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Federal Operating Permits Program Under Title V of the Clean Air Act

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FEDERAL OPERATING PERMITS PROGRAM UNDER TITLE V OF THE CLEAN AIR ACT

FINAL REPORT

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PREFACE

The purpose of this notebook is to supplement the information presented and discussed in the EPA-sponsored workshop entitled, "The Federal Operating Permits Program (Part 71)." This workshop was developed to inform industry in affected States of the requirements for complying with the Federal Operating Permits Program under Part 71 of Volume 40 of the Code of Federal Regulations.

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1.0 INTRODUCTION

With the Clean Air Act Amendments of 1990, Congress created the Title V operating permits program, which required EPA to establish national standards for an operating permits program for stationary sources of air pollution. Based on these standards, States were required to devise their own permit programs under Title V. On July 21, 1992, the U. S. Environmental Protection Agency (EPA) published the final rulemaking for the Title V program as Part 70 of Chapter I of Title 40 of the Code of Federal Regulations (40 CFR Part 70). This regulation outlined the specific minimum requirements that States must meet in their operating permit programs.

The basic premise behind Title V is fundamentally simple: all Federal requirements from a number of air pollution regulatory programs are integrated into a single document. By consolidating facilities' permit requirements, the public and permitting authorities can better determine if sources are in compliance with their Clean Air Act requirements. Other program objectives include providing a consistent framework for incorporating new requirements, providing programs for emissions trading, and establishing independently funded operating permits programs. Title V also includes requirements for public participation, provisions for permit and application shields, and a mechanism for permit reopenings and revisions. Finally, timeframes in which State permitting authorities and EPA must act to review and rule on permitting applications are specified.

State agencies are responsible for developing and implementing operating permits programs under Title V. Therefore, States must develop their own operating permit programs to review, issue, administer, and enforce operating permits. States are also required to collect the fees necessary to carry out these responsibilities. State agencies are free to develop and implement Part 70 as they wish so long as they meet minimum

EPA-established requirements. For example, States may elect to establish requirements more stringent that those set forth under Part 70.

Under the Clean Air Act Amendments, EPA is required to implement a *Federal* Title V permits program (to be issued under 40 CFR Part 71) in any State or jurisdiction that did not have an approved Part 70 permit program in place by November 15, 1995. Because several State and authorized local agencies do not have EPA-approved Part 70 programs in place, EPA is in the process of preparing to implement Part 71 programs in these areas. Part 71 will apply not only to major stationary sources of air pollution in States and authorized local agencies that have failed to obtain EPA approval of their operating permits, but also to sources located in areas over which Indian Tribes have jurisdiction (if the Tribes have not developed their own permit programs) and to certain sources on the Outer Continental Shelf.

The requirements in the Part 71 rule are similar to those mandated in Part 70 because Part 71 is modeled on the Part 70 regulations. For example, the definitions, permit content, and application requirements are quite similar. In addition, Part 71 provides some flexibility by allowing EPA to delegate administration of the operating permits program, in whole or in part, to State, local, or Tribal agencies, where appropriate. Therefore, EPA anticipates a smooth transition between the Part 71 and Part 70 programs if the permitting authorities should change in the future (e.g., if certain States ultimately receive EPA approval of their operating permits programs).

The primary difference between the Part 70 and 71 rules is that Part 70 programs are implemented by State or local authorities, whereas Part 71 programs are administered by EPA, except in those cases where authority is delegated elsewhere. Other differences include the following: (1) under Part 70, many implementing agencies have developed very extensive lists of insignificant activities and emission level thresholds that have been approved by EPA; the insignificant activity list in Part 71 is much less extensive; and (2) under Part 70, the initial fee for sources is adjusted upward from a 1989 base fee of $25

per ton per year of regulated pollutant emissions plus the Consumer Price Index;[1] under Part 71, the fee is proposed to be $32 per ton per year in Phase I if the program is administered by EPA and $24 per ton per year if administered by the State under a fully delegated program (to be increased in Phase II to reflect the additional cost of permit revisions). Additionally, Part 71's definition of "affected State" has been modified to include Indian tribal lands for cases where EPA determines that an Indian Tribe is eligible for treatment as an affected State. Also, Part 71 requires that any federally recognized Indian Tribe be notified of the issuance of any draft permits to sources that could impact tribal air quality, including all draft permits issued by EPA for the tribal area and all draft permits for sources that are within 50 miles of the reservation boundary.

Although EPA originally intended to incorporate proposed revisions to the Part 70 rule into the final Part 71 rule, industry commenters unanimously argued that the permit revisions in the proposed Part 70 rule were too complex and would hinder a source's ability to make rapid changes in response to market conditions. EPA agreed with these concerns and with concerns over impeding transitions to Part 70 approval. For EPA to fulfill its mandate as the Title V permitting authority for States that have not obtained Part 70 approval, and to do so by establishing a complete Part 71 program, it was necessary for EPA to promulgate the Part 71 rule on an interim basis (hereafter called "Phase I Part 71 rule"), based upon the current Part 70 regulation. Many issues in Part 70 are still outstanding following the August 1994 and August 1995 proposed changes. Once the Agency has resolved the outstanding issues with the relevant stakeholders, EPA intends to issue a second round of final rulemaking for Part 71 (hereafter "Phase II rulemaking") to conform Part 71 to the revised Part 70 rule.

[1]For example, the minimum Part 70 fee in 1996 is $31 per ton per year of regulated pollutant, although some States have established levels significantly higher than this, while other States have prepared detailed fee demonstrations showing that lesser fees would be sufficient to run the program.

2.0 TRANSITION BETWEEN PARTS 70 AND 71

EPA has tailored the Federal Part 71 operating permits regulations after the Part 70 regulations. This consistency should ease the anticipated transition from Part 71 to Part 70 programs when States obtain EPA approval of their own permit programs. This section will present the differences between the requirements of Part 70 and Part 71 and discuss some practical transition issues that may be of interest to industry.

2.1 DIFFERENCES BETWEEN Part 70 AND Part 71

EPA initially finalized the Part 70 regulation on July 21, 1992 (57 FR 32250). After much controversy related to the permit revision procedures, EPA published proposed changes to these procedures on August 29, 1994 (59 FR 44460). Part 71, as proposed on April 27, 1995 (60 FR 20804), incorporates EPA's revised permit revision procedures. Because of the extensive comments received on these revised procedures from both industry and the States, EPA has streamlined the permit revision procedures in a supplemental notice (60 FR 45529, August 31, 1995). Due to delays in finalizing the Part 70 rules, EPA has decided to finalize the Part 71 rule based on the original July 21, 1992 Part 70 rule and not the Part 71 proposal which in large part was based on the August 29, 1994 proposed revisions to Part 70. Because States may have up to two years to revise their existing Part 70 programs to meet the Part 70 revisions once promulgated, EPA believes that tailoring the Part 71 rule to the existing Part 70 rule will enhance the transition between the Part 71 and Part 70 programs. In a Phase II promulgation of Part 71, EPA plans to incorporate any additional changes to Part 70 into the Part 71 regulations so that the two programs remain consistent.

Although EPA has attempted to make these programs as consistent as possible, some inherent differences exist. These differences arise because the Part 71 program is a national program implemented by EPA, while Part 70 is a program implemented by the States or

local agencies incorporating unique State/local preferences and precedents. The more significant variations are discussed below.

2.1.1 Early Application Due Date

Under Part 70, EPA allowed State and local agencies to set individual schedules for submittal of permit applications by industry that meet the needs of their specific programs. The only stipulation was that all applications must be submitted within 1 year of program approval. Many States used 4 or 6 month schedules and many required application even prior to EPA approval of the program.

Sources subject to Part 71 must also generally submit a permit application within 1 year of becoming subject to the program. However, EPA may choose to require application submission before the 1-year deadline, provided that advance notice and reasonable submission time is given. At least 6-months notice must be given to sources prior to the early application deadline.

2.1.2 Insignificant Activities and Emission Levels

Under Part 70, State and local agencies must obtain EPA approval of activities and emissions that are considered insignificant, and therefore, not to be included in the permit application. State and local agencies have proposed a wide variety of insignificant activities and emissions provisions in their Part 70 programs.

In Part 71, EPA's criteria for insignificant emission levels are as follows:

1. For non-HAP regulated air pollutants: no more than 2 tons per year (tpy), based on the unit's potential to emit.

2. For HAP's: no more than 1,000 lb/yr of any HAP from a single emission unit.

While units or activities qualifying for insignificant treatment due to emission levels must be reported in the permit application, only a listing is required that generally describes the unit and its emissions. Detailed information (e.g., emission estimates, work practices, and monitoring) is not required in the permit application.

2.1.3 Permit Fees

Under Part 70, State and local agencies developed fee schedules to cover the costs of administering and implementing their operating permit programs. EPA suggested a

presumptive norm of $25 per ton of regulated pollutant emissions per year, which is adjusted upward each year after 1989 according to increases in the Consumer Price Index.

Under Phase I of Part 71, EPA will charge an initial fee of $32 per ton of regulated pollutant emissions (including fugitives) per year. If EPA finds it necessary to use contractor assistance to administer the Part 71 program, the per ton fee will vary depending on the extent of contractor involvement. The fee could exceed $70 per ton per year; although as in Part 70, EPA will not charge for emissions of each regulated pollutant that the source emits in excess of 4,000 tpy. In Phase II of Part 71, an additional fee will be determined to cover the cost of permit revisions when EPA finalizes a new streamlined permit revision process. Part 71 sources are required to submit an initial fee calculation worksheet and fees to EPA. However, EPA may suspend its fee collection where a State receives full delegation and collects adequate fees under State law to administer the delegated Part 71 program. For fully delegated programs in which EPA has not suspended its fee collection, the fee will be $24.

2.1.4 Enforcement

Under Part 70, State and local agencies are required to obtain enforcement authority to assess civil penalties of $10,000 per day per violation. Under Part 71, civil penalties are significantly higher -- $25,000 per day per violation. Fines could be assessed for violation of any applicable requirement; any permit condition; any fee or filing requirement; and any duty to allow or carry out inspection, entry, or monitoring activities of any regulation or orders issued by the permitting authority.

2.2 PROGRAM TRANSITION AND IMPLEMENTATION

If an approved Part 70 program is not in place by November 15, 1995, EPA is required by the Act to implement a Federal Part 71 program for that area. Although the lack of an approved Part 70 program is the most likely reason that a Federal permit program would be needed, several other situations could cause EPA to impose a Part 71 program, including the following:

1. EPA may find that a State or local agency is not adequately administering or enforcing its approved Part 70 program. In this case, EPA must impose a Part 71 program

within 2 years after informing the permitting authority of the deficiency, if the deficiency is not corrected.

2. A State or local agency that has received interim approval for its Part 70 program may fail to obtain the required full program approval before the intermim approval expires. In such a case, EPA is required to impose a Part 71 program.

3. If a permitting authority fails to act properly on an individual Part 70 permit (e.g., fails to respond to a timely permit objection or to reopen the permit for cause), EPA may impose a Part 70 permit action or issue the source a Part 71 permit.

4. A Tribal area where a Part 70 operating permits program has not been granted full or interim approval would be subject to Part 71. The effective date of a Part 71 program for a Tribal area is November 15, 1997.

5. Selected major sources which are classified as outer continental shelf (OCS) sources would be subject to Part 71. If the source is located beyond 25 miles of a State's seaward boundaries, the source becomes subject to Part 71 30 days after promulgation. If the source is located within 25 miles of the seaward boundaries, the Part 71 program applies if the program is being administered and enforced by EPA for the corresponding onshore area.

The following paragraphs discuss some transition issues that will arise when EPA implements Part 71.

2.2.1 Public Notice of Part 71 Program

If a Part 71 program is needed for a State (or area within the State), EPA will publish a notice in the Federal Register informing the public of EPA's decision to administer and enforce the Part 71 program in the State (or area) and the effective date of the program. In addition to the Federal Register notice, EPA may publish notice in a newspaper of general circulation within the area and will send a letter to the Governor informing him or her of the effective date of the program.

2.2.2 Transition Plan for Initial Permit Issuance

Once the effective date of the Part 71 program is established, Part 71 allows from 6 months to 1 year from that effective date for sources to submit permit applications to EPA, although sources could always submit applications earlier. States and industry have

complained about the unnecessary detail that is required from sources in these application forms, and EPA has consented to allow States to develop supplemental guidance for filling out the Part 71 application, based on the "White Paper" in Appendix A. In general, this guidance clarifies the amount and level of information needed in permit applications and provides considerable options for streamlining the application process. EPA or delegate agencies will follow the streamlining guidelines in the White Paper when implementing the Part 71 program. Part 71 requires that EPA issue permits for at least one-third of all applications annually over a period of 3 years after the effective date of the Part 71 program. If an application contains an early reduction demonstration under Section 112(i)(5) of the Act, the permit will be issued within 12 months of receipt of a complete application.

2.2.3 Delegation of Part 71 Programs to State or Local Agencies

The EPA recognizes that in some cases States may fail to receive Part 70 program approval due to program flaws that are not related to their practicable ability to implement a permitting program. In the preamble to the proposed Part 71 regulation, EPA cites the example of a Part 70 program that contains elements in it's enabling legislation or regulations that prevent EPA from granting program approval, even though EPA may be confident that the State could adequately administer and enforce the program. For this and similar cases, the State or local agency may be delegated authority for the entire program or only a portion of the program. If EPA chooses to delegate all or part of the program, EPA will define, as part of the delegation agreement, the respective roles in administering and enforcing the Part 71 program. Note that delegation of a Part 71 program, in part or whole, to the State or local agency does not constitute EPA approval of their Part 70 program.

2.2.4 Transition to Approved Part 70 Program

For a State that submits a late Part 70 submittal to EPA such that EPA has not approved or disapproved the submittal by the effective date of the final Part 71 rule, Part 71 becomes automatically effective until the State's Part 70 program is approved by EPA. However, sources are not obligated to submit applications to EPA until 12 months after the effective date of the Part 71 program. Therefore, if the State's Part 70 program is approved shortly after Part 71 is effective, it is likely that sources will submit applications to the State or local permitting authority rather than to EPA. Upon approval of the Part 70 program,

EPA will suspend further action on applications for Part 71 permits. Where appropriate, applications received by EPA prior to approval of the Part 70 program will be forwarded to the permitting authority after approval of the Part 70 program.

If Part 71 permits have already been issued to a source when a Part 70 program is approved by EPA, EPA will continue to administer and enforce the Part 71 permit until it is replaced by a Part 70 permit. If a Part 71 permit expires prior to the issuance of a Part 70 permit, the Part 71 permit will remain in effect until the Part 70 permit is issued or denied, provided that a timely and complete application for permit renewal was submitted to the permitting authority.

The permitting authority may issue Part 70 permits for all sources with Part 71 permits in accordance with a permit issuance schedule approved as part of their Part 70 program or may issue Part 70 permits at the expiration of the Part 71 permit. Part 71 permits will contain a permit condition that states that the permit will automatically expire upon issuance by the State of a Part 70 permit.

3.0 TITLE V OBLIGATIONS AND APPLICABILITY

3.1 OBLIGATIONS UNDER TITLE V

Under most circumstances, sources subject to Title V permitting requirements must submit a permit application within 1 year of becoming subject to Part 71. In some instances, EPA will require an early application, in which case the agency will give a minimum 6 months notice prior to the early application deadline. Under Section 71.5(a), the owner or operator of a source subject to a Federal operating permit program is required to submit a timely and complete permit application. Also, Section 71.5(e) states that the applicant has a duty to promptly supplement or correct information in the permit application upon becoming aware of any failures, incorrect submittals, or new requirements.

3.1.1 Reporting Requirements

Title V requires adherence to certain reporting requirements which relate primarily to: (1) monitoring data, (2) compliance certification, and (3) a schedule of compliance. The permit application must describe how the reporting will be prepared and identify a responsible party. The reporting requirements are summarized below:

- Sources must submit reports of any required monitoring at least every 6 months. All emissions exceedances must be clearly identified in the reports.
- Whenever a source deviates from permit requirements, including deviations attributable to upset conditions, the source must promptly report the deviations, the probable cause of such deviations, and any corrective actions or preventive measures taken. The final operating permit rule states, "[t]he permitting authority shall define 'prompt' in relation to the degree and type of deviation likely to occur and the applicable requirements" [Section 70.6 (a)(3)(iii)(B)]. Part 71 and many State rules require that deviations which result in an emissions increase must be

reported within 1 to 2 days. All other deviations must be reported in semi-annual monitoring reports, unless more frequent reporting is required in the permit.

- If the source is required to submit a schedule of compliance as part of its permit application, the source must submit progress reports at least semiannually. These progress reports must contain an updated schedule indicating when milestones were met. The reports must also explain why any dates in the original schedule of compliance were not or will not be met, as well as any additional corrective or preventive measures adopted.
- Sources must submit compliance certifications at least annually. These certifications must state the source's current compliance status with all applicable requirements and the methods used to determine compliance. All compliance certifications must be signed by a "responsible" company official and verified for "truth, accuracy, and completeness."

All records must be available for a period of at least 5 years from the date of monitoring event, measurement, report, or application. Upon request, the facility must submit any of these records to the permitting authority.

3.1.2 Fees

Title V allows EPA to charge sources annual fees whenever EPA is required to administer a Part 71 program. The annual fees are based on information that the facility submits regarding actual emissions of each regulated pollutant. Each Part 71 source must complete and submit an initial fee calculation worksheet. The work sheets will be provided by EPA. Fee payment of the full amount must accompany each initial fee calculation work sheet. The fees are based on the source's actual emissions for the preceding calendar year multiplied by the cost per ton factor. When determining the fee, emissions in excess of 4,000 tons per year of any regulated pollutant and insignificant sources should be excluded from the fee calculation. Fees are charged on regulated pollutants only once so care should be taken not to double count pollutants in more than one pollutant category.

Due dates for the initial fee calculation work sheets and fees are as follows:

1. If EPA implements a Part 71 program that does not replace an approved Part 70 program, the due dates are as follows:

Type of Part 71 permit	Due date from Part 71 effective date
Early deadline permits	By date specified in notice (specified date will be within 12 months)
Phase II acid rain permits	
SO_2	By January 1, 1996
NO_x	By January 1, 1998
All other permits	Within 12 months

2. If EPA withdraws approval of a Part 70 program and implements a Part 71 program, the due dates are as follows:

SIC code	Due date from Part 71 effective date
0100 - 2499	Within 6 months
2500 - 2999	Within 7 months
3000 - 3999	Within 8 months
>3999	Within 9 months

3. If a Part 71 permit is issued following an EPA objection to a Part 70 permit, the due date is 3 months after the date the Part 71 permit is issued.

If the permitting authority determines that a source has completed the fee calculation worksheet incorrectly, the permitting authority will bill the applicant for the corrected fee or credit overpayments to the source's account. If additional amounts are due, full payment must be remitted within 30 days of the receipt of an invoice. (Penalties of 50 percent of the fee amount are assessed if the fee is not paid within 30 days of the payment due date and are also assesssed for certain underpayments.) Note, that the permit application is considered incomplete until all required fees are paid. If an owner or operator believes that the assessed fee is in error, a written explanation of the alleged error must be provided to the permitting authority along with the assessed fee. The permitting authority has 90 days to determine whether the assessed fee was in error and make appropriate adjustments.

3.1.3 Enforcement and Penalty Issues

A source must comply with all conditions of the Part 71 permit. Any permit noncompliance constitutes a violation of the Act and may result in enforcement action, including permit termination, revocation, or modification. Permitting authorities have great latitude to enforce any Title V violations, including those involving compliance certification. Authorities may enter a facility at any time to inspect a source's permit documents, reports, and other recordkeeping. If violations are discovered, the permitting authority may immediately assign fines and/or other penalties.

Facilities are also subject to civil and criminal penalties if a violation of a permit's terms are discovered. Civil penalties may be levied against a facility even if the infractions are made unintentionally. For example, a facility may be penalized if a discrepancy with a fee or filing requirement is discovered, if a source fails to adequately accommodate or assist the permitting agency during an inspection, or for any action that fails to comply with a specific regulation or order issued by the permitting authority.

Criminal sanctions are levied against a facility if it knowingly violates permit-related mandates. Criminal activities include deliberately falsifying permit records and documents, making false material statements in a permit application, and falsely representing a facility in a certification, permit form, notice, or report. Criminal penalties can also be issued against person who knowingly tampers with or renders inaccurate any monitoring device or method required in a permit.

3.2 APPLICABILITY OF TITLE V

One of the first steps towards meeting the Title V compliance requirements is determining which sources are subject to the regulations. Most nonmajor sources are not currently subject to Title V permit requirements. EPA has proposed a rulemaking to address the nonmajor Section 112 sources subject to standards promulgated after July 21, 1992 (see 60 FR 64002), but has not yet addressed nonmajor Section 111 sources with standards promulgated after July 21, 1992. As a result, these Section 111 sources are subject to the requirement of obtaining a Title V operating permit. Nonmajor sources subject to Section 111 or 112 standards promulgated prior to July 21, 1992 are currently not required

to obtain a Title V operating permit. The EPA has yet to determine whether such nonmajor sources will be required to apply for a Title V operating permit. Lastly, solid waste incineration units are required to obtain a permit (Section 129(e) of the Act and Section 71.3(b)(1) of the Part 71 rule). EPA will decide whether to incorporate other nonmajor sources into the Title V program before the year 2000.

3.2.1 Definitions

Before discussing Title V applicability further, it is helpful to define several terms.

3.2.1.1 Ozone Transport Regions. An ozone transport region (OTR) is a geographic region comprised of States and metropolitan areas that "share" responsibilities for controlling ozone formation. The following is a list of States and areas that currently comprise the ozone transport region:

- Connecticut
- Delaware
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Pennsylvania
- Rhode Island
- Vermont
- Consolidated Metropolitan Statistical Area (includes the District of Columbia)

3.2.1.2 Stationary Source. A stationary source is "any building, structure, facility, or installation that emits or may emit any regulated air pollutant or any pollutant listed under Section 112(b) or the Act." The word "source" can also be used to define a piece of equipment or machinery within a facility that emits pollution.

3.2.1.3 Potential to Emit (PTE). The size of a source is determined by its "potential to emit" an air pollutant. PTE is the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, is treated as part of its design if the limitation is enforceable by the Administrator. PTE is not explicitly defined in the Part 71 regulation, but the term is discussed in the preamble of this regulation. PTE is explicitly defined in Part 70 and in most State rules.

3.2.1.4 Affected Source. Affected sources are defined as stationary sources subject to the acid rain provisions of Title IV (essentially fossil fuel-fired power plants). Applicability regulations for affected sources are found in 40 CFR Section 72.6.

3.2.2 Who Needs an Operating Permit?

Initially, Part 71 regulations will primarily apply to major and affected stationary sources. Major source thresholds under the Part 71 permit program are provided in Table 3-1. The types of sources that fit the definition of major source are summarized below:

- For hazardous air pollutants other than radionuclides, if the source emits (or has the potential to emit) 10 tons per year (tpy) or more of any single HAP, or 25 tpy or more of aggregate HAP's (including fugitive emissions), it is a "major" facility and requires a permit. These pollutants are regulated under the NESHAP program established pursuant to Section 112 of the Act. (Note that EPA plans to develop different major source thresholds for certain highly toxic HAP's.)
- For sources in NAAQS nonattainment areas, the "major source" emission rate threshold varies by pollutant and area classification (e.g., moderate, serious, and severe). Sources having the potential to emit pollutants at rates equal to or greater than the values given in Table 3-1 must obtain an operating permit.
- Finally, any source having the potential to emit 100 tpy of any "air pollutant" qualifies as a major source. In Section 302(g) of the Act, this term is defined as follows:

> The term "air pollutant" means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term "air pollutant" is used.

TABLE 3-1. MAJOR SOURCE THRESHOLDS UNDER THE PART 71 OPERATING PERMIT PROGRAM

ATTAINMENT DESIGNATION AND POLLUTANT	MAJOR SOURCE THRESHOLD (tons/yr)
Criteria Pollutants (Including Elemental Lead) in Attainment Areas	100
Criteria Pollutants (Including Elemental Lead) in Nonattainment Areas:	
Carbon Monoxide	
Moderate	100
Serious	50
PM_{10}	
Moderate	100
Serious	70
Ozone (VOC, NO_x[a])	
Marginal and Moderate	100
Serious	50
Severe	25
Extreme	10
Ozone Transport Regions (VOC[b])	
Severe	25
Extreme	10
All Other Areas	50
Sulfur Dioxide	100
Air Toxics (Including Lead Compounds, But Excluding Elemental Lead[c]) in All Areas:	
One Hazardous Air Pollutant (HAP)	10
Two or more HAP's	25
All Other Air Pollutants Not Listed Above	100

[a]Exemptions from NO_x requirements can be obtained pursuant to Section 182(f) of the Act.

[b]As stated in 57 FR 55622, November 25, 1992, the major stationary source threshold is specifically limited to VOC.

[c]Section 112 of the Act indicates that elemental lead is not a HAP. Lead and lead compounds should be inventoried separately.

3.2.3 Which Pollutants are Regulated?

Regulated air pollutants include:

- Nitrogen oxides (NO_x).
- Volatile organic compounds (VOC's).
- Criteria pollutants regulated under the NAAQS program, including ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxides (SO_2), PM_{10} (particulate matter with an aerodynamic diameter less than or equal to 10 μm), and lead.
- Any pollutant subject to a standard under the NSPS program.
- HAP's subject to standards promulgated under Section 112 of the Act or other requirements established under Section 112, including Sections 112(g), (j), and (r) of the Act.
- Class I or II ozone-depleting substances or substitute substances regulated under the stratospheric ozone protection program.

The April 26, 1993 guidance memorandum from EPA's Lydia Wegman is currently the best source of information on regulated air pollutants for the purposes of Title V. (A copy of this memorandum is provided in Appendix A). Since this memorandum was issued, acetone and perchloroethylene have been added to the list of organic compounds that are excluded from the definition of VOC.

3.2.4 When Should Fugitive Emissions be Counted?

Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. If the source falls within one of the source categories given in Table 3-2, its fugitive emissions would be considered in determining if it is a major source. Fugitives must also be included in calculating HAP emissions.

The March 8, 1994 memorandum from EPA's Lydia Wegman is currently the best source of information on the consideration of fugitive emissions for major source determinations. A copy of this memorandum is provided in Appendix A.

TABLE 3-2. SOURCE CATEGORIES FOR WHICH FUGITIVE EMISSIONS MUST BE CONSIDERED

Carbon black plants (furnace process)
Charcoal production plants
Chemical process plants
Coal cleaning plants (with thermal dryers)
Coke oven batteries
Fossil fuel boilers (or combinations thereof) totaling more than 250 MMBtu/hr heat input
Fossil fuel-fired steam electric plants of more than 250 MMBtu/hr heat input
Fuel conversion plants
Glass fiber processing plants
Hydrofluoric, sulfuric, or nitric acid plants
Iron and steel mills
Kraft pulp mills
Lime plants
Municipal incinerators capable of charging more than 250 tons of refuse per day
Petroleum refineries
Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
Phosphate rock processing plants
Portland cement plants
Primary aluminum ore reduction plants
Primary copper smelters
Primary lead smelters
Primary zinc smelters
Secondary metal production plants
Sintering plants
Sulfur recovery plants
Taconite ore processing plants
Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Act[a]

[a]Sections 111 and 112 are the NSPS and NESHAP programs, respectively.
Source: 40 CFR Section 71.2.

3.2.5 Insignificant Activities

Insignificant activities must be included in the Title V applicability determination. Applicability is based on all emission units regardless of whether the units emit insignificant levels of air pollutants. A detailed discussion on insignificant activities is provided in Section 5.1.8 of this notebook.

4.0 SYNTHETIC MINORS, POTENTIAL TO EMIT, AND TRANSITION POLICY

4.1 SYNTHETIC MINORS

The "potential to emit" (PTE) is a useful term when defining "major sources and synthetic minors." The current Part 70 definition of PTE provides that physical or operational limits on a source's capacity to emit an air pollutant be considered part of the source's design if the limitation is enforceable by the Administrator. Many sources, for instance, have a PTE above major source thresholds, but historically their actual emissions have been below major source thresholds. These sources, many of which are small businesses, do not believe they should be affected by Title V. Many States have developed methods to create enforceable limits for these sources so that they will not be subject to Title V. Such sources are known as "synthetic minors."

A definition of PTE for the purposes of the Phase I Part 71 rule was not included in the rule in light of two recent court decisions (National Mining Association v. EPA, 59 F.3d 1351, D.C. Cir., July 21, 1995; and Chemical Manufacturers Ass'n v. EPA, No. 89-1514, D.C. Cir., Sept. 15, 1995). In the former case, the court implicitly accepted EPA's argument that only "effective" state-issued controls should be cognizable in limiting PTE. However, the court found that EPA had not adequately explained why <u>only</u> federally enforceable measures should be considered in assessing the effectiveness of state-issued controls. While the court rulings will require EPA to conduct additional rulemaking to define what is legally and practicably enforceable, the court did not question the validity of current mechanisms for limiting the PTE. For this reason, the following discussion on mechanisms for limiting the PTE is still applicable in light of the recent court decisions. After stakeholder meetings take place, EPA will conduct rulemaking to finalize the enforceability requirements of the Part 71 rule.

4.2 MECHANISMS TO LIMIT PTE

The EPA has issued guidance on available methods to create Federally enforceable limitations on PTE. One such guidance memo was signed by EPA's John Seitz on January 25, 1995, and is available on the TTN bulletin board under Title V policies. (See Section 8.0 for a description of EPA's TTN bulletin board system.) The January 1996 "EPA Interim Policy on Federal Enforceability Requirement for Limitations on Potential to Emit" supplements this guidance based on the recent court decisions. Federally-enforceable limits can be specified within the following five programs, permits, or rules:

1. Federally-enforceable State operating permit programs (FESOP's);
2. SIP general permits;
3. Prohibitory rules;
4. Preconstruction permits; and
5. Source specific SIP revisions.

Limits established under these programs, permits, or rules must be incorporated into the SIP, and in some instances through Section 112(l), before being deemed Federally enforceable. Limitations in Title V permits are also Federally enforceable. Each of the approaches for limiting PTE is described further below.

4.2.1 FESOP's

Traditionally, EPA has not considered State operating permits to be Federally enforceable. Although this issue is debatable since many State operating permit programs have been approved for incorporation into the SIP, EPA has generally enforced SIP limits and new source review (NSR) permits, but not State operating permits. The preamble to the June 28, 1989, Federal Register notice for 40 CFR Parts 51 and 52 provides criteria for an operating permits program under which permits would be considered Federally enforceable. First, the State operating permits program must be approved into the SIP. Second, the rule must impose a legal obligation that permittees adhere to the terms and limits of the permit; permits which do not conform to all of the operating permit program criteria would be deemed not Federally enforceable by EPA. Third, the rule must require that all emission limitations, controls, and other requirements be at least as stringent as any other applicable requirement contained in the SIP or enforceable under the SIP (e.g., NSPS and NESHAP

requirements). Fourth, the limitations, controls, and requirements in the permits must be permanent, quantifiable, and practically enforceable. Finally, the permit applications must be subject to public review before the issuance of the final permit. The State must also provide EPA with a copy of the draft and final permit. States may choose to subject only certain types or classes of permits to these requirements (e.g., only synthetic minors). Permits not subject to all of the above requirements would be State enforceable only.

4.2.2 SIP General Permits

There are two ways States can use general permits through the SIP process. One method is to develop a general permit for a specific source category and request approval by EPA of the general permit into the SIP. While the SIP process itself would require public participation, sources would then apply for coverage under the general permit without further public participation or EPA review. A second method is for the State to develop a general permitting program and have the program approved into the SIP. A State could develop a general permit rule using language similar to that found at 40 CFR 70.6(d), General Permitting. Once the public process has been completed and the general permit rule is finalized, the State could draft general permits, but would be required to subject the general permits to public review. When the public review process has been completed and a general permit is finalized, the State could grant or deny source coverage under the general permit without further public participation. General permits would usually be used for less complex sources such as dry cleaners, wood finishers, asphalt plants, and electroplaters.

4.2.3 Prohibitory Rule

A prohibitory or "exclusionary" rule limits the emissions and/or operations of a large category of sources. For instance, the rule may state that all sources whose actual emissions are 50 percent of the major source threshold may be covered by the rule. The rule, which would provide a range of recordkeeping, monitoring, and reporting requirements for a broad range of sources, provides a convenient way to remove a large number of sources from Title V coverage. For instance, while California has predicted that perhaps 50,000 sources would potentially be subject to Title V, their prohibitory rule will probably bring the number of actual Title V sources down to around 4,000.

Some regulators believe that the upper threshold for coverage under prohibitory rules should be around 50 percent of the major source threshold. However, a State may elect to use higher thresholds, depending on each State's circumstances and how actual emissions are to be calculated.

4.2.4 Preconstruction Permit

Major and minor NSR permits are Federally enforceable if the program is approved in the SIP. The criteria that a State new source review permitting program must meet to be approved into the SIP is found at 40 CFR Part 51, Subpart I.

4.2.5 Source Specific SIP Revisions

Source specific limits or permits approved into the SIP can also be used to limit the PTE. This has also has been referred to as "permit by rule." This method, which is very similar to a SIP general permit, involves the adoption of a source specific rule that is approved into the SIP. The rule would provide emission and operational limits as well as specific monitoring, recordkeeping, and reporting requirements for that specific category.

4.2.6 Limiting HAP Emissions

For controlling HAP emissions, Federally-enforceable limits on criteria pollutants could be used to create Federally-enforceable limits on HAP's under certain circumstances. Examples include limits on hours of operation, amount of material used, or production limits in Federally enforceable operating permits or NSR permits. Additionally, if the VOC limit in a permit addresses a particular HAP, or a permit has a HAP limit as a means to limit VOC emissions, both would be Federally-enforceable mechanisms. However, a limit on VOC emissions alone may not be a Federally-enforceable limit for a particular HAP. For cases where a HAP is not defined as a VOC (e.g., methylene chloride), the State may need to seek approval of the operating permit or NSR program through Section 112(l) of the Act. Therefore, as States submit FESOP programs to EPA, EPA could approve the programs under Sections 110 and 112 of the Act to ensure that permits issued under these programs would limit both criteria pollutants as well as HAP's.

4.3 EPA TRANSITIONAL GUIDANCE FOR SYNTHETIC MINORS

The January 25, 1995 EPA guidance memo referenced earlier in this section provides a transitional period to allow States time to develop appropriate mechanisms to create synthetic minors. For a 2-year period beginning January 25, 1994, the following provisions apply:

1. Sources whose actual emissions are below 50 percent of major source thresholds must maintain actual emissions for every consecutive 12-month period (beginning in January 1994) at levels that do not exceed 50 percent of threshold for every regulated pollutant. A 12-month period is defined as a period of 12 consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month. Sources must maintain records onsite for the entire transitional period. No other recordkeeping or reporting is required.

2. Sources whose actual emissions exceed the 50 percent threshold could use restrictions contained in State permits, if practically enforceable, to limit PTE.

Providing such a transitional period is optional to the States. A State should work with its EPA Regional Office to determine how to proceed during the transitional period. EPA's transitional guidance basically represents an enforcement discretional policy in which the State and EPA would not enforce against sources for not having applied for a Title V permit during the 2-year period if the source meets the above criteria. During the 2-year period, the State would either have to issue Federally-enforceable permits or general permits to sources to limit their PTE on a permanent basis or have sources covered under an EPA approved prohibitory rule. In recognition of the absence in some States of suitable Federally enforceable mechanisms to limit PTE applicable to sources that might otherwise be subject to Section 112 or Title V, EPA's interim PTE policy provides for the consideration of State-enforceable limits as a gap-filling measure during a transition period that extends until January 1997. In addition, the policy provides that sources which maintain their emissions at levels that do not exceed 50 percent of any applicable major source threshold are not treated as major sources and do not need a permit to limit PTE, so long as they maintain adequate records to demonstrate that the 50 percent level is not exceeded.

4.4 PRACTICAL ENFORCEABILITY

To be practically enforceable, the permit term must be a technically accurate limitation and identify the portion of the source subject to the limit. In addition, the term must include a time period for the limit, preferably as short-term as appropriate. Also, there must be a method to determine compliance, including appropriate monitoring, recordkeeping, and reporting methods. In addition, if the State is using a prohibitory rule or general permit that applies to a category of sources or a broad range of sources, the rule must identify the types and categories of sources covered. Where coverage is optional, the rule must require that sources provide notice of election to be covered under the rule or general permit. Additionally, the rule must specify the enforcement consequences of violations to the rule (including the consequences of not meeting the coverage criteria).

5.0 PERMIT APPLICATION STEPS AND CONTENT

This section is divided into three major subsections. The first subsection provides information that will be helpful during the preparation of permit applications. The next subsection explains the permit application process from initial contact with the regulatory authority to the final permit issuance. The final subsection discusses the Title V permit content.

5.1 PERMIT APPLICATION ELEMENTS

The overall permit development process can be seen as having 11 basic steps, as proposed in *11 Suggested Steps to Prepare for a Successful Operating Permit* (Gale F. Hoffnagle, Stephen Walata, and John L. Hanisch, *Hydrocarbon Processing*, April 1993). These steps are listed below.

1. Identify each source of emissions.
2. Determine actual and potential emissions.
3. Determine whether the Federal operating permit requirement applies to your facility.
4. Determine applicable emission limits and identify all Federally applicable limitations.
5. Determine whether emissions comply with all applicable limitations.
6. If necessary, propose a compliance program.
7. Propose measurement, recordkeeping, and reporting methods.
8. Combine each source in to a permit or permits.
9. Select flexible operating scenarios.
10. Prepare a draft operating permit.
11. Calculate fees, then sign and file the application.

The importance of the emission inventory process is emphasized by the fact that this entire process begins with and depends heavily on preparation of a clear and detailed emission inventory for the entire facility. The data prepared in Steps 1 and 2 are critical in determining the need for a Title V permit (Step 3), assessment of compliance with applicable regulations (Step 5), development of operating scenarios (Step 9), preparation of the permit itself (Step 10), and calculation of emissions-based annual permit fees (Step 11).

5.1.1 Permit Application Streamlining

Due to concerns raised within the regulatory community about the potential burdens imposed with collecting, documenting, and verifying the information required under the Title V program, EPA has issued further guidance on streamlining Title V. The July 10, 1995 memorandum from EPA's Lydia N. Wegman (see Appendix A) states that industry is allowed to:

- Provide emissions descriptions, and not emissions estimates, for emissions not regulated at the source, unless such estimates are needed for other purposes such as calculating permit fees;
- Submit checklists, rather than emission descriptions, for insignificant activities based on size/production rate and for risk management plans potentially owed under Section 112(r);
- Provide citations for applicable requirements, with qualitative descriptions for each emissions unit, and for prior new source review (NSR) permits;
- Exclude certain trivial and short-term activities from permit applications;
- Provide group treatment for activities subject to certain generally-applicable requirements;
- Certify compliance status without requiring reconsideration of previous applicability decisions;
- Use the Part 70 permit process to identify environmentally significant terms of NSR permits, which should be incorporated into the Part 70 permit as Federally-enforceable terms; and

- Submit tons per year estimates only where meaningful to do so and not, for example, for Section 112(r)-only pollutants; such estimates should be based on generally-available information rather than on new studies or testing.

The remainder of this section is developed with these guidelines in mind. The next group of sections elaborate on some of the elements one will encounter during the Part 71 permit application process. Detailed instructions for completing forms can be found in EPA's *Instruction Manual for Permit Application Forms - 40 CFR Part 71 Federal Operating Permits Program (March 1995)* or in the instruction forms provided by the EPA-delegated authority.

5.1.2 Minimum Permit Application Elements

The minimum requirements for information submitted in the permit application are detailed in Table 5-1. To be deemed complete, an application must provide sufficient information to allow the permitting authority to begin processing the application. In other words, "complete" means administratively (not technically) complete. This was the original intent of regulations. Based on the preamble discussion concerning the proposed revisions to Section 70.5(a)(2), an application is complete if it contains:

- A statement acknowledging the applicability of the requirements, and
- An acceptable schedule for submitting the more detailed information necessary to define compliance.

Based on this same preamble discussion, a two-phase application process is possible for certain sources. More specifically,

- Sources scheduled for permitting in years two and three of the transition period could submit less detailed applications than sources scheduled for permitting in the first year.
- Information submitted in the first phase must meet the minimum requirements of Section 70.5(c).
- Information submitted by the second phase must be sufficient to allow permit issuance consistent with Sections 70.7 and 70.8.

TABLE 5-1. MINIMUM PERMIT APPLICATION REQUIREMENTS

- **General Company Information** (including facility's name and address, owner's name and agent, and the facility contact person)
- **Description of the Facility's Process and Products** (including the facility's SIC code)
- **Description of All Emission Points**
- **Inventory of Emissions** (including fugitive emissions from all sources and for all regulated air pollutants; pollutants for which the facility is classified as a major source; and all emissions of regulated pollutants, whether or not those emissions caused the source to be major)
- **Emission Rates and Limits** (in some cases, permit may establish alternative or equivalent emissions limits to those in the SIP)
- **Description of Fuels** (including how they are used and a description of raw materials)
- **Description of All Air Pollution Control and Compliance Monitoring Devices or Activities** (including requirements and methods for emissions testing, and a brief description of operation, maintenance, and quality assurance procedures)
- **List of All Applicable State and Federal Air Pollution Control Requirements** (including those promulgated at the time of application that will become effective during the term of the permit)
- **Compliance Plan for All Sources Within the Facility Regulated Under the Permit Program**
- **Description of Production Rates, Operating Schedules, and Any Operating Limitation or Restrictions on Work Practices That Affect Emissions of Regulated Air Pollutants**
- **Certification of Compliance with All Applicable Requirements** (including a schedule for submission of at least annual compliance certifications during the permit term)
- **Description of Methods Used to Determine Compliance** (including monitoring, recordkeeping, reporting, and testing methods)
- **Information on Alternative Operating Scenarios Defined Under "Operational Flexibility" Provisions** (see Section 6.0 for a detailed explanation of Operational Flexibility)
- **Supporting Calculations for Submitted Information**

NOTE: If the source is not in compliance, the application must provide a plan and schedule for future compliance. A progress report must be submitted at least every 6 months detailing the progress towards compliance. Sources that are in compliance also must submit a plan; however, this plan need only contain a statement that the source will continue to comply.

While the Part 70 revisions have not yet been finalized, this two-phase application submittal is addressed in the White Paper, and the process may be acceptable to an EPA Regional Office or a delegated authority.

5.1.3 Emissions Reporting Categories[1]

When preparing an emission estimate, it is necessary to classify not only the type of pollutant emitted, but also the means of release to the atmosphere. Release mechanisms are usually classified into three categories: process emissions, fugitive emissions, and process fugitive emissions. Process emissions are emissions from sources where an enclosure, collection system, ducting system and/or stack (with or without an emission control device) are in place for a process. Process emissions represent emissions from process equipment (other than leaks) where the emissions can be captured and directed through a controlled or uncontrolled stack for release into the atmosphere. Fugitive emissions are emissions from other sources that are technically infeasible to collect and control (e.g., storage piles, waste water retention ponds, etc.). Process fugitive emissions occur as leaks from process equipment such as compressors, pump seals, valves, flanges, product sampling systems, pressure relief devices, and open-ended lines. Emissions from the process that are not caught by the capture system are also classified as process fugitive emissions. These definitions are important because emission factors and other estimation methods are often specific to the type of release.

The emissions estimate reporting system used by most State and local air pollution control agencies groups emission sources into one of three categories and maintains emission-related data in a different format for each. The plant level category is used to consolidate data for an entire plant or facility. A plant may contain one or many pollutant-emitting sources. The point level category is used to maintain emission-related information for single stacks or vents individually large enough to be considered point sources under the Title V

[1]Note that EPA does not require that sources perform an emissions inventory for Title V purposes. However, the following discussion is provided as a useful tool for sources in determining emissions and applicability to various federal requirements and may be useful to sources in determining their fees.

cutoffs described. The emission unit level category typically contains data for a single process or unit of operation.

The plant level reporting used by most air pollution control agencies generally requires that the facility provide certain data which apply to the facility as a whole. Such data include number of employees and the Standard Industrial Classification (SIC) code designation for the plant. A plant usually has only one SIC denoting the principal economic activity of the facility. For the purpose of clearly identifying and tracking emissions data, each plant is generally assigned a plant (or "facility") name and number. The plant is also identified by geographic or jurisdictional descriptors such as air quality control region, county, address, and UTM grid coordinates (or latitude/longitude) that identify coterminous locations. An owner or operator engaged in one or more related activities is also identified.

Regulatory agencies generally maintain individual emission-related records at the point level. Point level reporting occurs with specific data for emissions points (typically stacks) which require more detailed information than possible at the plant level. Such data include emission-related and modeling information such as stack height of the emission point, diameter of the stack, emission rate and method of determination, gas exit velocity from the stack, gas temperature, and operating schedule. For fugitive sources, stack parameters are not relevant, but basic parameters such as dimensions, height, and concentration apply.

For emission unit level reporting, each process within a plant is identified by an EPA source classification code (SCC). For point sources, reporting guidelines may require that a plant identify, for each process or operation (designated by SCC code), the periods of process operation (daily, weekly, monthly, and annually); operating rate data, including actual, maximum, and design operating rate or capacity; fuel use and property data (ash, sulfur, trace elements, heat content, etc.); all pollution control equipment and associated control efficiencies (measured or design); and emissions rates.

5.1.4 Source Identification System

The first stage of the data collection process is the development of a comprehensive and logical source identification system which will allow the collected data, process descriptions, and other information to be properly referenced and interrelated, reflecting the plant/point/process distinctions and source types previously outlined. A plant-wide emission

source summary table based on these identifiers and their relationships can be used to initiate and organize the data collection process, enabling the preparers to establish a plant- or facility-specific identification system for all of the emission sources and release points before much effort is spent on collecting data. A typical hierarchy for source data identifiers would include a process group identification name (PGN), process identification names (PINs), process component identification names (PCNs), emission point identification names (EPNs), and control equipment identification names (CINs). These source data identifiers are described below.

The Process Group Name (PGN) should be a common name which will help a facility track production information or can be used to represent a group of processes for which emissions will be aggregated.

The Process Identification Name (PIN) is a unique identifier (unique to the entire facility) which should remain with the process throughout the inventory process; a typical PIN system uses a three digit building number followed by a three-digit process identifier. For example, Ink Press 2 in Building 10 could have PIN No. 010-002. The Process Common Name for PIN can be the common name associated with a process. This will be used to help search the inventory database for the process of interest.

The Process Component Identification Name (PCN) should be the common name associated with a process component. A component can be defined as any part of a process for which emissions will be quantified separately from other parts of the process, such as the vented emissions and fugitive emissions from a single process.

The Emission Point Identification Name (EPN) is a unique identifier for each emission point within the facility. A typically EPN system uses the building number, a one-digit "vent type" (V = exhaust vent; F = fugitive; I = intake vent), and a three-digit emission point. For example, exhaust vent 44 on Building 10 would be EPN 010V-044.

The Control Equipment Identification Name (CIN) is a unique alphanumeric code name used to identify pollution control equipment.

It is important that the identifiers used for these items correlate exactly to the relevant parts of the Title V application. Therefore, the inventory preparer should consult the current

Title V application form to verify the length and format of the required identifiers and adjust any of these definitions accordingly.

5.1.5 Emission Estimation Principles

This section provides basic information on the common methods for estimating emissions from sources found at industrial facilities, including estimation and speciation procedures as well as a number of computerized emission estimation tools.

