's original design capacity is irrelevant to a determination of PSD applicability.

#### B. Significant Net Emissions Increase

Under the PSD regulations, whether the life extension project at Port Washington would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical changes resulting from the renovation work. Where, as here, the source has not yet begun operations following the renovation, "actual emissions" following the renovation are deemed to be the source's "potential to emit" [see 40 CFR 52.21(b)(21)(iv)]. Apparently, there would be a "significant net emissions increase" within the meaning of the PSD regulations as a result of the proposed renovations as currently planned, because potential emissions after the project--reflecting the restoration of 80 megawatt capacity at each unit--would greatly exceed representative actual emissions prior to the physical changes. (The fact that the project is intended to restore the plant's original design capacity is irrelevant to that calculation.)<sup>4</sup> If this is so, the project would be a "major modification" subject to PSD review. However, PSD applies on a pollutant-specific basis, and EPA has not been furnished with adequate data regarding the impact of the proposed renovations on the various pollutants to determine whether a significant net emissions increase would indeed occur for any pollutant. Such data must be provided before EPA can make a final determination of PSD applicability.

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<sup>4</sup>The WEPCO also contends (July 29, 1988 letter, page 35) that EPA should instead compare representative actual emissions prior to the change with "projected" actual emissions after the renovations. The PSD regulations provide no support for this view. Where, as here, a source is not currently subject to a PSD permit containing operational limitations, EPA must presume that the source will operate at its maximum capacity and, hence, its maximum potential to emit. However, as discussed below, a source is entitled to reduce its potential to emit by embodying its "projections" of future emissions in federally enforceable restrictions on its operations that may serve to lawfully avoid PSD review.

It is important to note in this regard that WEPCO, at its option, could "net out" of PSD review by accepting federally enforceable restrictions on its potential to emit after the renovation. This could occur through enhancement of existing pollution control equipment, addition of new equipment, acceptance of federally enforceable operational restrictions, or some combination of these measures, limiting potential emissions to a level not significantly greater than representative actual emissions prior to the renovations. Theoretically, WEPCO could minimize the needed restrictions on its potential to emit following the renovations if it could show that some period other than the most recent two years is "more representative of normal source operation" [see 52.21(b)(21)(ii)]. (Obviously, such a showing would be most important with respect to unit 5, because it has been shut down and has had zero emissions since 1985.) Since these matters are within WEPCO's control, you should advise the company to enter discussions with Region V and Wisconsin, as appropriate, if WEPCO desires to "net out" of PSD review.

The WEPCO also argued in its July 29, 1988 letter, at pages 33-41, that even if EPA is correct that the Port Washington life extension project would involve physical changes within the meaning of the PSD regulations, any emissions increases would be due to increased production rates or hours of operation rather than higher emissions per unit of production. Therefore, WEPCO contends that these increases should be excluded from consideration in determining whether a net significant emissions increase and, hence, a major modification, would occur. The WEPCO is incorrect in this regard.

As noted above, the exclusions cited by WEPCO are intended to apply where a source increases emissions by simply combusting a larger amount of fuel, or processing a larger amount of raw materials during a given time period, or by expanding its hours of operation "to take advantage of favorable market conditions" (see 45 FR 52704). In this instance, however, it is obvious that WEPCO's plans to increase production rate or hours of operation are inextricably intertwined with the physical changes planned under the life extension project. Absent the extensive renovations proposed at Port Washington, WEPCO would have little market incentive to, and in part would be physically unable to, increase operations at these aged and deteriorated facilities which, absent the renovations, would likely be retired from service in the near future. Thus, WEPCO's plans call for precisely the type of "change in hours or rate or operation that would disturb a prior assessment of a source's environmental impact [and] should have to undergo [PSD review] scrutiny" (see 45 FR 52704). Conversely, accepting WEPCO's interpretation of the major modification regulations would serve to exclude from consideration all physical or operational changes except those which cause increased emissions per unit of production. Clearly, EPA never intended this result. It would allow, through substantial capital investment, significant expansion of the pollution-emitting capacity and longevity of major industrial facilities without PSD review of the impacts on air quality and opportunities for future economic growth.

### C. Baseline Date

The November 9, 1987 letter from the Wisconsin Department of Natural Resources to Region V asked whether a complete March 28, 1986 PSD permit application for certain work at Port Washington triggered the PSD baseline date, despite the fact that the permit was never issued. The answer to this question is yes. Baseline dates are triggered by the first complete application and remain in effect regardless of whether the application is revised or withdrawn, or whether the permit is finally issued and the source constructed or modified.

### III. NSPS Applicability

The Port Washington renovations are subject to the Act's NSPS if they constitute "modifications" within the meaning of section 111 and 40 CFR Part 60. Under 60.1, the NSPS applies to modifications at an "affected facility." Each unit at Port Washington is properly characterized as an "affected facility" subject to the NSPS at 40 CFR Part 60, Subpart Da, which applies to electric utility steam generating units [see 60.40(a)]. Pursuant to 60.14(a), a modification for NSPS purposes is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies." Increase in emission rate is in turn defined as an increase in kilograms per hour (kg/hr) [see 60.14(b)].

Pursuant to longstanding EPA interpretations, the emission rate before and after a physical or operational change is evaluated at each unit by comparing the hourly potential emissions under current maximum capacity to emissions at maximum capacity after the change. In addition, under the Act's NSPS provisions, only physical limitations on maximum capacity are considered in determining potential emissions at power plants. Thus, any prospective changes in fuel or raw materials accompanying the physical or operational change are not considered in determining maximum capacity. Consequently, 60.14(b)(2) requires that, in conducting emissions tests before and after a change to determine whether an increase in emission rate has occurred, "operational parameters" which may affect emissions must be held constant. Fuel and raw materials are "operational parameters" for this purpose. Similarly, 60.14(e)(4) provides that use of an alternative fuel or raw material which the existing facility was designed to accommodate before the change would not be considered a modification. Thus, for example, a physical change which increases the maximum capacity of the facility would have a corresponding increase in the sulfur dioxide emissions if the facility used fuel with the same sulfur content before and after the change. Such a prospective increase cannot be offset by instead using fuel with a lower sulfur content after the change, because, under the regulations, the facility would always have the option of changing back to the higher sulfur-content fuel at a later date without triggering a modification for NSPS purposes. However, any offsetting reductions in emission rate caused by the concurrent addition of pollution control equipment would be considered in determining whether a physical or operational change results in an increase in emission rate.

The WEPCO contends (July 29, 1988 letter, at pages 20-27) that baseline capacity for the purpose of determining whether an increase in emission rate occurs for purposes of an NSPS modification is the original design capacity of the facility. This is incorrect. The thrust of the NSPS modification provisions is to compare actual maximum capacity before and after the change in question. Thus, original design capacity is irrelevant. The provision in 40 CFR 60.14(b)(2) for manual emission tests to determine whether an increase has occurred clearly contemplates that tests will be done just prior to and after the physical or operational change. The original design capacity of a unit, to the extent it differs from actual maximum capacity at the time of the test due to physical deterioration--and, hence, derating--of the facility, is immaterial to this calculation.

#### A. Physical or Operational Change

As with the Act's PSD provisions, a modification occurs for NSPS purposes, if there is either a physical or operational change [see 40 CFR 60.14(a)].

##### 1. Physical Change

As is the case under the PSD provisions, the proposed renovations at Port Washington would constitute a physical change for NSPS purposes, at least at units 2, 3, 4, and 5. The WEPCO would need to supply more information, if EPA is to make a definitive determination as to unit 1.

The rear steam drums are part of the steam generating unit which constitutes the "affected facility" within the meaning of 40 CFR 60.41(a), and the drum replacements at units 2, 3, 4, and 5 are integral to the planned increase in maximum capacity, which is the purpose of the life extension project. With respect to unit 1, other physical changes would increase maximum capacity from 45 to 80 megawatts. However, there is some question whether those changes, in significant part, would occur at the steam generating unit or will be limited to the turbine/generator set, which is not part of the affected facility. We suggest that you pursue this matter with WEPCO to the extent necessary to determine NSPS applicability regarding unit 1.

As with PSD, the NSPS regulations exclude routine maintenance, repair, and replacement [see 60.14(e)(2)]. However, the renovations at the Port Washington steam generating units are not routine for NSPS purposes for the same reasons--detailed above--that they are not routine for PSD purposes.

##### 2. Operational Change

Operational changes include both increases in hours of operation and increases in production rate. Section 60.14(e)(3) provides that an increase in hours of operation is not, by itself, a modification. However, an increase in production rate at an existing facility constitutes a modification, unless it can be accomplished without a capital expenditure on that facility [see 60.14(e)(2)].

It is highly likely that the life extension project at Port Washington constitutes an operational change under this standard, for two reasons. First, restoring nameplate capacity at units 1, 2, 3, and 4 presumably entails, among other things, changes that will allow the units to combust a larger amount of fuel at maximum capacity through operation at higher working pressures than the units have been able to accommodate in recent years. In the case of unit 5, the renovations presumably involve an increase over zero fuel and pressure. These changes constitute an increase in production rate within the meaning of the regulations. Second, as noted above in the discussion of PSD applicability, this increase in production rate entails substantial investments to improve the capital stock at each affected facility. It appears that these investments are large enough to qualify as "capital expenditures" under the formula specified in 60.2, although WEPCO should be asked to supply actual calculations should this become necessary to determine NSPS applicability.

#### B. Increase in Emission Rate

It seems clear that, absent some creditable offsetting changes, the increases in maximum generating capacity proposed for each of the Port Washington units would represent an increase in the hourly potential emission rate for each pollutant to which a standard applies over the emission rate prior to the renovation. As noted above, burning cleaner fuels would not be creditable. Similarly, voluntarily restricting the production rate following the renovations also would not be creditable for NSPS purposes, because WEPCO could, at a later date, increase production without triggering NSPS [see 40 CFR 60.14(e)(2)]. Accordingly, to avoid triggering NSPS, WEPCO would need to install additional air pollution control equipment, or upgrade existing equipment, to offset the potential emissions increases, such that no increase would occur at maximum capacity. The information submitted indicates that WEPCO may plan some enhancement of the current control equipment, but it is unclear whether this would be adequate to prevent an increase in emission rates. As with PSD applicability, such steps can lawfully avoid NSPS requirements. Accordingly, you should advise the company that it should address these contingencies if it desires EPA to rule on whether WEPCO can avoid NSPS requirements in this fashion.

#### C. Reconstruction

Based upon data provided by WEPCO, it seems that the Port Washington renovations would not qualify as a "reconstruction" for NSPS purposes under 40 CFR 60.15, because the capital cost for the upgrades to each of the five units, while substantial, apparently is less than 50 percent of the fixed capital cost of constructing a comparable, entirely new steam generating unit [see 60.15(b)(1)]. However, the modification and reconstruction provisions of NSPS are independent. The former provisions are intended to apply in circumstances where physical or operational changes which increase emissions make NSPS coverage appropriate at levels well below 50 percent of the capital cost of a replacement unit. Conversely, the reconstruction provisions are aimed at changes to an existing unit irrespective of associated emissions

increases, but trigger NSPS requirements only if the higher 50 percent level is reached. Thus, the suggestion made by WEPCO in its July 29, 1988 letter (at pages 14-15) that EPA must undertake rulemaking to amend the reconstruction regulations before NSPS could be applied to the Port Washington project is not well taken.

#### IV. Conclusion

In adopting the PSD and NSPS programs, Congress sought to focus air pollution control efforts at an efficient and logical point: the making of long-term decisions regarding the creation or renewal of major stationary sources. The Port Washington life extension project, as it has been presented to EPA, would involve a substantial financial investment at pollution-emitting facilities that may significantly increase potential emissions of air pollutants over a period well beyond the current life expectancy of those facilities. If the additional factual information called for in this memorandum shows that emissions increases would indeed result from this project, the project would be subject to PSD and NSPS requirements. Such a result would be in harmony with the broad policy objectives that Congress intended to achieve through these programs.

cc: Gerald Emison, OAQPS  
Alan Eckert, OGC



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

August 29, 1988

MEMORANDUM

SUBJECT: Transfer of Technology in Determining Lowest Achievable Emission Rate (LAER)

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: David Kee, Director  
Air and Radiation Division, Region V

This is in response to your memorandum of August 9, 1988, requesting guidance on the transfer of control technology between source categories for the purpose of determining LAER for a source. This issue was raised by the Michigan Department of Natural Resources in proposing that the control achieved by incineration of oven and spray booth emissions from a truck parts surface coating line (which is considered to be miscellaneous metals) should also be achievable by an automobile surface coating line. You stated that the policy set forth in the January 16, 1979 Federal Register (page 3280) would appear to support this position; however, the sentence at the end of the citation, "Comments on this interpretation and whether it is appropriate to revise the regulatory definition are solicited," suggests that the Environmental Protection Agency might have changed its policy since that time.

This is to reaffirm the policy stated in the January 16, 1979 Federal Register. Our quick investigation of the regulatory history since the publication of that policy indicates that no comments were ever received on that issue. Consequently, the policy has never been revisited. Furthermore, we interpret the last sentence you cited to mean that we would consider whether to redefine LAER to clearly reflect policy, not that we would change the policy on transfer of control technology.

There are two types of potentially transferable control technologies:

1) gas stream controls, and 2) process controls and modifications. For the first type of transfer, we consider the class or category of sources to include any sources that produce similar gas streams that could be controlled by the same or similar technology. The process that generates a volatile organic compound (VOC) laden gas stream, for example, is immaterial. What matters is whether the gas stream characteristics, such as composition and

VOC concentration, are sufficiently similar to a stream from which incineration technology, for example, may be transferred. The same would be true for the control of particulate matter or sulfur dioxide in a gas stream using control devices such as baghouses or scrubbers.

For the second type of transfer, process similarity governs the decision. For example, coating compositions and application technology probably do not vary substantially across the entire class of motor vehicle coating sources. A source within that category would, therefore, have to clearly demonstrate the unique process characteristics that preclude it from using otherwise transferable LAER technology used by a similar but not necessarily identical source. We would be more cautious, however, before grouping more disparate operations, such as coating semiconductor circuit boards, in the same class as coating motor vehicles.

Based on your memorandum, Michigan's application of the technology transfer policy is based on treatment of the first type (i.e., control of the gas stream). Consequently, we agree with their position and your support of it. Incineration of spray booth emissions is a transferable technology in a LAER determination. Whether it is actually selected as LAER depends, of course, on the actual gas stream characteristics. Requiring the same level of control, based on process-related factors such as coating formulation and coating transfer efficiency, would be a more subjective call but is not the focus of your question.

In a follow-up telephone conversation with Gary McCutchen on August 24, 1988, your staff requested our policy on LAER determinations for individual emissions units versus the entire facility. Our policy is that LAER is primarily an emissions unit determination. Each emissions unit must achieve the lowest possible emissions rate. Once LAER has been decided for each emissions unit, the reviewer should then assess LAER for the entire building, structure, facility, or source. If some more effective LAER exists by controlling the entire facility (e.g., the entire building exhaust instead of units within the building), then the "facility-wide" LAER should be considered. However, there are three hurdles to determining "facility-wide" LAER. The first is that an overall limit on multiple units is difficult if not impossible to enforce. The second is that a "facility-wide" LAER is often a combination of emissions unit and facility control, so sources seldom explore this option. The third is that most "facility-wide" LAER approaches proposed by sources are actually bubbles. They do not really represent the sum of the LAER's for the respective units, as explained at the beginning of this paragraph. As you know, LAER cannot be bubbled.

Finally, your staff also asked whether LAER can be considered individually for each aspect of control of a source. Specifically, they wanted to know if LAER for surface coating can be considered first for the composition of the coating, then for the transfer efficiency, and finally for the exhaust gas stream. The answer is yes, although reviewers must be aware that one decision affects the others. For example, a requirement for low VOC paint may result

in gas stream VOC concentrations so low that incineration of the gas stream is not considered feasible in terms of LAER. However, it is acceptable to consider composition from one source, application technology (transfer efficiency) from another source, and incineration from a third source when performing a LAER determination, as long as each of those sources meets the control technology transfer criteria discussed above.

If you have further questions regarding transfer of technology in LAER determinations, please contact Gary McCutchen at FTS 629-5592.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUL 28 1988

MEMORANDUM

SUBJECT: Supplemental Guidance on Implementing the North County  
Prevention of Significant Deterioration (PSD) Remand

FROM: *for* John Calcagni, Director *Kent Berry*  
Air Quality Management Division (MD-15)

TO: Addressees

On September 22, 1987, Gerald Emison issued guidance on implementation of the Administrator's remand decision in the North County PSD permit appeal, PSD Appeal No. 85-2. That document sets forth, in general terms, the essence of the remand--that all pollutants, including those not directly regulated by the Clean Air Act are to be considered in making the best available control technology (BACT) determination for a PSD applicant. Now that the guidance is out, various issues beyond the scope of the September 22, 1987 document have arisen. I am addressing two of them. The first deals with the flexibility that the permitting authority has with respect to pollutants considered and controls selected, while the second involves the level of detail needed in the PSD public notice. \*

Consideration of Air Toxics in the BACT Determination

The BACT requirement is implemented through case-by-case decisionmaking. While this necessarily involves significant use of judgment by the permitting authority, certain policy presumptions apply: that it consider the full range of pollution control options available and choose the most effective means of limiting emissions, subject only to a showing of compelling reasons of economic or energy impracticality. Those are the important lessons underscored by the North County and H-Power remands. The presumption of employing a top-down BACT analysis was further emphasized in Craig Potter's memorandum of December 1, 1987, entitled "Improving New Source Review (NSR) Implementation," to the Regional Administrators. Other policy presumptions were articulated in the September 22, 1987 guidance requiring that the BACT determination for regulated pollutants be sensitized to the control of unregulated air pollutants (including air toxics). \*

The September 22, 1987 policy does not identify which toxic substances, require consideration in the BACT analysis, and at what levels. Among the reasons for this is that the information with respect to the type and magnitude of emissions of noncriteria pollutants for many source categories is limited.

\* see PN 165-87-09-22-020

\*\* see PN 165-87-12-01-022

For example, a combustion source emits hundreds of substances, but knowledge of the magnitude of some of these emissions or the hazard they produce is sparse. While the Environmental Protection Agency (EPA) is pursuing a variety of projects that will help permitting authorities to determine pollutants of concern, EPA believes it is appropriate for agencies to proceed on a case-by-case basis using the best information available. Thus, the determination of whether the pollutants would be emitted in amounts sufficient to be of concern is one that the permitting authority has considerable discretion in making. Reasonable efforts should be made to address these issues. The EPA expects these efforts to include consultation with the Regional Office and with the Control Technology Center (CTC), National Air Toxics Information Clearinghouse, and Air Risk Information Support Center in the Office of Air Quality Planning and Standards (OAQPS) and review of the literature, such as EPA-prepared compilations of emission factors. Source-specific information supplied by the permit applicant is often the best source of information, and it is important that the company be made aware of its responsibility to provide for a reasonable accounting of air toxics emissions.

Similarly, once the pollutants of concern are identified, the permitting authority has flexibility in determining the methods by which it factors air toxics considerations into the BACT determination, subject to the obligation to make reasonable efforts to consider air toxics. Consultation by the review authority with EPA's implementation centers, particularly the CTC, is again advised. One exception to this approach is where a municipal waste combustor is involved. Here, the OAQPS has provided rather detailed guidance regarding pollutants of concern and their control. (See memorandum of June 22, 1987, from Gerald Emison to EPA Regional Air Division Directors.) Similar guidance on other source categories will be developed as appropriate.

It is important to note that several acceptable methods, including risk assessment, exist to incorporate air toxics concerns into the BACT decision. Whatever the methods selected, these serve only to affect the selection of the control strategy. The overall approvability of a project once it applies BACT depends on other criteria, as well, and is outside the scope of the North County remand and this guidance.

#### Level of Detail in Public Notice

The September 22, 1987 guidance strongly emphasizes public participation. The purpose of the PSD public notice is to provide sufficient information as to the type of source involved, and its projected emissions and proposed controls, such that potentially interested citizens will be apprised of the main issues. Individuals wishing to investigate those issues in depth can turn to the technical support document. Our intent regarding air toxics is to provide the public with adequate notice of potential issues. The identification of specific toxic substances and the degree of detail in the notice should be consistent with the concern posed by air toxics.

For example, if there are no air toxics projected to be emitted in amounts sufficient to be of concern to the permitting authority, the notice

can be handled very simply. One way, but by no means the only way, of doing this would be to note that "the [permitting authority] also considered the impact of available control alternatives on emissions of other pollutants, including those not regulated by the Clean Air Act, in making the BACT determination, but found that no such pollutants would be emitted in amounts sufficient to cause concern."

When any toxic pollutants of concern have been identified, it is appropriate that the public be informed of them more directly. A variety of approaches is acceptable. Public notice requirements would be met if all these pollutants are mentioned individually, by name, or addressed by referring to them by groups (e.g., "toxic metals"). It might be reasonable to note the main representative pollutants (e.g., "the State has examined other pollutants of potential concern, including compounds A, B and C"). In short, the permitting authority can provide adequate notice in several ways, including the names of the pollutants at issue and an indication that the compounds are toxic. The notice can be quite brief on this subject (1-2 sentences), deferring any detailed analyses and discussion to the technical support document.

#### EPA Oversight

The EPA Regional Offices are now supporting State and local implementation of PSD review in virtually all cases and are charged with taking enforcement action, as necessary, to ensure proper implementation of the September 22, 1987 policy. Action is contemplated only where basic procedural steps are missed, such as appropriate public notice, or inclusion of discussion of relevant control alternatives in the technical support document, or where the substantive technical analysis is clearly inconsistent with general practice. Priority should be given to those cases in which there is a practical impact to any followup--for example, more effective and affordable controls were not considered.

The OAQPS is taking steps to facilitate continuing effective implementation of this policy. One step toward this goal is the recent addition of this policy in reviews of PSD permits under the National Air Audit System.

Thank you for your progress in carrying out this significant regulatory requirement. If you need further assistance, please contact Michael Trutna at FTS 629-5345 or Kirt Cox at FTS 629-5399.

#### Addressees:

Director, Air Management Division, Regions I, III, and IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides, and Toxics Management Division, Region IV  
Director, Air and Radiation Division, Region V  
Director, Air, Pesticides, and Toxics Division, Region VI  
Director, Air and Toxics Division, Regions VII, VIII, and X

cc: Air Branch Chiefs  
New Source Review Contacts  
Air Toxics Coordinators  
OAQPS Division Directors  
G. Emison  
J. O'Connor  
E. Lillis  
G. McCutchen  
M. Trutna  
K. Cox



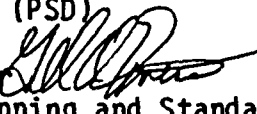
## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUL 5 1988

MEMORANDUM

Subject: Air Quality Analysis for Prevention of Significant Deterioration (PSD)

From: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

To: Thomas J. Maslany, Director  
Air Management Division (3AM00)

Your memorandum of May 9, 1988, pointed out that two different procedures are currently being used by the Regional Offices in certain PSD permit analyses. The inconsistency involves the question of how to interpret dispersion modeling results to determine whether a source will cause or contribute to a new or existing violation of a national ambient air quality standard (NAAQS) or PSD increment. This memorandum serves to resolve the inconsistency by reaffirming previous Office of Air Quality Planning and Standards guidance provided in a December 1980 policy memorandum (attached). [see PN 165-80-12-16-007]

As you know, the regulations for PSD stipulate that approval to construct cannot be granted to a proposed new major source or major modification if it would cause or contribute to a NAAQS or increment violation. Historically, the Environmental Protection Agency's (EPA's) position has been that a PSD source will not be considered to cause or contribute to a predicted NAAQS or increment violation if the source's estimated air quality impact is insignificant (i.e., at or below defined de minimis levels). In recent years, two approaches have been used to determine if a source would "significantly" (40 CFR 51.165(b) defines significant) cause or contribute to a violation. The first is where a proposed source would automatically be considered to cause or contribute to any modeled violation that would occur within its impact area. In this approach, the source's impact is modeled and a closed circle is drawn around the source, with a radius equal to the farthest distance from the source at which a significant impact is projected. If, upon consideration of both proposed and existing emissions contributions, modeling predicts a violation of either a NAAQS or an increment anywhere within this impact area, the source (as proposed) would not be granted a permit. The permit would be denied, even if the source's impact was not significant at the predicted site of the violation during the violation period. You have indicated that this is the approach you currently use.

The second approach similarly projects air quality concentrations throughout the proposed source's impact area, but does not automatically assume that the proposed source would cause or contribute to a predicted NAAQS or increment violation. Instead, the analysis is carried one step further in the event that a modeled violation is predicted. The additional step determines whether the emissions from the proposed source will have a significant ambient impact at the point of the modeled NAAQS or increment violation when the violation is predicted to occur. If it can be demonstrated that the proposed source's impact is not "significant" in a spatial and temporal sense, then the source may receive a PSD permit. This approach is currently being used by Region V and several other Regional Offices, and is the approach that you recommend as the standard approach for completing the PSD air quality analysis.

In discussing this matter with members of my staff from the Source Receptor Analysis Branch (SRAB) and the Noncriteria Pollutant Programs Branch (NPPB), it appears that different guidance has been provided, resulting in the two separate approaches just summarized. We have examined the history and precedents which have been set concerning this issue. I also understand that this issue was discussed extensively at the May 17-20, 1988 Regional Office/State Modelers Workshop, and that a consensus favored the approach being used by Region V and several other Regions. Based on this input, as well as your own recommendation, I believe the most appropriate course of action to follow is the second approach which considers the significant impact of the source in a way that is spatially and temporally consistent with the predicted violations.

By following the second approach, three possible outcomes could occur:

(a) First, dispersion modeling may show that no violation of a NAAQS or PSD increment will occur in the impact area of the proposed source. In this case, a permit may be issued and no further action is required.

(b) Second, a modeled violation of a NAAQS or PSD increment may be predicted within the impact area, but, upon further analysis, it is determined that the proposed source will not have a significant impact (i.e., will not be above de minimis levels) at the point and time of the modeled violation. When this occurs, the proposed source may be issued a permit (even when a new violation would result from its insignificant impact), but the State must also take the appropriate steps to substantiate the NAAQS or increment violation and begin to correct it through the State implementation plan (SIP). The EPA Regional Offices' role in this process should be to establish with the State agency a timetable for further analysis and/or corrective action leading to a SIP revision, where necessary. Additionally, the Regional Office should seriously consider a notice of SIP deficiency, especially if the State does not provide a schedule in a timely manner.

(c) Finally, the analysis may predict that a NAAQS or increment violation will occur in the impact area and that the proposed source will have a significant impact on the violation. Accordingly, the proposed source is considered to cause, or contribute to, the violation and cannot be issued a permit without further control or offsets. For a new or existing NAAQS

violation, offsets sufficient to compensate for the source's significant impact must be obtained pursuant to an approved State offset program consistent with SIP requirements under 40 CFR 51.165(b). Where the source is contributing to an existing violation, the required offsets may not correct the violation. Such existing violations must be addressed in the same manner as described in (b) above. However, for any increment violation (new or existing) for which the proposed source has a significant impact, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source (see 43 FR p.26401, June 19, 1978; and 45 FR p.52678, August 7, 1980).

Your memorandum also states that other air quality analysis issues exist within the NSR program which need consistent national guidance. You recommend a more coordinated effort between SRAB and NPPB to review outstanding NSR issues. We agree; however, rather than establishing a formal work group as you propose, we are optimistic that the formal participation of representatives of the NSR program in the Modeling Clearinghouse will help resolve coordination problems. Earlier in the year, the Modeling Clearinghouse was officially expanded to include representation from the NPPB to coordinate PSD/NSR issues which have a modeling component.

I trust that this is responsive to the concerns which you have raised. By copy of this memorandum, we are also responding to a Region V request for clarification on the same issue (memorandum from Steve Rothblatt to Joe Tikvart/Ed Lillis, dated February 18, 1988).

Should you have any further questions concerning this response, please feel free to contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

Attachment

cc: Air Division Directors, Regions I-X  
Air Branch Chiefs, Regions I-X  
D. Clay  
J. Calcagni  
J. Tikvart  
E. Lillis  
G. McCutchen  
D. deRoeck



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 7 1988

MEMORANDUM

SUBJECT: Response to Request for Prevention of Significant  
Deterioration (PSD) Applicability Determination

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: David Kee, Director  
Air and Radiation Division (5AR-26)

I have reviewed your memorandum of May 2, 1988 concerning the issue of whether use of tire-derived fuel (TDF) at existing steam generating facilities should be classified as an alternative fuel generated from municipal solid waste. My conclusion supports your preliminary determination that TDF does not, by itself, constitute municipal solid waste in accordance with the definition contained in paragraph (b) of 40 CFR 60.51. I also do not consider TDF to be "generated from" municipal solid waste within the context of the PSD exemption for major modifications. Consequently, the use of TDF as an alternative fuel would not qualify for a PSD exemption under subparagraph (b)(2)(iii)(d) of 40 CFR 52.21.

My staff has reviewed the brief yet pertinent language contained in two Federal Register preambles which leads us to conclude that the intent in establishing the subject exemption was to address fuel consisting of either the total collected mixture of municipal type waste, i.e., municipal solid waste, or the bulk of such mixture excluding the noncombustible waste fraction, i.e., refuse derived fuel. The PSD exemption is explained briefly in the preamble to the 1980 PSD amendments as applying to "fuel derived in whole or in part from municipal solid waste" [45 FR 52698, August 7, 1980]. The concept of "derived in whole" appears to refer to a fuel prepared from the complete content of municipal solid waste. However, the meaning of "derived . . . in part" is not as apparent.

We have also relied on the preamble discussion of the same exemption contained in the 1979 Emission Offset Interpretative Ruling. In that preamble, the Environmental Protection Agency (EPA) refers to the use of "municipal solid waste (including refuse derived fuel . . .)" [44 FR 3278, January 6, 1979]. Taken together, these brief explanations strongly suggest

that EPA's concern is for the alternative use of municipal solid waste which has already been collected, and not any particular individual component which might be utilized as a fuel by itself. Since nearly everything can be found in municipal waste from used oil to plastics to pesticides, the argument that any combustible material found in municipal waste should qualify for this exemption when recovered and burned alone is somewhat unrealistic.

Therefore, the use of a particular material as an alternate fuel, even if it is found in municipal solid waste, does not qualify for the PSD exemption and should be reviewed to determine whether an increase in actual emissions would result. In the event that such alternative fuel would result in a significant net emissions increase, then its use should be reviewed as a major modification.

Should you have any further questions or comments concerning this determination, please contact Dan deRoeck at FTS 629-5593.

cc: E. Lillis  
New Source Review Contacts  
Air Branch Chiefs, Regions I-X

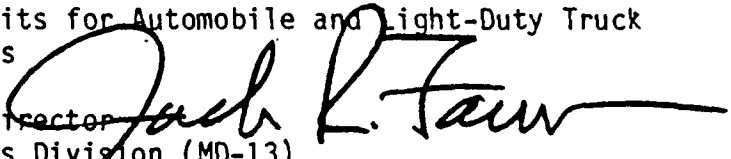


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

APR 25 1988

MEMORANDUM

SUBJECT: LAER Emission Limits for Automobile and Light-Duty Truck  
Topcoat Operations

FROM: Jack R. Farmer, Director   
Emission Standards Division (MD-13)

TO: See Below

At the March Air Directors' meeting in Seattle, Washington, some questions were raised concerning the Agency's current position regarding Lowest Achievable Emission Rate (LAER) emission limits for automobile and light-duty truck topcoat operations. This memorandum describes our position on this issue.

The LAER emission limit for automobile and light-duty truck topcoat operations should be at least as stringent as 12.26 pounds of volatile organic compound (VOC) per gallon of solids deposited with compliance on a daily basis using actual measured transfer efficiency values. This limit should apply regardless of the material of construction (substrate) of the vehicles being coated (e.g. metal, plastic or combination.)

The basis for citing this emission limit as LAER is the permit (see attachment) for Subaru/Isuzu in Lafayette, Indiana. The permit for Toyota in Georgetown, Kentucky, may also be used to support this limit.

When the industry has argued for less stringent emission limits because of the type of coating or the type of substrate planned, we have maintained that "painting cars is painting cars," and these factors do not justify less stringent emission limits. We have taken this position because technology and manufacturing processes constantly change and evolve; the manufacturer is responsible for ensuring that any new process meets environmental as well as product requirements.

The procedure which we feel is most appropriate for determining compliance with this LAER limit is the protocol which we have been developing in conjunction with the Motor Vehicle Manufacturers Association (MVMA). We met with the MVMA on March 22, 1988, to discuss the draft

protocol. We are making some changes in the protocol based upon the discussion at this meeting. We expect to have the final protocol ready soon. If you have an immediate need to provide a compliance procedure for a topcoat LAER determination, please contact Dave Salman at FTS-629-5417.

Attachment

Addressees:

Irwin Dickstein, Reg VIII  
Louis Gitto, Reg I  
William Hathaway, Reg VI  
David Howekamp, Reg IX  
David Kee, Reg V  
Thomas Maslany, Reg III  
Gary O'Neal, Reg X  
Conrad Simon, Reg II  
Winston Smith, Reg IV  
William Spratlin, Reg VII

cc: Mike Alushin, LE-134A  
John Calcagni, MD-15  
Jerry Emison, MD-10  
Joan LaRock, A-101  
John Seitz, EN-341

bcc:

Wayne Aronson, Reg IV  
Tom Helms, MD-15  
Lars Johnson/Brent Marable, Reg V  
Paul Kahn, Reg II  
Vishnu Katari, EN-341  
Floyd Ledbetter, Reg IV  
Nancy Mayer, MD-15  
Gary McCutchen, MD-15  
Mindy Moore/Lee Hanley, Reg VIII  
Bob O'Meara/Tom Elter, Reg I  
Bill Repsher, LE-134A  
Steve Rosenthal, Region V  
Cynthia Stahl, Reg III  
David Sullivan/Willie Kelly, Reg VI  
Jean Thompson, Reg III  
Mary Tietjen, Reg VII  
Tim Williamson, Reg I  
Bill Wruble/Dennis Beauregard, Reg IX

# CONSTRUCTION PERMIT

Control No. 000547

## OFFICE OF AIR MANAGEMENT

Page 1 of 12

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

105 South Meridian Street  
Indianapolis, Indiana 46223

Subaru-Isuzu Automotive Incorporated, Indiana Plant  
Intersection of State Road 38  
and  
Interstate 65  
near Lafayette, Indiana

RECEIVED

OCT 08 1987

is hereby authorized to construct

a new automobile and light duty truck assembly plant at the above location southeast of Lafayette, Indiana, consisting of a stamping shop, body shop, paint shop, and trim and final assembly shop. Emission of air pollutants will occur primarily from metal working operations, surface coating operations and combustion of natural gas.

This permit is issued under provisions of Rule 325 IAC 2-1.1, with findings and conditions listed on the attached pages.

Identification No. PSD (79) 1651

Date Issued July 30, 1987

Expiration Date N/A

Issued by Nancy A. Maloney  
Commissioner

FROM EPA REG. 5 CHIGO. 03/18/87 01:56 P. 3

## Subaru Isuzu Automotive Inc, Indiana Plant

### OPERATION CONDITIONS

#### Volatile Organic Compounds(VOC)

##### VOC Emission Limits

1. That VOC emissions shall not exceed the rates shown in the table below. These limits are pursuant to the following Rules:

325 IAC 2-2-3(2) PSD Best Available Control Technology requirements (BACT);

325 IAC 12.1-35 New Source Performance Standards for Automobile and Light Duty Truck Coating Operations (40 CFR 60.390-398)(NSPS);

325 IAC 8 Volatile Organic Compound Emission Limits(IAC 8)

#### Surface Coating VOC Emission Limits

<u>Coating Operation</u>	<u>Rule</u>		
	<u>NSPS</u>	<u>BACT</u>	<u>IAC 8</u>
Body Prime	0.16 kg VOC/l appl.solds	0.062 kg VOC/l appl.solds	0.14 kg VOC/l ctg <sup>1,2</sup> ✕ (IAC 8-2-2)
Chassis Prime	NA (Not applicable)	0.049 kg VOC/l appl.solds	0.38 kg VOC/l ctg <sup>1</sup> (IAC 8-2-10)
PVC Undercoat	NA	0.03 kg VOC/l ctg solids	0.42 kg VOC/l coating <sup>1</sup> (IAC 8-2-10)
Stoneguard	NA	0.87 kg VOC/l appl solids	0.87 kg VOC/l appl.solds <sup>3</sup> (IAC 8-2-10)
Primer Surfacer	1.40 kg VOC/l appl solids	0.95 kg VOC/l appl solids	1.83 kg VOC/l appl solids <sup>2</sup> ✕ (IAC 8-2-2)
Topcoats	1.47 kg VOC/l appl solids <sup>3</sup>	1.47 kg VOC/l appl solids <sup>3</sup>	1.83 kg VOC/l appl solids <sup>2,4</sup>

### Gasoline Unloading and Vehicle Fueling

9. That pursuant to 325 IAC 8-4-6 the gasoline storage tanks shall be equipped with submerged fill pipes and a (Stage I) vapor balance system for gasoline truck unloading. Tank trucks shall not be unloaded unless they are properly equipped and connected to the vapor balance system and the system is in operation.

10. That the vehicle gasoline fueling operation be equipped with a (Stage II) vapor balance control system and that this system be in operation whenever vehicles are being fueled.

### Oven Afterburners

11. That the following oven afterburners shall be in service at all times that the associated oven is in operation:

- a. ED Body Prime Oven Afterburner
- b. ED Chassis Prime Oven Afterburner
- c. Intermediate Oven Afterburner
- d. Topcoat Oven No.1 Afterburner
- e. Topcoat Oven No.2 Afterburner
- f. Twotone Oven Afterburner
- g. Plastic Coating Oven Afterburner

12. That the above afterburners shall maintain a minimum combustion temperature and residence time of 1400°F and 0.5 seconds respectively and achieve 90% destruction efficiency. Records of afterburner operation and combustion temperature shall be maintained and made available upon request.

### VOC Compliance Determinations

13. That compliance with the NSPS emission limitations above shall be determined pursuant to 40 CFR 60.393 based on the monthly volume weighted average mass of VOC emitted per volume of applied solids using the 60.393(c)(1)(i) table transfer efficiencies.

\* 14. That compliance with all BACT and 325 IAC 8 emission limitations expressed as kg VOC/liter applied solids shall be determined on a daily basis based on actual daily coating usage. Actual transfer efficiency and actual afterburner capture and destruction efficiency data shall be determined in the performance testing specified in Condition 21. Coating solvent content shall be determined by ASTM Method D2369-81 (w/ 1 hour bake).

15. That compliance with all BACT and 325 IAC 8 emission limitations expressed as kg/l coating solids shall be determined on a daily basis based on actual daily coating usage, using coating solvent content and volume % solids. Coating solvent content shall be determined by ASTM Method D2369-81 (w/ 1 hour bake). Coating volume % solids shall be based on manufacturers formulation data.

16. That compliance with emission limitations expressed as kg/l coating (minus water) shall be determined by ASTM Method D2369-81(w/1 hour bake).

17. That for operations where compliance is based on daily averaging of more than one coating, the methodology used for determining the average VOC emission rate shall be a weighted average by volume of all coatings based on actual daily coating usage and shall be submitted to and approved by the Commissioner prior to start of commercial operation of the plant.

18. That compliance with emission limits expressed as lbs/day shall be based on actual daily coating usage data and on coating solvent content determined by ASTM Method D2369-81(w/ 1 hour bake). For operations with oven afterburners actual control efficiencies shall be used to calculate final emission rates if the afterburner is relied upon to establish compliance.

19. That VOC content of coatings may be determined based on a combination of analytical and formulation data in accordance with 325 IAC 8-1.1-2.

#### **VOC Testing Requirements**

20. That pursuant to 40 CFR 60.393 monthly NSPS performance tests for prime coat, guidecoat and topcoat operations shall be performed to document compliance with the NSPS limits. Pursuant to 40 CFR 60.8a, the initial performance test shall be performed within 60 days of achieving maximum production rate but no later than 180 days after initial startup.

21. That within 60 days of achieving maximum production rate but no later than 180 days after start of commercial production the following shall be established using test procedures and methodology submitted to and approved by the Commissioner prior to testing:

a. Actual overall coating solids transfer efficiency of the system used to apply each coating type for coating operations with emission limits expressed as kg/l appl. solids.

b. Afterburner capture efficiency and destruction efficiency for all ovens equipped with afterburners. Destruction efficiency testing shall be performed pursuant to 325 IAC 3-2.

#### **VOC Recordkeeping and Reporting Requirements**

22. That daily records shall be maintained of all coatings and solvents used. These records shall be made available upon request and maintained for the most recent two-year period.

23. That records shall be maintained of purge solvent used, reclaimed and disposed of. These records shall be made available upon request and maintained for the most recent two-year period.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

OCT 6 1987

MEMORANDUM

SUBJECT: Emissions from Landfills

FROM: Gerald A. Emison, Director  
Office of Air Quality Planning and Standards (MD-10)

TO: David P. Howekamp, Director  
Air Management Division, Region IX

This is in response to your September 1, 1987, memorandum requesting clarification regarding how landfill emissions should be considered for the purpose of determining nonattainment new source review (NSR) applicability under 40 CFR 51.18.

As you are aware, a landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tons per year applicable major source cutoff for the pollutant for which the area is nonattainment. Fugitive emissions are defined in 40 CFR (j)(1)(ix) as "... those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Landfill emissions that could reasonably be collected and vented are therefore not considered fugitive emissions and must be included in calculating a source's potential to emit.

For various reasons (e.g., odor and public health concerns, local regulatory requirements, economic incentives), many landfills are constructed with gas collection systems. Collected landfill gas may be flared, vented to the atmosphere, or processed into useful energy and products such as high-Btu gas, steam, or electricity. In these cases, for either an existing or proposed landfill, it is clear that the collected landfill gas does not qualify as fugitive emissions and must be included in the source's potential to emit when calculating NSR applicability.

The preamble to the 1980 NSR regulations characterizes nonfugitive emissions as "... those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Although there are some exceptions, it is our understanding that landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions and are not included in the NSR applicability determination. This does not mean that the applicant's decision on whether to collect emissions is the deciding factor; in fact, the reviewing authority makes the decision on which emissions would ordinarily be collected and which therefore are not considered fugitive emissions.

It should be noted that NSR applicability is pollutant specific. Therefore, where the landfill gas is flared or otherwise combusted or processed before release to the atmosphere, it is the pollutant released which counts toward NSR applicability. As an example, landfill gas is composed mostly of volatile organic compounds, but when this gas is burned in a flare, it is the type and quantity of pollutants in the exhaust gas (e.g., nitrogen oxides and carbon monoxide) that are used in the NSR applicability determination.

If you have any questions regarding this matter, please contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

cc: Chief, Air Branch  
Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

AUG 05 1987

MEMORANDUM

SUBJECT: Implementation of Revised Prevention of Significant Deterioration (PSD) Program for Particulate Matter

FROM: *for* *James S. Tyler*  
Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)

TO: Director, Air Management Division  
Regions I, III, and IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Management Division  
Regions IV  
Director, Air and Radiation Division  
Region V  
Director, Air, Pesticides, and Toxics Division  
Region VI  
Director, Air and Toxics Division  
Regions VII, VIII, and X

As you know, the revisions to the national ambient air quality standards (NAAQS) for particulate matter, published in the Federal Register on July 1, 1987, and effective on July 31, 1987, will cause significant changes to the way that EPA and affected State and local agencies implement the national PSD program with respect to particulate matter. While it is clear that EPA must begin to impose the new PM<sub>10</sub> provisions under its Part 52 PSD regulations beginning on July 31, 1987, we do not have a good understanding as to what kind of particulate matter analyses will be required by the State and local agencies who have PSD responsibility [either via delegation or State implementation plan (SIP) approval] once the PM<sub>10</sub> NAAQS become effective. The purpose of this memo is: (1) to highlight the potential differences as to when the new PM<sub>10</sub> indicator must be subject to PSD review under EPA's Part 52 PSD regulations versus the PSD rules in approved SIP's, and (2) to encourage you to communicate with your affected State and local agencies (if you have not already done so) to ensure that all parties understand their PSD role concerning the new PM<sub>10</sub> requirements.

There are three basic implementation schemes under which the national PSD program is currently being carried out. Below, for each implementation scheme, I have summarized the way that the PSD program for particulate matter should be carried out from the date the new PM<sub>10</sub> indicator became effective (July 31, 1987). I have also indicated the communicative

actions that you will need to take to ensure that we understand the role of the affected State or local agencies in carrying out the PM<sub>10</sub> revisions under PSD in the upcoming months.

#### Case 1. EPA implementation of PSD

In the areas where EPA has sole responsibility for PSD review under the requirements at 40 CFR 52.21, the new PM<sub>10</sub> indicator must be reviewed as a PSD pollutant as of July 31, 1987, the date the revised NAAQS for particulate matter became effective under 40 CFR 50.6. On and after July 31, 1987, EPA Regional Offices must regard PM<sub>10</sub> as a pollutant subject to regulation under the Clean Air Act (Act). As such, PSD review must apply in general to any PM<sub>10</sub> emitted in significant amounts by a PSD source. See, for example, the requirements for best available control technology (BACT) at 40 CFR 52.21(j).

