

CALLS FOR STATE IMPLEMENTATION PLAN (SIP) REVISIONS

TECHNICAL SUPPORT DOCUMENT

VOLUME II - Appendices

ADDITIONAL DATA FOR AREAS RECEIVING SIP CALLS

March 9, 1984

Table of Contents

<u>Title</u>	<u>Page</u>
Region III Pennsylvania	PA-1
Region IV Georgia Alabama Florida	GA-1 AL-1 FL-1
Region V Indiana Minnesota Ohio	IN-1 MN-1 OH-1
Region VI Louisiana Oklahoma Texas	LA-1 OK-1 TX-1
Region VII Nebraska Kansas	NE-1 KA-1
Region IX Arizona California Nevada	AZ-1 CA-1 NV-1

Region III

Pennsylvania

TABLE I-1

CONTINUOUS AIR MONITORING SUMMARY
JANUARY 1981 TO DECEMBER 1981
OZONE (PPM)

SITE NAME	SITE CODE	ANNUAL MEAN DATA	PERCENT VALID DATA	FOUR HIGHEST DAILY MAXIMUM FOUR VALUES								-- NUMBER OF DAILY MAXIMUM HOURS IN RANGES --									
				1 HR	1 HR	DATE	DATE	1 HR	DATE	1 HR	DATE	to .040	to .080	to .120	to .160	to .200	to .240	GREATER THAN .250			
SOUTHEAST PENNSYLVANIA AIR BASIN																					
CHESTER	P11	0.023	90.7	5	0.147	6/13/14	0.120	7/12/12	0.127	8/ 7/14	0.126	6/21/16	207	110	40	5	0	0	0		
BRISTOL	P01	0.020	89.0	7	0.163	7/12/16	0.161	6/16/13	0.136	5/26/13	0.127	6/13/15	211	104	36	5	2	0	0		
NORRISTOWN	P21	0.021	89.6	6	0.221	8/ 17/15	0.163	7/31/16	0.146	6/18/16	0.132	7/13/14	202	114	36	4	1	1	0		
FOLCROFT	P41	0.019	53.2	5	0.195	6/16/12	0.140	6/25/17	0.139	7/29/18	0.138	6/21/16	134	58	21	4	1	0	0		
ALLENTOWN-BETHLEHEM-EASTON AIR BASIN																					
ALLENTOWN	M11	0.022	90.4	2	0.124	6/19/14	0.122	6/21/14	0.116	6/ 8/15	0.116	6/13/15	187	135	38	2	0	0	0		
BETHLEHEM	M21	0.019	88.9	1	0.124	6/24/16	0.099	7/19/16	0.095	5/14/16	0.095	8/ 2/15	237	106	17	1	0	0	0		
EASTON	M41	0.021	64.6	1	0.121	5/14/16	0.111	4/ 8/15	0.109	5/25/17	0.106	2/16/15	163	92	21	1	0	0	0		
READING AIR BASIN																					
READING	R01	0.021	92.3	9	0.162	5/25/20	0.135	6/12/18	0.133	6/30/17	0.132	7/ 8/19	203	113	38	8	1	0	0		
SCRANTON-WILKES BARRE AIR BASIN																					
SCRANTON	S01	0.022	89.3	0	0.118	5/14/19	0.104	7/ 8/13	0.104	7/24/17	0.103	7/19/13	215	129	21	0	0	0	0		
WILKES BARRE	S21	0.018	90.3	0	0.093	6/30/12	0.093	8/ 2/12	0.092	7/24/19	0.091	1/21/ 3	234	113	11	0	0	0	0		
CAULFIELD	S25	0.022	81.8	0	0.106	6/30/12	0.099	7/ 8/13	0.090	6/29/14	0.090	8/ 2/14	211	99	12	0	0	0	0		
HARRISBURG AIR BASIN																					