5.1.5.1 Emission Estimation Methods. The primary emission estimation methods typically used in point source inventories are described below.

Continuous emissions monitoring (CEM) involves any monitoring effort which "continuously" measures (i.e., measures with very short averaging times) and records emissions. In addition to measuring and recording actual emissions during the time of monitor operation, CEM data can be used to estimate emissions for different operating periods and longer averaging times.

Source tests are short-term tests used to collect emissions data which can then be extrapolated to estimate long-term emissions from the same or similar sources. Uncertainties arise when source test results are used to estimate emissions under process conditions which differ from those under which the test was performed.

Material balance or mass balance is a method for estimating emissions which attempts to account for all of the inputs and outputs of a given pollutant. If inputs of a material to a given process are known, and all outputs except for air emissions can be reasonably well quantified, then the remainder can be assumed to be an estimate of the amount lost to the atmosphere for the process.

Emission factors are ratios which relate emissions of a pollutant to an activity level at a plant that can be easily measured, such as an amount of material processed or an amount of fuel used. Given an emission factor and a known activity level, a simple multiplication yields an estimate of the emissions. Emission factors are developed from separate facilities within an industry category; they represent "typical" values for an industry, but do not necessarily represent a specific source. Published emission factors are available in numerous sources, but the primary source is EPA's *A Compilation of Air Pollutant Emission Factors (AP-42)*.

Process-specific empirical relationships are similar to emission factors in that they relate emissions to easily identifiable process parameters. However, these relationships are more detailed equations which relate emissions to several variables at once, rather than to a simple ratio. An example is the estimate for VOC emissions from storage tanks, which is based on tank size, air temperature, and vapor pressure. *AP-42* contains several of these empirical relationships.

Engineering estimate is a term commonly applied to the best approximation which can be made when the methods previously described are not possible. This estimation is usually made by an engineer familiar with the specific process and is based on whatever knowledge may be available.

Theoretically, plants needing emissions estimates could use CEM to make actual emissions measurements at very short time intervals. Some plants currently do this. CEMS concentration data can be easily converted to mass emission rate estimates provided that air volume through the monitor is also known. However, in cases where CEMS data are unavailable, another method must be used to estimate emissions. The three principal methods for estimating emissions are sources tests, material balances, and emission factors. The most reliable estimation of emissions is determined using source test data; but, because of the time and expense involved in source testing, material balances and/or the use of emission factors to estimate process emissions are more often employed. EPA assigns emission factor ratings based on the criteria for determining data quality and emission factor ratings as required in the document *Technical Procedures for Developing AP-42 Emission Factors and Preparing AP-42 Sections*. If none of these methods can be employed for a specific process, an approximation or engineering estimate based on available process, physical, chemical, and emission knowledge may be used.

The following hierarchy should typically be considered for deciding on an appropriate estimation method for an emission source:

- Measured Emissions Data are the preferred source of information for developing emissions estimates. They provide the most accurate estimation of emissions under actual operating conditions at the facility; however, care must be taken when

extrapolating measured emissions at normal operating conditions to maximum operating conditions.

- Emission Factors (e.g., AP-42 emission factors) are used when actual measurement data are not available. Care must be taken to ensure that the emission factor selected is appropriate for the source being evaluated.
- Mass Balances can often be used when an appropriate emission factor cannot be identified or developed from process data. The mass balance calculation assumes that any material present at the beginning of the process which is not accounted for at the end of the process is emitted as an air pollutant.
- Engineering Calculations are used when emissions cannot be quantified directly. These calculations are based on the principles of chemistry and physics, such as the Ideal Gas Law.

Computer models which incorporate one or more of the above methods may also be considered where appropriate. The advantage to using computer modeling techniques is that they can handle very complex algorithms and make the calculations manageable in a cost-effective manner. However, care must be taken that the appropriate model and input parameters are selected for the source being evaluated.

5.1.5.2 Available Emission Estimation Tools. This section identifies some of the principal technical resources for obtaining emission factors, calculating emissions, and evaluating plant processes. Any emission estimating tools should be used with discretion. Actual emissions from individual sources may vary considerably from values estimated using emission and speciation factors.

5.1.5.2.1 Access to EPA emission estimation documents, systems, and databases. Most of the EPA materials described in this section are available through the EPA Clearinghouse for Inventories and Emission Factors Bulletin Board System (CHIEF BBS) or on Air CHIEF CD-ROM. Any user accessing the CHIEF BBS can download *AP-42* chapters, *Locating and Estimating* documents, XATEF, SPECIATE, TANKS, SIMS, the AIRS Facility Subsystem Emission Factors (AFSEF) database, and many more tools for estimating emissions. The CHIEF BBS is a subpart of EPA's Office of Air Quality Planning and Standards (OAQPS) technology transfer network (TTN). Access to the CHIEF BBS

requires a personal computer with communications software and hardware to connect to the EPA system (see Section 8.0 for more information).

The Air CHIEF CD-ROM can also be used to access many of EPA's documents and databases. Users need an IBM™ compatible personal computer with an EGA or VGA monitor, MS-DOS version 3.0 or later, 640 KB of free RAM, 2 MB of expanded memory, a CD-ROM drive and interface card, and MS-DOS CD-ROM extensions. The Air CHIEF CD-ROM is updated annually.

Fax CHIEF offers AP-42 sections for immediate delivery by facsimile (fax) machine. A fax machine with a phone headset is required equipment for using FAX CHIEF. This ensures that your fax phone line can transmit the signal indicating that it is ready to receive the CHIEF fax. To connect with Fax CHIEF, dial (919) 541-5626 or (919) 541-0548 and follow the directions. Only two documents may be requested per call. Many of the documents are quite lengthy.

5.1.5.2.2 EPA documents containing emission estimation methods and data. There are a number of existing sets of emission estimation methods, data, and examples contained in EPA documents related to industrial regulations and control technologies. Three of these documents are described briefly below. It is recommended that inventory preparers for these particular industries obtain the EPA documents which contain the full text of these examples and additional information which would be required to apply these methods in a specific case. These are current EPA documents which can be obtained from the EPA library/ document distribution center at (919) 541-2777, through the National Technical Information Service (NTIS) at 1-800-555-6847, or by downloading from the EPA Chief Bulletin Board System (BBS). For other source categories of interest, the EPA library can perform keyword searches for all EPA publications to locate any relevant documents.

Protocol for Equipment Leak Emission Estimates, EPA-453/R-93-026, Office of Air Quality Planning and Standards, Research Triangle Park, NC, June 1993. This document includes methods and data for estimating emissions and control efficiencies for leak detection programs for leaking valves, flanges, pumps, and other pieces of process equipment in synthetic organic chemical manufacturing industry plants, refineries, and natural gas plants. Alternative methods include an average emission factor approach, screening ranges approach,

and two correlation approaches (EPA and unit-specific). Appendix A of the protocol document includes full examples of the implementation of each of these approaches. These methods are documented in three files available via the CHIEF BBS.

Control Techniques Guidelines for Batch Processes, EPA-450/2-78-029, Office of Air Quality Planning and Standards, Research Triangle Park, NC, February 1978; and *Control of Volatile Organic Compound Emissions for Batch Processes - Alternative control Techniques Information Document*, EPA-453/R-93-017, Office of Air Quality Planning and Standards, Research Triangle Park, NC, February 1994. These documents include methods and data for estimating emissions and control efficiencies for batch processes in all industries, but focuses on the following six industries: plastic materials and resins, pharmaceuticals, gum and wood chemicals, cyclic crudes and intermediates, industrial organic chemicals, and agricultural chemicals. It should be noted that there are differences between these two documents, and discussions are continuing on developing a workable transition plan. Specific examples of emission estimation for various unit operations in typical batch processes are given, including:

- Vapor displacement of a single component liquid
- Vapor displacement of a homogenous mixture
- Tank/reactor heatup losses
- Empty tank and reactor purging
- Filled tank and reactor purging
- Sparging volatilization
- Vacuum dryer emissions
- Atmospheric dryer emissions
- Vessel depressurization
- Emissions from a steam ejector
- Emissions from equipment leaks

5.1.5.2.3 EPA emission estimation systems. EPA's computerized emission estimation tools include several software packages that calculate emission estimates from process inputs provided by the user: TANKS for volatile organic liquid storage tanks, the Surface Impoundment Modeling System (SIMS), and LANDFILL, which estimates air

emissions of criteria pollutants and HAPs from landfills. These are all available for download from the CHIEF BBS.

TANKS contains the newly revised storage tank equations contained in the new *AP-42*. The system calculates monthly and annual VOC and toxic air emissions for horizontal and vertical fixed roof tanks, internal and external floating roof tanks, and underground storage tanks, incorporating the latest American Petroleum Institute (API) equations. The TANKS User's Manual is also available on the CHIEF BBS.

For VOC emissions from wastewater treatment, SIMS is available. The SIMS system is based on treatment, storage, and disposal facility (TSDF) models and VOC emission models and uses the CHEMDAT7 database for calculations. CHEMDAT7 is a spreadsheet program, with a 700-compound database, that can be run independently from SIMS. CHEMDAT7 has models for disposal impoundments, closed landfills, land treatment facilities, and aeration and non-aeration impoundment processes.

LANDFILL estimates air emissions of criteria pollutants and HAPs from landfills. With a menu-driven database and worksheet, it can calculate emissions up to 50 years beyond landfill closure. Models for estimating VOC emissions from storage tanks and PM_{10} fugitive dust emissions are also available and may be accessed via the CHIEF BBS.

5.1.5.2.4 <u>EPA emission estimation databases</u>. The Factor Information and Retrieval Data System (FIRE) is a personal computer program containing EPA's recommended criteria and HAP emission estimation factors. FIRE includes information about industries and their emitting processes, the chemicals emitted, and the emission factors themselves. FIRE is a user-friendly, menu-driven system with an interface patterned after Microsoft Windows. Users can browse through records in the database or select specific emission factors. FIRE is distributed on a 3.5" diskette, free to government agencies. Other requesters must purchase FIRE or download it from the CHIEF BBS. Users will need an IBM-compatible PC that runs MS-DOS version 3.3 or later, with fixed disk having at least 10 MB of available storage, 512 KB of free RAM, and a VGA color monitor. MS DOS 5.0 or later is recommended. Contact Info CHIEF at (919) 541-5285 for more information.

The VOC/PM Speciation Database Management System (SPECIATE) is a clearinghouse for speciation factors for both VOCs and PM. Speciation factors are used to

derive emission estimates of air species from factors or estimates of total VOC or PM. Each profile, as defined by SCC, lists the elements or compounds identified as being emitted by a source category or process according to the weight percent of each compound as a function of total VOC or PM emissions. Each individual pollutant speciation factor within a profile can be multiplied by a VOC or PM emission factor (or emission rate) to produce an estimated compound-specific emission factor. However, the lists of compounds attributed to a source category provided in SPECIATE will not necessarily be complete. Because this system represents a compilation from available literature for use in EPA's photochemical modeling efforts, it will not address toxic compounds with any degree of completeness or accuracy.

SPECIATE is designed to search for speciation factors based on a user-provided SCC, pollutant name, or a source category description. The SPECIATE PM profiles include three particle size range distributions and total measured PM data for each species. The SPECIATE database is updated annually and is accompanied by a user's manual. The SPECIATE database is not published in paper due to the size of the database, but is available on 5.25" high density diskette.

5.1.5.3 Emission Estimation Examples. To illustrate the approach taken to estimate emissions from industrial processes, the following two examples are presented, both involving batch processes. These examples are derived from Appendix C of *Control of Volatile Organic Compound Emissions for Batch Processes - Alternative Control Techniques Information Document,* EPA-453/R-93-017, February 1994.

Example 1. Vapor displacement of a homogenous (miscible) mixture in a batch process

A 50-50 volume percent solvent mixture of heptane and toluene is charged to a surge tank at the rate of 300 gal/min. A total of 1,500 gal is charged. The mixture temperature is 20°C. Calculate emission rates for both mixture components.

STEP 1. Define conditions of the displaced gas:

1. Temperature of displaced gas: 20°C;
2. Pressure = 1 atm (14.7 psia, 760 mmHg); and
3. Rate of displacement = 300 gal/min.

STEP 2. Calculate vapor phase mole fraction:

VOC	Molecular weight, lb/lbmole	Density, lb/gal	Gallons charged	Pounds	lbmoles	x_i
Heptane	100	5.7	750	4,275	42.8	0.42
Toluene	92	7.3	750	5,475	59.5	0.58
TOTAL					102.3	1.0

P* heptane @ 20°C (68°F) = 0.7 psia
P* toluene @ 20°C (68°F) = 0.4 psia

$$y_i = \frac{x_i(P*)}{P_T}$$

$$\text{Heptane: } \frac{(0.42)(0.7 \text{ psia})}{(14.7 \text{ psia}) \text{ heptane}} = 0.020 = y$$

$$\text{Toluene: } \frac{(0.58)(0.4 \text{ psia})}{(14.7 \text{ psia}) \text{ toluene}} = 0.016 = y$$

STEP 3. Calculate emission rate:

$$E_{R_{heptane}} = \frac{(y_{heptane})V(P_T)(M_W)}{R_T}$$

$$E_{R_{toluene}} = \frac{(0.020)\ (300\ \text{gal/min})\ (1\ \text{atm})\ (100\ \text{lb/lbmol})\left[\frac{\text{ft}^3}{7.48\ \text{gal}}\right]}{1.3144\ \text{atm ft}^3/\text{lbmol K})\ (293\text{K})}$$

$$E_{R_{heptane}} = 0.21\ \text{lb/min}$$

$$E_{R_{toluene}} = \frac{(y_{toluene})(V)(P_T)(M_w)}{R_T}$$

$$E_{R_{toluene}} = \frac{(0.016)\ (300\ \text{gal/min})\ (1\ \text{atm})\ (92\ \text{lb/lbmol})\left[\frac{\text{ft}^3}{7.48\ \text{gal}}\right]}{\left[\frac{1.3144\ \text{atm ft}^3}{\text{lbmol K}}\right]\ (293\text{K})}$$

$$E_{R_{toluene}} = 0.15\ \text{lb/min}$$

Therefore, total emissions for the event are:

Heptane: (0.21 lb/min)(5 min) = 1 lb

Toluene: (0.15 lb/min)(5 min) = 0.75 lb

Example 2. Batch process tank/reactor heatup losses

A 2,000 gal reactor, 75 percent full of a solution of a raw material in toluene, is heated from 20 to 70°C. The reactor is vented to the atmosphere during the heatup. How much toluene will be emitted?

Since the liquid is mostly toluene, a simplifying assumption is that the partial pressure of toluene in the headspace is equal to the vapor pressure. At 20°C, the vapor pressure of toluene is 22 mmHg; at 70°C it is 200 mmHg. The headspace of the reactor is 500 gal or 66.8 ft^3. The temperatures must be expressed in absolute units K. The gas constant, R_i, in appropriate units is 998.9 mmHg-ft^3/lbmol-°K. The weight of toluene emitted is then directly calculated:

$$\Delta\eta = \left[\frac{66.8\ ft^3}{998.9\ \frac{mmHg\ ft^3}{lbmol\ K}}\right]\left[\left(\frac{760-22\ mmHg}{(273+20)K}\right) - \left(\frac{760-200\ mmHg}{(273+70)K}\right)\right]$$

$$\Delta\eta = 0.0592 \text{ lbmoles non-VOC gas displaced}$$

$$\eta_S = \frac{\left(\frac{22\ mmHg}{760-22\ mmHg}\right) + \left(\frac{200\ mmHg}{760-200\ mmHG}\right)}{2}(0.0592 \text{ lbmoles gas})$$

$$\eta_S = 0.01195 \text{ lbmoles toluene (92.13 lb toluene/lbmole)} = 1.06 \text{ lb toluene}$$

5.1.6 Applicable Requirements

Because the Title V monitoring, recordkeeping, and reporting requirements are directly linked to applicable requirements, an understanding of the definition of applicable requirements is essential to understanding the Title V monitoring provisions. Applicable requirements include existing emission standards, limitations, permit conditions, and other requirements to which a source is subject. Title V requires that operating permits assure compliance with each applicable standard, regulation, or requirement under the Act. Thus, part of the process of preparing a Title V permit application is assessing what requirements

under the Act apply to a particular source. Applicable requirements are presented in Figure 5-1.

An important aspect of performing a rule applicability analysis is to distinguish between Federally-applicable requirements (i.e., those that are enforceable by the Federal government) and State-only applicable requirements (i.e., those that are enforceable by the State but not the Federal government). State-only applicable requirements include limitations that have been adopted by the State or local agency, but have not been federally approved. This distinction is important because Title V permits contain monitoring, recordkeeping, and reporting provisions for Federally-applicable requirements only. Effectively, this means that the State or local agency will have a significant amount of discretion in deciding what type of monitoring, recordkeeping, and reporting can be accepted for State-only applicable requirements.

5.1.7 Preparing Compliance Plans, Schedules, and Certification

The information for compliance plans, schedules, and certifications is collected on EPA forms CP, CC-1 and CC-2 (Figures 5-2 through 5-4, respectively). Similar forms are available in areas where EPA has delegated the authority to administer the Title V program. A summary of the compliance plan and schedule requirements is illustrated in Figure 5-5. The plan information in Figure 5-5 should be summarized on Forms CP and CC-1. Form CP contains the compliance plan for the whole facility. Detailed compliance information for each applicable requirement is summarized on Form CC-1 for each generic requirement (e.g. facility-wide opacity limits) or for each emissions unit.

1. Compliance certifications include:
    - A certification of compliance with all applicable requirements by a responsible official.
    - A statement of methods used for determining compliance (e.g., monitoring, recordkeeping, and testing).
    - A schedule for compliance certifications over the duration of the permit (no less frequently than annually).

State Implementation Plan (SIP), Federal Implementation Plan (FIP), or Tribal Implementation Plan (TIP)

Requirements of Title I of the Act that apply in the State or areas under Tribal jurisdiction where a facility is located. In designated nonattainment areas where a SIP or TIP has not been adopted or approved, a FIP may apply. A brief description of each State's approved SIP can be found in 40 CFR Part 52. Implementation plans regulate the criteria pollutants: PM, SO_2, CO, NO_x, VOC, and lead. Implementation plans typically include limitations on allowable emissions and procedural requirements for preconstruction review and other permitting programs, including PSD, nonattainment NSR, and minor source NSR. In ozone nonattainment areas, there are VOC and NO_x RACT (reasonable achievable control technology) requirements for sources in certain industrial categories. Facilities may also be subject to requirements such as the employee commute option if States choose to include it in their SIP.

Prevention of Significant Deterioration (PSD)

A program contained in an EPA-approved or promulgated implementation plan for the preconstruction review of changes which are subject to review as new major stationary sources or major modifications under EPA regulations implementing Part C or Title I of the Act. Where there are no EPA-approved State PSD rules, Federal rules at 40 CFR Part 52 apply and are typically implemented by delegation of authority. These requirements apply to sources located in attainment or unclassified areas. Under PSD, sources are limited from increasing the ambient concentration of pollutants above existing baseline concentrations and are required to install stringent controls, known as best available control technology (BACT). More stringent limitations on increases in air pollution concentrations and air quality related values (AQRV), such as visibility, apply near certain national parks and wilderness areas (Class I areas).

Nonattainment NSR (Nonattainment New Source Review)

A program contained in an EPA-approved or promulgated implementation plan for the preconstruction review of a new major stationary sources or major modifications of existing sources in nonattainment areas under EPA regulations implementing Part D of Title I of the Act. This program typically imposes stringent controls, lowest achievable emissions rate (LAER), and requires emissions offsets to assure progress toward attainment.

Figure 5-1. Applicable requirements.

Minor Source NSR

A Title I program approved by EPA into a State's implementation plan under EPA regulations implementing Section 110(a)(2) of Title I of the Act for the preconstruction review of changes which are subject to review as new or modified sources and which do not qualify as new major stationary sources or major modifications under EPA regulations implementing Parts C or D of Title I of the Act.

Section 111 Requirements

New Source Performance Standards (NSPS) are standards or requirements that regulate criteria and other pollutants for specific types of source categories. A new or modified source is subject to NSPS if standards have been proposed for that source category before the facility commenced construction. The NSPS are promulgated at 40 CFR Part 60. These regulations implement the statutory requirements of Section 111(b) of the Act. Section 111(d) of the Act requires the Administrator to develop emissions guidelines documents and the States to implement regulations addressing the control of non-criteria pollutants from existing sources in several source categories that also have Section 112(b) standards. These pollutants are called "designated pollutants" and the sources for which the standards are set are called "designated facilities." Regulations controlling the adoption and submittal of the State plans for regulating these sources are promulgated at 40 CFR Part 60, Subpart B. The emissions guidelines and compliance times are promulgated at 40 CFR Part 60, Subpart C, and the State regulations addressing these sources are approved by EPA and promulgated at 40 CFR Part 62. Designated pollutants include certain emissions from municipal waste combustors, sulfuric acid mist, total reduced sulfur, and fluorides.

Phase I Acid Rain

These standards or requirements apply to 110 mostly coal-burning electric utility plants. Acid rain permits, issued by EPA under 40 CFR part 72, became effective on January 1, 1995 and expire on January 1, 2000.

Phase II Acid Rain

These standards or requirements generally apply to all existing utility units with an output capacity greater than 25 megawatts (MW) and all new utility units. Phase II acid rain permit applications must be received from sources no later than January 31, 1996. States with approved Part 70 operating permit programs will be responsible for issuing these permits by December 31, 1997. In the event that a Part 71 program is in effect, the EPA or a delegated agency will issue the Phase II permit.

Figure 5-1. (continued)

Compliance Assurance Monitoring

EPA is required to promulgate a rule concerning requirements for enhanced monitoring and compliance certification at 40 CFR Part 64. These requirements will implement Section 114(a)(3) of the Act. The proposed rule was published on October 22, 1993 at 50 FR 54648 and is currently being revised under the compliance assurance monitoring program.

The Outer Continental Shelf (OCS) Program

These are requirements of standards for certain sources located on the Outer Continental Shelf pursuant to 40 CFR Part 55, as authorized by Section 328 of the Act. Facilities located beyond 25 miles from a States' seaward boundaries, or within 25 miles if the State does not have an approvable Part 70 program, may have requirements under this regulation.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

These are emissions standards that apply to specific sources of noncriteria air pollutants. These standards apply to new, modified, and existing sources. The regulations implementing this program are promulgated at 40 CFR Part 61 and are based on Section 112 of the Act, as promulgated before the 1990 Act Amendments.

Municipal Waste Combustor (MWC) Requirements Under Section 129

Section 129 of the Act requires that MACT-based standards be promulgated under Section 111 for existing and new solid waste incineration units, including units combusting municipal waste, hospital waste, medical waste, infectious waste, and commercial or industrial waste. On December 19, 1995 (60 FR 65387-65436), new source performance standards (NSPS) were promulgated under Part 60, Subpart Eb, for new MWC, and emission guidelines were promulgated under Part 60, Subpart Cb for existing MWC's. Also within this notice, the old emission guidelines for MWC's in Part 60, Subpart Ca, were withdrawn. Emission guidelines for sulfuric acid production plants were moved from Subpart Cb to Subpart Cd to make room for the new guidelines that now occupy Subpart Cb.

Figure 5-1. (continued)

Consumer and Commercial Product Requirements

Section 183(e) of the Act requires EPA to study the potential of consumer and commercial products to contribute to ozone levels in ozone nonattainment areas and to establish criteria for regulating them. The study will identify categories of consumer and commercial products for regulation and divide the categories into four groups to be regulated over 8 years. These regulations, when promulgated, will only apply to manufacturers, processors, wholesale distributors, or importers of these products.

Increment or Visibility Requirements for Temporary Sources

Temporary sources must meet any national ambient air quality standard or PSD increment or visibility analyses requirements of Part C of Title I of the Act and must include appropriate studies or analyses meeting these requirements in the permit application. Temporary sources are sources that apply for a permit that allows them to operate in more than one location during the term of the permit.

Stratospheric Ozone Protection

For permitting purposes all Title VI requirements must be listed in the Title V permit application, including Sections 608 and 609 that apply to capture and recycling of ozone-depleting substances during service and disposal of refrigerator equipment and air conditioners. Although a proposal has been made to require only Sections 608 and 609 as the only applicable requirements in Title V permit applications, this proposal has not been adopted at this time. On May 14, 1993, EPA promulgated final regulations pursuant to Section 608 of the Act (40 CFR 82, Subpart F, 58 FR 28660). These regulations require recycling of ozone-depleting refrigerants which are recovered during servicing of non-motor vehicle air conditioning or refrigeration equipment. The rules also require recycling during disposal of all air conditioning and refrigeration equipment. On July 14, 1992, EPA promulgated final regulations pursuant to Section 609 of the Act (40 CFR 82, Subpart B, 57 FR 31241). These regulations prescribe standards and requirements for servicing motor vehicle air conditioners.

Emissions-Limiting Requirements

This category of applicable requirements includes any emissions-limiting requirement that is enforceable by EPA and by citizens under the Act (Federally enforceable) and that is imposed on a source for purposes of creating an emissions or offset credit or avoiding the applicability of other applicable requirements.

Figure 5-1. (continued)

Standards and Requirements under Section 112, as Amended in 1990

These statutes establish a framework for controlling hazardous air pollutants (HAP) by establishing certain requirements and control technology standards for specific categories of sources. These standards include maximum achievable control technology (MACT) and generally achievable control technology (GACT). Note that MACT standards may replace previously published NESHAP. Sources subject to Section 112 will, in many cases, have to submit substantial information in the application to address these requirements. Many regulations implementing the Section 112 requirements will be promulgated on March 16, 1994 at 40 CFR Part 63, Subpart A (50 FR 12408). The general provisions address general procedures and criteria that apply to all subsequent subparts of Part 63, except when otherwise specified in a particular subpart. The remaining boxes in this section summarize some of the different types of requirements and control standards that are being established under Section 112 of the Act.

Section 112(d) Requirements

These are emissions standards and other requirements for categories or subcategories of new and existing major and area (nonmajor) sources listed for regulation pursuant to Sections 112(c) and 112(e) of the Act. These requirements will be promulgated on a schedule extending until November 15, 2000. For a final list of the categories and subcategories of sources to be regulated and the schedule for their release, see 58 FR 63941 published on December 3, 1993.

Section 112(g) MACT

After the effective date of a Title V permit program, no person may construct a new major source or reconstruct an existing major source of HAP unless MACT will be met. If MACT has not been established under Sections 112(d) or (f) of the Act, a case-by-case review must be undertaken for that source to determine MACT. Part 63, Subpart B, was reproposed on March 26, 1996 (61 FR 13125).

Early Reductions of HAP

Existing sources that will be subject to Section 112(d) emissions control requirements are allowed to submit early reduction demonstrations under Section 112(i)(5) of the Act, demonstrating an alternative emissions limitation in order to receive a compliance extension from meeting the Section 112(d) standard for a period of 6 years from the compliance date of the 112(d) standard. On December 29, 1992, final regulations were published at 40 CFR Part 63, Subpart D (57 FR 61970).

Figure 5-1. (continued)

Section 112(j) MACT Standards

If the Administrator fails to promulgate a Section 112(d) MACT standard by the Section 112(e) deadline, the owner or operator of an existing major source in a category or subcategory that would have been subject to the standard and that does not already have a permit that would meet the requirements of Section 112(j), must submit an application to establish a MACT standard under Section 112(j). Section 112(j) standards are established on a case-by case basis and must be equivalent to the MACT standard that would have been established by EPA under Section 112(d). These requirements are not applicable until after the Title V program is effective and not until 18 months after the date for which a relevant standard is scheduled to be promulgated. Final rules were promulgated at 40 CFR Part 63, Subpart B, on May 20, 1994 (59 FR 26429).

Risk Management Plan

Sources required to submit risk management plans under Section 112(r), which addresses the prevention of the accidental release of certain extremely hazardous substances, must indicate their compliance with the submittal requirements. Regulations were proposed on October 20, 1993 to require development and implementation of risk management programs at facilities that manufacture, store, or otherwise handle regulated substances above specified thresholds. A final list of regulated substances and thresholds were published on January 31, 1994 at 40 CFR Part 68 (59 FR 4478). Once the final rule is issued, sources not in compliance with this requirement must propose in the permit application a schedule of remedial measures leading to compliance.

Tank Vessel Requirements

The EPA proposed standards implementing two provisions of the Act on May 13, 1994 (59 FR 25004). One set of standards implementing Section 183(f) would require the application of RACT to control emissions of VOC and HAP from new and existing marine tank vessel loading and unloading operations. An additional set of standards proposed under Part 63 implementing Section 112(d) of the Act would limit emissions of HAP from new and existing marine tank vessel loading and unloading operations through the application of MACT.

Figure 5-1. (continued)

DRAFT, February 1996 OMB Control No. 2060-0336, Approval Expires 07-31-98.

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

FORM CP - COMPLIANCE PLAN

INSTRUCTIONS: Complete this form once for the facility.

A. Description of Compliance Status of the Source with Respect to all Applicable Requirements

Except as indicated in section B, this facility will be in compliance with all applicable requirements at the time of permit issuance and this facility will continue to comply with these requirements ☐ YES ☐ NO

This facility will meet all applicable requirements that take effect during the term of the permit on a timely basis ☐ YES ☐ NO

B. Description for Applicable Requirements for which the Facility will not be in Compliance at Permit Issuance

Unit ID	Applicable Requirement	Narrative Description of How Compliance Will be Achieved

C. Schedule of Compliance

Instructions: Complete this section if the source is not in compliance with an applicable requirement at permit issuance or if a detailed schedule is required by an applicable requirement, judicial consent decree or administrative order. For sources not in compliance, the schedule must contain a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance. You must include the date of final compliance in the schedule.

Unit ID	Applicable Requirement	Remedial Measure or Action	Date Milestone or Action Will be Achieved

D. Progress Reports

Instructions: Complete this section if the facility is required to have a schedule of compliance to remedy a violation. Progress reports must be submitted at least every 6 months during the term of the permit.

Frequency for submittal of progress reports _____ Starting date for submittal of progress reports ___/___/___

Figure 5-2. Draft Form CP -- Compliance Plan.

DRAFT, February 1996

OMB Control No. 2060-0336, Approval Expires 07-31-98.

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

FORM CC-1 - COMPLIANCE CERTIFICATION (METHOD OF COMPLIANCE)

INSTRUCTIONS: Complete this form for each applicable requirement at each emissions unit or for multiple emissions units if the applicable requirement will be complied with in the same way at the units.

A. Identification of Emission Unit and Applicable Requirement

Emission unit ID(s) _____

Applicable requirement (cite and describe in detail) _____

_____

_____

_____

_____

B. Description of Methods for Complying with the Applicable Requirement

Instructions: Indicate each method for assuring compliance with the applicable requirement described above on a separate line below. Identify the type of method, describe the method briefly, and indicate whether it is based on the applicable requirement or the periodic monitoring requirements of title V.

Method of Compliance (monitoring, testing, recordkeeping, or reporting)	Description of Method of Compliance	Basis	
		Applicable Requirement	Periodic Monitoring

Figure 5-3. Draft Form CC-1 -- Compliance Certification (Method of Compliance).

DRAFT, February 1996

OMB Control No. 2060-0336, Approval Expires 07-31-98.

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

FORM CC-2 - COMPLIANCE CERTIFICATION

INSTRUCTIONS: This form must be completed once for the facility with respect to all applicable requirements at the facility and must be signed by a responsible official.

A. Schedule for Submission of Compliance Certifications During the Term of the Permit

Instructions: *Indicate how often you are required to submit compliance certifications and when the first one will be submitted.* Compliance certifications are required to be submitted at least once per year during the term of the permit.

Frequency of submittal _____ *Beginning* ___/___/___

B. Statement of Compliance with Enhanced Monitoring and Compliance Certification Requirements

The facility is in compliance with all applicable enhanced monitoring and compliance certification requirements ☐ YES ☐ NO

C. Certification of Compliance With All Applicable requirements:

Instructions: *This certification must be signed by a responsible official. Applications without a signed compliance certification will be returned as incomplete.*

I certify that based on information and belief formed after reasonable inquiry, the part 71 source identified in this application is

☐ in compliance with all applicable requirements.
☐ not in compliance with all applicable requirements.

Signature _____ Date: ___/___/___

Name (typed) _____

Figure 5-4. Draft Form CC-2 -- Compliance Certification.

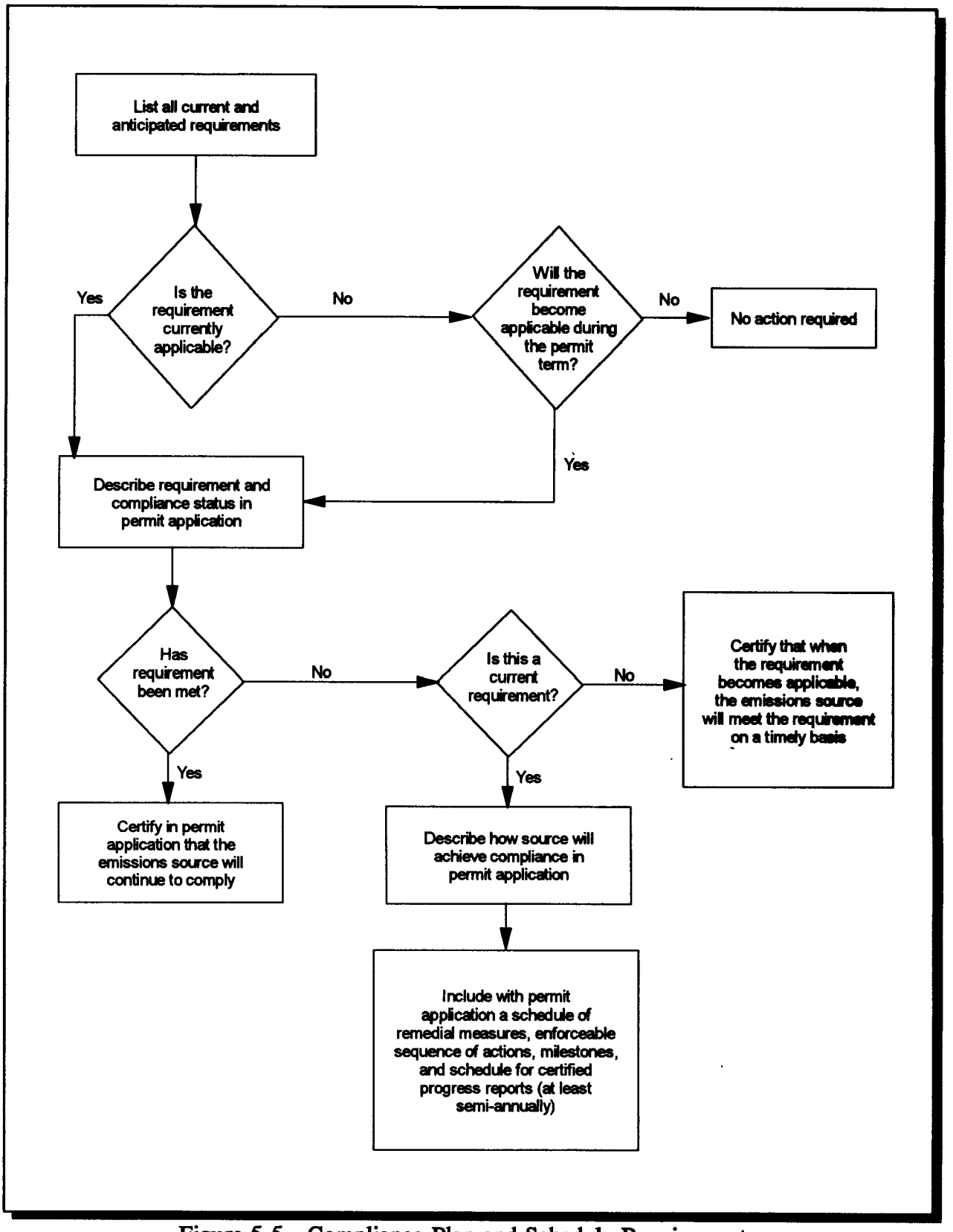

Figure 5-5. Compliance Plan and Schedule Requirements.

- Statements indicating a source's compliance status with the compliance certification requirements of the Act.

The above information is collected on EPA Form CC-2.

5.1.8 Preparing Insignificant Activities and Emission Levels Lists

EPA has established several ways to streamline applications for activities (or equipment) that do not contribute significantly to the decision to obtain a permit or that do not need to be specified in the permit. EPA has designated some activities as "insignificant activities." Insignificant activities that are listed in the Part 71 rule do not generally need to be identified or described in the application (see Table 5-2). EPA has also established "insignificant emissions levels" that may be used, at the discretion of the source, to designate other activities as insignificant activities:

- For HAP's:
  - No more than 1,000 lb/year of any HAP from a single emission unit.
- For non-HAP regulated air pollutants:
  - No more than 2 tons/yr from a single emission unit.

Because these activities may be unique to the source and have not undergone prior EPA review, the application must identify them in a list.

TABLE 5-2. INSIGNIFICANT ACTIVITIES UNDER THE PART 71 PERMIT PROGRAM

- Air-conditioning units for human comfort, provided that no ozone-depleting substances or substitute substances are used and air pollutants are not exhausted into ambient air
- Ventilation units used for human comfort, provided that no air pollutants are exhausted into ambient air
- Heating units used solely for human comfort (i.e., not used for manufacturing or industrial purposes)
- Noncommercial food preparation
- Consumer use of office products or equipment
- Janitorial services and consumer use of janitorial products
- Internal combustion engines used for landscaping purposes
- Mobile sources

Source: Elsevier Science Inc.; compiled from proposed 40 CFR Section 71.5(c)(11)(i).

In some cases, more information than described above for insignificant activities (whether listed in the rule or qualifying based on emission levels) would be needed in the application. For example, when insignificant activities are subject to applicable requirements, the application may need to include information concerning the insignificant activities for the permit to properly include those applicable requirements. In cases where the PTE from activities that are insignificant would tip a source over from being a minor source to being a major source, the PTE from the activities must be included in the total for the facility, the source must be considered a major source, and the application must include those emissions.

The Part 70 White Paper, also being implemented in Part 71, allows "trivial activities" to be completely omitted from applications. The white paper defines trivial activities as activities without specific applicable requirements (although they may have "generic" applicable requirements) and with extremely small emissions. The list of examples included in Appendix A of the White Paper may be used by all Part 71 sources. In addition, EPA may expand the list of trivial activities for a particular State to include trivial activities or certain insignificant activities of the State's operating permits program without the need for Federal rulemaking.

Form IE is provided (Figure 5-6) to list emissions units or activities that have insignificant emissions levels. In addition, information concerning equipment, activities, or emissions units that are exempted from an otherwise applicable requirement (e.g., emissions units grandfathered from requirements of a NSPS should be attached to the form). Such exemptions are only valid if they are authorized under a Federally-approved implementation plan (SIP, FIP, or TIP) or other applicable requirement. On the attachment, describe the exempted equipment, emissions unit, or activity and the basis for the exemption (you may cite the State administrative code or Federal regulation). In some cases, the listing in the application may need to specify capacity; throughput; material being processed, combusted, or stored; or other pertinent information, but try to keep this information to one line. The "number" column is provided to indicate the total number of units or activities grouped together under one description. For example, a complex facility may have hundreds of valves and flanges and there are no applicable requirements that apply. However, units or

OMB Control No. 2060-0336, Approval Expires 07-31-98.

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

APPLICATION FORM IE - INSIGNIFICANT EMISSIONS

INSTRUCTIONS: List each source eligible for insignificant treatment under § 71.5(c)(11)(ii). In the "number" column, indicate the number of units qualifying under each description. Each description must be specific enough to describe the source of emissions. List emission units separately if they have dissimilar descriptions, including dissimilar capacities or sizes and other factors. Please check the appropriate column to indicate whether the source meets the emissions criteria under § 71.5(c)(11)(ii)(A) and (B) for regulated air pollutants except hazardous air pollutant (RAP, except HAP), and for HAP, respectively.

Number	Description of Activities or Emission Units	RAP, except HAP	HAP

Figure 5-6. Draft Application Form IE -- Insignificant Emissions.

activities that have dissimilar descriptions, including dissimilar capacities or sizes, should be listed separately in the application. Two columns are provided for applicants to indicate the type of pollutants for the insignificant emissions.

5.2 THE PERMIT APPROVAL PROCESS

After it receives a Part 71 permit application, EPA (or the delegated permitting authority) would have a limited time to determine whether the application is complete and to request additional information, if needed. The application is automatically deemed complete if a determination of incompleteness is not made within 60 days following submittal. Although EPA could still request additional information (if needed), the Agency would have only 18 months from receipt of the complete application to issue or deny the permit (except during the initial three years of the program in which the permitting authority must issue one-third of the permits each year; EPA or the delegate agency would have 6 months or less to process the first one-third of the applications received). The 18-month period applies to the date the completed application is received, regardless of whether the application has been determined to be complete or deemed complete by default. In cases where a permit application contains a HAP early reduction demonstration, EPA must take final action on the permit within 12 months. Figure 5-7 summarizes the generic permit review/issuance process.

5.2.1 Public and "Affected State" Notice and Opportunity for Comment

Draft Part 71 permits would be made available to both the general public and "affected States" for review and comment. The public notice must include the opportunity for submission of written comments and the opportunity to request a public hearing. The public will have access to copies of the applications and the compliance plan.

In addition, States affected by source emissions and that are contiguous to the State where the source is located or States located within 50 miles of source must be notified of each draft permit. The affected States may submit comments during 30-day public comment periods as well.

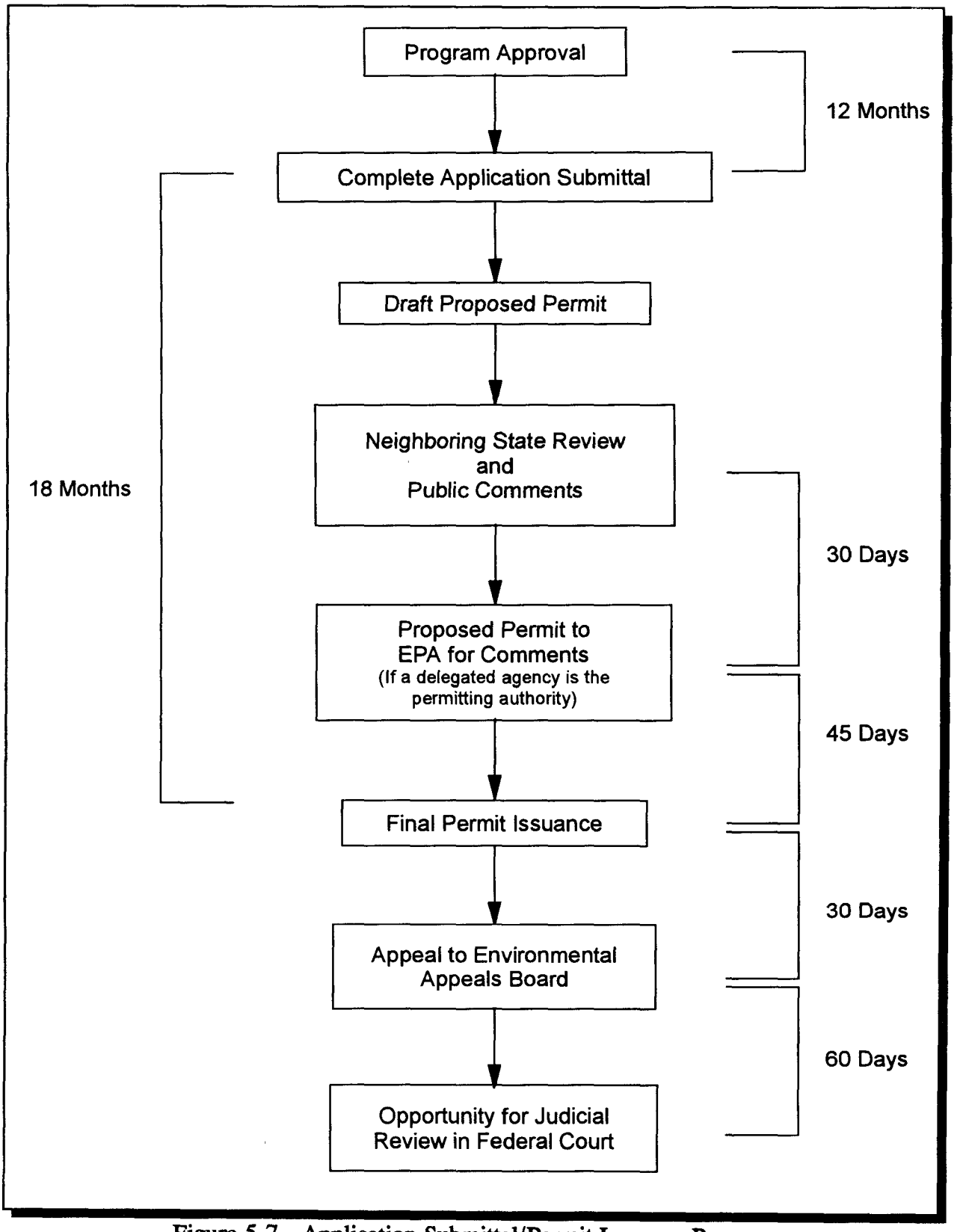

Figure 5-7. Application Submittal/Permit Issuance Process.

5.2.2 Public Petitions and Judicial Review

After the close of the public comment period on a draft permit, the permitting authority will issue a final permit decision. Within 30 days of the final permit decision, anyone who filed comments on the draft permit or participated in the public hearing may petition the EPA Environmental Appeals Board (EAB) to review any condition of the permit that was changed between the draft and final permit stage or other new grounds not reasonably foreseeable during the comment period. The EAB will issue an order either granting or denying the petition for review. To the extent review is denied, the conditions of the final permit decision become the final Agency action and are subject to judicial review in the United States Court of Appeals. The decision of the EAB to issue or deny the permit is also subject to judicial review. Petitions for judicial review must be filed within 60 days of the EAB's final decision. A petition can also be made to reopen an already issued permit for cause. Petitions would be required in writing and to contain facts or reasons supporting the request.

5.3 PERMIT CONTENT

Because operating permits are the primary tool for implementing and enforcing Act provisions, EPA has specified a number of items that will be included in each permit. These items are summarized below:

- Fixed Term. The permit will generally include a fixed term of 5 years or less. However, Acid Rain permits will be issued for a 5-year term and solid waste incinerator permits may have up to a 12-year term.
- Emissions Limitations and Standards. The purpose of emissions limitations is to ensure that the source will comply with all "applicable requirements." These limits cannot be exceeded without a revision to the permit, which must be approved by the permitting authority. The permit may establish alternative or equivalent emissions limits to those in the SIP. A regulatory citation or origin will be provided for each requirement. Requirements that are more stringent than required will be incorporated into the permit as such and will be enforceable.
- Applicable Requirements. For all major sources subject to Part 71, the permit will include all applicable requirements for relevant emissions units. For

nonmajor sources subject to Part 71, the permit will include all applicable requirements pertaining to the emissions units that caused the source to be subject to Part 71.