Another part of the PSD requirements, under 40 CFR 52.21(d), requires that no concentration of a pollutant from a proposed source or modification can cause a violation of a primary or secondary NAAQS. Beginning on July 31, 1987, EPA is legally obligated to protect the PM<sub>10</sub>-based NAAQS under its Part 52 PSD regulations; the total suspended particulates (TSP) NAAQS will no longer exist under 40 CFR Part 50. However, the TSP PSD increments are still in effect and must continue to be protected; there are, as yet, no PM<sub>10</sub> increments.

Implementation of PSD will follow the newly-amended Part 52 PSD regulations, which now contain a new PM<sub>10</sub> significant emission rate and air quality concentration (the latter for enabling monitoring exemptions), a special PM<sub>10</sub> monitoring phase-in schedule, and PM<sub>10</sub> grandfathering provisions. All PSD applicants who are not eligible to be grandfathered must be instructed to include as part of their particulate matter analysis a review of both TSP and PM<sub>10</sub> as appropriate under the new significance criteria. Accordingly, an applicant may be required to include a BACT analysis for both PM<sub>10</sub> and TSP, and may have to demonstrate that the source will not cause or contribute to a violation of the PM<sub>10</sub> NAAQS and the TSP increments.

#### Case 2. State implementation of PSD under EPA delegation

In States where the PSD program is carried out wholly or in part by the State or local agency under a delegation of EPA's PSD responsibility, the requirements contained in EPA's PSD regulations at 40 CFR 52.21 will apply to PM<sub>10</sub>. All PSD applicants who are not eligible to be grandfathered must be instructed to meet the applicable PSD provisions for TSP and PM<sub>10</sub> as of July 31, 1987, as in case 1.

Delegate agencies should be encouraged to continue implementing the PSD program. It is important, therefore, for you to determine whether the existing delegation agreement for each delegate agency in your Region is adequate to cover PSD review for the new PM<sub>10</sub> indicator, and whether the delegate agency intends to immediately carry out the required PM<sub>10</sub>

analyses. In the event that the delegation agreement is not adequate, you should seek to negotiate an updated agreement to cover the new PM<sub>10</sub> responsibilities. I urge you to initiate communications with the appropriate agencies as soon as possible in light of the July 31, 1987, implementation date for PM<sub>10</sub>.

If the State chooses not to modify the agreement at this time, then the Region must undertake responsibility for the PSD review for at least those PSD sources that would have the potential to emit significant amounts of PM<sub>10</sub> emissions. Any change to a delegation agreement, whether it be to expand the current delegation authority or to withdraw a portion of the State's authority, must be noticed in the Federal Register.

Case 3. State implementation of PSD under approved SIP

In States where an approved PSD SIP currently exists, each State should revise its rules to fully address the new PM<sub>10</sub> indicator by May 1, 1988. Until the new PSD procedures are approved by EPA as SIP revisions, States must continue to implement their existing PSD rules for particulate matter. The EPA will assume at this point that under their current PSD SIP's, States will continue to review only TSP as the regulated indicator for particulate matter until a SIP revision is submitted to EPA for approval.

Some States, however, may find that the language in their existing rules is sufficiently open-ended to enable (or require) them to review PM<sub>10</sub> as a regulated form of particulate matter from the date the PM<sub>10</sub> NAAQS became effective (July 31, 1987). A survey of some State regulations suggests that some States may also be authorized to provide such immediate protection of the PM<sub>10</sub> NAAQS.

The possibility that a State PSD rule could already cover PM<sub>10</sub> is based on the fact that some States have used the phrase "each pollutant subject to regulation under the Act" in several PSD provisions, e.g., the requirement for BACT. This phrase could be interpreted to mean that when EPA promulgates requirements for a new pollutant (or in this case, a new regulated form of a pollutant) in accordance with the Act, such pollutant could immediately be considered to be a regulated pollutant pursuant to their PSD rule.

Similarly, the section of a State regulation which defines "NAAQS" (or equivalent terminology) could be considered sufficiently open-ended in some cases to enable a State to immediately incorporate EPA's revised particulate matter NAAQS based on the new PM<sub>10</sub> indicator.

Based on the considered possibilities, I foresee at least three ways that States may implement their PSD programs for particulate matter under the existing language of their PSD rule:

1. No immediate PM<sub>10</sub> review (TSP remains as the only indicator for particulate matter until SIP revisions are approved);

2. A PSD review for PM<sub>10</sub> only as a regulated pollutant (BACT analysis required for PM<sub>10</sub>, but TSP NAAQS remain in effect); or
3. A PSD review for PM<sub>10</sub> as a regulated pollutant, with PM<sub>10</sub> also the indicator for the NAAQS.

Of course, regardless of which case may apply, TSP must also continue to be reviewed as a regulated pollutant and as the indicator for the PSD increments. In no case, however, will EPA have a responsibility to review PM<sub>10</sub> under a PSD permit issued pursuant to an approved PSD SIP.

There are at least two reasons why it is important to understand how the States intend to implement their existing PSD SIP with respect to particulate matter. First, PSD applicants must know what preconstruction analyses will be required of them. Second, once a State makes a determination as to what the current rules will require, EPA will expect all PSD permits issued pursuant to such rule to be consistent with that determination. For these reasons, I believe that it is necessary for each Regional Office to notify affected State and local agencies concerning their need to determine how they intend to implement their PSD requirements for particulate matter based on the current language under the approved SIP. The State or local agency determinations should be submitted to EPA in writing and will be used by EPA to interpret the applicability of the current PSD SIP's to PM<sub>10</sub>.

During the next several months, it will also be appropriate to review the preliminary determinations being issued by State and local agencies to ensure that the particulate matter analyses are being performed in accordance with their written interpretation of the existing PSD rules. Thus, if you are not already requiring that such preliminary determinations be routinely submitted to you, I urge you to do so at this time.

In order that I might be informed of your progress in determining the status of existing delegations and approved PSD SIP's, please have the person assigned this task contact our New Source Review Section personnel within the next several weeks. In the meantime, if you have any questions concerning PM<sub>10</sub> implementation under PSD or need further guidance regarding the issues involving PSD delegations or existing SIP language, please call Dan deRoeck at FTS 629-5593 or Gary McCutchen at FTS 629-5592.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JAN 29 1987

*5-2-87*MEMORANDUM

SUBJECT: Implementation of the Revised Modeling Guideline for Prevention of Significant Deterioration (PSD)

FROM: Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)

TO: Director  
Air Division, Regions I-X

Section 165(e)(3)(D) of the Clean Air Act (Act) requires the Administrator to adopt regulations specifying with reasonable particularity models to be used to comply with the Act's PSD requirements. To carry out these requirements, the 1978 "Guideline on Air Quality Models" was incorporated by reference in 40 CFR 51.24 (now renumbered 51.166) and 40 CFR 52.21. Many States have adopted this guideline in their PSD regulations.

On September 9, 1986 (51 FR 32176), EPA promulgated amendments to 40 CFR 51.24 (now renumbered 51.166) and 52.21 to substitute by reference the "Guideline on Air Quality Models (Revised)," EPA 450/2-78-027R, in these regulations. This change became effective October 9, 1986. This means that all modeling done pursuant to the PSD requirements must either comply with the 1986 version of the modeling guideline or be specifically approved by EPA; modeling done pursuant to the 1978 guidance may no longer be accepted.

The PSD permits are reviewed by EPA, State, or local agency personnel depending on whether and to whom EPA has transferred the PSD program. This program transfer could take the form of: (1) a delegation where the State or local authority agrees to act in the Administrator's place to apply the requirements of 40 CFR 52.21 regulations to sources, or (2) a State implementation plan (SIP) where States have adopted their own PSD regulations which comply with 40 CFR 51.166 (formerly 40 CFR 51.24). For the few areas of the country where EPA has not transferred the PSD program, EPA applies 40 CFR 52.21 regulations to permit PSD sources. The mechanism of implementing the revised modeling guideline is different for each of these situations.

### Areas where EPA Has PSD Permitting Authority

(1) As of October 9, 1986, EPA should not issue a PSD permit when a model other than that contained in the revised guideline is used to comply with the air quality impact analysis. An exception is if EPA approval was obtained for a specific case. The regional meteorologist should carefully review all pending PSD permit applications to insure that current modeling guidance has been used.

### States with PSD Permitting Authority by Delegation

For both full and partial delegations, Regional Offices should initiate updating of the delegation by informing the relevant reviewing authority that the revised modeling guideline has been promulgated in 40 CFR 52.21. The Region should then determine which type of delegation agreement exists for each State and take one of the following actions:

(2) For State and local agencies which have a delegation agreement that specifies exactly which version of 40 CFR 52.21 (e.g., January 1, 1986) is to be used when processing PSD permits, the delegation agreement must be amended to include the revised modeling guideline (e.g., as of October 9, 1986).

(3) For State and local agencies which have a delegation agreement that requires incorporating all revisions to 40 CFR 52.21 into their PSD permitting process, EPA should notify the State or local agencies that all modeling done pursuant to the PSD regulations must comply with the revised modeling guideline or must receive prior approval from EPA.

Regional Offices should publish a Federal Register notice announcing which States have modified their delegation agreements to incorporate the revised modeling guideline and which States have incorporated the revised modeling guideline into their PSD permitting process.

### States with PSD Permitting Authority by SIP

For States that have PSD permitting authority by SIP's, the Regions should review the State and local regulations to determine whether the existing regulations preclude the use of the revised modeling guideline (e.g., rules which reference the 1978 guideline explicitly or incorporate 40 CFR 52.21 by reference as of a date prior to September 9, 1986) or do not explicitly preclude the use of the revised modeling guideline (e.g., a general statement that restricts air quality modeling to EPA-approved models). The State or local agency must then take one of the following actions:

(4) State or local agencies with SIP's which preclude the use of the revised guideline must revise their SIP to remove the reference to the old modeling guideline and replace it with a reference to the revised modeling guideline.

(5) State and local agencies that do not explicitly preclude the use of the revised modeling guideline can either revise their PSD regulation to explicitly include the revised modeling guideline or submit an enforceable letter of commitment in lieu of a regulatory revision. This commitment letter must mention that the generalized language now means that all PSD permit applicants must use the revised guideline models or models otherwise approved by EPA.

Obviously, all SIP revisions must be accomplished through the regular Federal Register process. All letters of commitment must also be incorporated by reference into the SIP. To conserve resources, Regional Offices can process as direct final action SIP packages that contain only revisions aimed at implementing the revised modeling guideline.

#### Current SIP Processing

Even though EPA stated in the September 9, 1986, Federal Register that the revised modeling guideline would become effective on October 9, 1986, the Act gives States 9 months (until July 9, 1987) to make the necessary changes in their programs. To avoid disapproving the SIP revision, EPA should conditionally approve SIP actions where the State has committed to: (a) revise their regulations in a timely manner, and (b) limit PSD modeling to analyses which comply with the revised modeling guideline or models otherwise approved for use by EPA. No PSD SIP will be approved unless it incorporates the revised modeling guideline.

#### Follow-up

If a State refuses to make the necessary regulatory changes or commitments, EPA will withdraw permitting authority from the State for any source using a nonguideline model without prior EPA approval. The EPA will then promulgate 40 CFR 52.21 into the SIP for such permits so that EPA retains permitting authority for those permits. This, of course, requires full rulemaking action in the Federal Register.

By the end of February 1987, please let Nancy Mayer know: (a) which category (1, 2, 3, 4, or 5 above) applies to each of your States; (b) what actions are planned to incorporate the new guideline into each State's PSD programs; and (c) a schedule of when these actions will occur. Ms. Mayer may be reached at:

FTS 629-5591  
Mail Drop 15  
Research Triangle Park, NC 27711

cc: NSR Contacts, Regions I-X  
Chief, State Air Programs Branch  
Region I  
Chief, Technical Support Branch  
Region I  
Chief, Air Programs Branch  
Regions II, III, IV, VI, VIII, IX, and X  
Chief, Air and Radiation Branch  
Region V  
Chief, Air Branch  
Region VII  
N. Mayer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

DEC 1 1986

MEMORANDUM

SUBJECT: Need for Emission Cap on Complex Netting Sources

FROM: Darryl D. Tyler, Director *Darryl D. Tyler*  
Control Programs Development Division (MD-15)

TO: David Kee, Director  
Air Management Division, Region V (5AR-26)

This is in response to your correspondence dated November 4, 1986, concerning a request from a State to provide further guidance on: (1) the appropriate context for defining an emissions decrease for prevention of significant deterioration (PSD), and (2) the level of administrative effort appropriate to make an emissions decrease permanent and enforceable. Your example involves an applicant proposing to modify a source and wanting to net out of PSD review by taking federally enforceable restrictions on existing units.

The PSD rules at 40 CFR 52.21(b)(2)(i) define a major modification as

. . . any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

Net emissions increase is defined as:

. . . the amount by which the sum of the following exceeds zero: (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

Major modifications are, therefore, determined by examining changes in actual emission levels at the source. Actual emissions are defined as:

. . . the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs(b)(21)(ii) through (iv) . . .

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.

(iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

From subparagraph (iv), it is clear that a new unit's actual rate of emissions is equal to its potential to emit. Any federally enforceable physical and operational limitations which an applicant is willing to accept on the new emissions unit is considered in evaluating the new unit's potential to emit.

To determine the actual emissions decrease from the shutdown emissions unit, the reviewing agency applies the method defined in subparagraph (ii). Specifically, the average rate, in tons per year, at which the unit actually emitted during a 2-year period prior to shutdown. Furthermore, for the emissions decrease from the shutdown to be creditable, the requirement to shut down must be made federally enforceable.

After the new unit's potential to emit and the creditable emissions decrease have been quantified, the reviewing agency should then evaluate the extent to which the modification to the source will affect changes to actual emissions levels at other emissions units. Of particular concern (as you have pointed out in your example) is where existing emissions units, historically operated at less than their full capacity or allowable level, will increase operational levels for the sole purpose of compensating for the shutdown unit. If the emissions units in question do not have source-specific allowable emissions, actual emissions are determined as set forth in subparagraph (ii). If the reviewing agency determines that an increase in actual emissions at the existing emissions units will be directly attributable to the startup of the new unit, then the agency can act (via an emissions cap) to limit the increase so as to ensure no net emissions increase at the source.

Suppose, however, as specified in subparagraph (iii), actual emissions (for the purpose of performing a "net emissions increase" calculation) are presumed to be source-specific allowable emissions for these units; in such a case, there is probably no increase in "actual" emissions. This results from the fact that, though in reality emissions may increase at these units, their actual emissions have been presumed to be equivalent to their allowable emissions and their allowable emissions have not changed. In such a case, after the modification, the atmosphere may in reality experience an increase in emissions. For example, emissions at the source after modification could equal the source's previous emissions level (three units operating at 67 percent rather than four units at 50 percent) plus the additional emissions from the new emissions unit. In effect, a significant emissions increase occurs at the source without PSD review.

Although the regulations provide a presumption for the use of allowable emissions when source-specific limits are established, the preamble at 45 FR 52718 (August 7, 1980) states that:

The presumption that federally enforceable source-specific requirements correctly reflect actual operating conditions should be rejected by EPA or a state, if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or the permit.

Further along that section of the preamble states that:

EPA, a state, or source remains free to rebut the presumption by demonstrating that the source-specific requirement is not representative of actual emissions. If this occurs, however, EPA would encourage states to revise the permits or the SIP to reflect actual source emissions.

Therefore, a State may act to revise source-specific requirements if such a revision in the State's view is needed to establish allowable emissions limits consistent with historical actual emissions. Accordingly, in the modification scenario you describe, a State may act to place a federally enforceable emissions cap, based on historical actual emissions, on the source. It can do this on the knowledge (or presumption) that the three remaining boilers will (or would logically be expected to) operate at a higher capacity in the future to make up for the shutdown unit. Simply shifting the load like this should not result in a "credit" that can be used to net a new emissions unit out of review. The emissions cap would prevent such an occurrence.

If the modification is a direct replacement, then an emissions cap is required on the new unit's production capacity to ensure that its potential to emit, when balanced against the shutdown credit, does not result in a significant emissions increase. Depending on the available shutdown credit, this may result in a limit in production capacity at the source.

For a major source to net out of PSD review, a permit agency must take all administrative measures necessary to ensure that the requirements to decrease emissions are explicit and meet the criteria for being considered "federally enforceable." The credits may come from any emissions unit within the source as long as the emissions unit meets the criteria for being a part of that "major source."

If you have any questions regarding this matter, please have your staff contact David Solomon of the New Source Review Section at 629-5697.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

OCT 21 1986

MEMORANDUM

SUBJECT: Applicability of PSD to Portions of a Plant Constructed  
in Phases Without Permits

FROM: Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)

TO: David Kee, Director  
Air Management Division, Region V (5AR-26)

This is in response to your correspondence, dated September 30, 1986, regarding the applicability of prevention of significant deterioration (PSD) review to a minor source that becomes major through a series of modifications.

Your memo describes a series of modifications to an initial minor source. With the first modification (A), the original source maintains its minor status. The second modification (B) puts the source over the major source threshold, and the third modification (C) results in an emissions increase greater than the PSD significance levels. To complicate matters, the original source was not required to obtain a permit under the State implementation plan (SIP) and all subsequent modifications were constructed without SIP permits. The source is then discovered at the point modification (C) is made.

You present two schools of thought with respect to the applicability of PSD review to the source.

- 1) PSD review is applicable only to modification (C) or,
- 2) the State should view the plant as it first appeared to them, i.e., as a major source without a PSD permit. This option would require that best available control technology (BACT) be applied to the total plant.

In general, the first determination is correct. The fact that the initial minor source and subsequent modification were not subject to, or failed to receive, a SIP permit has no bearing on applying the rules of PSD applicability. Except under the provisions of 40 CFR 52.21(r)(4), the PSD regulations do not contemplate the retroactive application of PSD

review to previously minor sources. A BACT review applies only to the emissions units which define a major modification to an existing major source or a new major source. However, the air quality impact portion of a PSD review must consider, as either baseline or increment consuming, the emissions from all emissions units at the source.

In the extreme case where the source has made a deliberate effort to circumvent PSD review (by the systematic construction of carefully sized emissions units which only in the aggregate would trigger review) a permitting agency may, however, make a finding that PSD applies to the total plant. Such a finding would have to be based on clear evidence that the source made a conscious effort to escape review by knowingly misrepresenting the intended source size through the calculated juggling of actual and scheduled construction of emission units. For such evidence, the permitting agency may require that the source provide detailed information regarding original construction plans, timing and construction contracts, emission unit purchase orders, and project financing. The source should be compared to similar facilities to determine the industrial norm regarding final source size and configuration and construction scheduling.

If you have any questions regarding this matter, please have your staff contact David Solomon of the New Source Review Section at 8-629-5591.




PN 165-86-07-07-024  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

7 JUL 1986

MEMORANDUM

SUBJECT: Prevention of Significant Deterioration (PSD)  
Definition of "Modification"

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, V, and IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxic Management Division  
Regions IV and VI  
Director, Air and Toxics Division  
Regions VII, VIII, and X

The Office of Air Quality Planning and Standards (OAQPS) has recently received an inquiry regarding the applicability of PSD review to two facilities which would replace wet scrubbers with baghouses. The baghouses would improve control of particulate matter but allow a significant net increase of sulfur dioxide (SO<sub>2</sub>) emissions. The question is whether the proposed change would be subject to PSD review under the Federal PSD regulations as a major modification. For the reasons discussed below, I have concluded that this change would constitute a major modification. The Office of General Counsel (OGC) has concurred in the conclusions of this memorandum.

The PSD review applies to new major stationary sources and to major modifications.<sup>1</sup> Subject to certain qualifications and exemptions, a "major modification" is a "physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act" [40 CFR 51.24(b)(2) and 52.21(b)(2)]. There is general agreement

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<sup>1</sup> Note that, although the subject cases involve PSD review, the same issue exists with respect to major source nonattainment new source review (NSR) permitting pursuant to Part D of the Clean Air Act (Act). Because these cases involve PSD, and because nonattainment NSR has basic program requirements that make this issue less likely to arise in that area, this memorandum focuses on PSD. The conclusions of this memorandum apply equally to nonattainment NSR, however.

that the proposed change constitutes a major modification within the express terms of the PSD regulations.<sup>2</sup> For purposes of brevity, I am omitting the specific details of that analysis.

The true area of controversy, and the focus of this memorandum, is the relevance of an exemption from review under the new source performance standards (NSPS). Specifically, the NSPS regulations provide that the following shall not be considered a modification:

The addition or use of any system or device whose primary function is the reduction of air pollutants, except where an emission control system is removed or replaced by a system which the Administrator determines to be less environmentally beneficial [40 CFR 60.14(e)(5)].

The statutory definition of modification for both PSD and NSPS purposes is presented in section 111 of the Act. It has been stated that, for this reason, the subject exemption automatically applies to PSD even if it is not expressly part of the PSD regulations (memorandum from Edward E. Reich, Director, Stationary Source Compliance Division, OAQPS, and William F. Pedersen, Acting Associate General Counsel, OGC, to Allyn M. Davis and Paul Seals of EPA Region VI, dated April 21, 1983).

The better approach, which I am setting forth today, is that the subject exemption does not automatically affix itself to the PSD regulations. Rather, any such exemptions may be made applicable to PSD only by express rulemaking.

There are several reasons for concluding that EPA did not intend to make the exemption in question here part of the PSD system, beyond the obvious lack of language including it in the regulations. First, the program is oriented toward ambient air quality as well as technology based controls, in contrast to the NSPS program which addresses only the latter. The PSD review is a tool for air quality management and comprehensive consideration of increases of any pollutant regulated under the Act. The NSPS exemption is inconsistent with this approach. In addition, it seems very unlikely that EPA would have imported the "environmentally beneficial" test into the PSD applicability calculus, inasmuch as that calculus is strongly quantitative and objective in its orientation, yet the NSPS test is highly qualitative and judgmental. In any event, the overall PSD calculus is simply different from the NSPS approach, and hence one would have expected EPA to give express indication of an intention to bring the NSPS exemption into the PSD calculus if indeed it had had that intention.

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<sup>2</sup> The owner of the facilities has argued that this activity constitutes routine maintenance, repair, or replacement, thus allowing it to rely on an exemption from review [40 CFR 51.24(b)(2)(iii)(a) and 52.21(b)(2)(iii)(a)]. I conclude, however, that this situation does not fall within that exemption.

The fact that both programs use the definition of modification contained in section 111 of the Act is not, in itself, sufficient to prove that Congress intended that NSPS exemptions then in effect would automatically be incorporated into PSD. Congress has, of course, occasionally ratified existing regulatory programs or approaches (e.g., 40 CFR 51, Appendix S and uncodified section 129 of Public Law 95-95), but such is generally done with an express indication of that intent. I have found no such indication in this case. Apparently the only legislative history on this subject is the remark that Congress intended to conform the meaning of "modification" for PSD purposes to "usage in other parts of the Act" [123 Cong. Rec. H11957 (November 1, 1977)]. Given the distinct differences between the NSR regulatory processes promulgated in response to the 1977 amendments and the preexisting NSPS regulations defining "modification," it seems clear that Congress desired to conform the usage of that term in only a broad sense.

Finally, I believe that the Federal Register preamble segment cited in the April 21, 1983, memorandum (43 FR 26380, 26396, June 19, 1978) should not be read broadly in support of automatic incorporation of NSPS provisions. That preamble, involving review of fuel switches, addressed a regulatory reaffirmation of an exemption which had already been promulgated into the original 1974 PSD regulations.

For these reasons, the subject exemption does not apply to PSD and the earlier memorandum cited on this topic is withdrawn.

cc: R. Bauman  
A. Eckert  
T. Helms  
E. Reich  
D. Tyler  
P. Wyckoff

June 28, 1985

MEMORANDUM

SUBJECT: Seasonal Afterburner Policy, Applicability of Part D New Source Review Requirements

FROM: Robert D. Bauman, Chief  
Standards Implementation Branch, CPDD (MD-15)

TO: William S. Baker, Chief  
Air Programs Branch, Region II

This is in response to your memorandum dated March 8, 1985, in which you requested guidance on whether emissions increases associated with the winter shutdown of VOC control equipment must be reviewed for applicability for new source review (NSR). Your proposal would allow sources which have historically been using the EPA Seasonal Afterburner Policy to exempt the increases in emissions for NSR applicability. All other sources are prohibited from exempting any emissions from the applicability requirements. These sources include any sources which deviate from the EPA Seasonal Afterburner Policy, existing sources which although able to use the EPA Seasonal Afterburner Policy have not chosen to apply it, and all new sources of air pollution. I support your proposal except for one minor change. All sources in existence before the date of this memo, which have not previously requested an exemption under the EPA Seasonal Afterburner Policy should not be required to evaluate the associated increase in emissions for NSR applicability if the exemption is processed as a SIP revision. \*

This policy position has been agreed on by Office of General Counsel and Regulatory Reform staffs which should avoid any further revisions in the near term. The attached outline summarizes the relationship between the EPA Seasonal Afterburner Policy and NSR.

Attachment

cc: M. Levin  
W. Petersen  
D. Tyler

\* PN 172-80-12-01-033

bcc: N. Mayer  
M. Trutna

THE RELATIONSHIP BETWEEN THE SEASONAL AFTERBURNER POLICY  
AND NSR APPLICABILITY

1. Sources which have historically been using the EPA Seasonal Afterburner Policy will not be required to evaluate the associated increase in emissions for NSR applicability.
2. Sources in existence as of the date of this memo, which have not previously requested an exemption under the EPA Seasonal Afterburner Policy, will not be required to evaluate the associated increase in emissions for NSR applicability if the exemption is processed as a SIP revision.
3. New sources which request the use of the EPA Seasonal Afterburner Policy must be reviewed accordingly:
  - a. Evaluate the associated increase in emissions when calculating potential emissions for applicability purposes.
  - b. If the request results in a source being classified as a new major source or major modification, then require:
    - i. Offsets for all emissions on a tons-per-year basis,
    - ii. Statewide compliance, and
    - iii. LAER, which may include seasonal shutdown of afterburners if the State determines this shutdown meets standard industry practices for the use of afterburners.
4. Any other State exemption which allows increases in VOC's during the wintertime which deviate from the EPA Seasonal Afterburner Policy (e.g., for boilers using oil) will be required to evaluate the associated increase in emissions as discussed in (3) above.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 1 1987

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Improving New Source Review (NSR) Implementation

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443)

A handwritten signature in dark ink, appearing to read "J. Craig Potter", written over the typed name and title.

TO: Regional Administrator  
Regions I-X

On June 27, 1986, I established a special task force to address growing concerns about the consistency and certainty of permits issued under the Clean Air Act's prevention of significant deterioration and nonattainment area NSR programs. Based on the findings and recommendations of the task force, I am today establishing certain program initiatives designed to improve the timeliness, certainty, and effectiveness of these programs.

A great deal of effort will be required to overcome the problems which have developed, but it is my belief that these problems, with your full cooperation and assistance, can be resolved so that these essential air management programs can fulfill their intended roles. Therefore, I urge each of you to provide the maximum priority and resource commitments available to the task.

The outstanding concern we now face in these programs is inadequate implementation. The Office of Air and Radiation intends to apply its resource commitments so as to enhance its ability to provide technical support and guidance, training, workshops, auditing, and enforcement support to the Regions and delegated programs. The Regional Offices must make a corresponding resource commitment for these efforts to succeed. Accordingly, I am requesting that you initiate a self-evaluation of current NSR activities and, to the extent necessary, refocus Regional attention on these programs in an effort to improve and enhance NSR program implementation.

To ensure that we maintain the flexibility to make this effort a dynamic one, capable of sensing and adjusting to the needs of the program, I intend to establish an informal group of our colleagues to report to me on progress in implementing the initiatives discussed below. The mission of the group is to provide the feedback necessary to maximize the effectiveness of NSR implementation and to make NSR reflective of air program needs.

The following is a list of the specific program initiatives I am hereby instituting to bring about improvements in NSR implementation:

Tracking Permit Actions--Initially and until such time as permit quality can be assured, I am requiring that each Regional Office establish (if not already in place) a program to ensure a timely and comprehensive review of all State and local agency-issued major source permits and certain minor source permits. Implementation of the program will be made part of the Regional Office Management System and will require the "real time" exchange and review of information between the Regional Office and the State and local agencies when a key milestone is reached during the permitting process.

Effective communication between the permitting agency and the Regional Office is essential to improving program implementation. Therefore, the Regional Offices will need to ensure that State and local permitting agencies follow certain notification procedures such as:

- Notify the Regional Office and other affected parties (e.g., the Federal land manager if Class I areas are impacted), within a reasonable time, of the receipt of a new major source permit application. This can take the form of a complete copy of the application itself or a brief description of the proposed project. Notification can be made as each application is received or the information may be submitted to the Regional Office in a periodic report.

- Submit to the Regional Office a complete public notification package at the beginning of the public notice period. The package must contain the public notice language, the proposed permit, and a technical analysis demonstrating how the proposed project complies with the technical review requirements of the regulations [e.g., best available control technology (BACT) or lowest achievable emission rate (LAER), air quality impacts or offsets].

- Submit to the Regional Office a copy of the final preconstruction permit when issued, including a response to any appropriate comments submitted during the public comment period.

- Submit to the Regional Office a copy of the operating permit when issued.

Likewise, when informed of a permit action, the Regional Office is responsible for the timely review of the information, specifically:

- Screen incoming information on permit applications for potential issues or concerns and, if warranted, communicate them to the permitting agency.

- Perform a timely and comprehensive review of the public notice package and, if warranted, provide comment during the public comment period. To aid in this task, I have directed the Office of Air Quality

Planning and Standards (OAQPS) to start work on the development of a permit review checklist for use by the Regional Office during the public comment period. The checklist will also be useful to State and local agencies as a tool for self-audit and to understand what the Environmental Protection Agency (EPA) emphasizes when reviewing a proposed permit.

- Review any response to comments and the final permit to ensure that any outstanding concerns have been resolved satisfactorily.

- Review the permit to operate to ensure that it is consistent with the preconstruction permit.

- Take prompt and appropriate action to deter the issuance or use of permits which fail to meet minimal Federal requirements. I have directed OAQPS to work with the Office of General Counsel and the Office of Enforcement and Compliance Monitoring to develop guidance for the Regional Offices on the appropriate legal mechanisms and procedures for handling deficient permit actions.

- To the extent practicable, prior to permit issuance, review potential minor permit actions which exempt an otherwise major source or modification from a major review (e.g., "synthetic" minor sources, major sources netting out of review, and 99.9 or 249.9 tons per year sources).

The most critical element of these initiatives is the Regional Office review of proposed permit actions during the public comment period. The FY 1985 national air audit showed widespread serious permit deficiencies, many of which could have been corrected without interfering with State and local agency processing if dealt with by EPA during the public comment period. By uniformly reviewing all major source permit actions during the comment period, EPA is able to address deficient reviews or permits before the final permit is issued. This not only promotes more consistency in the permitting process among the States, but also provides the highest degree of certainty to the applicant that the permit will not be challenged by EPA at a later date. Moreover, if the permit is not reviewed and commented on prior to issuance, the possibility of successfully challenging the action is greatly diminished, as is the opportunity to improve the enforceability of the permit.

BACT Determinations--Of all the NSR processes, BACT (and LAER) determinations are perhaps the most misunderstood and the least correctly applied. The BACT alternatives, if presented by the applicant at all, are often poorly documented or biased to achieve the decision the applicant desires.

To bring consistency to the BACT process, I have authorized OAQPS to proceed with developing specific guidance on the use of the "top-down" approach to BACT. The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for

the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case.

The "top-down" approach is essentially already required for municipal waste combustors pursuant to the June 22, 1987, Administrator's remand to Region IX of the H-Power BACT decision and the OAQPS June 26, 1987, "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWC's)." It is also currently being successfully implemented by many permitting agencies and some of the Regional Offices for all sources. I have therefore determined that it should be adopted across the board.

In the interim, while OAQPS develops specific guidance on the "top-down" process, I am requesting the Regional Office to apply it to their BACT determinations and to strongly encourage State and local agencies to do likewise. Moreover, when a State agency proposes as BACT a level of control that appears to be inconsistent with the "top-down" concept, such as failure to adequately consider the more stringent control options, the Regional Office is to provide comment to that agency. A final BACT determination which still fails to reflect adequate consideration of the factors that would have been relevant using a "top-down" type of analysis shall be considered deficient by EPA.

Training--No formal training workshops specific to NSR have been held since 1980. Many State and local agencies, as well as the Regional Offices, have experienced a high rate of NSR personnel turnover since then. Many of the basic problems that are occurring in NSR implementation can be traced to the lack of comprehensive, continuing training for new Regional Office and State agency personnel.

To rectify this situation, in FY 1988, OAQPS will work on developing materials for a comprehensive training program in the form of Regional workshops to be conducted in FY 1989.

Commencing in FY 1989, biannual Headquarters-sponsored NSR workshops will be conducted at each Regional Office with State and local agencies attendance encouraged. Workshop topics will cover the NSR rules and policy, BACT and LAER determinations, effective permit writing, how to review a proposed permit and audit a permit file, and other program areas as needed. Appropriately trained Regional staff are to then hold these workshops at their respective State agencies. The NSR experts from Headquarters or NSR experts from other Regions will be available to assist.

In addition, Regional Offices should reserve the funds necessary to send at least one EPA staff representative to the NSR workshops (for EPA only) held semiannually at Denver, Colorado (February), and Southern Pines, North Carolina (July). Attendance at these workshops plays a vital role in keeping the Regions up to date on program implementation and new and emerging policy.

Policy and Guidance--Continuous litigation and regulatory changes have combined with the complexity of NSR rules to create a log jam of the policy and guidance needed to help interpret and effectively apply these rules. Therefore, I am directing that in FY 1989 OAQPS dedicate at least one staff person to ensuring a timely response to policy and guidance requests. In the interim, I intend to continue OAQPS's efforts to compile and organize NSR reference and guidance materials, such as the NSR electronic bulletin board.

I realize that the initiatives discussed above constitute only the first steps of a continuing process to address concerns and needs relating to NSR program implementation. In recognition of the possible need to maintain flexibility in managing and improving the NSR process I will, as indicated earlier, establish a group to monitor our progress under this new policy. The group will be comprised of representatives from EPA Headquarters and Regional Offices and we will consult with State and local agency officials as part of our effort to obtain timely feedback as we implement these initiatives.

Additional specific guidance on improvements in the program areas discussed above will be issued in the near future. In the meantime, each Regional Office is directed to work closely with its State and local agencies to ensure that all aspects of the NSR permit programs comply with all applicable State and Federal program requirements.

Your comments and suggestions are welcome. Please direct them to Gary McCutchen, Chief, New Source Review Section, MD-15, Research Triangle Park, North Carolina 27711 (FTS 629-5592).

cc: Air Division Directors, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

SEP 22 1987

MEMORANDUM

SUBJECT: Implementation of North County Resource Recovery PSD Remand

FROM: Gerald A. Emison, Director *[Signature]*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division, Regions I, III, V, and IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides, and Toxics Division, Regions IV and VI  
Director, Air and Toxics Division, Regions VII, VIII, and X

On June 3, 1986, the Administrator remanded a prevention of significant deterioration (PSD) permit decision, involving the North County Resource Recovery project, to Region IX for their reconsideration. The permit was for a 33-megawatt, 1000 tons-per-day facility to be located in San Marcos, California. At issue was whether appropriate consideration had been given, within the best available control technology (BACT) determination, to the environmental effects of pollutants not subject to regulation under the Clean Air Act (Act).<sup>\*</sup> The remand strongly affirms that the permitting authority should take the toxic effects of unregulated pollutants into account in making BACT decisions for regulated pollutants. This obligation arises from section 169(3) of the Act, which defines BACT as the maximum degree of emissions decrease which the permitting authority determines is achievable, taking into account "environmental . . . impacts." Essential to this process is the notification to the public of how the effects of toxic air pollutants, including those that are unregulated, have been considered in the PSD review and the subsequent consideration of the comments in making the final BACT decision. The purpose of this memorandum is to advise you of the impact of the remand on PSD permitting and to provide implementation guidance. This document builds upon and makes final the draft guidance of August 1986.

Coverage

Although the Act has given us the authority to review directly the considerable range of regulated pollutants, the remand clearly indicates that the Environmental Protection Agency (EPA) should incorporate consideration of all pollutants within its PSD determinations for all sources subject to PSD. This result is consistent with the fact that the PSD permitting process is charged ". . . to protect public health and welfare from any

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<sup>\*</sup>A "regulated pollutant," or "pollutant subject to regulation under the Clean Air Act," is one which is addressed by a national ambient air quality standard, a new source performance standard, or is listed pursuant to the national emission standards for hazardous air pollutants program.

actual or potential adverse effect . . . from air pollution . . . ." and that increases in air pollution should be permitted ". . . only after careful evaluation of all the consequences . . . ." [section 160(1) and (2)].

Revisions to State implementation plans (SIP's), to comport with the Administrator's decision, should not be necessary. State or local agencies with delegated PSD programs automatically track this change in policy. Agencies implementing their own SIP-approved programs are also unlikely to need any regulatory changes. This is because the remand is based on an interpretation of Act language, notably the definition of BACT, that is in most cases already contained in the plan. I ask that you confirm this with your States and applicable local agencies.

### Transition

As with any change in the way EPA does business, we have developed a transition plan for its implementation. The situations can be addressed most logically by dividing all PSD sources into three groups based on phase of permitting activity: those sources for which permit applications had not been filed, those for which permits had already been granted, and those for which applications had been filed but permits not yet granted.

First, all PSD sources for which complete applications had not been filed as of the Administrator's June 3, 1986, decision are fully subject to the remand's requirements. Earlier applications present more complex policy considerations.

One could argue, since the Administrator's decision is an interpretation of existing Act provisions, rather than a new requirement, that all PSD permits issued under the terms of the 1977 Amendments to the Act should be subject to the remand. However, program stability and equity to sources, in this second group, that have relied upon properly issued PSD permits militate strongly against such an approach. For these reasons, I have decided to exempt from the requirements of the remand all sources holding finally issued permits as of June 3, 1986. (Subsequent major modifications to such existing sources are, of course, subject to PSD review, including the application of the requirements of this remand.)

The third group of sources consists of those for which PSD permits were in the pipeline (i.e., complete application filed but permits not yet issued) as of the date of the remand. It is appropriate that these sources also be subject to the terms of the remand. However, for permit applications which have successfully passed through the public comment period without environmental effects concerns being raised, the Regional Office may, at its discretion, issue these in final without further delay.

The above enunciated transition policy applies directly to all EPA permit issuance procedures and also to those used by State agencies issuing PSD permits under a delegation of authority agreement pursuant to 40 CFR 52.21(u). This transition policy does not automatically apply to PSD

permit decisions by States under SIP-approved PSD programs, except to the extent that environmental effects issues are raised by commenters. The policy does apply prospectively in a uniform fashion to all applications filed after June 3, 1986. States with SIP-approved PSD programs are, of course, responsible for enunciating reasonable transition schemes and I ask that you encourage them to adopt policies consistent with this one. These transition schemes, as with the substantive program itself, are unlikely to require rulemaking; however, the policies should be set forth in formal statements so as to further the goals of public awareness and consistent application. These policies and their implementation will be reviewed within the National Air Audit System to assess the need to require greater conformance.

### Required Analyses

The BACT requirement outlined in section 169(3) of the Act contemplates a decision process in which the best available controls are defined for each regulated pollutant that a PSD source would emit in significant amounts. This case-by-case process is to take into account energy, environmental, and economic impacts and other costs. The toxic effects of unregulated pollutants are to be accounted for in deciding if the BACT otherwise being prescribed for regulated pollutants still represents the appropriate level and type of control. If the reviewing authority judges the potential environmental effects of such unregulated pollutants to be of possible concern to the public, then the final BACT decision for regulated pollutants should in all cases address these effects and reflect, as appropriate, control beyond what might otherwise have been chosen.

A recent remand determination made by the Administrator in another case provides further elucidation of the BACT process. In that case, Honolulu Program of Waste Energy Recovery (H-Power), PSD Appeal No. 86-6, Remand Order (June 23, 1987), the Administrator ruled that a PSD permitting authority has the burden of demonstrating that adverse economic impacts are so significant as to justify the failure to require the most effective pollution controls technologically achievable as BACT.

The broad mandate with respect to toxics that is presented by the remand is not readily amenable to highly detailed national guidance that provides the appropriate permitting requirement in each case. There is no specific formula for making BACT decisions; this is a case-by-case process involving the judgment of the reviewing authority. While it may be possible to develop a framework of guidance based upon such factors as risk assessment and reference doses, this would entail a large effort that seems inappropriate at this time. It is more practical, however, for EPA to develop guidance for specific source categories that are of particular importance. The EPA has recently provided such BACT guidance with respect to municipal waste combustors. See memorandum entitled "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors," from Gerald A. Emison, Director, Office of Air Quality Planning and Standards, dated June 26, 1987. Guidance on other source categories may be issued from time to time as appropriate.

Today's policy charges the PSD review authority with analyzing at the outset the environmental impacts of proposed construction projects with respect to air toxics which might be of concern, even if such matters are not initially raised by the public. Other types of environmental effects should also be addressed in response to public concerns, within the limits of the ability to do so. For PSD reviews consistent with this policy, each applicable permitting authority should initiate an evaluation of toxic air pollutants (unregulated as well as regulated) which the proposed project would emit in amounts potentially of concern to the public. The review authority should evaluate unregulated pollutants for both carcinogenic and noncarcinogenic effects. The National Air Toxics Information Clearinghouse (NATICH) data base contains considerable information relevant to evaluating the effect, sources, and control techniques available for unregulated pollutants. I encourage you to urge permitting authorities to use NATICH as a source of information as they conduct the analyses. Further information may be obtained by calling the NATICH staff at 629-5519.

The response to the Administrator made by EPA Region IX in its analysis of the North County permitting decision is attached. Although this example illustrates only one of several acceptable approaches, it is a well thought out analysis that provides a useful example to consider for future permitting exercises.

Headquarters has several other mechanisms in effect to support analyses with respect to toxics. These include a recent report which helps to estimate toxic air emissions from various sources (Compiling Air Toxics Emission Inventories, EPA-450/4-86-010). The burden of proof regarding emissions estimates, of course, rests with the applicant, but the techniques discussed in the document should be useful in determining if the applicant's estimates are reasonable and address appropriate pollutants. In addition, the Office of Research and Development (ORD) has released a control technology manual which is valuable in evaluating how control devices for particulate matter and volatile organic compounds differ in their abilities to control various toxic species of these criteria pollutants (Control Technologies for Hazardous Air Pollutants, EPA-625/6-86/014).

Support will also be available on a case-by-case basis from the Office of Air Quality Planning and Standards (OAQPS) and ORD. In particular, we have formed a control technology center to provide assistance to the review authority in determining BACT. This center can offer a range of activities, including evaluation of source emissions, identification of control techniques, development of control cost estimates, identification of operation and maintenance procedures, and, in a few situations, in-depth engineering assistance on individual problems. Other planned activities include the publication of technical guidance to assist in the evaluation of selected types of sources. Contact points for the control technology center are Lee Beck in OAQPS (629-0800) and Sharon Nolen in ORD (629-7607). We expect this support to limit the effort required of PSD reviewing authorities.

## Public Participation

One of the most important features of this policy is the requirement that the affected public be fully informed of the potential toxic emissions from a proposed project and of what the reviewing authority has done to minimize this potential within the BACT decision. A specific discussion of toxics concerns in a technical support document might be helpful in accomplishing this information transfer. Additional concerns related to the environmental effects of unregulated pollutants raised by commenters must then be addressed in the final BACT determination. This process is of central importance to PSD permitting and comments received must be adequately addressed in the final decision. Strong public participation is consistent with the PSD goals contained in section 160 of the Act, which relate to informing the public of increased air pollution, including that due to unregulated pollutants.

It should be noted that although these analyses are used in the BACT decision, they will not be used as the basis for disapproving a project that has agreed to apply BACT. In other words, today's policy requires that toxics be considered in the control of the proposed project only to the extent that the level of control chosen as BACT is achievable.

## Enforcement

In the case of delegated (as opposed to SIP-approved) PSD programs, EPA has various enforcement tools. Pursuant to 40 CFR 124.19, any party that participated in the public proceedings with respect to a proposed permit may, within 30 days of the final permit decision, petition the Administrator of EPA to review any condition of that permit decision. The Administrator may also seek to review any such permit condition on his own initiative. Should this appeals procedure be unavailable in a particular case, EPA has the authority, depending upon the facts of the case, to withdraw the delegation with respect to an individual permit that is being or has been issued inconsistently with the terms of that delegation. Thus, EPA may be able to directly intervene in the issuance of a PSD permit to ensure implementation of today's policy. This withdrawal of delegation is not the preferred course of action but it may be available if needed.