HARRISBURG	H11	0.019	86.1	1	0.141	6/30/15	0.104	6/18/20	0.103	6/24/14	0.096	7/13/12	234	110	13	1	0	0	0		
LANCASTER AIR BASIN																					
LANCASTER	L01	0.022	89.8	6	0.164	5/25/18	0.143	6/13/17	0.142	6/30/12	0.136	5/26/18	190	138	24	5	1	0	0		
YORK AIR BASIN																					
YORK	Y01	0.021	85.5	2	0.148	8/19/13	0.145	6/30/14	0.112	6/18/18	0.109	5/14/16	215	123	12	2	0	0	0		
JOHNSTOWN AIR BASIN																					
JOHNSTOWN	J01	0.020	87.8	1	0.125	7/ 8/18	0.117	8/27/17	0.116	5/23/18	0.114	7/18/18	195	137	28	1	0	0	0		
MONONGAHELA VALLEY AIR BASIN																					
CHARLOTTE	M01	0.020	84.8	4	0.180	6/30/15	0.156	7/ 6/16	0.128	6/19/14	0.124	7/ 7/18	208	117	24	3	1	0	0		
UPPER BEAVER VALLEY AIR BASIN																					
NEW CASTLE	U21	0.020	90.1	2	0.134	7/12/17	0.124	7/ 7/18	0.106	6/30/12	0.103	7/ 8/12	209	129	23	2	0	0	0		
LOWER BEAVER VALLEY AIR BASIN																					
DAVEN	L01	0.013	74.5	1	0.122	8/ 1/16	0.108	7/31/17	0.106	8/ 2/17	0.103	6/30/14	234	60	13	1	0	0	0		
BLAVER FALLS	L11	0.019	87.9	0	0.104	8/ 1/15	0.104	8/27/16	0.102	7/18/14	0.099	8/23/18	213	124	23	0	0	0	0		
MIDLAND	L31	0.020	86.1	1	0.125	7/12/18	0.100	6/20/15	0.100	8/27/14	0.098	8/23/17	199	127	16	1	0	0	0		
ERIE AIR BASIN																					
ERIE	E01	0.022	85.9	4	0.129	7/18/15	0.128	7/12/17	0.126	7/ 8/14	0.126	7/25/19	248	83	20	4	0	0	0		
NON-AIR BASIN SITES																					
KUTZTOWN	208	0.024	74.8	4	0.147	6/30/15	0.144	7/24/15	0.133	6/24/15	0.128	5/14/17	169	87	25	4	0	0	0		
PERRY COUNTY	305	0.023	67.7	1	0.134	7/22/11	0.117	8/27/17	0.113	6/30/17	0.112	8/28/16	128	132	13	1	0	0	0		
HERSHEY	306	0.016	32.3	1	0.196	9/21/16	0.117	8/28/16	0.114	5/27/16	0.113	8/23/17	96	24	10	0	1	0	0		
WILLISPORT	402	0.021	78.5	1	0.163	4/ 7/ 7	0.117	5/14/20	0.116	5/29/19	0.109	7/29/17	174	121	18	0	0	0	1		
ALTOONA	404	0.023	79.9	0	0.103	7/18/17	0.099	8/19/19	0.098	8/27/17	0.094	5/24/18	186	136	12	0	0	0	0		
NEW KENSINGTON	501	0.015	28.7	4	0.138	7/18/16	0.131	10/14/13	0.120	5/23/14	0.125	7/ 7/17	68	30	7	4	0	0	0		
PETROLIA	502	0.019	79.2	0	0.103	8/ 1/17	0.098	5/23/17	0.096	9/17/13	0.095	5/ 5/16	209	94	15	0	0	0	0		
PAWELL	606	0.021	77.6	1	0.157	7/12/14	0.119	8/27/16	0.118	6/30/12	0.115	7/30/11	196	107	19	1	0	0	0		

PRIMARY 1 HOUR STANDARD OF 0.120 PPM DAILY

TABLE I-J
CONTINUOUS AIR MONITORING SUMMARY
JANUARY 1982 TO DECEMBER 1982
OZONE (PPM)