- Compliance Certification Requirements. The permit will contain information regarding the frequency of compliance certifications submissions. The permit will specify the means used to monitor compliance and the elements that must be reported in the compliance certification (e.g., permit provisions, compliance status, and duration of compliance/noncompliance). The permit will require the source to submit the above information.
- Operational Flexibility. The permit will include terms and conditions for the anticipated alternative operating scenarios and emissions trading. Permit revisions will not be needed for these changes. The permit will require recordkeeping to establish compliance with the terms of the permit.
- Fee Schedule. The permit will include a provision to ensure that a permitted source pays its annual dues according to schedule.
- Monitoring, Recordkeeping, and Reporting. Monitoring, recordkeeping, and reporting requirements will be included in the permit. In addition, all emissions monitoring and procedures or test methods will be included. The frequency of report submittals will also be included.
- Permit Reopenings. The permit will contain an option for permit reopening. The old permit terms remain in effect until the reopening process is completed. Permits may be reopened under the circumstances shown in Table 5-3.
- Compliance Schedule. A compliance schedule that sets specific timeframes for achieving all provisions in the Act for which a source is not in compliance will be included in the permit.
- Progress Reports. The permit will include a requirement that the source submit progress reports at least semiannually and perhaps more frequently if required by the applicable requirement or by the permitting authority.
- Enforcement Issues. Provisions will be included in the permit that explain the nature of the permit and the grounds for enforcement.

TABLE 5-3. CIRCUMSTANCES REQUIRING PERMIT REOPENINGS

• Additional applicable requirements are promulgated after the permit is issued and the requirements become applicable when more than 3 years remain during the permit term. • Additional requirements become applicable to an affected source under the acid rain program. • The permit contains a material mistake. • Inaccurate statements were made in establishing emission standards or other permit terms. • EPA or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Source: 40 CFR, Section 70.7(f).

- Inspection and Entry Requirements. A provision allowing proper access by permitting officials to inspect facility operations, permit documents, and other pertinent information will be included in the permit.
- Permit Shield. A permit shield will be provided in the permit to protect the source from enforcement actions as a result of unintentional releases or deviations, provided that the reporting requirements for these deviations have been met. The shield also protects the source from enforcement actions if the source has met the requirements for trading emissions increases and decreases in the facility. A permit shield does not protect a facility from requirements promulgated after the permit is issued, minor permit modifications, "off permit" actions, violations existing at the time the permit is issued, acid rain requirements, and Section 114 information requests.
- Emergency Provisions. An emergency provision will be included in the permit. An emergency is defined as a sudden and unforeseeable event that occurs beyond the control of the source, including acts of God. An emergency does not include noncompliance due to improperly designed equipment, careless operation, or insufficient maintenance. A provision will be included in the permit to require notifying the permitting agency within 2 working days should an emergency occur.

5.4 PERMIT REVISIONS

The Part 71 permit revision program is modelled on the current Part 70 program. Permit revisions will be processed in one of three ways:

1. Administrative permit amendments;
2. Minor permit modifications; and
3. Significant permit modifications.

Each of these are discussed further below.

5.4.1 Administrative Permit Amendments

Administrative permit amendments are changes such as:

1. Correction of typographical errors;
2. Change of address or ownership;
3. Change of contact person or responsible parties; and
4. Incorporation of State preconstruction requirements.

The permittee may make these changes to the permit after submitting a notice to the permitting agency. The permit will be revised at renewal.

5.4.2 Minor Permit Modifications

Minor permit modification procedures may be used only for those permit modifications that:

1. Do not violate any applicable requirement;
2. Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject;
5. Are not modifications under Title I of the Act; and
6. Are not required to be processed as a significant modification.

Although "Title I modifications" are not specifically defined under the current Part 71 rule, a definition is under development, and EPA will add the definition in the Phase II rulemaking, consistent with how EPA ultimately defines the term under Part 70. Until this term is formally defined, EPA is applying the interpretation of Title I modifications that States are using under the current Part 70 rule. Consequently, changes subject to State minor NSR programs will not be considered Title I modifications.

Under this permit revision track, the source may make a change immediately upon filing an application for a minor permit modification. Eligible changes could be processed individually or in groups, but the permit shield may not extend to these changes. If the change is made before approval is granted by the permitting authority, the source does so at its own risk. The source is only afforded a temporary exemption from the formal requirement that it operate in accordance with the permit terms that it seeks to change in its modification application. Should the proposed permit modification be rejected, the source would be subject to enforcement proceedings.

The application requesting the minor permit modification should include the following:

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit;
3. Certification by a responsible official that the proposed modification meets the criteria for minor permit modifications; and
4. Completed forms for the permitting authority to use to notify affected States.

The permitting authority has 90 days to issue or deny the permit modification.

5.4.3 Significant Permit Modifications

Significant permit modifications are changes that do not qualify as minor permit modifications or as administrative amendments. In this permit revision track, the public, permitting authority, affected States, and EPA will review the modification permit application in the same manner as a review during a permit issuance. The permit shield may extend to changes processed under this track. Permitting authorities will initiate review of the proposed changes after receipt of an application. The permitting authority has 9 months to

complete action on the significant permit modification application after the application is deemed complete.

5.5 PERIODIC MONITORING, RECORDKEEPING, AND REPORTING

EPA is developing a program for implementing the Act's enhanced monitoring provisions. This new program, referred to as compliance assurance monitoring (CAM), will incorporate periodic monitoring requirements. However, until the CAM rule becomes final, if an emissions unit subject to Part 71 lacks periodic testing or monitoring requirements, the source owner or operator must propose in the initial permit application periodic monitoring requirements. As described in 71.6(a)(3), the proposed periodic monitoring requirements must use terms, test methods, units, averaging periods, and other statistical conventions consistent with those found in the applicable requirements. It is possible that simple recordkeeping will suffice for the periodic monitoring of some emission units.

Should permit applicants or permitting authorities seek additional information on developing periodic monitoring, a review of the draft Technical Guidance Document for the CAM rule could provide some insight. In this document, EPA has developed several illustrations of acceptable CAM plans. An electronic version of this document is available on the EPA's Office of Air Quality Planning and Standard's (OAQPS) Technology Transfer Network (TTN) in the Emission Measurement Technical Information Center's (EMTIC) Bulletin Board, as filename TECHDOC.914. The following example draft CAM plans are 2 of 18 available examples provided in the guidance document.

EXAMPLE 1

COMPLIANCE ASSURANCE MONITORING (CAM) ILLUSTRATION NO. 1a., FABRIC FILTER FOR PM CONTROL

1. APPLICABILITY

1.1 Control Technology: Fabric filter (Baghouse)

1.2 Pollutants:

Primary: PM, PM_{10}
Other: Toxic heavy metals

1.3 Process/Emissions Units: Industrial process vents and fuel combustion units

2. MONITORING SYSTEM/PROGRAM DESCRIPTION

2.1 Parameter to be Monitored: Visible emissions (VE).

2.2 Rationale for Monitoring Approach/Measurements: Changes in VE observations indicate process changes, changes in baghouse efficiency, or leaks.

2.3 Monitoring Location: Per RM 9 or RM 22 requirements.

2.4 Analytical Devices: Trained observer using RM 9 or RM 22.

2.5 Description of Data Acquisition and Measurement System Operation:

- Frequency of measurement: Daily or as weather permits.
- Reporting units: Percent opacity or visible/no visible emissions.
- Recording process: Observers complete VE observation forms and log into binder or electronic database, as appropriate.

2.6 Corrective Action Trigger Levels:

- Basis for setting levels: Baseline percent opacity; typical appearance, RM 9 or RM 22.
- Data needs: Baseline VE observations concurrent with emission test or historical plant records of opacity observations. (No data are needed if "any visible emissions" type corrective action trigger is chosen.)

2.7 Corrective Action Period:

- Time to take initial action: Inspection to isolate problem and define solution within 4 to 24 hours of indication of problem, depending on severity. If opacity is above permit limit, immediate corrective action should be taken.
- Time to rectify problem: 1 to 14 days from indication of problem, depending on severity.

2.8 Specific QA/QC Procedures: Initial training of observer per RM 9 or RM 22; semi-annual refresher training per RM 9, if applicable.

2.9 References: 1, 2, 3, 4, 5.

EXAMPLE 2

COMPLIANCE ASSURANCE MONITORING (CAM) ILLUSTRATION No. 38, THERMAL INCINERATOR FOR VOC CONTROL

1. APPLICABILITY

1.1 Control Technology: Thermal incineration

1.2 Pollutants:

Primary: Volatile organic compounds (VOCs)
Other: Higher molecular weight organic compounds

1.3 Process/Emissions Units: Coating, spraying, printing, polymer manufacturing, distillation units, wastewater treatment units, air oxidation units, petroleum refining, miscellaneous SOCMI units

2. MONITORING SYSTEM/PROGRAM DESCRIPTION

2.1 Parameter to be Monitored: Incineration temperature.

2.2 Rationale for Monitoring Approach/Measurements: Proper temperature range can be related to good performance.

2.3 Monitoring Location: Outlet of combustion chamber.

2.4 Analytical Devices: Thermocouples, or alternative methods/instrumentation as appropriate for specific gas stream. See CAM guidance for specifications.

2.5 Description of Data Acquisition and Measurement System Operation:

- Frequency of measurement: Hourly, or recorded continuously on strip chart or digital data acquisition system.
- Reporting units: Degrees Fahrenheit or Celsius (°F, °C).
- Recording process: Operators take readings and manually log data, or recorded automatically on strip chart or digital data acquisition system.

2.6 Corrective Action Trigger Levels:

- Basis for setting levels: Regulatory standards for VOC emissions.
- Data needs:
  Baseline incineration temperature measurements and outlet VOC concentration measurements concurrent with emission test.
  Historical plant records on incineration temperature measurements and outlet VOC concentration measurements.

2.7 Corrective Action Period:

- Time to take initial action: Inspection to isolate problem and define solution within 15 minutes to 24 hours of indication of problem, depending on severity. If temperature is near ambient, immediate corrective action should be taken.
- Time to rectify problem: 1 day.

2.8 Specific QA/QC Procedures:

- Calibrate, maintain, and operate instrumentation according to manufacturer's recommendations.

2.9 References: 1, 2, 3, 4.

REFERENCES FOR COMPLIANCE ASSURANCE MONITORING (CAM) ILLUSTRATIONS

1. Air Pollution Engineering Manual, A&WMA, Buonicore and Davis, ed. 1992.

2. Ohio EPA's Operating and Maintenance (O&M) Guidelines for Air Pollution Control Equipment, for Ohio EPA, Columbus, OH, by Environmental Quality Management, Inc., Cincinnati, OH, February 1993.

3. Generic Permit Conditions Pertaining to Monitoring, Georgia State Pollution Control Agency, GDNR.

4. Combustion Emissions Technical Resource Document (CTRED), USEPA Solid Waste and Emergency Response (5305), EPA 530-R-94-014, May 1994.

5. APTI Course SI:412, Baghouse Plan Review, USEPA, 1982.

6.0 FLEXIBLE PERMIT APPROACHES

The operational flexibility provisions as provided for under the Federal operating permits program (40 CFR Part 71) allow a source to respond quickly to changing business opportunities. Many changes made in normal operating procedures, such as a change in product formulations or hours of operation, can be provided for under the operational flexibility provisions without requiring a permit modification.

The two major aspects of operational flexibility that may be helpful to applicants are: (1) emissions trading under emissions caps established by the permit, and (2) emissions trading based on the State implementation plan (SIP) rules. Additional provisions, which are generally considered to offer operational flexibility, are: (1) off-permit changes, (2) emissions trading based on applicable requirements, (3) emissions trading based on economic incentives, (4) alternative operating scenarios, (5) advance NSR approval, and (6) general permits. Maximizing potential to emit (PTE) can also be an option under certain circumstances for increasing operational flexibility. All of the above mentioned operational flexibility approaches are described below.

6.1 EMISSIONS TRADING UNDER EMISSION CAPS ESTABLISHED BY THE PERMIT

According to Section 71.6 of Part 71, the permitting authority must allow for emissions trading provisions that are used to meet an independent emissions cap. The emissions cap when placed into the permit is a Federally-enforceable, pollutant-specific limit that restricts the emissions of any regulated air pollutant. The cap is considered "independent" because it is independent of any applicable requirements and does not displace the obligation to comply with applicable requirements. Caps may be established at the plant level or at the process level. Once the emissions cap is set, the source may operate an internal emissions trading program, thereby providing some latitude with its own operations.

The permit must describe how the source plans to track its operations relative to the cap and ensure that trades are quantifiable and enforceable.

The permitting authority must put the cap into the permit if a source's proposal meets the criteria for enforceable trading. Additionally, the permit must establish compliance requirements for trading. The required 7-day advance notice of trading does not establish permit terms for trading, but just notifies the authority and EPA that the source is using already established permit terms to trade.

6.1.1 Impacts of Establishing Emissions Caps

For a source that does not maximize its potential to emit and that produces a wide variety of products using a fixed group of raw materials, the emissions cap can grant considerable flexibility. Since the cap is normally established at greater than current levels but less than the cumulative potential to emit, the facility may operate with great flexibility provided that it complies with the restrictions of the emissions cap and any other State or Federal requirements. The emissions cap may provide for peak operation of individual units within a group of equipment at higher levels than would be allowed if all the units were permitted at average rates. Additionally, the permit shield is available for equipment covered under the emissions caps.

Conversely, some drawbacks may be seen with the emissions cap: (1) the facility must operate at or below the levels determined by the cap, and (2) the facility must perform the necessary recordkeeping required to ensure compliance with the cap. The applicant must implement recordkeeping practices and permit terms that ensure the trades are both quantifiable and enforceable. Also, the facility must give the permitting authority 7 days notice before trading under the cap. Care must be taken to trade only emissions that are similar, especially in the case of hazardous air pollutants (HAP's), because Section 112(g) of the Act prohibits offsets of less hazardous materials to compensate for increased emissions of more hazardous compounds.

6.1.2 Developing Emissions Caps

Emissions caps should represent the worst-case scenarios for a facility or a particular group of processes. The facility operator should ensure that the emissions cap does not interfere with future plant operations. In determining worst-case scenarios, the applicant

should consider the quantity of emissions, and in the case of HAP's, the hazard ranking assigned in Section 112(g) of the Act.

6.1.3 Implementing Emissions Caps

To illustrate the implementation of emission caps, the following is an example of how a permitting authority might determine emissions caps for a batch chemical production plant.

> *Because of product variability and unpredictability of manufacturing demands, [the permitting authority] recognizes that the construction of alternative operating scenarios for batch chemical manufacturing facilities presents unique challenges for the industry. These scenarios must be constructed and described in the application and resulting Title V permit in a manner where emissions are quantifiable and compliance determinations at any time are verifiable. To achieve this end, [the permitting authority] recommends that industry identify and develop measurable parametric relationships between production rates and emissions from the full array of products that may be produced. Critical parameters that may be considered in this relationship may include, but not be limited to, factors such as product formulation, production cycle times, temperature of unit operations, reaction pressures, flow rates, batch size, air cleaning efficiency, and water/solvent temperatures, as applicable. Development of these relationships will permit the creation of an emission factor (weight of air emissions per weight of product produced) for the particular batch formulation. Thus, knowing historical and planned future production levels, an emissions cap may be developed for which compliance can readily be demonstrated.*

6.2 EMISSIONS TRADING BASED ON THE SIP RULES

Emissions trading is an approved method of limiting a source's emissions under the SIP. If a State adopts this option into its SIP, sources within the State may trade increases and decreases in emissions, provided that no net increase occurs. Consequently, a company that has several plants could be afforded some degree of operational flexibility within this program by trading emissions among sites. Under the provisions of Section 71.6, the permittee may use a 7-day notice to comply with applicable requirements using a SIP's trading provisions rather than the permit terms addressing those applicable requirements. The permit must identify which permit terms may be replaced with SIP trading provisions. Additionally, the SIP trading provisions must be practically enforceable (virtually general permits within the SIP). EPA believes that the SIP review process will ensure the quality of the trading provisions.

6.3 OFF-PERMIT CHANGES

Section 71.6 of Part 71 provides that States may allow a source to delay applying for a permit revision when the proposed changes "do not result in the source being in violation of any permit term or condition but render the source subject to an applicable requirement" that previously did not apply to the source. However, the change may not result in a net increase in allowable emissions of any regulated pollutant at the source. Additionally, off-permit changes require that notice be given to the permitting authority at the time the change takes place. Off-permit changes may not be used for Title I modifications or for requirements subject to Title IV (the acid rain provisions) of the Act, and the permit shield is not available for off-permit changes. (A permit revision for purposes of the acid rain portion of the permit is governed by 40 CFR Part 72.) The source is responsible for: (1) keeping a record describing the changes that result in emissions of a regulated air pollutant subject to an applicable requirement but not otherwise regulated by the permit, and the emissions resulting from these changes; and (2) revising the information when application is made for a permit renewal.

One possible downside to using the off-permit change mechanism is that if the change is later shown to be ineligible for the off-permit, the source is liable for failing to have applied for a permit revision from the time of the change.

6.4 EMISSIONS TRADING BASED ON APPLICABLE REQUIREMENTS

Sources may also request to trade emissions based on applicable requirements. The trading written into a permit must have all of the compliance terms necessary to make it enforceable, just like any other compliance scenario. All Part 71 permits must contain "testing, recordkeeping, and compliance certification requirements sufficient to assure compliance." Additionally, where an underlying rule gives the State discretion to implement trading, the Title V permitting process would require the State to provide for trading, provided that the trade can be made enforceable, consistent with Title V compliance requirements.

6.5 EMISSIONS TRADING BASED ON ECONOMIC INCENTIVES

Sources may also trade emissions based on economic incentives. In cases where trading is not already provided for in the permit, no permit revision will be required under "any economic incentives, marketable permits, emissions trading or other similar programs or processes approved in an implementation plan" when the plan provides for such trading on 7 days notice. Emissions trading is also allowed for the purpose of complying with the Federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements.

6.6 ALTERNATIVE OPERATING SCENARIOS

A permittee may want to be permitted for alternative operating scenarios from which it may choose processes and operations. Although this procedure is technically not considered part of the operational flexibility provisions, alternative operating scenarios do provide a form of "operational flexibility," and for that reason, are discussed here.

Sources that wish to be permitted under the alternative operating scenario scheme must identify their reasonably anticipated operating scenarios in their permit applications. The permitting authority will then review the scenarios and approve the ones that meet all applicable requirements. Thereafter, no permit revision is needed to switch from one scenario to the other, thereby simplifying the permitting process for the source and the permitting authority. However, the source must contemporaneously record the change in operating scenario in a log at the facility. Additionally, the permitting authority may extend the permit shield to cover the terms and conditions of each permitted scenario.

When using the alternative scenario program, an on-site log must be kept and the source must record in the log contemporaneously with making a change from one operating scenario to another.

Finally, alternative operating scenarios may include emissions trading within the facility as allowed under the applicable requirements. Moreover, the source may ask that the permitting authority include emissions trading provisions in its permit.

To illustrate the use of alternative operating scenarios, the following example is provided for batch chemical production.

A pharmaceutical manufacturer produces a number of products. Many of these products can be manufactured using different pieces of equipment within the facility. For example, product X can be manufactured in reactor A or B. To describe how alternative operating scenarios may be used to permit this operation:

- *Determine potential emissions for each product/equipment combination.*
- *Determine all applicable regulations for each product/equipment combination.*
- *Define an operating scenario for each product/equipment combination.*

Potential emissions should be based on source testing data, AP-42 emission factors, or other data such as the EPA document "Control Techniques Guidelines for Batch Processes" (EPA-450/2-78-029). Other emission factors should not be used prior to obtaining approval from the local permitting authority or the appropriate EPA Regional Office. The permit application should include scenarios for each product/equipment combination. The alternative operating scenario should clearly identify the applicable requirements that apply for each product/equipment combination. There is no need to include alternative operating scenarios for product/equipment combinations that do not change the applicable requirements. A system should be implemented to keep contemporaneous records of when products were produced in specific pieces of equipment.

6.7 ADVANCE NSR APPROVAL

Advance New Source Review (NSR) approval is actually a form of alternative operating scenario that may be available to some permittees in some States. Advance NSR approval would allow the operating permit to contain the construction permit; the operating permit could then authorize a future modification at the facility. A time-limited authorization could be updated with reapplication. However, advance NSR may not be an option if the Part 71 agency and the NSR agency are not the same.

6.8 GENERAL PERMITS

To an extent, general permits [as provided for in Part 71.6(d)] allow some form of operational flexibility. General permits cover numerous similar sources, such as gas stations, dry cleaners, or small printing operations. The drafting and issuance of the provisions to be included in the general permits for certain source categories are subject to normal public review and comment. However, EPA may allow a specific facility or source to operate under an approved general permit without requiring that public notice procedures be followed. Finally, citizens have the right to legally challenge the issuance of individual general permits. General permits will not be authorized for affected sources under the acid rain program unless otherwise provided for in regulations promulgated under Title IV of the Act.

6.9 MAXIMIZING POTENTIAL TO EMIT

A facility may develop operational flexibility within the Title V permit by maximizing its PTE. Under this approach, the facility uses the products and operating parameters that lead to highest emissions in its permit application. The process would only be bounded by Federal or State emission rate limitations where applicable or limits which would have required new source review. This option does not establish new limits if the facility currently has none; however, it does establish PTE to be used as a basis for future modifications.

6.9.1 Impacts - Benefits and Limitations

Maximizing PTE has advantages from both a compliance and productivity viewpoint. From a compliance viewpoint, the fact that all processes are permitted to operate at physical and operational limits minimizes the opportunity for failing to comply with the permit. From a productivity viewpoint, the permit will not impede business managers from operating the equipment at the most profitable and productive levels. The permit is written anticipating that the equipment will be operated at maximum production levels; thus, the company is free to operate the equipment at any desirable level.

The main limitation to maximizing PTE is that the facility may exceed trigger levels for additional permitting or reporting requirements. For example, while increases in the rate

or hours of production for existing equipment are exempt from the prevention of significant deterioration (PSD) program in Title I, Part C, of the Act, introduction of new raw materials or products, or modification of equipment, could be considered modifications under the PSD rule, and could result in requiring the company to obtain a PSD permit before the modifications may be undertaken. Care must also be taken to describe the maximum emission rate on a time basis (usually hourly or annually), consistent with agency requirements. For processes with broad fluctuations in instantaneous emissions rates (e.g., a batch process where emissions reach a peak for part of the production cycle), sources may report *maximum* emission rates rather than *actual* emission rates. The averaging period (i.e., length of time of emissions testing) for determining the emissions rates may be negotiated with the permitting authority.

6.9.2 Guidelines to Maximizing PTE

The methods for maximizing PTE are the same at those used for estimating PTE. The focus of the PTE maximization effort is on identifying the variables that will increase the facility PTE. Typical methods of maximizing emissions are summarized in Table 6-1.

TABLE 6-1. TYPICAL FACTORS USED FOR MAXIMIZING POTENTIAL TO EMIT

Factor	Change Required to Maximize PTE
Production level	Maximize
Hours of operation	Maximize (8,760 hr/yr)
Efficiency of control equipment	Minimize (No credit is given for presence of control device if facility has no enforceable limits)
Product mix (for equipment processing more than one end product)	Select product resulting in highest emission rate
Chemical selection	Consider chemical with highest hazard, as listed in Section 112(g)
Activities that the equipment is designed to accommodate	Use most expansive design and process description that may be logically defended

6.9.3 Examples of Maximizing PTE

Two examples of maximizing PTE are provided below in Figures 6-1 and 6-2.

MAXIMIZING PTE FOR HEALTH PRODUCTS

Scenario Description

A manufacturer of packaged intravenous fluid bags produces the product in a batch mixer. The batch process, which has a 10 hour cycle time, results in a maximum emission rate of 100 pounds volatile organic compounds (VOC) per batch produced. Determine the maximum annual PTE for this process.

Approach

1. Determine the maximum number of batches that the equipment may process in one year.

2. Calculate the emissions from the maximum annual number of batches.

Calculation

1. Determine the maximum number of batches per year:

$$\frac{8{,}760 \text{ hrs/yr}}{10 \text{ hrs/batch}} = 876 \text{ batches/yr}$$

2. Determine maximum emissions from this process:

$$\frac{876 \text{ batches}}{\text{year}} \times \frac{100 \text{ lbs VOC}}{\text{batch}} \times \frac{\text{ton}}{2{,}000 \text{ lbs}} = \frac{43.8 \text{ tons VOC}}{\text{year}}$$

Source: TRC Environmental Corporation (see acknowledgements in Preface)

Figure 6-1. Maximizing PTE example for health products.

MAXIMIZING PTE FOR ELECTRONICS PRODUCTIONS

Scenario Description

A manufacturer of printed circuit boards applies a screen-printed surface coating as an integral part of the production process. The solvent-based surface coating is cured in a vented infrared tunnel oven with the emissions controlled by a thermal oxidation unit with a control efficiency of 99.2%. For purposes of this example, the control equipment is not considered Federally enforceable, and therefore, is not factored into the calculation of PTE. The coated substrates are 12 inches square, and the coatings vary from 40 to 60 weight percent VOC and are applied no more than 7 mils (0.007 inches) thick (wet measure). The operating capacity of the screen printers is 800 cycles per hour. The coating has a material density of 10 pounds per gallon. Calculate the maximum annual PTE from this process.

Approach

1. Calculate the maximum VOC content of each print cycle.

2. Calculate the emissions from the maximum annual number of print cycles.

Calculation

1. Determine the maximum VOC content of each print cycle.

$$60\% \times \frac{10 \text{ lbs}}{\text{gal}} \times \frac{144 \text{ in}^2}{\text{cycle}} \times 0.007 \text{ in} \times \frac{\text{gal}}{231 \text{ in}^3} = \frac{0.0262 \text{ lbs}}{\text{cycle}}$$

2. Determine maximum emissions from this process:

$$\frac{0.0262 \text{ lbs VOC}}{\text{cycle}} \times \frac{\text{ton}}{2{,}000 \text{ lbs}} \times \frac{8{,}760 \text{ hrs}}{\text{year}} \times \frac{800 \text{ cycles}}{\text{hr}} = \frac{91.7 \text{ tons VOC}}{\text{year}}$$

Source: TRC Environmental Corporation (see acknowledgements in Preface)

Figure 6-2. Maximizing PTE example for electronics production.

7.0 HAZARDOUS AIR POLLUTION PROGRAM REQUIREMENTS FOR TITLE V

Under the Clean Air Act Amendments of 1990, EPA is required to regulate large or "major" industrial facilities that emit one or more of 189 listed hazardous air pollutants (HAP's). Major sources are those that have the potential to emit 10 tons/year or more of a listed pollutant or 25 tons/yr or more of a combination of pollutants. On July 16, 1992, EPA published a list of industrial source categories that emit one or more of these hazardous air pollutants. For listed industrial categories of "major" sources, EPA is required to develop standards for these sources that will require the application of stringent controls, known as maximum achievable control technology (MACT). Development of these standards began shortly after the 1990 Clean Air Act Amendments, and the regulatory development process is scheduled to continue through the year 2000.

Title V operating permit applications must address requirements for substances that are considered to be hazardous under Title III of the Act. Sections 112(g), (j), and (r) of the Clean Air Act Amendments impose new requirements on sources applying for operating permits. These programs are discussed below.

7.1 SECTION 112(g) REQUIREMENTS

Section 112(g) establishes requirements for owners or operators who intend to construct, reconstruct, or modify a major source of HAP's. The section 112(g) provision is designed to ensure that emissions of toxic air pollutants do not increase if a facility is constructed or reconstructed before EPA issues a MACT regulation for that particular category of sources or facilities. In effect, the 112(g) provision is a transitional measure to ensure that facilities adequately protect the public from toxic air pollutants until EPA issues a MACT standard that applies to the facility in question.

7.1.1 Components of the Draft Final Rule

A schematic diagram of the proposed Section 112(g) process is provided in Figure 7-1. EPA's draft final rule substantially streamlines the 112(g) process it proposed in March 1994 by limiting the 112(g) requirements to the construction of new facilities and the reconstruction (rebuilding) of large sources of toxic air pollutants at existing facilities. Newly constructed facilities or reconstructed units or sources at existing facilities would be subject to 112(g) requirements if they have the potential to emit HAP's above the major source thresholds. "Reconstruction" is defined as a change that costs 50 percent of the cost of constructing a new unit or source like the one being rebuilt. Sources or facilities subject to 112(g) would be subject to stringent air pollution control requirements, referred to as "new source MACT." Under the Clean Air Act, new source MACT control is required to be no less stringent than the best controlled similar source or facility. EPA anticipates that the new source MACT requirements will be equally or more stringent than the requirements in the MACT standard that EPA will later issue for the industrial source category in question. However, should the new source MACT requirements prove to be less stringent than the air toxics regulation that EPA later issues, the source or facility would be provided additional time to comply with the MACT standard. The draft final rule provides a transition period for States that have a preconstruction review process already in place to make adjustments in their programs to comply with 112(g) requirements. This transition period would prevent project delays for sources that were about to commence construction at the time this rule is issued.

7.1.2 Case-by-Case MACT Determination

When no emission standard has been promulgated under Section 112(d) of the Act, MACT determinations concerning such sources must be made on a case-by-case basis. The permitting authority has discretion to prescribe those procedures to be used in making a case-by-case MACT determination for constructed or reconstructed major sources (except that the owner or operator of the source may elect to use the Title V permitting process). If a permitting authority establishes, or has already established, preconstruction review procedures for sources to follow, then these procedures may be used in lieu of the procedures described in the 112(g) rule, so long as they provide for public participation in

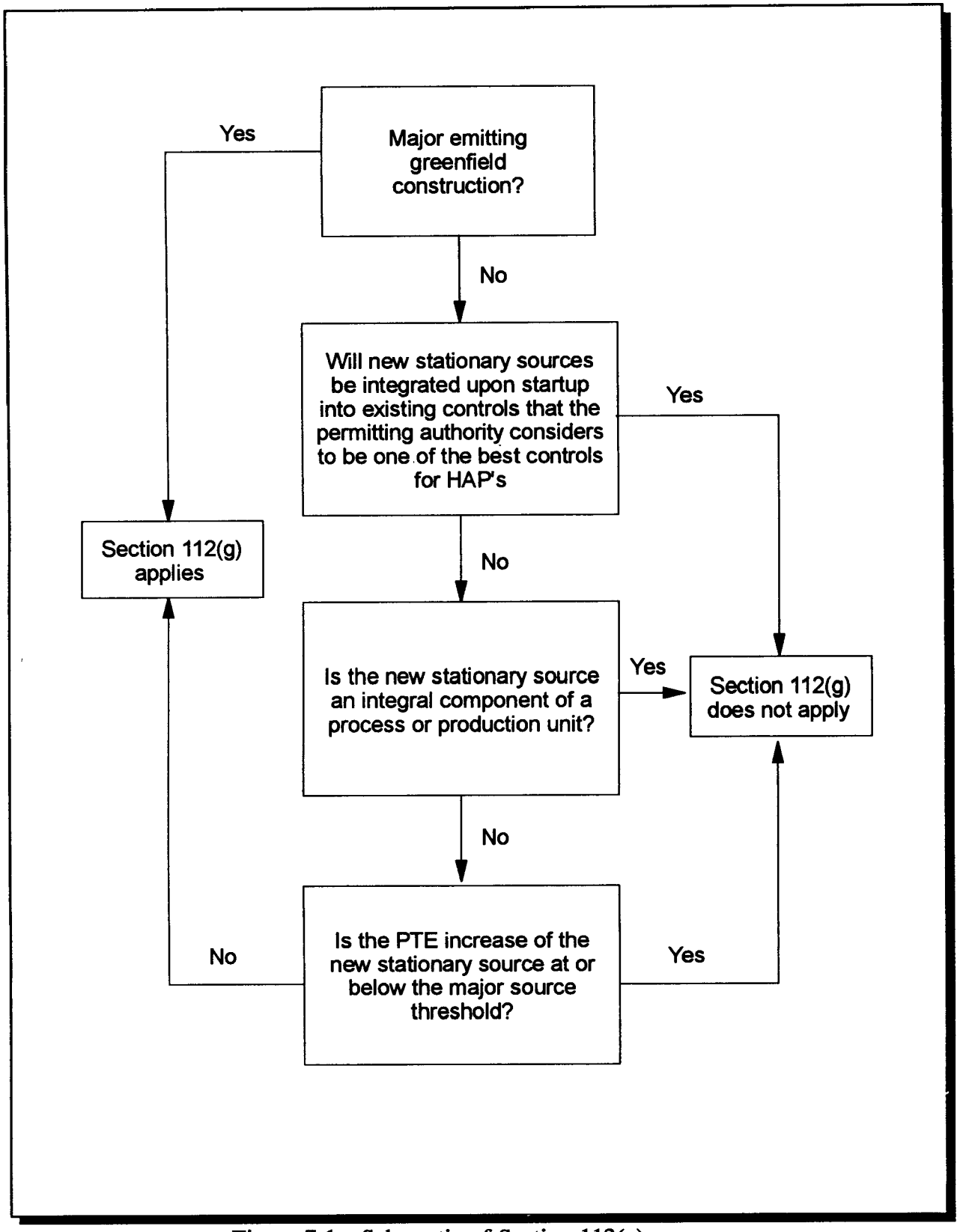

Figure 7-1. Schematic of Section 112(g) process.

the case-by-case MACT determination and to ensure that a final MACT determination will be made prior to construction or reconstruction.

As promulgated, 40 CFR Section 63.53 requires that owners/operators submit the following types of information in applications for case-by-case MACT determinations:

1. A description of the major source and source category;

2. Descriptions of the emission units requiring MACT determinations, and an explanation of whether new-source and/or existing-source MACT is required (including construction and start-up dates for new sources);

3. Lists of HAP's emitted by each emission unit and corresponding emission rates, as well as estimates of uncontrolled and controlled emission rates for the entire source; and

4. Any existing federally enforceable emission limitations applicable to the source.

If EPA or the permitting authority has issued guidance or distributed information establishing the MACT "floor" for the source category by the statutory deadline, the application must also include the following information:

1. Recommended emission limitations for the source and a description of the selected MACT candidate (including technical information such as control efficiency, operational parameters, and size);

2. Supporting technical documentation on alternative control technologies also believed capable of satisfying the emission limitation; and

3. A list of parameters to be monitored (and monitoring frequency) to demonstrate continuous compliance with the selected emission limitation.

If the information on the MACT floor is not publicly available, the source may omit the above information. In this case, the permitting authority must make a case-by-case determination based on the facility description provided by the source. EPA strongly encourages applicants to recommend MACT for their facility, even though a requirement to do so is not included in the Part 63, Subpart B regulations. Finally, facility owners/operators must submit a copy of the application to a national database for MACT determinations.

7.1.3 Determining MACT-Equivalent Limitations

Determining case-by-case MACT will be simplest in cases where: (1) EPA has already proposed a standard, or (2) a "blanket" MACT determination has been issued. For example, when a MACT standard has been proposed but not finalized within 18 months of the applicable deadline, the standard as proposed would represent the appropriate level of control for the source category subject to case-by-case MACT determination. Establishing MACT for categories not affected by the previous two scenarios will involve an application, public comment, and agency approval process. Note that if the applicable MACT standard has not been issued and EPA has missed the statutory deadline, a case-by-case determination must be conducted under the "MACT hammer" provisions mandated by Clean Air Act Section 112(j).

7.1.4 MACT Hammer -- Section 112(j)

Section 112(j) of the Act provides for a "MACT hammer" if EPA fails to issue a MACT standard by the statutory deadline. This provision has the effect of requiring affected sources to install MACT equivalent limitations even when MACT standards for the particular source category have not yet been promulgated. Essentially, the MACT hammer requirements apply in a given State only if EPA is required to issue a MACT standard for a particular source category, but does not do so within 18 months of its deadline. In this case, the permitting authority must make a case-by-case MACT determination, requiring the HAP source to comply with emission limits at least as stringent as the MACT standard would have been had it been promulgated on time.

Facilities must apply for Section 112(j) case-by-case MACT determinations 18 months after EPA misses the applicable source category MACT deadline. The mechanism for MACT review depends in part on whether the affected emission unit is new or existing; new sources are subject to more stringent MACT levels than existing ones. In most cases, Section 112(j) MACT approval will be secured through the operating permit program. However, other approval venues are possible. State agencies may issue a blanket MACT determination for an entire source category for which Section 112(j) has been triggered.

7.1.5 MACT Approval

If MACT is approved by the permitting authority, the "Notice of MACT Approval" (or a new or revised operating permit) would include the following information:

1. A HAP emission standard or limitation found to be equivalent to the MACT standard that would have been promulgated if EPA had met the required schedule;

2. Appropriate notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements;

3. Additional emission limits, production limits, operational limits, or other terms and conditions necessary to ensure Federal enforceability;

4. Requirements for the facility to comply with specified provisions of the general NESHAP regulations codified in Subpart A of Part 63 (discussed below); and

5. The applicable compliance deadline.

What happens when EPA eventually issues the required MACT? Two scenarios are possible. First, if the standard is issued before a permit reflecting the case-by-case MACT determination has been approved, then the permit must contain the MACT requirements as defined by the State's transition process. Second, if the standard is issued after the operating permit is approved, the permit must be revised to reflect the new standard upon its next renewal.

7.2 SECTION 112(r) REQUIREMENTS

Section 112(r) of the Act requires that facilities prepare a risk management plan to prevent and mitigate the consequences of accidental releases. The Act indicates that regulations under Section 112(r) are to be enforced in the same manner as MACT standards established under Section 112(d). Section 112(r)(7)(E) states that "[a]fter the effective date of any regulations or requirement imposed under this subsection, it shall be unlawful for any person to operate any stationary source subject to such regulation or requirement in violation of such regulation or requirement. Each regulation or requirement under this subsection shall for the purposes of Sections 113, 114, 116, 120, 304, and 307 and other enforcement provisions of this Act, be treated as a standard in effect under Subsection (d)." Thus, States

should consider the Section 112(r) regulations as they would emission standards established under Section 112(d).

The requirements of the Section 112(r) program have been partially promulgated in 40 CFR Part 68, Chemical Accident Prevention Provisions. This regulation, when complete, will contain three subparts consisting of the general requirements of the program (Subpart A), the risk management plan requirements (Subpart B), and the regulated substances for accidental release prevention (Subpart C). Subparts A and C of 40 CFR Part 68 were promulgated on January 31, 1994. Subpart B was proposed on October 20, 1993, but has not been finalized.

A list of regulated substances and threshold quantities that will identify facilities subject to chemical accident prevention regulations can be found in 59 FR 4478 (January 31, 1994). The list is composed of three categories: 77 toxic substances, 63 flammable substances, and explosive substances with a mass explosion hazard as listed by the U.S. Department of Transportation. Threshold quantities are established for toxic substances ranging from 500 to 20,000 lb. For all listed flammable substances, the threshold quantity is established at 10,000 lb. For explosive substances, the threshold quantity is 5,000 lb.

The threshold quantities apply to the maximum total quantity of a substance in a process (i.e., the maximum total quantity, at any one time, in a single vessel, in a group of interconnected vessels, or in several vessels that could potentially be involved at one time in an accidental release). Substances in mixtures would be exempted from the threshold determination if they represent less than one percent of the mixture by weight. EPA also proposed to exempt substances if: (1) they are part of articles; (2) they are used as structural components; (3) they are used for janitorial maintenance; or (4) they are found in consumer products, process water, or in water or air from the environment or municipal sources. Also, if the concentration of the regulated substance in the mixture is one percent or greater by weight, but the owner or operator can demonstrate that the partial pressure of the regulated substances in the mixture (solution) under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury (mm Hg), the amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source.

Sources that expect to use, store, or otherwise handle some of the regulated substances (e.g., fuel constituents) in quantities that exceed the specified thresholds will be required to develop and implement a risk management program that meets the new requirements of Subpart B. Although the requirements for this program are not final, the proposed rule requires affected sources to register a risk management plan within 3 years after the date of the final rule publication. The risk management plan needs to be registered with EPA; provided to the Chemical Safety and Hazard Investigation Board, State governments, and local planning authorities; and made available to the public.

The Part 71 permit application only requires the source to indicate whether it is subject to Section 112(r) and, if it is subject, to agree to submit the plan. (Note: detailed information is not required, as discussed in the "White Paper" in Appendix A.) Current Part 71 guidance indicates that the source must agree to permit conditions that assure: (1) development and submittal of any required risk management plan (RMP) to the appropriate authority, and (2) annual certification by the responsible official as to whether the RMP is being properly implemented. Sources are also required to submit compliance schedules when compliance with all Section 112(r) requirements has not been achieved prior to permit issuance.

8.0 INFORMATION SOURCES

Various EPA hotlines, bulletin boards, and information sources are listed below.

Acid Rain Hotline — Records questions and disseminates EPA documents related to the Acid Rain program. Phone: (617) 674-7377.

Air Risk Information — Assists state and local air pollution control agencies and EPA Regional Offices with technical matters pertaining to health, exposure, and risk assessment of air pollutants. Phone: (919) 541-0888.

Control Technology Center — Provides technical support and guidance on air pollution emissions and control technology, as well as information on the Federal Small Business Assistance Program. The CTC operates a hotline and supports the RACT/BACT/LAER Clearinghouse. Phone: (919) 541-0900.

Emission Factor Assistance Hotline (INFOCHIEF) — Provides information on various emissions data bases and reference documents, such as SPECIATE, FIRE, AIR CHIEF, Locating and Estimating documents, and EPA's compilation of emission factors (AP-42). Phone: (919) 541-5285.

Emission Factor Clearinghouse — Provides a means of exchanging information on air pollution control matters; addresses the criteria pollutants and toxic substances from stationary and area sources as well as mobile sources. Phone: (919) 541-5477.

EPA Library — Provides copies of some EPA documents and other reference materials. Phone: (919) 541-2777.

Internet Access — A wide variety of information regarding EPA programs and publications is accessible through the Internet. Two fact sheets on EPA access through the Internet are presented at the end of this section.

National Air Toxics Information Clearinghouse — Emphasizes air toxics (noncriteria pollutants) and the development of air toxics control programs. Phone: (919) 541-0850.

Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Bulletin Board System — A network of electronic bulletin boards providing information and technology exchange on pollution control matters. The seven bulletin boards are: (1) OAQPS, (2) emission Measurement Technical Information Center (EMTIC), (3) Support Center for Regulatory Air Models (SCRAM), (4) Clearinghouse for Inventories/Emission Factors (CHIEF), (5) Clean Air Act Amendments (CAAA), (6) Air Pollution Training Institute (APTI), and (7) Control Technology Center (CTC). Phone (via modem): (919) 541-5742. Help Line: (919) 541-5384. (Two summary pages from EPA's TTN brochure are presented at the end of this section.)

Pollution Prevention Information Clearinghouse — Provides access to information in EPA's pollution prevention information exchange system (PIES). Phone: (703) 821-4800.

Reasonably Available Control Technology, Best Available Control Technology, and Lowest Achievable Emission Rate (RACT/BACT/LAER) Clearinghouse — Emphasizes air pollution control technology related to new source review permitting requirements. Phone: (919) 541-0800.

Stratospheric Ozone Information Hotline — Offers consultation on ozone protection regulations and requirements under Title VI of the Clean Air Act.
Phone: (800) 296-1996.

Environmental Information at Your Fingertips: EPA Offerings on the Internet

Below is a sampling of some of the publications, resources, and services available on EPA's public access server.

INFORMATION RESOURCES

- Directories and guides
- EPA National Online Library System (OLS) catalog
- Publications catalog
- Bulletin boards

DATA SYSTEMS

- ENVIROFACTS
- STORET
- AIRS

ADMINISTRATIVE INFORMATION

- EPA initiatives; policy and strategy documents
- Handbooks and manuals

LEGISLATION AND REGULATIONS

- Federal Register notices, including environmental impact statements and general/meeting information.

PROGRAM INFORMATION

- World Wide Web access to the following:
  - Environmental Monitoring and Assessment Program (EMAP)
  - Gulf of Mexico Program
  - National Estuaries Program
  - Great Lakes Information Network

RESEARCH AND DEVELOPMENT

- Scientific, research, and technical reports

NEWS AND CURRENT EVENTS

- Press releases
- Speeches
- Journals and newsletters

CONTRACTS, GRANTS, AND FINANCING

- Grants and fellowships
- Requests for proposals (RFPs)
- *Commerce Business Daily* announcements

CONSUMER INFORMATION

- Guides and handbooks
- UV index document
- Energy Star Compliant Product Database

Connecting to EPA on the Internet

EPA has established an access server with connectivity available via the Internet. One's method of connecting to the EPA Public Access Server may be determined by the type of Internet access available. This document describes the various routes. If you are unsure about how to access the Internet, please contact a local Internet provider.

GOPHER [*gopher.epa.gov*]

This is a hierarchical menu system devised by the University of Minnesota. The local provider must have gopher client software. The host name is gopher.epa.gov. The port number, if needed, is 70.

WORLD WIDE WEB, WWW [*http://www.epa.gov/*]

WWW provides hypertext access to EPA information, including information found on the EPA gopher. There are a number of WWW clients, such as Lynx (no graphics) or Mosaic and Netscape (both with graphics) that one can use to access this server.

WIDE AREA INFORMATION SERVER [*wais.epa.gov*]

EPA also provides keyword search capability through the WAIS client on the public access server.

FILE TRANSFER PROTOCOL [*ftp.epa.gov*]

The files that physically reside on the EPA Public Access Server are also available via anonymous file transfer protocol from the system *ftp.epa.gov* in the directory *pub/gopher*. The file *INDEX* in that directory will assist in locating the appropriate subdirectory to obtain the data required.

MAILING LISTS (*Listserver*)

EPA maintains a number of mailing lists via *listserver*. Some of the mailing lists supported by *listserver* are private and subscription access may be limited. For a full listing of lists available to the public, send a message to:

listserver@unixmail.rtpnc.epa.gov

and include in the body of the message the single word *list*. One can subscribe to a list by sending a message to the address provided above, including in the body of the message a line:

subscribe <listname> <FirstName> <LastName>

where *<listname>* is the name of the mailing list, and *<FirstName>* and *<LastName>* are the user's respective names.

For assistance with EPA's Public Access Server, please contact EPA via e-mail at *internet_support@unixmail.rtpnc.epa.gov*. For assistance with finding EPA information, please contact EPA via e-mail at *public-access@epamail.epa.gov*.

How do I access it?

Set up your computer, call the network, and register on-line. Then you're free to use the network whenever you need to. Follow the steps below.

STEP 1 Install a modem and communications software on your computer, if you don't already have them. There are a wide variety to choose from.

STEP 2 Set the following parameters on your communications software:

Data Bits: **8**
Parity: **N**
Stop Bits: **1**
Terminal Emulation: **VT100** or **VT/ANSI**
Duplex: **FULL**

STEP 3 Call the network using your communications software:

(919) 541-5742 for modems up to 14,400 bps

STEP 4 Log on to the system and select <R> from the Unregistered Users main menu and answer the questions on the screen.

```
OAQPS TTN == UNREGISTERED USERS == MAIN MENU
```

This menu provides DESCRIPTIONS of the TTN Bulletin Boards, access to SYSTEM UTILITIES and the option to REGISTER

```
<D> Descriptions of OAQPS TTN Bulletin Board Systems

<S>ystem Utilities

<R>egistration          <==Register for OAQPS TTN

                <G>oodbye
```

After this information is accepted, you will see the Registered Users menu. From here you can access any of the bulletin board systems.

Why use it?

It's easy! You log on, answer questions, and select menu options. ***It's useful!*** You'll discover all kinds of information and tools that you can use in your job. ***It saves time! It saves money! It saves paper! It saves headaches!*** Say goodbye to phone tag. Leave and receive messages anytime the network is up. Exchange information over long distances and at high speed without waiting for the mail to arrive. ***It's worldwide!*** You can communicate with people all over the world—people you know and people you don't know—who are involved in air pollution control. ***It's always available! It's got it all!*** Eighteen different bulletin boards are up and running; more are on the way. ***It's readily accessible!*** Access the latest information whenever you need it.