The consideration of air toxics in PSD permitting is a requirement of the Act and, through the definition of BACT, is incorporated in the SIP's. Therefore, violation of this policy would constitute a SIP violation and be enforceable by EPA. Section 113(a) of the Act provides for Federal issuance of a notice of violation in the case of a violation of a SIP. If the violation continues for more than 30 days, section 113(b) provides that the Administrator shall commence an action for injunction or civil penalty, or both. In addition, section 167 of the Act specifically provides that EPA take legal action to prevent the construction of a major emitting facility that does not conform to the requirements of PSD. Under section 167, EPA can issue an administrative order or commence a civil action. Since no

notice of violation would be necessary, in this case, EPA can use section 167 to order immediate cessation of construction or operation. Note also that this section has been construed as providing EPA with authority to take enforcement action against sources out of compliance with PSD even if they have already been constructed. These remedies are more likely to be used in the case of SIP-approved programs than with delegated programs, for which an appeal under 40 CFR Part 124 would generally be the preferred course of action.

Enforcement actions are pursued after reviewing a range of factors relevant to each particular case. For this reason, I am not setting forth detailed provisions as to required enforcement measures. There are, however, certain situations in which enforcement action is generally appropriate. These include procedural deficiencies, such as failure to solicit public comment on air toxics issues for applicable permits, and failure to address the air toxics concerns raised by public comment. Enforcement with respect to permits already in the pipeline should follow the transition scheme in today's policy for delegated programs and the State or local agreement established with EPA for SIP-approved programs.

The Act and the PSD regulations require that States submit a copy of the public notice for proposed permits to EPA. I urge the Regional Offices to ensure that such notices are submitted and are reviewed for conformance with the criteria contained in this document. Although enforcement mechanisms are available to address noncomplying sources, our efforts to implement today's policy will be much more effective if taken prospectively and in coordination with the State permitting process.

### Conclusion

Today's guidance summarizes the broad ranging impact of the June 3, 1986, remand and provides some insight into the analyses and public disclosure that now should take place. We will continue to support and monitor subsequent decisions and to assess the need for more detailed or expansive guidance. Questions on today's guidance should be addressed to Michael Trutna (629-5345) or Kirt Cox of OAQPS (629-5399).

### Attachment

cc: C. Potter  
A. Eckert  
D. Clay  
Regional Administrator, Regions I-X  
Air Branch Chiefs, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street  
San Francisco, Ca. 94105

MEMORANDUM

DATE: August 15, 1986

SUBJECT: North County Resource Recovery Associates  
PSD Appeal No. 85-2

FROM: *[Signature]*  
David A. Howekamp, Director  
Air Management Division, Region 9

TO: Lee M. Thomas, Administrator  
U.S. Environmental Protection Agency

This is in response to the June 3, 1986 remand of Region 9's April 2, 1985 determination to issue a Prevention of Significant Deterioration (PSD) permit to the North County Resource Recovery Associates for the construction of a 1000 ton per day resource recovery facility. The remand charged Region 9 with reconsidering the effects of unregulated pollutants when making PSD determinations.

Region 9 has reviewed the relevant BACT decisions and has prepared a response to the Administrator's remand, as recommended in the July 21, 1986 guidance memo from Gerald A. Emison, Director, Office of Air Quality Planning and Standards. Our response with supporting materials is attached.

If you have any questions regarding the enclosed materials please contact me at 454-8201 (FTS) or have your staff contact Wayne A. Blackard, Chief of our New Source Section at 454-8249 (FTS).

Enclosures

RESPONSE TO PSD REMAND  
NORTH COUNTY RECYCLING AND ENERGY RECOVERY CENTER  
(PSD Appeal No. 85-2)

On April 2, 1985 the Director of the Air Management Division, EPA Region 9, made a determination to issue a Prevention of Significant Deterioration (PSD) permit to the North County Resource Recovery Associates (NCRRA) for the construction and operation of a 33 megawatt, 1000 ton per day resource recovery facility. During the following appeal period EPA received three petitions filed pursuant to 40 CFR 124.19 requesting the Administrator to review Region 9's decision to issue the PSD permit. The Office of the Administrator reviewed the petitioners' comments and Region 9's responses to the comments and determined that Region 9 had satisfactorily addressed all of the petitioners' allegations with the exception of Region 9's assertion that EPA lacked the authority to "consider" pollutants not regulated by the Clean Air Act when making a PSD determination. The Administrator felt that Region 9's assertion was overly broad and that when making a PSD determination, in particular a best available control technology (BACT) decision, a permitting agency must consider not only the environmental impact of the controlled regulated pollutant but must also consider the environmental impacts of any unregulated pollutants that might be affected by the choice of control technology. For this reason the Administrator remanded the PSD determination to Region 9 for reconsideration and action consistent with the above interpretation of EPA authority.

In response to the above, Region 9 has reviewed the BACT decisions made for the NCRRA PSD permit. Under the PSD regulations NCRRA must apply BACT to control emissions of SO<sub>2</sub>, NO<sub>x</sub>, lead, mercury, and fluorides from their proposed resource recovery facility. BACT is defined in the Clean Air Act as "...an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this Act...on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs..." Under environmental impacts our review of the original BACT determination included the impacts from both regulated and affected unregulated pollutants. The control of particulates, CO, and VOC emissions are not directly subject to the federal PSD BACT review, but are subject to the nonattainment permitting regulations which are administered by the San Diego Air Pollution Control District.

NCRRA is proposing to use a dry scrubber with a baghouse to control emissions of SO<sub>2</sub>, acid gases, and particulate matter from the proposed resource recovery project. The dry scrubber consists of a spray dryer and a baghouse. The spray dryer injects an atomized lime slurry sorbent into the flue gas stream. The baghouse removes the dried sorbent and flyash (particulate matter) from the flue gas. The dry scrubber will be designed for a flue gas flow of 225,000 acfm at an inlet temperature of

340 degrees F and a maximum outlet temperature of 265 degrees F. NCRRA expects the dry scrubber system to provide 83% removal of SO<sub>2</sub> and 95% removal of acid gases as well as 99.5% removal of particulates.

Recent tests of emissions control devices for waste fired boilers (the latest being the Quebec City Test Program) have shown that properly designed and operated control devices can significantly reduce emissions from resource recovery facilities. In particular, an acid gas scrubbing system operating at optimal stoichiometric ratios, at low temperature, in tandem with a baghouse can achieve very high removal efficiencies of particulates, SO<sub>2</sub>, HCl, organics, and heavy metals. The tests indicate that the NCRRA's proposed emission control system (lime slurry spray dryer, baghouse, low temperature flue gas) is the most efficient for controlling the unregulated pollutants from a resource recovery facility. While certain technologies may have the potential for greater removal of regulated pollutants (e.g. a wet scrubber may yield greater SO<sub>2</sub> removal), available data suggests that greater control of unregulated pollutants will not result. Region 9 believes that the NCRRA's proposed control technology will have very high collection efficiencies of dioxins, furans, and heavy metals, with collection efficiencies of 95% for HCl, and greater than 90% for mercury. We conclude that a lime slurry spray dryer with a baghouse provides the greatest degree of control currently achievable for the relevant air toxics concerns and therefore, emission limitations based on the operation of a lime slurry spray dryer with a baghouse and continuous emission monitors constitute BACT for the control of SO<sub>2</sub>, lead, mercury, and fluorides from the NCRRA facility.

In addition to the proposed acid gas BACT, Region 9 also reviewed the BACT decisions made for controlling NO<sub>x</sub> emissions from the NCRRA facility. NCRRA has proposed to control NO<sub>x</sub> emissions with low excess air and staged combustion. After reviewing all of the available control technologies, Region 9 believes that the alternate NO<sub>x</sub> control technologies currently available for resource recovery do not offer any better control of the affected pollutants (organics such as dioxins and furans) than do the controls proposed for the NCRRA facility. Our review included staged combustion, selective non-catalytic reduction, selective catalytic reduction, wet flue gas denitrification, and the different categories of source separation. Our review also took into account the effects of the district permit requirements designed to reduce organic toxic pollutants (minimum 1800° F furnace temperature and minimum 2 second residence time in the combustion zone). We conclude that an emission limitation based on the use of low excess air and staged combustion and with continuous emission monitors is BACT (considering the effect of unregulated pollutants) at this time for the control of NO<sub>x</sub> emissions from the NCRRA facility.

As part of our BACT review of the NCRRA PSD permit, Region 9 prepared several charts listing the available SO<sub>2</sub> and NO<sub>x</sub> control options for the NCRRA facility, ranked in order of control

effectiveness, with the estimated impacts of the controls on the projects' other air pollutants. The charts were prepared using data from existing Region 9 PSD permits, permit applications, district permits, emission control technology reports from the California Air Resources Board and the New York City Department of Sanitation, and from reports on the Quebec City Test Program. The impacts on other pollutants were estimated using our best engineering judgement based on the available data. We have included these charts with this report for your review.

After reviewing the above facts, Region 9 has concluded that no greater controls for the regulated pollutants can be applied that would be more effective in reducing the emissions of unregulated pollutants. Therefore, the BACT proposed by NCRRA and the BACT decisions made by Region 9 in the April 2, 1985 PSD determination are reaffirmed as BACT for controlling SO<sub>2</sub>, NO<sub>x</sub>, lead, mercury, and fluoride emissions from NCRRA's proposed North County Recycling and Energy Recovery Center.

REFERENCES

1. Air Pollution Control at Resource Recovery Facilities, California Air Resources Board, May 24, 1984.
2. Clarke, Marjorie J., Emission Control Technologies for Resource Recovery, New York City Department of Sanitation, March 15, 1986.
3. Hay, D.J., Finkelsteim, A., Klicuis, R., Masentette, L., "The National Incinerator Testing and Evaluation Program: An Assessment of A) Two-Stage Incineration B) Pilot Scale Emission Control", Presented at the 79th Annual Meeting of the Air Pollution Control Association, June 22-27, 1986, Minneapolis, Minnesota.

BACT ANALYSIS  
(Ranked in Decreasing Order of Control Effectiveness)

Project Type: 1113 TPD, RDP, 36 MW  
 Pollutant: SO<sub>2</sub>  
 Date: Aug 15, 1986  
 Project Engineer: Bob Baker

Control Options	% Control	Emission Rates	Emissions (tons/yr)	Control Effectiveness on Other Pollutants				
		lbs/ton (ppm) (1)		Heavy Metals	Dioxin Furans	HCl	Hg	Lead
Spray Dryer, Alkaline Slurry, Baghouse	80-95	0.26-1.04 (9-35)	53-212	Exc	Exc	Exc	Good	Exc
Spray Dryer, Lime Slurry, Baghouse	75-90	0.52-1.30 (18-44)	106-265	Exc	Exc	Exc	Good	Exc
Spray Dryer, Alkaline Slurry, ESP	75-90	0.52-1.30 (18-44)	106-265	good	good	Exc	Fair	Good
Dry Injection, Sodium Sorbent, Baghouse	70-85	0.78-1.56 (26-53)	159-318	Exc	Poor	Exc	Poor	Good
Spray Dryer, Lime Slurry, ESP	65-85	0.78-1.82 (26-62)	159-371	Good	Good	Exc	Fair	Good
Dry Injection, Lime, Baghouse	65-80	1.04-1.82 (35-62)	212-371	Good	Poor	Exc	Poor	Good
Wet Scrubbing, Alkaline	50-90+	0.52-2.61 (18-88)	106-530	Poor	Poor	Exc	Fair	Fair
Dry Injection, Sodium Sorbent, ESP	50-75	1.30-2.61 (44-88)	265-530	Fair	Poor	Exc	Poor	Fair
Dry Injection, Lime, ESP	40-70	1.56-3.13 (53-106)	318-636	Fair	Poor	Good	Poor	Fair

(1 Corrected to 12% CO<sub>2</sub>, 24 hour average

EPA Region 9 - New Source Section  
 BACT ANALYSIS  
 (Ranked in Decreasing Order of Control Effectiveness)  
 Page 2

Project Category: Resource Recovery  
 Project Type: 1113 TPD, RDF, W  
 Pollutant: SO<sub>2</sub>  
 Date: Aug 15, 1986  
 Project Engineer: Bob Baker

Control Options	% Control	Emission Rates	Emissions (tons/yr)	Control Effectiveness on Other Pollutants				
		lbs/ton (ppm) (1)		Heavy Metals	Dioxin Furans	HCl	Hg	Lead
Dry Injection, Limestone, ESP	25-40	3.13-3.91 (106-132)	636-795	Fair	Poor	Good	Poor	Fair
Wet Scrubbing, Water	20-30	3.65-4.17 (124-141)	742-848	Poor	Poor	Fair	Poor	Fair
Source Separation	5-10	4.69-4.95 (159-168)	954-1007	Poor	Fair	Fair	Poor	Poor

(1 Corrected to 12% CO<sub>2</sub>, 24 hour average.

EPA Region 9 - New Source Section  
BACT ANALYSIS  
(Ranked in Decreasing Order of Control Effectiveness)

Project Category: Resource Recovery  
Project Type: 1113 TPD, RDF, 36 MW  
Pollutant: NO<sub>x</sub>  
Date: Aug 15, 1986  
Project Engineer: Bob Baker

Control Options	% Control	Emission Rates	Emissions (tons/yr)	Control Effectiveness on Other Pollutants				
		lbs/ton (ppm) (1)		Dioxin Furans	VOC	CO	Heavy Metals	
Selective Catalytic Reduction (SCR) (2)	90-95	0.31-0.61 (15-30)	65-129	Unk	Poor	Poor	None	
Wet Flue Gas Denitrification (FGD <sub>n</sub> ) (2)	80-90	0.61-1.21 (30-60)	129-258	None	None	None	Poor	
Selective Non-Catalytic Reduction (SNCR)	30-60	2.43-4.25 (110-200)	473-860	None	None	None	None	
Low Excess Air/Staged Combustion	30-35	3.94-4.25 (185-200)	795-860	Unk	Unk	Unk	None	
Flue Gas Recirculation	10-15	5.16-5.46 (240-260)	1032-1118	Worsen	Worsen	Worsen	None	
Source Separation	Minimal	-	-	Fair	Poor	Poor	Poor	

(1) Corrected to 12% CO<sub>2</sub>, 24 hour average.

(2) This control technology has not yet been applied to refuse combustion, and has not been considered as a transferable technology due to as yet unresolved technological problems.

EPA Region 9 - New Source Sec  
BACT ANALYSIS  
(Ranked in Decreasing Order of Control Effectiveness)

Project: North County RR  
Project Category: Resource Recovery  
Project Type: 1113 TPD, R 36 MW  
Pollutant: NO<sub>x</sub>  
Date: Aug 15, 1986  
Project Engineer: Bob Baker

Control Options	% Control	Emission Rates	Emissions (tons/yr)	Control Effectiveness on Other Pollutants				
		lbs/ton (ppm) (1)		Dioxin Furans	VOC	CO	Heavy Metals	
Selective Catalytic Reduction (SCR) (2)	90-95	0.31-0.61 (15-30)	65-129	Unk	Poor	Poor	None	
Wet Flue Gas Denitrifica- tion (FGD <sub>n</sub> ) (2)	80-90	0.61-1.21 (30-60)	129-258	None	None	None	Poor	
Selective Non-Catalytic Reduction (SNCR)	30-60	2.43-4.25 (110-200)	473-860	None	None	None	None	
Low Excess Air/Staged Combustion	30-35	3.94-4.25 (185-200)	795-860	Unk	Unk	Unk	None	
Flue Gas Recirculation	10-15	5.16-5.46 (240-260)	1032-1118	Worsen	Worsen	Worsen	None	
Source Separation	Minimal	-	-	Fair	Poor	Poor	Poor	

(1) Corrected to 12% CO<sub>2</sub>, 24 hour average.

(2) This control technology has not yet been applied to refuse combustion, and has not been considered as a transferable technology due to as yet unresolved technological problems.



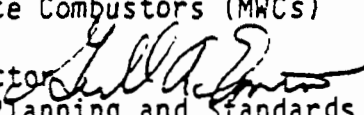
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

26 JUN 1987

MEMORANDUM

SUBJECT: Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWCs)

FROM: Gerald A. Emison, Director   
Office of Air Quality Planning and Standards (MD-10)

TO: Air Management Division Directors  
Regions I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

As you know, numerous questions regarding the selection of appropriate pollution control requirements for MWCs have arisen during recent years in major source permitting proceedings under the prevention of significant deterioration (PSD) provisions of Part C of the Clean Air Act and the nonattainment new source review (NSR) provisions of Part D of the Act. Accordingly, the attached operational guidance is being issued to promote consistency in making best available control technology (BACT) determinations under PSD and lowest achievable emission rate (LAER) determinations under nonattainment NSR, and to reduce delay and confusion in the permitting process. This guidance requires reviewing authorities, in considering the range of potential control options during the BACT determination process for MWCs, to consider a dry scrubber and a fabric filter or electrostatic precipitator as BACT for sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM), and combustion controls as BACT for carbon monoxide (CO).

The Administrator remanded to Region IX on June 22, 1987, their previous concurrence on a PSD permit for the H-Power MWC to be constructed in Honolulu, Hawaii. Petitioners had argued that, (a) BACT for this facility did not adequately justify the failure to require the use of an acid gas scrubber, and (b) the permitting authority did not evaluate the effectiveness of acid gas scrubbers in reducing emissions of unregulated pollutants, as required

by the June 1986 North County Resource Recovery Associates PSD Appeal decision (or North County remand). In remanding the H-Power permit application to Region IX for further proceedings, the Administrator made it clear that the Agency considers acid gas scrubbers to be an available technology for excess air MWCs that fire refuse-derived fuel (RDF) such as the H-power facility. The attached operational guidance states that this type of post-combustion control is one component of available technology for modular, starved air MWCs and massburn, excess air MWCs, in addition to RDF-fired, excess air MWCs.

As stated above, the operational guidance includes a second component of available technology, which is combustion control for the criteria pollutant CO. Since the effectiveness of the two components of available technology in controlling unregulated pollutants is an important consideration in individual BACT determinations (per the North County remand), the attached guidance states that (a) acid gas scrubbers followed by fabric filters or electrostatic precipitators are effective in controlling potentially toxic organic and metal pollutants, as well as acid gases other than sulfur dioxide, and (b) combustion controls are effective in controlling potentially toxic organic pollutants.

The technical basis for the operational guidance is documented in five reports which are a part of the Agency's comprehensive study of MWC. These volumes are listed in the References section of the guidance. You will note that the guidance indicates "specified values" should be selected on a site specific basis for several design and operating parameters of the facility and for emissions of criteria pollutants. A thorough discussion of the factors to be considered in choosing the "selected values" is included in the five reports from the comprehensive MWC study.

As noted under Section V, this guidance should be transmitted to all State and local agencies to which PSD permitting authority has been delegated under 40 CFR Section 52.21(u). The transmittal letter should specify that the delegation agreement is amended to include this guidance. States which have received SIP approval of a PSD program under 40 CFR Section 51.166 (formerly Section 51.24) should also be informed of this guidance and of EPA's expectation that it be followed.

#### Attachment

cc: James DeMocker (ANR-443)  
Gregory Foote (LE-132A)  
Steve Greene (WH-565)  
Joseph E. Lees (ANR-443)  
J. Craig Potter (ANR-443)  
John C. Ulfelder (A-101)  
Marcia Williams (WH-562)

6/26/87.

OPERATIONAL GUIDANCE ON CONTROL  
TECHNOLOGY FOR NEW AND MODIFIED  
MUNICIPAL WASTE COMBUSTORS

I. The Need for Guidance.

The combustion of municipal waste represents an increasingly important element of the solid waste disposal problem in the U.S. However, the operation of municipal waste combustors (MWCs) releases potentially harmful pollutants to the air. Human exposure can occur directly or indirectly, and there is also concern that the environment could be vulnerable to long-term accumulation of emitted pollutants. EPA is addressing these issues in a comprehensive, integrated Municipal Waste Combustion Study and with this operational guidance.

Numerous questions regarding the selection of appropriate pollution control requirements have arisen during recent years in major source permitting proceedings under the prevention of significant deterioration (PSD) provisions of Part C of the Act and the nonattainment new source review (NSR) provisions of Part D of the Act. Uncertainty over these questions has led to conflict over minimum legal requirements and consequent delay in the permitting and construction of MWCs. Hence, there is a need for guidance to resolve controversies which may arise as to facilities seeking permits. Accordingly, EPA is issuing this operational guidance for use in making best available control technology (BACT) determinations under PSD and lowest achievable emission rate (LAER) determinations under nonattainment NSR. EPA believes that this guidance will promote consistency in control requirements, and reduce delay and confusion in the permitting

process. At the same time it will allow permitting authorities to give appropriate consideration to local factors in making case-by-case BACT determinations as required under law.

#### II. Administrative History.

Section 169(3) of the Act provides that BACT determinations in PSD permits must be "based on the maximum degree of reduction of each pollutant subject to regulation under this [Act] . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable." EPA's regulations track this language. See 40 C.F.R. 52.21(b)(12), 40 C.F.R. 51.166(b)(12). In addition, in two administrative appeals involving resource recovery facilities, EPA has further refined the analysis which permitting authorities must conduct in making BACT determinations.

In North County Resource Recovery Associates, PSD Appeal No. 85-2 (June 3, 1986), the Administrator issued a Remand Order which held that, in making BACT determinations for a regulated air pollutant, the permitting authority must consider the effect of that decision on emissions of pollutants not regulated under the Clean Air Act. North County provided that the final BACT decision should address these environmental impacts, and that the permitting authority may ultimately choose more stringent emissions limitations for the regulated pollutant than it would otherwise have chosen if it would have the collateral benefit of restricting emissions of the unregulated pollutant. In the North County case, the permitting authority had required the use of a dry scrubber and fabric filter as BACT for sulfur dioxide, but had failed to consider the effect of that decision on emissions

of certain unregulated pollutants -- dioxins and furans, heavy metals, and acid gases -- on the grounds that it lacked authority to do so. Various persons petitioned the Administrator under 40 C.F.R. Part 124. In response to the Administrator's subsequent remand order, the permitting authority analyzed the effect of various control options on these three classes of pollutants, and found that no other controls on regulated pollutants would be more effective in reducing emissions of the unregulated pollutants. The Administrator then ruled that the permitting authority had satisfied the requirements of the remand order, and denied the petitions. See North County Resource Recovery Associates, PSD Appeal No. 85-2, Order Denying Review (September 4, 1986).

The Administrator ruled in Honolulu Resource Recovery Facility ("H-Power"), PSD Appeal No. 86-6, Remand Order (June 22, 1987), that a PSD permitting authority has the burden of demonstrating that adverse economic impacts justify the failure to require as BACT the most effective control technology which is available. He also found that acid gas scrubbers are an available control technology for sulfur dioxide (SO<sub>2</sub>). The H-Power decision also provided that the economic impacts must be specific to the source in question and substantial. Thus, because the Administrator agreed with EPA Region IX that Hawaii had not adequately demonstrated the basis for its conclusion that economic factors justified the absence of flue gas treatment as BACT for SO<sub>2</sub>, he remanded the matter for further proceedings.

EPA today also draws upon the technical data referenced below, and its experience in issuing, reviewing, and enforcing PSD permits for MWCs. Recent emission test data have demonstrated that particulate matter (PM), SO<sub>2</sub>, and other air pollutants (including organics, heavy metals, and acid gases) can be controlled effectively by acid gas scrubbing devices (dry scrubbers) equipped with efficient particulate collectors. Over 20 MWC facilities in Europe are known to be operating with dry scrubbers and particulate collectors, and at least 37 such facilities are known to exist in Japan. In the United States, three facilities currently are in operation and at least 15 have been permitted to construct with dry scrubbing and particulate control devices as the specified technology. Thirteen of these facilities are expected to be operating by December 1988.

Based on this information, it is clear that a dry scrubber followed by either a fabric filter or electrostatic precipitator are "available" technologies for effective control of the SO<sub>2</sub> and PM emitted by MWCs, and that these technologies also are effective in controlling emissions of potentially toxic organic and heavy metal pollutants, and acid gases other than SO<sub>2</sub>. In addition, the data show that these technologies are reliable and reasonably affordable. Similarly, combustion controls are an available technology for the control of carbon monoxide (CO) emitted by MWCs, and are effective in controlling that criteria pollutant and potentially toxic organic pollutants. EPA's information indicates that this technology also is reliable and reasonably affordable.

### III. BACT Guidance for SO<sub>2</sub>, PM, and CO.

Accordingly, in considering the range of potential control options during the BACT determination process for MWCs, the reviewing authority must consider a dry scrubber and a fabric filter or electrostatic precipitator as BACT for SO<sub>2</sub> and PM, and combustion controls as BACT for CO. In order to justify a BACT determination calling for a lesser degree of emissions control than can be achieved using these technologies, the permitting authority must demonstrate, based on information contained in the permit file, that significant technical defects, or substantial adverse economic, energy, or environmental impacts or other costs would arise that are specific to the MWC in question. Permitting authorities remain free to make case-by-case judgments in accordance with today's guidance. However, based on the above-referenced information regarding legal requirements and the availability, effectiveness, and cost of these technologies, EPA expects that proper application of this guidance will result in few, if any, BACT determinations entailing application of pollution control technologies less effective than those called for herein.

Today's guidance is general; it is limited to describing types of post-combustion control equipment and to establishing general criteria for combustor design, combustor operating practices, emission monitoring, and operator training. It does not set specific emission limits. Detailed information regarding the maximum degree of emissions control achievable with these technologies is available in the referenced technical documents, the BACT/LAER Clearinghouse, or from EPA. Such information should be used by applicants and permitting authorities setting specific emissions

limits for PSD permits. In addition, today's guidance only addresses control technologies currently in widespread use for MWCs, and establishes minimum criteria for BACT determinations. Permitting authorities are not relieved of their responsibility to consider, on a case-by-case basis, whatever available technologies may be anticipated to provide a greater degree of control than those addressed today. Similarly, because control technologies and the other factors in forming BACT determinations are constantly evolving, the technology providing the greatest degree of emissions control taking economic, energy, and environmental impacts into account may likewise change over time. As one example, flue gas treatment technology for the criteria pollutant nitrogen oxides ( $\text{NO}_x$ ) is in operation at one MWC in the U.S., and this technology should be considered by permitting authorities in making BACT determinations. In addition, emerging technologies in flue gas cleaning may develop which can attain the level of multipollutant control currently demonstrated by dry scrubbing/particulate matter controls, and technologies such as these should be considered in future BACT determinations. Permitting authorities and applicants must keep abreast of new developments. Of course, EPA will assist in this endeavor.

#### IV. LAER Guidance for Nonattainment Areas.

The technologies discussed herein for control of  $\text{SO}_2$ , PM, CO, and  $\text{NO}_x$  have all been successfully implemented, and thus have been "achieved in practice" by MWCs within the meaning of section 171(3) of the Act. Hence, in nonattainment areas where NSR requirements apply and major new sources and modifications must apply LAER, no less effective pollution control technologies may be imposed as LAER.

#### V. Implementation.

Today's guidance applies to all ongoing PSD and NSR proceedings, as well as to all new permit applications. In consideration of the needs for program stability and equity to sources which have in good faith relied on pre-existing permitting guidelines, this guidance does not apply to PSD and NSR permit proceedings for which, as of June 26, 1987, final permits have already been issued and, with respect to PSD permits issued by EPA, agency review procedures under 40 C.F.R. Part 124 have been exhausted.

This operational guidance applies to PSD permits issued by EPA directly through its Regional offices and indirectly through State and local agencies pursuant to delegation agreements made under 40 C.F.R. 52.21(u). Such agencies will be notified by letter of this guidance. It will constitute an amendment to the pre-existing delegation agreements. EPA Regional offices will review all draft permits for MWCs issued by delegate agencies during the public comment period to insure proper application. Further program evaluation will take place under the National Air Audit System (NAAS). If delegate agencies should fail to adhere to this guidance, EPA staff may initiate administrative appeal proceedings under 40 C.F.R. Part 124 in appropriate cases. Such action would be appropriate where, for example, failure to follow the guidance results in a finding of fact or conclusion of law which is clearly erroneous, or involves an exercise of discretion or an important policy consideration which the Administrator should review. See 40 C.F.R. 124.19(a). Action would also be appropriate where failure to follow the guidance resulted in an inability to determine,

based on the record, whether a clear error occurred. If necessary, EPA may also revoke the delegation of PSD authority to the State or local agency.

With respect to State PSD permits issued pursuant to a State implementation plan (SIP) program approved by EPA under 40 C.F.R. 51.166 (formerly 51.24), and State NSR programs approved under Part D of the Act and 40 C.F.R. 51.165 (formerly 51.18(j)), EPA expects States to follow today's guidance in generally the same fashion as delegate agencies. EPA will use the guidance as a reference point in its oversight of State MWC permit actions. As with delegated permits EPA will participate in permit proceedings and conduct NAAS evaluations. If agencies processing NSR permits or PSD permits under approved State programs should fail to adhere to this guidance, EPA may initiate administrative and/or judicial action under sections 113 and/or 167 of the Act in appropriate cases. Such action would be appropriate where, for example, failure to follow the guidance results in a finding of fact or conclusion of law which is clearly erroneous, or in an inability to determine whether a clear error occurred. If necessary, EPA may also call for SIP revisions under section 110(a)(2)(H).

Insofar as today's guidance addresses minimum legal requirements for BACT determinations, it simply implements existing regulations and policy, including Agency actions already made by the Administrator in the North County and H-Power cases. To the extent the guidance addresses the technical issues of availability, effectiveness, and cost of control technologies for MWCs, it expresses EPA's view regarding the proper usage, in permit proceedings under existing EPA regulations and SIP programs, of the factual data contained

in the five documents referenced below. Those documents present information on the alternative controls available for MWCs, the performance capabilities and costs of those controls, and the methods for monitoring and measuring emissions from MWCs. Factors to be considered in choosing the "specified values" to be included in permits, as noted in the guidance, such as maximum concentration of CO in emissions and minimum value of furnace temperature, are contained in these references. Thus, the guidance does not constitute rulemaking within the meaning of section 307(d) of the Act or under the Administrative Procedure Act. Accordingly, it is not necessary to implement this guidance, as to EPA permits issued by Regional offices or State and local agencies, through changes in the PSD regulations at 40 C.F.R. 52.21. Likewise, regarding approved State PSD programs, it is not necessary to revise 40 C.F.R. 51.166 and require corresponding SIP revisions.

#### VI. Technical Guidance.

Today's operational guidance applies to three types of MWCs: massburn, excess air MWCs; excess air MWCs that fire refuse-derived fuel; and modular, starved air MWCs. It applies to those MWCs that operate with energy recovery and those that operate without energy recovery. It applies to both major new and major modified facilities of these types. The guidance requires that values for emission limits and operating parameters be specified in MWC permitting decisions.

One component of control technology for MWCs is the application of the appropriate post-combustion control equipment. The EPA has identified this equipment as a dry scrubber with fabric filter or with electrostatic

precipitator. The concentration of particulate emissions in the exhaust gases from the post-combustion control equipment shall not exceed a specified maximum value; and the SO<sub>2</sub> emissions in the exhaust gases shall not exceed a specified maximum concentration value or the percent reduction in SO<sub>2</sub> emissions across the post-combustion control equipment shall not be less than a specified value. Performance of the dry scrubber and fabric filter or electrostatic precipitator in controlling acid gases, potentially toxic metals, and potentially toxic organic pollutants is affected significantly by the reduction in flue gas temperature which occurs in the dry scrubber. The control system shall be designed and operated such that the flue gas temperature at the outlet from the dry scrubber does not exceed a specified value.

A second component of control technology for MWCs is proper design and operation of the combustion system, which controls CO and potentially toxic organic pollutants. Minimum concentrations of CO in emissions from MWCs are associated with the implementation of several good combustion practices. These practices are also related to the effective destruction of potential emissions of toxic organic pollutants, including dioxins and furans. Concentrations of CO in furnace exhaust gases shall not exceed a specified maximum value, and CO and O<sub>2</sub> concentrations in the exhaust gases shall be monitored continuously. In addition, furnace operating temperatures shall be no lower than a specified minimum value, and a procedure for continuous monitoring shall be established to ensure that the specified temperature is maintained.

The capabilities to control flow rates and distributions of underfire (primary) and overfire (secondary) air, to monitor continuously CO concentration and furnace temperature, to maintain thermal load within a specified range, and to control the process to maintain CO and temperature of the furnace at appropriate levels are all important to good combustion. Detailed information regarding the numerical values to be assigned to the emission levels and equipment design and operating parameters associated with good combustion are provided in the documents cited under References.

References:

Municipal Waste Combustion Study: Emission Data Base for Municipal Waste Combustors.  
EPA/530-SW-87-021B

Municipal Waste Combustion Study: Combustion Control of Organic Emissions.  
EPA/530-SW-87-021C

Municipal Waste Combustion Study: Flue Gas Cleaning Technology.  
EPA/530-SW-87-021D

Municipal Waste Combustion Study: Cost of Flue Gas Cleaning Technologies.  
EPA/530-SW-87-021E

Municipal Waste Combustion Study: Sampling and Analysis.  
EPA/530-SW-87-021F



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

APR 12 1987

MEMORANDUM

SUBJECT: Huntsville Incinerator - Determining Best Available Control Technology (BACT)

FROM: Gary McCutchen, Chief  
New Source Review Section, CPDD (MD-15)

A handwritten signature in dark ink, appearing to read "Gary McCutchen".

TO: Bruce P. Miller, Chief  
Air Programs Branch, Region IV

This is in response to your March 30, 1987, memorandum regarding the BACT determination made by the Alabama Department of Environmental Management (ADEM) for the proposed Huntsville incinerator facility.

It is difficult to provide a detailed response to the significant and complex questions and issues you have raised within the relatively short turn-around time that you have specified. However, our initial review of the information submitted indicates that the Region's position (i.e., the use of acid gas scrubbing as BACT for municipal waste incinerators) is consistent with emerging national policy and current BACT analysis for similar facilities.

We have reviewed the arguments presented by the applicant and ADEM. Although certain of the criteria used in the BACT decision are acceptable, many of the reasons given for not requiring acid gas controls are unacceptable--even within the context of a case-by-case analysis. Specifically:

1) The fact that the new source performance standard (NSPS) for this source category (40 CFR 60, Subpart Db, June 19, 1986) does not require sulfur dioxide (SO<sub>2</sub>) scrubbing should not influence the BACT analysis. In a BACT analysis, an NSPS simply defines a minimal level of control. The fact that a technology was not selected for the NSPS (or that a pollutant is not regulated by the NSPS) is in no way indicative of the qualifications of a technology as a BACT candidate. The only reason for comparing control options to an NSPS is to determine whether the control option would result in an emissions level less stringent than the NSPS. If so, that option is unacceptable.

2) It is not correct to factor into the BACT analysis the contention that the proposed facility would be less polluting than any coal-fired boiler Redstone Arsenal would contemplate building if steam were not available from the proposed facility. Any emitting facility constructed by Redstone Arsenal would be a separate source and would be required to comply with all applicable environmental regulations. If the Redstone Arsenal were to construct a coal-fired facility or its own incinerator, it would also have to apply BACT. In fact, BACT for a coal-fired boiler might result in lower emissions than would a steam-producing incinerator.

3) In regard to ADEM's argument that the Huntsville plant would produce steam which is a less valuable commodity than the electricity produced at other similar plants, it is difficult to determine the validity of the argument without a detailed economic assessment. Even though electricity may be a more valuable product than steam (for some municipal waste incinerators), steam is cheaper to produce both from the point of capital and annualized costs. Depending on the purchase price of the steam, it may even be a more profitable alternative for those facilities where a buyer for the steam is on hand.

The ADEM has indicated that since the steam purchase agreements are already signed it is not possible for the applicant to consider raising the purchase price of the steam to defray the increased tipping cost that the applicant contends would result from the cost of SO<sub>2</sub> controls. In most cases, this type of argument should be ignored. A reviewing agency is no more bound by an applicant's unfounded assumption regarding what level of control will constitute BACT than a bank is bound by an assumption of a certain interest rate on the applicant's loan or a supplier by an assumption on the applicant's part regarding the costs of materials or equipment. This is one case where it is acceptable for a BACT determination to make it uneconomical for a source to construct.

The EPA has no choice other than to ignore such arguments. If financial agreements like this were taken into account, applicants could simply sign contracts based on meeting the NSPS or even using no control whatsoever, then use those contracts to justify the level of control that they preselected.

In further response to the specific questions raised in your memo:

1) The document titled "Guidelines for Determining Best Available Control Technology (BACT)," dated December 1978, was issued for the purpose of providing the framework for a consistent approach in determining BACT. The document, however, is general in its attempt at defining the BACT process, and at best focuses on specifying the parameters which should be considered in the BACT analysis.

In October 1980, EPA published the "Prevention of Significant Deterioration Workshop Manual." This document, in the hopes of bringing greater consistency to the BACT review process, presented an analytical format for the BACT analysis. Although the document recognizes the need

for evaluating BACT on a case-by-case basis, it does provide more specific guidance than the 1978 document in defining how economic, energy, and environmental factors are to be evaluated. If applied correctly, the methodology described in the workbook should result in a BACT determination consistent with the definition of BACT and acceptable to EPA.

Probably the best method of determining BACT, an approach that assesses BACT starting from the most effective control option available, is being successfully implemented by some State and local agencies. This approach, in conjunction with the PSD workshop manual, can be used to evaluate the State's proposed BACT decision. For further information on the implementation of this approach, contact Wayne A. Blackard, Chief, New Source Section, EPA Region IX (FTS 454-8249).

2) As you have pointed out, States are to decide how their environmental resources (such as increments) are used. A State may, for example, decide that a proposed source would consume too much increment and therefore prevent that source from being built or allow it to be built only if increment consumption is further reduced.

The BACT determination, however, is made totally independent of the amount of increment or air resources available. The environmental impact aspect of BACT is designed to ensure that a more costly control system will result in a decreased environmental impact (e.g., fewer emissions, smaller impact area, lower maximum ground level concentration, etc.). This environmental assessment should not be confused with the concept of using up the increment by "relaxing" BACT, a concept that EPA does not accept.

Once determined, BACT can only be made more stringent (not less) by environmental considerations. Examples include cases where BACT is not stringent enough to prevent exceedances of a national ambient air quality standard (or an increment) or where the State will not accept the level of control selected as BACT and demands more stringent controls to preserve increment. In both cases, the source has a choice of locating elsewhere or reducing either its emissions or its impact. Efforts to reduce emissions bring about the "technology-forcing" aspect of BACT and lowest achievable emission rate that Congress envisioned as part of a system designed to hold new emissions to an absolute minimum. If it works, the "forced" technology will likely become the new BACT level of control.

Possible grounds for overturning a BACT decision include an inappropriate review (e.g., BACT procedures not correctly followed, BACT decision not correctly justified), an incomplete review, a review based on false or misleading information, or a permit which is not enforceable as a practical matter. This is not a complete list; these are just some of the most common problems.

3) The PSD Workshop Manual also addresses this point by recognizing that "additional financing required for an alternative control strategy may jeopardize the financing of the entire project." However, the workshop manual also points out that "information is available on the

value of various emissions reductions that EPA and affected industries generally agree are reasonable." Since an applicant can bias the economics of a proposed project towards a less stringent control option, it is best in nearly all cases to evaluate the costs of controls against established norms. Many State and local agencies currently evaluate BACT proposals against dollars per ton criteria or against acceptable control costs for the category of source in question. This helps to ensure that the applicant does not bias the economics of the project against an otherwise acceptable control option. These types of approaches help to bring nationwide consistency to the BACT determinations while still allowing for a case-by-case determination.

The burden of proof always rests on the applicant to demonstrate why a generally accepted and established control option is unacceptable for the proposed project. The demonstration deserves special scrutiny when the applicant claims that an established control option would prevent the source from being constructed. It should be noted that the reason for applying economics to the source category overall and then requiring extensive justification for less stringent control for an individual facility is that EPA cannot be placed in the position of allowing less stringent (or no) controls simply because an applicant cannot afford what similar sources are required to use.

Economic considerations will vary from project to project, but within the same general source category, construction and operation costs should not vary to the extent that the requirement to apply an established control option can stop a project. This type of argument generally is not acceptable. In most cases, a source simply should not be granted a permit if financing is inadequate for proper controls.

The caveat in existing BACT guidance about stopping a project is intended to prevent BACT determinations by a reviewing agency that are so much more expensive than the norm that a typical source could not reasonably be built. Examples might include requirements for a series of two or more baghouses or a control system whose cost greatly exceeds that of the base facility.

4) The Region's nonacceptance of the "alternative build scenario" appears appropriate in this case.

If you have any questions regarding this matter, please feel free to contact me at FTS 629-5592, or have your staff contact David Solomon at FTS 629-5375.

cc: NSR contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR - 8 1987

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Clarification of New Source Review Policy on  
Averaging Times for Production Limitations

FROM: John S. Seitz, Director *John S. Seitz*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III and IX

Air and Radiation Division Director  
Region V

Air and Waste Management Division Director  
Region II

Air, Pesticides and Toxics Management Division  
Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

On March 13, 1986 the Stationary Source Compliance Division issued the attached memorandum which describes EPA's policy on maximum allowable averaging times for production and operational limitations. The limitations addressed are those which restrict a source's potential to emit to below PSD/NSR major source or major modification thresholds. Since the issuance of this memorandum last March, there have been several attempts to misuse the policy and apply it to emission limitations, rather than to production/operational limitations. The purpose of this memorandum is to distinguish between EPA's policy on averaging times for production limitations versus emission limitations, and to clarify the proper implementation of the March 13, 1986 memorandum.

Production limitations place restrictions on a source's operating rate, or rate of material throughput. Examples of production limitations are: hours of operation, gallons of coating per job or per unit time, million BTU per unit time,

material processed per unit time. Federally enforceable limitations on these parameters may serve to limit a source's potential to emit to below major source thresholds. EPA's policy on the longest averaging times that are considered Federally enforceable is set forth in the March 13, 1986 memorandum from Edward E. Reich. The longest averaging time generally acceptable for the purposes of practical Federal enforcement is one month, however, a source may seek approval of longer rolling averages as discussed in that memorandum.

Emission limitations place restrictions directly on the source's pollutant emission rate. Examples of emission limitations are: lb VOC/gal coating, lb VOC/hour, lb SO<sub>2</sub>/MBTU, lb SO<sub>2</sub>/hour, grains particulates/dscf. In order for emission limitations to be Federally enforceable from the practical stand point, they must be short term and specific so as to enable the Agency to determine compliance at any time. Emission limitations on a yearly basis alone (e.g., tons per year, or rolling yearly averages) do not satisfy EPA's requirements with respect to Federal enforceability. EPA's policy on averaging times for VOC emission limitations is stated in the January 20, 1984 memorandum from John O'Connor, Acting Director of OAQPS.

The March 13, 1986 Edward Reich memorandum describes EPA's policy on averaging times for production limitations which limit potential to emit to below major source or major modification thresholds. That memorandum states that the averaging time policy for production limitations does not apply to emission limitations. Therefore, limitations on a source's emission rate (e.g., lb VOC/unit time) designed to keep the source's potential emissions below NSR/PSD thresholds must comport with EPA policy on emission limitations. Sources may not use the March 13, 1986 memorandum on averaging times for production limitations to justify the use of longer (e.g., yearly or monthly) averaging times for emission limitations.

Any questions regarding this memorandum or the March 13, 1986 memorandum may be directed to Sally M. Farrell at FTS 382-2875.

Attachment

cc: Gary McCutchen, CPDD  
David Soloman, CPDD  
Marcia Spink, Region I  
John Courcier, Region I  
Kenneth Eng, Region II  
Karl Mangels, Region II  
Estena McGhee, Region III  
Wayne Aronson, Region IV  
Roger Pfaff, Region IV  
Ron Van Mersbergen, Region V  
Rizalino Castenares, Region V  
John Behnam, Region VI  
Stanley Spriuell, Region VI  
Charlie Whitmore, Region VII  
John Dale, Region VIII  
Steve Frey, Region VIII  
Wayne A. Blackard, Region IX  
David Bray, Region X  
Gregory Foote, OGC  
Judy Katz, OECM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

February 27, 1987

OFFICE OF  
AIR AND RADIATION

MEMORANDUM

SUBJECT: Plantwide Definition of Major Stationary Sources of Air Pollution

FROM: J. Craig Potter  
Assistant Administrator  
for Air and Radiation

A handwritten signature in dark ink, appearing to read "J. Craig Potter", written over the typed name and title.

TO: Director, Air Management Division  
Regions I, III, V, and IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxic Management Division  
Regions IV and VI  
Director, Air and Toxics Division  
Regions VII, VIII, and X

As you know, in October 1981 the Environmental Protection Agency (EPA) revised the new source review (NSR) regulations in 40 CFR Part 51 to allow adoption and use of the "plantwide" definition of "source" in nonattainment areas (46 Fed. Reg. 50766). Since then, the Supreme Court has upheld that action in Chevron, USA, Inc. v. NRDC, Inc., 104 S.Ct. 2778 (1984), and many States have submitted State implementation plan (SIP) revisions that would adopt the plantwide definition for nonattainment purposes, either by substituting that definition for a definition that already exists in the SIP as part of a previously approved NSR program or by including it as part of the nonattainment NSR program still missing from the SIP. The purpose of this memorandum is to provide guidance on the preparation of Federal Register notices proposing action on those pending submissions and to ask that you process those submissions as quickly as possible.