SITE NAME	SITE CODE	ANNUAL MEAN	PERCENT VALID DATA	FOUR HIGHEST DAILY MAXIMUM HOUR VALUES								-- NUMBER OF DAILY MAXIMUM HOURS IN RANGES --								
				DATE		DATE		DATE		DATE		.000 to .040	.041 to .080	.081 to .120	.121 to .160	.161 to .200	.201 to .240	.241 to .280	GREATER THAN .280	
				1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	1 HR	
SOUTHEAST PENNSYLVANIA AIR BASIN																				
CHESTER	P11	0.025	88.7	14	0.157	6/27/13	0.151	9/14/15	0.149	7/27/17	0.147	5/13/14	157	153	35	14	0	0	0	0
BRISTOL	P01	0.022	88.7	13	0.148	6/28/15	0.145	8/ 4/15	0.143	6/ 9/18	0.134	7/18/12	177	127	40	13	0	0	0	0
NORRISTOWN	P21	0.021	90.5	4	0.139	7/14/14	0.131	7/16/16	0.128	6/27/14	0.125	5/12/14	185	143	30	4	0	0	0	0
FULCROFT	P41	0.018	87.0	1	0.128	6/27/15	0.113	5/13/14	0.113	8/ 4/14	0.111	5/26/15	204	105	27	1	0	0	0	0
ALLENTOWN-BETHLEHEM-EASTON AIR BASIN																				
ALLENTOWN	A01	0.022	91.1	3	0.143	6/ 9/21	0.124	7/14/18	0.121	6/27/15	0.117	6/26/14	174	152	34	3	0	0	0	0
BETHLEHEM	A21	0.022	91.3	5	0.149	7/14/18	0.145	6/27/17	0.133	6/26/15	0.125	6/28/18	191	143	23	5	0	0	0	0
EASTON	A41	0.019	88.0	1	0.142	7/14/18	0.118	7/ 6/16	0.112	5/27/18	0.112	6/27/17	224	113	14	1	0	0	0	0
READING AIR BASIN																				
READING	R01	0.021	90.5	3	0.147	5/ 7/15	0.138	7/14/18	0.127	6/27/13	0.113	6/26/16	197	128	36	3	0	0	0	0
SCRANTON-WILKES BARRE AIR BASIN																				
SCRANTON	S01	0.025	83.7	5	0.175	5/ 7/15	0.158	7/15/15	0.131	7/ 7/16	0.125	9/13/12	179	151	25	4	1	0	0	0
WILKES BARRE	S21	0.020	36.7	1	0.124	5/ 7/14	0.100	5/18/15	0.090	4/25/19	0.085	5/12/12	90	48	3	1	0	0	0	0
WILKES BARRE	S28	0.023	51.2	0	0.116	9/13/13	0.112	6/27/20	0.107	6/28/14	0.107	7/15/13	96	93	23	0	0	0	0	0
PAVINGDALE	S25	0.025	91.1	1	0.132	5/ 7/16	0.119	7/15/16	0.104	9/13/11	0.103	7/16/14	161	181	13	1	0	0	0	0
NANTICUKE	S26	0.023	78.6	1	0.125	5/ 7/15	0.098	6/ 9/23	0.098	6/27/15	0.097	4/15/16	152	136	25	1	0	0	0	0
HARRISBURG AIR BASIN																				
HARRISBURG	H11	0.024	89.9	0	0.120	9/10/15	0.117	6/19/15	0.115	5/18/15	0.113	5/ 7/19	174	139	49	0	0	0	0	0
LANCASTER AIR BASIN																				
LANCASTER	L01	0.023	86.1	3	0.343	10/27/ 1	0.154	8/ 4/16	0.123	8/31/16	0.117	8/16/18	174	143	33	2	0	0	0	1
YORK AIR BASIN																				
YORK	Y01	0.022	90.1	0	0.113	8/ 4/19	0.112	7/10/16	0.106	6/26/18	0.105	6/27/14	185	141	31	0	0	0	0	0
JOHNSTOWN AIR BASIN																				