(919) 541-5742
for modems up to 14,400 bps

Internet Access
TELNET ttnbbs.rtpnc.epa.gov

When can I use it?

24 hours a day, 7 days a week except Monday morning 8-12 EST, when the system is down for maintenance and backup.

Who do I call?

If you need help accessing the system, call the help desk at (919) 541-5384 in Research Triangle Park, North Carolina during business hours, 1-5 EST.

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OAQPS TTN

Office of Air Quality Planning & Standards

Technology Transfer Network

EPA
U S Environmental Protection Agency
Research Triangle Park, NC 1/94

What is OAQPS TTN?

OAQPS, the EPA Office of Air Quality Planning and Standards, provides information and technical support on air pollution control. Its four divisions—Air Quality Management, Emission Standards, Technical Support, and Stationary Source Compliance—provide services to EPA regional offices, state and local agencies, consultants, industry, and the general public. These services include clearinghouses, conferences, reports, manuals, newsletters, support centers, workshops, classroom training, self-instructional courses, and TTN.

TTN, Technology Transfer Network, is a network of electronic bulletin boards developed and operated by OAQPS. The network provides information and technology exchange in different areas of air pollution control, ranging from emission test methods to regulatory air pollution models. The service is free, except for the cost of using the phone.

How does it work?

You access the network from your own computer through the use of a modem and communications software. Your computer connects with a computer at EPA through the phone lines. Once you're on the network, you've got all the tools, technology, and information in any of the bulletin boards available at your fingertips. You can find tools to estimate air pollutant emissions, download computer code for regulatory air models, read a Title summary of the 1990 Clean Air Act, find a course offered by the Air Pollution Training Institute, or request technical support in implementing an air pollution control program. You can transfer files, communicate with other users, leave a question for others to answer, or upload a file for others to use.

Who can use it?

Anyone in the world wanting to exchange information about air pollution, including personnel in EPA, state and local agencies, the private sector, and foreign countries.

What's on the network?

Eighteen bulletin boards are currently available or planned on the network.

EMTIC - Emission Measurement Technical Information Center provides access to emission test methods and testing information for the development and enforcement of national, state, and local emission prevention and control programs.

AMTIC - Ambient Monitoring Technology Information Center provides information and all federal regulations pertaining to ambient monitoring. Information on monitoring methodology, field and laboratory studies are also included.

AIRS - Aerometric Information Retrieval System provides information and documentation on the use and acquisition of air quality and emissions data from the AIRS mainframe computer.

BLIS - RACT/BACT/LAER Information Systems is a compilation of air permits from local, state, and regional air pollution control agencies.

NATICH - National Air Toxics Information Clearinghouse contains information submitted by EPA, and state and local agencies regarding their air toxics programs to facilitate the exchange of information among government agencies.

COMPLI - Stationary Source Compliance provides stationary source and asbestos compliance policy and guidance information.

NSR - New Source Review offers guidance and technical information within the NSR permitting community.

SCRAM - Support Center for Regulatory Air Models provides regulatory air quality model computer code, meteorological data, documentation, as well as modeling guidance.

CHIEF - Clearinghouse for Inventories/Emission Factors contains the latest information on air emission inventories and emission factors. It provides access to tools for estimating emissions of air pollutants and performing air emission inventories for both criteria and toxic pollutants.

CAAA - Clean Air Act Amendments has information on the Clean Air Act amendments of 1990, regulatory requirements, implementation programs, criteria pollutants, and technical analyses.

APTI - Air Pollution Training Institute describes current course offerings on air pollution, including curriculum, schedules, locations, costs, and up-to-date changes.

CTC - Control Technology Center offers free engineering assistance, a hotline, and technical guidance to state and local air pollution control agencies in implementing air pollution control programs.

USC - User Support Center provides support for users by offering information on modems, downloading, communication software and other communications issues. It also provides a public message area for users to share information related to the use of the TTN.

ORIA - Office of Radiation and Indoor Air disseminates information to state and local governments, industry, professional groups, and citizens to promote actions to reduce exposure to harmful levels of radiation and indoor air pollutants.

USCAN - US/Canada Air Quality Agreement provides for the exchange of permitting information between the states bordering the U.S. and Canada.

OMS - Office of Mobile Sources provides information pertaining to mobile source emissions, including regulations, test results, models, and guidance.

AIRISC - Air RISC provides technical assistance and information primarily to state and local air pollution control agencies in areas of health, risk, and exposure assessment for toxic and criteria pollutants.

SBAP - Small Business Assistance Program provides support to state and local small business assistance programs by serving as a communications network to share materials as well as new federal rules that have been developed related to small business issues.

APPENDIX A.

EPA MEMORANDA

APPENDIX A CONTENTS

Subject	Date
White Paper for Streamlined Development of Part 70 Permit Applications	July 10, 1995
White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program	March 5, 1996
Definition of Regulated Air Pollutant for Purposes of Title V	April 26, 1993
CAA Section 112(r) Final Rule on List & Thresholds	January 26, 1994
Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V	October 16, 1995
Consideration of Fugitive Emissions in Major Source Determinations	March 8, 1994
Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)	January 25, 1995

July 10, 1995

MEMORANDUM

SUBJECT: White Paper for Streamlined Development of Part 70 Permit Applications

FROM: Lydia N. Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
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

Please find attached a White Paper on Part 70 permit applications. The paper is designed to streamline and simplify the development of part 70 permit applications. The guidance was developed to respond to the concerns of industry and permitting authorities that preparation of initial permit applications was proving more costly and burdensome than necessary to achieve the goals of the Title V permit program.

The White Paper provides several streamlining improvements. Among them, it allows industry to:

- Provide emissions descriptions, and not emissions estimates, for emissions not regulated at the source, unless such estimates are needed for other purposes such as calculating permit fees;

- Submit checklists, rather than emission descriptions, for insignificant activities based on size/production rate and for risk management plans potentially owed under section 112(r);

- Provide citations for applicable requirements, with qualitative descriptions for each emissions unit, and for prior new source review (NSR) permits;

- Exclude certain trivial and short-term activities from permit applications;

- Provide group treatment for activities subject to certain generally-applicable requirements;

- Certify compliance status without requiring re-consideration of previous applicability decisions;

- Use the Part 70 permit process to identify environmentally significant terms of NSR permits, which should be incorporated into the part 70 permit as federally-enforceable terms; and

- Submit tons per year estimates only where meaningful to do so and not, for example, for section 112(r)-only pollutants; such estimates should be based on generally-available information rather than new studies or testing.

There is an immediate need for the implementation of this guidance. Increasing numbers of sources are becoming subject to the requirement to file a complete part 70 application as more State part 70 programs are approved. I strongly encourage you to work with your States to effect near-term use of the White Paper guidance to streamline the application process.

I want to thank you and your staff for your support in developing this guidance and invite your suggestions on what additional guidance is needed to improve further the initial implementation of title V. If you should have any questions regarding the attached guidance, please contact Michael Trutna at (919) 541-5345 or Jeff Herring at (919) 541-3195.

Attachment

cc: M. Trutna (MD-12)
J. Herring (MD-12)
A. Eckert (2344)
J. Domike (2242A)
A. Schwartz (2344)

WHITE PAPER FOR

STREAMLINED DEVELOPMENT OF PART 70 PERMIT APPLICATIONS

U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

July 10, 1995

Contacts: Michael Trutna (919) 541-5345
Jeff Herring (919) 541-3195

EPA WHITE PAPER FOR

STREAMLINED DEVELOPMENT OF PART 70 PERMIT APPLICATIONS

July 10, 1995

I. INTRODUCTION

The EPA is issuing this guidance to enable States to take immediate steps to reduce the costs of preparing and reviewing initial part 70 permit applications. A perceived lack of clarity in these requirements has led to an unintended escalation in permit application costs. Too often, sources have felt compelled to make conservative assumptions to assure themselves of receiving the "application shield" and avoiding enforcement actions.

Title V of the Clean Air Act (the Act) and its implementing regulations in part 70 set forth minimum requirements for State operating permit programs. In general, this program was not intended by Congress to be the source of new substantive requirements. Rather, operating permits required by title V are meant to accomplish the largely procedural task of identifying and recording existing substantive requirements applicable to regulated sources and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives.

There is an immediate need for this guidance. Most States and those local air pollution control agencies participating in the program (hereinafter referred to as "States") are expected to receive approval by the fall of 1995 of their part 70 operating permit programs to implement title V of the Act. As a result, most sources are in the process of preparing their initial applications, a number of sources have already submitted their initial applications, and a few part 70 permits have already been issued. As programs start to be implemented, concerns are being raised by States and sources as to the expectations for complete permit applications and permit content, the intended scope of the program, and the respective responsibilities of sources, permitting authorities, and the Environmental Protection Agency (EPA) in making implementation decisions in accomplishing permit issuance.

The EPA recognizes that the burden for filing a complete application may vary significantly among States as does the nature of their applicable requirements, status of source compliance, air quality conditions, the type of permit fee schedule, and the size and complexity of their industry. However, EPA believes that the mentioned problems, if unaddressed, would threaten implementation of the title V program, and thus warrant a timely response. The clarifications contained in this policy statement are made under the current part 70 regulations and should typically not require State

rulemaking. The EPA strongly urges States to allow sources to take near term advantage of the flexibility provided by this paper, particularly during the initial implementation phase of the program. It is imperative that the provisions and clarifications of this paper are implemented by States as quickly as possible. Most States need not wait for EPA approval before implementing this guidance, however they are encouraged to consult with the appropriate EPA Regional Office as they adjust implementation of their programs.

Section II of this paper articulates how part 70 allows permitting authorities considerable flexibility to make decisions regarding the completeness of applications and their adequacy to support initial permit issuance. This guidance makes clear that the part 70 rules do not impose unreasonable permit application preparation burdens. In particular, it accomplishes application streamlining by enabling and encouraging the use of:

- Tons per year (tpy) estimates for emissions units and pollutant combinations subject to applicable requirements, and only where meaningful to do so (e.g., not for section 112(r)-only pollutants); such estimates can be based on generally-available information rather than new studies or testing;

- Emissions descriptions, not estimates, for emissions not regulated at the source (unless needed for permit fee calculation, for purposes of establishing a permit shield or a plantwide applicability limit (PAL), or for resolution of applicable requirement coverage or major source status);

- Checklists rather than emission descriptions for insignificant activities based on size/production rate and risk management plans potentially owed under section 112(r);

- Exclusions for certain trivial and short-term activities from permit applications (see Attachment A);

- Group treatment for activities subject to certain generally-applicable requirements;

- Part 70 permit process to reconcile which terms of existing new source review (NSR) permits should be incorporated into the part 70 permit as federally-enforceable terms;

- Citations for applicable requirements with qualitative descriptions for each emissions unit, and for prior NSR permits as they may be revised; and

- Certifications of compliance status which do not require re-evaluation of previous applicability decisions.

This paper affirms EPA's strong commitment to successful program implementation. It is the first in a series of policy statements intended to alleviate known implementation concerns within the framework of the existing part 70 regulations. At the same time, the Agency is developing rulemaking which will afford a new streamlined approach to part 70 permit revisions and provide other relief not possible under the current rule. The policies set out in this paper are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

II. STREAMLINED DEVELOPMENT OF COMPLETE Part 70 APPLICATIONS

A. Current Requirements for Complete Applications (§ 70.5)

Within 12 months of the effective date of a part 70 program, all sources subject to the program must submit complete permit applications. The State may establish, and many have established, a phased schedule for application submittals.

Section 70.5(c)(3) requires a permit application to describe all emissions of pollutants for which a source is major and all emissions of regulated air pollutants. It also authorizes the permitting authority to obtain additional information as needed to verify which requirements are applicable to the source. Applications are also sometimes relied upon to evaluate the fee amount required under the approved permit fee schedule. Emissions information for these purposes does not always need to be detailed or precise. Information for applicability purposes need only be detailed enough to resolve any open questions about which requirements apply. Information for fee purposes only has to be consistent with what is required in applications by the permitting authority to implement its fee schedule. No information is needed when this activity is done outside the part 70 permit application process. Finally, in cases where the applicable requirement will be established or defined in the part 70 permit (e.g., PAL), the part 70 permit application must contain additional information as needed to verify emissions levels and the basis for measuring changes from them.

Section 70.5(c) further requires the application to contain a compliance plan describing the compliance status of the source with respect to all applicable requirements. For sources that will not be in compliance at the time of permit issuance, the application must contain a narrative description of how the source will achieve compliance and a detailed schedule of remedial measures leading to compliance. If the source is in compliance, the application need only contain a statement that the source will continue to comply. For applicable requirements that will take effect during the permit term, the compliance plan may be a statement that the source will meet them. Each application must also include a certification of the source's compliance status with respect to each applicable requirement and a statement of the methods used for determining compliance. Finally, the responsible official must also certify that the

application form and the compliance certification are true, accurate, and complete based on information and belief formed after reasonable inquiry.

Each part 70 program must contain criteria and streamlined procedures for determining when permit applications are complete. Applications for an initial part 70 permit may be considered complete if they have information sufficient to allow the permitting authority to begin processing the application. Unless the permitting authority determines that an application is not complete within 60 days, it will be considered complete by default. If the source submits a timely and complete application the source is shielded against penalties for operating without a permit until its part 70 permit is issued (i.e., the source is granted the "application shield").

Even after applications have been initially determined to be complete, the source must submit any additional information requested by the permitting authority to determine, or evaluate compliance with applicable requirements, within the reasonable timeframe allowed by the permitting authority, to maintain the effect of the application shield. In addition, until release of the draft permit, sources have an on-going responsibility to correct information or submit supplemental information needed to prepare the permit. The timeframe for updates will depend on the permitting authority's schedule for performing the technical review for a given application. The application shield once granted remains in effect until permit issuance even where the source augments its original application submittal in response to requests for more information by the permitting authority.

As mentioned, considerable confusion exists as to what constitutes a complete application under the requirements of part 70. Due to the significant new penalties for knowing violations and the extremely visible forum for processing permit applications, in the absence of clear guidance many sources have made or are making very conservative assumptions regarding their obligations. For example, many in the regulated community feel that a part 70 application can be complete only if it exhaustively catalogues every past and present emitting activity with great precision. Others fear that an application can never be complete since many Act requirements are still evolving, confusion exists as to which requirements are applicable to the source (e.g., what constitutes the State Implementation Plan (SIP)), or no monitoring data exists upon which to base the initial certification of compliance. Other concerns have been raised regarding the choice of emissions estimation techniques and the amount of information needed to support decisions of applicability or exemption, especially those involving the appropriate NSR for previous construction activities.

There is also a general apprehension that EPA will second guess any or all of these judgments during its review period and thereby impede the permit issuance process. Others are concerned that even if complete applications could be filed, they soon

would grow obsolete and require updates before a draft permit could be prepared. In addition, there are concerns that EPA will issue guidance in the future which would establish extensive new requirements concerning the content of a complete application. As a result, worst-case assumptions for various determinations are being made effecting a level of rigidity and rigor as well as cost unintended by the current regulations.

This guidance is intended to correct these misunderstandings. It is intended to give States and sources direction on how States can reduce these burdens while achieving the requirements of title V. As previously stated, EPA believes that these streamlining ideas can and should be implemented under the current part 70 rule for most States. To the extent State forms reflect the current confusion, the Agency wishes to clarify the issues sufficiently for States to revise the portion of their forms implementing title V to be consistent with this guidance.

B. Content of Part 70 Permit Applications

1. Overview

This section describes the level of information which must be contained in a part 70 permit application for it to be considered complete. This guidance clarifies the minimum requirements under the Federal regulations for acceptable part 70 permit applications. It grants a substantial degree of discretion to State permitting agencies. The EPA recognizes that different States may adopt different approaches to these minimum requirements depending on their local needs and circumstances, and that others may elect to go beyond those minimum requirements. However, at least in the initial program phase, EPA urges States to keep part 70 application requirements to the minimum needed to identify applicable requirements. In many instances, a qualitative description of emissions, or sometimes no description at all, will satisfy this standard.

This section specifically clarifies that there are different expectations for information from emissions units depending on whether and how applicable requirements apply. In addition, this section provides several policy clarifications aimed at lowering current application burdens associated with addressing insignificant activities, generic grouping of emissions units and activities, short-term activities, incorporation of current NSR permit conditions, section 112(r) requirements, and Research and Development (R&D) activities.

2. Required Emissions Information And Source Descriptions

Applications should contain information to the extent needed to determine major source status, to verify the applicability of part 70 or applicable requirements, to verify compliance with applicable requirements, and to compute a permit fee (as necessary). Section 70.5(c) requires the application to describe emissions of all regulated air pollutants for each emissions

unit. This would require at least a qualitative description of all significant[5] emissions units, including those not regulated by applicable requirements.

While part 70 does not require detailed emissions inventory building, it does require limited emissions-related information for each pollutant and emissions unit combination which is regulated at the source. Section 70.5(c)(3)(iii) requires for such units emissions rate descriptions in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method. The EPA interprets the tpy estimates to not be required at all where they would serve no useful purpose, where a quantifiable emissions rate is not applicable (e.g., section 112(r) requirements or a work practice standard), or where emissions units are subject to a generic requirement (see Section 4. Generic Grouping of Emissions Units and Activities).

On the other hand, more emissions information would presumptively be required to verify emissions levels and monitoring approaches where PALs or other plantwide emissions limits would be established or defined in part 70 permits. Another situation where additional emissions information might be needed is where the permitting authority would be granting the shield relative to a decision of non-applicability where a source is claiming an exemption based on an emissions level cutoff in a standard that has been issued for the category to which the emissions unit potentially belongs. In such cases additional information to support a determination that a requirement is not applicable may well be required. In addition, for the minority of States that use the part 70 application to determine the first year's permit fee, the application and its description of all regulated air pollutants for presumptive fee calculation must also be adequate for that purpose. Finally, additional emissions information might also be necessary in some cases to resolve a dispute over whether a particular requirement is applicable, or whether a source is major for a particular pollutant (additional information would not be necessary where a source would stipulate to the applicablity of the requirement and/or its major status).

Wherever emissions estimates are needed (unless the source independently decides to more accurately estimate emissions), use of available information should suffice. Any information that is sufficient to support a reasonable belief as to compliance or the applicability or non-applicability of requirements will be acceptable for these purposes. That could include AP-42 emission factors, emissions factors in other EPA documents, or reasonable

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[5]The term "significant" as used in this policy statement does not have the meaning as used in § 52.21 (e.g., 15 tpy PM-10, 40 tpy VOC) but rather means that the emissions unit does not qualify for treatment in the application as an insignificant emissions unit.

engineering projections, as well as test data (see Section C. Quality of Required Information).

Any required tpy estimates are not to be included as federally-enforceable part 70 permit terms, unless otherwise required by an applicable requirement or requested by the source to avoid one. In addition, where tpy descriptions are needed, EPA does not believe that part 70 requires multiple forms of emissions estimates (i.e., actual allowable, and potential emissions). Also, where an emissions estimate is needed for part 70 purposes but is otherwise available (e.g., recent submittal of emissions inventory), then the permitting authority can allow the source to cross-reference this information for part 70 purposes.

Even if tpy estimates are not necessary, part 70 applications must describe all significant emissions units, including any which are not subject to any applicable requirement at any given emissions unit. Such unregulated emissions can include hazardous air pollutants (HAP) listed under section 112(b) of the Act and criteria pollutants that are unregulated for a particular emissions unit. A general description of emissions (i.e., simple identification of the significant pollutant or family of pollutants believed to be emitted by the emissions unit) should suffice. For part 70 purposes, the descriptions of emissions units themselves also can be quite general (i.e., descriptions need not contain information such as UTM coordinates or model and serial numbers for equipment, unless such information is needed to determine the applicability of, or to implement, an applicable requirement). Negative declarations are not required for pollutants that are not emitted by the emissions unit.

Some examples may help to illustrate where only source descriptions of regulated and unregulated emissions are necessary for title V purposes:

- An application for a de-greaser subject to a requirement to have a certain type of lid could describe the relevant applicable requirement and simply identify that it emits volatile organic compounds (VOC) and falls within the scope of the regulation. Quantification of the VOC emissions would not be necessary since the level of emissions is not relevant to the standard.

- An application for a storage tank subject to a requirement to have a certain type of seal, in addition to describing this requirement, would only need to generally identify the types of pollutants emitted, such as VOC and HAP generally.

- An application for a boiler that is grandfathered under the SIP could just identify that PM, SO2, NOx, VOC,

lead, and HAP are emitted and that no applicable requirement is relevant.

3. Insignificant Activities

Section 70.5(c) allows the Administrator to approve as part of a State program a list of insignificant activities which need not be included in permit applications. For activities on the list, applicants may exclude from part 70 permit applications information that is not needed to determine (1) which applicable requirements apply, (2) whether the source is in compliance with applicable requirements, or (3) whether the source is major. If insignificant activities are excluded because they fall below a certain size or production rate, the application must describe any such activities at the source which are included on the list. Even for such insignificant activities, the process for listing them in the application can be fairly simple. The permitting authority could allow the source merely to list in the application the kinds of insignificant activities that are present at the source or check them off from a list of insignificant activities approved in the program.

In addition to the insignificant activity provisions of § 70.5(c), there is flexibility inherent in § 70.5 to tailor the level of information required in the application to be commensurate with the need to determine applicable requirements. The EPA believes this inherent flexibility encompasses the idea that certain activities are clearly trivial (i.e., emissions units and activities without specific applicable requirements and with extremely small emissions) and can be omitted from the application even if they are not included on a list of insignificant activities approved in a State's part 70 program pursuant to § 70.5(c). Attachment A lists examples of activities which EPA believes should normally qualify as trivial in this sense. This list is intended only as a starting point for States to consider. The determination of whether any particular item should be on the State's trivial list may depend on State-specific factors (e.g., whether the activity is subject to the requirements of the SIP). Permitting authorities can also allow, on a case-by-case basis without EPA approval, exemptions similar to those activities identified in Attachment A. Additional exemptions, to the extent that the activities they cover are not clearly trivial, still need to be approved by EPA before being added to State lists of insignificant activities.

4. Generic Grouping of Emissions Units and Activities

Questions have arisen regarding whether emissions units and activities may be treated generically in the application and permit for certain broadly applicable requirements often found in the SIP. Examples of such requirements brought to EPA's attention include requirements that apply identically to all emissions units at a facility (e.g., source-wide opacity limits), general housekeeping requirements, and requirements that apply identical emissions limits to small units (e.g., process weight

requirements). These requirements are sometimes referred to as "generic," because they apply and are enforced in the same manner for all subject units or activities.

These requirements can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and the manner of its enforcement are clear. Even where such generic requirements attach to individual small emissions units or activities, requiring a unit-by-unit or activity-by-activity description of numerous units or activities would generally impose a paperwork burden that would not be compensated by any gain in the practical enforceability of such relatively simple requirements. Therefore, provided the applicant documents the applicability of these requirements and describes the compliance status as required by § 70.5(c), the individual emissions units or activities may be excluded from the application, provided no other requirement applies which would mandate a different result. Similarly, the part 70 permit which must assure compliance with the generic applicable requirement would be written without specificity to applicable emissions units or activities.

In EPA's view, the validity of this approach stems from the nature of these applicable requirements. Accordingly, EPA believes application of this principle for grouping subject activities together generically should not depend on whether those activities qualify as trivial or insignificant. Where the applicable requirement is amenable to this approach, that is, where (1) the class of activities or emissions units subject to the requirement can be unambiguously defined in a generic manner and where (2) effective enforceability of that requirement does not require a specific listing of subject units or activities, permitting authorities may follow this approach regardless of whether subject activities have been listed as trivial or insignificant.

A lengthy list of the types of requirements suitable for this treatment is not possible here because, among other reasons, the examples of which EPA is aware are SIP requirements, and so vary from State to State. Permitting authorities are in the best position to decide which SIP requirements can be treated in this generic fashion. However, permitting authorities may wish to consult with the EPA Regional office in advance to clarify any uncertainties.

5. Short-term Activities

States can treat many short-term activities (e.g., activities occurring infrequently and for a short duration at a part 70 source) subject to an applicable requirement in the same fashion as activities subject to a generic requirement (see previous discussion). Since these activities are not present at the source during preparation of the permit, the most that can be expected is generic treatment in the application. For such

activities, the application and permit would not include emissions unit specificity but instead would contain a general duty to meet all applicable requirements that would apply to any qualifying short-term activity. Short-term activities which are not subject to an applicable requirement should be classified as insignificant activities or would qualify as trivial, and so would not be included in either the part 70 application or permit.

For example, a contractor-run sandblasting operation that is subject to a SIP limit for particulate matter might be operated on an infrequent but recurring basis might qualify for the general duty approach. However, where such activities re-occur with considerable frequency, the permitting authority could require them to be included in the permit. The source would also be obligated to revise the permit if operation of any short-term activity would be in conflict with the permit. If short-term construction activities occur, the part 70 permit application would need to address them only if they are subject to the State's NSR program or are otherwise in conflict with the envisioned part 70 permit.

6. Determination of Applicable SIP Requirements

One of the undisputed challenges facing both State and the regulated community in their efforts to develop complete applications is the determination of the applicable SIP requirements for a part 70 source. In some situations, it may be difficult to identify all the requirements in the SIP which are applicable to a particular source. Applicants, after consultation with the permitting authority, should include in permit applications the State rules which, to the best of their knowledge, are in the SIP. A good faith estimate will be enough to support both a valid compliance certification and a "completeness" determination. Review by the permitting authority, EPA, and the public may provide additional insight into whether any other applicable requirements exist. Any additions should not affect the validity of the original permit application and its eligibility for the application shield or of the accompanying compliance certification. However, the source would have to update its certification to account for any subsequently identified SIP requirements.

At least one State has developed a checklist of its air rules and required the applicant to check off which ones apply and select appropriate codes for rationalizing which ones do not apply. This type of approach should aid the source in providing in the part 70 application its understanding of what applicable requirements apply. Sources in such a State may rely on the checklist. The EPA has also provided a contractor to document the approved SIP for each State. Where an EPA compilation exists, sources may rely on it as well. This process is well underway for most States and permitting authorities and, in many cases, EPA Regional Offices can provide the rule citation of the State rules that have been approved as part of the SIP.

Where a State has adopted a rule that is pending approval by EPA into the SIP, sources (if advised by the permitting authority) could in their applications note that the corresponding State-only requirements will become federally enforceable upon SIP approval. The permitting authority during review of the application would be responsible for determining if the SIP had been approved. If so, then the permitting authority would incorporate the requirements into the federally-enforceable portion of the permit. If the requirements had not been approved into the SIP, the permitting authority could incorporate the pending requirements into the State-only enforceable portion of the permit and note that the requirements would become federally enforceable upon SIP approval. The federally-enforceable portion of the permit would include the existing SIP requirements and condition them to expire upon EPA approval of the SIP revision. Once the SIP revision is approved, the pending permit terms would become federally-enforceable and the permit terms based on the superseded SIP rule would become void.

7. Incorporation of Prior NSR Permit Terms and Conditions

This paper provides guidance to States and sources in devising a means to revise NSR permit terms as appropriate (including classification as a State-only enforceable term) in conjunction with the part 70 permit issuance process. As used here, "new source review" refers to all forms of preconstruction permitting under programs approved into the SIP, including minor and major NSR (e.g., prevention of significant deterioration). Section 70.2 defines any term or condition of a NSR permit issued under a Federal or SIP-approved NSR program as being an applicable requirement. The Agency has concluded, however, that only environmentally significant terms need to be included in part 70 permits. The EPA recognizes that NSR permits contain terms that are obsolete, extraneous, environmentally insignificant, or otherwise not required as part of the SIP or a federally-enforceable NSR program. Such terms, as subsequently explained, need not be incorporated into the part 70 permit to fulfill the purposes of the NSR and title V programs required under the Act.

Minor NSR, in particular, is a program which the State has discretion to mold as necessary to be consistent with the goals of the SIP. Therefore, the permitting authority has very broad discretion in determining the terms of minor NSR. This discretion also exists to a much lesser extent in crafting major NSR permits, since the Act and EPA regulations contain several express requirements for review of major subject sources. Many NSR permit terms written in the past for both minor and major NSR, however, were understandably not written with a view toward careful segregation of terms implementing the Act from State-only requirements.

The EPA believes that the part 70 permit issuance process, involving as it does review by the permitting authority, public, and EPA, presents an excellent opportunity for the permitting

authority to make appropriate revisions to a NSR permit[6] contemporaneously with the issuance of the part 70 permit. The public participation procedures for issuance of a part 70 permit satisfy any procedural requirements of Federal law associated with any NSR permit revision. This parallel processing approach is also an excellent opportunity to minimize the administrative burden associated with such an exercise. By conducting a simultaneous revision to the NSR permit, the permitting authority would be revising the "applicable NSR requirement" for purposes of determining what must be included in the part 70 permit.

There are several factors which bound the available discretion of the permitting authority in deciding whether an NSR permit term is necessary and must be incorporated into the part 70 permit as a federally-enforceable condition. Certainly all NSR terms must be incorporated which are mandatory under EPA's governing regulations (e.g., best available control technology, lowest achievable emissions rate, and other applicable NSR emission limits), or are not mandatory under EPA regulations but are expressly required under the terms of the State's NSR program (e.g., new source performance standards (NSPS) and SIP emission limits, reporting and recordkeeping requirements[7]), or are voluntarily taken by the source to avoid an otherwise applicable requirement (e.g., emission limits used to create a "synthetic minor" source, to "net out" of major NSR, or to create tradeable offsets or other emission reduction credits).

On the other hand, other NSR permit terms and conditions may be patently obsolete and no longer relevant to the operation of the source, such as terms regulating construction activity during the building or modification of the source, where the construction is long completed and the statute of limitations on construction-phase activities has run out. These terms no longer serve a Federal purpose and need not be included as terms of the part 70 permit. Likewise, the State will also need to identify provisions from NSR permits that are not required under Federal law because they are unrelated to the purposes of the NSR program. Examples typically include odor limitations, and limitations on emissions of hazardous air pollutants where such limitations do not reflect a section 112 standard or a SIP

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[6]In many States, an NSR permit is subsequently converted to an operating permit leaving the preconstruction permit void. In other States, there is not a separate construction permit (i.e., single permit system). In either case the phrase "NSR permit" means the current permit in which the NSR applicable requirements reside.

[7]This does not preclude the possibility that certain federally-enforceable limits incorporated into the NSR permit may qualify for generic treatment in the application and the permit as described in Section 4. Generic Grouping of Emissions Units and Activities.

criteria pollutant requirement. Where the State retains such conditions, it would draft the part 70 permit to specify that they are State-only conditions and incorporate them into the part 70 permit as such.

New source review permits are also likely to contain other terms that are not patently obsolete or irrelevant, but that the source and permitting authority agree are nevertheless extraneous, out-dated, or otherwise environmentally insignificant and inappropriate for inclusion in a federally-enforceable permit. Candidates for this exclusion include: (1) information incorporated by reference from an application for a preconstruction permit (to the extent this information is needed to enforce NSR permit terms it should be converted to terms in the part 70 permit), or (2) original terms of a preconstruction permit that has been superseded by other terms related to operation. The propriety of excluding other types of NSR permit terms will need to be evaluated on a case-by-case basis.

The EPA believes that the above parallel processing approach should be effective in most situations to incorporate the federally significant NSR permit terms into the part 70 permit in an efficient and workable way. However, the Agency recognizes that sources and permitting authorities may experience serious burden and timing concerns in accomplishing this process. Therefore, the Agency recommends the following approach, which EPA believes is consistent with the current part 70 rule. Under this approach, sources may in their part 70 permit applications, propose candidate terms from their current NSR permits which they reasonably believe should be considered for revision, deletion, or designation as being enforceable only by the State. Upon submittal of the application, the source would, as a Federal matter, only need to certify compliance status for those remaining NSR terms that it had earmarked for incorporation into the part 70 permit as federally-enforceable terms. The permitting authority, as part of the collaborative part 70 permit issuance process, would review the list of terms recommended in good faith by the source for deletion, revision, or State-only status and would ultimately agree or disagree with the source's proposal. Where the permitting authority decided that terms beyond those proposed as federally enforceable by the source should be retained to implement NSR, the source would be required to re-certify its application with respect to those NSR terms. Failure to do so within the timeframe required by the permitting authority would result in an inaccurate certification and the loss of the application shield.

The resolution of which NSR terms are to be incorporated should ideally be completed by the time of initial part 70 permit issuance. However, the resources available for timely issuance of thousands of part 70 permits may not be sufficient to achieve final resolution of NSR permit terms by permit issuance. Serious concerns have been raised by industry that they should not be subject to premature incorporation of these remaining permit terms into the part 70 permit. They believe that this could

trigger, in many cases, inappropriate part 70 responsibilities (e.g., monitoring, reporting, and recordkeeping) for these terms.

The EPA believes that the current part 70 rule allows permitting authorities to address these concerns as well. Where States wish to extend the time in which to decide whether to revise, delete, or designate as State-only certain terms of current NSR permits, permitting authorities may stipulate in initial part 70 permits that any of those NSR terms so listed in the permit will be reviewed and be deleted, revised, or incorporated as federally-enforceable terms of the part 70 permit on or before a specified deadline (not later than the renewal of the permit). Prior to the deadline, the permitting authority would delete, revise, or make federally enforceable any terms that the State determined warranted such treatment. In the meantime, all other terms would continue to be enforceable under State law as terms of the NSR permit. The permitting authority would incorporate any NSR permit terms that were not deleted or designated as State-only into the federally enforceable portion of the part 70 permit consistent with its approved part 70 permit revision procedures.

Finally the permitting authority may be required to add new terms to the part 70 permit to make any incorporated NSR permit terms enforceable from a practical standpoint, to reflect operation rather than construction, or to meet other part 70 requirements regarding the content of permits. Where a permitting authority has already converted the NSR permit into an existing State operating permit before incorporation into the part 70 permit, the terms of the current permit to operate will presumptively define how NSR permit terms should be incorporated into part 70 permits.

8. Section 112(r) Requirements

For sources otherwise required to obtain a part 70 permit, complete applications merely need to acknowledge (where appropriate) that the on-site storage and processing of section 112(r) chemicals may require the source to submit a section 112(r) risk management plan (RMP) when that requirement becomes applicable. This acknowledgment should be based on the "List of Regulated Substances and Their Thresholds" rule [59 FR 4478 (January 14, 1994)]. Sources are not required to quantify emissions of these substances (unless they are also pollutants listed under section 112(b), and such quantification is needed for fee collection purposes). To resolve issues of applicability, permitting authorities may ask for additional information from certain sources regarding materials stored and transferred and the amounts of chemicals used in certain processes if the source does not indicate its potential applicability with respect to the section 112(r) requirement to file an RMP.

9. Research and Development Activities

The EPA expects that R&D activities will generally be exempt from part 70 and not be involved in the part 70 application process since they are typically independent, non-major sources. The July 1992 part 70 preamble provided general guidance explaining that R & D activities could often be regarded as separate "sources" from any operation with which it were co-located (57 FR 32264 and 32269). The Agency is clarifying and confirming their substantial flexibility under the ongoing rulemaking action to revise part 70.

Some R&D activities can still be subject to part 70 because they are either individually major or a support facility making significant contributions to the product of a collocated major manufacturing facility. In addition, laboratory activities which involve environmental and quality assurance/quality control sample analysis, as well as R&D, present similar permitting problems. Such activities should be eligible for classification as an insignificant activity if there are no applicable SIP requirements. Where applicable SIP requirements do apply, they typically consist of "work practice" (e.g., good laboratory practice) requirements. In this situation, permit applications would need to contain only statements acknowledging the applicability of, and certifying compliance with, these work practice requirements. There is no need for an extensive inventory of chemicals and activities or a detailed description of emissions from the R&D or laboratory activity. Similarly, there would be no need to monitor emissions as a part 70 permit responsibility.

10. Applications from Non-major Sources

Applications for non-major sources subject to part 70 can be less comprehensive than those for major sources. (Note that virtually all States have deferred the applicability of these sources as provided by part 70.) While permits for major sources must include all applicable requirements for all emissions units at the source, § 70.3(c)(2) stipulates that permits for non-major sources have to address only the requirements applicable to emissions units that cause the source to be subject to part 70 (e.g., requirements of sections 111 or 112 of the Act applicable to non-major sources). Other emissions units at non-major sources that do not trigger part 70 applicability, even if they are subject to applicable requirements, do not have to be included in the permit. Since permits for non-major sources do not have to include applicable requirements for emissions units that do not cause the source to be subject to part 70, no information on those units is needed in the permit application.

11. Supporting Information

The great majority of the detailed background information relied upon by the source to prepare the application need not be included in the application for it to be found complete. Even

though certain emissions-related calculations [see § 70.5(c)(3)(viii)] are required, the application size can still be significantly reduced if the permitting authority allows the source to submit examples of calculations performed that illustrate the methodology used. Cost savings can be realized, even though the calculations are still performed, in that the efforts to exhaustively record them in the application can be omitted.

The permitting authority can request additional, more detailed information needed to justify any questionable information or statement contained in the initial application or to write a comprehensive part 70 draft permit. Applications for permits which will establish a requirement uniquely found in the part 70 permit (such as an alternative reasonably available control technology (RACT) limit) would require more supporting information, including any required demonstration.

C. Quality of Required Information

The quality of emissions estimates where they are needed in the part 70 permit application depends on the reasonable availability of the necessary information and on the extent to which they are relied upon by the permitting authority to resolve disputed questions of major source status, applicability of requirements, and/or compliance with applicable requirements. In general, where estimates of emissions are necessary, reasonably-available information may be used.

Generally, the emissions factors contained in EPA's publication AP-42 and other EPA documents may be used to make any necessary calculation of emissions. When an acceptable range of values is defined for a general type of source situation, permitting authorities have considerable discretion to define the appropriate emissions factor value within that range. States are most often better able to make such decisions given their closer proximity to the particular source and its operation.

For purposes of certifying the truth and accuracy of the application, part 70 requires that emissions estimates be expressed in terms consistent with the applicable requirement. This does not mean that only test data is acceptable. Rather, the source may rely on any data using the same units and averaging times as in the test method. New testing is not required and emission factors are presumed to be acceptable for emissions calculations, but more accurate data are preferred if they are readily available. Emissions factors provided by permitting authorities are also allowed where EPA emission factors are missing or State or industry values provide greater accuracy. The applicant may also use other estimation methods (materials balance, source test, or continuous emissions monitoring (CEM) data) when emission estimates produced through the use of emission factors are not appropriate.

In disputed cases, the source may propose the least costly alternative estimation method as long as it will produce acceptable data. Owners and operators may propose use of emissions estimation methods of their choosing to the permitting authority when the resulting data is more accurate than that obtained through the use of emissions factors. Sources are encouraged to contact the permitting authority to discuss the appropriate estimation techniques for a particular circumstance.

Emissions estimates when they are necessary for HAPs often become less precise below certain thresholds. The need for quantification or even estimation should therefore decrease the lower the levels are that are present. For example, VOC estimates based on manufacturer's safety data sheets may indicate that trace amounts of certain HAPs may be present. It is reasonable for the source to report these HAPs as present in trace amounts and not quantify them further or perform expensive testing procedures to collect more accurate data, unless the permitting authority requires otherwise. On the other hand, more precise estimates might be required to defend a position that a VOC source was below emissions cutoffs which subject it to a RACT requirement if the source appeared close to that threshold and it exact emissions level was in doubt.

D. Phase-In of Details for Completeness Determinations

Permitting authorities have considerable flexibility in processing the expected huge volume of permit applications so as to issue initial permits by the required deadline of 3 years after program approval. The § 70.5(c) requirement that a permit application will be complete only if it addresses all the information required in this section must be interpreted in light of the July 1992 preamble (which clarifies the § 70.5(c) requirement for completeness in terms of information needed by the permitting authority to begin processing of an application). Accordingly, the permitting authority may balance the need for information to support timely permit issuance pursuant to the schedule approved in the program against the workload associated with managing and updating as necessary the initially submitted information.

Sources must submit complete applications within 12 months of the effective date (i.e., 30 days after the Federal Register date where EPA approves the program) of a State part 70 program or on whatever schedule for application submittal the State establishes in its approved program for its sources. Permitting authorities may also require application submittals prior to part 70 program approval under State authority, however, a failure to comply with any application deadline earlier than the effective date for the program cannot be considered a violation of the Act.

The current rule allows permitting authorities to implement a two-step process for application completeness, first determining an application to be administratively complete, then

requiring application updates as needed to support draft permit preparation. For example, permitting authorities can initially find an application complete if it defines the applicable requirements, and major/minor source status; certifies compliance status with respect to all applicable requirements (subject to the limitation on this action provided for in Section H. Compliance Certification Issues); and allows the permitting authority to determine the approved permit issuance schedule. The application must also include a certification as to its truth, accuracy, and completeness. In any event, permitting authorities must award the application shield if the source submits a timely application which meets the criteria for completeness in § 70.5(c).

Under this approach, if the source has supplied at least initial information in all the areas required by the permit application form and has certified it appropriately, the permitting authority generally has flexibility to judge the application to be complete enough to begin processing. Accordingly, there should normally be no need for an applicant to submit an application many days in advance in order to build in extra time for an iterative process before the relevant submittal deadline. Sources scheduled for permitting during the first year of the transition schedule must submit any additional information as needed to meet fully the requirements of § 70.5(c) for completeness on a more immediate schedule so that their permit can be issued within that first year.

E. Updates to Initially Complete Applications Due to Change

Sources, to maintain their application's status as complete and therefore preserve the application shield, must respond to requests from the permitting authority for additional information to determine or evaluate compliance with applicable requirements within the reasonable timeframe established by the permitting authority. Where more information is needed in the permit application to continue its processing, permitting authorities may opt to add the additional information to the application themselves or require additional submittals from the source. Sources must promptly certify any additional information submitted by them and certify or revise any relevant information furnished by the permitting authority.

1. Changing Emissions Information

Updates to the initially complete application may be required if emissions information, such as revised emissions factors, changes or additional NSR projects are approved after an application is submitted. The exact response required will depend in part on whether the change affects a source's applicable requirements or its compliance status and when it is discovered. If, after consultation with the permitting authority, it is determined that the applicability status of the source is affected by new emissions information (e.g., the change causes the source to become newly subject to applicable

requirements or may affect its ability to comply with a current NSR permit condition), then the source must promptly submit the new information to the permitting authority, identify any new requirements that apply, and certify any change in the source's compliance status. The issuance of an NSR permit may also add a new applicable requirement that would need to be addressed by the part 70 permit.

If the new information is discovered before the draft permit has been issued, it should be submitted as an addendum to the application, and the draft permit should reflect the new information. The permitting authority and a source can agree on set intervals at which such updating is required in order to structure the process and make it more efficient. If new information is discovered after the draft permit has completed public review but before the proposed permit has been issued, the information should still be submitted, and it is the responsibility of the permitting authority to revise the permit accordingly.

If new information is discovered after the permit has been issued, the resulting change could, at the discretion of the permitting authority, be addressed as a permit revision or as a reopening. If the change would not allow a source to comply with its current permit, the source should initiate a permit revision.

If the information does not affect applicability of, or compliance with, any applicable requirement (e.g., only alters the tpy emissions estimates of regulated pollutants), the information need not be submitted until permit renewal. If the permitting authority requires submittal of new information earlier, however, then it must be submitted according to reasonable deadlines established by the permitting authority.

2. Other Changes

Other changes can also occur that would require the source, even absent a specific request from the permitting authority, to propose an update to an initially complete application. One example is where a new regulatory requirement becomes applicable to the source before the permit is issued.

F. Content Streamlining

1. Cross Referencing

The permitting authority may allow the application to cross-reference previously issued preconstruction and part 70 permits, State or local rules and regulations, State laws, Federal rules and regulations, and other documents that affect the applicable requirements to which the source is subject, provided the referenced materials are currently applicable and available to the public. The accuracy of any description of such cross-referenced documents is subject to the certification requirements of part 70. Such documents must be made available as part of the

public docket on the permit action, unless they are published and/or are readily available (e.g., regulations printed in the Code of Federal Regulations or its State equivalent). In addition, materials that are available elsewhere within the same application can be cross referenced to another section of the application.

In many cases, incorporation of prior information from previously issued permits would be useful. Examples are where a source is updating a part 70 permit by referencing the appropriate terms of a NSR permit or renewing a part 70 permit by referencing the current permit and certifying that no change in source operation or in the applicable requirements has occurred. Even where existing permit conditions are expressed in terminology other than that used in the part 70 permit, cross-referencing can still be possible. Such citations, however, would have to provide sufficient translations of terms to ensure the same effect.

As discussed previously, the permitting authority may determine that certain terms and conditions of existing NSR permits are obsolete, environmentally insignificant, or not germane with respect to their incorporation into part 70 permits. Even when a NSR permit contain such terms, citation can still be used to the extent that the NSR permit provisions appropriate for part 70 permit incorporation are clearly identified through the cross-reference. Also, the NSR permit terms not cited for part 70 incorporation are still in effect as a matter of State law unless and until expressly deleted by the permitting authority. Wherever this citation approach is used, the permitting authority should review all referenced terms to ensure they meet part 70 requirements for enforceability.

The EPA believes that one reason for the excessive length and cost of some permit applications is that sources believe they are required to paraphrase or re-state in their entirety the provisions of the Code of Federal Regulations (CFR) or other repositories of applicable requirements. Citations can be used to streamline how applicable requirements are described in an application and will also facilitate compliance by eliminating the possibility that part 70 permit terms will conflict with underlying substantive requirements. Indeed, many States have taken a citation-based approach as a way of streamlining applications and permits. Thus, a source could cite, rather than repeat in its application, the often extensive details of a particular applicable requirement (including current NSR permit terms), provided that the requirement is readily available and its manner of application to the source is not subject to interpretation. The citation must be clear with respect to limits and other requirements that apply to each subject emissions unit or activity. For example, a storage tank subject to subpart Kb of the NSPS would cite that requirement in its application rather than re-typing the provisions of the CFR.

2. Incorporation of Part 70 Applications by Reference into Permits

The EPA discourages the incorporation of entire applications by reference into permits. The concern with incorporation of the application by reference into the permit on a wholesale basis is the confusion created as to the requirements that apply to the source and the unnecessary limits to operational flexibility that such an incorporation might cause.

If States do incorporate part 70 applications by reference in their entirety into part 70 permits, EPA will consider information in the application to be federally enforceable only to the extent it is needed to make other necessary terms and conditions enforceable from a practical standpoint. Moreover, EPA does not interpret part 70 to require permit revisions for changes in the other aspects of the application.

3. Changing Application Forms

The EPA urges States to re-examine their permit application forms in light of their experience to date and the contents of this guidance. Although the revision of an application form requires a program revision when it impacts any portion of the form which was relied upon by EPA in approving the part 70 program for the State, such a revision can, in most cases, be accomplished through an exchange of letters with the appropriate EPA Regional Office. Changes made to implement this guidance can be effected immediately with implementing documents sent to the appropriate EPA Regional Office. Similarly, a State could notify the Regional Office in writing that the State intends to make completeness determinations based on completion of parts of the existing forms to avoid costly changes in computerized form systems that have already been developed. This is another way that a State can act quickly to streamline application requirements while minimizing its own administrative burdens.

G. Responsible Official

Part 70 provides that a "responsible official" must perform certain important functions. In general, responsible officials must certify the truth, accuracy, and completeness of all applications, forms, reports, and compliance certifications required to be submitted by the operating permits program [§ 70.5(d)]. As an example, a responsible official must certify the truth, accuracy, and completeness of all information submitted as part of a permit application [§ 70.5(a)(2)] and that the source is in compliance "with all applicable requirements" under the Act [§ 70.5(c)(9)(i)]. In addition, part 70 requires responsible officials to certify monitoring reports, which must be submitted every 6 months, and "prompt" reports of any deviations from permit requirements whenever they occur.