In its 1981 action, EPA ruled that a State wishing to adopt a plantwide definition has discretion to do so. However, the EPA also stated that use of the plantwide definition could not interfere with reasonable further progress (RFP) and timely attainment of the relevant national ambient air quality standards (NAAQS). Thus, EPA further ruled that, if a State had relied on emission reductions that it projected would result from the operation of a "dual" definition (or a definition similar to the dual definition) in obtaining EPA approval of its Part D plan, then the State would have to revise its attainment strategy and demonstration as necessary to accommodate reduced permitting under the plantwide definition.

The EPA did not restrict a State's ability to adopt a plantwide definition in any other respect. It did not, however, on the premise that the Clean Air Act (Act) would operate independently to generate Part D plans that would assure RFP and timely attainment (see 46 FR 50767 col. 2, 50769 col. 1).

Category A: Adequate SIP, No Prior Reliance on Dual Definition

In view of the above, a proposal to approve is appropriate for those pending submissions where the State: (1) has a fully approved Part D SIP, (2) is not subject to a call by EPA for a SIP revision, and (3) did not rely on a dual or similar definition in its attainment demonstration. Where EPA has previously approved a Part D plan on the basis of an attainment demonstration, you should determine whether there was reliance on a dual or similar definition, either by examining the demonstration yourself or by asking the State to certify that there was no such reliance and then reviewing that certification.

Category B: Adequate SIP, Prior Reliance on Dual Definition

A proposal to approve would also be appropriate for any submission where the State: (1) has a fully approved Part D SIP, (2) is not subject to a call by EPA for a SIP revision, and (3) did rely on the operation of a dual or similar definition but now has adjusted its strategy or demonstration or both to compensate or otherwise account for the effects, if any, of the switch to the plantwide definition. This could be done in one of several ways, as follows:

1. Altered Circumstances/Revised Views. The State could make a showing that any emission reductions previously projected to be obtained from the NSR program are no longer needed as part of the attainment strategy in the current SIP (e.g., because fewer reductions are needed than originally forecast, or because additional reductions will be forthcoming elsewhere). Similarly, the State could revise its original views as to the emission reductions that would be obtained from NSR using the existing definition (e.g., upon reassessment, the State might conclude that the plantwide definition would be at least as effective in producing reductions).

2. Progressive Netting. The State could require that all emission reduction credits used for plantwide netting be discounted at (or beyond) the offset ratio specified in the applicable SIP. Such a measure would assure that any emission reductions previously expected as a result of applying NSR would be achieved through plantwide netting.

3. Compensating Changes Within the NSR Program. Alternatively, the State could submit other changes to the NSR program (e.g., increasing the offset ratio for the reduced number of anticipated NSR permits) such that the total emission reductions attributable to the NSR program would remain constant.

4. Compensating Changes Elsewhere in the SIP. Finally, the State could also compensate (in whole or in part) for any fall-off in emission reductions previously expected from NSR, if any, by making compensating changes elsewhere in the SIP (e.g., by adopting additional control measures for existing sources).

Category C: Inadequate SIP

A proposal to approve would be appropriate for a submission where the State does not have a fully approved Part D plan or is subject to a call for a SIP revision only if the State has shown it is making, and will continue to make, reasonable efforts to adopt and submit a complete plan for RFP and timely attainment. Specifically, the State must submit written assurances that it is making reasonable efforts to develop a complete approvable SIP and intends to adhere to the schedule for such development (including dates for the completion of an emissions inventory and subsequent increments of progress) stated in the submission or previously forwarded to EPA. The State assurances will become part of the SIP; however, they need not be verified by, e.g., detailed quantifications, or showings that all reductions needed for areawide progress or attainment have been identified and targeted for regulation. They are, however, expected to be based upon a meaningful review by the State. Likewise, EPA will not second-guess the assurances, provided that they constitute a substantial assessment and, as a whole, explain how use of the plantwide definition is consistent with the State's SIP development strategy.

One of the pillars of the 1981 action was EPA's confidence that the Act would independently generate adequate attainment plans. However, many nonextension areas with previously approved plans are still experiencing violations of the relevant NAAQS, and many extension areas are still without approved attainment plans. The purpose of the requirement for specific assurances from the State is to rebuild for the specific case that level of confidence that supported EPA's general willingness in 1981 to approve the use of the plantwide definition.

Incidentally, if the State previously relied on the operation of a dual or similar definition in obtaining approval of its Part D plan, it would also have to adjust its strategy or demonstration or both to compensate or otherwise account for the effects, if any, of the switch to the plantwide definition, even though EPA has called for a SIP revision.

A proposal to disapprove would be appropriate for all other cases, in particular where the State has yet to obtain approval of a Part D plan and has failed to show that it is making reasonable efforts to develop the SIP revisions necessary at this point.

We have prepared "boilerplate" language for each of these cases. A copy is attached. You should tailor it to fit the circumstances of each particular SIP submission.

If you have any questions, please contact Gary McCutchen (FTS-629-5591).

Attachment

cc: Mike Alushin, LE-134A  
Don Clay, ANR-443  
Alan Eckert, LE-132A  
Greg Foote, LE-132A  
Joe Lees, ANR-443  
Mike Levin, PM-223  
Paul Stolpman, ANR-443  
John Thillmann, ANR-443  
Bob Wayland, A-101  
Peter Wyckoff, LE-132A

## ATTACHMENT

### INSERT FOR FEDERAL REGISTER PROPOSALS TO APPROVE PLANTWIDE DEFINITION

On October 14, 1981, the Environmental Protection Agency (EPA) revised the new source review (NSR) regulations in 40 CFR Part 51 to give States the option of adopting the "plantwide" definition of stationary source in nonattainment areas (see 46 FR 50766). This definition provides that only physical or operational changes that result in a net increase in emissions at the entire plant require a NSR permit. For example, if a plant increased emissions at one piece of process equipment but reduced emissions by the same amount at another piece of process equipment at the plant, then there would be no net increase in emissions at the plant and therefore no "modification" to the "source." The plantwide definition is in contrast to the so-called "dual" definition [or a definitional structure like that in the 1979 offset ruling (44 FR 3274), which has much the same effect as the dual definition]; under the dual definition, the emissions from each physical or operational change are gauged without regard to reductions elsewhere at the plant.

In the October 1981 Federal Register notice, EPA set forth its rationale for allowing use of the plantwide definition (46 FR 50766-69). In its view, allowing use of the plantwide definition was a reasonable accommodation of the conflicting goals of Part D of the Clean Air Act (Act); on the one hand, reasonable further progress (RFP) and timely attainment of national ambient air quality standards (NAAQS), and on the other, maximum State flexibility and economic growth. The EPA recognized that use of the plantwide definition would bring fewer plant modifications

into the nonattainment permitting process, but emphasized that this generally would not interfere with RFP and timely attainment primarily because the States under the demands of Part D eventually would have adequate State implementation plans (SIP's) in place. For instance, EPA stated:

Since demonstration of attainment and maintenance of the NAAQS continues to be required, deletion of the dual definition increases State flexibility without interfering with timely attainment of the ambient standards and so is consistent with Part D [46 Fed. Reg. 50767 col. 2].

The EPA added that in any event the use of a dual definition, by bringing more plant modifications through the NSR process or subjecting them to the construction ban (40 CFR 52.24), may discourage replacement of older, dirtier processes and hence retard not only economic growth, but also progress toward clean air. The EPA also pointed out that under the plantwide definition new equipment would still be subjected to any applicable new source performance standard and that wholly new plants, as well as any modifications that resulted in a significant net emissions increase, would still be subject to NSR. Thus, EPA saw no significant disadvantage in the plantwide definition from the environmental standpoint, as against the advantages from the standpoints of state flexibility and economic growth. It regarded the plantwide definition as presenting, at the very worst, environmental risks that were manageable because of the independent impetus to create adequate Part D plans, and at best the potential for air quality improvements driven by the marketplace.

As a result, EPA ruled that a State wishing to adopt a plantwide definition generally has complete discretion to do so, and it set only one restriction on that discretion. If a State had specifically projected

emission reductions from its NSR program as a result of a dual or similar definition and had relied on those reductions in an attainment strategy that EPA later approved, then the State needed to revise its attainment strategy as necessary to accommodate reduced NSR permitting under the plantwide definition (46 FR 50767 col. 2, 50769 col. 1).

In 1984, the Supreme Court upheld EPA's action as a reasonable accommodation of the conflicting purposes of Part D of the Act, and hence well within EPA's broad discretion. Chevron, U.S.A., Inc. v. NRDC, Inc., 104 S.Ct. 2778. Specifically, the Court agreed that the plantwide definition is fully consistent with the Act's goal of maximizing State flexibility and allowing reasonable economic growth. Likewise, the Court recognized that EPA had advanced a reasonable explanation for its conclusion that the plantwide definition serves the Act's environmental objectives as well (see 104 S.Ct. at 2792). The EPA today generally reaffirms the rationales stated in the 1981 rulemaking. Those rationales were left undisturbed by the Supreme Court decision. Further, EPA has not received any empirical information since the 1981 rulemaking that would require a departure from the basic reasoning in support of the plantwide definition.

[Insert for States in "Category A" with an approved NSR program and an approved attainment plan that does not rely on the NSR program to demonstrate attainment.]

On \_\_\_\_\_, the State of \_\_\_\_\_ submitted a SIP revision that would substitute a plantwide definition of source for the existing dual definition in the State's nonattainment NSR program. The EPA previously approved the Part D SIP for the relevant nonattainment areas on the basis of an attainment demonstration. The State has certified that it did not

rely on any reduction from the operation of the existing NSR program in that demonstration, and EPA's examination of the demonstration confirms that it did not. Therefore, EPA here proposes to approve the switch to a plantwide definition inasmuch as it satisfies the only restriction EPA placed on such changes.

[Insert for States in "Category B" with an approved NSR program and an approved attainment plan that relies on the NSR program to demonstrate attainment.]

On \_\_\_\_\_, the State of \_\_\_\_\_ submitted a SIP revision that would substitute a plantwide definition of source for the existing dual definition in the State's nonattainment NSR program. The EPA previously approved the Part D SIP for the relevant nonattainment areas on the basis of an attainment demonstration, and the State relied in that demonstration on emission reductions it projected would result from the operation of the NSR program. The State, however, has adjusted its attainment strategy and demonstration to account for the loss of any reductions attributable to the operation of the dual definition as follows: [insert content of State showing]. Therefore, EPA here proposes to approve the switch to a plantwide definition in accordance with its 1981 action inasmuch as the State has modified its attainment plan to assure RFP and attainment of the NAAQS on the original schedule approved in the plan.

[Insert for all States in "Category C" that lack an approved attainment plan or are subject to a SIP call.]

There has been, however, a material change in circumstances from those surrounding the 1981 rulemaking. In 1981, EPA assumed that

nonattainment areas already had or shortly would have Part D SIP's in place that would bring about RFP and attainment by the applicable statutory deadline. Now, however, many nonattainment areas that were to be free of NAAQS violations by the end of 1982 are still experiencing them and have yet to respond adequately to EPA's calls for SIP revisions. See generally EPA's policy on Compliance with the Statutory Provisions of Part D of the Act, 48 FR 50586 (November 2, 1983). Similarly, many areas that were to be free of violations by the end of 1987 still do not have fully approved Part D plans and, at this point, could not be free of the violations by then without the imposition of draconian measures (see, e.g., 51 FR 34428, 34431-35 (September 26, 1986)).

In light of this history of SIP development and implementation, EPA will now approve adoption of the plantwide definition into SIP's for nonattainment areas that still lack adequate plans only if the State has shown that it is making, and will continue to make, reasonable efforts to adopt and submit a complete plan for RFP and timely attainment. Specifically, the State must submit written assurances that it is making reasonable efforts to develop a complete approvable SIP and intends to adhere to the schedule for such development (including dates for the completion of an emissions inventory and subsequent increments of progress) stated in the submission or previously forwarded to EPA. In adopting and defending the plantwide definition, EPA relied in large measure on its confidence that the Act would operate independently to generate adequate attainment plans, so as to make manageable whatever risks were posed by the use of the plantwide definition. The assurances described above are necessary to restrengthen EPA's confidence with respect to this specific State plan.

[Further insert for those "Category C" States with an approved NSR program and an attainment plan that does not rely on NSR to demonstrate attainment but is subject to a SIP call.]

On \_\_\_\_\_, the State of \_\_\_\_\_ submitted a SIP revision that would substitute a plantwide definition for a dual definition in its existing NSR program. Several of the nonattainment areas to which this program applies have Part D plans previously approved by EPA, but nevertheless are still experiencing violations of the relevant NAAQS, and therefore are currently subject to calls for SIP revisions by EPA. The State has shown that in obtaining EPA approval of its original Part D SIP it did not rely on any emission reductions from the operation of its existing NSR program. The State has also submitted assurances that it is making, and will continue to make, reasonable efforts to adopt and submit the necessary additional SIP revisions. [Describe the assurances.] Therefore, EPA here proposes to approve the switch to a plantwide definition, in accordance with its 1981 action.

[Further insert for those "Category C" States which have an approved NSR program, but do not have an approved attainment plan.]

On \_\_\_\_\_, the State of \_\_\_\_\_ submitted a SIP revision that would substitute a plantwide definition for a dual definition in its existing NSR program. The State has yet to submit a full Part D plan and attainment demonstration for the relevant nonattainment areas, and hence did not rely on any reductions from the operation of the existing NSR program in any attainment demonstration. Therefore, EPA here proposes to approve the switch to a plantwide definition in accordance with its 1981 action, inasmuch as the State has shown that it is making, and will

continue to make, reasonable efforts to adopt and submit the necessary additional SIP revisions. [Describe the assurances.]

[Further insert for those "Category C" States which do not have an approved NSR program, and do not have an approved attainment plan.]

On \_\_\_\_\_, the State of \_\_\_\_\_ submitted a SIP revision that would add a NSR program for nonattainment areas to the SIP. This program uses a plantwide definition of source. The State has yet to submit and receive approval of an attainment demonstration for the relevant areas, and hence did not rely on any reductions from the operation of the new NSR program in an approved attainment demonstration. Therefore, EPA here proposes to approve the adoption of a plantwide definition in accordance with its 1981 action inasmuch as the State has shown that it is making, and will continue to make, reasonable efforts to adopt and submit the necessary additional SIP revisions. [Describe the assurances.]

NOV 24 1986

MEMORANDUM

SUBJECT: Need for A Short-term Best Available Control Technology (BACT)  
Analysis for the Proposed William A. Zimmer Power Plant

FROM: Gerald A. Emison, Director  
Office of Air Quality Planning and Standards (MD-10)

TO: David Kee, Director  
Air Management Division, Region V (5AR-26)

This is in response to your November 17, 1986, memorandum, in which you requested comment on Region V's belief that prevention of significant deterioration (PSD) permits must contain short-term emission limits to ensure protection of the applicable national ambient air quality standards (NAAQS) and PSD increments. I concur with your position and emphasize to you that this position reflects our current national policy. Consequently, I recommend that you continue to identify this apparent deficiency to the Ohio Environmental Protection Agency and seek correction of the draft permit for the William A. Zimmer Power Plant.

The PSD regulations clearly require that the application of BACT conform with any applicable standard of performance under 40 CFR Part 60 at a minimum. However, this should not be taken to supersede any additional limitations as needed to enable the source to demonstrate compliance with the NAAQS and PSD increments. In the case of sulfur dioxide (SO<sub>2</sub>), source compliance with the 30-day rolling average emission limit under subpart Da does not adequately demonstrate compliance with the short-term NAAQS and PSD increments. Consequently, enforceable limits pertaining to the performance of the flue gas desulfurization system on a short-term basis must also be established. Note, however, that the short-term limits can result from either BACT analyses or the need to protect air quality. Therefore, the short-term limit could be more stringent than the BACT limit.

I recognize that the sulfur variability issue tends to complicate the setting of short-term SO<sub>2</sub> emission limits, but such limits must be defined nevertheless. Continuous emission monitoring data from comparable sources can be used in order to estimate worst-case short-term SO<sub>2</sub> emissions that could occur at the plant. The modeling techniques used to determine compliance with the short-term NAAQS and increments should employ the enforceable short-term SO<sub>2</sub> emission limits which the permitting agency establishes.

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03/01/89

1

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 167  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 167

\* PN167-88-03-29-002

OPINION IN U.S. V. LOUISIANA-PACIFIC CORPORATION

\* PN167-88-07-15-003

PROCEDURES FOR EPA TO ADDRESS DEFICIENT NEW SOURCE PERMITS UNDER THE  
CLEAN AIR ACT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 15 1988

MEMORANDUM

SUBJECT: Procedures for EPA to Address Deficient New Source Permits Under the Clean Air Act

FROM: Michael S. Alushin *David Rochlin for MA Alushin*  
Associate Enforcement Counsel for Air  
Office of Enforcement and Compliance Monitoring  
  
John S. Seitz, Director *Richard Biondi for*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Addressees

INTRODUCTION

This memorandum transmits the final guidance for your use in addressing deficient new source permits. After we distributed the draft guidance for comment on December 16, 1987, several Regional Offices took action on deficient new source permits. The events surrounding those permit actions, as well as your thoughtful comments on the draft guidance, have shaped the final policy.

RESPONSE TO COMMENTS

We have incorporated most of your comments into the final guidance. As you requested, we have included examples of forms showing a request for permit review under 40 C.F.R. §124.19, a §167 order, and a §113(a)(5) finding of violation.

Some commenters suggested that we include a section on actions that can be taken, not against the source, but against the state issuing the deficient permit. We agree that this topic should be included in the guidance because it surfaces repeatedly in individual cases. Therefore, we have added a section on possible actions against states for issuing deficient permits. We have also clarified the guidance to indicate that EPA should send a state written comments at both the draft and final permit stage when a state is issuing what EPA considers a deficient permit.

Some reviewers requested further elaboration of when to use alternative enforcement responses. We have indicated relevant considerations in determining which action to take. One commenter pointed out that the guidance did not define what was meant by a "deficient permit." This involves a determination that requires the exercise of judgment. However, we have tried to list most of the criteria that will support a finding of deficiency. We realize, however, that we may not have anticipated every deficiency that may present itself to every Regional Office in the future.

Concern was expressed over the requirement to respond to a deficient permit within thirty days. We realize that this is an ambitious objective, but it is a legal requirement for permit review under 40 C.F.R §124, and greatly enhances EPA's equitable position in challenges under §167 and §113(a)(5). It will be easier to meet this deadline if Regional Offices have routine procedures in place for prompt receipt of all permits from their states and for thorough review of permits as they are received.

A few commenters wanted the guidance expanded to apply to "netting" actions and "synthetic minor" sources. We agree that guidance in this area would be useful, but the topic is too broad to be folded into the same document as the guidance on deficient permits. We have begun work to address appropriate enforcement action for improper "synthetic minors" in the context of the Federal Register notice announcing the program for federally enforceable state operating permits. If you think that separate enforcement guidance is needed on this subject, please let us know.

Finally, a few reviewers questioned the guidance regarding EPA directly-issued permits. We agree that, in all cases where we find a deficiency, it is preferable to change the permit by modifying its terms. If the source is amenable, we should do so. However, if EPA cannot get the source to accept new permit conditions, our only options are review under §124.19(b), revocation of the permit, and/or enforcement action. A §124.19(b) review must be taken within 30 days after the permit was issued. The

regulations are unclear on EPA's authority to revoke PSD permits. In an enforcement action to force a source, involuntarily, to accept a permit change when the source has not requested the change or made any modification to its facility or operations, EPA must always keep in mind the litigation practicalities and equities. These make enforcing against a permit we have issued when we are not basing our action on any new information a difficult proposition.

#### CONCLUSION

We hope that this guidance will help EPA Regions act to challenge deficient new source permits. Many of the practices advocated in this document may be litigated in pending or future cases. We will amend the guidance as necessary in light of judicial developments. If you have any questions, please contact attorney Judith Katz at FTS 382-2843.

#### Attachment

#### Addressees:

Regional Counsels  
Regions I-X

Regional Counsel Air Branch Chiefs  
Regionx I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

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Greg Foote, OGC

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NPPB, AQMD (MD-15)

Ron McCallum  
Chief Judicial Officer  
EPA

David Buente, Chief  
Environmental Enforcement Section  
DOJ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 15 1988

MEMORANDUM

SUBJECT: Procedures for EPA to Address Deficient New Source Permits Under the Clean Air Act

FROM: Michael S. Alushin *David Rolli for M Alushin*  
Associate Enforcement Counsel for Air  
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director *Richard Biondi for*  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Addressees

I. Introduction

This guidance applies to permits issued for major new sources and major modifications under both the prevention of significant deterioration (PSD) program and the nonattainment new source review (NSR) program. It contains three sets of procedures -- one for permits issued pursuant to EPA-approved state programs (NSR permits and PSD permits in more than half the states) one for permits issued by states pursuant to delegations of authority from EPA, and one for instances where EPA issues the permit directly. An appendix of model forms appears at the end.

The need for this guidance has become increasingly evident in the last two years. Before then, EPA had attempted only once, in 1981, to enforce against sources constructing or operating with new source permits the Agency determined to be deficient. In 1986, EPA litigated Greater Detroit Recovery Facility v. Adamkus et al. No. 86-CU-72910-DT (October 21, 1986). In that case, EPA wanted to enforce against a major stationary source constructing with a PSD permit issued by Michigan under a delegation agreement with EPA. The Agency had first determined that the best available control technology (BACT) determination for SO<sub>2</sub> in the permit was inadequate. Before EPA started formal enforcement action, the source filed suit against the Agency,

arguing that EPA had no authority to "second guess" the BACT determination and that, in any event, we should be equitably foreclosed from challenging the permit because we had remained silent during the two years since we had failed to comment on the permit. The court agreed and granted the source's motion for summary judgment.

The Detroit case was an example of the need for prompt and thorough EPA review of and written comments on new source permits. Our ability to influence the terms of a permit, both informally and through legal procedures, diminishes markedly the longer EPA waits after a permit is issued before objecting to a specific term. This is due both to legal constraints, that is, tight time limits for comments provided in the regulations, and to equitable considerations that make courts less likely to require new sources to accept more stringent permit conditions the farther planning and construction have progressed. Accordingly, as a prerequisite to successful enforcement action, it is imperative that EPA review all major source permit packages on a timely basis and provide detailed comments on deficiencies. If EPA does not obtain adequate consideration of those comments, it is also important for EPA to protect air quality by prompt and consistent enforcement action against sources whose permits are found lacking.

Because PSD permits are issued on a case-by-case basis, taking into consideration individual source factors, permitting decisions involve the exercise of judgment. However, although not an exhaustive list, any one of the following factors will normally be sufficient for EPA to find a permit "deficient" and consider enforcement action:

1. BACT determination not using the "top-down" approach.
2. BACT determination not based on a reasoned analysis.
3. No consideration of unregulated toxic pollutants in BACT determination.
4. Public notice problems - no public notice & comment period or deficiencies in the public notice.
5. Inadequate air quality modeling demonstrations.
6. Inadequate air quality analysis or impact analysis.
7. Unenforceable permit conditions.
8. For sources that impact Class I areas, inadequate notification of Federal Land Manager or inadequate consideration of impacts on air quality related values of Class I areas.

In NSR permitting, each of the following factors, while not necessarily an exhaustive list, are grounds for a deficient permit:

1. Incorrect LAER determination, i.e., failure to be at least as stringent as the most stringent level achieved in practice or required under any SIP or federally enforceable permit.
2. No finding of state-wide compliance.
3. No emissions offsets or incorrect offsets.
4. Public notice problems - no public notice and comment or deficiencies in public notice.
5. Unenforceable permit conditions.

## II. Timing of EPA Response

### A. Comment

Although EPA should know about every permit, at least by the time it is published as a proposal, the Agency sometimes does not learn about a permit during its development prior to the time the final permit is issued. If we do become aware of the permit and have objections to any of its terms, we should comment during the developmental stage before the permit becomes final.

State agencies should send copies of all draft permit public notice packages and all final permits to EPA immediately upon issuance. (The requirements for contents of public notice packages are set forth at 40 C.F.R. §51.166(q)(2)(iii).) The Regional Office should review all draft permit public notice packages and final permits during the 30 day comment periods provided for in the federal regulations. It should write detailed comments whenever Agency staff does not agree with the terms of a draft or final permit. To make sure they get permits in time for review, Regional Offices should consider requiring states with approved new source programs, through Section 105 Grant Conditions, to notify them of the receipt of all major new source permit applications. They should also require states to send them copies of their draft permits at the beginning of the public comment period.

Final permits should be required to be sent to EPA immediately upon issuance. (Note that the requirement for Regions to review draft and final permits is contained in guidance issued by Craig Potter on December 1, 1987.) Regions should carefully check their agreements with delegated states. These agreements require

states to send draft permits to EPA during the comment period. In addition, 40 C.F.R. §52.21(u)(2)(ii) requires delegated agencies to send a copy of any public comment notice to the appropriate regional office. Pursuant to 40 C.F.R. §124.15, a final permit does not become effective until 30 days after issuance, unless there are no comments received during the comment period, in which case it becomes effective immediately. Regions should make sure that delegated states know about permit appeal procedures at 40 C.F.R. §124 and, if necessary, issue advisory memoranda notifying them that EPA will use these procedures if the Agency determines a permit is deficient.

#### B. Formal Enforcement Action

If the permit was issued under a delegated program, it is important to initiate formal review or appeal within 30 days after the final permit is issued. (This response is set forth in Section IV below. The 30 day period is required by the regulations at 40 C.F.R. §124.19). When enforcing against permits issued under state programs, the same legal requirement to initiate enforcement within 30 days does not exist, but it is still extremely important to act expeditiously.

#### III. Enforcement Against the Source v. Enforcement Against the State

If a state has demonstrated a pattern of repeatedly issuing deficient permits, EPA may consider revoking the delegation for a delegated state or acting under Section 113(a)(2) of the Act to assume federal enforcement for an approved state. It is not appropriate to issue a §167 order to a state. Revocations of delegated authority as to individual permits and revocations of actual permits are theoretically possible, but they are unnecessary where EPA can act under Part 124 (i.e. within 30 days of issuance). Revocation may be appropriate where Part 124 appeals are unavailable, but likely will be subject to legal challenge.

#### IV. Procedures to Follow When Enforcing Against Deficient Permits in Delegated Programs

##### A. If possible, the following actions before construction commences:

1. Take action under 40 C.F.R. §124.19(a) or (b) within 30 days of the date the final permit was issued to review deficient provisions of the permit.

- a. §124.19(a) is an appeal, which may be taken by any person who commented during the public comment period.

b. §124.19(b) is a review of the terms of the permit by the Administrator under his own initiative. Regional Offices informally request the Administrator to take this action. They need not have commented during the public comment period. The Administrator has demonstrated a preference for using §124.19(b) over §124.19(a). In the four instances thus far when he was given the choice of acting under (a) or (b), he chose (b). However, the Administrator may not have sufficient time to act within 30 days in every situation in the future.

2. In the majority of situations, it is more appropriate for the Agency to act as one body to initiate review under §124.19(b). In some instances, however, the third party role for a Regional Office, through 40 C.F.R. §124.19(a) may be preferable. Regions should pick (a) or (b). However, if both provisions are legally available, they should request, in the alternative, that the Administrator act under the provision other than the one chosen by the Region should he deem it more appropriate. In particular, if a Region requests the Administrator to act under §124.19(b), it should ask that its memorandum be considered as a petition for review under §124.19(a) should review under §124.19(b) not be granted within 30 days. This is to protect the Regions' right to appeal a permit if the Administrator does not have sufficient time to act. Therefore, all memoranda requesting review should be written to withstand public scrutiny if considered as petitions under §124.19(a).
3. If the 30 day period for appeal has run and strong equities in favor of enforcement exist, issue a §167 order and be prepared to file a civil action to prohibit commencement of construction until the source secures a valid permit. (See Section IV B(2)) below.

**B. For sources where construction has already commenced:**

1. If the permit was issued less than 30 days previously take action under 40 CFR §124.19.
2. If the permit was issued more than 30 days previously, issue a §167 order requiring immediate cessation of construction until a valid permit is obtained. This

step should only be taken if extremely strong equities in favor of enforcement exist. Regions should be keeping state and source informed of all informal efforts to change permit terms before the §167 order is issued. §167 orders may be used both for sources which have and have not commenced construction. However, because the §124.19 administrative appeal and review process is available in delegated programs, it is greatly preferred for challenging deficient permits in states where it can be used.

3. If EPA determines that penalties are appropriate, issue a NOV under Section 113(a)(1) of the Act for commencement of construction of a major source or major modification without a valid permit. This is necessary because §167 contains no penalty authority. Note that strong equities for enforcement must exist before taking this step. EPA can issue both a §167 order requiring immediate injunctive relief and a NOV if we decide that both are appropriate.
4. Follow up with judicial action under §167 and §113(b)(2) if construction continues without a new permit.

- C. Note that the appeal provisions of 40 C.F.R. §124.19 apply to all delegated PSD programs even if §124.19 is not specifically referenced in the delegation.

V. Procedures to Follow When Enforcing Against Permits in EPA-Approved State Programs (All NSR and More Than Half of the PSD Programs)

- A. Issue §113(a)(5) order (for NSR) or §167 order (for PSD) as expeditiously as possible, preferably within 30 days after the permit is issued, requiring the source not to commence construction, or if already started, to cease construction (on the basis that it would be constructing with an invalid permit), and to apply for a new permit. Note that EPA should issue a §167 order if it has determined that there is a reasonable chance the source will comply. Otherwise, the Region should move directly to section V.D below.
- B. From the outset of EPA's involvement, keep the source informed of all EPA's attempts to convince the permitting agency to change the permit.
- C. Issue an NOV (§113(a)) as soon as construction commences if EPA determines penalties are appropriate.

- D. If source does not comply with order, follow up with judicial action under §167, §113(b)(5), or, if NOV issued, §113(b)(2). If penalties are appropriate, issue NOV and later amend complaint to add a §113 count when 30 day statutory waiting period has run after initial action is filed under §167.

VI. For EPA-issued Permits (Non-delegated)

- A. If source submitted inadequate information (e.g., misleading, not identifying all options) and EPA recently found out about it,
  - 1. If within 30 days of permit issuance, request review by the Administrator under 40 C.F.R. §124.19(b).
  - 2. If permit has been issued for more than 30 days, issue §167 or §113(a)(5) order preventing start-up or, if appropriate, immediate cessation of construction.
  - 3. Issue NOV if construction has commenced and EPA determines penalties to be appropriate.
  - 4. If necessary, request additional information from source; if source cooperates, issue new permit.
  - 5. Consider taking judicial action if appropriate.

EPA recognizes the distinction between permits based on faulty and correct information only for EPA directly-issued permits. This distinction is necessary for EPA permits due to equitable considerations.

- B. If source submitted adequate information and EPA issued faulty permit, we should attempt to get source to agree to necessary changes and accept modification of its permit. However, if source will not agree, only available options are revoking the permit and enforcing. Consolidated permit regulations are unclear about EPA's authority to revoke PSD permits. Because of this and the equitable problems associated with enforcing against our own permits, unless new information about health effects or other significant findings is available, we may choose to accept the permit. If faulty permit produces unacceptable environmental risk, act under 40 C.F.R. §124.19, if possible. If action under 40 C.F.R. §124.19 not possible, first revoke permit and then act as set forth in Section IV.

Addressees:

Regional Counsels  
Regions I-X

Regional Counsel Air Contacts  
Regions I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI

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Ron McCallum  
Chief Judicial Officer

Bob Van Heuvelen  
Environmental Enforcement Section  
Department of Justice

David Buente, Chief  
Environmental Enforcement Section  
Department of Justice

## Appendix

1. Request for Review under 40 C.F.R. §124.19
2. §167 Order
3. §113(a)(5) finding of violation and accompanying §113(a)(1)  
Notice of violation

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

DATE: DEC 8 1 1987

SUBJECT: Request for Administrator to Initiate Review of  
PSD Permit for Camden County Resource Recovery FacilityFROM: Christopher J. Daggett  
Regional AdministratorTO: Lee M. Thomas  
Administrator

I am requesting that, pursuant to 40 C.F.R. 124.19, you review the PSD portion of the air pollution permit issued to Camden County Energy Recovery Associates for construction of the Camden County Resource Recovery Facility in Camden, New Jersey (CCRRF). The failure of the New Jersey State Department of Environmental Protection (DEP) to include an emission limit for PM<sub>10</sub> in the permit, to address BACT adequately for PM<sub>10</sub> and to provide for public comment on PM<sub>10</sub> as a PSD affected pollutant are grounds for reviewing the DEP's actions in issuing the permit and for staying the effectiveness of the permit until all PSD requirements have been met. As explained below, if you agree that review of this permit is appropriate, you will have to notify the permittee by January 11, 1988, that you are initiating review of the PSD portion of the permit.

This permit was issued under various authorities including EPA's PSD permit authority, 40 C.F.R. 52.21, which is delegated to DEP. Due to the promulgation of the new NAAQS for PM<sub>10</sub> on July 1, 1987, the emissions of particulate matter from the CCRRF became subject to the PSD rules. Particulate matter was not previously subject to PSD because the area was classified as nonattainment for the now withdrawn NAAQS for total suspended particulate (TSP). My staff has concluded that the permit and the permit review procedures do not adequately address PM<sub>10</sub> under the applicable PSD regulations.

DEP was aware several months before it issued the permit that the new PM<sub>10</sub> NAAQS for particulate matter would require PSD review. Nevertheless, the permit does not include an emission limitation for particulate matter expressed as PM<sub>10</sub> emissions from the facility. Also, the analysis of the control technology fails to demonstrate that the system selected would provide the best degree of emission control currently available for PM<sub>10</sub> particulates. Finally, there is a procedural problem with the permit as well. DEP did not provide notice and an opportunity for the public to comment on the PM<sub>10</sub> aspect of the permit, contrary to the regulatory requirements and the express advice of Region II.

### The Delegation of PSD Authority to DEP

EPA Region II delegated PSD new source review authority to DEP pursuant to 40 C.F.R. 52.21(u). The PSD permitting authority delegated to the DEP is not restricted in any way. The delegation is general in nature and includes all PSD requirements as they are from time to time revised by rulemaking.

### Applicability of PM<sub>10</sub> Requirements to CCRRF Permit

The application for the CCRRF air pollution control permit was submitted on April 30, 1986. The DEP required the application to be augmented until the application was considered complete and the DEP noticed the permits for public comment on April 28, 1987. A public hearing was held on May 28, 1987, in Camden, New Jersey, and the public comment period ended on June 12, 1987.

PSD requirements are applicable to this permit for particulate matter because it is not in the class of permits and permit applications that are covered by the grandfathering exemptions of the PM<sub>10</sub> promulgation. No PSD application addressing particulate matter was submitted for the CCRRF before July 31, 1987. At the time of the notice period, the facility was required to undergo preconstruction review under the SIP for TSP because the area was nonattainment (secondary) for TSP but Federal and State permits were not issued until December 7, 1987. Only sources with PSD applications for particulate matter or with all Federal and State preconstruction approvals or permits before July 31, 1987, are exempt from PSD review for PM<sub>10</sub>. See, 40 C.F.R. 52.21(c)(4)(ix) and (x) (52 Fed. Reg. 24714, July 1, 1987).

We reminded the DEP, both orally and in writing, of the need to satisfy the PSD requirements at 40 C.F.R. 52.21 for sources of particulate matter as a result of the PM<sub>10</sub> promulgation. The DEP was informed that the CCRRF was not grandfathered and required additional PSD review to account for PM<sub>10</sub>.

### BACT Emission Limit Necessary for PM<sub>10</sub>

The permit has no emission limitation for PM<sub>10</sub>. BACT is, by definition, an emissions limitation rather than merely specified types of equipment. 40 C.F.R. 52.21(b)(12). (The only exception is when there are technological or economic limitations on the application of measurement methodology.) Clearly the grandfathering provisions were meant to limit the class of major new sources for which the particulate emission limit is expressed

as TSP under the Clean Air Act. Without an express limit on PM<sub>10</sub> as a permit condition, we are concerned that there will be no sufficiently stringent, enforceable limit on particulate matter for this facility.

Even if the difference between the actual rate of particulate matter emissions smaller than 10 microns in size occurring as a result of the TSP limit now in the permit and the PM<sub>10</sub> limit that should be in the permit proves to be small or nonexistent, failing to correct this permit will leave a muddled and uncertain basis for future enforcement. EPA regulations clearly require that particulate matter emissions be addressed under the PSD regulations for this permit and that an emission limit be expressed in terms of PM<sub>10</sub>. Region II is concerned that a TSP emission limit in an instance where PM<sub>10</sub> was the PSD regulated pollutant may be unenforceable especially in light of EPA's conclusion that the NAAQS which triggers PSD for particulate matter in the case of CCRRF's permit is the new PM<sub>10</sub> NAAQS. See, 52 Fed. Reg. 24694.

#### The State BACT Analysis

The DEP'S Hearing Officer found that there is no predictable difference between a baghouse and an electrostatic precipitator (ESP) with respect to PM<sub>10</sub> collection efficiency and, therefore, concluded that the ESP determined adequate for TSP is also adequate as BACT for PM<sub>10</sub>. Region II considers the BACT analysis by which the DEP reached its conclusion to be unacceptably thin in its review of available data. The only analysis which appears to be available is in a report submitted by letter from the permittee dated November 16, 1987, responding to a November 2, 1987, request from DEP.

Our review of the BACT analysis shows that it is incomplete and an inadequate basis for making necessary technical judgments. Some questions are so fundamental that we cannot make meaningful technical comments. For example:

1. What are the sources of the engineering and economic data?
2. Why is there no comparison of the particulate size and garbage characteristics at the cited facilities and what is anticipated at CCRRF?
3. What were the test methods employed in obtaining the emissions data from the cited facilities?
4. Why were three United States facilities referenced but not considered in the analysis? ✓

5. Was the removal efficiency data based on a system comparable to CCRRF's which includes a dry scrubber before the electrostatic precipitator or baghouse?

These are just some of the questions that we have and which we would normally review with a PSD permit applicant before public comments are solicited. With the date of the submission being November 16, 1987, and the permit issuance date being December 7, 1987, we do not believe that any meaningful questioning of the permittee's analysis was done by the DEP. The mere three weeks between the submission of the report and permit issuance did not allow the Region a meaningful opportunity to resolve EPA concerns.

#### Public Comment on PM<sub>10</sub> PSD Review

In early November, 1987, DEP informed Region II that it had completed the necessary PSD analysis for PM<sub>10</sub> but needed to issue the permit with little or no time for a public comment period with respect to PM<sub>10</sub> because of an impending financing deadline. On the basis of DEP assurances that PM<sub>10</sub> had been adequately addressed, Region II staff suggested to DEP staff that DEP might be able to justify a shortened public comment period, but emphasized that an opportunity for public comment to review the PM<sub>10</sub> analysis was necessary. (EPA's OGC and OAQPS orally concurred with Region II's position.) DEP acknowledged the need for public comment and agreed to follow appropriate, but shortened, procedures. Region II received a copy of and began to review the permittee's November 16, 1987, submission. With no notice for public comment and no further notice to EPA, DEP issued the air permits to CCRRF along with SPDES and solid waste permits on December 7, 1987.

Region II's advice with respect to the comment period assumed adequate treatment of PM<sub>10</sub> under PSD requirements. Having subsequently reviewed the BACT analysis and the permit itself, we now believe that these do not meet the requirements of PSD and any reason to allow less than 30 days for public comment on the PM<sub>10</sub> analysis would be unjustified.

#### Recommendation

I am asking that you initiate review of the CCRRF permit with respect to compliance with PSD review procedures applicable to PM<sub>10</sub>. Specifically, the review should address:

1. The failure to include BACT expressed as a PM<sub>10</sub> emission limit in the permit.

2. The adequacy of the review of available technology in establishing BACT.

3. The failure to provide for public comment regarding the PM<sub>10</sub> limitations.

A December 1, 1987, memorandum from Craig Potter, Assistant Administrator for Air and Radiation, calls for regional offices to monitor state compliance with preconstruction reviews to prevent instances such as this. We have done so in this case but were not consulted by the DEP when it decided to reject EPA's direction and issue the permit. We expect that the DEP and the permittee will correct this action rather than go through the entire review process but the issuance of the permit leaves us with no choice but to seek to commence review to prevent the action taken by DEP from becoming final action.

We are prepared to continue working with the DEP to act on the permit expeditiously should the DEP and the permittee agree to remedy the deficiencies discussed above. We have also explained to the DEP that, if appropriate, Region II could request a stay of EPA's permit review proceedings in the interim. In this regard, the DEP has contacted Region II and is exploring ways to take valid legal action on their own which would eliminate the need for you to act on this request for review by January 11. If the DEP should take such action, we will notify you immediately. I request that you alert me before you issue an order under §124.19(c).

#### Procedures and Time Limitations

We are concerned that review procedures be initiated within the time period allowed by the regulations, 40 C.F.R. Part 124, so that we are not foreclosed from raising these important issues. Under §124.19(a), if this is construed as a petition for review, the petition must be filed within 30 days of service of the notice by the DEP of its final permit decision and the Administrator must issue an order granting the review within a reasonable time. §124.19(c). If for any reason you determine that §124.19(a) is not the proper procedure, we would request you to initiate review on your own initiative under §124.19(b), which appears to require you to act within the initial 30 days.

Based on the issuance of the permit on December 7, 1987, we calculate that the 30 day period from the issuance of the permit will end on January 11, 1988. Pursuant to §124.20(a), the time began to run on the day after permit issuance. Since service of the DEP notice was by mail, we have added three days to the prescribed time in accordance with §124.20(d). The thirty-third day after December 7, 1987, is January 9, 1988, which is a Saturday, and §124.20(c) provides that the time period is extended to the next working day which is Monday, January 11, 1988. If this is construed as a review on your

own initiative, notice must be given by this date and we recommend that notice granting review in either case be provided by January 11, 1988.

The regional office filed comments on the draft permit within the DEP's public comment period. See, Hearing Officer's Report, December 7, 1987, Appendix B. We construe the definition of person in §124.41 to include an EPA regional office. Therefore the Region, as a person who filed comments, is a proper party to file a petition for review under §124.19(a).

By whichever means review is initiated, the review procedure is intended to prevent raising facts or issues on appeal that were not raised in the public comment period. See, 45 Fed. Reg. 33411, Col. 3 (May 19, 1980). Section 124.19(a) requires a statement that the issues being raised for review were raised during the comment period to the extent required by Part 124. A person's obligation is to "raise all reasonably ascertainable issues and submit all reasonably available arguments . . . by the close of the public comment period." §124.13. The issues raised herein were not required to be raised earlier since these issues could not have been known at the time the comment period closed on June 12, 1987. Indeed, we had advised the DEP that a public comment period should be provided so that public comments could be received on the PM<sub>10</sub> permit decision.

Notice of the initiation of the review procedures should be sent to:

Mr. Robert Donahue  
President  
Camden County Energy Recovery Associates  
110 South Orange Avenue  
Livingston, New Jersey 07039

Mr. Richard T. Dewling  
Commissioner  
New Jersey State Department of  
Environmental Protection  
401 East State Street  
CN-027  
Trenton, New Jersey 08625

Mr. Gary Pierce  
Chief  
Bureau of Engineering and  
Regulatory Development  
Division of Environmental Quality  
New Jersey State Department of  
Environmental Protection  
401 East State Street  
CN-027  
Trenton, New Jersey 08625

Enclosed are copies of the following documents upon which this request is based:

1. PERMIT TO CONSTRUCT, INSTALL, OR ALTER  
CONTROL APPARATUS OR EQUIPMENT AND TEMPORARY  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT  
AND PREVENTION OF SIGNIFICANT DETERIORATION PERMIT  
December 7, 1987
2. HEARING OFFICER'S REPORT FOR THE  
APPLICATION BY CAMDEN COUNTY ENERGY RECOVERY ASSOCIATES  
TO CONSTRUCT AND OPERATE  
A SOLID WASTE RESOURCE RECOVERY FACILITY  
December 7, 1987
3. Letter from Robert F. Donahue, President, Camden  
County Energy Recovery Associates to Jorge H.  
Berkowitz, New Jersey State Department of Environmental  
Protection, Subject: Camden County Resource Recovery  
Facility PM<sub>10</sub> BACT Analysis, with enclosure  
November 16, 1987

Enclosures (3)

cc: Thomas L. Adams, LE-133  
Francis S. Blake, LE-130  
J. Craig Potter, ANR-443  
Ronald L. McCallum, A-101

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

In the matter of: )  
 )  
LAKE COUNTY WASTE TO ENERGY FACILITY )  
 ) Order  
OKAHUMPKA, FLORIDA )  
PROCEEDINGS UNDER )  
SECTION 167 OF THE CLEAN )  
AIR ACT, AS AMENDED, 42 U.S.C. §7477 )

ADMINISTRATIVE ORDER

This Administrative Order is issued this date by the Regional Administrator, Region IV, United States Environmental Protection Agency (EPA), pursuant to Section 167 of the Clean Air Act (the Act), 42 U.S.C. §7477.

FINDING OF FACT

1. The NRG/Recovery Group, Inc., proposes to construct and operate a Lake County Waste to Energy Facility (Lake County) in Okahumpka, Lake County, Florida. The Lake County facility will consist of two mass burn incinerators which will each incinerate approximately 250 tons per day of municipal solid waste. These incinerators will be fueled with a combination of municipal solid waste and wood chips. These incinerators will emit particulate matter, sulfur dioxide (SO<sub>2</sub>), nitrogen oxides, carbon monoxide, volatile organic compounds, lead, beryllium, fluoride, sulfuric acid mist, mercury, dioxins,

dibenzofurans, and hydrogen chloride. All of the aforementioned pollutants are regulated by the Act except dioxins, dibenzofurans, and hydrogen chloride.

2. The area of construction of the Lake County Waste to Energy Facility is located in an attainment area for all pollutants regulated by the Act. [40 Code of Federal Regulations (C.F.R.) §81.310] The facility is considered a major stationary source because its potential emissions (which are subject to regulations under the Act) are above the Prevention of Significant Deterioration (PSD) of Air Quality threshold level. Consequently, this facility is regulated under the PSD rules and regulations.

3. On March 11, 1986, the NRG/Recovery Group applied to the Florida Department of Environmental Regulation (DER) for a PSD permit to construct and operate two 250 tons per day municipal solid waste energy recovery units at its Lake County facility located on Jim Rogers Road in Okahumpka, Florida, pursuant to the Florida State Implementation Plan (SIP) [Florida Administrative Code (F.A.C.) Rule 17-2.500 et seq.].

4. On May 20, 1986, in response to said PSD application, the Florida DER issued a Preliminary Determination which contained, in the State's judgment, the Best Available Control Technology (BACT) for the proposed incinerators. The BACT Determination contained emission limits for all applicable pollutants regulated by the Act and contemplated that a baghouse (to control particulates) in combination

with a scrubber (to control acid gases) constituted BACT.

5. On July 2, 1986, EPA notified the Florida DER that the SO<sub>2</sub> emission limit contained in the Florida DER BACT Determination may not adequately reflect BACT (i.e., proposed SO<sub>2</sub> emission limit not sufficiently stringent) and that the BACT Determination should also consider the effect of controlling SO<sub>2</sub> on unregulated pollutants such as hydrogen chloride and dioxin. Furthermore, EPA informed DER that it was EPA policy that the control of nonregulated air pollutants may be considered in imposing a more stringent BACT limit on regulated pollutants, if there is a reduction in the nonregulated air pollutants which can be directly attributed to the control device selected for the abatement of the regulated pollutants.

6. On August 15, 1986, DER issued a second PSD Preliminary Determination with a modified BACT Determination. The modified BACT Determination no longer contained the requirement for acid gas controls, but only required that the applicant leave space for the acid gas control equipment in the event there would be a future state rule change for resource recovery facilities. Removal of the requirement to employ acid gas control meant the modified BACT Determination could not adequately address EPA's concern about a more stringent SO<sub>2</sub> emission limit.

7. On September 19, 1986, EPA notified DER that EPA was not persuaded by Lake County's contention that municipal solid waste incineration with acid gas control is not

economically feasible.

8. On September 24, 1986, the Florida DER issued its Final Determination and PSD permit to the NRG/Recovery Group for the proposed Lake County facility. The Final Determination and State PSD permit did not require the installation of acid gas control.

9. On October 23, 1986, EPA notified the Florida DER that EPA did not concur with DER's Final Determination regarding the issue of BACT. EPA recommended that the Final Determination and the Florida DER permit be reissued with a BACT Determination which reflects state-of-the-art technology (acid gas control and more stringent emission limitations for particulate matter and SO<sub>2</sub>).

10. On January 30, 1987, EPA-Region IV prepared an independent BACT analysis, which varied from DER's Final Determination, in that it contained more stringent emission limitations for particulate matter and SO<sub>2</sub> (achieved through the use of high efficiency particulate emission and acid gas controls).

11. On February 11, 1987, EPA notified Florida DER that the DER PSD permit issued to the NRG/Recovery Group for the Lake County facility on September 24, 1986, was deficient and that EPA may initiate appropriate enforcement action against the Lake County facility to prevent or delay the construction of the facility.

12. On February 11, 1987, EPA notified the NRG/Recovery

Group that the Florida DER PSD permit was deficient and that unless the DER PSD permit was modified to reflect what EPA considers BACT, EPA may initiate appropriate enforcement action to prevent or delay the construction of the facility.

#### CONCLUSIONS OF LAW

1. The Administrator of the EPA pursuant to his authority under Section 109 of the Act, 42 U.S.C. §7409, promulgated National Primary and Secondary Ambient Air Quality Standards (NAAQS) for certain criteria pollutants, including total suspended particulate matter, sulfur oxides (SO<sub>2</sub>), nitrogen oxides, carbon monoxide, ozone, and lead. (40 C.F.R. §§50.4 - 50.12)

2. Pursuant to Section 110 of the Act, 42 U.S.C. §7410, the Administrator of EPA, in 45 Federal Register 52676 (August 7, 1980), promulgated amended regulations for PSD in areas where the existing air quality is better than said ambient standards and incorporated said regulations into the various implementation plans of each state. The relevant regulations are codified at 40 C.F.R. §51.24.

3. The Florida SIP contains federally approved PSD regulations, based on the above-referenced PSD regulations, for such attainment or "clean air" areas. (F.A.C. Rule 17-2.500)

4. The area of construction for the Lake County Waste to Energy facility is an attainment area for NAAQS for all pollutants. (40 C.F.R. §81.310)

5. NRG/Recovery Group is the owner and operator of the major emitting resource recovery facility in Lake County, Florida, and proposes to construct at that site pursuant to the PSD permit issued to the Lake County Waste to Energy facility by Florida DER on September 24, 1986.

6. EPA finds the Florida DER PSD permit issued to the Lake County Waste to Energy facility to be deficient in that it fails to require the installation of acid gas control. The Florida DER PSD permit also fails to require more stringent emission limitations for particulate matter and SO<sub>2</sub>. These deficiencies invalidate the State-issued PSD permit.

7. The construction of the Lake County Waste to Energy facility pursuant to an invalid permit will violate Section 165(a) of the Act, 42 U.S.C. §7475(a), and 40 C.F.R. §51.24. Consequently, the issuance of this order, pursuant to Section 167 of the Act, 42 U.S.C. §7477, is required to prevent such construction.

8. The authority of the Administrator of EPA pursuant to §113(a) of the Act, 42 U.S.C. §7413(a), to make findings of violation of the Florida SIP, to issue notices of violation and to confer with the alleged violator has been delegated, first, to the Regional Administrator [earlier delegation consolidated to Delegations Manual, No. 7-6 (July 25, 1984)] and second, to the Director, Air, Pesticides, and Toxics Management Division, Region IV [earlier delegation consolidated

in Region IV Delegation Manual, No. 4-2 (March 15, 1985)].

9. The authority of the Administrator of EPA to issue orders pursuant to Section 167 of the Act, 42 U.S.C. §7477, was delegated to the Regional Administrator [earlier delegation consolidated to Delegations Manual, No. 7-38 (July 25, 1984)]. The Regional Administrator, Region IV, has also consulted with the Associate Enforcement Counsel for Air and the Director of the Stationary Source Compliance Division pursuant to delegation requirement.

ORDER

Consequently, based upon investigation and analysis of all relevant facts, including any good faith efforts to comply, and pursuant to Section 167 of the Clean Air Act, 42 U.S.C. §7477, the NRG/Recovery Group, Inc. (Lake County Waste to Energy facility), is hereby ORDERED:

1. effective immediately upon receipt of this Order, not to commence any on-site construction activity of a permanent nature on its two 250 tons per day municipal solid waste energy recovery units, including, but not limited to, installation of building supports and foundations, paving, laying of underground pipe, construction of permanent storage structures and activities of a similar nature.

2. not to commence any on-site construction activity until it has received a Prevention of Significant Deterioration (PSD) permit and Final Determination that incorporates all

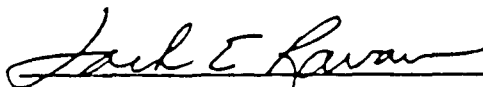
the requirements for PSD pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. §7470 et. seq., the regulations promulgated thereunder at 40 C.F.R. §51.24 and/or the regulations of the federally enforceable Florida State Implementation Plan, Rule 17-2.500 of the Florida Administrative Code, and Chapter 403 of the Florida Statutes including EPA's Best Available Control Technology analysis, dated January 30, 1987 (which addresses acid gas control and more stringent emission limitations for sulfur dioxide and particulate matter), and;

3. to submit, no later than ten (10) days after receipt of this Order, certification that the prohibition in paragraph one (1) of this Order has been observed and will continue to be observed until the permit referenced in paragraph two (2) of this Order has been issued. Such certification shall be submitted to:

Winston A. Smith, Director  
Air, Pesticides, and Toxics  
Management Division  
United States Environmental  
Protection Agency  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365  
(404) 347-3043

JUN - 3 1987

Date

  
Jack E. Ravan  
Regional Administrator

REGION V

A PROCEEDING PURSUANT TO  
SECTION 113(a)(5) OF THE  
CLEAN AIR ACT, AS AMENDED  
(42 U.S.C. Section 7413 (a))

FINDING OF VIOLATION  
EPA-5-86-A-50

## INTRODUCTION

On February 6, 1986, the St. Joseph County Health Department, as duly authorized delegate of the State of Indiana, issued a permit to operate several air pollution sources operated by AM General Corporation located at 13200 McKinley, Mishawaka, Indiana.

### FINDING OF VIOLATION

For reasons set forth below, the Administrator finds that the permit to operate, issued by the St. Joseph County Health Department on February 6, 1986, to AM General Corporation, (AMG) failed to comply with the requirements of Indiana Air Pollution Control Regulation APC-19 Section 4 and 8 that the St. Joseph County Health Department, as duly authorized delegate of the State of Indiana, did not act in compliance with those requirements.

The permit to operate issued by St. Joseph County Health Department on February 6, 1986, to AM General Corporation increased the Volatile Organic Compounds (VOC) emissions from 197.3 tons per year to 377.0 tons per year. This VOC emission increase of 179.7 tons per year allowed to AMG, subjects the facility to Regulation APC-19.

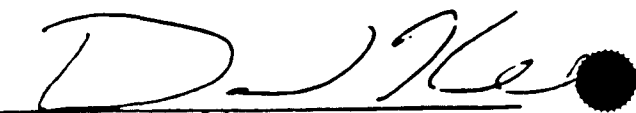
Regulation APC-19 Section 4 b(4) requires any person proposing the construction, modification or reconstruction of a major facility which will impact on the air quality of a nonattainment area or which will be located in a nonattainment area, shall comply with the requirement of Section 8 of this regulation, as applicable.

Regulation APC-19 Section 8 requires the same person to demonstrate along with other requirements:

- (1) Increased emissions of the pollutant are to be offset and are equal to 90 percent or less of the offsetting emissions.
- (2) Application of emissions limitation devices or techniques such that the Lowest Achievable Emission Rate (LAER) for the pollutant will be achieved.

This document serves as notification that the Administrator, by duly delegated authority, has made a finding under Section 113(a)(5) of the Clean Air Act, as amended, 42 U.S.C 67413(a)(5), and is served on both the State of Indiana and its delegate, the St. Joseph County Health Department, as well as AM General Corporation to provide an opportunity to confer with the Administrator prior to initiation of a civil action pursuant to Section 113(b)(5). By offering the opportunity for such a conference or participating in one, the Administrator does not waive his right to commence a civil action immediately under Section 113(b).

Date: 11/14 19 1986

  
David Kee, Director  
Air Management Division

REGION V

NOTICE OF VIOLATION  
EPA-5-86-A-49


(b) This permit to operate issued to AMG, failed to comply with the requirements of IAPCB regulation APC-19, Section 4 and 4.11:

- (i) the applicant did not apply emission limitation devices or techniques such that the Lowest Achievable Emission Rate (LAER) for VOC was not achieved.
- (ii) the increased VOC emissions were not offset by a reduction in VOC emission by existing facilities.

NOTICE OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Indiana and the AM General Corporation, that the facility described above is in violation of the applicable implementation plan as set forth in the Finding of Violation.

DATE JUN 19 1986

  
\_\_\_\_\_  
David Kee, Director  
Air Management Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 29 1988

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE MONITORINGMEMORANDUM

SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, Civil  
Action No. 86-A-1880 (D. Colorado, March 22, 1988)

FROM: Michael S. Alushin *Elliot J. Gilbert for*  
Associate Enforcement Counsel  
Air Enforcement Division

TO: Thomas L. Adams, Jr.  
Assistant Administrator for Enforcement  
and Compliance Monitoring

J. Craig Potter  
Assistant Administrator  
for Air and Radiation (ANR-443)

On March 22, Judge Alfred A. Arraj of the District of Colorado issued his opinion in this case which was tried in Denver between January 19-26, 1988. EPA had brought an enforcement action against Louisiana-Pacific Corporation (LPC) for violations of the prevention of significant deterioration (PSD) regulations under the Clean Air Act. The violations occurred when LPC constructed two waferboard plants in Kremmling and Olathe, Colorado without first obtaining PSD permits. Judge Arraj found that EPA had not met its burden of proving that the Olathe plant was subject to PSD requirements, but held that LPC had violated PSD regulations at the Kremmling plant. Judge Arraj did not find that LPC had received an economic benefit from its violation, however, and assessed a civil penalty of \$65,000. This is the first enforcement case for PSD violations exclusively to go to trial.

Discussion

Although the amount of the civil penalty awarded by Judge Arraj is modest, his opinion contains good law for EPA. The adverse holdings were based on narrow issues of fact and cannot act as precedent for future litigation. The important legal issues discussed include the proper implementation of the thirty day notice provision of 42 U.S.C. §7413 and a thorough analysis of the term "potential to emit."

The defendant had argued that, in order to collect penalties under §113, EPA must prove that a source was in violation for the 30 day period of time immediately following the issuance of the NOV and that any other events transpiring after this period are irrelevant. The judge held that "the jurisdictional requirement of 42 U.S.C. §7413 has been met if the source commits the specific violation alleged in the NOV anytime after the 30 day grace period has run." He found that any other construction would contravene the goals and purposes of the entire Clean Air Act enforcement program.

The opinion restated Judge Arraj's position on the proper construction of the term "potential to emit" as first set forth in his Memorandum Opinion on cross motions for summary judgment issued October 30, 1987. That opinion stated that "restrictions contained in state permits which limit specific types and amounts of actual emissions (blanket restrictions on emissions) are not properly considered in the determination of a source's potential to emit." Slip opinion at 35-36. However, other federally enforceable permit restrictions which restrict hours of operation or amounts of material combusted are properly included.

The opinion stated that, in testing a source to determine potential to emit, "the unit being tested must be operated during the test in the manner in which it is designed to be operated . . . . (W)ithin that constraint, the unit must be operated at maximum capacity, or 'full throttle' throughout the test." Slip opinion at 30. Judge Arraj was persuaded by LPC's testimony that a March 1985 stack test of emissions at the Olathe plant was not performed under conditions within which the equipment was designed to be operated. Because this stack test was the government's only piece of evidence that PSD requirements applied to the Olathe plant, the judge dismissed EPA's claim for relief for the Olathe violations.

Significantly, Judge Arraj held that federally enforceable permit limitations cannot act to limit potential to emit where such limits are ignored or violated. He found that LPC had knowingly violated the production limitations in its state construction permit for the Kremmling facility. Because of this violation, he ruled that the production limits could not be employed in determining potential to emit. Moreover, he held that "regular and willful violation of one permit limitation . . . . should eliminate consideration of any other permit limitations. . . . which would otherwise apply to the source." Slip opinion at 41.

In arriving at an appropriate penalty, Judge Arraj found that there was no economic benefit from delayed compliance. His conclusion was based on the reasoning that, by the first date of LPC's violation, LPC had already installed and was operating the control equipment that probably would have been required as best available control technology (BACT) if LPC had applied for a PSD permit. The first date of violation was found to be November 1986, when LPC first exceeded the production limits in its state permit.

However, the court ruled that:

Were this court to assess a nominal penalty only in this case, it would give sanction to a willful disregard of the PSD regulatory framework, and encourage other sources in the future to disregard other lawful restrictions on operations whenever convenient to do so . . . . (T)he burden of guessing correctly (what emissions will be) remains with the source, and . . . . a mistake in this process can indeed result in a penalty. Otherwise, future sources that are unsure of whether they will qualify as a major source will have no incentive to apply for PSD permits, which, undisputedly, is a burden. Slip opinion at 49-50.

Judge Arraj did not explain how he arrived at the figure of \$65,000.

#### Conclusion

The amount of the penalty awarded by the Court is significantly less than the government sought at trial. However, the opinion contains language that will be helpful precedent for cases in the future. The reasons for the court's relatively small penalty turn on narrow issues of fact peculiar to this specific case and cannot be used generally by other sources in future litigation. While the government has not made a definite decision about whether to appeal, it seems likely that we will accept Judge Arraj's decision. A copy of the opinion is attached.

#### Attachment

cc: Gerald Emison, Director  
Office of Air Quality Planning and Standards

Jonathan Z. Cannon  
Deputy Assistant Administrator  
for Civil Enforcement

Alan W. Eckert  
Associate General Counsel  
Air and Radiation Division

John S. Seitz, Director  
Stationary Source Compliance Division

Regional Counsels  
Regions I-X

Air and Waste Management Division Director  
Region II

Air Management Division Directors  
Regions I, III, and IX

Air and Radiation Division Director  
Region V

Air, Pesticides and Toxics Management Division Directors  
Regions IV and VI

Air and Toxics Division Directors  
Regions VII, VIII, and X

Air Branch Chiefs/Team Leaders  
Office of Regional Counsel  
Regions I-X

Air Compliance Branch Chiefs  
Air Division  
Regions I-X

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03/01/89

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 169A  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 169A

\* PN169A-86-11-10-002  
VISIBILITY PROTECTION STATE IMPLEMENTATION PLANS (SIP'S)--VISIBILITY  
SIP'S PART II

November 10, 1986

MEMORANDUM

SUBJECT: Visibility Protection State Implementation Plans (SIP's)--  
Visibility SIP's Part II

FROM: Darryl D. Tyler, Director  
Control Programs Development Division (MD-15)

TO: Director, Air Management Division  
Regions I, III, V, and IX

Director, Air and Waste Management Division  
Region II

Director, Air, Pesticides, and Toxics Division  
Regions IV and VI

Director, Air and Toxics Division  
Regions VII, VIII, and X

The Environmental Protection Agency (EPA) is currently developing Part II visibility plans for certain States in accordance with a settlement agreement with the Environmental Defense Fund (EDF) and the National Parks and Conservation Association. The EPA completed actions related to Part I of the settlement agreement by approving the SIP's or promulgating Federal implementation plans (FIP's) for visibility monitoring and new source review (NSR). Part II of the settlement agreement required EPA to determine the adequacy of the existing SIP's to meet the remaining provisions of the 1980 visibility regulations, i.e., implementation control strategies, integral vista protection, and long-term strategies (40 CFR 51.302, 51.304, and 51.306 respectively). The EPA completed this action on January 23, 1986, at 51 FR 3046 in which EPA preliminarily determined that the SIP's of 32 States were deficient with respect to the Part II provisions. The settlement agreement required EPA to propose and promulgate FIP's (or approve SIP's) to remedy these deficiencies on a specified schedule. The EPA and EDF have recently revised the schedule in the agreement which affects both Federal and State actions. This memorandum describes the new schedule and outlines the requirements for SIP submittals.

REVISED SCHEDULE

The old settlement agreement required EPA to propose FIP's to remedy all deficiencies by June 20, 1986, and for States to submit SIP revisions to EPA by December 20, 1986. Because of time constraints, EPA could not

develop appropriate plans to meet this deadline. In particular, EPA needed additional time to develop a data base and evaluate the necessity of control strategies to remedy impairment in mandatory Class I Federal areas where the Federal land managers (FLM's) had certified that visibility impairment existed. In addition, EPA recognized the need for additional time to approve SIP revisions submitted in response to the settlement agreement. Therefore, EPA negotiated revisions to the settlement schedule which reflect these needs. The revisions to the settlement agreement, which were approved by the court on September 9, are summarized below:

<u>FEDERAL ACTIONS</u>	<u>DEADLINE</u>
FLM's certify impairment	June 1, 1986
General provisions	
Propose FIP's	February 28, 1987
Promulgate FIP's	October 31, 1987
Provisions related to impairment	
Propose FIP's	August 31, 1988
Promulgate FIP's	April 30, 1989
<u>STATE SIP SUBMITTAL</u>	<u>DEADLINE</u>
Avoid proposal of FIP	October 31, 1986
Avoid promulgation FIP	August 31, 1987
EPA proposed action	7 months from submittal
EPA final approval	14 months from submittal of the SIP

The new schedule calls for EPA to propose FIP's to remedy the deficiencies by February 28, 1987, for all provisions in the visibility regulations except for those addressing certified visibility impairment. The EPA must promulgate the FIP's by 6 months of the close of the 60-day comment period (approximately October 31, 1987). The EPA will propose the provisions related to visibility impairment by August 31, 1988, and will promulgate these requirements approximately 8 months from proposal (April 1989). Because the settlement is designed to remedy existing deficiencies in the SIP's, the schedule set a June 1, 1986, deadline for the FLM's to certify the existence of visibility impairment to EPA. Any future visibility impairment certifications will be addressed in the long-term strategy in the FIP or SIP. Specifics on the long-term strategy are described later in this memorandum.

As in Part I of the settlement agreement, States are encouraged to develop their own programs. The States can avoid federally promulgated FIP's if they submit SIP's by August 31, 1987. Some States have already developed Part II SIP's and wish to avoid confusion resulting from a FIP proposal. If EPA received Part II SIP revisions by October 31, 1986, it will not propose FIP's for these States. Rather, EPA will review the submittal according to the SIP processing requirements described later in this memorandum.

#### REGULATORY REQUIREMENTS

If States are to meet the August 31, 1987, SIP submittal deadline, they need to begin SIP development efforts soon. The regulatory requirements are outlined below and more specific information regarding the SIP submittals follows.

The purpose of the visibility regulations as stated in 40 CFR 51.300 is to require States to make reasonable progress toward the national goal of preventing any future and remedying any existing impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution. The visibility regulations require the States to:

1. Require control of impairment that can be traced to a single existing stationary facility or small group of stationary facilities,
2. Evaluate and control new sources to prevent future impairment, and
3. Adopt strategies for monitoring and long-term planning to make reasonable progress toward the national goal.

#### Implementation Control Strategies--Section 51.302

Section 51.302(a), Plan Revision Procedures, are straightforward procedures for SIP adoption with the only exception being an FLM notification procedure as stated in 51.302(a)(2)(ii). Section 51.302(b) which describes the State and FLM coordination, requires the State to provide the FLM's a name of the contact person to which the FLM's can submit recommendations on the SIP. The State must also allow the FLM's the opportunity to identify any existing impairment and integral vistas and elements to be included in the monitoring strategy. The State must provide the opportunity for the FLM's to meet in person and allow the FLM's to discuss their assessment of visibility impairment and recommendations on the development of the long-term strategy. The visibility SIP must also provide procedures for the continuing consultation between the State and FLM's on the visibility protection program. Since the State/FLM coordination procedures are a critical and nonroutine action which States must perform for SIP approval, Regions should promptly provide the attached FLM contact list to help assure clear communications channels are established.

The general plan requirements of section 51.302(c) require the SIP to:

1. Recognize that the FLM's may, at any time, certify that impairment exists;

2. Contain a long-term strategy (10-15 years) for making reasonable progress toward the national goal;
3. Contain an assessment of visibility impairment and a discussion of how each element of the plan relates to the national goal; and
4. Contain emission limitations or other control measures as represented by best available retrofit technology (BART).

In cases where at least 6 months before SIP submission the FLM's have certified that impairment has occurred in a Class I area, the State must identify and analyze for BART each stationary facility where the State can "reasonably attribute" that impairment to the facility. The EPA document, "Guidelines for Determining Best Available Retrofit Technology for Coal Fired Power Plants and Other Existing Stationary Facilities" (EPA 450/3-800-09b), should be used for this analysis.

#### Exemptions from BART--Section 51.303

Major stationary facilities are given the opportunity to avoid emission limitations as represented by BART if they can demonstrate to the Administrator that the emissions from that source do not cause significant impairment of visibility in a Class I area. The State and FLM's must concur with the determination before the Administrator grants the exemption. We will develop further guidance on these exemptions, if needed, in the future.

#### Identification of Integral Vistas--Section 51.304

The FLM's were given the opportunity to declare integral vistas on or before December 31, 1985. The Roosevelt Campobello International Park Commission (RCIPC) was the only FLM to declare integral vistas. Therefore, only the State of Maine is required to protect integral vistas from visibility impairment caused by new or existing sources. Other States, as have the States of Washington and Alaska, may declare and protect integral vistas at their own discretion. Although the Department of the Interior (DOI) declined to name vistas, DOI stated that the States have the authority to protect vistas. The National Park Service has expressed willingness to assist any State that wishes to list vistas.

#### Long-Term Strategy--Section 51.306

The long-term strategy is a 10-15 year plan for making reasonable progress toward the national goal. The long-term strategy must cover any existing impairment and any integral vista that the FLM's have declared at least 6 months before plan submission. A long-term strategy must be developed which covers each Class I area within the State and each Class I area in another State that may be impacted by sources within the State. The strategy must be coordinated with existing plans and goals for a Class I area including those of the FLM's. (A single comprehensive plan is not precluded.) The strategy must state with reasonable specificity why it is adequate for making reasonable progress toward the national goal. The long-term strategy

and SIP must provide for the review of the impact of new sources as required by sections 51.307 and Subpart I (formerly sections 51.24 and 51.18). The State must consider as a minimum the following six factors in the long-term strategy:

1. Emission reductions due to ongoing air pollution control programs,
2. Additional emission limitations and schedules for compliance,
3. Measures to mitigate the impacts of construction activities,
4. Source retirement and replacement schedules,
5. Smoke management techniques for agricultural and forestry management purposes including such plans as currently exist within the State for these purposes, and
6. Enforceability of emission limitations and control measures.

The SIP must include a statement as to why these factors were or were not considered in developing the long-term strategy.

The State must commit to periodic review of the SIP on a schedule not less than every 3 years. A periodic report must be developed in consultation with the FLM's and must contain the following:

1. Progress achieved in remedying existing impairment;
2. The ability of the long-term strategy to achieve reasonable progress toward the national goal;
3. Any change in visibility conditions since the last report or since plan approval;
4. Additional measures, including the need for SIP revisions, that may be necessary to achieve progress toward the national goal;
5. The progress achieved in implementing BART and meeting other schedules laid out in the long-term strategy;
6. The impact of any exemption granted under 51.303; and
7. The need for BART to remedy existing impairment in an integral vista declared since plan approval.

#### Monitoring Strategy and NSR Procedures--Sections 51.305 and 307

The visibility monitoring and NSR requirements have been outlined in memoranda dated June 20, 1984; September 24, 1984; and March 25, 1985; and also in Federal Register notices 49 FR 42670 and 50 FR 28544 (dated October 23, 1984; and July 12, 1985, respectively). States without approved Part I plans should be encouraged to develop them at this time.

## VISIBILITY SIP SUBMITTALS

### General Plan Requirements

The regulations can be divided into general requirements which all SIP's must contain and more specific requirements for States (or Class I areas) to address visibility impairment. Most requirements can be met in narrative discussions and should not require lengthy regulatory development. Each SIP must contain as a minimum:

1. Evidence of consultation with the FLM's;
2. A discussion of whether visibility impairment certified by a FLM can be "reasonably attributed" to specific sources;
3. A discussion whether control measures are necessary, effective, and enforceable in remedying the impairment and preventing future impairment;
4. A discussion of which data and control programs were considered in making the decisions above; and
5. A commitment to a periodic review and revision of the visibility SIP, which includes a report to the public and to EPA.

If the State finds that visibility impairment is attributable to certain sources, the State is required as a minimum to carry out the following:

1. Analyze for BART each major stationary facility that causes or contributes to that impairment.
2. Consider controls on each minor facility or nontraditional source, and
3. Adopt emission limitations representing BART or other appropriate control measures.

The State is allowed to consider economic factors in assessing the need for alternate control strategies. However, the SIP must nevertheless demonstrate reasonable progress toward the national goal.

### FLM Certification of Impairment

The EPA began FIP development by formally requesting the FLM's to identify visibility impairment and integral vistas in April 1985. The FLM's responded in late 1985 and early 1986. My staff has already sent copies of all material relevant to the certification of impairment for the States in your Region. This information should be transmitted to the States if you have not already done so. Because EPA expects the States to address this certification, I will briefly summarize it here.

The DOI has certified that visibility impairment from uniform haze exists in all mandatory Class I Federal areas in the lower 48 United States. In addition, the DOI has identified 8 Class I areas where emissions from specific sources may be causing or contributing to visibility impairment in the Class I area. The Department of Agriculture, Forest Service (FS), initially identified 14 Class I areas where they had reason to believe that local sources were causing visibility impairment in the Class I areas. The FS has since notified EPA that this determination was preliminary and should not be considered a certification under section 51.302(c)(1). The RCIPC informed EPA that visibility impairment exists from both natural and manmade sources. Although the RCIPC attributes the manmade impairment to regional sources, there may be some local sources which are contributing to the impairment.

In the January 23 notice, EPA cited deficiencies relating to impairment in the SIP's of 19 States. After further evaluation of the data supplied by the FLM's, EPA believes only six States (Maine, New Jersey, South Carolina, Minnesota, Arizona, and Utah) may be required to address impairment.

Although the EPA has set a June 1, 1986, cutoff date for the FLM's to certify impairment for initial FIP development, the regulations require the States to address visibility impairment which has been identified at least 6 months prior to SIP submission. Therefore, the FLM's may identify visibility impairment directly to the States during the SIP development process and this impairment must then be addressed in the SIP's.

#### Assessment of Visibility Impairment

Each SIP must contain an assessment of visibility impairment which addresses the identified impairment. Each State is expected to make a reasonable effort to determine if emissions from any local sources can be "reasonably attributed to cause or contribute to the visibility impairment." The regulations define "reasonably attributable" as "by visual observation or other technique the State deems appropriate." Although the available data on reasonably attributable visibility impairment may be limited, the States are expected to consider all available data including the following:

1. Data supplied by the FLM's;
2. The number of sources (major sources, minor sources, and nontraditional sources) that have the potential to impact the visibility in Class I areas;
3. The emissions and the control measures on the sources;
4. The prevailing meteorology near the Class I area; and
5. Any modeling which may have been done for other air quality programs such as for new source permitting.

The State may also consider modeling the impact of nearby sources by the existing visibility models. The States may also consider implementing a special monitoring program to address specific problems in Class I areas.

If the State concludes that the impairment is attributable to specific sources, the State must evaluate control programs to remedy the impairment. In cases where the source is an existing stationary facility as defined in section 51.301(e), the State must complete a BART analyses according to the BART guidelines. If the source is a minor source, or nontraditional source such as smoke from prescribed fires, the State must consider whether additional controls are necessary.

In many cases the visibility impairment is not well documented, and the State will be unable to make a decision as to the type or sources of visibility impairment. The SIP should contain a discussion of what data the State considered and what measures the State is taking, if any, to resolve this situation. If the State concludes that the Class I areas within the State are not experiencing visibility impairment that can be addressed under these regulations, the State must support that conclusion.

#### Long-Term Strategy

Each SIP must contain a discussion of whether the six factors listed in section 51.306(e) are or are not required in the long-term strategy. This discussion need not be lengthy but must address each of the six items. The long-term strategy also requires each SIP to contain a commitment for periodic review and revision of the SIP no less than every 3 years. The State must prepare a report to the Administrator which contains a discussion of the listed section 51.306(c). The State should commit to this by a regulation or a letter from the Governor of the State. This part of the SIP will then be incorporated by reference in the Code of Federal Regulations.

#### SIP PROCESSING

As was mentioned earlier, some States have or are about to submit Part II SIP's to EPA for review. If EPA receives the submittals by October 31, 1986, these States will not be part of the Federal proposal. The States can also avoid the final Federal promulgation if they submit revisions by August 31, 1987. The States should have adequate time to develop a visibility SIP and follow through with adoption procedures to meet this second deadline.

As in Part I, the Regional Offices are responsible for preparing the proposed and final rulemaking notices on the SIP submittals. The proposed actions must be published within 7 months of the SIP submittal (but no later than March 31, 1988) and the final actions within 7 months of the proposed action. These times are meant to reflect our 5-2 processing schedule. If the Regional Office determines that a SIP revision is not approvable, the rulemaking notice must contain the proposed disapproval and proposed Federal remedies. The final rulemaking notice will then contain the final disapproval and promulgation of the Federal remedies.

Although the settlement agreement has been revised to reflect more reasonable processing times, the deadlines require EPA to approve SIP's or promulgate FIP's on schedule. The Regional Offices and Headquarters will need to give these actions priority status. We had some difficulty in meeting the deadlines with parallel process Part I SIP's. Therefore, we are not encouraging parallel process SIP's for these requirements because of the short time available to change approaches on the SIP's. If a State fails to meet its schedule in a parallel process action, the EPA may not have sufficient time to promulgate a FIP for the State in compliance with the settlement schedule. We also had problems with receiving late notices from the Regions. I remind the Regions that Headquarters needs 2 months to review the SIP submittals. In order to facilitate processing of the SIP's, my staff will be using a checklist in their review of the SIP's to ensure that the States and Regions have included the appropriate discussions. I have attached a copy which may be distributed to your States.

I hope by providing timely guidance and emphasizing the importance of these actions, we can avoid some of the problems we encountered in the Part I actions. If you have any questions on the State or Federal actions under the settlement, please contact Janet Metsa (FTS 629-5540) of my staff.

Attachments

cc: R. Campbell

bcc: J. Byrne (FS)  
S. Farrell (EN-341)  
R. Fisher (FS)  
G. Foote (LE-132A)  
B. Mitchell (NPS)  
B. Rolofson (FWS)  
S. Worthington (PM-221)

0AQPS:CPDD:SIB:PPS:METSA#4 doc.8:Jhargrove:10/24/86:RTP(MD-15):x5697.

Attachment 2

CHECKLIST FOR VISIBILITY SIP'S

STATE: \_\_\_\_\_

REVIEWER: \_\_\_\_\_

Comments

51.300 Purpose

(a) Statement of national goal

\_\_\_\_\_

(b) Listing of protected areas

\_\_\_\_\_

51.301 Definitions

\_\_\_\_\_

51.302(b) Coordination with FLM

(1) Consultation before SIP submittal

\_\_\_\_\_

(2) Opportunity to meet

\_\_\_\_\_

(3) Continuing consultation

\_\_\_\_\_

51.302(c)

(1) FLM may identify impairment

\_\_\_\_\_

(2) Assessment of visibility impairment

\_\_\_\_\_

Discussion of SIP elements

\_\_\_\_\_

Emission limitations

\_\_\_\_\_

Schedules for compliance

\_\_\_\_\_

(3) Require maintenance of control equipment

\_\_\_\_\_

(4) BART analyses

\_\_\_\_\_

51.304 Integral Vistas (not required)

\_\_\_\_\_

51.305 Monitoring Strategy

\_\_\_\_\_

(a) Evaluate visibility

\_\_\_\_\_

(b) Consider available data

\_\_\_\_\_

Visibility Checklist Cont.

Comments

51.306 Long Term Strategy (10-15 year plan)

(a) Must address identified impairment

Each area must be addressed

States why LTS adequate

(b) Coordinated with FLM

(c) Periodic review and report to EPA (not less than 3 years)

(1) Progress toward national goal

(2) Ability of SIP to attain goal

(3) Change in visibility conditions

(4) Additional necessary measures

(5) Progress toward implementing BART

(6) Impact of any BART exemption

(7) Need for BART since SIP approval

(d) Review of impact of new sources (See 51.307)

(e) Consideration of the following:

(1) On-going emission reductions

(2) Additional emission reductions

(3) Construction activities

(4) Source retirement and replacement

(5) Smoke management techniques

(6) Enforceability of emission limitations

(f) Discuss why factors were or were not considered

(g) State considers economic factors in LTS

51.307 New Source Review

(a) FLM 30/60 day notification

Visibility Checklist cont.

Comments

Advance notification

\_\_\_\_\_

Consideration of FLM analyses

\_\_\_\_\_

(b) Nonattainment review

\_\_\_\_\_

(c) Consistent with goal

\_\_\_\_\_

(d) Preapplication monitoring

\_\_\_\_\_

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 172  
(VOLUME 2)

\*\* CLEAN AIR ACT SECTION 172

- \* PN172-86-02-28-052  
RESPONSES TO FOUR VOC ISSUES RAISED BY THE REGIONAL OFFICES AND  
DEPARTMENT OF JUSTICE
- \* PN172-86-10-30-053  
INCLUSION OF CLEAN-UP SOLVENTS IN DETERMINING APPLICABILITY TO THE  
100-TON PER YEAR NON-CTG REQUIREMENTS
- \* PN172-87-06-25-054  
EMISSION CUT-OFF FOR CONTROL TECHNIQUES GUIDELINES VOLATILE ORGANIC  
COMPOUND SOURCES
- \* PN172-87-09-09-055  
ALTERNATIVE COMPLIANCE FOR GRAPHIC ARTS RACT
- \* PN172-86-01-09-057  
CLARIFICATION OF CTG RACT RECOMMENDATIONS FOR HIGH-DENSITY  
POLYETHYLENE, POLYPROPYLENE, AND POLYSTYRENE
- \* PN172-86-09-29-058  
SEASONAL VOC CONTROLS
- \* PN172-87-09-11-059  
GEOGRAPHIC APPLICABILITY OF CLEAN AIR ACT SANCTIONS
- \* PN172-87-12-10-060  
LETTER TO LEONARD LEDBETTER ON USE OF POTENTIAL VS ACTUAL EMISSIONS FOR  
VOC REGULATIONS
- \* PN172-88-05-27-061  
TRANSMITTAL OF EPA GUIDANCE ON VOC ISSUES
- \* PN172-88-06-21-062  
TRANSMITTAL OF AUTOMOBILE TOPCOAT PROTOCOL
- \* PN172-88-08-23-063  
LETTER TO WILLIAM JURIS ON VOC EMISSION CUTOFF
- \* PN172-88-09-07-064  
AIR PROGRAMS APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS  
COMPLIANCE WITH THE STATUTORY PROVISIONS OF PART D AND SECTION 110 OF  
THE CLEAN AIR ACT (FR CITATION)
- \* PN172-88-11-04-065  
EPA AUTHORITY TO REQUEST CHANGES IN RACT RULES

AIR PROGRAMS POLICY AND GUIDANCE NOTEBOOK  
DOCUMENT TITLE LISTING FOR CAA SECTION 172  
(VOLUME 2)

- \* PN172-88-12-01-066  
RACT REQUIREMENTS IN OZONE NONATTAINMENT AREAS
- \* PN172-88-12-16-067  
VOLATILE ORGANIC COMPOUND (VOC) DISPOSAL REGULATION
- \* PN172-89-01-27-069  
TRANSMITTAL OF QUESTIONS AND ANSWERS ON EMISSION INVENTORIES FOR  
POST-1987 OZONE AND CARBON MONOXIDE STATE IMPLEMENTATION PLAN CALL  
AREAS
- \* PN172-89-02-15-070  
MARINE VESSEL VAPOR CONTROL
- \* PN172-89-03-16-071  
COMPLIANCE SCHEDULES FOR VOLATILE ORGANIC COMPOUNDS (VOC's)
- \* PN172-89-04-03-072  
APPLICABILITY OF MISCELLANEOUS METAL PARTS AND PRODUCTS COATINGS  
REGULATIONS TO ADHESIVES, SEALANTS AND FILLERS
- \* PN172-89-04-07-073  
BASELINE FOR CROSS-LINE AVERAGING
- \* PN172-89-05-03-074  
IDENTIFICATION OF NEW AREAS EXCEEDING THE NAAQS
- \* PN172-89-05-25-075  
CORRECTING CAPTURE EFFICIENCY (CE) REGULATIONS
- \* PN172-89-07-06-076  
AEROSPACE AND SIMILAR RULES IN OZONE STATE IMPLEMENTATION PLANS (SIP'S)
- \* PN172-89-10-24-077  
COMPLIANCE TIME PERIOD FOR ELECTROPHORETIC PRIME-COATING OPERATIONS
- \* PN172-90-02-28-078  
LOWEST ACHIEVABLE EMISSION LIMITS (LAER) FOR OZONE NONATTAINMENT AREAS
- \* PN172-90-06-18-079  
OZONE AND CARBON MONOXIDE DESIGN VALUE CALCULATIONS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-07-06-076

JUL 6 1989

MEMORANDUM

SUBJECT: Aerospace and Similar Rules in Ozone State Implementation Plans (SIP's)

FROM: Gerald A. Emison, Director *[Signature]*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

A number of Regions have raised questions concerning volatile organic compound (VOC) emissions from the aerospace industry. This memo is intended to provide you with the most current information and guidance relative to this industry. In assessing our efforts to "Level the Playing Field" for State VOC regulation cutpoints, deficiencies, and deviations, we became aware that a wide disparity exists between State VOC regulations for aerospace facilities. (See attached Table A-3 from Region IX's draft report, "Compliance Evaluation of Surface Coatings in the California Aerospace Industry.") Even though the Regional Offices issued SIP calls to correct deficiencies and deviations, it appears that some deviations regarding the aerospace industry were not identified to the States as deficiencies.

Our objectives are to assure that SIP emission limits represent reasonably available control technology (RACT) and to standardize these regulations across post-1987 nonattainment areas. This action is intended to prevent a wide variety of emission limits from being included in regulations applicable to this industry throughout the country. Therefore, the emission limits included in the control technique guideline (CTG) for miscellaneous metal parts and products (MMP&P) must be applied to all applicable items, regardless of whether they are under the aerospace category. Such limits must be expressed in a fashion no less stringent than a 24-hour weighted average.

As a result, specialty coatings applied to metal surfaces (such as maskants, adhesive bonding primers, strippers, etc.) must comply with the applicable emission limit specified in the CTG for the MMP&P.

If credit for transfer efficiency is allowed, the regulation must meet the requirements specified in the document, "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations."

The only allowable exemptions for this category are those stated in the MMP&P CTG and for sources with actual VOC emissions less than 3 lbs/hour or 15 lbs/day or potential VOC emissions less than 10 tons per year. Also, the Environmental Protection Agency (EPA) model regulations for MMP&P exempt the painting of the exterior of airplanes, boats, and ships for very specific reasons.

In 1978, no known technology had been demonstrated to control the lean concentrations of VOC in the large volumes of exhaust air from the large hangers used in coating the exterior of large aircraft. Ocean going vessels are not painted in spray booths; hence, add-on abatement was not an option. It was not clear that complying coatings that meet the requisite performance requirements would be readily available in the near term. (However, new technology has now made add-on controls of aircraft spray booths technologically feasible for use in those States that need the reductions.)

Regional Offices should therefore, under the post-1987 SIP calls, ask States to review State regulations that are applicable to the aerospace industry or ship painting and revise them if necessary to ensure that they are consistent with these recommendations. Also, the Regional Offices should note that the MMP&P regulations may not exempt the aerospace industry (except for the exemptions noted above). The States should revise their regulations as expeditiously as practicable after notification of the deficiency.

In the attached letter to Mr. Robert A. Wyman from Mr. Don R. Clay, dated February 3, 1989, EPA has also provided guidance concerning source-specific RACT determination.

Any questions concerning the technical aspects of this matter should be directed to Dave Salman (FTS 629-0859); questions related to the regulatory aspects should be directed to John Silvasi (FTS 629-5666) or Bill Johnson (FTS 629-5245).

#### Attachments

cc: J. Calcagni	J. Farmer
R. Campbell	B. Rosenberg
D. Clay	J. Seitz

TABLE A-3

## NATIONAL COVERAGE OF AEROSPACE OPERATIONS

<u>AREA</u>	<u>SUMMARY OF COVERAGE</u>
1. Kansas City, KA	- Uses Miscellaneous Metal Parts & Products (MMP&P) CTG limits; exempts minor sources and the exterior refinishing of airplanes.
2. St. Louis, MO	- Uses MMP&P CTG limits; covers sources emitting over 10 T/Y; exempts exterior refinishing of airplanes and the following: adhesion promoters, adhesive bonding primers, flight test coatings, space vehicles, fuel tank coatings and dry film lubricants.
3. Pennsylvania	- Applies MMP&P limits to sources with the potential to emit over 50 T/Y; no exemptions in the rule.
4. New Jersey	- Applies MMP&P CTG limits; exempts exterior coating of aircraft.
5. Wisconsin	- Applies MMP&P CTG limits; exempts exterior of airplanes and specialized coatings required by state or federal agencies.
6. Washington	- Has Aerospace-specific rule, exempts chemical milling maskants, adhesive bonding primers, flight test coatings, space vehicle coatings and fuel tank coatings; covers sources emitting 40 lb/day or more.
7. Oregon	- Applies CTG limits to sources emitting over 15 lb/day; no aerospace exemptions.
8. Puget Sound	- Has Aerospace-specific rule, covers sources emitting over 40 lb/day, exempts chemical milling maskants, adhesive bonding primers, to light test coatings, space vehicle coatings and fuel tank coatings.