The definition of responsible official in § 70.2 identifies specific categories of officials that have the requisite

authority to carry out the duties associated with that role. The definition provides in part that the following corporate officials may be a responsible official:

> . . . a president, secretary, treasurer, or vice president or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit . . . . [emphasis added]

Similarly, for public agencies, the definition indicates the following persons may be responsible officials:

> . . . a principal executive officer or ranking elected official. For purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency . . . . [emphasis added]

Concerns have been raised over the apparent narrowness of the current definition of responsible official. In the August 1994 Federal Register notice, EPA responded to those concerns related to acid rain by proposing a revision to the definition of responsible official to allow a person other than the designated representative to be the responsible official for activities not related to acid rain control at affected sources [59 FR 44527].

To respond to further concerns over the definition of responsible official as it applies to partnerships formed by corporations, or partnerships, or a combination of both, EPA confirms that the same categories of officials who can act as responsible officials for corporations can also act in that capacity for partnerships where they carry out responsibilities substantially similar to those in the same categories in corporations. Partnerships that are essentially unions of corporations and/or partnerships will normally have the same management needs as corporations and so will establish a management structure with categories of officials similar to those of most corporations. In these partnerships, the persons with the knowledge and authority to assure regulatory compliance are the officials of the partnership.

Interpreting the definition of responsible official as limiting the class of persons in partnerships that may be responsible officials to general partners would frustrate the intent of the definition because it would in many instances actually result in designating a person that is not in a position to adequately fulfill the role of a responsible official. For this reason, EPA believes it is reasonable for permitting authorities, in the case of partnerships composed of corporations and/or partnerships, to allow for the same flexibility in

designating a responsible official as would be the case for corporations.

H. Compliance Certification Issues

To make the required compliance certification to accompany the initial part 70 permit applications, sources are required to review current major and minor NSR permits and other permits containing Federal requirements, SIP's and other documents, and other Federal requirements in order to determine applicable requirements for emission units. The EPA and/or the State permitting authority may request additional information concerning a source's emissions as part of the part 70 application process.

Companies are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications. However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any past noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.

ATTACHMENT A

LIST OF ACTIVITIES THAT MAY BE TREATED AS "TRIVIAL"

The following types of activities and emissions units may be presumptively omitted from part 70 permit applications. Certain of these listed activities include qualifying statements intended to exclude many similar activities.

Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.

Air-conditioning units used for human comfort that do not have applicable requirements under title VI of the Act.

Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process.

Non-commercial food preparation.

Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction.

Janitorial services and consumer use of janitorial products.

Internal combustion engines used for landscaping purposes.

Laundry activities, except for dry-cleaning and steam boilers.

Bathroom/toilet vent emissions.

Emergency (backup) electrical generators at residential locations.

Tobacco smoking rooms and areas.

Blacksmith forges.

Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification.[1]

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[1]Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise required.

Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.

Portable electrical generators that can be moved by hand from one location to another[2].

Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.

Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals.[3]

Air compressors and pneumatically operated equipment, including hand tools.

Batteries and battery charging stations, except at battery manufacturing plants.

Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP.[4]

Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

Equipment used to mix and package, soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

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[2] "Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.

[3] Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production level thresholds. Brazing, soldering, welding and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this appendix.

[4] Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

Drop hammers or hydraulic presses for forging or metalworking.

Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.

Vents from continuous emissions monitors and other analyzers.

Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.

Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.

Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOC or HAP.

CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.

Consumer use of paper trimmers/binders.

Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.

Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants.

Laser trimmers using dust collection to prevent fugitive emissions.

Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents.[5]

Routine calibration and maintenance of laboratory equipment or other analytical instruments.

Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

Hydraulic and hydrostatic testing equipment.

Environmental chambers not using hazardous air pollutant (HAP) gasses.

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[5]Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.

Shock chambers.

Humidity chambers.

Solar simulators.

Fugitive emission related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.

Process water filtration systems and demineralizes.

Demineralized water tanks and demineralizer vents.

Boiler water treatment operations, not including cooling towers.

Oxygen scavenging (de-aeration) of water.

Ozone generators.

Fire suppression systems.

Emergency road flares.

Steam vents and safety relief valves.

Steam leaks.

Steam cleaning operations.

Steam sterilizers.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 5 1996

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program

FROM: Lydia N. Wegman, Deputy Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Office of Ecosystem Protection, Region I
Director, Environmental Planning and Protection Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air, Pesticides and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Please find attached White Paper Number 2 for improved implementation of the part 70 operating permits programs. This guidance is intended to enable State and local agencies to take further steps to reduce the complexity and preparation costs of part 70 permit applications and of the part 70 permits themselves. It is intended to supplement, not obviate, the guidance provided in EPA's "White Paper for Streamlined Development of Part 70 Permit Applications" (July 10, 1995). This guidance is consistent with, and furthers the goals of, the presidential initiatives to streamline and reinvent government.

The attached guidance is divided into five sections as follows:

II. A. Streamlining Multiple Applicable Requirements On The Same Emissions Unit(s).

II. B. Development Of Applications And Permits For Outdated SIP Requirements.

II. C. Treatment Of Insignificant Emissions Units.

II. D. Use Of Major Source And Applicable Requirement Stipulation.

II. E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

Streamlining will lead to substantial reductions in permitting burdens and improved part 70 implementation by allowing for the first time multiple applicable emissions limits and work practices expressed in different forms and averaging times to be reduced to a single set of requirements (which can be an alternative to all those requirements being subsumed). It will also allow various monitoring, recordkeeping, and reporting requirements that are not critical to assuring compliance with the streamlined (most stringent) limit to be subsumed in the permit. Any such streamlining must provide that compliance with the streamlined limit would assure compliance with all applicable requirements. In addition, substantial reductions in burden are expected to result from the reduced confusion and cost where locally adopted rules differ from the EPA-approved State implementation plan, the streamlined treatment of insignificant emissions units, the use of stipulations by sources as to which regulations apply, and the cross referencing rather than repetition of certain existing information.

There is an immediate need for the implementation of this guidance. A large number of sources have filed complete part 70 applications, and increasing numbers of these submittals are being processed for permit issuance. I strongly encourage you to work with your States to effect near-term use of this guidance.

Substantial contributions to this White Paper have come from the California Title V Implementation Working Group. I want to thank you and your staff for your support and Region IX in particular for their leadership and considerable efforts in developing and completing this paper. I invite your suggestions on what additional guidance is needed to improve further the initial implementation of title V. If you should have any questions regarding the attached guidance, please contact Michael Trutna at (919) 541-5345, Ginger Vagenas of Region IX at (415) 744-1252, or Roger Powell at (919) 541-5331.

Attachment

cc: M. Trutna (MD-12)
G. Vagenas (Region IX)
R. Powell (MD-12)
A. Schwartz (2344)

WHITE PAPER NUMBER 2 FOR IMPROVED IMPLEMENTATION OF THE PART 70 OPERATING PERMITS PROGRAM

U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

March 5, 1996

Contacts: Michael A. Trutna (919) 541-5345
Ginger Vagenas (415) 744-1252
Roger Powell (919) 541-5331

WHITE PAPER NUMBER 2 FOR IMPROVED IMPLEMENTATION OF THE PART 70 OPERATING PERMITS PROGRAM

March 5, 1996

I. OVERVIEW.

This guidance is intended to enable State and local agencies to take further steps to reduce the complexity and preparation costs of part 70 permit applications and of the part 70 permits themselves and to remove unintended barriers and administrative costs. It is also intended to build on and expand the guidance provided in the Environmental Protection Agency's (EPA) "White Paper for Streamlined Development of Part 70 Permit Applications" (July 10, 1995). White Paper Number 2 supplements, not obviates, the first White Paper. Both papers should be consulted for guidance in improving the implementation of title V of the Clean Air Act (Act) (i.e., part 70 operating permits programs). In particular, White Paper Number 2 is designed to simplify the treatment of overlapping regulatory requirements and insignificant emissions units and to clarify the use of citations and incorporation by reference in the part 70 permitting process. This effort is consistent with and furthers the goals of the Presidential initiatives to streamline and reinvent government.

Substantial contributions to this White Paper have come from the California Title V Implementation Working Group (Working Group). The California Air Resources Board and several California air districts and industries which (together with EPA) make up the Working Group have decades of experience with operating permits. These operating permits programs are generally just one component of air programs that, in many districts, also include local emissions standards (often with associated recordkeeping and reporting requirements), monitoring requirements, inspections, source testing, and new source review (NSR). The EPA has found the insights and recommendations of the Working Group extremely useful in integrating these various requirements using the part 70 permitting process. While much of the guidance contained herein addresses situations arising in California, it is available for use nationwide.

This guidance is divided into five sections and two attachments which are generally summarized as follows (the reader is, however, referred to the applicable main sections of the guidance for more detailed information):

Section II. A. Streamlining Multiple Applicable Requirements On The Same Emissions Unit(s).

The EPA and States have developed different and often overlapping applicable requirements governing the same emissions units to serve the purposes of different air programs. As a result, emissions units at a stationary

source may be subject to several parallel sets of requirements. This can result in some of the requirements being redundant and unnecessary as a practical matter, even though the requirements still legally apply to the source. In cases where compliance with a single set of requirements effectively assures compliance with all requirements, compliance with all elements of each of the overlapping requirements may be unnecessary and could needlessly consume resources. For example, a source could be subject to overlapping standards that result in two or more different emissions limits for the same pollutant and two or more source monitoring requirements for instrumentation, recordkeeping, and reporting.

Today's guidance describes how a source may propose streamlining to distill or "streamline" multiple overlapping requirements into one set that will assure compliance with all requirements. According to the guidance, multiple emissions limits may be streamlined into one limit if that limit is at least as stringent as the most stringent limit. (Limitations that apply to the streamlining of acid rain requirements are described in the main section of this guidance.) If no one requirement is unambiguously more stringent than the others, the applicant may synthesize the conditions of all the applicable requirements into a single new permit term that will assure compliance with all requirements. The streamlined monitoring, recordkeeping, and reporting requirements would generally be those associated with the most stringent emissions limit, providing they would assure compliance to the same extent as any subsumed monitoring. Thus, monitoring, recordkeeping, or reporting to determine compliance with subsumed limits would not be required where the source implements the streamlined approach.

It is important to emphasize that while streamlining may be initiated by either the applicant or the permitting authority, it can only be implemented where the permit applicant consents to its use.

Section II. B. Development Of Applications And Permits For Outdated SIP Requirements.

Historically, long periods of time have been required to review and approve (or disapprove) SIP revisions. The EPA has undertaken a number of reforms to its SIP approval process and is continuing to make significant progress in reducing the amount of time required for taking action on SIP revisions. Despite the progress we have made to date, there are many local rules now pending EPA review and approval for inclusion in the SIP. The gap between the approved SIP and the State rules is of concern because States and local agencies enforce their current rules (which

are usually more stringent than the approved SIP rules) and often, as a practical matter, no longer enforce the superseded and outdated rules in the SIP. On the other hand, EPA only recognizes and can only enforce the SIP-approved rules. This situation can cause confusion and uncertainty because some sources are effectively subject to two different versions of the same rules. Part 70's application, certification, and permit content requirements highlight this longstanding concern.

The most problematic situation arising from the gap between the approved SIP and the State rules is where a technology-forcing rule that has been approved into the SIP is found by the State to be impossible to meet. Under these circumstances, the State would generally adopt a relaxation of this rule and submit it to EPA as a SIP revision. Until EPA is able to take action on the submitted relaxation, sources remain subject to a rule that is impossible to meet.

This section of the guidance largely addresses the problem by authorizing permitting authorities and their sources to base permit applications on State and local rules that have been submitted for SIP approval, rather than on the potentially obsolete approved SIP provisions that they would replace. Such reliance on pending State and local rules is proper when the permitting authority has concluded that the pending rule will probably be approved, or when the source believes it can show that the pending rule is more stringent than the rule it would replace. However, if the pending rule is not more stringent than the rule it would replace, the permit cannot be issued until the pending rule is approved.

Section II. C. Treatment Of Insignificant Emissions Units.

This section provides for the streamlined treatment of generally applicable requirements that apply to "insignificant" emissions units (IEU's). It is intended to address current concerns that resources will be unnecessarily consumed by matters of trivial environmental importance.

The guidance clarifies that the permitting authority has broad discretion to tailor the permit application and permit for small equipment and activities as long as compliance with Federal requirements is assured. For both the permit application and the permit, information on IEU's may be generically grouped and listed without emissions estimates, unless emissions estimates are needed for another purpose such as determining the amount of permit fees that are calculated using total source emissions. This approach would utilize standard permit conditions with minimal or no reference to any specific emissions unit or activity,

provided that the scope of the requirement and its enforcement are clear.

The EPA also believes that for IEU's, a responsible official's initial compliance certification may be based on available information and the latest cycle of required information.

The guidance further provides that the permitting authority can use broad discretion in determining the nature of any required periodic monitoring. The EPA's policy on IEU's is based on the belief that these emissions points are typically associated with inconsequential environmental impacts.

Section II. D. Use Of Major Source And Applicable Requirement Stipulation.

There have been concerns expressed that extensive new emissions data would be needed to verify major source status or the applicability of Federal requirements. White Paper Number 2 clarifies that for applicability purposes, a source familiar to the permitting authority may simply stipulate in its application that it is major or that Federal requirements apply as specified in the application. The paper clarifies that there is no need to prepare and submit extensive information about the source that "proves" it is subject to any requirements that it stipulates are applicable. This does not affect the requirement to provide information that is otherwise required by part 70.

Section II. E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

Concerns have been raised that a source must re-prepare and resubmit information that is readily available, or that the permitting authority already has, to complete part 70 permit applications. In addition, similar concerns have been voiced regarding the large and potentially unnecessary burden of developing permits which repeat rather than reference certain types of regulatory requirements that apply to the source (e.g., monitoring and testing protocols). The guidance clarifies that, in general, the permitting authority may allow information to be cited or cross-referenced in both permits and applications if the information is current and readily available to the permitting agency and to the public. The citations and references must be clear and unambiguous and be enforceable from a practical standpoint. After permits specify which emissions limits apply to identified emissions units, cross-referencing can be authorized for other requirements (e.g., monitoring, recordkeeping, and reporting).

Attachment A provides guidance on using the part 70 permit process to establish alternative test methods, while Attachment B provides example SIP language that could be used by both part 70 and non-part 70 sources to establish alternative requirements without the need for a prior source-specific SIP revision. This guidance should be particularly useful to those seeking greater certainty or to establish alternative test methods to those now approved by EPA. [Note that Sections III. and beyond in Attachment B are currently in draft form.]

Streamlining will lead to substantial reductions in permitting burdens by allowing for the first time multiple applicable emissions limits and work practices expressed in different forms and averaging times to be reduced to a single set of requirements. It will also lower current burden levels by allowing various monitoring, recordkeeping, and reporting requirements that are not critical to assuring compliance with the streamlined (most stringent) limit to be subsumed in the permit. In addition, substantial reductions in burden are expected to result from the reduced confusion and cost where locally adopted rules differ from the EPA-approved SIP, the streamlined treatment of insignificant emissions units, and the use of stipulations and the cross-referencing rather than repetition of certain existing information in part 70 applications and permits.

The EPA believes that the guidance contained herein may be implemented by permitting authorities and sources without revisions to part 70 programs, unless a provision is specifically prohibited by State regulations. In some situations, EPA will be proceeding in parallel to issue clarifying rules. The EPA strongly encourages States to allow sources to take advantage of the streamlining opportunities provided in this guidance. The Agency also suggests the permitting authority develop information about permits issued with successful streamlining and make it available to other similar sources to help avoid repetitive costs.

Sources are advised to consult with their permitting authority to understand how the policies of this White Paper will be implemented. In several situations (particularly those where sources have already filed complete applications), permitting authorities may choose to propose streamlining options and, if mutually agreeable, work with the source to support a draft permit containing a streamlined limit. Where EPA is the permitting authority pursuant to part 71 regulations, the Agency will implement both White Papers to the extent possible and promote similar implementation where EPA delegates responsibility for the part 71 program to a State.

The policies set out in this paper are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

II. ADDITIONAL GUIDANCE ON STREAMLINED DEVELOPMENT OF PART 70 PERMITS AND APPLICATIONS.

A. Streamlining Multiple Applicable Requirements[1] On The Same Emissions Unit(s).[2]

1. Issue.

Can multiple redundant or conflicting requirements (emissions limits, monitoring, recordkeeping, reporting requirements) on the same emissions unit(s) be streamlined into a single set of understandable and enforceable permit conditions? May an applicant propose to minimize or consolidate applicable requirements? May a permitting authority develop such a proposal? How would a permit application with a streamlining proposal satisfy compliance certification requirements?

2. Guidance.

A source, at its option, may propose in its application to streamline multiple applicable requirements into a single set of permit terms and conditions[3]. The overall objective would be to

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[1]Title IV applicable requirements are an exception to this general rule. As set out in § 72.70(b), to the extent that any requirements of part 72 and part 78 are inconsistent with the requirements of part 70, part 72 and part 78 will take precedence and will govern the issuance, denial, revision, reopening, renewal, and appeal of the acid rain portion of an operating permit. The subsequent descriptions of streamlining therefore apply to requirements under parts 72 and 78 only to the extent that such requirements are, at the option of the applicant, used as streamlining requirements because they are the most stringent applicable requirements.

[2]Emissions unit(s) means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant (as defined in section 70.2) or any pollutant listed under section 112(b) of the Act. It is used in this paper to include specifically a grouping of emissions units at a stationary source that shares the same applicable requirement and compliance demonstration method for a given pollutant.

[3]The EPA recognizes that the described streamlining process may not be allowed by all State regulations or be warranted or desired for all applicable requirements. Similarly, partial streamlining (i.e., the streamlining of some, but not all, applicable requirements that apply to the same emissions units) may be most cost effective where difficult comparisons or correlations are needed for streamlining the other remaining applicable requirements. In addition, there is no barrier to more extensive

determine the set of permit terms and conditions that will assure compliance with all applicable requirements for an emissions point or group of emissions points so as to eliminate redundant or conflicting requirements. Otherwise applicable requirements that are subsumed in the streamlined requirements could then be identified in a permit shield. The process would be carried out in conjunction with the submittal and review of a part 70 permit application, as an addendum to an application, or as an application for a significant revision to the part 70 permit (unless EPA in its revisions to part 70 authorizes permitting authorities to use a less extensive permit revision process). The EPA plans to revise part 70 to provide that the compliance certification required with initial application submittals may be based on the proposed streamlined applicable requirement where there is sufficient source compliance information on which to base such a certification.

The permitting authority, at its option, may evaluate multiple applicable requirements for a source category and predetermine an acceptable streamlining approach. Such evaluations should be made readily available to applicants. It is up to the applicant, however, to request in its application that such streamlined requirements be contained in the part 70 permit. Where streamlining would be of mutual interest, the permitting authority and the source could work together during the permit development stage to establish a basis for a streamlined limit prior to the issuance of a draft permit. This cooperative activity must result in a record consistent with this guidance which supports the draft permit containing the streamlined requirement. The approach might be particularly useful where a source has already submitted a complete part 70 permit application and the permitting authority does not want to require the source to submit a formal amendment to its application. Any streamlining demonstration must be promptly submitted to EPA upon its availability and in advance of draft permit issuance unless EPA has previously agreed with the permitting authority not to require it (e.g., the proposed streamlining is of a simple and/or familiar type with no new concerns).

In addition, general permits could be useful to allow the transfer of streamlined requirements from the first source to be covered by them to other similar sources or emissions units. The information development and review conducted as part of streamlining for an individual source can be used by the permitting authority to generate a general permit for similar sources or portions of sources. If a general permit were used, EPA and public review beyond that needed to issue the general permit would not be necessary when sources subsequently applied for the streamlined permit conditions established under the

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streamlining occurring in the future.

general permit. Even where a general permit is not issued, the availability of information obtained from the streamlining of one source may be useful as a model for future streamlining actions involving other similar sources.

Streamlined permit terms should be covered by a permit shield. The permit shield will result in an essential degree of certainty by providing that when the source complies with the streamlined requirement, the source will be considered to be in compliance with all of the applicable requirements subsumed under the streamlined requirement. Where the program does not now provide for a permit shield, the permit containing streamlined requirements should clarify this understanding (See section II.A.3. discussion). Permitting authorities without provisions for permit shields are encouraged to add a permit shield provision at the first opportunity, if they wish to realize fully the benefits of streamlining.

Sources that opt for the streamlining of applicable requirements must demonstrate the adequacy of their proposed streamlined requirements. The following principles should govern their streamlining demonstrations:

a. The most stringent of multiple applicable emissions limitations for a specific regulated air pollutant on a particular emissions unit must be determined taking into account[4,5]:

- o Emissions limitation formats (emissions limits in different forms must be converted to a common format and/or units of measure or a correlation established among different formats prior to comparisons);
- o Effective dates of compliance (to the extent different);
- o Transfer or collection efficiencies (to the extent

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[4]Applicable requirements mean those requirements recognized by EPA, as defined in § 70.2. State and local permitting authorities may modify, eliminate, or streamline "State-only" requirements based on existing State or local law and procedures.

[5]Sources may, in the interest of greater uniformity, opt to expand the scope of an applicable requirement to more emissions units so that the same requirements would apply over a larger section of the plant or its entirety, provided compliance with all applicable requirements is assured. Though a permit may through streamlining expand the scope of applicable requirements to include new emissions units, it may not change the basis on which compliance is determined (e.g., emissions unit by emissions unit, if that is the intent of the applicable requirement).

relevant);

o Averaging times[6]; and

o Test methods prescribed in the applicable requirements[7].

Limitations for specific pollutants can be subsumed by limitations on classes of pollutants providing the applicant can show that the streamlined limit will regulate the same set of pollutants to the same extent as the underlying applicable requirements. For example, a volatile organic compound (VOC) limitation could effectively subsume an organic hazardous air pollutant (HAP) limitation for a constituent such as hexane, provided the VOC limit is at least as stringent as the hexane limitation. Where a single VOC limit subsumes multiple HAP limits, the permit must be written to assure that each of the subsumed limits will not be exceeded. However, a limit for a single or limited number of compounds cannot be used to subsume a limit for a broader class (e.g., a hexane limit for a VOC limit) because this would effectively deregulate any of the class that are not covered by the more limited group.

b. Work practice requirements must be treated as follows:

o Supporting An Emissions Limit. A work practice requirement directly supporting an emissions limit (i.e., applying to the same emissions point(s) covered

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[6]While the streamlining of requirements with varying averaging times is viable under this policy, in no event can requirements which are specifically designed to address a particular health concern (including those with short term averaging times) be subsumed into a requirement which is any less protective.

[7]The predominant case is expected to involve test methods which have been EPA approved either as part of the SIP or as part of a Federal section 111 or 112 standard. If a permitting authority is seeking to base a streamlined limit on an alternative or new test method relative to the ones already approved by EPA for the SIP or a section 111, or section 112 standard, some additional steps are needed to complete the proposed streamlining. As described in more detail in Attachment A, permitting authorities may only implement streamlining which involves alternative or new test methods within the flexibility granted by the SIP and any delegation of authority from EPA (where section 111/112 standards are involved). With respect to SIP requirements, the ability for a permitting authority to authorize use of a different test method depends on the governing language contained in the SIP. Attachment B contains example SIP language which provides a mechanism that can establish an alternative applicable requirement in such cases without the need for source specific SIP revisions.

by the emissions limit) is considered inseparable from the emissions limit for the purposes of streamlining emissions limits. The proposed streamlined emissions limit must include its directly supporting work practices, but need not include any work practice standards that are associated with and directly support the subsumed limit(s);

o Not Supporting An Emissions Limit. Similar work practice requirements which apply to the same emissions or emissions point but which do not directly support an emissions limit may be streamlined (e.g., different leak detection and repair (LDAR[8]) programs). The streamlined work practice requirement may be composed of provisions/elements (e.g., frequency of inspection, recordkeeping) from one or more of the similar work practice requirements, provided that the resulting composite work practice requirement has the same base elements/provisions as the subsumed work practice requirements (e.g. has a frequency of inspection or has recordkeeping if the subsumed work practice requirements have these elements/provisions).

Multiple work practice requirements which apply to different emissions or emissions points cannot be streamlined.

c. Monitoring, reporting, and recordkeeping requirements should not be used to determine the relative stringency of the applicable requirements to which they are applicable.

d. Where the preceding guidance does not allow sufficient streamlining or where it is difficult to determine a single most stringent applicable emissions limit by comparing all

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[8]For LDAR programs, stringency comparisons likely will be based on the aggregate requirements of each LDAR program (screening levels, frequency of inspection, repair periods, etc,) and the resultant overall actual emissions reduction expected from the affected equipment. In cases where a convincing demonstration cannot be made based on existing information or the regulations themselves have not clearly defined the expected emissions reduction, verifying test data may be required. Alternatively, the applicant, the permitting authority, and EPA can work together to devise a method consistent with the principles of EPA's "Protocol For Equipment Leak Emissions Estimation" (EPA-453/R-95-017, November 1995) for determining relative stringency. Where a demonstration of the relative stringency of LDAR programs as applied to the affected equipment is not feasible, sources may modify elements of a particular LDAR program to produce a program that clearly (i.e., without further analysis) assures compliance with the other applicable LDAR programs.

the applicable emissions limits with each other, sources may perform any or all the following activities to justify additional or different streamlining:

- o Construct an alternative or hybrid emissions limit[9] that is at least as stringent as any applicable requirement;

- o Use a previously "State-only" requirement as the streamlined requirement when it is at least as stringent as any applicable Federal requirement it would subsume (this requirement would then become a federally-enforceable condition in the part 70 permit);

- o Use a more accurate and precise test method than the one applicable (see footnote number 7) to eliminate doubt in the stringency determination; or

- o Conduct detailed correlations to prove the relative stringency of each applicable requirement.

e. The monitoring, recordkeeping, and reporting requirements associated with the most stringent emissions requirement are presumed appropriate for use with the streamlined emissions limit, unless reliance on that monitoring would diminish the ability to assure compliance with the streamlined requirements.[10] To evaluate this presumption, compare whether the monitoring proposed would assure compliance with the streamlined limit to the same extent as would the monitoring applicable to each subsumed limit. If not, and if the monitoring associated with the subsumed limit is also relevant to and technically feasible for the streamlined limit, then monitoring associated with a subsumed limit (or other qualifying monitoring[11]) would be

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[9]Title V allows for the establishment of a streamlined requirement, provided that it assures compliance with all applicable requirements it subsumes. However, EPA recognizes that construction of such hybrid or alternative limits can be more complicated than the situation where the streamlined limit is one of the applicable emissions limits. Accordingly, sources and States may need more time to agree on acceptable demonstrations and may wish to defer such streamlining until after issuance of the initial part 70 permit.

[10]Quality assurance requirements pertaining to continuous monitoring systems should be evaluated using the same approach.

[11]The applicant may propose alternative monitoring of equal rigor. Permitting authorities may only implement streamlining which involves alternative or new monitoring methods within the flexibility granted by the SIP and any delegation of authority from

included in the permit.[12] The recordkeeping and reporting associated with the selected monitoring approach may be presumed to be appropriate for use with the streamlined limit[13,14,15].

f. Permitting authorities must include citations to any subsumed requirements in the permit's specification of the origin and authority of permit conditions. In addition, the part 70 permit must include any additional terms and conditions as necessary to assure compliance with the streamlined requirement. In all instances, the proposed permit terms and conditions must be enforceable as a practical matter.

3. Process.

Streamlining may be accomplished through an applicant

EPA (where section 111/112 standards are involved).

[12]Permitting authorities and sources should presume that existing monitoring equipment [such as continuous emissions monitors (CEMs)] required and/or currently employed at the source should be retained. A permitting authority or applicant would have the opportunity to demonstrate that retention of such monitoring equipment is inappropriate, such as when the monitoring equipment is no longer relevant or is technically infeasible (e.g., the source has switched to a closed loop process without emissions or the streamlined limit corresponds to levels too low for a monitor to measure, such as SO_2 emissions from a boiler firing pipeline quality natural gas.)

[13]Where recordkeeping is the means of determining compliance (e.g., in the miscellaneous metal parts and products coating rules, the typical role of monitoring is fulfilled by recordkeeping), the appropriate recordkeeping would be determined in the same manner described for monitoring.

[14]Where a standard includes recordkeeping associated with a limit in addition to recordkeeping linked to a monitoring device (e.g., a coating facility that has recordkeeping requirements pertaining to coating usage, as well as recordkeeping for monitoring associated with an add-on control), both types of recordkeeping must be incorporated into the permit.

[15]The result offers considerable potential to reduce the different reporting burdens associated with different applicable requirements well beyond what was previously available (e.g., synchronizing the required reporting cycles from different applicable requirements to coincide with the most stringent one beginning at the earliest required date). (See also Final General Provisions, § 63.10(a)(5), March 16, 1994.)

proposing to streamline multiple requirements applicable to a source, the permitting authority developing streamlining options for sources or source categories that would be subsequently accepted at the election of permittees, or the applicant working in agreement with the permitting authority after filing an initial complete application. The first six of the following actions wuld be taken by the source or, as appropriate, by the permitting authority. The level of effort to complete these actions will depend on the relative complexity of the streamlining situation. The permitting authority would then perform steps seven and eight.

Step One - Provide a side-by-side comparison of all requirements included in the streamlining proposal that are currently applicable and effective for the specific emissions units of a source[16]. Distinguish between requirements which are emissions and/or work practice standards, and monitoring and compliance demonstration provisions.

Step Two - Determine the most stringent emissions and/or performance standard (or any hybrid or alternative limits as appropriate) consistent with the above streamlining principles and provide the documentation relied upon to make this determination. This process should be repeated for each emissions unit pollutant combination for which the applicant is proposing a streamlined requirement.

Step Three - Propose one set of permit terms and conditions (i.e., the streamlined requirements) to include the most stringent emissions limitations and/or standards, appropriate monitoring and its associated recordkeeping and reporting (see section II.A.2.e.), and such other conditions as are necessary to assure compliance with all applicable requirements.

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[16]A future applicable requirement (e.g., MACT standard newly promulgated under section 112 with a compliance date 3 years in the future) may be determined to be the most stringent applicable requirement if compliance with it would assure compliance with less stringent but currently applicable requirements. In such a case, the source may propose either a streamlined requirement based on immediate compliance with the future applicable requirement or it may opt for a phased approach where the permit would contain two separate time-sensitive requirements. Under the latter approach, one streamlined requirement addressing all currently applicable requirements would be defined to be effective until the future applicable requirement became effective. The permit would also contain a second streamlined requirement which also addressed the future applicable requirement and would become the new streamlined requirement after expiration of the first streamlined requirement.

Step Four - Certify compliance (applicant only) with applicable requirements. The EPA is planning to revise its part 70 regulations to provide that a source may certify compliance with only the proposed streamlined limit. Until this is accomplished, EPA recommends that a source certifying compliance only with the streamlined limit indicate this in an attachment to the certification, so that it is clear that the certification is being made with respect to a set of terms and conditions that the source believes "assure compliance" with all applicable requirements. In any event, a source may only certify compliance with a streamlined limit if there is source compliance data on which to base such a certification. (Such data should be available where the streamlined requirement is itself an applicable requirement and may be available if the streamlined limit is an alternative limit, e.g., a previously State-only emissions limitation). If there is not, then certifications must instead be made relative to each of the applicable requirements judged to be less stringent and must be based on data otherwise required under them to make this point clear.

Step Five - Develop a compliance schedule to implement any new monitoring/compliance approach relevant to the streamlined limit if the source is unable to comply with it upon permit issuance. The recordkeeping, monitoring, and reporting requirements of the applicable requirements being subsumed would continue to apply in the permit (as would the requirement for the source to operate in compliance with each of its emissions limits) until the new streamlined compliance approach becomes operative.

Step Six - Indicate in the application submittal that streamlining of the listed applicable requirements under a permit shield (where available) is being proposed and propose the establishment of a permit shield which would state that compliance with the streamlined limit assures compliance with the listed applicable requirements. All emission and/or performance standards not subsumed by the streamlined requirements must be separately addressed in the part 70 permit application.

Step Seven - Evaluate the adequacy of the proposal and its supporting documentation. The EPA recommends that the permitting authority communicate its findings to the applicant and provide reasonable opportunity for the applicant to accept the findings or propose a resolution of the differences before issuance of a draft permit for public review. Where the permitting authority determines that the streamlining proposal is inadequate, the source, to retain its application shield, must expeditiously resolve any problems identified by the permitting authority or update its prior application based on the individual applicable

requirements previously proposed for streamlining.

Step Eight - Note the use of this process in any required transmittal of a part 70 application, application summary, or revised application to EPA and include the streamlining demonstration and supporting documentation in the public record. When the source is required to provide a copy of the application (or summary) directly to EPA, it must note the proposed use of streamlining. A copy of the streamlining demonstration must be submitted promptly to EPA along with the required copy of the application or application summary (where a summary may be submitted to EPA in lieu of the entire part 70 permit application) unless EPA has previously agreed with the permitting authority not to require it (e.g., the proposed streamlining is of a simple and/or familiar type with no new concerns).

4. Enforcement.

All terms and conditions of a part 70 permit are enforceable by EPA and citizens, unless certain terms are designated as being only State (or locally) enforceable. In addition, a source violating a streamlined emissions limitation in the part 70 permit may be subject to enforcement action for violation of one (or more) of the subsumed applicable emissions limits to the extent that a violation of the subsumed emissions limit(s) is documented.

Upon receiving a part 70 permit, a source implementing the streamlined approach would not be subject to an EPA enforcement action for any failure to meet monitoring, recordkeeping, and reporting requirements that are subsumed within the streamlined requirement and specified under the permit shield. These requirements would no longer be independently enforceable once the permit has been issued, provided that the source attempts in good faith to implement the monitoring, recordkeeping, and reporting requirements specified in the permit.

If subsequently the permitting authority or EPA determines that the permit does not assure compliance with applicable requirements, the permit will be reopened and revised.

5. Discussion.

As sources subject to title V identify all applicable requirements for inclusion in part 70 permit applications, they may find that multiple applicable requirements affect the same pollutant or performance parameter for a particular emissions unit. Likewise, the requirements of federally-enforceable terms and conditions in preconstruction or operating permits may overlap with the requirements of other federally-enforceable rules and regulations.

In these instances, a source may be in compliance with the overall emissions limit of each of the applicable requirements, but be required to comply with a multitude of redundant or conflicting monitoring, reporting, or recordkeeping requirements. For example, a source owner faced with two emissions limits for the same pollutant at a specific emissions point may be required to install separate monitoring instrumentation and submit separate monitoring reports for each, even though one monitor can effectively assure compliance with both emissions limits. Furthermore, the recordkeeping and reporting associated with the unnecessary instrumentation may create an administrative burden for both the facility and the implementing agency without an associated gain in compliance assurance. Prior to title V there has been no federally-enforceable means to resolve this situation.

The EPA encourages permitting authorities to allow use by the permit applicant of the part 70 permit issuance process to streamline multiple applicable requirements to the extent the conditions of this policy can be met. In this way, the part 70 process with its procedural safeguards can be used to focus all concerned parties on providing for compliance with a single set of permit terms that assure compliance with multiple applicable requirements instead of maintaining the costs of multiple sets of controls, monitoring, recordkeeping, and reporting approaches.

The legal basis for streamlining multiple applicable requirements relies on section 504(a), which requires that title V permits contain emissions limits/standards and other terms as needed to assure compliance with applicable requirements. This section notably does not require repetition of all terms and conditions of an applicable requirement when another applicable requirement or part 70 permit condition (i.e., streamlined requirement) could be fashioned to otherwise assure compliance with that applicable requirement.

Section 504(f) lends additional certainty to permit streamlining. It specifically provides that the permitting authority may authorize that compliance with the permit may be deemed to be compliance with the Act provided that the permit includes all applicable requirements. Thus, this section allows the permitting authority to issue a permit containing a shield which protects a source against a claim that it is violating any applicable requirements listed in the permit shield as being subsumed under the streamlined requirement, provided that the source meets the permit terms and conditions that implement the streamlined requirement.

Part 70 is also receptive to the issuance of streamlined permits. It contains parallel language to the statute for emissions limits and for permit shields in §§ 70.6(a)(1) and (f). Although language in § 70.6(a)(3) may appear to restrict streamlining by requiring that all "applicable" monitoring,

recordkeeping, and reporting requirements be placed in the permit, EPA did not intend for these provisions to preclude streamlining. Instead, the Agency believes that the provisions should be consistent with the flexibility for streamlining provided in section 504(a) of the Act and in § 70.6(a)(1). To require otherwise would be anomalous and could frustrate legitimate streamlining efforts. The EPA intends to revise part 70 to reflect this understanding in a future rulemaking.

Streamlining may be limited in cases where an applicable requirement defines specific monitoring requirements as the exclusive means of compliance with an applicable emissions limit. Some interpret these cases to require that only one set of monitoring requirements may be used to determine compliance and that only these requirements may appear in the part 70 permit. The EPA believes instead that section 504(a) supersedes any need for such exclusive monitoring, but nonetheless recommends that States address any potential concerns by adopting certain SIP language in the future. States that choose to revise their existing SIP's to contain authorizing language to overcome any SIP exclusivity problems may use the example language in Attachment B. The EPA believes that similar flexibility should be provided to non-part 70 sources as well. To that end, Attachment B also provides a SIP process (currently in draft form) which would allow similar flexibility for non-part 70 sources.

With respect to NSR, States can process, in parallel with the part 70 permit issuance process, a revision to an existing NSR permit as necessary to resolve any exclusivity concerns within existing NSR permits (See first White Paper).

Currently the implementing regulations for section 112(l) at 40 CFR part 63, subpart E represent an additional constraint on the streamlining of applicable requirements in part 70 permits but only where a State or local agency has accepted a delegation of authority for a particular maximum achievable control technology (MACT) standard by virtue of its commitment to replace the Federal section 112 emissions standard with the State's own standard or program during the part 70 permit issuance process and using the procedures established in the Subpart E rule at § 63.94.. In § 63.94, EPA has specified the criteria for approving such alternative limits and controls to meet an otherwise applicable section 112 requirement. These criteria must be satisfied to ensure that, after a State accepts delegation under § 63.94, any change to the Federal rule results in permit requirements that, among other things:

- Reflect applicability criteria no less stringent than those in the otherwise applicable Federal standards or requirements;

- Require levels of emissions control for each affected

source and emissions point no less stringent than those contained in the Federal standards or requirements;

o Require compliance and enforcement measures for each affected source and emissions point no less stringent than those in the Federal standards or requirements;

o Express levels of control and compliance and enforcement measures in the same form and units of measure as the Federal standard or requirement for § 63.94 program substitutions;

o Assure compliance by each affected source no later than would be required by the Federal standard or requirement.

Thus, when a State or local agency, after receiving § 63.94 delegation, seeks to replace a Federal section 112 emissions standard with requirements arising from its own air toxics standard or program (such as a toxics NSR program) during the part 70 permit issuance process, streamlining must take place by meeting both the criteria of § 63.94 and, except where contradictory, the criteria of this guidance. However, because most States are planning to take straight delegation of Federal emissions standards through subpart E procedures that do not rely on the part 70 permit issuance process, the EPA believes that the subpart E criteria for streamlining applicable requirements will be necessary only in a minority of instances. In the majority of cases, where a State takes delegation of a Federal standard (e.g., through straight delegation), the applicable section 112 requirements could be streamlined by following only the criteria outlined in section A.2., above. Where there are a large number of sources in the same category subject to a MACT standard for which the State has a regulation with equivalent requirements, EPA recommends that the State explore delegation options under § 63.93 to best utilize available resources.

It should be noted that the current subpart E rule may be subject to change as a result of pending litigation. Currently, EPA intends to revise the rule within the parameters of the Court's decision to allow greater flexibility for approving State air toxics standards and programs and to minimize or remove (as appropriate) any constraint that subpart E might impose on the streamlining of applicable requirements in part 70 permits.

Finally, States are strongly encouraged to adopt regulatory provisions allowing permitting authorities to grant the permit shield where they cannot now do so. The permit shield is an effective means to clarify that for applicable requirements listed as subsumed under the streamlined requirements, compliance with the streamlined requirements is deemed to also be compliance with the subsumed requirements. Such an understanding is essential to support and defend the issuance of any permit which provides for the streamlined treatment of multiple applicable

requirements.

If a permit shield is not available, a permittee can still be afforded significant enforcement protection by an explicit agency finding that in its judgment the streamlined permit term indeed provides for full compliance with all the permit limits that is subsumes. In such a case, it is imperative that the permit contain language that lists the applicable requirements being subsumed into the streamlined requirement and states that compliance with the streamlined requirement will be deemed compliance with the listed requirements.

B. Development Of Applications And Permits For Outdated SIP Requirements.

1. Issue.

Can sources file part 70 permit applications on the basis of locally adopted rules pending EPA SIP approval rather than the current SIP requirements? Can sources certify their compliance status on the same basis? Under what circumstances can permitting authorities issue and/or later revise part 70 permits based on such locally adopted rules?

2. Guidance.

a. General. In the first White Paper (section II.B.6.), EPA described a mechanism for simplifying permits where a source is subject to both a State adopted rule that is pending SIP approval and the approved SIP version of that rule. Under that approach, the pending SIP requirements would be incorporated into the State-only portion of the permit and would become federally enforceable upon EPA approval of the SIP. The EPA believes that in most instances, the approach described in the first White Paper adequately addresses the described problem. In some areas (most notably California), however, a sizable backlog of pending SIP revisions exists, and a more far-reaching solution is needed. In today's guidance, therefore, another approach that may be used by EPA and permitting authorities to address this situation is described.

Under this new alternative, the permitting authority may allow that application completeness initially be based on locally adopted rules including those which would relax current (i.e., federally-approved) SIP requirements, provided that (1) the local rule has been submitted to EPA as a SIP revision, and (2) the permitting authority reasonably believes that the local rule (not the current SIP rule) will be the basis for the part 70 permit.

Where the permitting authority or the source has

demonstrated to EPA's satisfaction[17] that the local rule is more stringent and therefore assures compliance with the current SIP for all subject sources, a permit application relying on the local rule may be deemed to be complete and a permit containing the requirements of the local rule rather than the current SIP could be issued for part 70 purposes. That is, consistent with section 504(a) of the Act, the part 70 permit need only contain emissions limits and other terms and conditions (i.e., the more stringent local rule) as needed to assure compliance with the applicable requirement (i.e., the current SIP regulation).

An EPA finding that a submitted rule assures compliance with the approved SIP rule would be a preliminary indication of EPA's belief that a part 70 permit incorporating the terms of the submitted rule would also assure compliance with the approved SIP. Such a finding would not equate to rulemaking, and so would not constitute a revision of the SIP. Therefore, a preliminary finding would not necessarily ensure that the proposed revision would ultimately be approved by EPA, nor would it protect a source from enforcement of the approved SIP.[18] Further, such a finding would not predetermine the outcome of the part 70 permit proceeding. Reviewers would have the ability to evaluate any proposed permit terms or conditions based on pending SIP revisions to determine whether the permit assures compliance with applicable requirements, i.e., the approved SIP. However, EPA believes that a finding of this nature should provide the source and the permitting authority sufficient assurance to proceed with the issuance of a permit that reflects the terms of the submitted local rule rather than the approved SIP. Note that a part 70 permit can be based on a local rule even if the local rule is subsequently disapproved by EPA for SIP purposes (e.g., measure is more stringent than the current SIP but fails to meet SIP requirements for reasonably available control technology and/or to make reasonable further progress), provided: (1) a permit based on the local rule would assure compliance with all applicable requirements (including the approved SIP); and (2) the permit meets all part 70 requirements.

Where the local rule submitted to EPA as a SIP revision

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[17]Where resources allow and the situation calls for it, EPA will go on record with a letter to the permitting authority with a list of rules that it has preliminarily determined will assure compliance with the corresponding SIP approved rule.

[18]If a part 70 permit is issued based upon a pending SIP revision and a permit shield is incorporated in the permit, compliance with the permit would be deemed to be compliance with all applicable requirements. If EPA or the permitting authority later discovers that the permit terms do not assure compliance with all applicable requirements, including the applicable SIP, the permit would have to be reopened and revised.

represents a relaxation of the current SIP requirement (e.g., the local rule would replace an existing technology forcing rule that has been determined to be unachievable in practice), a part 70 source may propose in its permit application to base its permit on the local rule in anticipation of EPA approval. However, a permit based on the local rule could not be issued prior to EPA approval of the rule. This is because a permit based on the relaxed requirements of the local rule could not assure compliance with the more stringent applicable requirement (the approved SIP), as required by section 504 of the Act. Similarly, a part 70 source may be subject to pending SIP revisions that may tighten certain current SIP obligations and relax others for sources in that source category. Here again the permitting authority could allow initial application completeness to be determined relying on the locally adopted rule, but the permit could not be issued without the current SIP requirements unless a source opted to demonstrate that the submitted rule represents, for that specific source, a more stringent requirement than the current SIP. In such a case, the part 70 permit could subsequently be issued for that source on the basis of the local rule, since the permit terms would assure compliance with the approved SIP.

b. Initial actions by EPA and permitting authorities. The EPA is committed to working with States within available resources to assure that the timetable for overall permit issuance is not adversely affected by pending SIP revisions that are not straightforward tightenings. The extent of the problem, however, will vary greatly and, in some cases, may require a specific plan of action between EPA and certain States to expedite SIP processing where the problem is substantial.

In California, where this problem is believed to be most extensive, EPA, the districts, and the California Air Resources Board are in the process of identifying rules in the SIP backlog that are not straightforward tightenings or are relaxations of the currently approved SIP, and will target them for expeditious processing. These rules will be identified within a specified timeframe, generally within 1 year of the effective date of a district's part 70 program. The EPA's Region IX will enter into formal agreements with affected districts and will commit to take action on this "targeted" portion of the SIP backlog before comprehensive permit issuance for sources affected by the backlog would be required, provided this is consistent with the transition plan[19] (as it may be revised). Other EPA Regional Offices will determine the need and resources available for this type of exercise on a case-by-case basis. Region IX will also commit to process expeditiously any similar rules submitted or identified after the period of the formal agreement, although

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[19]Transition plan refers to the 3-year transition strategy for initial part 70 permit issuance described in § 70.4(b)(11).

such processing would not necessarily occur before permits must be issued to sources affected by these rules.

Under Region IX's formal agreements, permitting authorities in the districts need not issue the portion of the part 70 permit covering emissions units affected by the targeted backlog until the rule adoption or change identified in the formal agreement has been acted on by EPA, consistent with the flexibility allowed in the permit issuance transition plan in the permitting authority's program. This should in most cases allow permitting authorities to delay issuing permits to sources to the extent they are affected by the targeted SIP backlog until EPA completes its review action on the pending SIP revisions. Where a transition plan contains a permit issuance schedule that would not allow postponing permit issuance until EPA has acted on the proposed SIP revisions, appropriate changes to the plan can still be made to defer permit issuance until EPA action on the targeted SIP backlog. Such changes would be made following the same approach described for changing application forms in EPA's first White Paper. Within these constraints, a permitting authority may allow for issuance of part 70 permits to the facility in phases such that permits covering those emissions units of the facility affected by the targeted SIP revision are issued later. This result is also consistent with the flexibility contained in § 70.2 (see definition of "Part 70 permit") for the permitting authority to issue multiple permits to one part 70 source if it makes sense to do so. Alternatively, the permitting authority could issue the permit in its entirety based on the current SIP.