TABLE A-3 (cont'd.)

<u>AREA</u>	<u>SUMMARY OF COVERAGE</u>
9. Delaware	- Applies MMP&P CTG limits, no aerospace exemptions.
10. Massachusetts	- Applies MMP&P CTG limits; covers sources emitting over 25 T/Y, no exemptions.
11. Connecticut	- Applies MMP&P CTG limits; exempts "interior and exterior" of aircraft.
12. Texas	- Applies MMP&P CTG limits, covers sources emitting over 100 lb/day, exempts exterior of airplanes.
13. Colorado	- Applies MMP&P CTG limits, no size based exemption, exempts in-situ coating of aircraft and division-approved high performance coatings.

FEB 8 1989

Mr. Robert A. Wyman  
Latham & Watkins  
555 South Flower Street  
Los Angeles, California 90071

Dear Mr. Wyman:

This is in response to our November 9, 1988, meeting regarding the aerospace industry. At that meeting the industry representatives requested clarification of the following questions: (1) can States deviate from the miscellaneous metal parts and products control techniques guideline (CTG) in developing aerospace rules and (2) to what extent is State source-specific relief available.

The U.S. Environmental Protection Agency's (EPA's) guidance for reasonably available control technology (RACT) in ozone State implementation plans (SIP's) appears in the Federal Register of September 17, 1979 (44 FR 53761). I am enclosing a copy of that notice for your information (Enclosure 1). The notice provides a definition of RACT: "The lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility . . . RACT for a particular source is determined on a case-by-case basis, considering the technological and economic circumstances of the individual source."

The notice further states:

" . . . each CTG contains recommendations to the States of what EPA calls the 'presumptive norm' for RACT, based on EPA's current evaluation of the capabilities and problems general to the industry. Where the States find the presumptive norm applicable to an individual source or group of sources, EPA recommends that the State adopt requirements consistent with the presumptive norm level in order to include RACT limitations in the SIP . . . . The presumptive norm is only a recommendation. For any source o[r] group of sources, regardless of whether they fall within the industry norm, the State may develop case-by-case RACT requirements independently of EPA's recommendation. EPA will propose to approve any submitted RACT requirement that the State shows will satisfy the requirements of the Act for RACT, based on the economic and technical circumstances of the particular sources being regulated."

We continue to regard the miscellaneous metals CTG to be applicable to coating of metal aerospace parts and components. The above cited policy provides for obtaining a source-specific RACT determination for an individual source if the State provides adequate documentation that the presumptive norm for RACT (e.g., emission control through use of an incinerator or carbon adsorber or process substitution such as the use of complying coatings) is economically or technologically infeasible.

It should be noted, however, that most of the pertinent rules were adopted prior to 1982; and we are now over 7 years after that date. While we do not a priori preclude the ability of a source to make a showing such as that described above, it is likely that any credible source-specific arguments would have already been raised and resolved by this late date. Hence, any such demonstration should adequately address the source's efforts since rule adoption, and should place the lack of an earlier submittal into context.

Further, the above response presumes that the area for which a source-specific RACT determination is requested does not lack an approved SIP and complies with other statutory requirements. The EPA can only approve a relaxation where the State demonstrates that compliance with the other statutory requirements of the Clean Air Act, such as attainment and reasonable further progress, is also adequately addressed.

The EPA must require expeditious compliance with all surface coating regulations; therefore, in order to insure this result, we have instructed our Regional Offices (see enclosed memoranda dated August 7, 1986, and November 23, 1987--Enclosures 2 and 3) to secure an expeditious schedule for the installation of add-on control equipment where plants are not in compliance. Low-solvent technology will only be accepted if compliance is to be demonstrated via complying coatings within a very short time period.

I appreciate the opportunity to meet with you and representatives of the aerospace industry, and trust this information is responsive to your concerns.

Sincerely,

(SIGNED) DON R. CLAY

Don R. Clay  
Acting Assistant Administrator  
for Air and Radiation

3 Enclosures

bcc: John Calcagni (MD-15)  
Eileen Claussen (ANR-443)  
John Seitz (ER-341)

OAQPS:ESD:CPB:CAS:RBLASZCZAK/1hanzely/johnson:NCII:MD-13:12-06-88:541-5408  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

A. LEIN

PN 172-89-05-25-075

MAY 25 1989

MEMORANDUM

SUBJECT: Correcting Capture Efficiency (CE) Regulations

FROM: 601 Gerald A. Emison, Director *Thompson*  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxics Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

The Office of Air Quality Planning and Standards (OAQPS) has received a number of requests for additional guidance and clarification relative to CE requirements for volatile organic compound (VOC) emission limiting regulations. This memo is to provide information on the status of that guidance and our expectation regarding State implementation plan (SIP) submittals.

STATUS OF GUIDANCE

A generally applicable test method for CE cannot be published at this time because of the variety of configurations of sources that would be subject to the tests.

Basic principles for determining CE are presented in a July 7, 1980 memo entitled "Determination of Capture Efficiency" from Jim Berry of the Emission Standards and Engineering Division [now the Emission Standards Division (ESD)] to Region IV (copy attached). The Technical Support Division (TSD) will shortly issue a memo that provides guidance on the sampling regimen and describes procedures and conditions that cause inaccuracies which should be considered. Test methods developed in accordance with the principles set forth in the above-noted memos should standardize measurements of CE insofar as possible. Standardization is often difficult, however, considering

\*

\* 7/7/80 MEMO NOT ATTACHED

the diversity of processes for which CE must be measured or the variety of feed streams which must be metered and analyzed as part of a conventional material balance. Thus, it is not presently possible to specify a generic method to be applied in all cases.

Separate protocols are being developed with details for conducting any of three kinds of tests; these draft protocols may form the basis for a State to develop case-by-case test methods. The first, developed around the concept of temporarily enclosing the process and measuring all VOC's that exit from the enclosure, is now available from ESD. The others include, a comprehensive liquid-to-gas material balance and a gas-to-gas material balance without a temporary enclosure. These protocols should be available by late this summer, after which EPA will conduct confirming tests for all three protocols. The EPA has also proposed a CE test for the rubber tire manufacturing industry (54 FR 6850, February 14, 1989) that includes a simplified liquid-to-gas material balance method. This method would be applicable in some unique cases when only a single solvent is used and the coatings dry by evaporation (no reaction by-products are formed).

A separate memorandum currently under development will provide guidance on ongoing enforcement cases that involve CE testing.

#### IMPLICATIONS FOR "SIP CALL" SUBMITTALS

The May 25, 1988 document entitled "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations" (also known as the "blue book") says, in regard to CE, that State regulations must:

- " ° Specify CE test method where CE is discussed or implied in the limit (e.g., webcoating operations with add-on control).
- ° Employ the most recent guidance on CE testing (guidance forthcoming)."

Until EPA issues final CE test methods, an acceptable response to the SIP call will be a commitment to develop test methods consistent with the most recent EPA guidance on CE testing on a case-by-case basis as needed and a commitment to develop generally applicable test methods after EPA issues final CE test methods.

If you have any further questions about this matter, you may call Jim Berry, (ESD) at 629-5605, Gary McAlister, (TSD) at 629-2237, or John Silvasi (AQMD) at 629-5666.

Attachment

cc: J. Berry  
J. Calcagni  
D. Cole  
J. Farmer  
S. Holman  
B. Johnson  
L. Kesari  
V. Katari ✓  
W. Laxton  
G. McAlister  
B. Polglase

J. Seitz  
J. Silvasi  
T. Williamson  
G. Wood  
S. Wyatt  
Chief, Air Branch, Regions I-X  
VOC Regulatory Contacts, Regions I-X.  
VOC Enforcement Contacts, Regions I-X.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-05-03-074

3 MAY 1989

MEMORANDUM

SUBJECT: Identification of New Areas Exceeding the NAAQS

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: William Laxton, Director  
Technical Support Division (MD-14)

This is in response to your earlier request for our consideration of two modeling related State implementation plan (SIP) issues. Specifically, the two issues are: (1) approval of a proposed SIP emission limit for a source under consideration when there are modeled violations of the national ambient air quality standards (NAAQS) due to nearby background sources in the surrounding area, and (2) the resource burden associated with assembling the data necessary for modeling the background sources. This memorandum restates the existing policy developed by the Model Clearinghouse and discusses limited exceptions to the policy.

SIP Approvals

Our general policy may be summarized as follows:

1. Background concentrations are an essential part of the total air quality concentration to be considered in determining source impacts. Nearby sources which are expected to cause a significant concentration gradient in the vicinity of the source under consideration should be explicitly modeled (as "background" sources).
2. Under section 110 of the Clean Air Act, each SIP must provide for attainment and maintenance of the NAAQS. Where background sources are found to cause or contribute to a violation, a SIP revision for the source under consideration generally should not be approved until each violation in the modeled Region is prevented or eliminated through the SIP rules. This policy avoids approval of a SIP revision which does not provide for attainment throughout the modeled area.

I also recognize that section 110 allows for approval of portions of SIPs. Therefore, exceptions to the general policy may be warranted in certain circumstances. Before any exception will be considered, it must be clearly shown that the SIP would be improved as a result of the partial approval. As a minimum, the following factors should be considered in determining exceptions to the general policy:

1. Approval would not interfere with expeditious attainment (i.e., emissions from the source under consideration do not cause or contribute to the modeled violation).
2. There would be an environmental benefit (i.e., the SIP revision would result in an actual emissions decrease and ambient air quality improvement).
3. Enforcement of the SIP would be improved (e.g., without approval there would be no federally enforceable measure for the source under consideration or ambiguities in the previous limit serve to frustrate enforcement efforts).

Where it is found that an exception should be made based on the above factors, we expect the proposed approval notice to specifically identify the background source violations and clearly state that the State retains an obligation to take action expeditiously to correct the background violations. The final approval notice for the source under consideration should not be promulgated before the State acknowledges the background violations and submits an acceptable schedule for corrective action. The schedule would then be included in the final notice as the State's response to EPA's identification of violations. A SIP call pursuant to section 110(a)(2)(H) should be issued where a State fails to acknowledge its obligation and submit a schedule for resolution of violations during the comment period.

### Resources

The resource burden associated with assembling the necessary data and modeling the background sources has been extensively discussed through the Model Clearinghouse and annual modelers' workshops. I believe that the resource burden associated with modeling background sources using current modeling guidance need not be as great as it potentially appears.

The Guideline on Air Quality Models (Guideline) states that the nearby (background) source inventory should be determined in consultation with the local air pollution control agency. Specifically, the Guideline states that "The number of (background) sources is expected to be small except in unusual

situations." In this and in other areas, the Guideline necessarily provides flexibility and requires judgment to be exercised by the reviewing agency. The resource burden may be mitigated somewhat by application of this judgement.

In investigating whether more explicit guidance is needed, my staff has coordinated with the Model Clearinghouse and the modeling and SO<sub>2</sub> contacts in each Regional Office. Given the flexibility that is provided by existing guidance and the tendency for more explicit policy to reduce this flexibility, no further guidance was judged necessary. The Regional Offices generally have been able to work with their States to collect sufficient data to support the necessary modeling. Consequently, there was little support for the suggestion to revise the current policy to more explicitly limit the number of sources that should be modeled for downwash.

### Conclusion

I believe that an exception to the general policy regarding processing of SIP revisions may be warranted where it is in the best interests of air quality to approve certain SIP revisions notwithstanding the existence of violations due to background sources. However, the affected State retains an obligation to take corrective action in response to any properly conducted analyses which demonstrate a violation. This policy is consistent with the Guideline and Model Clearinghouse actions. My staff is available to assist in application of this policy on a case-by-case basis.

If you would like to discuss these issues further, please call me or have your staff contact Doug Grano at extension 5255.

cc: R. Bauman  
R. Campbell  
P. Embrey (OGC)  
E. Ginsburg  
D. Grano  
J. Silvasi  
D. Stonefield  
J. Tikvart  
D. Wilson  
Air Division Directors, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-04-07-073

7 APR 1990

MEMORANDUM

SUBJECT: Baseline for Cross-Line Averaging

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Director, Air Management Division  
Regions I, III, IX  
Director, Air and Waste Management Division  
Region II  
Director, Air, Pesticides, and Toxic Division  
Regions IV, VI  
Director, Air and Radiation Division  
Region V  
Director, Air and Toxics Division  
Regions VII, VIII, X

This memorandum clarifies the Environmental Protection Agency (EPA) policy concerning baseline calculations for volatile organic compounds (VOC) emission trades involving cross-line averaging for coating operations. The major issues are appropriate procedures to develop a baseline for cross-line averaging, and use of emission limitations (caps) for sources seeking cross-line averaging.

As you know, EPA policy treats cross-line averages as bubbles covered under the emissions trading policy statement (ETPS). Cross-line averaging refers to the averaging of emissions from two or more operations or sources to achieve compliance with the emission limits of a rule (generally expressed in units of mass of VOC per volume of coating, or mass of VOC per volume of solids applied).

The ETPS defines baselines as the lower of actual or allowable emissions [or RACT-allowable for nonattainment areas needing but lacking an approved attainment demonstration (NALD)] in a mass per time unit (e.g., tons/year or pounds/day). This value is calculated as the product of an emission rate (e.g., in lb of solids applied), a capacity utilization (e.g., lb of solids

applied/hour), and the hours of operation (e.g., in hours/day). This is an obvious discrepancy because cross-line averaging does not require a limit on production but the ETPS appears to require a cap on production. However, page 43843 of the ETPS states:

"Unless enforceable restrictions are or have been placed on capacity utilization and hours of operation, or on overall emissions, maximum values for capacity utilization and hours of operation must generally be used in calculating post-trade emission limits and in modeling of the post-bubble case."

The word "generally" in this sentence was explicitly included to preserve the option of cross-line averaging as discussed above. In other words, cross-line averaging was an exception to the general ETPS. Therefore, a cross-line average is consistent with EPA policy if the trade is based on the lower of actual or allowable emission rate (or RACT-allowable for NALD's) and current production. No assumptions are needed concerning historic production; the trade is based solely on the appropriate emission rate.

In a cross-line average, credit is generated and used over a 24-hour period (i.e., a lower emission rate on one line compensates for a high emission rate on another line) and, therefore, the amount of credit does not depend on historical production.

Even though use of caps is not required for cross-line averaging, they would obviously be more beneficial (than no cap) in providing progress toward attainment and maintenance in NALD's. Thus, EPA would encourage caps.

Note that, for NALD's, if one coating line in the trade had, within the 2 years preceding the date of applications, used a coating whose VOC content was lower than the SIP-allowable or RACT-allowable, that lower rate must be used in calculating the baseline emission rate for the plant.

Ted Creekmore (629-5699) is available for further discussion of these issues.

cc: T. Helms	C. Stahl, R-III
J. Silvasi	K. Prince, R-IV
T. Creekmore	L. Schultz, R-V
R. Ossias	B. Riddle, R-VI
H. Hoffman	C. Whitmore, R-VII
B. Elman	D. Wells, R-VIII
M. Cypser	J. Ungvarsky, R-IX
D. Conroy	D. Bray, R-X
M. Gonzalas, R-II	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-04-03-072

APR 03 1989

MEMORANDUM

SUBJECT: Applicability of Miscellaneous Metal Parts and Products  
Coatings Regulations to Adhesives, Sealants and Fillers

FROM: G. T. Helms, Chief *Tom*  
Ozone/Carbon Monoxide Programs Branch

TO: Steve Rothblatt, Chief  
Air and Radiation Branch, Region V

This memorandum is in response to a question concerning whether adhesives, sealants, and fillers must be treated as coatings subject to miscellaneous metal parts and products regulations. In particular, the exemption of adhesives, sealants, and fillers was identified by Region V as a deficiency in Wisconsin's volatile organic compound (VOC) regulations. Wisconsin's VOC rule for miscellaneous metal parts and products exempts adhesives and materials used to prepare a surface for adhesives; and it also exempts sealants or fillers whose purpose is to seal or fill seams, joints, holes, and minor imperfections of surfaces. The State has requested national guidance which indicates that the application of adhesives, sealants, and fillers to metal parts must be subject to surface coating regulations.

The Control Techniques Guideline (CTG) for miscellaneous metal parts and products does not specifically exempt the application of adhesives, sealants, and fillers, nor are such exemptions contained in any subsequent EPA guidance. In general, these must be considered coatings and be required to meet RACT limits for miscellaneous metal parts operations. Any State regulations which currently contain a blanket exemption for these coatings should be revised to eliminate the exemption. However, a State would still have the option of making a demonstration, on a case-by-case basis, that a particular adhesive, sealant or filler should not be considered a coating, as intended by the CTG. If such a demonstration is made, an exemption could be allowed through a site-specific SIP revision.

If you have any questions, please call John Silvasi (FTS 629-5666) or David Cole (FTS 629-5497).

cc: Air Branch Chiefs, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-03-16-071

MAR 16 1989

MEMORANDUM

SUBJECT: Compliance Schedules for Volatile Organic Compounds  
(VOC's)

FROM: John Calcagni, Director  
Air Quality Management Division

John Seitz, Director  
Stationary Source Compliance Division

TO: David Kee, Director  
Air and Radiation Division, Region V

We have reviewed your memorandum dated December 7, 1988 regarding two issues on compliance schedules for VOC's. The first issue pertains to U.S. Environmental Protection Agency's (EPA's) continuity policy, which requires that each source comply with an existing State implementation plan (SIP) until the new or revised SIP is met. As you stated in your memorandum, this policy has been (and continues to be) a key feature of EPA's implementation of Part D of the Clean Air Act. This memorandum reaffirms EPA's intention of supporting and maintaining this policy, particularly in light of the post-1987 SIP calls and correction of VOC deficiencies and deviations.

The second issue pertains to a source's need and/or request for additional time to comply with the revised VOC regulations. You proposed two approaches for extending compliance schedules for corrected VOC rules.

The first approach would not grant any additional compliance time except through the delayed compliance order (DCO) process. (Under the DCO process, a source may request up to an additional 3 years to comply with a VOC regulation.) We recommend this approach (i.e., immediately effective rules with case-by-case DCO's) when the changes are trivial or simply clarify previous interpretations and do not impose significant new, additional burdens on sources that were otherwise in compliance with the approved SIP. (Sources not in compliance with existing requirements should not be allowed additional compliance time,

and instead should be handled through a traditional compliance approach.) In addition, when a rule change affects only part of a source category or the State cannot document how the change will affect sources, the rule should be immediately effective (and the DCO process is appropriate).

However, this first approach (no additional compliance time) may be unduly restrictive in circumstances where previously exempted sources are newly regulated, or where sources that previously complied with the approved SIP now require major process changes and/or major capital expenditures to comply. In these instances, we recommend the second approach of setting a "presumptive norm" compliance schedule of 1 year or less (from the effective date of the revised rule). However, under this second approach, the State is obligated to clearly demonstrate that these circumstances exist for all sources eligible for this "presumptive norm." The "presumptive norm" compliance time frame would not necessarily apply to an entire source category. In this case, the State's regulation allowing the "presumptive norm" would need to clearly specify that portion of the source category affected. Conversely, the regulation would need to clearly specify that the other sources in the category have an immediately effective compliance date (i.e., the DCO is the only route available for an extension).

Under the "presumptive norm" approach, we also agree with your suggestion that any source requesting additional time beyond the 1 year would be required to apply for a DCO, rather than submitting a rule revision. If a DCO becomes necessary, we would encourage the Regional Offices to limit compliance date extensions to the minimum time necessary to comply with the modified regulations, not to exceed 3 years from the date of rule adoption. Further, the DCO should be limited only to changes made necessary by the rule change. Noncompliance incidental to the rule change should not be included in the DCO; instead, these cases should be handled through normal compliance mechanisms. In any case, EPA retains the responsibility to ensure that any compliance schedule, whether it is contained in the SIP submittal or is the result of a DCO, meets the Clean Air Act's requirements of expeditiousness.

While EPA's policy on grandfathering provisions would apply in these compliance cases (memorandum from Gerald A. Emison, Office of Air Quality Planning and Standards, to Air Division Directors, "Grandfathering of Requirements for Pending SIP Revisions," June 27, 1988), we are not aware of any SIP submittals that would be grandfathered by this policy. Please advise us if this is not the case. \*

\* SEE PN 110-88-06-27-095

If you have any questions or comments, please call John Silvasi at FTS 629-5666 or David Cole at FTS 629-5497.

Attachment

cc: R. Ossias, OGC  
Air Director, Regions I-X  
Air Branch Chief, Regions I-X  
Regional Division Directors  
Regional Air Branch Chiefs (Programs and Compliance)  
VOC Regulatory Contacts  
VOC Compliance Contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

15 FEB 1993

PN 172-89-02-15-070

MEMORANDUM

SUBJECT: Marine Vessel Vapor Control  
FROM: Jack R. Farmer, Director  
Emission Standards Division (MD-13)  
TO: William Hathaway, Director  
Air, Pesticides and Toxics Division, EPA Region VI

Recently, the Emission Standards Division commented on Louisiana's revised draft marine vapor recovery regulation (See attached memo). As you know, other State and local agencies are also pursuing regulation of marine vessel loading operations, including the State of New Jersey and California's Bay Area Air Quality Management District (BAAQMD). Control of marine vessel emissions has raised an issue of safe operation of vapor control systems. The Coast Guard is addressing the issue of safety by developing regulations which will specify equipment and procedures deemed necessary to ensure safe operation during loading and vapor control operations.

Control of marine vessels has also raised the issue of determining compliance with regulations, given both the present lack of knowledge concerning vapor collection efficiency when close-loaded for the purpose of vapor control and the lack of a vapor collection test for the purpose of determining compliance. Therefore, we thought it would be useful to describe alternative approaches to ensure emission control which, if adopted, would result in adequate vapor collection and would also resolve the issue of vapor collection efficiency and compliance determination. A more detailed description of the issue and an approach to resolve it are discussed in the following paragraphs.

BACKGROUND

Presently, nearly all marine vessels are loaded with the vessel hatches or elevated vent pipes open to the atmosphere; cargo vapors are simply displaced to the atmosphere. To effectively control these vapors the following steps are necessary:

1. all openings to the atmosphere must be closed during loading;
2. a vapor collection piping system must be installed - the piping manifold system will most likely be either attached directly to the hatches or be connected to the elevated vent lines, and;
3. the entire control system - including the vessel vapor piping, the piping which connects to the vessel manifold piping and routes vapors to the control unit, and the control unit - must be designed to not exceed the positive and negative pressure settings of the vessel settings of the vessel pressure-vacuum (PV) vents.

Marine vessels are not structurally designed to withstand very large pressure increases or decreases in the cargo space relative to atmospheric pressure. Vessels may withstand pressure changes of a few pounds per square inch gauge. All vessels are equipped with PV vents which open to atmosphere when pressure inside the vessel exceeds the PV vent pressure setting and also open into the vessel if negative pressure develops which exceeds the PV vent pressure setting. Pressure changes occur during loading, unloading, and when cargo vapors expand and contract with temperature changes. The PV vents are designed to open at pressure settings well below vessel pressure tolerances to avoid catastrophic failure of the vessel. Vapor control systems can be designed to operate below the PV vent pressure settings to prevent vapor loss during loading.

Recently, both the States of Louisiana and New Jersey, and California's BAAQMD have adopted regulations for marine vessel loading operations. These regulations specify overall control system effectiveness in the format of a percent emission reduction requirement and/or a mass rate limit. Under either regulatory approach, an estimate of vapor collection efficiency will need to be determined. With a percent emission reduction requirement a determination of add-on control unit efficiency is also needed; the efficiency can be determined during initial compliance and operation of the control device ensured subsequently by monitoring process parameter(s) (e.g., operating temperatures of a thermal incinerator). However, with a mass rate limit, more testing is required by virtue of having to test every vessel that is loaded to determine either compliance or applicability. Therefore, regulations which ensure good vapor capture efficiency and then concentrate on test requirements for the add-on control device will likely minimize the costs of regulation.

We have developed much knowledge on add-on control devices and expect incinerators, flares, and recovery devices to perform the same here as for other volatile organic compound (VOC) streams. Properly designed and operated thermal incinerators, flares, and recovery devices would be expected to achieve 98, 98, and 95 percent emission reduction, respectively, when tested during the latter part of loading when vapors tend to be at their highest concentrations.

To comply with a percent emission reduction requirement, one must know both the vapor collection efficiency and the emission reduction achieved by the add-on control unit (e.g., incineration) (i.e., Percent Emission Reduction = Vapor Collection Efficiency x Add-on Control Unit Efficiency). We do not have a test method designed to determine vapor collection efficiency. Therefore, a measurement of vapor collection efficiency will not be available. Additionally, it is not clear how tight vessels will be once they are closed for control purposes. Because of this uncertainty, vapor leakage from the PV vents and the hatch covers are of particular concern. We do not know to what extent if any, that PV vents and hatch covers that are part of a well-designed system will leak vapors during loading operations. The American Petroleum Institute's (API) Marine Vessel Emissions Task Force is gathering data to address this concern; the API Task Force is scheduled to make recommendations to API by mid-1989. We will review their data when they become available.

The degree of vapor collection and the methodology to demonstrate compliance with the requirement may either be required or implied in the regulation. Vapor collection efficiency, depending on the stringency of the requirements, will affect the design of the add-on control system. Vapor collection systems may be designed to result in either a slight positive or negative pressure in the vessel. The most stringent requirement would specify collection of all vapors without any leakage and would likely necessitate a design system which, when operating, results in a slight vacuum in the vessel to prevent vapors from escaping. Although it is clear that a vessel under slight negative pressure will not leak VOC, it is not clear whether a vessel operating under a slight positive pressure will leak to an extent to preclude compliance. Although Coast Guard safety requirements will ensure that positive or negative pressure within the vessel will not explode or implode the vessel, empirical data demonstrating the degree of tightness under a positive pressure system are rather limited, if not nonexistent. We are, however, suggesting the following approaches to ensure high capture efficiency and effective control which would allow vessels to maintain either a slight positive or negative pressure while connected to a vapor control system.

#### Suggested Alternative Approaches For Ensuring Emission Control

First, the norm for all marine vessel control strategies should be a totally closed vessel/vapor capture system. That is, during loading all hatches should be closed and all PV vents should remain shut while loading. The control system could operate under either a positive or negative pressure depending on the type of vessel being loaded.

The onboard vapor collection system would then route vapors to the add-on control unit. Second, the EPA Method 21 can be used as a surrogate vapor collection efficiency test to ensure that essentially all the vapors are being collected. Method 21 is presently used as a screening technique to equipment component leaks which require maintenance. We are assuming that hatch covers and PV vents in particular will not leak to an appreciable extent under closed loading conditions for many vessels. If hatch covers and PV vents do not leak more than other components (e.g., pumps, valves, flanges, and pressure relief devices), then the mass emissions estimated from vessel equipment leaks will be relatively small when compared to total cargo vapor mass. Therefore, if vessel components can pass a Method 21 screening test, then we are confident of a high vapor collection efficiency. The Method 21 leak definition of 10,000 ppm, which is measured at potential leak interfaces (hatch cover gaskets), is based on empirical data for valves and pumps and represents the screening value above which approximately 95 percent of mass emissions occur. Although little data exist to support the ability of vessels to meet Method 21 with a 10,000 ppm leak definition, both Exxon and Chevron recently performed Method 21 tests on their vessels and stated at a Coast Guard meeting that the results suggest that some vessels, when closed and loaded, may be tight enough to meet Method 21 with a 10,000 ppm leak definition. Presently, a leak definition of 10,000 ppm can be used with the understanding that as more empirical data are collected, a different definition may be developed for the purpose of demonstrating high vapor collection efficiency.

The suggested alternative approaches for ensuring emission control are as follows:

1. Vessels operated below atmospheric pressure during loading will be exempt from determining vapor collection efficiency. Vapor collection efficiency will be assumed to be 100 percent.
2. Vessels operated above atmospheric pressure will be tested using EPA Method 21. Vessels which have equipment meeting a Method 21 action level of 10,000 ppmv when tested during the last 20 percent of loading will be assumed to have a vapor collection efficiency equal to 100 percent. During initial loading of product, displaced vapors are generally lean. Therefore, testing is specified at the end of loading when vessel vapors are at their highest concentration of VOC.
3. Vessels operated above atmospheric pressure and failing EPA Method 21 testing may perform maintenance on leaking equipment and test again.

It is recommended that vessel operating pressure be measured at the ship/shore manifold and be adjusted to account for the pressure differential between the pressure measured at the ship/shore manifold and the pressure in the vessel's cargo tanks. Measuring at the ship/shore manifold would provide a convenient location to check pressure levels rather than measuring pressure at each cargo hold and having to board the vessel to read the gauges. The Coast Guard would like to eliminate the need for personnel to board the vessels because of safety considerations.

Also, the frequency of performing the Method 21 test has not been determined, given the lack of data concerning marine vessel components and how component leak frequency changes with time. However, one should not confuse the frequency of Method 21 screening for leak detection and repair programs, such as those frequencies specified in new source performance standards, for the purpose of reducing emissions from leaking components, with using Method 21 as a surrogate vapor collection efficiency test. For compliance purposes, a vapor collection efficiency test may be needed only once a year.

If you have any questions please call David Markwordt at (919) 541-0837 or FTS 629-0837.

**Attachment**

cc: Jorge Berkowitz, New Jersey DEP  
Gus Von Bodungen, Louisiana DEQ  
Jim Karas, California BAAQMD  
Captain John Maxham, Coast Guard  
Air Directors, Regions I-V, VII-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-89-01-27-069

27 JAN 1989

MEMORANDUM

SUBJECT: Transmittal of Questions and Answers on Emission Inventories for Post-1987 Ozone and Carbon Monoxide State Implementation Plan Call Areas

FROM: William G. Laxton, Director *William G. Laxton*  
Technical Support Division (MD-14)

TO: Chief, State Air Programs Branch, Region I  
Chief, Air Programs Branch, Regions II-IV, VI, VIII-X  
Chief, Air and Radiation Branch, Region V  
Chief, Air Branch, Region VII  
Chief, Air Compliance Branch, Regions IV-V  
Chief, Air Enforcement Branch III  
Chief, Air Operations Branch, Region IX

The purpose of this memorandum is to transmit to you the second issuance of EPA responses to specific questions and issues concerning the proposed post-1987 ozone/carbon monoxide State Implementation Plan emission inventory requirements and procedures. The previous issuance, dated August 15, 1988, addressed questions regarding policy and requirements issues. This issuance responds to questions and issues collected during and since the recently completed emission inventory workshops.

We have prepared responses to some of these important questions and are sending a collection of the questions and responses to you and all of the workshop attendees. Answers to the remaining questions are in preparation and will be mailed under a similar cover letter as soon as they are available.

## Attachments

cc: Charles Gray, OMS  
John Calcagni, OAQPS

*Shue*

## General Guidance Issues

- Q: Some of the guidance presented at the workshops was not in final form. How should the States and local agencies proceed in preparing the inventories without final requirements and procedures?
- A: The key guidance on the requirements and procedures was provided at the workshops in essentially final form. Revisions incorporated since the workshops have been primarily editorial corrections and clarifications resulting from discussions at the workshops. The substance of the guidance materials, as indicated at each of the workshops, has not been revised. Additional guidance materials on the application of MOBILE4 and on preparing quality assurance plans are being provided early in 1989. Absence of these guidance materials at this time is not expected to hamper initial progress in the development of the inventories. The information in the additional guidance can be applied as it is received.
- Q: Does EPA foresee presentation of workshops covering other facets of emission inventory and SIP development (e.g., emission projections, modeling, reasonable further progress, mobile source emissions, and control strategy development)?
- A: Additional guidance is being developed beyond that presented at the workshop, primarily involving MOBILE4, projected inventories, and AIRSHED modeling. Workshops will be planned depending on the perceived needs and requests from State and local agencies.
- Q: What is meant by the phrase "draft emission inventory" when describing the requirements for submittal of a base year emission inventory?
- A: The term "draft" was used in guidance documents distributed at the O<sub>3</sub> and CO SIP emission inventory workshops and in discussions at the workshops to refer to the initial submittal of emission inventories due within one year of receipt of the inventory guidance. The term was meant to convey that while the initial base year inventories are to be complete, the inventories will undergo a review by EPA and that revisions or additions may be required before the final inventory is submitted with the SIP. The term "draft" has been eliminated from the final versions of the guidance documents to avoid the potential for inference of a brief or incomplete inventory effort.

Q: What type of input data will be needed for MOBILE4?

A: Draft MOBILE4 input guidance was distributed at the workshops. A summary of the input data is below. Note that some of these data will have default values built into the model for cases where a State elects not to use local data. Specify local data for:

- 0 Region for which emission factors are to be calculated (e.g., low or high altitude)
- 0 Calendar year
- 0 Vehicle speed
- 0 Ambient temperature (e.g., daily minimum and maximum)
- 0 Percentage of total VMT attributable to noncatalyst vehicles operating in the cold-start mode
- 0 Percentage of total VMT attributable to catalyst vehicles operating in the hot-start mode
- 0 Percentage of total VMT attributable to catalyst vehicles operating in the cold-start mode
- 0 Fuel volatility for season of interest
- 0 ASTM volatility class

Specify local data or use default values reflecting national averages for:

- 0 Distribution of VMT by vehicle type
- 0 Vehicle model year and accumulated mileage distributions
- 0 Factors to correct light duty vehicle emissions for air conditioner use, extra loading, trailer towing, and humidity

Specify control program parameter, when applicable:

- 0 Inspection/Maintenance (I/M) Program
  - Start year
  - Stringency
  - Model years included
  - Waiver rate
  - Program enforcement level

- Inspection frequency
- Vehicle types included
- I/M test used
- 0 Fuel Volatility Control
  - Reid vapor pressure (RVP) of fuel at control level
  - Start year
- 0 Stage II Control
  - Start year
  - Number of phase-in years
  - Percent efficiency
- 0 Anti-Tampering Program
  - Start years
  - Model years included
  - Vehicle types included
  - Centralized computer-aided or manual program
  - Components inspected

Q: In the discussion of estimation of VOC emissions from municipal solid waste landfills at the top of page 4-32 in the reference entitled Procedures For The Preparation Of Emission Inventories For Precursors Of Ozone, Volume I, EPA 450/4-88-021, December 1988, what is meant by "this emission factor represents an estimate of the average annual emissions over the lifetime of a landfill ..."?

A: The "lifetime of a landfill" refers to the time that municipal solid wastes exist in a landfill, whether the landfill is operating or closed.

## Modeling Issues

- Q: What is EPA's position regarding the use of the Urban Airshed Model (UAM) versus EKMA in preparing the SIP?
- A: Either method is acceptable for use in SIP attainment demonstrations. Of the two approaches, the UAM is generally preferred because the model has the potential for better evaluation of the effect of detailed control strategies. The model has better spatial and temporal resolution, ability to consider different reactivities of VOC emissions, and more extensive capabilities for assessing effects of strategies on factors other than peak ozone.
- Q: How does the EKMA model factor in the effects of elevated releases from point sources?
- A: All VOC and CO emissions are assumed to occur in the well mixed layer. The proposed EKMA guidance outlines a procedure to address NO<sub>x</sub> emissions from tall stacks. In essence, the user must calculate a plume rise for the NO<sub>x</sub> source and determine whether this height is above or below the hourly mixing height used in EKMA. Thus, emissions from elevated sources are ignored unless and until the mixed layer grows to include the plume's effective stack height.
- Q: How is the EKMA model reconciled with the possibility that ozone may be at higher locations where no monitors are located?
- A: EKMA relies upon a measured ozone level as one of the key inputs and assumes that the measured value represents the maximum ozone level. The ozone monitoring guidance has been developed with this purpose. On the other hand, the more sophisticated UAM may produce results indicating maximum ozone levels at locations other than the monitoring sites.
- Q: If the EKMA trajectory traverses only a limited number of counties in an MSA/CMSA, what is the purpose for inventorying the entire MSA/CMSA?
- A: EKMA relies on data from the ozone monitoring network to provide the maximum ozone levels in the MSA/CMSA. In most cases, resource constraints prevent monitoring to cover all possible wind directions and all distances. As a result, the maximum ozone level may very well occur at some unmeasured site or direction. Emissions from the entire MSA/CMSA must be controlled to account for directions and

- distances not covered by the monitoring network.
- Q: What spatial detail is necessary to apply EKMA and why is such spatial detail important?
- A: Emissions data on a countywide basis may be used in applying EKMA. Subcounty gridding is also allowable providing the grids are at least 10k by 10k in size. Spatial resolution is important in accounting for significant variations in terms of location and time of day.
- Q: What is EPA's guidance regarding modeling of natural VOC sources?
- A: EPA is currently conducting analyses using the UAM to establish the effect of biogenic emissions on ozone levels. If the results indicate biogenic emissions are significant in urban scale ozone analyses, EPA will revise the guidance and the models to include an inventory and application of biogenic emissions. The estimates of biogenic emissions for the U. S. should be available as part of the National Acid Precipitation Assessment Program (NAPAP) by the middle of 1989.
- Q: Are the inventory requirements and guidance EPA has provided consistent with use of either EKMA or UAM so that either may be selected for use at a later time?
- A: The inventory guidance defines the basic data required for the application of EKMA. As discussed in the guidance, these data and optional data are also required for application of the UAM. Such optional data include source location coordinates and stack parameters (e.g., stack height, stack exit diameter, exhaust gas temperature, and volume flow rate). Use of the UAM also requires that VOC emissions be speciated or separated into specific chemical mechanism categories. The EPA is developing default speciation values for categorizing VOC emissions by source classification code (SCC). The SAM PC system will accommodate the data elements required for UAM application. States and local agencies should determine early which model will be used in order to request the appropriate data from sources.

Q: To what extent is wind direction/source-monitor orientation factored into an EKMA analysis?

A: For an area without significant transport, wind direction data are used to establish whether winds are generally in the direction from the central city towards the "downwind" ozone monitor.

For an area with significant transport, wind direction and speed data from several stations are used to define a backward trajectory in determining likely sources for transported ozone.

Q: Is EKMA sensitive to boundary conditions, and what is the guidance available for selecting appropriate boundary conditions? Will the NE States rely on ROMNET to establish boundaries?

A: The EKMA guidance outlines procedures for determining present and future levels of boundary parameters to which the model is sensitive (NMOC, NO<sub>x</sub>, and ozone aloft). Areas in the northeast are expected to use ROMNET results in determining boundary conditions for EKMA. The EPA is preparing procedures for converting ROMNET outputs into values needed to run EKMA.

## Quality Assurance Issues

Q: When should quality assurance plans for the O<sub>3</sub>/CO SIP emission inventories be submitted by the States?

A: Quality assurance (QA) plans should be submitted early to allow for review by EPA before inventory compilation and QA efforts are completed by the States. While the timing for submitting the QA plans must be determined in cooperation with the Regional Office, we recommended to the Regional Offices that the State and local agencies submit QA plans within 60 days of Regional Office notification to submit the QA plan. This notification should include the guidance materials on preparing the QA plans.

Q: How does EPA plan to verify vehicle miles travelled (VMT) data developed by the Department of Transportation, but not submitted to EPA?

A: The EPA will not verify the VMT data as part of our QA program; that responsibility will lie with the State and local agencies using the data. Each State should discuss the procedures for verifying the VMT data as well as other critical data elements in the required QA plans.

Q: Is each State or local agency expected to designate and provide a quality assurance (QA) person?

A: Yes. This person need not be devoted full time to QA activities but should be independent from other emission inventory functions.

Q: Must each State and local agency prepare a QA plan to submit to EPA?

A: Only the State agencies are required to submit a QA plan to EPA for approval; although, every inventory preparation agency should develop and follow a comprehensive QA plan. Depending on the size of each local agency and the resources available to complete the inventory efforts, States may require that the local agencies also prepare QA plans.

Q: Explain the manual and computer-aided quality assurance/quality control (QA/QC) review program planned by EPA.

A: The EPA is developing QA/QC emission inventory checks that will be applied to both manual and computer-aided

operations. The envisioned approach is to apply a checklist-driven manual review to each inventory, not necessarily to each source or source category in the inventory. This primarily administrative check will ensure that all of the required data are submitted, while some technical checks will be performed, as well. The computer-aided review, based primarily on the SAM PC system, will incorporate the same checklist for review and will include a more intensive technical review of critical data elements for selected sources. The SAM PC system with the QA/QC checks will be available to the State and local agencies in preparing the emission inventories.

- Q: On January 18, 1989, a Federal Register notice was issued adding four chlorofluorocarbons to the list of organic compounds that EPA considers to be negligibly reactive (54 FR 1987). Should these compounds be excluded from post-1987 ozone State Implementation Plan (SIP) emission inventories?
- A: In the guidance document entitled Procedures For The Preparation Of Emission Inventories Of Ozone Precursors, December 1988, it is stated that methane, ethane, methylene chloride, methyl chloroform (1,1,1-trichloroethane), and seven CFC's (CFC's 11, 12, 22, 113, 114, 115, and FC 23) are considered nonreactive under atmospheric conditions and should be excluded from ozone SIP emission inventories (see page 2-13 of reference). The Federal Register notice mentioned above adds CFC's 123, 141b, 142b, and FC 134a to this list. Therefore, in addition to the eleven nonreactive VOC's mentioned in previous guidance, these four CFC's should be excluded from ozone SIP emission inventories.

## Urban Airshed Model (UAM)

### Background

Historically, UAM applications have been conducted on a case by case basis. Generally, a consensus agreement is reached among participating agencies and/or industries regarding selection of modeling episodes. Typically, two to five prototypical meteorological episodes associated with elevated ozone are used. Future guidance on using UAM in SIP applications will address this issue.

Q: Explain how the UAM is used to determine attainment especially with regard to use of future projected base case emissions as opposed to current observed air quality, and to the determination of the amount of emission reduction needed.

A: Applications of the UAM generally involve a three-step procedure. First, model performance is evaluated with current emissions inventory and current air quality data associated with a current meteorological episode. Second, current emissions are projected to a future year using growth factors, which are as category specific as possible, to form a future base emissions inventory. The UAM is run with this future base inventory. Third, simulations are run with emissions control strategies incorporating various control measures reflecting VOC, NOx, and CO emissions changes relative to the future base inventory.

Attainment could be demonstrated by a future year emissions strategy which produces a predicted future year ozone level at or below the ozone NAAQS for each modeled episode.

Q: Must the States undertake extensive efforts to speciate emissions in order to apply the UAM?

A: The UAM handles VOC composition (speciation) as explicit inputs in the emission files. In the absence of source specific speciation data, default speciation profiles associated with various source categories may be applied. These data are compiled in the Air Emissions Speciation Manual, Volume 1 (EPA-450/2-88-0056).

Q: Is UAM sensitive to boundary conditions? What guidance exists concerning selection of appropriate boundary conditions? Will ROMNET be used in the Northeast U. S. to generate boundary conditions?

A: UAM simulations may be affected by poorly characterized boundary conditions; however, the effect of boundary concentrations can be mitigated somewhat by expanding the

modeling domain so that the significance of boundary concentrations are reduced. Data from upwind monitoring stations not subject to effects from nearby sources of  $\text{NO}_x$  should be used.

For domains under certain meteorological episodes, output from Regional Oxidant Model (ROM), which provides a more comprehensive set of boundary conditions, can be used for UAM boundary concentrations.

Q: What is the minimum computer hardware requirement to run UAM?

A: Typical applications of UAM have been performed on mainframe computers; however, minicomputers or enhanced PC equipment (e.g., microvax) can perform the functions required for most UAM applications if dedicated for this purpose.

Q: What post processor options/capabilities exist with UAM?

A: Current post processing options in UAM include instantaneous or average concentration grid maps for selected species at selected times, peak concentrations at selected locations or times, and statistical comparisons of predicted and observed values (gross differences among all pairs or peaks, with or without temporal constraints - bias).

Q: Summarize the scope and intent of the five-city study regarding the use of less data intensive UAM applications and the EKMA versus UAM comparisons.

A: The following major objectives are incorporated in EPA's five-city UAM Study: 1) transfer UAM technology to participating states, 2) assess the impact of alternative, oxygenated fuels on ambient ozone levels, 3) provide methodology for applying UAM with routinely available input data, and 4) evaluate UAM application using routine data relative to applications using richer data bases. The study commenced in 1988 and will continue through most of FY-89. The cities include New York, St. Louis, Dallas/Ft. Worth, Atlanta, and Philadelphia.