The EPA agrees that delays in permit issuance described above will not be cause for an EPA finding of failure by the permitting authority to adequately administer or enforce its part 70 program. Any initial permit issued under a phased approach (i.e., the first phase involves all emissions units unaffected by the SIP backlog targeted by EPA), however, does not shield the source from the enforceability of the requirements excluded in the first phase permit and the obligation to obtain permit conditions covering the excluded emissions units after EPA has acted on the relevant SIP rule backlog.

c. Ongoing actions. The preceding guidance should address the most significant problems associated with the development of part 70 permit applications and the subsequent issuance of part 70 permits that result from the existence of a SIP backlog. The EPA recognizes, however, that areas experiencing the most significant start-up problems with respect to pending SIP rules may well require an ongoing program to manage the potential SIP backlog so as to prevent significant problems of this nature from occurring in the future. In some situations it may be appropriate on a continuing basis for EPA to determine preliminarily whether a submitted rule can be listed as one which would assure compliance with the SIP rule it seeks to replace. This would enable the permitting authority to adjust its

priorities for requiring application updates and for accomplishing permit issuance and revision.

For post application submittal, a source that has filed a complete application may opt to, or be required to, update its current application as a result of changes or pending changes to the SIP. The likelihood of these changes occurring will vary from area to area, and are most likely to affect sources scheduled later in the transition period for initial permit issuance. For example:

- o A local rule previously relied upon may be amended by the State or district.

- o Where a local rule that was previously listed in the formal agreement for expeditious SIP processing (because the rule is not a straightforward strengthening) is disapproved by EPA and the source has relied on that rule in preparing its application, the applicant must file an application update that either demonstrates that compliance with the local rule would assure compliance with the current SIP or demonstrates direct compliance with the current SIP.

- o The adoption and submission to EPA of a more stringent local rule after an applicant has filed its application may present a new and desired opportunity for streamlining. If so, the applicant could opt to file an application update to shift the compliance focus of its current application to the newly adopted local rule, which is pending SIP approval, provided it meets the streamlining criteria described in section II.A. above.

For post permit issuance, sources may also encounter changes to rule situations after initial permit issuance that could lead them to request a permit revision. For example, sources may propose a revision to an issued part 70 permit where a newly adopted local rule would present a desirable streamlining opportunity. The significant permit revision process would be required under the current part 70 to accomplish this change. Note that EPA in its revisions to part 70 may authorize permitting authorities to use a less extensive permit revision process.

To initiate the permit revision, the source must file an application to revise the permit to contain the requirements of local rule instead of the current SIP. This application must meet the previously defined and applicable streamlining criteria.

In response, the permitting authority may subsequently revise the permit based on the local rule in lieu of the current SIP where (1) the rule is listed by the EPA as one where compliance with it would assure compliance with the relevant portions of the current SIP, or (2) the applicant has provided a

source specific demonstration consistent with the streamlining criteria in section II.A.2. that assures this result. A permit shield or similar permit condition should be issued for purposes of certainty. In the absence of a shield or similar permit condition, all aspects of the approved SIP remain enforceable, regardless of the source's compliance status with respect to the permit. The EPA encourages permitting authorities currently without provisions for incorporating permit shields to add them at their first opportunity.

3. Process.

a. Initial Applications. An applicant proposing to submit its part 70 permit application based on a local rule that has been submitted for EPA approval rather than the current SIP would take one of two courses of actions depending on the status of the local rule with EPA and/or the permitting authority:

The first course of action would be appropriate for local rules that (1) have been previously demonstrated to EPA's satisfaction to be at least as stringent as the approved SIP rule so as to assure compliance with it for all subject sources, (2) are otherwise authorized by the permitting authority based on its judgement that such rules will likely be the basis for the part 70 permit (e.g. EPA approval of the rule is imminent), or (3) have been specifically identified in a formal agreement between the permitting authority and EPA for expeditious SIP processing, i.e., the "targeted backlog." Rules listed in a formal agreement will typically involve local rules pending SIP approval which do or could represent full or partial relaxations of the current SIP. Where they choose to use this approach, the permitting authority and EPA will maintain an up-to-date list of local rules which meet any of these criteria.

In preparing initial part 70 permit applications with respect to such local rules the applicant:

Step One - Will indicate in its application that it has opted for this approach, list or cross-reference all requirements from applicable local rules that are eligible for this approach, and refer to the list maintained for this purpose by the permitting authority.

Step Two - Will identify in the permit application the current SIP requirements that the pending SIP revision would replace.

Step Three - May choose to certify compliance with the requirement(s) of the pending local rule in lieu of the current SIP if there is sufficient source compliance data on which to base such a certification. (The EPA is proposing to revise its part 70 regulations to provide that such a certification would meet the requirements of § 70.5(c)(10).)

Step Four - May propose that a permit shield would be in effect upon permit issuance. For those listed local rules which are recognized by EPA as being able to assure compliance with the current SIP rule, the applicant would indicate in the application that a permit shield (or alternatively, other similar language where authority for a permit shield is not available) is being proposed to be incorporated into the permit to confirm this understanding.

The second course of action would be appropriate where the criteria specified above have not been met for a particular rule and an applicant still wants to base its initial part 70 application on such local rules pending SIP approval. In this instance, the process would be essentially the same but the source would have to demonstrate that compliance with the local rule would assure compliance with the current SIP (i.e., make an adequate demonstration consistent with the streamlining criteria described in section II.A.2. above.) and submit it with the permit application in step one. Again, if a part 70 permit application has already been submitted without streamlining but the source agrees to subsequently pursue this option, the permitting authority may work with the source to support streamlining requirements during the permit development process.

b. Initial Permit Issuance Process. After receiving a complete application, the permitting authority must note where the applicant has proposed use of the approaches described above in section II.B.3.a. The note would be placed in the application summary, the application, or the revised application. Copies of the application summary, the application, or the revised application containing such proposals must be submitted promptly to EPA (unless EPA has agreed that the demonstration is of a type not required for advance submittal to EPA).

Where the rule is listed by EPA as one where compliance with it would assure compliance with the relevant portions of the current SIP, or the applicant has provided a source specific demonstration consistent with the streamlining outlined in section II.A.2., the permitting authority may proceed to issue the permit based on the local rule in lieu of the current SIP. A permit shield or similar permit condition which confirms this understanding should be issued for purposes of certainty.

If an applicant chooses to demonstrate that a local rule assures compliance with the applicable SIP for all affected emissions units, the permitting authority will evaluate this proposal and any supporting documentation. Upon completion of this evaluation and prior to releasing a draft permit public notice, the permitting authority is advised to communicate any concerns to the applicant and provide reasonable opportunity for the applicant to accept the findings or propose a resolution of the differences. This may cause some revisions to the application as originally filed.

If the permitting authority or EPA are not satisfied that the local rule (as it applies to the applicant's facility) assures compliance with the applicable SIP rule, the applicant must revise its application to rely on the SIP rule. All required application updates must be submitted on or before the reasonable deadline required by the permitting authority for the source to maintain its application shield.

Consistent with the flexibility allowed in the permit issuance transition plan (as it may be revised), the permitting authority may delay issuance of those portions of a source's permit that are covered by a rule identified in a Region IX type formal agreement, which targets certain SIP rules for expeditious processing, until EPA has acted on the relevant rule(s). Alternatively, comprehensive permits may be issued to such a source prior to the time that EPA has acted on the rule provided that they are based on the current SIP (unless the source has provided an adequate streamlining demonstration).

4. Enforcement.

All terms and conditions of the part 70 permit are enforceable by EPA and by citizens. In addition, a source violating the emissions limitation in the part 70 permit is also subject to enforcement action for violation of the current SIP emissions limits if a violation of this limit can be documented.

Upon issuance of a part 70 permit based on the local rule, the permit terms and conditions implementing the local rule would become federally enforceable. A source would not be subject to an EPA enforcement action for any failure to meet monitoring, recordkeeping, and reporting requirements that are required under the currently approved SIP, if such an understanding has been specified in the permit. These requirements would no longer be independently enforceable, provided the source attempts in good faith to implement the monitoring, recordkeeping, and reporting approach required under the local rule.

If subsequently the permitting authority or EPA determines that the permit does not assure compliance with applicable requirements, the permit must be reopened and revised.

5. Discussion.

Sources in California districts currently are subject to several locally adopted rules which are pending before EPA as proposed SIP revisions. The majority of these local rules have been determined by the districts to be more stringent than the SIP rules that they seek to replace, although some of these rules would relax the current SIP requirements for certain affected sources. In some cases, technology-forcing SIP rules have been found to be infeasible to achieve and, instead of seeking to enforce them, districts have adopted achievable local rules.

Until the local rules are approved into the SIP, sources are subject to both the local rule and the federally-approved version of the rule.

The resulting "outdated SIP" presents special problems to sources which must file a part 70 permit application. In particular, questions arise as to whether sources must complete their applications and certify compliance based on SIP rules which have been superseded by more stringent local rules or by rules that have been relaxed where, for example, the permitting authority has found the current SIP rules to be unachievable. Those problems, while most apparent in their effect on the start-up of a part 70 program, are also ongoing in nature and may create a need to update initially complete permit applications. and to revise issued permits. The EPA believes that these problems with outdated SIP rules are most extensive in California but are not unique to that State.

The EPA strongly believes that implementation of title V to the extent possible should complement, not complicate, the implementation of other titles, including title I, the purpose of which is to assure adoption of programs that will attain and maintain the national ambient air quality standards (NAAQS).[20] Accordingly, the Agency is providing this guidance which will allow sources and permitting authorities to rely on more stringent local rules for permit issuance. The overall strategy for sensitizing the SIP revision process to part 70 concerns presented in this guidance will allow sources to focus more on current air quality requirements in all aspects of part 70 permit application development and update, permit issuance, and permit revision.

The legal basis for recognizing a local rule pending SIP approval in lieu of the current, but less stringent, SIP requirement or for streamlining multiple applicable requirements is identical to the basis for adopting a streamlined emissions limit to replace multiple applicable requirements (see discussion in section II.A.5.). The opportunities for shifting to the more stringent local rule are correspondingly affected by the limitations previously described for the streamlining of applicable requirements.

C. Treatment Of Insignificant Emissions Units.

1. Issue.

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[20]This guidance is designed primarily to alleviate situations where the SIP backlog is both large and longstanding. It is not to be used as a means of anticipating the outcome of pending attainment status redesignations.

How must sources address insignificant emissions units (IEU's) subject to at least one applicable requirement?[21] (Insignificant emissions units are in most cases not directly regulated, and therefore could be left off the permit entirely, were it not for the presence of certain generic or facility-wide requirements that apply to all emissions units.) Must the application and the subsequent permit address each IEU individually and require periodic monitoring where it is not otherwise provided by a generically applicable requirement? On what basis can the initial and future compliance certifications be made for IEU's with generally applicable requirements?

2. Guidance.

The EPA interprets part 70 to allow considerable discretion to the permitting authority in tailoring the amount and quality of information required in permit applications and permits as they relate to IEU's. In general, permit applications must contain sufficient information to support the drafting of the part 70 permit (including certain information for IEU's subject to only generally applicable requirements) and to determine compliance status with all applicable requirements. The EPA, however, interprets part 70 to allow permitting authorities considerable discretion as to the format and content of permits, provided that compliance with all applicable requirements, including those for IEU's, is assured. The Agency believes that the clarifications contained herein afford permitting authorities sufficient flexibility to treat IEU's in a manner commensurate with the environmental benefits that may be gained from their inclusion in the permit.

a. Permit Applications - Information. With regard to part 70 requirements to describe and list IEU's in applications and permits, the permitting authority can use the generic grouping approach for emissions units and activities as discussed in the first White Paper. In addition, the requirement to identify all applicable requirements, as it related to IEU's subject to generally applicable requirements, can normally be addressed by standard or generic permit conditions with minimal or no reference to any specific emissions unit or activity. The EPA has reviewed and acquiesced in the issuance of permits wherein generally applicable requirements are incorporated through the use of tables describing a tiered compliance regime

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[21]An emissions unit can be an IEU for one applicable requirement and not for another. However, such a unit may be eligible for treatment as an IEU only with respect to those pollutants not emitted in significant amounts. The term "significant" as used in this policy statement does not have the meaning as used in § 52.21 (e.g., 15 tpy PM-10, 40 tpy VOC) but rather means that the emissions unit does not qualify for treatment in the application as an insignificant emissions unit.

for these requirements as they affect different sizes of emissions units, including a distinct and more streamlined compliance regime for IEU's. Different generic permit tables may be necessary to cover the situation for a particular type of IEU which is governed by different applicable requirements. Similarly, the first White Paper provides that no emissions estimates need be provided for even regulated emissions streams where it would serve no useful purpose to do so. This should be the case for IEU's where the amount of emissions from a unit is not relevant to determining applicability of, or compliance with, the requirement. Except where the contributions of IEU's would need to be more precisely known to resolve issues of applicability or major source status would the permitting authority need to request emissions estimates for part 70 purposes.

b. Permit Applications - Initial Compliance Certifications. Section 70.5(c)(9) requires complete part 70 applications to contain a certification of compliance with all applicable requirements by a responsible official and a statement of the methods used for determining compliance. This certification must be based on a "reasonable inquiry" by the responsible official. The EPA believes that, for the generally applicable or facility-wide requirements applying to an IEU, reasonable inquiry for initial certifications need only be based on available information, which would include any information required to be generated by the applicable requirement. Regarding the latter, and as is true for any applicable requirement, the initial certification can be based on only the latest cycle of required information (e.g., a source could generally rely on a demonstration of compliance resulting from the most recent required monitoring, notwithstanding the existence of prior monitoring indicating non-compliance at a previous point in time). Where an applicable requirement (generally applicable or otherwise) does not require monitoring, the § 70.5(c)(9) requirement to certify compliance does not itself require that monitoring be done to support a certification. Similarly, there is no need to perform an emissions test to support this compliance certification if none is required by the applicable requirement itself. The EPA interprets § 70.5(c)(9) to allow for a certification of compliance where there is no required monitoring and, despite a "reasonable inquiry" to uncover other existing information, the responsible official has no information to the contrary.

c. Permit Content - Applicable Requirements. With regard to part 70 obligations to include all applicable requirements in the permit, the permitting authority can also use the generic grouping approach for emissions units and activities as discussed in the first White Paper. That is, generally applicable requirements can normally be adequately addressed in the part 70 permit by standard permit conditions with minimal or no reference to any specific emissions unit or activity, provided that the

scope of the requirement and the manner of its enforcement are clear. As noted above, different generic permit provisions may be necessary to cover the situation for which different types of IEU's are governed by different applicable requirements.

d. Permit Content - Monitoring, Recordkeeping, and Reporting. Section 70.6(a)(3)(i) requires all applicable requirements for monitoring and analysis procedures or test methods to be contained in part 70 permits. In addition, where the applicable requirement does not require periodic testing or monitoring (which may consist of recordkeeping designed to serve as monitoring), the permitting authority must prescribe periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. Many of the generically applicable requirements for IEU's have a related test method, but relatively few have a specific regimen of required periodic testing or monitoring.

The EPA believes that the permitting authority in general has broad discretion in determining the nature of any required periodic monitoring. The need for this discretion is particularly evident in the case of generally applicable requirements, which tend to cover IEU's as well as significant emissions units. The requirement to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emissions limitations or other requirements under normal operating conditions. In particular, where the establishment of a regular program of monitoring would not significantly enhance the ability of the permit to assure compliance with the applicable requirement, the permitting authority can provide that the status quo (i.e., no monitoring) will meet § 70.6(a)(3)(i). For IEU's subject to a generally applicable requirement for which the permitting authority believes monitoring is needed, a streamlined approach to periodic monitoring, such as an inspection program to assure the proper operation and maintenance of emissions activities (e.g., valves and flanges), should presumptively be appropriate.

The EPA's policy on IEU monitoring needs is based on its belief that IEU's typically are associated with inconsequential environmental impacts and present little potential for violations of generically applicable requirements, and so may be good candidates for a very streamlined approach to periodic monitoring. As EPA noted in the first White Paper, generally applicable requirements typically reside in the SIP. Permitting authorities therefore not only have the best sense of which requirements qualify as generally applicable, but also where it is appropriate to conclude that periodic monitoring is not

necessary for IEU's subject to these requirements. Where the source ascertains that the permitting authority will not require periodic monitoring for IEU's, it can of course omit a periodic monitoring proposal from the application.

e. Permit Content - Compliance Certifications. Section 70.6(c)(5) requires in part that each permitted source submit no less frequently than annually a certification of its compliance status with all the terms and conditions of the permit. This certification will be based on available information, including monitoring and/or other compliance terms required in the permit. Where a particular emissions unit presents little or no potential for violation of a certain applicable requirement, the "reasonable inquiry" required by title V can be abbreviated. Since it can be determined in the abstract that violation of the requirement by these emissions units is highly improbable, it is reasonable in that instance to limit the search for information to what is readily available. As noted above, EPA believes that an IEU subject to a generally applicable requirement typically presents little or no potential for violation of those requirements. It follows that where, for instance, a permit does not require monitoring for IEU's subject to a generally applicable requirement, and there were no observed, documented, or known instances of non-compliance, an annual certification of compliance is presumptively appropriate. Similarly, where monitoring is required, an annual certification of compliance is also appropriate when no violations are monitored and there were no observed, documented, or known instances of non-compliance.

3. Discussion.

Many of the concerns expressed to EPA regarding the treatment of IEU's in the application and permit arise because IEU's are in most cases not directly regulated, and therefore could be left off the permit entirely, were it not for the presence of certain generic requirements that apply to all emissions units. Though the focus of concern is the applicability of the generic requirements to IEU's, response to these concerns derive primarily from the flexibility that exists in part 70 for dealing with generically applicable requirements. In implementing this flexibility, it may be appropriate for the permitting authority to further distinguish between units that have been designated as insignificant and those that have not. This is so because the relative size of a unit can be an important factor in deciding how to fashion permit terms even for a generically applicable requirement, and State-established IEU's normally define the smallest emissions points. However, EPA notes that, as a matter of part 70 interpretation, whether a unit has been designated as insignificant is not necessarily critical to its treatment in the part 70 permit.

Concerns have been expressed that addressing in part 70 permits the relatively trivial portion of emissions attributable

to IEU's will consume a disproportionate share of the total resources available to issue part 70 permits. That is, according to their understanding of part 70, applicants and permitting authorities will expend greater resources than warranted to determine the specific applicability of requirements to IEU's, how compliance with them will be assured, and the basis on which the certification of compliance status of the source with respect to these IEU's would be made.

The EPA believes that the policy described for addressing generically applicable requirements in applications and permits as they apply to IEU's allows permitting authorities sufficient flexibility to streamline the required administrative effort commensurate to the environmental significance of the varying types of IEU situations. This should prevent the potentially high but unintended level of costs identified by certain sources and permitting authorities from occurring in the future with respect to IEU's.

D. Use Of Major Source And Applicable Requirement Stipulation.

1. Issue.

When an applicant stipulates that it is a major source and subject to specific applicable requirements, how much, if any, additional information related to applicability is necessary in the part 70 permit application?

2. Guidance.

If an applicant stipulates that it is a major source[22] and subject to specific applicable requirements, it need not provide additional information in its application to demonstrate applicability with respect to those requirements, provided that (1) the permitting authority has had previous review experience with a particular source (e.g., issued it a permit), or (2) otherwise has an adequate level of familiarity with the source's operation (e.g., current emissions inventory information). This does not affect the requirement to provide information for other purposes under part 70, such as to support a compliance certification or a request for a permit shield or to describe the emissions activities of its site (see first White Paper).

Accordingly, permitting authorities may allow the applicant to stipulate that:

- Its facility is a major source and subject to part 70 permitting, without providing any additional information for the applicability determination;

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[22]If an applicant stipulates it is a major source, it must list all pollutants for which it is major.

o It is subject to specific applicable requirements, to be included in its part 70 permit, without providing additional information to establish applicability for stipulated requirements; or

o It is subject to only portions of an applicable requirement and state that it is not subject to other portions. Such a stipulation must explicitly state which portion of the rule applies and which does not and an explanation must be provided for this conclusion.

Stipulation by a source to major source status or specific applicable requirements in a part 70 application does not preclude the permitting authority from requesting additional information from the applicant for establishing the applicability of non-stipulated requirements or for verifying a stipulation that certain requirements are not applicable.

3. Discussion.

In general, part 70 requires that applications contain information to the extent needed to determine major source status, to verify the applicability of part 70 or applicable requirements, and to compute a permit fee (as necessary). Section 70.5(c) requires the application to describe emissions of all regulated air pollutants for each emissions unit.

In the first White Paper, EPA indicated a substantial degree of discretion for permitting authorities in this area. It indicates that States may adopt different approaches to meet the minimum program requirements established by the part 70 regulations depending on local needs. In many instances, a qualitative description of emissions will satisfy this standard. However, the applicant may need to provide more detailed information for purposes other than determining applicability and to foster efficiency in the permitting program.

For the purpose of determining the applicability of part 70 or other specific requirements, the information required in an application should be streamlined for the mutual benefit of the applicant and the permitting authority. An applicant that stipulates it is a major source subject to part 70 and to other applicable requirements should not be required to provide any additional information to verify those facts in its part 70 application. However, the applicant must provide sufficient information to allow the permitting authority to impose the applicable requirement. In addition, the resulting application streamlining would not relieve the applicant from submitting, or the permitting authority from reviewing, emissions or other data for part 70 purposes other than determining applicability.

In the case where there is no dispute that a stationary source is subject to part 70, and the applicant stipulates that

the source is a part 70 source in the application, no further information would be required for applicability determination. An example would be a source which is currently operating under a prevention of significant deterioration permit because it is major for PM-10. Both the source and the permitting authority agree that the source is subject to the State's part 70 program.

A source may also streamline the part 70 permit process by stipulating that specific applicable requirements apply. This does not relieve the source of its obligation to identify all applicable requirements or preclude the permitting authority from requesting additional information, including information pertaining to the applicability of requirements not covered in the stipulation. For example, a stationary source may stipulate it is subject to a SIP rule. However, the permitting authority may suspect that the source is also subject to a New Source Performance Standard (NSPS), but may need more information for confirmation. In this case, the permitting authority would request additional information related to the applicability of the NSPS.

Similarly, an applicant may stipulate that it is subject to only portions of an applicable requirement and state that it is not subject to other portions. In such case, the permitting authority may request the applicant to provide additional information to demonstrate that it is not subject to requirements in question. However, if a source requests a permit shield, additional information to demonstrate the non-applicability of these requirements must be submitted.

E. Referencing Of Existing Information In Part 70 Permit Applications And Permits.

1. Issue.

Can an applicant in its permit application, and can the permit itself, reference existing information that is available at the permitting authority? Also, can the permit application and the permit reference applicable requirements through citation rather than by a complete reprinting of the requirements themselves in the part 70 permit application or permit?

2. Guidance.

a. General. Information that would be cited or cross referenced in the permit application and incorporated by reference into the issued permit must first be currently applicable and available to the permitting authority and

public[23]. The information need not be restated in the part 70 application. Standardized citation formats should be established by the permitting authority to facilitate appropriate use of this mechanism.

Referenced documents must also be specifically identified. Descriptive information such as the title or number of the document and the date of the document must be included so that there is no ambiguity as to which version of which document is being referenced. Citations, cross references, and incorporations by reference must be detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced document applies, applications and permits must specify the relevant section of the document. Any information cited, cross referenced, or incorporated by reference must be accompanied by a description or identification of the current activities, requirements, or equipment for which the information is referenced.

b. Permit Applications. The applicant and the permitting authority should work together to determine the extent to which part 70 permit applications may cross reference agency-issued rules, regulations, permits, and published protocols, and existing information generated by the applicant. To facilitate referencing existing information, permitting authorities should identify the general types of information available for this purpose. To the extent that such information exists and is readily available to the public, the following types of information may be cited or cross referenced (as allowed by the permitting authority)[24]:

- o Rules, regulations, and published protocols.
- o Criteria pollutant and HAP emission inventories and supporting calculations.
- o Emission monitoring reports, compliance reports, and source tests.
- o Annual emissions statements.

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[23]Referenced documents must be made available (1) as part of the public docket on the permit action or (2) as information available in publicly accessible files located at the permitting authority, unless they are published or are readily available (e.g., regulations printed in the Code of Federal Regulations or its State equivalent).

[24]Use of cross-referencing does not shift any burden of reproducing or otherwise acquiring information to the permitting authority.

- Process and abatement equipment lists and descriptions.
- Current operating and preconstruction permit terms.
- Permit application materials previously submitted.
- Other materials with the approval of the permitting authority.

Applicants are obligated to correct and supplement inaccurate or incomplete permitting authority records relied upon for the purposes of part 70 permit applications. The responsible official must certify, consistent with § 70.5(d), to the truth, accuracy, and completeness of all information referenced.

c. Permits. Incorporation by reference in permits may be appropriate and useful under several circumstances. Appropriate use of incorporation by reference in permits includes referencing of test method procedures, inspection and maintenance plans, and calculation methods for determining compliance. One of the key objectives Congress hoped to achieve in creating title V, however, was the issuance of comprehensive permits that clarify how sources must comply with applicable requirements. Permitting authorities should therefore balance the streamlining benefits achieved through use of incorporation by reference with the need to issue comprehensive, unambiguous permits useful to all affected parties, including those engaged in field inspections.

Permitting authorities may, after listing all applicable emissions limits for all applicable emissions units in the part 70 permit, provide for referencing the details of those limits, rather than reprinting them in permits to the extent that (1) applicability issues and compliance obligations are clear, and (2) the permit includes any additional terms and conditions sufficient to assure compliance with all applicable requirements[25].

Where the cited applicable requirement provides for different and independent compliance options (e.g., boilers subject to an NSPS promulgated under section 111 may comply by use of low sulfur fuel or through add-on of a control device), the permitting authority generally should require that the part 70 permit contain (or incorporate by reference) the specific option(s) selected by the source. Alternatively, the permit could incorporate by reference the entire applicable requirement

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[25]In the case of a merged permit program, i.e., where a State has merged its NSR and operating permits programs, previous NSR permits expire. This leaves the part 70 permit as the sole repository of the relevant prior terms and conditions of the NSR permit. Under these circumstances, it is not possible to incorporate by reference the expired NSR permits.

provided that (1) such reference is unambiguous in its applicability and requirements, (2) the permit contains obligations to certify compliance and report compliance monitoring data reflecting the chosen control approach, and (3) the permitting authority determines that the relevant purposes of title V would be met through such referencing. The alternative approach would not be allowable if changing from one compliance option to another would trigger the need for a prior review by the permitting authority or EPA (e.g. NSR), unless prior approval is incorporated into the part 70 permit (i.e., advance NSR).

The EPA does not recommend that permitting authorities incorporate into part 70 permits certain other types of information such as the part 70 permit application (see first White Paper).

3. Discussion.

Title V and part 70 do not define when citation or cross-referencing in permit applications would be appropriate, although it obviously would not be allowed where such citations or cross-references would not support subsequent development of the part 70 permit. The EPA's first White Paper states that a permitting authority may streamline part 70 applications by allowing the applicant to cross-reference a variety of documents including permits and Federal, State, and local rules. This guidance further provides that where an emissions estimate is needed for part 70 purposes but is otherwise available (e.g., recent submittal of emissions inventory) the permitting authority can allow the source to cross-reference this information for part 70 purposes.

Permitting authorities' files and databases often include information submitted by the applicant which can also be required by part 70. Development and review of part 70 permit applications could be streamlined if information already held by the permitting authority and the public is referenced or cited in part 70 permit applications rather than restated in its entirety. Similarly, specific citations to regulations that are unambiguous in their applicability and requirements as they apply to a particular source will reduce the burden associated with application development.

Incorporation by reference can be similarly effective in streamlining the content of part 70 permits. The potential benefits of permit development based on an incorporation by reference approach include reduced cost and administrative complexity, and continued compliance flexibility as enforceably allowed by the underlying applicable requirements.

Expectations for referencing with respect to permit content are somewhat better defined than for permit applications. Section 504(a) states that each permit "shall include enforceable

emissions limitations and standards" and "such other conditions as are necessary to assure compliance with the applicable requirements." In addition, section 504(c) requires each permit to "set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." Analogous provisions are contained in §§ 70.6(a)(1) and (3). The EPA interprets these provisions to place limits on the type of information that may be referenced in permits. Although this material may be incorporated into the permit by reference, that may only be done to the extent that its manner of application is clear.

Accordingly, after all applicable emissions limits are placed in the part 70 permit and attached to the emissions unit to which they apply, the permitting authority may allow referencing where it is specific enough to define how the applicable requirement applies and where using this approach assures compliance with all applicable requirements. This approach is a desirable option where the referenced material is unambiguous in how it applies to the permitted facility, and it provides for enforceability from a practical standpoint. On the other hand, it is generally not acceptable to use a combination of referencing certain provisions of an applicable requirement while paraphrasing other provisions of that same applicable requirement. Such a practice, particularly if coupled with a permit shield, could create dual requirements and potential confusion.

Even where the referenced requirement allows for compliance options, the permitting authority may issue the permit with incorporation of the applicable requirement provided that the compliance options of the source are enforceably defined under available control options, appropriate records are kept and reports made, and any required revisions to update the permit with respect to specific performance levels are made. This treatment would be analogous to the flexibility provided to sources through the use of alternative scenarios.

Attachment A

Approval of Alternative Test Methods

The part 63 general provisions, as well as other EPA air regulations implementing sections 111 and 112 of the Act, allow only EPA-approved test methods to implement emissions standards that are established by States to meet Federal requirements. Accordingly, streamlining cannot result in any requirement relying on a State-only test method unless and until EPA, or the permitting authority acting as EPA's delegated agency, approves it as an appropriate method for purposes of complying with that streamlined standard. Currently, all States may be delegated authority to make decisions regarding minor revisions to EPA approved test methods (i.e., minor changes are those that have isolated consequences, affect a single source, and do not affect the stringency of the emissions limitation or standard). The EPA is exploring options for defining where delegation to States is appropriate for reviewing major revisions or new test methods, and for expediting the approval process where the Agency retains final sign-off authority. The EPA recognizes that its approval must generally occur in a timeframe consistent with the time constraints of the part 70 permit issuance process. Until further guidance on this subject is issued, States must obtain EPA approval for all State-only test methods which represent major changes or alternatives to EPA-approved test methods prior to or within the 45-day EPA review period of the proposed permit seeking to streamline requirements.

With respect to SIP requirements, the ability for a permitting authority to authorize use of a different test method depends on the governing language contained in the SIP. For example, some SIP's expressly connect a test method with a particular emissions limit but allow for the use of an equally stringent method. Other SIP's contain a more exclusive linkage between an emissions limit and its required test method (i.e., limit A as measured by test method B). The SIP-approved test method can be changed only through a SIP revision unless the SIP contains provisions for establishing alternative test methods. Attachment B contains example SIP language which provides a mechanism that can establish an alternative applicable requirement in such cases without the need for a source-specific SIP revision.

Permitting authorities may implement streamlining which involves alternative or new test methods within the flexibility granted by the SIP and any delegation of authority granted by EPA (where section 111/112 standards are involved). Permit applications containing a request for a streamlined requirement based on an alternative or new test method must, to be complete, demonstrate that the alternative or new test method would determine compliance at the same or higher stringency as the otherwise applicable method. The EPA expects to receive

expeditiously (i.e., well in advance of any draft permit issuance) those portions of an application dealing with a proposal for streamlining, including any demonstration of test method adequacy. Any required EPA approval of an alternative or new test method need not be obtained as a precondition for filing a complete application, but it must be secured before the final part 70 permit can be issued. As mentioned previously, EPA intends to structure its approval process to comport reasonably with the timelines for part 70 permit issuance.

Attachment B

SIP Provisions For Establishing Alternative Requirements

I. Overview.

States may revise their SIP's to provide for establishing equally stringent alternatives to specific requirements set forth in the SIP without the need for additional source-specific SIP revisions. To allow alternatives to the otherwise-applicable SIP requirements (i.e., emissions limitations, test methods, monitoring, and recordkeeping) the State would include language in SIP's to provide substantive criteria governing the State's exercise of the alternative requirement authority.

II. Example Language For Part 70 Sources To Establish Alternative SIP Requirements.

The following is an example of enabling language that could be used to provide flexibility in the SIP for allowing alternative requirements to be established for part 70 sources.

> In lieu of the requirements imposed pursuant to (reference specific applicable sections(s) or range of sections to be covered), a facility owner may comply with alternative requirements, provided the requirements are established pursuant to the part 70 permit issuance, renewal, or significant permit revision process and are consistent with the streamlining procedures and guidelines set forth in section II.A. of White Paper Number 2.
>
> For sources subject to an approved part 70 program, an alternative requirement is approved for the source by EPA if it is incorporated in an issued part 70 permit to which EPA has not objected. Where the public comment period precedes the EPA review period, any public comments concerning the alternative shall be transmitted to EPA with the proposed permit. If the EPA and public comment periods run concurrently, public comments shall be transmitted to EPA no later than 5 working days after the end of the public comment period. The Director's [permitting authority's] determination of approval is not binding on EPA.
>
> Noncompliance with any provision established by this rule constitutes a violation of this rule.

III. Example Language For Non-Part 70 Sources To Establish Alternative SIP Requirements.

[NOTE: This section is a draft that EPA expects to finalize after appropriate revisions in the near future.]

For sources not subject to an approved part 70 program, the following is an example of enabling language that States may use

to revise/submit SIP rules which would provide flexibility in the SIP for allowing alternative requirements to be established.

A. Procedures.

1. General. In lieu of the requirements imposed pursuant to [reference applicable sections] of this plan, a source owner may comply with an alternative requirement, provided that the Director approves it consistent with the procedures of this paragraph and the criteria of paragraph B.

2. State Review Procedure. The Director may establish an alternative requirement in [a review process defined by the State], provided that the requirements of this paragraph are met for EPA and public review and for notification and access are met. The Director's determination of approval is not binding on EPA.

3. Public Review. The Director shall subject any proposed alternative to adequate public review but may vary the procedures for, and the timing of, public review in light of the environmental significance of the action. For the following types of changes [add list of de minimis actions subject to EPA review], no public review shall be necessary for the approval of the alternative.

4. EPA Review. The Director shall submit any proposed alternative to the Administrator through the appropriate Regional Office, except for the following types of changes [add list of de minimis actions subject to EPA review] no EPA review shall be necessary for the approval of the alternative. Until the specific alternative SIP requirement has completed EPA review, the otherwise applicable SIP provisions will continue to apply.

5. Periodic Notification And Public Access. For all actions taken by the State to establish an alternative requirement, the Director shall provide in a general manner for periodic notification to the public on at least a quarterly basis and for public access to the records regarding established alternatives and relevant supporting documentation.

6. Enforcement. Noncompliance with any alternative established by this provision constitutes a violation of this rule. The EPA and the public may challenge such an alternative limit on the basis that it does not meet the criteria contained in the SIP for establishing such an alternative. In addition, EPA and the public can take enforcement action against a source that fails to comply with an applicable alternative requirement.

B. General Criteria for Evaluating Alternatives.

1. Applicability. The unit(s) to which the requirements apply must be specified in the underlying SIP and in the permit/alternative. If percentage reductions are required from the source, the baseline must be clearly set. The SIP must require the submission of all the information necessary to establish the baseline, and the alternative requirement must achieve the reduction called for in the SIP.

2. Time. The alternative must specify the effective date of the alternative requirement. The underlying requirement of the SIP shall remain in effect until the effective date of the alternative. The alternative must clearly specify any future-effective dates or any compliance schedules that apply to the source under regulations in effect at the time of issuance. For instance, a source may be due to comply with requirements promulgated before the permit/alternative was issued, but which are effective prior to the expiration of the permit/alternative.

3. Effect of changed conditions. If alternative emissions limitations or other requirements are allowed in the underlying SIP, the associated documentation with the changed conditions must clearly demonstrate the alternative requirement is no less stringent than the original SIP requirement.

4. Standard of conduct. The alternative proposal must clearly state what requirements the source must meet. For example, the SIP must specify the emissions limit and what alternatives are acceptable. The alternative proposal must contain limits, averaging times, test methods, etc., that are no less stringent and must address how they are no less stringent than the underlying SIP requirements. The alternative proposal must also show whether it applies on a per-source or per-line basis or is facility-wide.

5. Transfer Efficiency. Any SIP allowing alternative emissions limits and using transfer efficiency in determining compliance must explicitly state the circumstances under which a source may use improved transfer efficiency as a substitute for meeting the SIP limit. The improvement should be demonstrated through testing and an appropriate baseline and test method should be specified.[1] See draft "Guidelines for determining capture efficiencies" for criteria for evaluating alternative capture efficiency requirements.

6. Averaging Time. Both the SIP and the alternative proposal must explicitly contain the averaging time

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[1]Implied improvements noted by the NSPS auto coating transfer efficiency table cannot be accepted at face value.

associated with each emissions limit (e.g., instantaneous, three hour average, daily, monthly, or longer). The time must be sufficient to protect the applicable NAAQS. The alternative proposal must demonstrate that the averaging time and the emissions limit in the alternative are as stringent as those in the original SIP requirements.

7. Monitoring and Recordkeeping. The alternative proposal must state how the source will monitor compliance with the emissions requirement, and detail how the proposed method compares in accuracy, precision, and timeliness to the SIP-approved method. Records and monitoring data must be retained for at least the same period of time as required by the SIP. The method must enable compliance determinations consistent with the averaging time of the emissions standard.

8. Test Methods. The alternative proposal must detail how the proposed test method in association with its particular emissions requirement (or rule) is at least as stringent as the approved method in association with its emissions limit (or rule) considering the accuracy, reliability, reproducibility, and timeliness of each test method taken in combination with its emissions limit. The application or proposal must also address how the change affects measurement sensitivity and representativeness, describe the need for the change, and indicate if the change is needed for unique conditions related only to the source in question. The method must enable a compliance determination consistent with the averaging time of the emissions standard associated with it.

9. Act Requirements. The alternative must meet the all applicable Act requirements (e.g., for reasonably available control technology, 15% VOC reduction, etc.) and must not interfere with any requirements of the Act, including any regarding the SIP's attainment demonstration and requirements for reasonable further progress.

10. Production Level. The emissions are no greater than the SIP allowable emissions at the same production level. Pre-1990 production/operation scenarios cannot be used as part of any demonstration that the alternative requirements are as stringent as those in the SIP. Also, the demonstration must be performed using an EPA-approved test methods.

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

MAY 13 1993
AIR & RADIATION BRANCH

APR 26 1993

MEMORANDUM

SUBJECT: Definition of Regulated Air Pollutant for Purposes of Title V

FROM: Lydia N. Wegman, Deputy Director
Office of Air Quality Planning and Standards (MD-10)

TO: Air Division Director, Regions I-X

In response to requests for guidance on the definition of regulated air pollutant, this memorandum clarifies the approach set forth by the definition in the 40 CFR part 70 regulations and indicates the ways in which the class of regulated air pollutants can change. The attachment provides a compilation of the lists of pollutants which are considered regulated air pollutants for purposes of the operating permits programs under title V of the Clean Air Act (Act). This memorandum also provides guidance on the Environmental Protection Agency's (EPA's) definition of air pollutant, as that term is used in determining major source status pursuant to section 302 of the Act. Finally, this memorandum emphasizes the ability of permitting authorities to designate certain quantities of emissions of regulated air pollutants as "insignificant" with respect to the obligation to report emissions of those pollutants in permit applications. The policies set out in this memorandum and attachment are intended solely as guidance, not final Agency action, and cannot be relied upon to create any rights enforceable by any party.

I. Regulated Air Pollutants

The definition of regulated air pollutant, found at 40 CFR 70.2, is important because it determines which pollutants and emissions units must be addressed in a source's title V permit application. In addition, this definition can affect whether a State's fee revenue is presumed adequate to fund its title V program and, in some cases, the amount of permit fees a source must pay. Each of these roles is discussed below.

Once a source is subject to a title V permitting program, its emissions of all regulated air pollutants (except those which meet the permitting authority's criteria for "insignificant"

emissions) must be described in the permit application along with all emissions of pollutants for which the source is considered major. Similarly, applications must describe all emissions units which emit regulated air pollutants (except those deemed insignificant).

In addition, the concept of regulated air pollutant plays a significant role in the area of permit fees. Most importantly, the definition of regulated air pollutant is the starting point for determining which pollutants must be included when relying on the $25 ton per year (as adjusted by the Consumer Price Index) presumptive minimum program cost as a basis for demonstrating the adequacy of a State's projected fee revenue. As part of this demonstration, the State projects its revenue using a subset of regulated air pollutants [i.e., regulated pollutant (for presumptive fee calculation)].

The population of regulated air pollutants is composed of the following categories of pollutants:

(1) Nitrogen oxides (NO_x) and volatile organic compounds (VOC). The definition of regulated air pollutant specifically includes these two significant precursors to ozone (O_3) formation. This approach is consistent with the Act's treatment of VOC and NO_x pursuant to part D of title I of the Act [these O_3 precursors are combined with the criteria pollutants for purposes of the attached list of regulated pollutants].

(2) Any pollutant for which a national ambient air quality standard has been promulgated [i.e., particulate matter (measured as PM-10: particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers), sulfur dioxide, O_3, nitrogen dioxide, carbon monoxide, and lead].

(3) Any pollutant that is subject to a new source performance standard promulgated under section 111 of the Act [including section 111(d)], which requires new and modified sources to satisfy emissions standards, work practice standards, and other requirements.

(4) Any of the O_3-depleting substances specified as a Class I (primarily chlorofluorocarbons) or Class II substance (hydrochlorofluorocarbons) under title VI of the Act [all of which became regulated pollutants when they became subject to standards and requirements for servicing of motor vehicle air conditioners, and restrictions on the sale of O_3-depleting substances promulgated into 40 CFR part 82 (57 FR 31242, July 14, 1992)].

(5) Any pollutant subject to a standard promulgated under section 112 or other requirements established under section 112 of the Act, including section 112(g)(2), (j), and (r) of the Act.

It is important to note that it is EPA's interpretation that if a pollutant is regulated for one source category by a standard or other requirement, then the pollutant is considered a regulated air pollutant for all source categories. This concept is relevant to all the pollutants listed under items (3), (4), and (5) above, with one exception: those which are the subject of case-by-case maximum achievable control technology (MACT) determinations under section 112(g)(2).

The issue of when a substance regulated under section 112 becomes a regulated air pollutant merits further discussion.

- When a permitting authority makes a case-by-case MACT determination under section 112(g)(2), then the pollutant for which the determination is made is regulated even though EPA has not issued a standard for that pollutant. However, the pollutant is considered regulated only with respect to the individual source for which the MACT determination was made.

- A pollutant will become regulated under section 112(j) of the Act [the MACT hammer] if the Administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the Act. Pursuant to section 112(j), permitting authorities will be required to make case-by-case MACT equivalent determinations. The pollutants become regulated nationwide upon the date this provision takes effect for the pollutant [i.e., 18 months after the missed deadline for the standard, but not prior to 42 months after the enactment of the Act Amendments of 1990 (1990 Amendments)]. Pollutants so regulated are considered regulated air pollutants for all sources that emit the pollutant because the hammer provision is a broadly-applicable surrogate for the promulgation of a MACT standard. This is in contrast to the section 112(g)(2) determinations which are triggered only for the single source subject to the requirement, rather than nationwide.

- The EPA's proposed rule [required by section 112(r)(3)] listing substances which could cause, or may reasonably be anticipated to cause, death, injury, or serious adverse effects to human health or the environment, if accidentally released, was published in the Federal Register on January 19, 1993 (58 FR 5102). All of the listed pollutants will become regulated air pollutants upon promulgation of the list.

The attachment to this memorandum contains a list of pollutants which are regulated, as well as a list of pollutants which are subject to regulation under section 112 in the future, as discussed above. It is also important to note that the attached lists are dynamic and subject to change. For example, the EPA is required to review periodically the statutory list of pollutants in section 112(b) and is authorized to delete and add substances if the scientific data demonstrate that such a change is appropriate.

We have attempted to note the likely near-term changes in the regulations that determine which pollutants are regulated air pollutants, and we will provide updates to this guidance periodically.

The definition of regulated air pollutant does not limit the air pollutants which a State may choose to regulate, nor does it limit the information (such as for permit applications) which a State may require of a source. States are free to adopt more expansive approaches to the regulation of toxic air pollutants than is required by part 70.

II. Definition of Air Pollutant Pursuant to Section 302

Considerable interest has been expressed in a related but distinct area: the definition of air pollutant contained in section 302(g) of the Act. This definition governs which pollutants are to be considered in determining whether a source is "major" pursuant to section 302(j) of the Act. This is important to the operating permits programs because all major sources must obtain a title V permit. Although section 302(g) can be read quite broadly, so as to encompass virtually any substance emitted into the atmosphere, EPA believes that it is more consistent with the intent of Congress to interpret this provision more narrowly. Were this not done, a variety of sources that have no known prospect for future regulation under the Act would nonetheless be classified as major sources and be required to apply for title V permits. Of particular concern would be sources of carbon dioxide or methane.

As a result, EPA is interpreting "air pollutant" for section 302(g) purposes as limited to all pollutants subject to regulation under the Act. This would include, of course, all regulated air pollutants plus others specified by the Act or by EPA rulemaking. This approach results in the inclusion of the pollutants on the list of hazardous air pollutants in section 112(b) that are not otherwise regulated. It should be noted that the 1990 Amendments did include provisions with respect to carbon dioxide (section 821) and methane (section 603), but these requirements involve actions such as reporting and study, not

actual control of emissions. Therefore, these provisions do not preempt EPA's discretion to exclude these pollutants in determining whether a source is major. If the results of the studies required by the 1990 Amendments suggest the need for regulation, these pollutants could be reconsidered at that time for classification as pollutants subject to regulation under the Act.

This approach to interpreting section 302(g) is similar to the traditional practice of the prevention of significant deterioration (PSD) program under part C of title I of the Act [e.g., Implementation of North County Resource Recovery PSD Remand, Gerald Emison, Director, Office of Air Quality Planning and Standards, dated September 22, 1987].

III. De Minimis Thresholds

With the 1990 Amendments, the Act expressly addresses a significantly broader range of pollutants. The EPA believes that this will confer real benefits to air quality management, and that the title V permits program offers the flexibility for efficient implementation of these requirements. This function includes providing information about emissions of these pollutants, through the permit application process, even if the particular pollutant is not currently required to be controlled at the individual source. The EPA also realizes that in many cases these pollutants are emitted in amounts of no significance to air quality management. It would be unduly burdensome to require permit applicants to quantify all emissions of these pollutants, especially given their considerable number and, in some cases, difficulty in quantification.

The part 70 promulgation recognized this fact but gave only very general guidance as to the approvable options for States in developing their part 70 programs. Section 70.5(c) provides that "[T]he Administrator may approve as part of a State program a list of insignificant activities and emissions levels which need not be included in permit applications." The regulation further provides that "[T]he permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information needed to collect any permit fees owed under the fee schedule approved pursuant to section 70.9(b) of this part" [section 70.5(c)(3)(i)].

In order to aid States in establishing their approaches to insignificant activities and emissions levels, EPA intends to review various approaches to setting de minimis thresholds for reporting of emissions of air pollutants and provide advice and guidance as needed on what constitutes acceptable approaches for setting de minimis levels. This effort will include evaluation of data compiled by EPA's national toxics program as well as

review of current practices among some States that have been regulating these pollutants. The EPA recognizes that the particular thresholds selected by individual States can vary based on their air quality management needs and professional judgement. The EPA's further efforts in this area will be offered as technical support and guidance to State and local programs in addressing these challenging issues, not as mandatory program minima. The EPA will work with States to develop part 70 programs that will best meet their program needs.

For further information, please contact Kirt Cox or Candace Carraway of my staff at (919) 541-5399 and (919) 541-3189, respectively.

Attachments

cc: Air Branch Chief, Regions I-X
Operating Permits Program Contacts, Regions I-X
OAQPS Division Directors

Attachment 1

LIST OF REGULATED AIR POLLUTANTS
(As of April 1993)

I. Pollutants for Which National Ambient Air Quality Standards (NAAQS) Have Been Established

lead
sulfur dioxide
nitrogen dioxide
carbon monoxide
particulate matter (PM-10)
ozone, including precursors:
- nitrogen oxides (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, N_2O_5)
- volatile organic compounds (VOC)

As defined in 40 CFR 51.100(s), the term VOC includes any compound of carbon (excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate) which participates in atmospheric photochemical reactions. The EPA has developed a list of substances (which is subject to change) which are excluded from the VOC definition because of their negligible reactivity. The EPA's proposal to exclude perchloroethylene from the definition was published in 57 FR 48490 (October 26, 1992).

The following organic compounds are excluded from the definition of VOC because they have been determined to have negligible photochemical reactivity:

methane
ethane
methylene chloride (dichloromethane)
1,1,1-trichloroethane (methyl chloroform)
1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
chlorodifluoromethane (CFC-22)
trifluoromethane (FC-23)
1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
1,1,1,2-tetrafluoroethane (HFC-134a)
1,1-dichloro 1-fluoroethane (HCFC-141b)
1-chloro 1,1-difluoroethane (HCFC-142b)
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
pentafluoroethane (HFC-125)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1-trifluoroethane (HFC-143a)
1,1-difluoroethane (HFC-152a)

perfluorocarbon compounds which fall into these classes:

(i) Cyclic, branched, or linear, completely fluorinated alkanes;

(ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

II. Pollutants Regulated Under New Source Performance Standards (NSPS)

Criteria pollutants (including VOC and NO_x) plus:

dioxin/furan (defined in 40 CFR 60.53a to mean total tetra through octachlorinated dibenzo-p-dioxins and dibenzofurans)*
fluorides
hydrogen chloride*
hydrogen sulfide (H_2S)
sulfuric acid mist
total reduced sulfur
reduced sulfur compounds
total suspended particulate

* The NSPS for municipal waste combustors (MWC) controls emissions of dioxin/furans and hydrogen chloride gas (40 CFR 60.53a and 60.54a) as surrogates for controlling emissions of organic compounds and acid gases which are emitted in the exhaust gases from MWC units. Thus, the indicated dioxin/furan compounds and hydrogen chloride are regulated pollutants.

Note that the EPA has drafted a proposed revision to the NSPS for MWC's which will regulate substances like cadmium which are not currently regulated air pollutants. As this revised NSPS and other standards are developed, there may be additions to the list of regulated pollutants.

III. Class I and Class II Substances Under Title VI

Class I Substances:

carbon tetrachloride
chlorofluorocarbon-11 (CFC-11)
chlorofluorocarbon-12 (CFC-12)
chlorofluorocarbon-13 (CFC-13)
chlorofluorocarbon-111 (CFC-111)
chlorofluorocarbon-112 (CFC-112)
chlorofluorocarbon-113 (CFC-113)
chlorofluorocarbon-114 (CFC-114)
chlorofluorocarbon-115 (CFC-115)
chlorofluorocarbon-211 (CFC-211)
chlorofluorocarbon-212 (CFC-212)
chlorofluorocarbon-213 (CFC-213)
chlorofluorocarbon-214 (CFC-214)
chlorofluorocarbon-215 (CFC-215)
chlorofluorocarbon-216 (CFC-216)
chlorofluorocarbon-217 (CFC-217)
halon-1211
halon-1301
halon-2402
methyl chloroform

Class II Substances:

hydrochlorofluorocarbon-21 (HCFC-21)
hydrochlorofluorocarbon-22 (HCFC-22)
hydrochlorofluorocarbon-31 (HCFC-31)
hydrochlorofluorocarbon-121 (HCFC-121)
hydrochlorofluorocarbon-122 (HCFC-122)
hydrochlorofluorocarbon-123 (HCFC-123)
hydrochlorofluorocarbon-124 (HCFC-124)
hydrochlorofluorocarbon-131 (HCFC-131)
hydrochlorofluorocarbon-132 (HCFC-132)
hydrochlorofluorocarbon-133 (HCFC-133)
hydrochlorofluorocarbon-141 (HCFC-141)
hydrochlorofluorocarbon-142 (HCFC-142)
hydrochlorofluorocarbon-221 (HCFC-221)
hydrochlorofluorocarbon-222 (HCFC-222)
hydrochlorofluorocarbon-223 (HCFC-223)
hydrochlorofluorocarbon-224 (HCFC-224)
hydrochlorofluorocarbon-225 (HCFC-225)
hydrochlorofluorocarbon-226 (HCFC-226)
hydrochlorofluorocarbon-231 (HCFC-231)
hydrochlorofluorocarbon-232 (HCFC-232)
hydrochlorofluorocarbon-233 (HCFC-233)
hydrochlorofluorocarbon-234 (HCFC-234)
hydrochlorofluorocarbon-235 (HCFC-235)
hydrochlorofluorocarbon-241 (HCFC-241)
hydrochlorofluorocarbon-242 (HCFC-242)

hydrochlorofluorocarbon-243 (HCFC-243)
hydrochlorofluorocarbon-244 (HCFC-244)
hydrochlorofluorocarbon-251 (HCFC-251)
hydrochlorofluorocarbon-252 (HCFC-252)
hydrochlorofluorocarbon-253 (HCFC-253)
hydrochlorofluorocarbon-261 (HCFC-261)
hydrochlorofluorocarbon-262 (HCFC-262)
hydrochlorofluorocarbon-271 (HCFC-271)

IV. Pollutants Regulated Under § 112

Pollutants for which national emission standards for hazardous air pollutants (NESHAP) have been established:

arsenic
asbestos
beryllium
benzene
mercury
radionuclides
vinyl chloride

Attachment 2

POLLUTANTS SUBJECT TO REGULATION UNDER § 112

I. Pollutants listed in § 112(b):

The 189 pollutants listed in § 112(b) are not considered regulated air pollutants until addressed in a requirement that the pollutant be controlled by a source. None of the listed pollutants meets the definition except asbestos, benzene, and vinyl chloride (for which NESHAP have been established); and hydrogen chloride (gas), dibenzofurans, and 2,3,7,8-Tetrachlorodibenzo-p-dioxin (regulated under the municipal waste combustor NSPS). Most of the listed pollutants will become regulated when EPA promulgates the Hazardous Organic NESHAP (HON) which is discussed below. The remaining pollutants will become regulated: (1) when EPA promulgates a maximum achievable control technology (MACT) standard for the pollutant under § 112(d); (2) for a particular source, when case-by-case MACT determinations are made under § 112(g) for the source; or (3) the later of June 15, 1994 or 18 months after EPA fails to issue emissions standards for categories of sources in compliance with the timetable promulgated pursuant to § 112(e) as mandated by § 112(j).

The § 112(b) list contains some technical errors which will be corrected in subsequent rulemaking. The majority of the technical corrections likely to be made are noted below. Also, the pollutants from the § 112(b) list which are addressed in the proposed HON are followed by an asterisk.

Chemical Abstract Service (CAS) Number	Chemical Name
75070	Acetaldehyde*
60355	Acetamide*
75058	Acetonitrile*
98862	Acetophenone*
53963	2-Acetylaminofluorene*
107028	Acrolein*
79061	Acrylamide*
79107	Acrylic acid*
107131	Acrylonitrile*
107051	Allyl chloride*
92671	4-Aminobiphenyl*
62533	Aniline*
90040	o-Anisidine*
1332214	Asbestos

71432	Benzene (including benzene from gasoline)*
92875	Benzidine*
98077	Benzotrichloride*
100447	Benzyl chloride*
92524	Biphenyl*
117817	Bis(2-ethylhexyl)phthalate (DEHP)*
542881	Bis(chloromethyl)ether*
75252	Bromoform*
106990	1,3-Bu_adiene*
156627	Calcium cyanamide
105602	Caprolactam*
133062	Captan
63252	Carbaryl
75150	Carbon disulfide*
56235	Carbon tetrachloride*
463581	Carbonyl sulfide*
120809	Catechol*
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid*
532274	2-Chloroacetophenone*
108907	Chlorobenzene*
510156	Chlorobenzilate
67663	Chloroform*
107302	Chloromethyl methyl ether*
126998	Chloroprene*
1319773	Cresols/Cresylic acid (isomers and mixture)*
95487	o-Cresol*
108394	m-Cresol*
106445	p-Cresol*
98828	Cumene*
94757	2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters)*
	DDE* [recommended technical correction: CAS number 72559] (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)
334883	Diazomethane*
132649	Dibenzofurans* [recommended technical correction: Dibenzofuran]
96128	1,2-Dibromo-3-chloropropane*
84742	Dibutylphthalate*
106467	1,4-Dichlorobenzene(p)* [recommended technical correction: 1,4-Dichlorobenzene]
91941	3,3-Dichlorobenzidene* [recommended technical correction: 3,3'-Dichlorobenzidine]
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)*
542756	1,3-Dichloropropene*
62737	Dichlorvos
111422	Diethanolamine*

121697 N,N-Diethyl aniline (N,N-Dimethylaniline)* [recommended technical correction: N,N-Dimethylaniline]
64675 Diethyl sulfate*
119904 3,3-Dimethoxybenzidine* [recommended technical correction: 3,3'-Dimethoxybenzidine]
60117 Dimethyl aminoazobenzene*
119937 3,3',-Dimethyl benzidine* [recommended technical correction: 3,3',-Dimethylbenzidine]
79447 Dimethyl carbamoyl chloride* [recommended technical correction: Dimethylcarbamoyl chloride]
68122 Dimethyl formamide* [recommended technical correction: N,N-Dimethylformamide]
57147 1,1-Dimethyl hydrazine* [recommended technical correction: 1,1-Dimethylhydrazine]
131113 Dimethyl phthalate*
77781 Dimethyl sulfate*
4,6-Dinitro-o-cresol, and salts* [recommended technical correction to remove CAS number]
51285 2,4-Dinitrophenol*
121142 2,4-Dinitrotoluene*
123911 1,4-Dioxane (1,4-Diethyleneoxide)*
122667 1,2-Diphenylhydrazine*
106898 Epichlorohydrin (1-Chloro-2,3-epoxypropane)*
106887 1,2-Epoxybutane*
140885 Ethyl acrylate*
100414 Ethyl benzene* [recommended technical correction: Ethylbenzene]
51796 Ethyl carbamate (Urethane)*
75003 Ethyl chloride (Chloroethane)*
106934 Ethylene dibromide (Dibromoethane)*
107062 Ethylene dichloride (1,2-Dichloroethane)*
107211 Ethylene glycol*
151564 Ethylene imine (Aziridine) [recommended technical correction: Ethyleneimine (Aziridine)]
75218 Ethylene oxide*
96457 Ethylene thiourea*
75343 Ethylidene dichloride (1,1-Dichloroethane)*
50000 Formaldehyde*
76448 Heptachlor
118741 Hexachlorobenzene*
87683 Hexachlorobutadiene*
77474 Hexachlorocyclopentadiene
67721 Hexachloroethane*
822060 Hexamethylene-1,6-diisocyanate*
680319 Hexamethylphosphoramide*
110543 Hexane*
302012 Hydrazine*

7647010	Hydrochloric acid [recommended technical correction: Hydrochloric acid (hydrogen chloride)(gas only)]
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone*
78591	Isophorone*
	Lindane (all isomers) [Recommended technical correction: 1,2,3,4,5,6-Hexachlorocyclohexane (all stereo isomers, including lindane)]
108316	Maleic anhydride*
67561	Methanol*
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)*
74873	Methyl chloride (Chloromethane)*
71556	Methyl chloroform (1,1,1-Trichloroethane)*
78933	Methyl ethyl ketone (2-Butanone)*
60344	Methyl hydrazine* [recommended technical correction: Methylhydrazine]
74884	Methyl iodide (Iodomethane)*
108101	Methyl isobutyl ketone (Hexone)*
624839	Methyl isocyanate*
80626	Methyl methacrylate*
1634044	Methyl tert butyl ether* [recommended technical correction: Methyl tert-butyl ether]
101144	4,4-Methylene bis(2-chloroaniline) [recommended technical correction: 4,4'-Methylenebis(2-chloroaniline]
75092	Methylene chloride (Dichloromethane)*
101688	Methylene diphenyl diisocyanate (MDI)* [recommended technical correction: 4-4' Methylenediphenyl diisocyanate (MDI)]
101779	4,4,-Methylenedianiline*
91203	Naphthalene*
98953	Nitrobenzene*
92933	4-Nitrobiphenyl*
100027	4-Nitrophenol*
79469	2-Nitropropane*
684935	N-Nitroso-N-methylurea*
62759	N-Nitrosodimethylamine*
59892	N-Nitrosomorpholine*
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol*
106503	p-Phenylenediamine*
75445	Phosgene*
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride*

1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone*
57578	beta-Propiolactone*
123386	Propionaldehyde*
114261	Propoxur (Baygon)*
78875	Propylene dichloride (1,2-Dichloropropane)*
75569	Propylene oxide*
75558	1,2-Propylenimine (2-Methyl aziridine)*
91225	Quinoline
106514	Quinone*
100425	Styrene*
96093	Styrene oxide*
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin*
79345	1,1,2,2-Tetrachloroethane*
127184	Tetrachloroethylene (Perchloroethylene)*
7550450	Titanium tetrachloride
108883	Toluene*
95807	2,4-Toluene diamine* [recommended technical correction: 2,4-Toluenediamine]
584849	2,4-Toluene diisocyanate*
95534	o-Toluidine*
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene*
79005	1,1,2-Trichloroethane*
79016	Trichloroethylene*
95954	2,4,5-Trichlorophenol*
88062	2,4,6-Trichlorophenol*
121448	Triethylamine*
1582098	Trifluralin*
540841	2,2,4-Trimethylpentane*
108054	Vinyl acetate*
593602	Vinyl bromide*
75014	Vinyl chloride*
75354	Vinylidene chloride (1,1-Dichloroethylene)*
1330207	Xylenes (isomers and mixture)*
95476	o-Xylenes* [recommended technical correction: o-Xylene
108383	m-Xylenes* [recommended technical correction: m-Xylene]
106423	p-Xylenes* [recommended technical correction: p-Xylene]
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds [1]
0	Glycol ethers* [2]

- Lead Compounds
- Manganese Compounds
- Mercury Compounds
- Fine mineral fibers [3]
- Nickel Compounds
- Polycylic Organic Matter [4] [recommended technical correction: Polycyclic Organic Matter]
- Radionuclides (including radon) [5]
- Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

1 X'CN where X = H' or any other group where a formal dissociation may occur.
For example KCN or $Ca(CN)_2$

2 Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH2CH2)n-OR' where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: $R-(OCH2CH)_o-OH$ [recommended technical correction: $R-(OCH2CH2)_n-OH$]. Polymers are excluded from the glycol category.

3 Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral-derived fibers) of average diameter 1 micrometer or less.

4 Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C. [Recommended technical correction: limited to, or refers to, products from incomplete combustion of organic compounds (or material) and pyrolysis processes having more than one benzene ring, and which have a boiling point greater than or equal to 100°C.]

5 A type of atom which spontaneously undergoes radioactive decay.

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

JAN 26 1994

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: CAA Section 112(r) Final Rule on List & Thresholds

FROM: Jim Makris, Director
Chemical Emergency Preparedness
and Prevention Office

TO: Addressees

I am pleased to announce the publication of the final rule on the list of substances and threshold quantities for chemical accident prevention, as required under section 112(r) of the Clean Air Act (CAA) Amendments of 1990. The final rule was signed by the Administrator on January 14, 1994.

This rule constitutes one of the responsibilities of the Chemical Emergency Preparedness and Prevention Office (CEPPO) under the provisions for chemical accident prevention in the CAA. The purpose of these provisions is to ensure that facilities reduce the likelihood and severity of accidental chemical releases that could harm the public and the environment. These provisions will also ensure that the public and state and local governments receive facility-specific information on potential hazards and the steps facilities are taking to reduce those hazards. This complements earlier requirements under the Emergency Planning and Community Right-to-Know Act. The section 112(r) regulations systematize and build on the approach to preventing chemical accidents that has existed in earlier industry codes and standards.

The substances identified in this rule are those that have the greatest potential to pose a hazard to public health and the environment in the event of an accidental release. Facilities that handle these substances in more than a threshold quantity in a process must develop and implement a risk management plan. That plan must include offsite consequence analyses, a 5-year accident history, a prevention program, and an emergency response program. The risk

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management plans will be submitted to the implementing agency (state or EPA), Local Emergency Planning Committee, State Emergency Response Commission, the Chemical Safety and Hazard Investigation Board, and will be made available to the public. The elements of the risk management planning requirements were published in a proposed rule in the Federal Register on October 20, 1993.

The final list includes 77 acutely toxic substances, 63 flammable gases and volatile flammable liquids, and the category of explosive substances with a mass explosion hazard known as Division 1.1 high explosives, as listed by DOT in 49 CFR 172.101. The threshold quantities for toxics range from 500 to 20,000 pounds, while flammables have a threshold of 10,000 pounds and explosives of 5,000 pounds. The rule also describes the procedures for determining whether a threshold quantity of a regulated substance is present at a stationary source. It specifies exemptions for mixtures, articles, and certain uses and activities. In addition, it specifies the requirements for petitions to the Agency to add substances to or delete substances from the list. The Agency is deferring action on the way to determine threshold quantities for listed flammable substances when used solely for facility consumption as a fuel. A supplemental notice (attached) is requesting additional public comments on this issue.

Enclosed with this memo are copies of the final list/thresholds rule and the companion supplemental notice, along with additional explanatory materials that set the context for this rule within the CAA accidental release prevention provisions and EPA's chemical accident prevention program. The rule will be published in the Federal Register on January 31, 1994. If you have any questions or need additional information about this rule, please contact Vanessa Rodriguez at 202-260-7913.

Attachments

§ 68.130 List of substances.

(a) Explosives listed by DOT as Division 1.1 in 49 CFR Part 172.101 are covered under section 112(r) of the Clean Air Act. The threshold quantity for explosives is 5,000 pounds.

(b) Regulated toxic and flammable substances under section 112(r) of the Clean Air Act are the substances listed in Tables 1, 2, 3, and 4. Threshold quantities for listed toxic and flammable substances are specified in the tables.

(c) The basis for placing toxic and flammable substances on the list of regulated substances are explained in the notes to the list.

TABLE 1 TO §68.130 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[ALPHABETICAL ORDER - 77 SUBSTANCES]

Chemical Name	CAS No	Threshold Quantity (lbs)	Basis - for Listing
Acrolein [2-Propenal]	107-02-8	5,000	b
Acrylonitrile [2-Propenenitrile]	107-13-1	20,000	b
Acrylyl chloride [2-Propenoyl chloride]	814-68-6	5,000	b
Allyl alcohol [2-Propen-1-ol]	107-18-6	15,000	b
Allylamine [2-Propen-1-amine]	107-11-9	10,000	b
Ammonia (anhydrous)	7664-41-7	10,000	a, b
Ammonia (conc 20% or greater)	7664-41-7	20,000	a, b
Arsenous trichloride	7784-34-1	15,000	b
Arsine	7784-42-1	1,000	b
Boron trichloride [Borane, trichloro-]	10294-34-5	5,000	b
Boron trifluoride [Borane, trifluoro-]	7637-07-2	5,000	b
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[metane]]-, T-4-	353-42-4	15,000	b
Bromine	7726-95-6	10,000	a, b
Carbon disulfide	75-15-0	20,000	b
Chlorine	7782-50-5	2,500	a, b
Chlorine dioxide [Chlorine oxide (ClO2)]	10049-04-4	1,000	c
Chloroform [Methane, trichloro-]	67-66-3	20,000	b
Chloromethyl ether [Methane, oxybis[chloro-]	542-88-1	1,000	b
Chloromethyl methyl ether [Methane, chloromethoxy-]	107-30-2	5,000	b
Crotonaldehyde [2-Butenal]	4170-30-3	20,000	b
Crotonaldehyde, (E)- [2-Butenal, (E)-]	123-73-9	20,000	b
Cyanogen chloride	506-77-4	10,000	c
Cyclohexylamine [Cyclohexanamine]	108-91-8	15,000	b
Diborane	19287-45-7	2,500	b

Chemical Name	CAS No	Threshold Quantity (lbs)	Basis for Listing
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	75-78-5	5,000	b
1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	57-14-7	15,000	b
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	20,000	b
Ethylenediamine [1,2-Ethanediamine]	107-15-3	20,000	b
Ethyleneimine [Aziridine]	151-56-4	10,000	b
Ethylene oxide [Oxirane]	75-21-8	10,000	a, b
Fluorine	7782-41-4	1,000	b
Formaldehyde (solution)	50-00-0	15,000	b
Furan	110-00-9	5,000	b
Hydrazine	302-01-2	15,000	b
Hydrochloric acid (conc 30% or greater)	7647-01-0	15,000	d
Hydrocyanic acid	74-90-8	2,500	a, b
Hydrogen chloride (anhydrous) [Hydrochloric acid]	7647-01-0	5,000	a
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	7664-39-3	1,000	a, b
Hydrogen selenide	7783-07-5	500	b
Hydrogen sulfide	7783-06-4	10,000	a, b
Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	13463-40-6	2,500	b
Isobutyronitrile [Propanenitrile, 2-methyl-]	78-82-0	20,000	b
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108-23-6	15,000	b
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	126-98-7	10,000	b
Methyl chloride [Methane, chloro-]	74-87-3	10,000	a
Methyl chloroformate [Carbonochloridic acid, methylester]	79-22-1	5,000	b

Chemical Name	CAS No	Threshold Quantity (lbs)	Basis for Listing
Methyl hydrazine [Hydrazine, methyl-]	60-34-4	15,000	b
Methyl isocyanate [Methane, isocyanato-]	624-83-9	10,000	a, b
Methyl mercaptan [Methanethiol]	74-93-1	10,000	b
Methyl thiocyanate [Thiocyanic acid, methyl ester]	556-64-9	20,000	b
Methyltrichlorosilane [Silane, trichloromethyl-]	75-79-6	5,000	b
Nickel carbonyl	13463-39-3	1,000	b
Nitric acid (conc 80% or greater)	7697-37-2	15,000	b
Nitric oxide [Nitrogen oxide (NO)]	10102-43-9	10,000	b
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide][1]	8014-95-7	10,000	e
Peracetic acid [Ethaneperoxoic acid]	79-21-0	10,000	b
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	594-42-3	10,000	b
Phosgene [Carbonic dichloride]	75-44-5	500	a, b
Phosphine	7803-51-2	5,000	b
Phosphorus oxychloride [Phosphoryl chloride]	10025-87-3	5,000	b
Phosphorus trichloride [Phosphorous trichloride]	7719-12-2	15,000	b
Piperidine	110-89-4	15,000	b
Propionitrile [Propanenitrile]	107-12-0	10,000	b
Propyl chloroformate [Carbonochloridic acid, propylester]	109-61-5	15,000	b
Propyleneimine [Aziridine, 2-methyl-]	75-55-8	10,000	b
Propylene oxide [Oxirane, methyl-]	75-56-9	10,000	b
Sulfur dioxide (anhydrous)	7446-09-5	5,000	a, b
Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	7783-60-0	2,500	b
Sulfur trioxide	7446-11-9	10,000	a, b

Chemical Name	CAS No	Threshold Quantity (lbs)	Basis for Listing
Tetramethyllead [Plumbane, tetramethyl-]	75-74-1	10,000	b
Tetranitromethane [Methane, tetranitro-]	509-14-8	10,000	b
Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	7550-45-0	2,500	b
Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-][1]	584-84-9	10,000	a
Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-][1]	91-08-7	10,000	a
Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-][1]	26471-62-5	10,000	a
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75-77-4	10,000	b
Vinyl acetate monomer [Acetic acid ethenyl ester]	108-05-4	15,000	b

[1]The mixture exemption in §68.115(b)(1) does not apply to the substance.

Basis for Listing:

[a]Mandated for listing by Congress.
[b]On EHS list, vapor pressure 10 mmHg or greater.
[c]Toxic gas.
[d]Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.
[e]Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

TABLE 2 TO §68.130 - LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS NUMBER ORDER - 77 SUBSTANCES]

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
50-00-0	Formaldehyde (solution)	15,000	b
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	15,000	b
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	15,000	b
67-66-3	Chloroform [Methane, trichloro-]	20,000	b
74-87-3	Methyl chloride [Methane, chloro-]	10,000	a
74-90-8	Hydrocyanic acid	2,500	a, b
74-93-1	Methyl mercaptan [Methanethiol]	10,000	b
75-15-0	Carbon disulfide	20,000	b
75-21-8	Ethylene oxide [Oxirane]	10,000	a, b
75-44-5	Phosgene [Carbonic dichloride]	500	a, b
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	10,000	b
75-56-9	Propylene oxide [Oxirane, methyl-]	10,000	b
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	10,000	b
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000	b
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	5,000	b
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000	b
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000	b
79-21-0	Peracetic acid [Ethaneperoxoic acid]	10,000	b
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	5,000	b
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-][1]	10,000	a
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000	b
107-02-8	Acrolein [2-Propenal]	5,000	b

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
107-11-9	Allylamine [2-Propen-1-amine]	10,000	b
107-12-0	Propionitrile [Propanenitrile]	10,000	b
107-13-1	Acrylonitrile [2-Propenenitrile]	20,000	b
107-15-3	Ethylenediamine [1,2-Ethanediamine]	20,000	b
107-18-6	Allyl alcohol [2-Propen-1-ol]	15,000	b
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000	b
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000	b
108-23-6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000	b
108-91-8	Cyclohexylamine [Cyclohexanamine]	15,000	b
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	15,000	b
110-00-9	Furan	5,000	b
110-89-4	Piperidine	15,000	b
123-73-9	Crotonaldehyde, (E)- [2-Butenal, (E)-]	20,000	b
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000	b
151-56-4	Ethyleneimine [Aziridine]	10,000	b
302-01-2	Hydrazine	15,000	b
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[metane]]-, T-4-	15,000	b
506-77-4	Cyanogen chloride	10,000	c
509-14-8	Tetranitromethane [Methane, tetranitro-]	10,000	b
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	1,000	b
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000	b
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-][1]	10,000	a

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000	b
24-83-9	Methyl isocyanate [Methane, isocyanato-]	10,000	a, b
814-68-6	Acrylyl chloride [2-Propenoyl chloride]	5,000	b
4170-30-3	Crotonaldehyde [2-Butenal]	20,000	b
7446-09-5	Sulfur dioxide (anhydrous)	5,000	a, b
7446-11-9	Sulfur trioxide	10,000	a, b
7550-45-0	Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	2,500	b
7637-07-2	Boron trifluoride [Borane, trifluoro-]	5,000	b
7647-01-0	Hydrochloric acid (conc 30% or greater)	15,000	d
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000	a
7664-39-3	Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	1,000	a, b
7664-41-7	Ammonia (anhydrous)	10,000	a, b
7664-41-7	Ammonia (conc 20% or greater)	20,000	a, b
7697-37-2	Nitric acid (conc 80% or greater)	15,000	b
7719-12-2	Phosphorus trichloride [Phosphorous trichloride]	15,000	b
7726-95-6	Bromine	10,000	a, b
7782-41-4	Fluorine	1,000	b
7782-50-5	Chlorine	2,500	a, b
7783-06-4	Hydrogen sulfide	10,000	a, b
7783-07-5	Hydrogen selenide	500	b
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	2,500	b
7784-34-1	Arsenous trichloride	15,000	b
7784-42-1	Arsine	1,000	b
7803-51-2	Phosphine	5,000	b

CAS No.	Chemical Name	Threshold Quantity (lbs)	Basis for Listing
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide][1]	10,000	e
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	5,000	b
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO2)]	1,000	c
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	10,000	b
10294-34-5	Boron trichloride [Borane, trichloro-]	5,000	b
13463-39-3	Nickel carbonyl	1,000	b
13463-40-6	Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	2,500	b
19287-45-7	Diborane	2,500	b
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-][1]	10,000	a

[1]The mixture exemption in §68.115(b)(1) does not apply to the substance.

Basis for Listing:

[a]Mandated for listing by Congress.
[b]On EHS list, vapor pressure 10 mmHg or greater.
[c]Toxic gas.
[d]Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.
[e]Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

TABLE 3 TO §68.130 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[ALPHABETICAL ORDER - 63 SUBSTANCES]

Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
Acetaldehyde	75-07-0	10,000	g
Acetylene [Ethyne]	74-86-2	10,000	f
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598-73-2	10,000	f
1,3-Butadiene	106-99-0	10,000	f
Butane	106-97-8	10,000	f
1-Butene	106-98-9	10,000	f
2-Butene	107-01-7	10,000	f
Butene	25167-67-3	10,000	f
2-Butene-cis	590-18-1	10,000	f
2-Butene-trans [2-Butene, (E)]	624-64-6	10,000	f
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000	f
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000	f
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000	g
1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000	g
Cyanogen [Ethanedinitrile]	460-19-5	10,000	f
Cyclopropane	75-19-4	10,000	f
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000	f
Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000	f
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000	f
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000	f
Ethane	74-84-0	10,000	f
Ethyl acetylene [1-Butyne]	107-00-6	10,000	f
Ethylamine [Ethanamine]	75-04-7	10,000	f
Ethyl chloride [Ethane, chloro-]	75-00-3	10,000	f

Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
Ethylene [Ethene]	74-85-1	10,000	f
Ethyl ether [Ethane, 1,1'-oxybis-]	60-29-7	10,000	g
Ethyl mercaptan [Ethanethiol]	75-08-1	10,000	g
Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000	f
Hydrogen	1333-74-0	10,000	f
Isobutane [Propane, 2-methyl]	75-28-5	10,000	f
Isopentane [Butane, 2-methyl-]	78-78-4	10,000	g
Isoprene [1,3-Butadiene, 2-methyl-]	78-79-5	10,000	g
Isopropylamine [2-Propanamine]	75-31-0	10,000	g
Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000	g
Methane	74-82-8	10,000	f
Methylamine [Methanamine]	74-89-5	10,000	f
3-Methyl-1-butene	563-45-1	10,000	f
2-Methyl-1-butene	563-46-2	10,000	g
Methyl ether [Methane, oxybis-]	115-10-6	10,000	f
Methyl formate [Formic acid, methyl ester]	107-31-3	10,000	g
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000	f
1,3-Pentadiene	504-60-9	10,000	f
Pentane	109-66-0	10,000	g
1-Pentene	109-67-1	10,000	g
2-Pentene, (E)-	646-04-8	10,000	g
2-Pentene, (Z)-	627-20-3	10,000	g
Propadiene [1,2-Propadiene]	463-49-0	10,000	f
Propane	74-98-6	10,000	f
Propylene [1-Propene]	115-07-1	10,000	f
Propyne [1-Propyne]	74-99-7	10,000	f
Silane	7803-62-5	10,000	f

Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000	f
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000	g
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000	g
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000	f
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000	f
Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000	f
Vinyl chloride [Ethene, chloro-]	75-01-4	10,000	a, f
Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000	g
Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000	f
Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000	g
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000	f
Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000	f

Basis for Listing:

[a]Mandated for listing by Congress.
[f]Flammable gas.
[g]Volatile flammable liquid.

TABLE 4 TO §68.130 - LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION
[CAS NUMBER ORDER - 63 SUBSTANCES]

CAS No.	Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
60-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	60-29-7	[illegible],000	g
74-82-8	Methane	74-82-8	10,000	f
74-84-0	Ethane	74-84-0	10,000	f
74-85-1	Ethylene [Ethene]	74-85-1	10,000	f
74-86-2	Acetylene [Ethyne]	74-86-2	10,000	f
74-89-5	Methylamine [Methanamine]	74-89-5	10,000	f
74-98-6	Propane	74-98-6	10,000	f
74-99-7	Propyne [1-Propyne]	74-99-7	10,000	f
75-00-3	Ethyl chloride [Ethane, chloro-]	75-00-3	10,000	f
75-01-4	Vinyl chloride [Ethene, chloro-]	75-01-4	10,000	a, f
75-02-5	Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000	f
75-04-7	Ethylamine [Ethanamine]	75-04-7	10,000	f
75-07-0	Acetaldehyde	75-07-0	10,000	g
75-08-1	Ethyl mercaptan [Ethanethiol]	75-08-1	10,000	g
75-19-4	Cyclopropane	75-19-4	10,000	f
75-28-5	Isobutane [Propane, 2-methyl]	75-28-5	10,000	f
75-29-6	Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000	g
75-31-0	Isopropylamine [2-Propanamine]	75-31-0	10,000	g
75-35-4	Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000	g
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000	f
75-38-7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000	f

CAS No.	Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
75-50-3	Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000	f
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000	g
78-78-4	Isopentane [Butane, 2-methyl-]	78-78-4	10,000	g
78-79-5	Isoprene [1,3-Butadiene, 2-methyl-]	78-79-5	10,000	g
79-38-9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000	f
106-97-8	Butane	106-97-8	10,000	f
106-98-9	1-Butene	106-98-9	10,000	f
106-99-0	1,3-Butadiene	106-99-0	10,000	f
107-00-6	Ethyl acetylene [1-Butyne]	107-00-6	10,000	f
107-01-7	2-Butene	107-01-7	10,000	f
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000	f
107-31-3	Methyl formate [Formic acid, methyl ester]	107-31-3	10,000	g
109-66-0	Pentane	109-66-0	10,000	g
109-67-1	1-Pentene	109-67-1	10,000	g
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000	g
109-95-5	Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000	f
115-07-1	Propylene [1-Propene]	115-07-1	10,000	f
115-10-6	Methyl ether [Methane, oxybis-]	115-10-6	10,000	f
115-11-7	2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000	f
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000	f
124-40-3	Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000	f
460-19-5	Cyanogen [Ethanedinitrile]	460-19-5	10,000	f

CAS No.	Chemical Name	CAS No.	Threshold Quantity (lbs)	Basis for Listing
463-49-0	Propadiene [1,2-Propadiene]	463-49-0	10,000	f
463-58-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000	f
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000	f
504-60-9	1,3-Pentadiene	504-60-9	10,000	f
557-98-2	2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000	g
563-45-1	3-Methyl-1-butene	563-45-1	10,000	f
563-46-2	2-Methyl-1-butene	563-46-2	10,000	g
590-18-1	2-Butene-cis	590-18-1	10,000	f
590-21-6	1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000	g
598-73-2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	598-73-2	10,000	f
624-64-6	2-Butene-trans [2-Butene, (E)]	624-64-6	10,000	f
627-20-3	2-Pentene, (Z)-	627-20-3	10,000	g
646-04-8	2-Pentene, (E)-	646-04-8	10,000	g
689-97-4	Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000	f
1333-74-0	Hydrogen	1333-74-0	10,000	f
4109-96-0	Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000	f
7791-21-1	Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000	f
7803-62-5	Silane	7803-62-5	10,000	f
10025-78-2	Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000	g
25167-67-3	Butene	25167-67-3	10,000	f

Basis for Listing:

[a]Mandated for listing by Congress.
[f]Flammable gas.
[g]Volatile flammable liquid.

October 16, 1995

MEMORANDUM

SUBJECT: Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V

FROM: Lydia N. Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: See Addressees

In a guidance memorandum dated April 26, 1993, the Agency clarified its interpretation of the term "regulated air pollutant" as defined in the operating permit rule (see 40 CFR 70.2). Recently, many discussions have been held concerning the application of this definition to sources of particulate matter under the title V operating permit program. Today's memorandum provides additional guidance to assist permitting authorities in determining which sources of particulate matter are subject to the requirements of title V.

There are different forms of particulate matter for which controls are required by various regulations. The April 26, 1993 memorandum listed PM-10 and total suspended particulates as regulated forms of particulate matter and, consequently, regulated air pollutants. The EPA has recently reevaluated this finding and has concluded that its definition of regulated air pollutant under title V applies only to emissions of PM-10. A detailed discussion of the basis for this conclusion is attached.

Today's guidance should be used to determine which sources of particulate matter are subject to minimum title V requirements and fee calculations. The Federal minimum for applicability of title V to sources of particulate matter should be based on the amount of emissions of PM-10, not particulate matter, that the source has the potential to emit. Some sources [such as country grain elevators, aggregate (rock, gravel, and sand) handling operations, and some mining operations] may not be major sources of PM-10 even though they would have been considered major sources of particulate matter.

This guidance does not change any requirements for sources to comply with emission limitations or work practice standards as described in State implementation plans (SIPs) and new source performance standards (NSPS). For example, the required procedures for determining compliance with NSPS continue to be based on in-stack measurements of particulate emissions or visible emissions observations (i.e., Test Methods 5, 9, 17, and

22, and Performance Specification 1). The Federal minimum is that if sources are major, then they must obtain title V operating permits which include all applicable requirements. Therefore, if a source is major for particulate matter, but not for PM-10, the Federal minimum would be that a title V operating permit would not be required if the only pollutant that would make the source major is particulate matter. Any requirements to comply with NSPS or SIPs would remain in effect, however.

This clarification of PM-10's status as the regulated pollutant will cause some difficulties in estimating emissions; however, tools are available for many source categories. For example, although some 1900 particulate matter emission factors can be found in the document referred to as "AP-42," there are also over 1200 PM-10 factors. In addition, category specific particle-size distributions are available for a number of other categories on EPA's data bases.

This revision of previous guidance constitutes a change only with regard to the title V operating permit program. It does not change any other interpretations or requirements that have been previously provided for implementing the Clean Air Act.

The policies set forth in this memorandum are intended solely as guidance and not final Agency action. This guidance cannot be relied upon to create any rights enforceable by any party. For further information on the title V aspects of this guidance, please contact Leo Stander at 919-541-2402, and for further information on emissions estimation techniques, please contact David Mobley at 919-541-4676.

Attachment

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Air & Waste Management Division, Region II
Director, Air, Radiation & Toxics Division, Region III
Director, Air, Pesticide & Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA and TSCA Division, Region VII
Director, Office of Pollution Prevention, State and Tribal, Region VIII
Director, Air & Toxics Division, Region IX
Director, Office of Air, Region X

cc: Chief, Air Branch, Regions I-X
Operating Permits Program Contact, Regions I-X
OAQPS Division Directors

REGULATED AIR POLLUTANT: PARTICULATE MATTER

This document explains the Environmental Protection Agency (EPA) policy that, at this time, PM-10 is considered to be the only regulated form of particulate matter. Today's policy supersedes prior EPA statements which indicated that a second regulated form of particulate matter existed. As explained further below, such prior statements were based on the fact that EPA had established specific compliance methods for sources of particulate matter under the new source performance standards (NSPS). The immediate consequence of this policy is that under the title V operating permits program only PM-10 is considered by EPA to be the regulated form of particulate matter for applicability and fee purposes. This policy does not affect (1) existing requirements under the NSPS that a source comply with applicable performance standards for particulate matter emissions or (2) provisions contained in State implementation plans for particulate matter, including existing particulate emissions limitations, which have been approved by EPA and are relied upon to attain or maintain the national ambient air quality standards (NAAQS) for particulate matter.

Background

The part 70 regulations for State title V operating permit programs define "regulated air pollutant" at 40 CFR 70.2. This definition is intended to ensure that permitting authorities receive appropriate information on all pollutants which are "regulated" under the Clean Air Act (Act) and emitted by a source. The term "regulated air pollutant" is intended to reflect all pollutants subject to a standard, regulation, or requirement by including in the definition five specific categories of pollutants which would be considered regulated air pollutants.[6] Questions have arisen, based on an EPA-issued memorandum on April 26, 1993, entitled "Definition of Regulated Air Pollutant for Purposes of Title V," concerning how many regulated forms of particulate matter the definition includes. The memorandum identified two regulated indicators--PM-10 and total suspended particulate (TSP). The PM-10 was considered regulated because it was a pollutant for which a NAAQS had been

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The five categories of pollutants included (1) nitrogen oxides and volatile organic compounds, (2) any pollutant for which NAAQS have been established, (3) any pollutant that is subject to an NSPS under section 111, (4) certain ozone depleting substances, and (5) any pollutant subject to national emission standard for hazardous air pollutants (NESHAP) under section 112.

promulgated. The TSP was listed as a pollutant regulated under the NSPS.[7]

Implied in the April 1993 memorandum (though not explicitly stated therein) was the interpretation that the NSPS for particulate matter--which measures a different form of particulate than PM-10--automatically constituted a separate regulated indicator for particulate matter. The EPA has reevaluated this interpretation and has concluded that it is no longer appropriate. It is EPA's current position that different indicators for particulate matter may be used as surrogate measures where appropriate for controlling ambient concentrations of PM-10 without specifically requiring such surrogates themselves to be regarded as regulated pollutants. The EPA further believes that the basis for determining what the regulated pollutant or indicator is for particulate matter should focus on EPA's intent as evidenced primarily by the underlying statutory authority used by EPA to subject the relevant air pollutant to a standard, regulation or requirement, and by statements made by EPA in connection with its promulgation. This interpretation does not preclude EPA from specifically choosing to regulate a different indicator for particulate matter under the authority of section 111 of the Act. However, as explained below, it was not EPA's intent to do so for any of the NSPS promulgated to date for particulate matter.

Section 109 authority

To date, EPA's efforts to regulate particulate matter have relied primarily upon the joint authorities of sections 108 and 109 of the Act. Section 108 directs the Administrator to identify pollutants which may reasonably be anticipated to endanger public health or welfare and to issue air quality criteria for those pollutants. Section 109 of the Act then governs the establishment and revision of NAAQS for criteria pollutants. On April 30, 1971, EPA promulgated the original NAAQS for particulate matter. The NAAQS defined ambient concentrations of particulate matter measured as TSP (ambient compliance sampling achieved by "high volume" samplers which collect particulate matter up to a nominal size of 25 to 45 micrometers). On July 1, 1987, EPA revised the NAAQS for particulate matter, replacing the TSP indicator with the new PM-10 indicator.

The EPA subsequently acknowledged that the correct description of the indicator considered to be regulated under the NSPS was "particulate emissions" as measured by in-stack test methods, e.g., Federal Reference Method 5.

Section 111 authority

The control of particulate matter is also required by various NSPS under section 111 of the Act. Section 111 generally requires EPA to promulgate NSPS for any category of stationary sources that "...causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." The EPA promulgated numerous NSPS specifically to address the criteria pollutant, particulate matter, during the period of time when the NAAQS for particulate matter were measured as TSP. While EPA indicated that particulate matter was a criteria pollutant for which NAAQS had been promulgated, EPA compliance tests used to meet the specific NSPS for particulate matter did not use the same indicator as the indicator for the NAAQS for particulate matter. Instead, such compliance tests typically involved measures of particulate matter in the stack using emissions testing procedures (e.g., Method 5) that do not take into account particle size. Nevertheless, preamble discussions to certain of these NSPS show that EPA regarded the pollutant of concern to be the criteria pollutant for which NAAQS had been promulgated. See e.g., NSPS for Phosphate Rock Plants (9/21/79), Nonmetallic Mineral Processing Plants (8/1/85), and Calciners and Dryers in Mineral Industries (9/28/92).

With the promulgation of PM-10 NAAQS in 1987, EPA considered the issue of whether to revise the NSPS with respect to particulate matter. In a July 1, 1987 Federal Register notice, EPA acknowledged that the indicator for particulate matter used to measure compliance with the NSPS was different from both TSP and PM-10 (52 FR 24710). The EPA stated, therein, that the existing NSPS "that reflect the best demonstrated control technology for particulate matter have the effect of controlling PM-10." The EPA later decided that, at least until further studies could be accomplished, the existing NSPS for particulate matter would serve as adequate surrogates for limiting ambient amounts of PM-10, the intended "regulated air pollutant." The NSPS promulgated after 1987 have continued to base compliance on in-stack emissions test methods which measure particulate emissions. Based on this regulatory history, it is EPA's position that the use of particulate matter emissions as the measure of compliance under various NSPS for particulate matter does not, in itself, constitute a new regulated air pollutant, but is simply designed as a surrogate measure of particulate matter to establish effective performance standards which limit the emissions of the regulated indicator, PM-10.

While the EPA contends that the control of a pollutant under an NSPS does not automatically result in that pollutant being

considered regulated if the intended pollutant is already being regulated under separate legal authority, the EPA does specifically rely upon the NSPS to regulate certain pollutants. A case in point is the NSPS for kraft pulp mills at 40 CFR 60 subpart BB, which includes limitations for emissions of total reduced sulfur compounds. This and other specific non-criteria pollutants are considered "regulated air pollutants" by virtue of the fact that EPA intended for them to be regulated by the NSPS, since they are not regulated elsewhere.

Other examples of surrogate measures

The EPA has used the measurement of particulate matter emissions for compliance purposes as the surrogate for controlling the pollutant intended to be regulated in the section 112 context as well. Examples of such situations are the NESHAP for arsenic and asbestos at 40 CFR 61.140 and 61.170, respectively. The EPA listed asbestos and arsenic as hazardous pollutants under section 112 of the Act. Subsequently, the EPA promulgated standards for several sources of asbestos and for inorganic arsenic emissions from primary copper smelters which require compliance with a particulate matter emissions limit using Method 5 and opacity monitoring (51 FR 27956, August 4, 1986 at 27981.) Nevertheless, the EPA considers arsenic and asbestos, as listed in accordance with section 112 of the Act, to be regulated pollutants in these instances.

Other implications

Nothing stated in this current policy is intended to negate, void or otherwise affect limits expressed as particulate matter emissions under any NSPS, or the enforceability of existing standards contained in State control strategies for PM-10 which may actually require compliance with other indicators for particulate matter. The EPA historically has allowed States to rely upon their original SIPs based on the control of particulate matter emissions to demonstrate attainment with the PM-10 NAAQS. The EPA continues to consider these plans to be adequate so as to remain in effect and be enforceable as long as they continue to be used to demonstrate attainment of the regulated indicator for particulate matter, PM-10.

March 8, 1994

MEMORANDUM

SUBJECT: Consideration of Fugitive Emissions in Major Source Determinations

FROM: Lydia Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

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

This memorandum summarizes the Environmental Protection Agency's (EPA's) policy regarding the consideration of fugitive emissions for the purpose of determining whether a source is major under the Clean Air Act (Act). As explained below, EPA will revisit, in a future revision to the part 70 regulations ("Operating Permit Programs"), the requirement to consider fugitives from sources subject to national emission standard for hazardous air pollutants (NESHAP) and new source performance standards (NSPS) promulgated after August 7, 1980, when determining whether a source is major under section 302(j) of the Act. For the present time, State operating permits programs that do not require consideration of fugitives for these sources will be eligible for interim approval. States must require consideration of fugitives for purposes of determining whether a source is major under section 112, but need not require consideration of fugitives for purposes of the new major source definitions in part D of title I of the Act.

I. Background: Statutory and Regulatory Provisions Affected

A. Section 302(j) and Section 169(1)

The Act's primary definition of "major stationary source" and "major emitting facility" is found in section 302(j) in the general definitions portion of the Act. It reads:

> Except as otherwise provided, the terms "major stationary source" and "major emitting facility" mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, 100 tons per year (tpy) or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the Administrator).