Q: What is EPA's position regarding use of the UAM versus EKMA?

A: Either model is acceptable for use in SIP attainment demonstrations. Of the two approaches, the UAM is the preferred approach. This model has the potential for better evaluating the effect of detailed control strategies as a result of its spatial resolution, ability to consider differing reactivity of VOC emissions, and more extensive

capability for assessing effects of strategies on factors other than peak ozone.

Q: What spatial detail is needed for the inventory? How are the gridded inventory input requirements reconciled with the irregular shapes of most nonattainment areas?

A: Typical grid square sizes used in the UAM applications range from 2 to 5 km on a side. Grid squares as large as 8 km on a side have been used to model a few very large areas. Such grid sizes should create no particular problems for most point sources as location of point sources can be identified precisely. Mobile or area source emissions, which may be estimated only on a countywide basis need to be suballocated to the appropriate grid squares. Surrogate information such as population distribution or VMT data are generally used to perform this suballocation.

## CO SIP Emission Inventory

Q: Over what geographic area must the CO SIP emission inventory be compiled and is a grid required for the emissions inventory?

A: Most areas will be required to prepare a CO SIP emissions inventory for the entire metropolitan statistical area or consolidated metropolitan statistical area (MSA/CMSA) in which nonattainment of the CO NAAQS was determined. No county or subcounty with measured or modeled CO violations may be excluded. In some cases, counties or sub-counties meeting the following criteria may be excluded from the MSA/CMSA.

Counties may be excluded only if: (a) the level of outcommuting (workers residing in the county but working in other counties of the MSA/CMSA) does not exceed 10,000 and the outcommuting level is projected not to exceed 10,000 for at least 10 years, and (b) the population of the urbanized areas in the county does not exceed 50,000 and is projected not to exceed 50,000 for at least 10 years.

Subcounties (portions of counties) may be excluded if: (a) the average population density in the excluded area does not exceed 50 people per square mile and is projected not to exceed 50 people per square mile for at least 10 years, and (b) the population of the urbanized areas in the subcounty does not exceed 50,000 and is projected not to exceed 50,000 in the next 10 years.

The area covered by the emissions inventory must be gridded unless a modified rollback or proportional model approach for control strategy demonstrations can be applied under the limited criteria described in the "Guideline on Air Quality Models (Revised)." The criteria for approving the application of a modified rollback or proportional model approach are: (a) results from screening techniques or measured carbon monoxide levels in an urban area indicating that the CO levels are clearly well below the CO NAAQS and are expected to remain below the CO NAAQS, or (b) demonstration that the Federal Motor Vehicle Control Program will provide the needed CO reductions.

Otherwise, apply either the Urban Airshed Model or RAM Model for control strategy demonstrations. Both these models require the emissions inventory to be gridded. The RAM model allows the sizes of grid squares to vary over the geographic area being inventoried. Grid square sizes should not be larger than 1 kilometer for the central business district (CBD) of urban areas and should not be larger than 5 kilometers for areas outside the CBD. Applications of the

Urban Airshed Model for control strategy demonstrations requires that the grid square size remain constant over the geographic area being inventoried. The choice of grid square size for the Urban Airshed Model depends on the size of the area being modeled, the resources available for modeling, and the degree of resolution needed to determine the effects of a particular control strategy. Grid square sizes up to 5 kilometers are considered acceptable; although, smaller grid squares sizes of 2 kilometers are preferred.

Q: Quality Maintenance Planning and Analysis, volume 9 (Revised): Evaluating Indirect Sources (Volume 9/CALINE3) is currently required by EPA for hot spot analysis. Is there a chance that CALINE4 and TEXIN2 will be approved by EPA for hot spot analysis over the next couple of years?

A: EPA does not intend to approve either TEXIN2 or CALINE4 for hot spot analysis over the next couple of years and is revising the current guidance for hot spot analysis (Volume 9/CALINE3). The Office of Mobile Sources (OMS) has determined that updating modal emission factors contained in Volume 9, TEXIN2, and CALINE4 for new vehicles would not be feasible at this time.

Instead, EPA in conjunction with the Federal Highway Administration (FHWA) is revising the guidance for hot spot analysis. The new hotspot model will employ the MOBILE4 model for emissions, the 1985 Highway Capacity Manual for traffic, and the CALINE3 model for dispersion. Thus, the new model will contain MOBILE4 emission factors, instead of the emission factors contained in Volume 9, TEXIN2, and CALINE4.

Q: Few, if any, CO exceedances from highways will occur at wind speeds of 1 m/s or greater. Will the CALINE3 model be modified to accommodate wind speeds below 1 m/s?

A: Highway modeling of many areas using CALINE3 has shown CO exceedances for wind speeds of 1 m/s or greater. While EPA agrees that Gaussian models, such as CALINE3, can produce unrealistically high concentrations for wind speeds of less than 1 m/s, EPA does not plan to modify CALINE3 to accept wind speed data below 1 m/s. The current regulatory modeling guidance is that the user should not attempt to input wind speeds of less than 1 m/s to CALINE3.

Q: How do the requirements for a CO SIP emissions inventory differ from those for the O<sub>3</sub> SIP emission inventory and under what time frame should the inventories be prepared?

A: The requirements for a CO SIP emissions inventory are independent of the requirements for an O<sub>3</sub> SIP emission inventory but the two inventories may be prepared concurrently. The requirements for a CO emissions inventory for O<sub>3</sub> SIPs are contained in the EPA document "Emission Inventory Requirements for Post-1987 Ozone State Implementation Plans" and the requirements for a CO emissions inventory for CO SIPs are contained in the EPA document "Emission Inventory Requirements for Post-1987 Carbon Monoxide State Implementation Plans." The major difference between the two CO inventories is that O<sub>3</sub> SIP emission inventories should reflect summer source activity while the CO SIP emission inventories should reflect winter source activity. In addition, the CO inventory for CO SIPs requires more detail on CO sources than the CO inventory for O<sub>3</sub> SIPs. Both the inventories for the base year are due in November 1989. The final inventories with the complete SIP packages, including any revisions or additions that result from the State's response to EPA's review of the base year and the projection year inventories, are due approximately 2 years after EPA issues the final post-1987 O<sub>3</sub> and CO policies.

### Dispersion Modeling

- Q: Are dispersion models required for control strategy demonstrations or can rollback or a proportional model approach be used?
- A: Dispersion models are required for analysis of both areawide and hotspot control strategy demonstrations with two exceptions. A modified rollback or proportional model approach may be applied for urban areawide control strategy demonstrations if: (1) results from CO screening or ambient measurement techniques applied in an urban area indicate CO levels clearly below the CO NAAQS and CO levels are expected to remain below the CO NAAQS, or (2) projection information demonstrates that the Federal Motor Vehicle Control Program will provide the needed CO reductions. Either the RAM Model or Urban Airshed Model is appropriate for dispersion modeling of the areawide component of control strategy demonstrations. The recommended modeling technique for determining the hot spot component for control strategy demonstrations is Worksheet 2 of Volume 9 (Revised).
- Q: Under what conditions is a CO SIP areawide emissions inventory required for an MSA/CMSA with no monitored CO NAAQS violations?
- A: There are two cases for which CO areawide emissions inventories should be developed for areas not monitoring violations of the CO NAAQS. In the first case, the EPA Regional Office may determine that the CO monitoring network in the MSA/CMSA is inadequate for measuring high CO concentrations. A CO areawide emissions inventory is required in order to apply dispersion modeling and determine whether CO exceedances in the MSA/CMSA are possible.

In the second case, a CO areawide emissions inventory is required for a State required to meet the maintenance provisions of the post-1987 policy as part of a redesignation request. As proposed, the policy requires the State to demonstrate that the attainment inventory will be maintained for a period of 10 years. For CO, the proposed policy defines an attainment inventory as the lowest annual emission level during the 2-year period in which no ambient violations were recorded. The attainment inventory in areas which have areawide CO problems applies to the entire MSA/CMSA. For areas which have hotspot problems, smaller areas (after EPA approval) may be used in determining the attainment inventory. At a later date, EPA will provide further guidance on projecting emissions and other aspects of developing a maintenance plan.

## Post-1987 Ozone/CO Policy

Q: When will the post-1987 policy be completed? Will the comments on the proposed policy be addressed at that time?

A: EPA staff expects to brief the incoming EPA management on the proposed policy, the nature of the major issues, and options for addressing those issues. Depending on EPA priorities and Congressional activity, the policy may be finalized by the end of the summer of 1989. The comments on the proposed policy will be addressed with final action.

Q: How should States approach SIP preparation in light of: (1) the policy has not been finalized, and (2) Congress has not amended the Clean Air Act?

A: States have been asked to direct resources toward the following activities: (1) correct deficiencies in current regulations, according to guidance issued in May 1988; and (2) prepare base year inventories according to guidance received at emission inventory workshops in October and November 1988. The remaining requirements will be established when the post-1987 policy is finalized.

Q: What is the purpose of reasonable further progress (RFP) reporting under the proposed policy?

A: The purpose of RFP reporting is twofold: (1) annual tracking of the effects of control strategy implementation on specific sources and source categories, and (2) periodic (every 3 years) tracking of the effects of control strategy implementation on the total emissions inventory to assess progress toward attainment and, where appropriate, the annual reduction target. The document entitled Revised Guidance for Tracking RFP in Ozone Control Programs, EPA/OAQPS/MDAD, September 1989, provides details on RFP reporting under the proposed policy .

Q: Should ambient trends be tracked under the revised RFP reporting requirements?

A: Yes. The Revised Guidance for Tracking RFP in Ozone Control Programs (page 5) includes the statement that "tracking of air quality trends is required to indicate the effect that emission reductions are having toward achieving the ambient ozone standard."

Q: Are separate RFP reports required for VOC, CO, and NO, or can the three pollutants be tracked in the same report?

- A: EPA intends to allow RFP information for VOC, CO, and to be reported in a single document. However, States should keep in mind that CO data tracked under an ozone SIP will be different than CO data tracked under a CO SIP.
- Q: Should States submit RFP reports which compare current emissions to the 1979 SIP levels? The models used to generate the 1979 SIP are no longer available and there is no funding for regenerating those model results.
- A: The 1979 SIP's had attainment deadlines of 1982 and there would be no reason to submit an RFP report for a plan with such data. On the other hand, the 1982 SIP's had 1987 deadlines, and some States may just now be completing a 1986 or 1987 inventory in preparation for an RFP report. Where RFP reporting on these plans is a requirement, States should continue to submit RFP reports using previous RFP guidance or other guidance issued by the EPA Regional Office until the post-1987 SIP takes effect.
- Q: Will the attainment demonstration be a phased iterative process?
- A: The attainment date or emissions reduction target will not be determined iteratively. States will be required to show attainment in the SIP and to complete adoption for all but the long-term measures needed to attain the NAAQS and to meet the annual reduction requirement. States will be allowed extra time to complete adoption of long-term measures.
- Q: Will EPA provide any additional funding to prepare the emission inventories other than that already committed?
- A: In FY 1989, Congress appropriated \$40.7 million in State air grants to be used for all ozone/CO SIP activities including inspections, air monitoring, mobile source inventories, program efficiency, tracking and corrections. Of this amount, \$4.7 million has been earmarked specifically for emission inventory preparation. The FY 1990 request includes \$39.6 million for ozone/CO SIP activities \$1.6 million of which is intended for emission inventory completion. EPA is aware that this level of funding falls short of the total needed to complete the work in many areas, and is continuing to work with OMB in an effort to secure more funds.

### Inventory Requirements

- Q: Will EPA provide any Section 105 grant money to local metropolitan planning organizations (MPOs) for the collection of transportation data?
- A: In 1982, EPA provided MPOs with funding under Section 175 of the Clean Air Act (CAA) to complete ozone and CO SIPs. This funding mechanism is not presently available. Therefore, States that wish to solicit the expertise of their local MPOs in collecting data should delegate some of their Section 105 funds to be used for that purpose.
- Q: Should States assume a strict interpretation of the 25-mile buffer zone, meaning that all sources in the >100 tpy category located less than 25.0 miles from the nonattainment area should be inventoried, or could the 25-mile limit be rounded up or down to the nearest county or township boundary?
- A: The purpose for the 25-mile requirement is to include in the inventory large sources lying outside the CMSA/MSA that may contribute to the nonattainment problem. States may use their discretion to judge whether to extend the 25-mile buffer zone to the nearest county or township boundary, but all sources emitting >100 tpy within 25 miles of the MSA/CMSA should be included in the inventory.
- Q: By including only sources emitting >100 tpy in the 25-mile buffer zone, is EPA missing an even more significant source, namely mobile sources, in the buffer zone?
- A: EPA has not required that mobile sources in the buffer zone be included in the inventory because most mobile source activity is found in the MSA/CMSA. If a State judges that mobile source activity in the 25-mile buffer zone (or any other area outside the MSA/CMSA) contributes significantly to the nonattainment problem, those emissions should be included in the inventory.
- Q: Who has the responsibility for reporting interstate emissions? Should they be included in the base year inventory?
- A: Interstate emissions should be determined by a cooperative effort among the planning agencies within whose jurisdiction the nonattainment area lies. The agency responsible for determining emissions from the broadest geographic area should take the lead in assembling the emissions data submitted by the other agencies. EPA Regional Offices will assist in facilitating this effort, where necessary.
- Q: What should be the base year for the inventory?

- A: EPA requires a base year of 1987 or 1988, the choice of which is left to the discretion of the State.
- Q: How should emissions from intermittent sources be factored into the base year inventory representing typical summertime weekday emissions?
- A: In determining whether to report intermittent emissions in the inventory, the State agency should solicit the appropriate Regional Office for a decision on a case-by-case basis. The decision should consider whether the intermittent source(s) produced emissions during a typical base year ozone season weekday.
- Q: Should the inventory include emissions from a source that does not operate because of a strike during the ozone season in the base year?
- A: The State should contact the appropriate Regional Office about such a source and solicit a decision on a case-by-case basis. If the emissions do not appear in the base year inventory, but the plant is expected to begin operation again in the near future, States should include emissions from this source in the future year inventory.
- Q: Is the requirement to inventory point sources down to 10 tpy warranted considering the imprecision associated with stationary area source and mobile source emission estimations?
- A: EPA believes that imprecision in a portion of the inventory is not sufficient reason for not documenting the activity levels and emissions of individual >10 tpy sources. Many of these >10 tpy point sources are, or will be, subject to control regulations. Source specific emission data in the inventory are necessary to assess the effectiveness of these regulations or the need for further emission control.
- Q: How much more of the emissions will be included in the point source portion of the inventory by reducing the point source emissions cutoff from 100 to 10 tpy?
- A: Preliminary assessments have indicated that about 20 percent more emissions could be included in the point source category by reducing the cutoff to 10 tpy. EPA expects this estimate is conservative because of the limitations of the available data bases.
- Q: If States find it impossible to meet the inventory requirements, will EPA accept a less detailed inventory or extend the deadline for submittal?

A: EPA is not considering relaxing the inventory requirements nor extending the deadline for inventory submittal. States should negotiate with the appropriate Regional Office to address individual problems.

## Rule Effectiveness

Q: Why is rule effectiveness an important consideration for ozone and CO, but not for PM<sub>10</sub> or SO<sub>2</sub>?

A: Rule effectiveness is an important factor to consider when the nature of the regulatory program is such that full compliance at all sources at all times cannot be assured. This is the case for the VOC and CO programs because of the small size, large number, and relative complexity of most regulated sources. For example, one of the largest components of both the VOC and CO control programs is the mobile source emission controls program. Given the difficulties in ensuring full compliance for every automobile, application of a rule effectiveness factor becomes important in estimating the effectiveness of the local inspection/maintenance program.

The SO<sub>2</sub> control program does not presently account for rule effectiveness and probably will not in the near future, given the maturity of the SO<sub>2</sub> program relative to the VOC control program. The PM<sub>10</sub> program is still under development and application of a rule effectiveness factor may be considered before completion.

Q: Why did EPA propose 80 percent for rule effectiveness?

A: Rule effectiveness has not been considered in preparing inventories prior to the post-1987 SIP policy. The previous inventory data reflected an assumption that all regulations were implemented with 100 percent effectiveness. In proposing the post-1987 policy, EPA determined the need to apply a more realistic rule effectiveness factor in a nationally consistent, yet fair manner. EPA chose 80 percent as a representative estimate of the average effectiveness values after surveying selected State and local personnel on the perceived effectiveness of their regulatory programs for a wide range of source categories.

Q: Rule effectiveness is really an enforcement issue and should not be applied in the planning process.

A: The determination of how well a regulatory program is achieving the intended emission reductions is certainly a major task for enforcement personnel and one to which EPA's Stationary Source Compliance Division (SSCD) is paying particular attention. The application of rule effectiveness in preparing the emissions inventory is necessary because the effectiveness of existing regulations is directly related to emissions levels. Rule effectiveness must also be considered in planning for the expected effect of future regulations. The 80 percent value is intended to be an initial estimate for

inventory purposes only and is to be replaced as the more detailed category-specific SSCD evaluations are completed in each local area.

Q: Would the 80 percent rule effectiveness factor be applied for a source if the source's emissions data were obtained through a survey?

A: The 80 percent rule effectiveness factor would be applied if the emissions data were determined using emission factors, results of emission tests, or estimated control efficiencies, even if such data were obtained from a survey of the source. If emissions data are determined from solvent usage records (see next question), then a rule effectiveness factor of 100 percent might be applied.

Q: Would a rule effectiveness factor of 100 percent be applied if the source's emissions data were obtained directly from solvent usage records? What detail is required for these records?

A: A rule effectiveness factor of 100 percent may be applicable in some cases. A direct determination of emissions made upon an evaluation of solvent usage records kept at the source is one of these cases. The data needed for direct determination include volume and density of solvent, coating, or ink used at the plant over an extended representative period of time (e.g., a month during the peak ozone season); solvent content of each coating or ink used; and volume and density of all other solvents used at the plant.

Q: Would the 80 percent rule effectiveness factor be applied if the emissions data are obtained by means of a stack test or a capture efficiency test?

A: Emission data from stack tests, even if combined with capture efficiency tests, do not provide assurance of compliance over time and, therefore, would not be a basis for exempting a source from the application of the 80 percent rule effectiveness factor.

Q: For what conditions is a rule penetration factor applied?

A: A rule penetration factor is an estimation of the extent to which emissions from a source category (typically area source categories) are affected by a regulation. A penetration factor should be applied to any source category for which emissions have been determined by means of a "top-down" approach rather than on a source-by-source basis. "Top-down" refers to the use of data collected for a large area, such as

a State or the nation, then allocated to a smaller area on the basis of population, geographic area, local activity levels, etc.

- Q: Control equipment downtime must be considered in preparing the emission inventory. The traditional approach is to survey source personnel, ask for estimates of the control equipment downtime for their specific sources, and apply the estimate in calculating the average emissions. Is the rule effectiveness factor intended to account for control equipment downtime or should States continue to account for control equipment downtime separately?
- A: Application of the rule effectiveness factor in estimating emission rates is a reasonable substitute for a separate accounting of control equipment downtime. Both the 80 percent default value and the local category-specific rule effectiveness factors (above or below 80 percent) account for the likelihood of control equipment failure of upsets.
- Q: Applying rule effectiveness in the base year inventory will cause a significant increase in the estimated emissions. Will such application artificially inflate the overall inventory?
- A: The application of rule effectiveness for emissions from regulated stationary sources is intended to provide an improved estimation of the actual emissions occurring as a result of the real effect of regulatory programs. (A rule effectiveness factor is already included in the mobile source controls model. The mobile source part of the inventory will not be affected by the application of rule effectiveness to the stationary source emissions estimations.) EPA believes that application of the rule effectiveness factor is not an artificial inflation of the inventory, but a necessary adjustment for emission estimations.
- Q: What time of day was considered in comparing the monitored NMOC/NOX ratios to the ratios predicted by the emissions inventory?
- A: EPA examined an Urban Airshed Model analysis of a selected area to determine the approximate correlation between the annual inventory and emissions that would be likely to occur between 6:00 and 9:00 a.m. Then, the annual inventories for the nonattainment areas were scaled down to represent the 6:00 to 9:00 a.m. period for which NMOC/NOX ratios were monitored. These two ratios were compared.
- Q: Is the discrepancy between monitored and inventoried NMOC/NOX ratios entirely attributable to ineffectiveness of the regulatory programs?

A: Ineffective regulations are not the only reason for the discrepancy. Other reasons may include the absence of certain sources or entire source categories from the inventory (such as TSDF's and POTW's), incomplete source data, the absence of running loss emissions from the mobile model, and spatial distributions of the inventory relative to the ambient NMOC monitors.

Q: Should the results obtained from standardized questionnaires used in determining a local category-specific rule effectiveness factor be weighted according to emissions levels in order to avoid skewing the factor in favor of small sources that are not inspected very often?

A: EPA does not intend that the results of the questionnaires be weighted according to emissions. The State or local agency should select sources for the application of the questionnaire randomly so that the sources for which questionnaires are completed is representative of the size distribution of sources in each source category.

Q: Could a source use the rule effectiveness factor to apply for an increase in allowable emissions or as a new baseline for an emissions trade?

A: No. Rule effectiveness is intended to assist planning agencies in deriving an inventory of actual emissions. The factors used in the inventory have no regulatory consequences and cannot be used for the above purposes.

Q: Can improvements in rule effectiveness be credited toward required emission reductions?

A: Improvements in rule effectiveness that can be quantified and enforced can be credited toward strategy and annual percent reduction requirements.

## Stationary Source Procedures and Requirements Issues

Q: Can service stations be excluded from the volatile organic compound (VOC) point source inventory?

A: All service stations and commercial dry cleaning operations may be excluded from the point source inventory, unless the agency compiling the inventory chooses to inventory these sources individually. Any of these sources not included in the point source inventory must be included in the area source inventory.

Q: Are NO<sub>x</sub> emission estimates required in the emission inventories for O<sub>3</sub> nonattainment areas that do not anticipate NO<sub>x</sub> emissions reductions as part of their O<sub>3</sub> attainment strategy?

A: Yes. Estimates of NO<sub>x</sub> emissions from point and area sources are required regardless of whether NO<sub>x</sub> reductions are a part of the O<sub>3</sub> control strategy. However, more information is required in the inventory for areas that anticipate NO<sub>x</sub> control. These areas must provide detailed process and emissions data for each NO<sub>x</sub> point source, while areas that do not anticipate NO<sub>x</sub> control as part of the strategy are required to report only a list of major NO<sub>x</sub> point sources and the total emission estimate for each.

Q: Will the SAM PC system be able to handle mobile source emissions data?

A: SAM currently allows entry of emissions totals by county for various types of mobile sources. A SAM module is being developed to allow entry and retrieval of the data that are used to estimate emissions from highway vehicles (MOBILE4 inputs and outputs, vehicle miles traveled, etc.).

Q: Does EPA prefer use of the SAM PC system for submittal of the emission inventories?

A: Yes. EPA is strongly encouraging use of this system because SAM provides a consistent format for compilation, submittal and review of the inventories. Routines for automatic calculations, edit checking, report generation, data tracking, and data analysis that are being prepared for addition to the system will make the task of inventory analysis and review an easier one and make inventories more complete and accurate.

Q: Should emissions be reported in pounds/day or tons/day?

A: Individual point source emissions should be reported in pounds/day while emissions summaries (by source category) should be reported in tons/day.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C 20460

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PN 172-88-11-04-068

NOV 4 1988

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MEMORANDUM

SUBJECT: EPA Authority to Request Changes in RACT Rules

FROM: Erica Rosenberg, Attorney *ER*  
Air and Radiation Division (LE-132A)

THRU: Richard B. Ossias *Richard Ossias*  
Acting Assistant General Counsel  
Air and Radiation Division (LE-132A)

TO: G. Tom Helms  
Chief  
Ozone/Carbon Monoxide Program Branch, OAQPS (MD-15)

Background

In late May and early June 1988, EPA issued SIP calls to 43 states. Several states have questioned EPA's legal authority to require changes to RACT rules that the Agency has already approved. This responds to your request for a memorandum discussing our legal authority to request these changes.

Discussion

Section 110(a)(2)(H) authorizes the Administrator to issue calls for revisions of an approved SIP if the plan is substantially inadequate to attain the NAAQS that it implements or "to otherwise comply with any additional requirements under the Clean Air Act Amendments of 1977." In accordance with this provision, EPA issued letters to several states, calling for revisions to their SIPs. The requested revisions were of two varieties. First, the letters called for corrective rulemaking where EPA had erroneously or inadvertently approved rules that did not comport with the Control Techniques Guidelines (CTGs) and other Agency RACT guidance. These revisions do not change the presumption of what constitutes RACT. Rather, they require proper implementation of what EPA originally identified as RACT. Since the RACT requirement appears in Section 172(b)(3), which Congress added to the Act in 1977, correction of the deviations falls squarely within the provision calling for revisions to comply with requirements of the 1977 Clean Air Act Amendments.

That same provision also makes it clear that the RACT and other requirements of the 1977 Amendments continue to apply even after SIPs are approved as in compliance with those Amendments. OGC reached a similar conclusion with respect to renewal of NPDES permits that had been issued in compliance with the 1977 Amendments to the Clean Water Act. See Memorandum, from Associate General Counsel for Water and Solid Waste Division to Deputy Assistant Administrator for Water Enforcement, "Request for a Legal Opinion -- Inclusion of Compliance Schedules in Second Round Permits and Newly Issued Permits" (December 26, 1978).

Second, EPA requested that states conform their rules to the clarification of presumptive RACT in its comprehensive guidance document of May 1988. When EPA issued its original guidance on RACT (contained in memoranda and CTGs), a number of topics for some source categories (e.g., applicability levels) were not addressed. As EPA and the States implemented the RACT rules, unanticipated questions about these areas arose. In many cases, EPA issued clarifying guidance as the issues arose, but did not necessarily require revision of already approved SIP provisions. In other cases, guidance was never produced. Therefore, to ensure consistency in VOC rules and to correct problems that were being widely experienced, EPA issued guidance in May 1988. This clarified agency policy that was previously vague, ambiguous, or simply unstated. Thus, while the first set of corrections (those where EPA erroneously or inadvertently approved insufficient rules) focuses on deviations from EPA's long-standing presumptive definition of RACT, this second set of corrections focuses on EPA's clarification of presumptive RACT. Because these requirements are grounded in the same RACT requirements of the 1977 Amendments, however, these corrections too comport with the provisions for SIP calls.

Beyond that, nothing in the Act's language or history suggests that EPA is bound forever to its initial interpretation of the Part D RACT requirement. In Chevron USA v. NRDC, 467 U.S. 837 (1984), the Supreme Court upheld EPA's reinterpretation of a statutory term (the definition of "source" for purposes of the new source review program mandated by Part D) on the ground that the new interpretation reflected a reasonable accommodation with the purposes of the statute. That decision suggests that even a major reinterpretation of the RACT requirement would be permissible, notwithstanding that it would trigger a requirement for revisions to SIPs previously approved under the initial interpretation.

Since EPA's statements of RACT are only presumptive, states may rebut the new presumption of RACT on a case-by case basis. Any final change in RACT rules would have to go through notice-and-comment rulemaking, which would occur when EPA takes

action on the state's response to the SIP call. In this regard, SIP calls serve merely as advance notice of, rather than final action on, a change from EPA's past rulemakings on state RACT rules.

cc: John Calcagni  
Alan Eckert  
Air Branch Chief, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

DEC 16 1988

MEMORANDUM

SUBJECT: Volatile Organic Compound (VOC) Disposal Regulation

FROM: John Calcagni, Director  
Air Quality Management Division

TO: Irwin L. Dickstein, Director  
Air and Toxics Division, Region VIII

In your memorandum of November 16, 1988, you requested guidance on the intended applicability of the VOC general disposal regulation contained in the EPA document "Regulatory Guidance for Control of Volatile Organic Compound Emissions from 15 Categories of Stationary Sources" (EPA-905/2-78-001).

The model regulation for VOC waste disposal, which limited VOC emissions to 1.5 gallons per day in ozone nonattainment areas, was not originally intended to be applied generically across all source categories. This provision was based on California rule 66.2 to prohibit improper disposal of reactive VOC's. It was intended to apply only to those source categories (e.g., degreasing and certain petroleum marketing operations) whose control techniques guidelines include specific provisions for VOC waste disposal. Although such provisions for other source categories are encouraged, they are not essential to an approvable State implementation plan. My memorandum dated November 13, 1978 (attached) is consistent with this guidance.

A State or local agency, however, should examine each VOC disposal situation on an individual basis. Where VOC emissions from waste disposal may be significant, the State or local agency should consider limiting VOC emissions in a manner consistent with the model regulation for VOC waste disposal, if appropriate.

If you have any other questions, please call John Silvasi (FTS 629-5666) or David Cole (FTS-629-5497) of my staff.

Attachment

cc: Director, Air Division, Regions I-VII, IX, X  
Regional VOC Contacts  
T. Helms  
J. Silvasi  
B. Polglase  
S. Holman  
D. Cole

Office of Air Quality Planning and Standards  
Nov 13 1973 Research Triangle Park, North Carolina 27711  
Waste Disposal Regulations for VOC

John Calcagni  
Control Programs Operations Branch, CPDD (40-15)

Winston Smith, Chief  
Air Programs Branch, Region IV

This is with regard to your memo on waste disposal regulations for VOC. As I discussed with Mr. Douglas Cook, unless waste disposal provisions are explicitly included in the Control-Technology Guidelines (CTG) for a source category, States need not adopt provisions for these VOC emissions. I do wish to note that CTGs for degreasing and petroleum marketing operations do include specific provisions and State regulations for these categories should address this in their regulations for these source categories.

The apparent source of the confusion on this issue is the sample VOC regulations prepared for Region V by EPA/Technology Division. This document included a generic VOC disposal provision based on California's rule 66.2 which prohibited improper disposal of reactive VOC. While a provision of this nature is commendable, it is not essential to an approvable SIP. Hence, we should approve any State submittal with a waste disposal provision and not discourage States from including such a provision, but its exclusion is not a basis for disapproval.

With regard to emission credits, the State should presume that CTG sources properly dispose of waste since waste disposal provisions are explicitly included in some CTGs and should not be a major problem in others. Additional credit can be claimed only where the State can document additional reductions in emission from a source complying with such a regulation.

If you have any other questions, please do not hesitate to call me at FTS 629-5365.

CPDD:CPDB:J.CALCAGNI:new:Rn52CHU:x5226:11/7/73

cc: E. Tuerk  
D. J. Borchers  
M. Fast  
S. Kuhrtz  
I. Artico  
R. Campbell  
E. J. Steigewald



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

01 DEC 1988

MEMORANDUM

SUBJECT: RACT Requirements in Ozone Nonattainment Areas

FROM: Gerald A. Emison, Director  
Office of Air Quality Planning and Standards (MD-10)

TO: William A. Spratlin, Director  
Air and Toxics Division, Region VII

This is in response to your memorandum of October 12, 1988 concerning reasonably available control technology (RACT) requirements for automobile assembly plants in ozone nonattainment areas.

We agree that automobile assembly plants in ozone nonattainment areas should have volatile organic compound emission requirements that are at least as stringent as RACT.<sup>1</sup> As described below, the requirements for new source performance standards (NSPS) or lowest available emission rate (LAER) (as determined at the time of permit issuance) for two plants in the St. Louis area may not be as stringent as RACT. Therefore, the St. Louis State implementation plan should contain RACT requirements for these plants.

There are important differences in the format and compliance demonstration methodology for automobile coating RACT and NSPS. Topcoat and surfacer RACT require daily averaging and actual transfer efficiency, while the NSPS allows monthly averaging and table transfer efficiency values. These differences may result in RACT being more stringent than NSPS. The OAQPS recommends that the June 1988 protocol be used as the basis for determining compliance with the RACT limit. [see PN 172-88-06-21-062]

The Ford Hazelwood plant is subject to NSPS and RACT. The State has proposed to delete the RACT requirements for Ford Hazelwood on the basis that the NSPS is more stringent. This claim is not correct. Therefore, the RACT requirements for Ford Hazelwood should not be deleted, rather they should be maintained

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<sup>1</sup>For this discussion, RACT for topcoat means an appropriate emission limit for which compliance is demonstrated on a daily basis using the June 1988 protocol. For surfacer, the RACT requirement should also specify daily compliance and actual transfer efficiency.

and the June 1988 protocol adopted as the compliance determination procedure.

The GM Wentzville plant was permitted as a new source in the early 1980's. This source is subject to NSPS and LAER, which was set equal to NSPS for topcoat and surfacer. Since the St. Louis RACT requirements for automobile coating were source specific and the GM Wentzville plant did not exist when the RACT requirements were first adopted, there are currently no RACT requirements for this plant. The NSPS and LAER requirements for this plant may not be as stringent as RACT. Therefore, RACT requirements should be adopted for GM Wentzville.

Thank you for bringing this situation to our attention. Questions concerning this matter should be addressed to Bill Polglase (629-5246) or Dave Salman (629-5417).

cc: J. Calcagni  
R. Campbell  
T. Helms  
J. Berry  
D. Salman  
G. McCutchen  
D. Crumpler  
B. Polglase  
J. Silvasi  
Director, Air Management Div., Regions I, III, V, IX  
Director, Air and Waste Management Division, Region II  
Director, Air, Pesticides, and Toxics Division, Regions IV, VI  
Director, Air and Toxics Division, Regions VII, VIII, X  
Chief, Air Branch, Regions I-X  
Chief, Air Compliance Branch, Regions IV, V  
Chief, Air Enforcement Branch, Region III  
Chief, Air Operations Branch, Region IX



PN 172-88-11-04-065

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C 20460

NOV 4 1988

OFFICE OF  
GENERAL COUNSEL

MEMORANDUM

SUBJECT: EPA Authority to Request Changes in RACT Rules

FROM: Erica Rosenberg, Attorney *ER*  
Air and Radiation Division (LE-132A)

THRU: Richard B. Ossias *Richard Ossias*  
Acting Assistant General Counsel  
Air and Radiation Division (LE-132A)

TO: G. Tom Helms  
Chief  
Ozone/Carbon Monoxide Program Branch, OAQPS (MD-15)

Background

In late May and early June 1988, EPA issued SIP calls to 43 states. Several states have questioned EPA's legal authority to require changes to RACT rules that the Agency has already approved. This responds to your request for a memorandum discussing our legal authority to request these changes.

Discussion

Section 110(a)(2)(H) authorizes the Administrator to issue calls for revisions of an approved SIP if the plan is substantially inadequate to attain the NAAQS that it implements or "to otherwise comply with any additional requirements under the Clean Air Act Amendments of 1977." In accordance with this provision, EPA issued letters to several states, calling for revisions to their SIPs. The requested revisions were of two varieties. First, the letters called for corrective rulemaking where EPA had erroneously or inadvertently approved rules that did not comport with the Control Techniques Guidelines (CTGs) and other Agency RACT guidance. These revisions do not change the presumption of what constitutes RACT. Rather, they require proper implementation of what EPA originally identified as RACT. Since the RACT requirement appears in Section 172(b)(3), which Congress added to the Act in 1977, correction of the deviations falls squarely within the provision calling for revisions to comply with requirements of the 1977 Clean Air Act Amendments.

That same provision also makes it clear that the RACT and other requirements of the 1977 Amendments continue to apply even after SIPs are approved as in compliance with those Amendments. OGC reached a similar conclusion with respect to renewal of NPDES permits that had been issued in compliance with the 1977 Amendments to the Clean Water Act. See Memorandum, from Associate General Counsel for Water and Solid Waste Division to Deputy Assistant Administrator for Water Enforcement, "Request for a Legal Opinion -- Inclusion of Compliance Schedules in Second Round Permits and Newly Issued Permits" (December 26, 1978).

Second, EPA requested that states conform their rules to the clarification of presumptive RACT in its comprehensive guidance document of May 1988. When EPA issued its original guidance on RACT (contained in memoranda and CTGs), a number of topics for some source categories (e.g., applicability levels) were not addressed. As EPA and the States implemented the RACT rules, unanticipated questions about these areas arose. In many cases, EPA issued clarifying guidance as the issues arose, but did not necessarily require revision of already approved SIP provisions. In other cases, guidance was never produced. Therefore, to ensure consistency in VOC rules and to correct problems that were being widely experienced, EPA issued guidance in May 1988. This clarified agency policy that was previously vague, ambiguous, or simply unstated. Thus, while the first set of corrections (those where EPA erroneously or inadvertently approved insufficient rules) focuses on deviations from EPA's long-standing presumptive definition of RACT, this second set of corrections focuses on EPA's clarification of presumptive RACT. Because these requirements are grounded in the same RACT requirements of the 1977 Amendments, however, these corrections too comport with the provisions for SIP calls.

Beyond that, nothing in the Act's language or history suggests that EPA is bound forever to its initial interpretation of the Part D RACT requirement. In Chevron USA v. NRDC, 467 U.S. 837 (1984), the Supreme Court upheld EPA's reinterpretation of a statutory term (the definition of "source" for purposes of the new source review program mandated by Part D) on the ground that the new interpretation reflected a reasonable accommodation with the purposes of the statute. That decision suggests that even a major reinterpretation of the RACT requirement would be permissible, notwithstanding that it would trigger a requirement for revisions to SIPs previously approved under the initial interpretation.

Since EPA's statements of RACT are only presumptive, states may rebut the new presumption of RACT on a case-by case basis. Any final change in RACT rules would have to go through notice-and-comment rulemaking, which would occur when EPA takes

action on the state's response to the SIP call. In this regard, SIP calls serve merely as advance notice of, rather than final action on, a change from EPA's past rulemakings on state RACT rules.

cc: John Calcagni  
Alan Eckert  
Air Branch Chief, Regions I-X

In order to conserve space, the Federal Register notice entitled:

Air Programs; Approval and Promulgation of  
Implementation Plans Compliance with the  
Statutory Provisions of Part D and Section  
110 of the Clean Air Act (53 FR 34500,  
September 7, 1988)

is not included in the Air Programs Policy and Guidance  
Notebook. Please refer to this notice for EPA  
policy/guidance related to this subject.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

23 AUG 1988

Mr. William Juris  
Division of Air Pollution Control  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, Ohio 43266-0149

Dear Mr. Juris:

Thank you for your letter of June 28, 1988 requesting clarification of the 3 lb/hr, 15 lb/day emission cutoff for volatile organic compound (VOC) sources subject to control technique guideline (CTG) requirements. I apologize for our delay in responding. With regard to that issue, the Environmental Protection Agency (EPA) document "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations," dated May 25, 1988 \* supersedes my previous memorandum dated November 4, 1987 on emission cutoffs. Our responses to your questions are provided below in the order you raised them.

1. The purpose of the 3 lb/hr, 15 lb/day recommendation is to provide national consistency in determining the applicability of reasonably available control technology (RACT) for those stationary source categories that are not otherwise covered by more specific EPA guidance. The cutoff applies only to emissions from multiple operations within the same CTG category, not individual sources. The May 1988 VOC guidance on emission cutoffs restates the fact that the level of emissions is determined by adding the individual emission sources within the same CTG category. In evaluating whether a source is covered by the RACT regulation, the source size cutoff should be determined on a plantwide basis, not a line-by-line basis. Otherwise, an ozone SIP would not actually realize as much VOC emission reduction credit for controlling RACT operations within a given CTG category as originally intended.
2. "Potential emissions before control" means as you described it, "potential emissions without any current control devices." In response to the second part of your question, the term "control devices" does not include material recovery operations essential for the economic operation of the source if they are part of the process. In some cases, however, such a determination may not be clearcut and would require a decision by the State or local agency in consultation with the appropriate EPA Regional Office.
3. A plant owner or operator should only use the 15 lb/day limit (not 72 lb/day) as a cutoff for determining potential coverage by a particular RACT rule. A RACT evaluation should be made for sources covered by CTG categories if plantwide emissions of VOC exceed 15 pounds

\* SEE PN 172-88-05-27-061

in any one day and EPA has not previously specified a different cutoff size. The RACT as specified in the CTG is then presumed to apply unless a "case-by-case" determination proves otherwise.

4. The May 1988 VOC compilation of guidance specifies that the 3 lb/hr, 15 lb/day cutoffs are based on actual emissions before add-on control. As previously mentioned, the May document supersedes my memorandum of November 4, 1987. The decision to specify actual emissions was based on input that we received in meetings with representatives from the EPA Regional Offices and several State air pollution control agencies.

The term "before add-on control" is used to indicate emission levels in the absence of VOC control devices currently in place. The term "before control" does not apply to conditions before process changes or product reformulation, but only refers to the addition of air pollution control equipment, such as incineration or carbon adsorption systems.

The "10-ton per year" potential emissions cutoff recommendation for certain coatings categories was based on a recent survey of State air pollution control agency regulations. In that survey, we reviewed all of the emission limits that had established cutoff levels for certain VOC categories where no EPA guidance had previously been specified. This "10-ton" number was selected based upon the cutoffs that a number of other State agencies were using.

I hope that this information is helpful. If you have any additional questions pertaining to these VOC issues, please call John Silvasi at (919)541-5666 or David Cole at (919)541-5497.

Sincerely,



G. T. Helms  
Chief

Ozone/Carbon Monoxide Programs Branch



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

JUN 21 1988

MEMORANDUM

SUBJECT: Transmittal of Automobile Topcoat Protocol

FROM: Gerald A. Emison, Director *GAEmison*  
Office of Air Quality Planning and Standards (MD-10)

TO: Air Management Division Directors  
Regions I, III, and IX  
Air and Waste Management Division Director  
Region II  
Air, Pesticides, and Toxics Management Division Directors  
Regions IV and VI  
Air and Radiation Division Director  
Region V  
Air and Toxics Division Directors  
Regions VII, VIII, and X

Attached are copies of the "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations." This protocol was referenced on page 2-22 of the May 25, 1988, guidance on VOC issues ("Issues Relating to VOC Regulation Cutpoints, Deficiencies and Deviations"). The EPA developed this protocol with the Motor Vehicle Manufacturers Association (MVMA) and its member companies, with additional input from other automobile manufacturers, coating suppliers, and State and local agencies. \*

The purpose of the protocol is to provide a uniform procedure for calculating daily compliance of topcoat operations when transfer efficiency is being employed as one of the emission reduction techniques permitted under the relevant ozone SIP regulation. The protocol should also be used as the compliance demonstration procedure for future topcoat BACT or LAER determinations. The protocol should be considered for use with previous BACT or LAER determinations which require daily compliance demonstrations and actual transfer efficiency values, but do not specify all the necessary test methods and procedures.

\* PN 172-88-05-27-061

The SIP's should be revised to require owner/operator use of the protocol to demonstrate compliance with automobile and light-duty truck topcoat RACT regulations. In order to be amenable to use of the protocol, a SIP must: (1) state the topcoat emission limit in units of pounds of VOC per gallon of solids deposited, (2) require that compliance be demonstrated for each day, and (3) treat the entire topcoat operation (all topcoat spray booths, flash-off areas, and bake ovens) as a single entity. Each SIP must also include provisions for retaining records, completing calculations in a timely manner, and reporting results consistent with proper implementation of the protocol and applicable EPA policies and guidelines. The owner/operator should generally be capable of completing the emission calculations for each day in a month by the end of the following month. Proper adoption and use of the protocol should eliminate disputes about averaging, transfer efficiency and bake oven exhaust control "credits," and the VOC and volume solids content of coatings.

It may require as much as 18 to 24 months to amend existing regulations and obtain final Federal approval of the SIP revisions. Until final EPA approval of SIP revisions is obtained, the current regulations remain applicable and are to be interpreted in accordance with letters to the MVMA from Craig Potter on November 20, 1986, and from Alan Eckert on December 23, 1986. Copies of these letters are attached.

Please forward a copy of the protocol to your State air directors as an addendum to your recent follow-up letters on VOC deficiencies and deviations. We will be providing additional information and support in the near future to enable States to effectively implement the protocol. Questions about the protocol should be directed to Dave Salman at FTS 629-5417.

### 3 Attachments

cc: Mike Alushin (LE-134A)  
John Calcagni (MD-15)  
Alan Eckert (LE-132A)  
Jack Farmer (MD-13)  
John Seitz (EN-341)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 23 1986

OFFICE OF  
GENERAL COUNSEL

Mr. William H. Crabtree  
Vice President and  
General Counsel  
Motor Vehicle Manufacturers Association  
of the United States, Inc.  
300 New Center Building  
Detroit, Michigan 48202

Dear Mr. Crabtree:

In a November 20, 1986, letter to Dr. Fred W. Bowditch of MVMA, EPA's Assistant Administrator for Air and Radiation, J. Craig Potter, responded to several questions that MVMA representatives had posed about EPA's interpretation of state implementation plan (SIP) requirements affecting auto coating processes. Subsequently, some MVMA members inquired whether EPA regards the letter as "final action" of the Administrator within the meaning of the judicial review provision of the Clean Air Act (section 307(b)(1), 42 U.S.C. §7607(b)(1)), and asked what effect the letter will have on the actions of EPA compliance personnel now and in the future.

EPA does not regard the November 20 letter as "final action" within the meaning of section 307(b)(1). Rather, the letter contains preliminary guidance from the Assistant Administrator to EPA personnel on how they initially should approach these issues in individual SIP rulemakings and enforcement actions. The letter will not bind EPA personnel in those proceedings. It is not intended to be a statement of final Agency interpretation of SIP provisions either for present or future purposes. Instead, EPA's interpretation will take place in those later proceedings based on all relevant factors. Moreover, nothing in the letter should be construed so as to add to or otherwise modify existing SIP requirements.

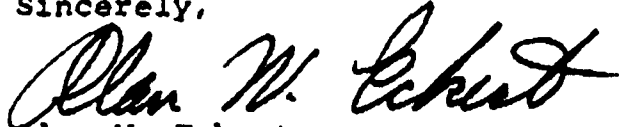
Finally, both for these reasons and because in any event the letter was not published in the Federal Register, the sixty-day petition period referred to in section 307(b)(1) does not apply to the letter.

2

- 2 -

In short, affected MVMA members will have an opportunity for judicial review of EPA's interpretations of individual SIP provisions once EPA makes those interpretations final. Please let us know if we can be of any further assistance in this matter.

Sincerely,



Alan W. Eckert  
Associate General Counsel  
Air and Radiation Division  
(LE-132A)

cc: Michael Alushin  
Don Clay  
Gerald Emison  
Jack Farmer  
Joe Lees  
Craig Potter  
Air Division Directors, Regions I-X  
Regional Counsel, Regions I-X

3

20 NOV 1986

Dr. Fred W. Bowditch  
Vice President, Technical Affairs  
Motor Vehicle Manufacturers Association  
of the United States, Inc.  
300 New Center Building  
Detroit, Michigan 48202

Dear Dr. Bowditch:

This is in response to your letter of August 6, 1986, and your meetings with members of my staff in Durham, North Carolina, on September 10, 1986 and November 3, 1986. At the meetings, four basic compliance parameters for automobile coating regulations were discussed: (1) transfer efficiency (TE), (2) volatile organic compound (VOC) content of paint, (3) booth-oven split, and (4) averaging time. Our position on each of these parameters is provided in the enclosure.

We recognize and appreciate all of the concerns raised by the MVMA, and have considered them carefully in developing our position. We also appreciate the MVMA's offer to work with us to evaluate procedures to measure TE and booth-oven split. Mr. Jack Farmer will call you within the next week to discuss how we can move quickly to begin this effort.

I know from our discussions that you recognize that many major metropolitan areas will not attain the national ambient air quality standard for ozone by the statutory deadline of December 31, 1987. The problem is so severe in some areas that attainment is unlikely for many years after 1987. On June 23, 1986, the Administrator announced a comprehensive national strategy to deal with this problem. The announcement included the goals the strategy should strive for and listed specific actions for accomplishing the goals. One action involves improving the effectiveness of existing regulations and programs, which have not been implemented or enforced consistently across the country, so that progress towards attainment can be accelerated. The position we are outlining in this letter is consistent with our national strategy for the post-1987 ozone program. As a result, it provides for a scientifically credible approach without interfering with progress toward attaining the ozone standard.

In developing our position, we had to deal with two major concerns: (1) how to implement the changes that will be required, and (2) what actions should be taken during the interim period before the necessary changes are adopted in the State implementation plans (SIP's). In response to the first concern, we intend to take SIP deficiency actions in the 1987-1988 time frame. We will require that States take appropriate action on compliance parameters for automobile surface coatings as part

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

2

of these actions. In response to the second concern, we will enforce the EPA approved SIP's during the interim period. The enclosure more fully explains the interim compliance posture.

We appreciate your cooperation and assistance and look forward to working with you on the development of procedures to measure TE and booth-even split.

Sincerely,

(Sgd) J. Craig Potter

J. Craig Potter  
Assistant Administrator  
for Air and Radiation

Enclosure

0AQPS:ESED:CPB:CAS:DSALMAN:jmcmillan:wright(MD-13):629-5605:11-7-86:Disk #12 (JB)  
File \_\_\_\_\_

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

ENCLOSURE

AUTOMOBILE COATING COMPLIANCE PARAMETERS

TRANSFER EFFICIENCY

SUMMARY

Actual measured TE will be required for demonstrating compliance with the SIP's.

IMPLEMENTATION

1. The SIP deficiency actions will be taken by the EPA in 1987-88 to require those States which allow for consideration of TE in compliance demonstrations to adopt into their SIP's an actual TE measurement technique acceptable to the EPA. This action will occur independent of any joint effort between the EPA and the MVMA to evaluate TE test methods.

2. The EPA will cooperate with the MVMA to evaluate methods (e.g. weighing the vehicle body before and after painting it, using a highly sensitive load cell) to measure actual TE on automobile coating lines on an expeditious schedule.

INTERIM PROCEDURES

1. The EPA will enforce the existing Federally approved SIP's. There are a variety of provisions concerning TE in the existing SIP's. Most existing SIP's fall into one of the following categories:

a. Some SIP's are totally silent on TE. The EPA interprets such SIP's as prohibiting the consideration of TE in compliance demonstrations. A State with such a SIP may continue to prohibit consideration of TE, or may submit a SIP revision which specifies a TE baseline and a method for measuring actual TE. In ozone nonattainment areas, the EPA will consider such a SIP revision only if it is consistent with the State's reasonable further progress demonstration. If the SIP is not revised, then TE cannot be considered in compliance demonstrations.

b. Some SIP's mention the possibility of considering TE in compliance determinations without identifying or incorporating into their emission limits a TE baseline. The EPA interprets such SIP's as not allowing the consideration of TE and will treat such SIP's in the same manner as SIP's which are totally silent on TE.

c. Some SIP's allow for the consideration of TE in compliance demonstrations and explicitly identify or incorporate into their emission limits a TE baseline, but do not explicitly state how TE is to be assessed. The EPA will examine each of these SIP's individually to determine whether it currently requires actual measured TE values or whether the TE table in the automobile coating new source performance standards (NSPS) can be used.

2. Because EPA has determined that the table values presented in the NSPS are a poor method for predicting emissions,<sup>1</sup> the tables will not be allowed in demonstrations of compliance with best available control technology (BACT) or lowest achievable emission rate (LAER). These demonstrations must be founded on the actual quantity of VOC that is emitted to the atmosphere. The TE measurements similiar to either of the in-plant methods that General Motors has used for nearly a decade would be an acceptable method of making such demonstrations. The table values also will not be allowed to be used in air quality analyses or attainment demonstrations.

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<sup>1</sup>The tables were made a part of the NSPS as a means of determining "best demonstrated technology" and the TE values assigned as an inducement to encourage new and modified facilities to install state-of-the-art spray equipment.

## VOC CONTENT OF COATINGS

## SUMMARY

The EPA Reference Method 24 (RM-24) and formulation<sup>1</sup> VOC data may be combined under certain conditions.

## IMPLEMENTATION

1. As part of the SIP deficiency actions in 1987-88, the EPA will require that States adopt RM-24 with a 1-hour bake as specified in ASTM 2369-81 as the primary method of determining the VOC content of a coating.

2. The EPA would consider SIP revisions that allow combining RM-24 (1-hour bake) and formulation VOC data weighted by actual measured TE values only if the SIP:

a. Explicitly identifies or incorporates into its emission limits a TE baseline.

b. Requires consideration of actual measured TE in compliance demonstrations and specifies the TE test method.

c. Requires sources to demonstrate that their method for disposing of overspray coating wastes does not generate cure volatiles.<sup>2</sup>

d. States that when RM-24 and formulation data are combined for a waterborne coating that the interlaboratory precision adjustments in RM-24 are not to be applied to the RM-24 results.

e. Specifies a procedure which would be used to substantiate formulation VOC data which differ from RM-24 results by more than 10 percent.

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<sup>1</sup>The amount of VOC that will evolve if the coating were exposed to the atmosphere, but never oven-cured. For most coatings, this would be identical to the solvent content of the as-applied coating.

<sup>2</sup>The combining of RM-24 and formulation VOC data recognizes that cure volatiles are not generated from oversprayed paint that does not cure. Therefore, the source must demonstrate that its waste disposal practices are consistent with allowing this credit. For example, if the overspray coating wastes are heated before disposal in a landfill, it could be inappropriate to permit the credit.

## INTERIM PROCEDURES

1. The EPA will accept a combination of RM-24 (1-hour bake) and formulation VOC data weighted by actual measured values if:

a. The use of such an alternative method is allowable under the existing SIP.<sup>3</sup>

b. The existing SIP:

(1) Explicitly identifies or incorporates into its emission limits a TE baseline.

(2) Requires consideration of actual measured TE in compliance demonstrations.

c. Each source using this alternate method:

(1) Demonstrates that its method for disposing of overspray coating wastes does not generate cure volatiles.

(2) Does not apply the interlaboratory precision adjustments in RM-24 to RM-24 results for waterborne coatings.

(3) Provides substantiation of formulation VOC data which differ from RM-24 results by more than 10 percent.

2. The EPA would allow VOC to be determined by a combination of formulation and RM-24 data weighted by actual TE when demonstrating compliance with NSPS, BACT, and LAER, but only when actual measured TE is to be used throughout the compliance demonstration (i.e., both for TE itself and to weight the RM-24 and formulation data) and the conditions in Items 2c through 2e, above, are met.

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<sup>3</sup>In many cases, alternative test methods must be approved by the EPA as SIP revisions.

## BOOTH-OVEN SPLIT

## SUMMARY

The EPA will consider SIP revisions that specify a surrogate test method as an alternative to stack testing for determining booth oven split.

## IMPLEMENTATION

1. As part of the SIP deficiency actions in 1987-88, the EPA will require States to specify stack testing as the primary method of determining the booth-oven split.
2. The EPA will cooperate with MVMA to evaluate surrogate methods for determining booth-oven split.
3. If an acceptable surrogate method is developed, States could incorporate it into the SIP's as an alternative method along with: (1) guidance on criteria to be met in demonstrating the need for the use of the surrogate method, and (2) the required retest frequency.
4. If an acceptable surrogate method is developed, it would then also be acceptable as an alternative method for determining compliance with the NSPS and in BACT and LAER compliance demonstrations.

## INTERIM PROCEDURES

The EPA will enforce the existing Federally approved SIP's.

## AVERAGING METHOD

## SUMMARY

The EPA will consider SIP revisions that allow a daily weighted average to determine compliance with automobile coating regulations. Requests for less stringent averaging methods could be made on a case-by-case basis pursuant to the "O'Connor Memo."<sup>1</sup>

## IMPLEMENTATION

1. As part of the SIP deficiency actions in 1987-88, the EPA will require States to explicitly state the averaging method, if any, in their SIP's.
2. The EPA will continue to consider SIP's which assess compliance with automobile coating regulations using a daily weighted average of the coatings used. States could also keep or adopt a more stringent averaging method.
3. Any SIP that does not explicitly state an averaging method will continue to be interpreted by the EPA as requiring that each individual coating comply with the regulations.
4. For plants that use basecoat/clearcoat coatings, a straight arithmetic average of all coatings used would be considered more stringent than a daily weighted average. A combination daily arithmetic/daily weighted average<sup>2</sup> would be considered less stringent and would require EPA approval via the checklist presented in the O'Connor Memo for demonstrating that a less stringent averaging method is warranted.

## INTERIM PROCEDURES

The EPA will enforce the existing Federally approved SIP's.

---

<sup>1</sup>"Averaging Times for Compliance with VOC Emission Units - SIP Revision Policy" signed by John O'Connor, Acting Director, OAQPS, on January 20, 1984. A copy is attached for your convenience in reviewing the detailed requirements.

<sup>2</sup>Arithmetic averages of (a) colors that do not receive a clearcoat, (b) basecoats, and (c) clearcoats all weighted together by relative use of coatings in the three categories.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

PN 172-88-05-27-061

MAY 27 1988

MEMORANDUM

SUBJECT: Transmittal of EPA Guidance on VOC Issues

FROM: John Calcagni, Director  
Air Quality Management Division (MD-15)

TO: Director Air Division, Regions I-X

Attached are copies of the final Environmental Protection Agency's (EPA's) guidance document, "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations." This document is based on Appendix D of the proposed post-1987 ozone/carbon monoxide policy in the November 24, 1987 Federal Register. As such, it does not formulate new guidance, but merely clarifies guidance on volatile organic compound (VOC) issues identified in Appendix D which may have been ambiguous. The document is intended to apply in those areas that receive post-1987 "SIP calls" for ozone and that should have previously adopted and implemented VOC regulations for stationary sources. It is not intended, however, to be applied in the expanded areas (i.e., consolidated metropolitan statistical area's) that receive post-1987 SIP calls, but have never previously been designated nonattainment. The Regional Offices should use this guidance package in identifying deficiencies to be corrected under the first-phase response to the SIP call ("leveling the playing field") and prescribing corrections to those deficiencies. \*

This guidance package represents a collaborative effort of EPA's Regional Offices and other Headquarters staff who participated in a 2-day workshop at the Office of Air Quality Planning and Standards on April 18-19, 1987 to discuss these VOC issues; previous drafts of this document have also undergone extensive Agency review.

If you have any questions or comments pertaining to this document, please contact John Silvasi (FTS 629-5666) or David Cole (FTS 629-5497).

\* GUIDANCE DOCUMENT NOT INCLUDED IN NOTEBOOK

## Attachments

cc: Ron Campbell, OAQPS  
David Cole, AQMD  
Ted Creekmore, AQMD  
Jerry Emison, OAQPS  
Jack Farmer, ESD  
Tom Helms, AQMD  
Howard Hoffman, OGC  
Bill Johnson, AQMD  
Vishnu Katari, SSCD  
Bill Laxton, TSD  
Brock Nicholson, AQMD  
Bill Polglase, AQMD  
Bill Repsher, OECM  
David Rochlin, OECM  
David Salman, ESD  
John Seitz, SSCD  
John Silvasi, AQMD  
Walker Smith, DOJ  
Barry Korb, OPPE



PN 172-87-12-10-060

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C 20460

DEC 10 1987

THE ADMINISTRATOR

Mr. J. Leonard Ledbetter  
Commissioner  
Georgia Department of Natural Resources  
205 Butler Street, S.E.  
Atlanta, Georgia 30334

Dear Mr. Ledbetter:

This is in response to your letter of October 30, 1987, concerning the use of potential emissions vs. actual emissions in determining exemption sizes for volatile organic compound (VOC) regulations in ozone nonattainment areas. You expressed concern over the Environmental Protection Agency's policy of basing the cutoff of 3 pounds per hour, 15 pounds per day for some VOC regulations in long-term problem areas on potential emissions and requested an explanation as to the benefits from this requirement.

As you mentioned in your letter, this policy is based on a recent conference call between the Office of Air Quality Planning and Standards and several Regional Offices. I have enclosed a copy of a memorandum dated November 4, 1987, confirming that the 3 pounds per hour, 15 pounds per day emission limit cutoff for certain control techniques guidelines (CTG's) for VOC sources should be based on potential emissions before control. \*

The reason for determining that the cutoff be based on potential rather than actual emissions is our desire for standardization of this requirement by regulatory agencies; the need to provide effective guidance to industry; and to ensure that the determination of whether a source is subject to a regulation is clear, consistent, and reproducible. The origin of the 3 pounds per hour, 15 pounds per day exemption dates back to the Los Angeles County, California, Rule 66 (adopted July 23, 1956) as cited in our memorandum of June 25, 1987, (copy enclosed). \* \*

Determination of the actual emissions from many source categories is difficult because operations at many sources vary from day to day. Many States' permit systems require that the owner or operator applying for a permit base an application on the maximum or potential emissions that may be expected from the equipment or facility. In many agencies, these estimated emissions are also considered in developing projected emission inventories from which control strategies are developed.

\* 11/4/87 memo superseded by PN 172-88-05-27-061

\* \* SEE PN 172-87-06-25-054

The use of potential emissions rather than actual emissions is important not only in permit systems but it also provides a basis for effective enforcement operations. Potential emissions based on design capacity or maximum anticipated emissions provide a quantifiable basis for determining, with a high degree of certainty, if the source is exempt from control or is in fact subject to regulation.

Finally, as you are aware, there are a number of source categories covered by our CTG's for which the above-noted exemption would not apply, i.e., those source categories with equipment and/or work practice standards instead of emission limits. Examples of these source categories are floating and fixed-roof tanks, cold-cleaner degreasers, and Stage I service station tanks. Emissions from source categories such as these may be less than 3 pounds per hour, 15 pounds per day, but because of the large number of these small sources, control is required to reduce areawide emissions.

In conclusion, during future ozone planning activities, one of our major objectives is to provide regulatory certainty, clarity, and national consistency in the way stationary source VOC regulations are developed and implemented. This would necessitate the use of a consistent basis for determining emissions, i.e., potential emissions.

I appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

Lee M. Thomas

Lee M. Thomas

Enclosures



PN 172-87-09-11-059  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

*gfr*

SEP 11 1987

MEMORANDUM

SUBJECT: Geographic Applicability of Clean Air Act Sanctions

FROM: Gerald A. Emison, Director *Gerald A. Emison*  
Office of Air Quality Planning and Standards (MD-10)

TO: William B. Hathaway, Director  
Air, Pesticides, and Toxics Division, Region VI

This is in response to your August 10, 1987, memorandum concerning efforts to encourage Texas to expand the ozone State implementation plan (SIP) planning area around Dallas/Fort Worth to include several nearby counties which are not designated nonattainment (for ozone). You mentioned that Texas is reluctant to include these other counties for fear that failure by one or more of the counties in the area to adequately control volatile organic compounds or nitrogen oxides may cause sanctions to be imposed on all of the counties.

One of the keys to addressing the fear of "blanket" sanctions is in the Environmental Protection Agency's (EPA's) approach to dealing with multicounty areas where some but not all of the counties do, in good faith, carry out the planning process and implement the plan. To date, the EPA has imposed funding sanctions on only those counties in an area which have failed to fulfill their obligations. An example of this discretionary application of funding sanctions is the Cincinnati-Northern Kentucky nonattainment area which includes four counties in Ohio and three counties in Northern Kentucky. Two of the counties in Northern Kentucky have received highway and sewage treatment grant funding sanctions for their failure to proceed with a motor vehicle inspection and maintenance program. The other counties in Ohio and Kentucky did not receive sanctions because they followed through with their planning obligations.

In the case of those sanctions which involve restrictions on construction of new sources, it has been EPA's position that both section 110(a)(2)(I) and section 173(4) apply only in designated nonattainment areas. Thus, under this position, unless the section 107 designation status of the other counties in the Dallas/Fort Worth area changes, only Dallas and Tarrant Counties can be affected by a construction moratorium. As with funding sanctions, the construction ban can be applied in an area on a county-by-county basis.

With these thoughts in mind, the following discussion responds to the questions in your memorandum in the order in which they were asked:

1. No, the fringe counties which are not designated nonattainment would not automatically be subject to sanctions for failures occurring outside their jurisdiction.
2. It is my understanding that the Agency will issue SIP calls to all of the counties in the Dallas/Fort Worth consolidated metropolitan statistical area. The funding sanctions available under sections 176(b) and 316 are not restricted to areas designated nonattainment under section 107 and, therefore, could be imposed on those fringe counties which fail to respond adequately to a SIP call. In addition, if EPA did not issue SIP calls to those fringe counties but the State included them in the SIP planning area, and EPA approved the SIP, the fringe counties could become subject to sections 176(b) and 316 sanctions upon a finding that the plan was not being carried out.
3. If the situation warrants, sanctions may be applied to individual counties. EPA, however, will base any decision concerning sanctions, including the issue of geographic applicability, on a review of the plan as a whole.
4. It is EPA's position that the Clean Air Act does not define failure to attain air quality standards as a basis for imposing sanctions. Therefore, the answer to the question as posed is that none of the counties in the planning area would be subject to sanctions for failing to attain by the SIP attainment date.

In addition to the above questions, you also asked that we "revisit" EPA's current position, regarding designation of areas pursuant to section 107, i.e., that EPA cannot initiate such designations without a request to do so from the State. I will be happy to reopen the dialogue with the Office of General Counsel on this issue; however, please understand that there are legal and administrative issues involved which will take some time to resolve.

I appreciate this opportunity to be of service and trust that this information will help to allay any concerns Texas may have about expanding the Dallas/Fort Worth planning area.

cc: D. Clay  
D. Tyler  
F. Blake

29 SEP 1986

MEMORANDUM

SUBJECT: Seasonal VOC Controls

FROM: G. T. Helms, Chief  
Control Programs Operations Branch (MD-15)

TO: Bruce Miller, Acting Chief  
Air Programs Branch, Region IV

In accordance with our telephone conversation of September 15, 1986, this will confirm our discussion on seasonal control of volatile organic compounds (VOC's).

Current policy dictates that seasonal control of VOC emissions is not appropriate for EPA's ozone control program. An exception to this policy was allowed for gas-fired afterburners and this was allowed only because of the Nation's continuing need to conserve energy resources in view of the early 1970's oil crisis. (See attached memorandum dated December 1, 1980.) [see PN 172-80-12-01-033]

This policy has not been extended to other VOC source categories except for the use of cutback asphalt during periods when the temperature is below 50°F or during winter months. This seasonal exemption for cutback asphalt was necessitated because the practical considerations of cold weather. (See attached memorandum dated December 19, 1978.)

With this background in mind, it is not EPA's intent to provide any further seasonal relaxations to this policy by either allowing source categories to temporarily relax SIP requirements (emissions limits) or extend averaging times during seasonal periods for compliance purposes. Further, seasonal relaxations are not consistent with EPA's toxic control efforts.

It is hoped that this will meet your present need. If you have any questions, please contact me.

Attachments

cc: Steve Hitte, SSCD  
John Rasnic, SSCD

Chief, Air Branch, Regions I-X  
VOC Contact, Regions I-X

OAQPS:CPDD:CPOB:TGS:MD-15:BPoIglase:lferrell:629-5516:9/17/86  
Disk 5, Doc. 41

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC 19 1978

*Deane  
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RECEIVED

DEC 20 1978

AIR BRANCH

SUBJECT: Cutback Asphalt - Acceptable RACT Regulation

FROM: Richard G. Rhoads, Director *RGR*  
Control Programs Development Division

TO: Director, Air and Hazardous Materials Division, Regions I-X

A number of issues have arisen concerning the Cutback Asphalt Control Techniques Guideline (CTG) and the exemptions that are appropriate for that CTG category. While it is late in the SIP revision process, I believe that it is still in order to clarify the issue. This memo is intended for that purpose.

To illustrate the exemptions issue, attached is a sample regulation for limiting the use of cutback asphalt in road paving and maintenance operations. The regulation is considered consistent with the CTG document and, therefore, an approvable RACT regulation. It should not be construed as a binding requirement on the States to adopt this sample.

The degree of use of emulsified asphalt varies widely across the nation depending on factors such as the availability of competent emulsified asphalt manufacturers and the experience and established policies of highway engineers. Even though emulsified asphalt technology is available, it may take an extended period of time for certain States with limited or no experience with emulsified asphalt to phase its use into the States' highway paving and maintenance programs. A transition period would be necessary for manufacturers to gear up to producing the various emulsions, highway engineers to obtain specifications and data applicable to their climatic conditions, equipment operators to be trained, and possible governmental issues to be resolved. In other words, a reasonable transition period from cutback to emulsified asphalt for one State may be unreasonable, or even impossible, for another State. Regional Offices should recognize that the time periods for compliance with regulations limiting use of cutback asphalt will justifiably vary from State to State. The compliance date suggested by the Asphalt Institute is June 1, 1980.

There are three specific problems associated with emulsified asphalt that are common to most States. These are:

1. Cannot be stockpiled for extended periods of time.
2. Limited experience with use as a penetrating prime coat.
3. Cannot be used during cold weather.

Cutback asphalts, and emulsions substituted for cutback, are used either as sprayed liquids or as binder in a patch mix. The patch mix is a mixture of the asphalt binder and an aggregate and is used for filling potholes. Characteristically, the patch mix is stockpiled for periods of from several months to a year. Current emulsions cannot be used in such a stockpiled mix unless a solvent is added to keep the emulsion from setting up. Emulsified asphalt in a liquid state can only be stored for up to four weeks and then only in heated or insulated containers preferably with some type of agitation. Liquid emulsions, however, should be available on short notice alleviating the problem of long-life stockpiling. The example regulation contains provisions for use of cutback asphalt where it can be demonstrated that long-life stockpiling is necessary. Emulsion manufacturers are currently working on emulsions that can be stockpiled for longer periods of time.

The cutback asphalts used for prime coats are low viscosity with high diluent contents. There is, therefore, a high degree of VOC evaporation from priming operations. At least one manufacturer makes a strong claim to having satisfactorily solved the problem of getting good penetration with an emulsified asphalt. Until such time as this or other priming emulsions are proven acceptable to users, an exemption for prime coats may be necessary and will be approvable. Fortunately, prime coats are used to prepare soil for new road construction which will most likely occur in rural areas. In general, priming is not necessary for city streets, driveways, and parking lots.

Emulsified asphalt does not set up properly at temperatures below 50° F. If roadway repair is necessary during colder periods, cutback asphalt must be used. States may specify months during the year when cutback asphalt may be used. These months should include the time of the year when meteorological conditions are such that temperatures do not linger above 50° F for periods of time adequate for emulsified asphalt application and setting. These exempted periods will coincide with the nonoxidant season and will, of course, vary nationwide.

The fourth exemption in the example regulation is in response to the fact that some cutback asphalts apparently do not set up by VOC evaporation. These are the very high viscosity cutbacks which are heated during use and set up simply by cooling off. If there are no VOC

emissions, there is no reason to prohibit the use of those cutbacks for purposes of RACT. Thus, if a user can demonstrate through the manufacturers data that no VOC emissions will occur, then the cutback may be used at any time.

In some instances, manufacturers are adding solvent to emulsions to improve the physical properties. If such an emulsion can be used in place of a cutback, and the emulsion contains less solvent than the replaced cutback, States may wish to allow the emulsion as an interim measure until a switch can be made to a straight emulsion which contains no solvent.

It is important to note that there may be other unique problems that are not discussed in this memo. Since RACT is a case-by-case determination, these should be discussed at the State level and exemptions allowed as necessary. Please advise me if you do encounter any additional requests for exemptions beyond those described in this memo.

Finally, the figures in the control techniques guideline document for calculating VOC emissions from cutback asphalt were based on an average solvent content of 35%. Information will be sent at a later date for more accurately calculating emission rates for the various cutbacks.

In summary, the attached sample regulation can be considered RACT for controlling use of cutback asphalt under the conditions specified above concerning the exemptions. In keeping with our goal to achieve consistency among State regulations, States should be encouraged but not required to follow this sample as a guideline in developing their cutback asphalt regulation.

If you have any questions, please contact Roger Powell at 629-~~5437~~

5897

Attachment

cc: W. Barber

EXAMPLE RACT REGULATION  
CUTBACK ASPHALT

1. Definitions:

Asphalt: The dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

Cutback Asphalt: Any asphalt which has been liquified by blending with petroleum solvents (dilutents) or, in the case of some slow cure asphalts (road oils), which have been produced directly from the distillation of petroleum.

Penetrating Prime Coat: An application of low-viscosity liquid asphalt to an absorbent surface in order to prepare it for paving with an asphalt concrete.

2. Regulation:

(a) This regulation applies to the use of asphalt in highway paving and maintenance operations.

(b) After June 1, 1980\*, no person shall cause, allow, or permit the sale, offering for sale, use, or application of cutback asphalt, or an emulsified asphalt containing petroleum solvents (dilutents), except as provided below:

(1) Where the use or application commences on or after (month) of any year and such use or application is completed by (month) of the following year;

(2) Where long-life (longer than 1 month) stockpile storage is necessary;

(3) Where the asphalt is to be used solely as a penetrating prime coat; or

(4) Where the user can demonstrate that there are no emissions of organic compounds from the asphalt under conditions of normal use.

\*This date should be negotiated on a State-specific basis.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

9 JAN 1986

MEMORANDUM

SUBJECT: Clarification of CTG RACT Recommendations for  
High-Density Polyethylene, Polypropylene, and Polystyrene

FROM: Darryl D. Tyler, Director *[Signature]*  
Control Programs Development Division (MD-15)

TO: Director, Air Division, Regions I-X

It has been brought to my attention that several Regional Offices have asked the Office of Air Quality Planning and Standards (Emission Standards and Engineering Division) for clarification with regard to reasonably available control technology (RACT) recommendations cited on page 4-1 of the control technique guideline (CTG) document for "The Control of Volatile Organic Compound Emissions From Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins," (EPA-450/3-83-008).

The following summarizes questions raised and EPA responses. All figure numbers and page numbers refer to the CTG document.

Q: For polypropylene plants using liquid phase processes, does the 98 weight percent reduction or reduction to 20 ppm of continuous VOC emissions recommendation apply to the slurry vacuum/filter system vent (stream E in Table 2-3)? This stream is not listed on page 4-1.

A: Yes. The slurry vacuum/filter system vent stream is part of the material recovery section and should have been specifically listed with the other three streams in the material recovery section on page 4-1.

Q: For the high-density polyethylene plants using liquid phase slurry processes, does the 98 weight percent reduction or reduction to 20 ppm of continuous VOC emissions recommendation apply to the VOC emissions from the flash tank at plants that do not incorporate ethylene recycle?

A: Yes. This stream can be effectively controlled and, as noted on page 2-16, is already often sent to boilers for heat recovery.

Q: For polystyrene plants using continuous processes, does the emission limit apply to both streams in the material recovery section (i.e., stream B, the devolatilizer condenser vent and stream C, the styrene recovery unit condenser vent as shown in Figure 2-3)?

A: Yes. The term "product devolatilizer system," which is used on page 4-1 in the RACT recommendations, refers to both streams.

Should you have any questions concerning this memo, please contact Bill Polglase (FTS 629-5516) or Bill Johnson (FTS 629-5605).

cc: Regional Administrator, Regions I-X  
Chief, Air Branch, Regions I-X  
VOC Regulatory Contacts, Regions I-X  
VOC Enforcement Contacts, Regions I-X  
R. Campbell  
G. Emison  
T. Helms  
B. Steigerwald  
B. Johnson  
J. Berry  
S. Wyatt  
J. Farmer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

SEP 9 1987

MEMORANDUM

SUBJECT. Alternative Compliance for ~~Graphic Arts~~ RACT  
FROM: Darryl D. Tyler, Director *Darryl*  
Control Programs Development Division (MD-15)  
TO: Director, Air Division, Regions I-X

As an outgrowth of comments on simplifying recordkeeping and determining compliance in the flexographic and packaging rotogravure printing industries, the Agency has decided to accept an emission limit of 0.5 lb of volatile organic compound (VOC) per pound of solids in the ink as alternative emission limit which is essentially equivalent to the reasonably available control technology (RACT) level recommended in the graphic arts control technique guideline (CTG), "Control of Volatile Organic Emissions From Existing Sources Volume VIII: Graphic Arts, Rotogravure, and Flexography," EPA-450/2-78-033, December 1978. A source-specific State implementation plan (SIP) revision for a graphic arts facility which is based on this equivalent alternative RACT emission limit will be considered valid and will be expeditiously reviewed.

Rather than applying this limit on a source-specific basis, a State may wish to revise its SIP to apply this alternative limit to all affected sources so that there will be no need for a source-specific SIP revision for each particular industrial facility. Such an approach will be acceptable to EPA.

However, States are not required to revise SIP's and adopt the 0.5 lb VOC/lb solids RACT equivalent. The EPA still considers the RACT limitations recommended in the CTG and already incorporated into most SIP's to be valid and does not propose to prohibit their use. If a State chooses to revise its SIP to apply the 0.5 lb VOC/lb solids RACT equivalent to all sources, this should be as an alternative in addition to, rather than as a replacement for, the RACT limitations recommended in the CTG and already incorporated into most SIP's.

The 0.5 lb VOC/lb solids limit includes all solvent added to the ink: solvent in purchased ink, solvent added to cut the ink to achieve desired press viscosity, and solvent added to ink on the press to maintain viscosity during the press run. Method 24 test procedures and procedures to account for thinning solvent as specified in "Procedures for Certifying Quantity of Volatile Organic Compounds by Paint, Ink, and Other Coatings", EPA 450/3-84-019, must govern in determining VOC compliance of an ink in an enforcement situation.

This limit applies to flexographic printing and packaging rotogravure printing presses. Publication rotogravure presses are not covered by this guidance.

cc: Regional Administrator, Regions I-X  
Chief, Air Branch, Regions I-X  
Ron Campbell  
Gerald Emison  
B. J. Steigerwald

*James*  
*File → VOC*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

25 JUN 1987

MEMORANDUM

SUBJECT: Emission Cut-Off for Control Techniques Guidelines  
Volatile Organic Compound Sources

FROM: G. T. Helms, Chief *TH*  
Control Programs Operations Branch (MD-15)

TO: Carl M. Walter, Chief  
Air Branch, Region VII

Your region has had questions about the origin of the 15 lb./day or 3 lb./hour cut-off frequently found in volatile organic compound (VOC) regulations, especially for sources covered by a control techniques guideline (CTG). The State of Missouri also contacted us about it. The following discussion provides some background information:

The 15 lb./day limit first appeared in 1966 in Rule 66 which was adopted by Los Angeles County. This cut-off was subsequently adopted by Federal Regulations. 40 C.F.R. Part 51 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans, Appendix B - Examples of Emission Limitations Attainable with Reasonably Available Technology was first published in the Federal Register November 25, 1971. The section of Appendix B on organic solvents says "The emission of organic compounds of more than 3 pounds per hour or 15 pounds per day from any equipment can be reduced by at least 85 percent."

After the first CTG's were issued, the Environmental Protection Agency issued model regulations for volatile organic reasonable available control technology categories. This guidance appeared in April 1978, is a document entitled "Regulatory Guidance for Control of Volatile Organic Compound Emissions from 15 Categories of Stationary Sources, EPA-905/2-78-001." The applicability section of the model regulations states these regulations will not apply to sources whose emission of volatile organic compounds are not more than 15 lbs. in any one day or more than 3 lbs. in any one hours.

The 15 lb./day cut-off is a well established precedent as the above examples show (copies of the documents are attached). We continue to recommend it as an evaluation criteria as you review VOC regulations for ozone SIP actions.

If you have any other questions please contact me.

Attachments

cc: Chief, Air Branch, Regions I-X  
Regional VOC contacts  
John Rasnic

Helms

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

OCT 8 1986

MEMORANDUMSUBJECT: Inclusion of Clean-up Solvents in Determining Applicability  
to the 100-Ton Per Year Non-CTG RequirementsFROM: G. T. Helms, Chief *G.T. Helms*  
Control Programs Operations Branch (MD-15)TO: Cynthia Greene  
Air Programs Branch, Region I

This is in response to your memorandum of October 1, 1986, addressed to Brock Nicholson concerning the inclusion of clean-up solvents in determining the 100-ton per year non-CTG requirements.

It is our opinion that clean-up solvents should be included in the calculation of non-CTG source total emissions in order to determine if it is a 100-ton per year source. However, if it can be documented that clean-up solvents are collected and disposed of in a manner which prevents their evaporation to the atmosphere, they can be excluded from the calculation (see EPA-450/2-79-004, p. 30, 31, and 92 attached).

Perhaps some misunderstanding has occurred as a result of the attached James C. Berry memorandums of June 5, 1984, and October 20, 1983. As stated in the June 5, 1984, memorandum, clean-up solvent should not be included when determining if an ink is in compliance with the CTG emission limit for the graphic arts source category. Dilution and make-up solvent added to the ink would be included in determining if the ink is in compliance with the emission limit.

It is hoped that this will meet your present need. If you have any questions, please contact Brock Nicholson or Bill Polglase (FTS 629-5526).

## Attachments

cc: John Rasnic, SSCD  
Steve Hitte, SSCD  
Laxmi Kesari, SSCDChief, Air Branch, Regions I-X  
VOC Regulatory Contact, Regions I-X  
VOC Enforcement Contact, Regions I-X

NOTE: Attachments to this memorandum are not included in the Policy and Guidance Notebook.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

28 FEB 1986

MEMORANDUM

SUBJECT: Responses to Four VOC Issues Raised by the Regional  
Offices and Department of Justice

FROM: Gerald A. Emison, *[Signature]*  
Office of Air Quality Planning and Standards

TO: Air Management Division Directors  
Regions I, III, V and IX

Air and Waste Management Division Director  
Region II

Air, Pesticides, and Toxics Management Division  
Directors  
Region IV and VI

Air and Toxics Division Directors  
Regions VII, VIII and X

In the attachments, I am transmitting responses to four VOC issues identified by the Regional Offices and DOJ through the VOC Compliance Workgroup. As you may know, absence of policy addressing these VOC issues was being presented as an impediment to Regional and State efforts in returning VOC violators to compliance.

On June 27, 1985, the first draft of the attached responses, as well as draft responses to many other VOC issues, were circulated for comment. On August 21 and 22, various Regional and Headquarters representatives met to discuss these first drafts. A second draft of each issue was circulated to the Regional Offices under two separate memoranda, dated October 25 and December 12. The attached responses incorporate the various comments received.

Under previous correspondence issued January 31, 1986 from SSCD and January 17, 1986 from OECM, four other responses have been transmitted to you. Therefore, eight issues have been addressed to date. Many of the remaining proposed responses raise significant policy issues which need to be addressed. We are working to expedite these responses and to assure any necessary coordination with the work of the Ozone Task Force.

I appreciate the efforts of the Regions in commenting on the various drafts of the attached four issues and hope that you find them helpful in resolving some of the issues concerning VOC enforcement.

Attachments

cc: VOC Compliance Workgroup  
Regional Counsel, Regions I-X

## Issue

What is the Agency's enforcement response for sources subject to pending bubbles, specifically for bubbles in areas lacking an approved attainment demonstration?

## Response

The June 28, 1984 guidance on "timely and appropriate" enforcement response for significant air violators addressed the situation of timely enforcement for sources subject to SIP revisions. The guidance states that EPA will routinely issue NOVs, if not already issued, 120 days following the violation (or shortly after) if the violation is not resolved in accordance with the guidance. Follow up to the NOV is warranted unless EPA determines, in consultation with the State, that continued deferral to the State activity will produce timely compliance.

Where the State activity is a SIP revision (bubbles are SIP revisions), the revision must, by day 120, at least have been scheduled for a State hearing and EPA staff-level review shows it likely to be approved. Where the SIP revision is unlikely to be approved, EPA is obligated under the "timely and appropriate" guidance to issue a NOV on day 120 and follow up with its own enforcement action as appropriate.

Sources subject to SIP revisions in areas that are classified as attainment are not subject to the "timely and appropriate" guidance unless a specific State-EPA agreement addresses such sources. However, such sources remain subject to enforcement by EPA. The criteria for deferral outlined in the "timely and appropriate" guidance may be useful for addressing such situations even though the timelines may not be applicable.



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Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

28 FEB 1986

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Date Signed

Issue: Are there any site-specific RACT limits being set?

Response: Site-specific RACT determinations are required for > 100 T/yr stationary sources not covered by a CTG where (1) sources are located in urbanized areas that did not attain by 1982 and (2) for urbanized areas that have requested an extension until 1987. In addition, case-by-case RACT determinations are allowable where the CTG suggested limit has been found to be technologically or economically infeasible. These case-by-case RACT determinations must be approved by EPA as source-specific SIP revisions.

Site-specific RACT determinations have been for a number of > 100 T/yr stationary source categories not covered by CTG's. Examples of this are Region IV RACT determinations for aluminum foil plants, woodworking plants, etc. Region I reportedly is making RACT determinations for a large number of sources. For example, more than 30 site-specific non-CTG RACT determinations in the State of Massachusetts will be submitted as SIP revisions to EPA in the near future. Also, a number of case-by-case RACT determinations have been made for CTG site-specific sources in Massachusetts in the past.

Case-by-case RACT determinations are allowable under EPA policy for both CTG and non-CTG source categories where appropriate.

The VOC RACT Clearinghouse is available and should be used for ensuring Regional consistency in RACT determinations for similar site-specific source categories.

  
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Gerald A. Emison, Director  
Office of Air Quality Planning and Standards

28 FEB 1981

Issue

What baseline year should be used for determining VOC percent emissions reductions as per State SIP regulations?

Response

° There is no one particular year that can be considered to be the baseline year for compliance purposes for all source categories. The baseline year is generally considered to be the effective date of the emission control regulation for the source category.

° The SIP itself, however, should be checked to determine if it contains language affecting baseline year determinations. It is possible that in approving the SIP either EPA or the State commented on this issue, thus providing guidance to sources. If there is no contrary guidance in the SIP, the general rule stated above should take effect.

° The stated issue and response relate to individual source compliance rather than to a SIP planning baseline or emissions trading issue. SIP baselines are defined in current policy and the issue of baselines relative to trading is covered in the various Agency policy documents on trading.

° The issue is only applicable to "percent reduction" types of regulations. A regulation based strictly on "VOC content" (e.g., lbs VOC/gal coating or percent solvent regulations, etc.) or add-on control equipment percent requirements, would not require a baseline date as compliance would be based only on a comparison against the SIP emission limits.

° The "percent reduction" requirement applies to the emission rate as expressed in terms of VOC content, not to total VOC emissions. That is, the percent reduction applies against the pre-control coatings/inks formulations, not to the emissions in mass per unit of time. This is consistent with the intent of the CTG's. The pre-control coatings/inks formulations used as the baseline in determining percent reductions must be representative of the coatings/inks in use at the time the regulation became effective.



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Office of Air Quality Planning  
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Date Signed

ISSUE

Is an exemption for use of incinerators in non-ozone season appropriate? How can we justify suing sources for failure to utilize controls during non-ozone season in SIPs where there is no exemption?

RESPONSE

The origin of the policy on seasonal controls began when EPA issued guidance on July 28, 1976 which authorized procedures for the approval of SIP revisions allowing seasonal operation of certain gas-fired afterburners. Such revisions could be accomplished without a detailed, time-consuming analysis of air quality impact so long as the seasonal shutdown period was consistent with that delineated in a staff study ("Oxidant Air Quality and Meteorology," February 6, 1976) and if the existing air quality showed no past violations in the months during which the afterburners were shut down.

On December 1, 1980, in a memorandum to the Regional Offices titled "Revised Seasonal Afterburner Policy" (attachment 1), EPA further stated that any plan revision which provided for afterburner shutdown in the period of November through March outside of southern California and the Gulf Coast should be proposed for approval.

It is important to note that the policy applies to gas-fired afterburners installed to control emissions of volatile organic compounds (VOCs) for the purpose of reducing ambient ozone concentrations. It does not apply to flares (which do not use natural gas as an auxiliary fuel), VOCs vented to boilers, afterburners operated principally for odor control, or afterburners operated to control toxic or hazardous substances. It is also important to note that the policy on seasonal control of afterburners can only be implemented through the SIP process. The EPA does not have a general exemption regarding seasonal controls of VOC gas-fired afterburners.

A second category of sources to which seasonal controls can be applied through the SIP process are cutback asphalt facilities. In some SIPs, control of these facilities is required only during the summer months.

In 1984, EPA, through the Office of Air and Radiation considered whether to expand the categories of sources to which such seasonal policies could apply. ("Seasonal Volatile Organic Compound (VOC) Control and Phillips Petroleum," dated September 21, 1984 (attachment 2)) The decision was made not to expand the scope of the policy primarily because:

- Only a relatively small additional cost savings could be expected from any expansion of the policy.

- Exposure to toxic emissions might increase.
- Pursuing such an initiative could disrupt VOC control efforts at a time of uncertain implementation.
- Scarce resources might have to be diverted from current programs to prepare the necessary administrative actions.
- The control flexibility in the program already available might be jeopardized since Section 302(K) of the Clean Air Act, passed subsequent to EPA's seasonal afterburner policy, requires controls on a "continuous basis."

It was for the above reasons that the recommendation was made to implement the existing policy as presently written.

Thus, the policy concerning seasonal control of afterburners can be implemented only if a State submits, and EPA approves, a SIP provision providing for seasonal operation. In the absence of such a provision, sources are obligated under State and federal law to continuously operate afterburners as necessary to meet applicable emission limits. EPA expects sources to meet their legal obligations, and is directed by Sections 113 and 120 of the Clean Air Act to take corrective enforcement action if a source fails to do so. The justification for enforcing SIP requirements providing for the continuous operation of afterburners rests with this directive in the Clean Air Act. SIP standards are initially developed by the States and can be more stringent than required by the Clean Air Act and EPA policy. Once federally effective, the SIP requirements are to be met by sources and enforced by the States and EPA.



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28 FEB 1986

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method for resolving it is contained in a draft Federal Register notice prepared in response to litigation on the new source performance standards for auto coating plants. This notice has never been published for reasons unrelated to its technical validity. David Salman of the Emission Standards Division recently forwarded this information to Vicky Booth of your office.

Therefore, while a monthly weighted average would be acceptable for Georgia to use, use of the information provided by David Salman would go further in addressing the problems associated with automobile EDP tanks.

If you have any questions, you may call Bill Johnson (FTS 629-5245).

cc: B. Johnson  
D. Salman  
S. Wyatt