The section 302(j) definition was added to the Act in 1977. Another definition of "major emitting facility" was added in 1977 in section 169(1). It sets a higher 250 tpy threshold for certain source categories for purposes of part C preconstruction review.

B. Lower Threshold Definitions Added by the 1990 Amendments to the Act

The 1990 Amendments added nine new definitions of "major source" or "major stationary source." Seven of these definitions appear in part D of title I and expand the set of "major stationary sources" of volatile organic compounds, particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-10), and CO for nonattainment areas by lowering the tonnage threshold below the 100 tpy specified in section 302(j).[2]

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[2]These are, specifically: §182(c), "Serious Areas" for ozone nonattainment; §182(d), "Severe Areas" for ozone nonattainment; §182(e), "Extreme Areas" for ozone nonattainment; §182(b)(1)(A)(ii)(I), new source review in "moderate areas" for ozone nonattainment; §187(c), "Serious Areas" for carbon monoxide nonattainment; §184(b)(2), interstate ozone control; §189(b)(3), "Serious Areas" for PM-10 nonattainment.

The other two new definitions are found in section 112(a)(1) and title V.[3] Section 112 provides a definition of "major source" similar to the definition of "major stationary source" and "major emitting facility" in part D of title I only tailored to the new hazardous air pollutants (HAP) provisions. The title V definition incorporates by reference all of the other "major source" and "major stationary source" definitions.

C. "Major Source" Definitions in Part 70

The definition of "major source" in section 70.2 of the permits rule divides into three parts, corresponding to the section 112 definition, the section 302(j) definition, and the lower tpy thresholds in the title I nonattainment provisions, respectively. The second definition, corresponding to section 302(j), requires the counting of fugitive emissions only for certain listed source categories. The other two part 70 definitions are silent on the issue of when fugitive emissions must be considered.

The section 302(j) definition lists 27 categories of sources for which fugitive emissions must be considered in determining whether a source is major for purposes of section 302(j). The twenty-seventh category requires that fugitive emissions be considered for:

> All other stationary source categories regulated by a standard promulgated under section 111 or 112 of the Act, but only with respect to those air pollutants that have been regulated for that category.

For present purposes, this should be contrasted with the corresponding provisions in the prevention of significant deterioration (PSD) and new source review (NSR) regulations (see, e.g., 40 CFR §51.165(a)(1)(iv)(C)), which refer to:

> Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

Regarding the first and third parts of the part 70 "major source" definition, the question of when fugitive emissions must be considered for applicability purposes was addressed directly

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[3]Section 501(a)(1) provides: The term "major source" means any stationary source (or any group of stationary sources located within a contiguous area and under common control) that is either of the following: (a) a major source as defined in section 112, and (b) a major stationary source as defined in section 302 or part D of title I.

in the response to comments document for the part 70 rulemaking. Section 3.5 of the response document states that the Act requires fugitives to be considered for purposes of determining whether a source is major under any of the part D or the section 112 definitions.

II. Summary of EPA Policy

In response to questions raised following promulgation of part 70, EPA has reconsidered the treatment of fugitives for purposes of making major source determinations. The EPA's decisions regarding the relevant provisions is summarized below in three parts.

A. Sources Subject to NSPS or NESHAP Standards Promulgated after August 7, 1980

The designation in the part 70 rules of sources subject to NSPS and NESHAP promulgated after August 7, 1980 as sources for which fugitives must be counted for purposes of major source determinations did not follow the procedural steps necessary for a proper rulemaking under section 302(j). As a result, EPA believes it would be inappropriate for the Agency to require States to count fugitives from these sources in making section 302(j) major source determinations. In the absence of a legally-sound Federal requirement, a State may choose to exercise its own legal authority to require that fugitives from sources subject to the post-1980 standards be considered in determining major source status under section 302(j). However, a State need not require that fugitives from these sources be so counted in order to obtain interim approval of its title V program.

The EPA intends to revisit this aspect of the rule in a revision to part 70 to occur sometime in 1994. The EPA believes that it may, in the mean time, grant interim approval to programs that do not require fugitives to be considered in determining the status of sources subject to post-1980 NSPS and NESHAP standards. However, until the rule is revised with respect to sources subject to the post-1980 standards, EPA may not grant full approval to a State program that does not include the post-1980 standards. Programs adhering to the language in the current rule will be eligible for full approval provided, as is the case for any element of part 70, the State has provided adequate legal authority for that element of its program.

Note that the policy articulated in section C below regarding the section 112 major source definition operates independently of a State's decision to list the post-1980 NESHAP standards for purposes of determining whether a source is major under the section 302(j) definition. Therefore, in determining whether a source is major for section 112 purposes, a source must

consider fugitive emissions of HAP listed pursuant to section 112(b) regardless of whether the source is in a category designated through rulemaking under section 302(j).

B. Definitions of "Major Stationary Source" in Part D of Title I

The EPA has revised its interpretation of the Act from that stated in the response to comments document. The EPA now believes the Act does not require fugitives to be considered for purposes of determining major source status in these nonattainment areas, except as provided pursuant to rulemaking under section 302(j). State programs that follow this revised interpretation will be eligible for full approval, as will programs that follow the more inclusive policy articulated in the response to comments document, provided the more inclusive program is supported by adequate State law authority.

The legal rationale for this position is that nothing in the statute or the legislative history of the Part D definitions indicates an intent to depart from the section 302(j) requirement that rulemaking be done before fugitives are included for applicability purposes in nonattainment areas. To the contrary, the explicit reference in most of these Part D definitions back to section 302(j), and the fact that these provisions address a broad universe of sources emitting a particular pollutant or class of pollutants, suggests that the section 302(j) rulemaking requirement carries over to these definitions. It is therefore permissible to read the Act not to require the consideration of fugitive emissions for these purposes.

C. Definition of "Major Source" in Section 111

The EPA continues to believe the Act requires that fugitive emissions, to the extent quantifiable, must be considered in determining major source status for all section 112 purposes. This policy applies to a source of any of the section 112(b) listed pollutants whether or not the source in question is in a category listed pursuant to section 112(c). The EPA expects States to comply with this policy in their operating permits program submittals.

The section 112 "major source" definition is distinguishable legally from the Part D definitions in some important respects. Section 112 uses the term "major source" as opposed to "major stationary source," and legislative history indicates an intent to treat this definition as distinct from the section 302(j) "major stationary source" definition. Moreover, section 112 establishes a new regulatory program wherein Congress has narrowed the regulatory concern to specific pollutants at

specific source categories to be determined by EPA. All of this suggests that the section 302(j) rulemaking requirement does not apply in the context of section 112, and that fugitive emissions must therefore be included for purposes of determining whether a source is major under section 112.

D. Collocation of Sources

Questions have also been raised regarding the treatment of fugitive emissions where sources in categories listed pursuant to section 302(j) are collocated with sources that are not in any of the listed categories. The EPA intends to follow the policies established in implementation of the PSD and NSR programs. Only the fugitive emissions from the listed source are required to be counted for purposes of determining major source status. Where there is a collocated source that is not on the source category list and where the nonlisted source is the primary activity at the site, fugitive emissions would not need to be counted from the collocated, nonlisted source. The EPA will issue case examples to help clarify application of this principle in the near future.

For further information, please contact Kirt Cox, Operating Permits Policy Section, at (919) 541-5399, or Adan Schwartz, Office of General Counsel, at (202) 260-7632.

cc: Air Branch Chief, Regions I-X
Regional Counsel, Regions I-X
M. Winer
M. Miller
K. Stein

January 25, 1995

MEMORANDUM

SUBJECT: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
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Many stationary source requirements of the Act apply only to "major" sources. Major sources are those sources whose emissions of air pollutants exceed threshold emissions levels specified in the Act. For instance, section 112 requirements such as MACT and section 112(g) and title V operating permit requirements largely apply only to sources with emissions that exceed specified levels and are thus major. To determine whether a source is major, the Act focuses not only on a source's actual emissions, but also on its potential emissions. Thus, a source that has maintained actual emissions at levels below the major source threshold could still be subject to major source requirements if it has the potential to emit major amounts of air pollutants. However, in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-enforceable permit conditions which limit emissions to levels below the applicable major source threshold. Federally-enforceable permit conditions, if violated, are subject to enforcement by the Environmental Protection Agency (EPA) or by citizens in addition to the State or Local agency.

As the deadlines for complying with MACT standards and title V operating permits approach, industry and State and local air pollution agencies have become increasingly focused on the need to adopt and implement federally-enforceable mechanisms to limit emissions from sources that desire to limit potential emissions to below major source levels. In fact, there are numerous options available which can be tailored by the States to provide such sources with simple and effective ways to qualify as minor sources. Because there appears to be some confusion and questions regarding how potential to emit limits may be established, EPA has decided to: (1) outline the available approaches to establishing potential to emit limitations, (2) describe developments related to the implementation of these various approaches, and (3) implement a transition policy that will allow certain sources to be treated as minor for a period of time sufficient for these sources to obtain a federally-enforceable limit.

Federal enforceability is an essential element of establishing limitations on a source's potential to emit. Federal enforceability ensures the conditions placed on emissions to limit a source's potential to emit are enforceable by EPA and citizens as a legal and practical matter, thereby providing the public with credible assurances that otherwise major sources are not avoiding applicable requirements of the Act. In order to ensure compliance with the Act, any approaches developed to allow sources to avoid the major source requirements must be supported by the Federal authorities granted to citizens and EPA. In addition, Federal enforceability provides source owners and operators with assurances that limitations they have obtained from a State or local agency will be recognized by EPA.

The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source's potential to emit. First, EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs. This requirement is based both on EPA's general interest in having the power to enforce "all relevant features of SIP's that are necessary for attainment and maintenance of NAAQS and PSD increments" (see 54 FR 27275, citing 48 FR 38748, August 25, 1983) as well as the specific goal of using national enforcement to ensure that the requirements of the Act are uniformly implemented throughout the nation (see 54 FR 27277). Second, limitations must be enforceable as a practical matter.

It is important to recognize that there are shared responsibilities on the part of EPA, State, and local agencies, and on source owners to create and implement approaches to creating acceptable limitations on potential emissions. The lead responsibility for developing limitations on potential emissions rests primarily with source owners and State and local agencies. At the same time, EPA must work together with interested parties, including industry and States to ensure that clear guidance is established and that timely Federal input, including Federal

approval actions, is provided where appropriate. The guidance in this memorandum is aimed towards continuing and improving this partnership.

Available Approaches for Creating Federally-enforceable Limitations on the Potential to Emit

There is no single "one size fits all" mechanism that would be appropriate for creating federally-enforceable limitations on potential emissions for all sources in all situations. The spectrum of available mechanisms should, however, ensure that State and local agencies can create federally-enforceable limitations without undue administrative burden to sources or the agency. With this in mind, EPA views the following types of programs, if submitted to and approved by EPA, as available to agencies seeking to establish federally-enforceable potential to emit limits:[4]

1. Federally-enforceable State operating permit programs (FESOPs) (non-title V). For complex sources with numerous and varying emission points, case-by-case permitting is generally needed for the establishment of limitations on the source's potential to emit. Such case-by-case permitting is often accomplished through a non-title V federally-enforceable State operating permit program. This type of permit program, and its basic elements, are described in guidance published in the Federal Register on June 28, 1989 (54 FR 27274). In short, the program must: (a) be approved into the SIP, (b) impose legal obligations to conform to the permit limitations, (c) provide for limits that are enforceable as a practical matter, (d) be issued in a process that provides for review and an opportunity for comment by the public and by EPA, and (e) ensure that there is no relaxation of otherwise applicable Federal requirements. The EPA believes that these type of programs can be used for both criteria pollutants and hazardous air pollutants, as described in the memorandum, "Approaches to Creating Federally-Enforceable Emissions Limits," November 3, 1993. This memorandum (referred to below as the November 1993 memorandum) is included for your information as Attachment 1. There are a number of important clarifications with respect to hazardous air pollutants subsequent to the November 1993 memorandum which are discussed below (see section entitled "Limitations on Hazardous Air Pollutants").

2. Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are relatively similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally-enforceable restrictions. One

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[4]This is not an exhaustive list of considerations affecting potential to emit. Other federally-enforceable limits can be used, for example, source-specific SIP revisions. For brevity, we have included those which have the widest applicability.

approach that has been used is to establish a general rule which creates federally-enforceable restrictions at one time for many sources (these rules have been referred to as "exclusionary" rules and by some permitting agencies as "prohibitory" rules). A specific suggested approach for volatile organic compounds (VOC) limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP and generally become effective upon approval by EPA.

3. General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category. Although this concept is generally thought of as an element of a title V permit program, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating potential to emit limits for groups of sources. Additionally, general permits can be issued under the auspices of a SIP-approved FESOP. The advantage of a general permit, when compared to an exclusionary rule, is that upon approval by EPA of the State's permit program, a general permit could be written for one or more additional source types without triggering the need for the formal SIP revision process.

4. Construction permits. Another type of case-by-case permit is a construction permit. These permits generally cover new and modified sources, and States have developed such permit programs as an element of their SIP's. As described in the November 1993 memorandum, these State major and minor new source review (NSR) construction permits can provide for federally-enforceable limitations on a source's potential to emit. Further discussion of the use of minor source NSR programs is contained in EPA's letter to Jason Grumet, NESCAUM, dated November 2, 1994, which is contained in Attachment 3. As noted in this letter, the usefulness of minor NSR programs for the creation of potential to emit limitations can vary from State to State, and is somewhat dependent on the scope of a State's program.

5. Title V permits. Operating permits issued under the Federal title V operating permits program can, in some cases, provide a convenient and readily available mechanism to create federally-enforceable limits. Although the applicability date for part 70 permit programs is generally the driving force for most of the current concerns with respect to potential to emit,

there are other programs, such as the section 112 air toxics program, for which title V permits may themselves be a useful mechanism for creating potential to emit limits. For example, many sources will be considered to be major by virtue of combustion emissions of nitrogen oxides or sulfur dioxide, and will be required to obtain part 70 permits. Such permits could be used to establish federally-enforceable limitations that could ensure that the source is not considered a major source of hazardous air pollutants.

Practicable Enforceability

If limitations--whether imposed by SIP rules or through individual or general permits--are incomplete or vague or unsupported by appropriate compliance records, enforcement by the States, citizens and EPA would not be effective. Consequently, in all cases, limitations and restrictions must be of sufficient quality and quantity to ensure accountability (see 54 FR 27283).

The EPA has issued several guidance documents explaining the requirements of practicable enforceability (e.g., "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989; memorandum from John Rasnic entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project," March 13, 1992). In general, practicable enforceability for a source-specific permit means that the permit's provisions must specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule. More specific guidance on these enforceability principles as they apply to rules and general permits is provided in Attachment 4.

Limitations on Hazardous Air Pollutants (HAP)

There are a number of important points to recognize with respect to the ability of existing State and local programs to create limitations for the 189 HAP listed in (or pursuant to) section 112(b) of the Act, consistent with the definitions of "potential to emit" and "federally-enforceable" in 40 CFR 63.2 (promulgated March 16, 1994, 59 FR 12408 in the part 63 General Provisions). The EPA believes that most State and local programs should have broad capabilities to handle the great majority of situations for which a potential to emit limitation on HAP is needed.

First, it is useful to note that the definition of potential to emit for the Federal air toxics program (see the subpart A "general provisions," section 63.2) considers, for purposes of controlling HAP emissions, federally-enforceable limitations on criteria pollutant emissions if "the effect such limitations would have on "[hazardous air pollutant] . . . emissions" is federally-enforceable (emphasis added). There are many examples of such criteria pollutant emission limits that are present in federally-enforceable State and local permits and rules. Examples would include a limitation constraining an operation to one (time limit specified) shift per day or limitations that effectively limit operations to 2000 hours per year. Other examples would include limitations on the amount of material used, for example a permit limitation constraining an operation to using no more than 100 gallons of paint per month. Additionally, federally-enforceable permit terms that, for example, required an incinerator to be operated and maintained at no less than 1600 degrees would have an obvious "effect" on the HAP present in the inlet stream.

Another federally-enforceable way criteria pollutant limitations affect HAP can be described as a "nested" HAP limit within a permit containing conditions limiting criteria pollutants. For example, the particular VOC's within a given operation may include toluene and xylene, which are also HAP. If the VOC-limiting permit has established limitations on the amount of toluene and xylene used as the means to reduce VOC, those limitations would have an obvious "effect" on HAP as well.

In cases as described above, the "effect" of criteria pollutant limits will be straightforward. In other cases, information may be needed on the nature of the HAP stream present. For example, a limit on VOC that ensured total VOC's of 20 tons per year may not ensure that each HAP present is less than 10 tons per year without further investigation. While the EPA intends to develop further technical guidance on situations for which additional permit terms and conditions may be needed to ensure that the "effect" is enforceable as a practical matter, the EPA intends to rely on State and local agencies to employ care in drafting enforceable requirements which recognize obvious environmental and health concerns.

There are, of course, a few important pollutants which are HAP but are not criteria pollutants. Example of these would include methylene chloride and other pollutants which are considered nonreactive and therefore exempt from coverage as VOC's. Especially in cases where such pollutants are the only pollutants present, criteria pollutant emission limitations may not be sufficient to limit HAP. For such cases, the State or local agency will need to seek program approval under section 112(l) of the Act.

Section 112(l) provides a clear mechanism for approval of State and local air toxics programs for purposes of establishing HAP-specific PTE limits. The EPA intends, where appropriate,

that in approving permitting programs into the SIP, to add appropriate language citing approval pursuant to section 112(l) as well. An example illustrating section 112(l) approval is the approval of the State of Ohio's program for limiting potential to emit (see 59 FR 53587, October 25, 1994). In this notice, EPA granted approval under section 112(l) for hazardous air pollutants aspects of a State program for limiting potential to emit. Such language can be added to any federally-enforceable State operating permit program, exclusionary rule, or NSR program update SIP approval notice so long as the State or local program has the authority to regulate HAP and meets other section 112(l) approval criteria. Transition issues related to such section 112(l) approvals are discussed below.

Determination of Maximum Capacity

While EPA and States have been calculating potential to emit for a number of years, EPA believes that it is important at this time to provide some clarification on what is meant in the definition of potential to emit by the "maximum capacity of a stationary source to emit under its physical and operational design." Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgements and factor them into estimates of a stationary source's potential to emit.

The EPA believes that the most straightforward examples of such inherent limitations is for single-emission unit type operations. For example, EPA does not believe that the "maximum capacity" language requires that owner of a paint spray booth at a small auto body shop must assume that (even if the source could be in operation year-round) spray equipment is operated 8760 hours per year in cases where there are inherent physical limitations on the number of cars that can be painted within any given period of time. For larger sources involving multiple emissions units and complex operations, EPA believes it can be more problematic to identify the inherent limitations that may exist.

The EPA intends, within its resource constraints, to issue technical assistance in this area by providing information on the type of operational limits that may be considered acceptable to limit the potential to emit for certain individual small source categories.

Transition Guidance for Section 112 and Title V Applicability

Most, if not all, States have recognized the need to develop options for limiting the potential emissions of sources and are moving forward with one or more of the strategies described in the preceding sections in conjunction with the submission and implementation of their part 70 permit programs. However, EPA is

aware of the concern of States and sources that title V or section 112 implementation will move ahead of the development and implementation of these options, leaving sources with actual emissions clearly below the major source thresholds potentially subject to part 70 and other major source requirements. Gaps could theoretically occur during the time period it takes for a State program to be designed and administratively adopted by the State, approved into the SIP by EPA, and implemented as needed to cover individual sources.

The EPA is committed to aiding all States in developing and implementing adequate, streamlined, and cost-effective vehicles for creating federally-enforceable limits on a source's potential emissions by the time that section 112 or title V requirements become effective. To help bridge any gaps, EPA will expedite its reviews of State exclusionary rules and operating permit rules by, among other things, coordinating the approval of these rules with the approval of the State's part 70 program and by using expeditious approval approaches such as "direct final" Federal Register notices to ensure that approval of these programs does not lag behind approval of the part 70 program.

In addition, in such approval notices EPA will affirm any limits established under the State's program since its adoption by the State but prior to Federal approval if such limits were established in accordance with the procedures and requirements of the approved program. An example of language affirming such limits was recently used in approving an Illinois SIP revision (see 57 FR 59931, included as Attachment 5).

The EPA remains concerned that even with expedited approvals and other strategies, sources may face gaps in the ability to acquire federally-enforceable potential to emit limits due to delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the

burden on States' implementation of title V, and to ensure that delays in EPA's approval of these types of programs will not cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources (i.e., those emitting under the 50 percent threshold) would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits (this is appropriate given that the limits are being taken to avoid otherwise applicable Federal requirements). Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period. States interested in making use of this portion of the transition policy should work with their Regional Office to develop an appropriate certification process.

3. Limits for noncriteria HAP. For noncriteria HAP for which no existing federally-approved program is available for the creation of federally-enforceable limits, the 2-year transition period provides for sufficient time to gain approval pursuant to section 112(l). For the 2-year transition period, State restrictions on such noncriteria pollutants issued to sources with emissions above the 50 percent threshold would be treated by EPA as limiting a source's potential to emit, provided that: (a) the restrictions are enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits. Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period.

The Regional Offices should send this memorandum, including the attachments, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718, or Clara Poffenberger with the Air Enforcement Division at 202-564-8709.

Attachments

cc: Air Branch Chief, Region I-X
Regional Counsels

NOTE: THE ATTACHMENTS ARE AVAILABLE ON EPA'S TECHNOLOGY TRANSFER NETWORK (SEE CHAPTER 8).

APPENDIX B.

SEMINAR OVERHEAD TRANSPARENCIES

FEDERAL OPERATING PERMITS PROGRAM
(PART 71)

By:

Valerie V. Harris
and
Stephen Edgerton

MRI
Midwest Research Institute

AGENDA

9:00 am	Introduction
9:30	Who Needs a Permit
10:00	Gathering Information
10:45	*Break*
11:00	Application Forms/Examples
Noon	*Lunch (on your own)*
1:15 pm	Application Forms/Examples
1:45	Permitting Options
2:15	*Break*
2:30	Permitting Strategies
3:00	Timing and Expectations
3:30	Questions/Answers

INTRODUCTION

- Purpose
- Schedule
- Presenters

INTRODUCTION

Title V background:

- Cornerstone of 1990 Clean Air Act Amendments
- *All facility requirements compiled into one* operating permit
- Available to facility, permitting authority, and the public

INTRODUCTION

Part 71 background:

- Title V envisioned as State program (Part 70)
- Part 71 implemented where Part 70 program not approved
- State-specific Part 71 status
  - Why invoked
  - Delegated or non-delegated
  - Anticipated Part 71/Part 70 transition
  - Portions of Part 70 program incorporated into Part 71

SESSION I

Who Needs a Permit

WHO NEEDS A PERMIT?

- Major sources - Titles I, III, VI
- Affected sources - Title IV
- Solid waste incineration - section 129(e)
- Other nonmajor sources specified by rule

AFFECTED SOURCES - TITLE IV

- Acid rain program from '90 Amendments
- Phase I (1995) - specified electric utility units
- Phase II (2000) - other units (including cogeneration)

SOLID WASTE INCINERATION UNITS - SECTION 129(e)

- Municipal waste incinerators
- Medical waste incinerators
- Commercial or industrial waste incinerators

MAJOR SOURCES

- Hazardous air pollutants (HAPs) (Section 112)
- Other air pollutants (Section 302)
- Nonattainment areas/Ozone Transport Region (Part D of Title I)

MAJOR SOURCES (CONT.)

- Based on "Potential to Emit"
- Can include group of sources on contiguous properties under common control
- Can include fugitive emissions

MAJOR SOURCES OF HAP

Potential to emit:

- $\geq$ 10 tpy of a single HAP
- $\geq$ 25 tpy of all HAPs combined
- Lesser quantities as established by rule
- For radionuclides, established by rule

MAJOR SOURCES IN NONATTAINMENT AREAS/OTR (POTENTIAL TO EMIT THRESHOLDS)

VOC and NO_x:

- 100 tpy in Marginal and Moderate Areas
- 50 tpy in Serious Areas and the OTR (VOC only)
- 25 tpy in Severe Areas
- 10 tpy in Extreme Areas

Carbon Monoxide:

- 50 tpy in Serious Areas

PM_{10}:

- 70 tpy in Serious Areas

MAJOR SOURCES IN NONATTAINMENT AREAS/OTR

- Aggregate contiguous sources under common control only if in same 2-digit SIC code Major Group
- Fugitives included only if in 1 of 27 listed source categories

OTHER MAJOR SOURCES - SECTION 302 DEFINITION

Potential to emit $\geq$ 100 tpy of "any air pollutant"

Pollutants included:

- VOC
- NO_x
- *Criteria pollutants:* PM_{10}, SO_2, ozone, NO_2, CO, lead
- NSPS - regulated polutants
- Title VI pollutants - Class I and II ozone-depleting substances
- HAPs
- Section 112(r) pollutants - toxic, flammable, and explosive materials regulated under the accidental release provisions (exempt from Title V)

OTHER MAJOR SOURCES - SECTION 302 DEFINITION

- Aggregate contiguous sources under common control only if in same 2-digit SIC code Major Group
- Fugitives included only if in 1 of 27 listed source categories

NONMAJOR SOURCES

Types of nonmajor sources that may require Title V permits in the future:

- Sources subject to NSPS or NESHAP promulgated after July 21, 1992 unless exempted in rule
- *Sources subject to other NSPS/NESHAP or to* NSR/PSD, after rulemaking on Title V program for minor sources
- Other source categories designated by EPA by rule

EXCEPTIONS TO APPLICABILITY

- *Sources included solely because they are major* Section 112(r) pollutant sources
- Sources included solely because they are subject to the NSPS for residential wood heaters (40 CFR Part 60, Subpart AAA)
- Sources included solely because they are subject to the NESHAP for asbestos demolition and renovation (40 CFR 61.145)
- *Oil or gas exploration or production well emissions* and pipeline compression or pump station emissions not aggregated for purposes of HAP major source status.

HOW TO APPLY

- Determine applicability
- Contact Title V Permitting Authority for forms and schedules
- Fill out application
- Submit complete and timely application

DETERMINE APPLICABILITY

- Major sources (HAPs, NAA/OTR, other)
- Affected sources
- Solid waste incinerators
- Other sources specified by rule

CONTACT TITLE V PERMITTING AUTHORITY

- Undelegated Part 71 program - EPA Regional Office
- Delegated part 71 program - State/local agency
- Approved Part 70 program - State/local agency

STATE-SPECIFIC INFORMATION/CONTACTS

- To be provided during seminar

FILL OUT APPLICATIONS

- Emission units/emissions of "regulated pollutants"
- Applicable requirements
- Information related to operational flexibility options
- Compliance status/schedules
- Monitoring, recordkeeping, reporting, test methods
- General permit application, if applicable
- Certification by a "responsible official"

SUBMIT COMPLETE APPLICATION

- Must include:
  - Information "sufficient to evaluate the source and its application and to determine all applicable requirements"
  - Fee calculation and remittance
  - Additional information as requested by the permitting authority
- Must supplement or correct application upon becoming aware of need

SUBMIT TIMELY APPLICATION

- Generally due within 12 months after source becomes subject to Title V program
- For some sources (with advance notice), may be due within 6 months
- "Application Shield" applies only from date deemed or determined complete

STATE-SPECIFIC INFORMATION ON SUBMITTAL TIMEFRAME

- To be provided during seminar

APPLICATION SHIELD CONSIDERATIONS

- Source can operate after due date only if application has been deemed or determined complete
- Deemed complete if no action within 60 days
- Should consider time needed:
  - For permitting authority to review initial application (up to 60 days)
  - To generate and submit any additional information requested
  - For permitting authority to review additional information

SESSION II

Gathering Information

EMISSION INVENTORY FOR PERMITTING

- Gathering of information
- A preview of the permit application
- Final calculations and totals will drive the permitting process

SESSION OUTLINE

- Collecting data for all emission points
- Applying estimation techniques
- Sources of information
- Critical concerns
- Examples and documentation

COLLECTING DATA

- Identify all emission points
  (Nothing is too small)
- Include all regulated air pollutants

TYPES OF EMISSION POINTS

- Anything that releases emissions
  - Process ducts/stacks
  - Fugitive emission sources
  - Process fugitive emissions
  - Controlled and uncontrolled emissions

TYPES OF EMISSION POINTS (CONT.)

- Examples
  - Fuel storage and handling
  - Solvent storage and usage
  - Chemical processes
  - Power/heat generation
  - Material storage piles
  - Wastewater treatment
  - Leaks from valves, lines, etc.
  - Material loading/unloading

TYPES OF POLLUTANTS

- Particulate matter and PM_{10}
- NO_x, SO_x, CO, Lead, VOC
- Individual HAP's (from HAP list)
- Other regulated air pollutants

DESIGN AND OPERATING PATTERNS

For each point: How much?

- Definition/type of emission point
- Capacity/rating; hours of operation
- Usage/throughput rate
- Definition of cycles (if batch)
- Control equipment/efficiency
  - Maximum and Actual Values
  - Define Variations
  - Hourly and Annual Basis

OTHER POINT SPECIFIC INFORMATION

- Chemical content of materials
- Btu, sulfur content of fuels
- Additional specific information for emission factor modeling of tanks and wastewater treatment

ADDITIONAL SETTING/MODELING INFORMATION

- SIC codes/SCC codes
- Location (UTM coordinates)
- Stack data
  - Release height
  - Exit temperature
  - Exit flow or velocity
  - Stack diameter
- Plant layout

ADDITIONAL SETTING/MODELING INFORMATION (CONT.)

- Building diagrams and data
  - Height, length, width
  - Base elevation
  - Location of other structures
- Community setting
  (Map with nearest school, hospital, etc.)
- Basic process flow diagrams
  (Blocks with input/outputs)

EMISSION ESTIMATION METHODS

- Measured emissions data
- Emission factors
- Mass balance
- Engineering calculations

ACCESS TO EMISSION FACTORS

- EPA Technology Transfer Network (TTN)
- TTN access to CHIEF (Clearinghouse for Inventories and Emission Factors) and EMTIC (Emission Measurement Information Center)
- TTN: (919) 541-5742
- System Operator: (919) 541-5384
- Also CHIEF CD-ROM

EMISSION FACTOR SOURCES

- AP-42 (primary reference)
- SPECIATE
- XATEF (Crosswalk)
- TANKS model
- SIMS (Surface Impoundment Modeling System)
- LANDFILL
- Locating and estimating air emissions series
- Others

CALCULATE TOTALS

- Average emissions
- Potential to emit
  - 8,760 hours/year
  - Maximum production rate
  - Worst polluting fuel, raw material, or media
  - Uncontrolled

CRITICAL CONCERNS

- Quality of data
- Potential to emit vs. emission thresholds
- Other pertinent regulations
- Future expansion or operational changes
- Fee determination

NOTE ON FLEXIBILITY

- EPA's "White Paper" (July 10, 1995) offers flexibility in emissions quantification
  - Use of least costly estimation method
  - Use of available information should suffice

KEY STEPS

- Propose compliance program, if necessary
- Develop permit application
  (with plan of attack)

CALCULATIONS: ACTUAL ANNUAL EMSSIONS FROM TWO INDUSTRIAL-SIZE BOILERS

1. Determine fuel/product usage consumption - natural gas and fuel oil

   Boiler #1 - fuel type = natural gas
   (Quantity consumed, calendar year = 40 x $10^6 ft^3$)

   Boiler #2 - fuel type = distillate fuel oil
   (Quantity consumed, calendar year = 15,000 gal)

2. Control equipment - none

CALCULATIONS (CONT.)

3. Obtain appropriate/applicable emission factor.

   In this case, Sections on Fuel Oil Combustion and Natural Gas Combusion from EPA's AP-42 contain appropriate emission factors for boilers of this size.

   The SPECIATE database will also be used to speciate emissions of VOCs and HAPs from boiler #1.

   Speciation of VOC and HAP emissions from boiler #2 will be quantified using both SPECIATE and an independent chemical analysis of the distillate oil used.

CALCULATE (CONT.)

4. Calculations. Tables 1 and 2 display uncontrolled emission factors for combustion of natural gas and fuel oil, respectively. Emissions from the boilers can be calculated as follows:

$$E = e\,c$$

E = Annual emission rate (lb pollutant/yr)
e = Emission factor (lb pollutant/quantity of fuel consumed)
c = Annual fuel consumption (i.e. 10^3 gal/yr, $10^6 ft^3$/yr)

TABLE 1

AP-42 Emission Factors for Uncontrolled Domestic and Commercial Boilers (<10 x 10^6 Btu/hr input) for Natural Gas Combustion

Particulate:	1-5 lb/10^6 ft^3
Sulfur Dioxide:	0.6 lb/10^6 ft^3
Nitrogen Oxides:	100 lb/10^6 ft^3
Carbon Monoxide:	20 lb/10^6 ft^3
Volatile Organics:	Nonmethane: 5.3 lb/10^6 ft^3 Methane: 2.7 lb/10^6 ft^3

CRITERIA POLLUTANT EMISSIONS: BOILER #1

Particulate/PM_{10} Emissions

E = 5 lb PM_{10}/$10^6$$ft^3$** x 40 x $10^6$$ft^3$/yr = 200 lb PM_{10}/yr

SO_x Emissions

E = 0.6 lb SO_x/$10^6$$ft^3$ x 40 x $10^6$$ft^3$/yr = 24 lb SO_x/yr

**Factor chosen to yield worst case scenario

CRITERIA: BOILER #1 (CONT.)

NOx Emissions

E = 100 lb NO_x/$10^6$$ft^3$ x 40 x $10^6$$ft^3$/yr = 4,000 lb NO_x/yr

CO Emissions

E = 20 lb CO/$10^6$$ft^3$ x 40 x $10^6$$ft^3$/yr = 800 lb CO/yr

CRITERIA: BOILER #1 (CONT.)

VOC Emissions

E = 8.0 lb VOC/$10^6$$ft^3$*** x 40 x $10^6$$ft^3$ natural gas consumed/yr

= 320 lb VOC/yr

***Total VOCs calculated from the combination of both nonmethane and methane emission factors

TABLE 2

AP-42 Emission Factors for Uncontrolled Distillate Oil Commercial Boilers

Particulate:	2 lb/10^3 gal
Sulfur Dioxide:	142 x (wt. % of sulfur in oil) lb/10^3 gal
Nitrogen Oxides:	20 lb/10^3 gal
Carbon Monoxide:	5 lb/10^3 gal
Volatile Organics:	Nonmethane 0.34 lb/10^3 gal Methane 0.216 lb/10^3 gal

CRITERIA POLLUTANT EMISSIONS: BOILER #2

Particulate/PM_{10} Emissions

E = 2 lb PM_{10}/10^3 gal x 15 x 10^3 gal/yr = 30 lb PM_{10}/yr

SO_x Emissions

E = (142 x 0.5%) lb SO_x/10^3 gal x 15 x 10^3 gal/yr

= 1,060 lb SO_x/yr

CRITERIA: BOILER #2 (CONT.)

NO_x Emissions

E = 20 lb $NO_x/10^3$ gal x 15 x 10^3 gal/yr = 300 lb NO_x/yr

CO Emissions

E = 5 lb CO/10^3 gal x 15 x 10^3 gal/yr = 75 lb CO/yr

CRITERIA: BOILER #2 (CONT.)

VOC Emissions

E = 0.556 lb VOC/10^3 gal x 15 x 10^3 gal/yr = 8 lb VOC/yr

VOC PROFILE SPECIATION REPORT

Profile Name: External Combustion Boiler - Natural Gas
Control Device: Uncontrolled
Data Source: Information based on stack sample for natural gas analyzed by GC/MS

SCC Assignments: 10100601, 10200601, 10300601, 10500106, 10500206, 39990003, 39990013

SAROAD	CAS NO	NAME	SPEC MW	SPEC WT
43105		ISOMERS OF HEXANE	86.17	1.00
43122		ISOMERS OF PENTANE	72.15	9.00
43291	74-82-8	METHANE	16.04	88.00
43204	74-98-6	PROPANE	44.09	4.00
43212	106-97-8	N-BUTANE	58.12	8.00
43220	109-66-0	N-PENTANE	72.15	6.00
43249	110-82-7	CYCLOHEXANE	84.16	1.00
43502	50-00-0	FORMALDEHYDE	30.03	8.00
46201	71-43-2	BENZENE	78.11	4.00
46202	108-88-3	TOLUENE	92.13	2.00
TOTAL				100.00

SPECIATED EMISSIONS: BOILER #1

ISOMERS OF HEXANE***

E = 320 lb VOC/yr x 1% by weight isomers of hexane

= 3.2 lb isomers of hexane/yr.

***Regulated as a HAP under the Clean Air Act Amendments

SPECIATED EMISSIONS: BOILER #1 (CONT.)

FORMALDEHYDE***

E = 320 lb VOC/yr x 8% by weight formaldehyde

= 26 lb formaldehyde/yr.

***Regulated as a HAP under the Clean Air Act Amendments

SPECIATED EMISSIONS: BOILER #1 (CONT.)

BENZENE***

E = 320 lb VOC/yr x 4% by weight benzene
= 13 lb benzene/yr.

TOLUENE***

E = 320 lb VOC/yr x 2% by weight toluene
= 6 lb toluene/yr.

***Regulated as a HAP under the Clean Air Act Amendments

VOC PROFILE SPECIATION REPORT

Control Device: Uncontrolled

Data Source: Information based on stack sample for residual oil analyzed by GC/MS.

SCC Assignments: 10100501, 10200501, 10300501, 10500205, 39990001, 39990011

SAROAD	CAS NO	NAME	SPEC MW	SPEC WT
43105		ISOMERS OF HEXANE	86.17	5.20
43106		ISOMERS OF HEPTANE	100.20	2.80
43107		ISOMERS OF OCTANE	114.23	4.70
43122		ISOMERS OF PENTANE	72.15	5.50
43204	74-98-6	PROPANE	44.09	1.20
43212	106-97-8	N-BUTANE	58.12	12.20
43214	75-28-5	ISO-BUTANE	58.12	4.10
43220	109-66-0	N-PENTANE	72.15	4.70
43231	110-54-3	HEXANE	86.17	10.80
43232	142-82-5	HEPTANE	100.20	0.30
43502	50-00-0	FORMALDEHYDE	30.03	48.70
TOTAL				100.00

SPECIATED EMISSIONS: BOILER #2
(USING SPECIATE DATABASE)

ISOMERS OF HEXANE***

E = 8 lb VOC/yr x 5.2% by weight isomers of hexane

= 0.4 lb isomers of hexane/yr.

***Regulated as a HAP under the Clean Air Act Amendments

SPECIATED EMISSIONS: BOILER #2 (CONT.)

HEXANE***

E = 8 lb VOC/yr x 10.8% by weight hexane

= 1 lb hexane/yr.

***Regulated as a HAP under the Clean Air Act Amendments

SPECIATED EMISSIONS: BOILER #2 (CONT.)

FORMALDEHYDE***

E = 8 lb VOC/yr x 48.7% by weight formaldehyde

= 4 lb formaldehyde/yr.

***Regulated as a HAP under the Clean Air Act Amendments

SPECIATED EMISSIONS: BOILER #2
(USING FUEL ANALYSIS RESULTS)

- METAL, CHLORINE, AND SULFUR EMISSIONS
  - Annual diesel throughput = 15,000 gal
  - 15,000 gal x 7.1 lb/gal = 0.106500 x 10^6 lb/yr
  - Metal, chlorine, and sulfur emissions

Chlorine	<8 ppm	x .1065 x 10^6/yr = 0.9 lb/yr
Sulfur	426 ppm	x 1065 x 10^6/yr = 45 lb/yr
Chloride	<8 ppm	x .1065 x 10^6/yr = 0.9 lb/yr
Total organic chlorine	<8 ppm	x .1065 x 10^6/yr = 0.9 lb/yr
Silver	<1 ppm	x .1065 x 10^6/yr = 0.1 lb/yr
Arsenic	<5 ppm	x .1065 x 10^6/yr = 0.5 lb/yr
Beryllium	<1 ppm	x .1065 x 10^6/yr = 0.1 lb/yr

SPECIATED EMISSIONS: BOILER #2 (CONT.)

Cadmium	<1 ppm	x .1065 x 10^6/yr = 0.1 lb/yr
Chromium	<12 ppm	x .1065 x 10^6/yr = 1.3 lb/yr
Copper	12 ppm	x .1065 x 10^6/yr = 1.3 lb/yr
Mercury	<5 ppm	x .1065 x 10^6/yr = 0.5 lb/yr
Nickel	1,104 ppm	x .1065 x 10^6/yr = 118 lb/yr
Lead	<5 ppm	x .1065 x 10^6/yr = 0.5 lb/yr
Selenium	<5 ppm	x .1065 x 10^6/yr = 0.5 lb/yr
Manganese	50 ppm	x .1065 x 10^6/yr = 5.0 lb/yr
Zinc	21 ppm	x .1065 x 10^6/yr = 2.0 lb/yr

Note: $\text{ppm} = \frac{\text{1 lb pollutant}}{10^6 \text{ lb fuel}}$

SESSION III

Application Forms and Examples

NOTE REGARDING SESSION III

- This session will consist of a discussion of actual application forms

SESSION IV

Permitting Options

SPECIAL OPTIONS/DECISIONS

- Synthetic minor sources
- Insignificant and exempt emissions units
- Monitoring, recordkeeping, and reporting
- Adding emission controls

SYNTHETIC MINOR SOURCES

Potential to emit means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

SYNTHETIC MINOR SOURCES (CONT.)

Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type/amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the Administrator (subject to change, due to recent court decisions).

SYNTHETIC MINOR SOURCES (CONT.)

In other words, PTE assumes:

- 24 hour/day, 365 day/year operation
- Worst-case emissions
  - Maximum process rate
  - Dirtiest fuel or raw materials
- Does not include any emission controls
- Does include enforceable emission limitations

SYNTHETIC MINOR SOURCES (CONT.)

Address sources with:

- Potential to emit above major source threshold(s)
- Actual emissions below major source threshold(s)

SYNTHETIC MINOR SOURCES (CONT.)

Created by accepting enforceable emission limitations:

- Limit hours of operation
- Limit production
- Limit material use
- Install emission control equipment/define minimum control efficiency

SYNTHETIC MINOR SOURCES (CONT.)

- Federally-enforceable State operating permit programs (FESOPs)
- Limits established by rules ("exclusionary" or "prohibitory")
- General permits
- Preconstruction permit programs (NSR)
- Source-specific SIP revision

STATE-SPECIFIC INFORMATION ON SYNTHETIC MINOR PROGRAMS

- To be presented during seminar

SYNTHETIC MINOR SOURCES (CONT.)

EPA transitional guidance (good until January 1997)

- Sources with actuals < 50% of major source thresholds
  - Maintain actual emissions at these levels for each rolling 12-month period (beginning January 1994)
  - Maintain records on site

SYNTHETIC MINOR SOURCES (CONT.)

- Sources with actuals > 50% of major source thresholds
  - Use limitations on State permits, if permit is enforceable as a practical matter

INSIGNIFICANT AND EXEMPT EMISSION UNITS

- Insignificant activities
- Trivial activities (White Paper)
- Insignificant emission levels
- Exempt emissions units

Notes: (1) Will be some changes to Part 71

(2) May be some State-specific provisions that supersede Part 71

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

Insignificant activities under Part 71:

- Comfort air-conditioning units (not subject to Title VI)
- Comfort ventilating units
- Comfort heating units
- Noncommercial food preparation

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

- Consumer use of office equipment and products
- Janitorial services and consumer use of janitorial products
- Internal combustion engines used for landscaping purposes
- Mobile sources

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

- Insignificant activities under State Part 70 program:

If the State's list differs from Part 71, EPA will consider adding activities to smooth the ultimate transition to the Part 70 program.

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

Insignificant emission levels under Part 71:

- Levels for regulated air pollutants, except HAPs
  - PTE for single emissions units $\leq$ 2 tpy
- Levels for HAPs
  - PTE for single emissions unit $\leq$ 1,000 lb/yr of any HAP

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

- Trivial activities from the "White Paper:"

List of 53 types of activities and emissions units that may be presumptively omitted from permit applications even if not included on the list of insignificant activities.

EXCLUSION OF "TRIVIAL" ACTIVITIES

- List in "White Paper" Attachment A

Examples:

- Janitorial services
- Tobacco smoking rooms and areas
- Steam vents

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

Exempt emissions units:

- "Grandfathered" units
- Units below size thresholds
- Other exemptions

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

Application treatment:

- Insignificant and trivial activities - not included in application
- Insignificant emission levels - identify emissions units and indicate that exemption applies
- Exempt emissions units - explain exemption from applicable requirements; provide all other data

INSIGNIFICANT AND EXEMPT EMISSIONS UNITS (CONT.)

Must supply additional information if needed to determine:

- Applicability of any applicable requirement
- Whether a source is major
- Whether a source needs a Part 71 permit
- Fee

MONITORING, RECORDKEEPING, AND REPORTING

- Emissions units with monitoring required by underlying applicable requirements
- Emissions units requiring "periodic monitoring"
- Emissions units requiring other reporting/ documentation

Note: CAM rule developments likely to apply.

MONITORING, RECORDKEEPING, AND REPORTING (CONT.)

- Monitoring required by applicable requirements:
  - Specified in standard - NSPS, NESHAP, SIP, etc.
  - Specified by preconstruction permit - NSR, PSD
  - Other

MONITORING, RECORDKEEPING, AND REPORTING (CONT.)

- "Periodic monitoring" required for other emissions units - CAM Rule
  - Emissions monitoring
  - Parameter monitoring - process or control device
  - Trigger O & M activities

MONITORING, RECORDKEEPING, AND REPORTING (CONT.)

Recordkeeping requirements:

- Per applicable requirements
- Per periodic monitoring requirements
- Records retained for 5 years

MONITORING, RECORDKEEPING, AND REPORTING (CONT.)

Reporting requirements:

- Per applicable requirements
- Every 6 months (or less)
- Prompt reporting of deviations from permit requirements

ADDING EMISSION CONTROLS

- May be required for new or future MACT standards
- Voluntary controls to reduce PTE

SESSION V

Permitting Strategies

OPERATIONAL FLEXIBILITY

- Remain competitive
- Adjust to changing market
- Minimize permit revisions

REALITIES OF PERMIT REVISIONS

- Reopen files
- Possible public notice
- Wait for approval

ISSUES FOR OPERATIONAL FLEXIBILITY

- Variations in product/operations
- Increased production rates
- Other

OPTIONS

- Alternative operating scenarios
- Maximize potential to emit
- Emission caps
- Emission trading
- Off permit changes

ALTERNATIVE OPERATING SCENARIOS

- Include in original permit application
- Different fuels, solvents
- Different operating modes
- Worst case scenario

MAXIMUM POTENTIAL TO EMIT

- Maximize production
- Maximize hours of operation
- Minimize efficiency of control equipment
- Most hazardous chemicals
- Worst case scenario

(But, avoid NSR, PSD, etc., limits!)

EMISSION CAPS

- Maximum for facility or subset of facility
- Be prepared for:
  - Recordkeeping
  - Limits
  - "Like-for-like" HAPs

EMISSION TRADING

- Between one company's facilities, or
- Open market

INTEL, OREGON EXAMPLE

- Semiconductor industry as a fast changing industry
- Pollution prevention goals
- Grouping of non-boiler sources for a VOC cap
- Permit viewed by many as an example to follow

SESSION VI

Timing and Expectations

NOTES REGARDING SESSION VI

- This session will consist of a last minute update of the status of the Part 71 program
- The latest decisions on implementation expectations and submittal timelines will be discussed

SESSION VII

Questions/Answers