JOHNSTOWN	J01	0.020	89.4	0	0.115	6/25/18	0.108	6/26/14	0.099	5/12/15	0.097	5/18/12	186	153	20	0	0	0	0	0
MONONGAHELA VALLEY AIR BASIN																				
CHARLENOI	M01	0.022	89.1	0	0.116	5/18/18	0.113	5/13/18	0.109	5/12/14	0.102	5/ 6/13	148	175	32	0	0	0	0	0
UPPER MEADOW VALLEY AIR BASIN																				
NEW CASTLE	U21	0.019	89.1	0	0.114	5/26/19	0.110	7/10/16	0.108	7/13/18	0.103	8/15/17	210	125	20	0	0	0	0	0
LOWER MEADOW VALLEY AIR BASIN																				
HARRIS	U01	0.009	4.5	0	0.033	1/21/16	0.027	1/15/ 1	0.026	1/14/23	0.024	1/22/ 2	22	0	0	0	0	0	0	0
MEADOW FALLS	U11	0.018	91.0	0	0.108	7/14/17	0.105	7/10/17	0.099	8/15/15	0.098	10/26/12	221	110	19	0	0	0	0	0
MEADOW	U31	0.022	89.0	0	0.107	8/16/16	0.098	5/26/15	0.098	8/15/17	0.095	7/26/15	159	172	21	0	0	0	0	0
ERIE AIR BASIN																				
ERIE	E01	0.026	92.9	0	0.119	7/15/13	0.114	7/10/18	0.111	5/ 6/15	0.109	8/15/16	194	143	26	0	0	0	0	0
NON-AIR BASIN SITES																				
KUTZTOWN	103	0.025	91.8	6	0.150	7/14/18	0.146	6/27/13	0.140	5/ 7/15	0.133	9/13/18	172	147	34	6	0	0	0	0
PERRY COUNTY	305	0.024	83.4	2	0.143	5/18/17	0.130	5/ 7/15	0.107	5/ 6/18	0.101	5/12/14	154	166	15	2	0	0	0	0
HERSHEY	306	0.020	76.7	0	0.112	5/ 7/19	0.109	7/16/14	0.101	6/26/13	0.101	7/25/14	184	119	25	0	0	0	0	0
ALTOONA	308	0.024	91.4	2	0.237	8/19/21	0.166	8/20/ 0	0.110	7/22/15	0.107	7/25/18	163	172	21	0	1	1	0	0
WILLIAMSPORT	402	0.020	84.3	1	0.122	6/27/19	0.115	6/26/16	0.114	6/19/13	0.112	8/19/17	187	134	24	1	0	0	0	0
NEW KINGSTON	501	0.012	6.1	0	0.031	1/15/12	0.030	1/ 9/12	0.029	1/ 8/ 4	0.029	1/17/11	26	0	0	0	0	0	0	0
FAIRFELL	606	0.023	91.1	0	0.118	7/30/15	0.113	7/10/16	0.111	8/16/14	0.110	5/11/18	192	134	30	0	0	0	0	0
PETROLIA	607	0.021	27.1	0	0.058	3/ 7/16	0.055	2/28/17	0.055	4/ 9/17	0.054	4/10/11	84	21	0	0	0	0	0	0

***** PRIMARY 1 HOUR STANDARD OF 0.120 PPM DAILY *****

02-03-84

NATIONAL AEROMETRIC DATA BANK
QUARTERLY FREQUENCY DISTRIBUTION
STATE (39): PENNSYLVANIA

PAGE 39-0286

SITECODE: 398040006F01 LOCATION: SCRANTON LATITUDE: 41 D. 26 M. 35 S. N
AGENCY/PROJECT: F01 COUNTY (4640): LACKAWANNA CO LONGITUDE: 075 D. 37 M. 28 S. W
AGENCY TYPE: STATE SITE ADDR: GEORGE ST TROOP AND CITY OF SCRANTON UTM ZONE: 18
CITY POPULATION: 88,117 STATION TYPE (22): SUBURBAN - RESIDENTIAL UTM NORTHING: 4597917
AOCR POPULATION: 2,018,114 AOCR (151): NORTHEAST PENNSYLVANIA-UPPER DELAWARE VALLEY UTM EASTING: 00447834
EPA-REGION: 3 SMSA (5745): NORTHEAST PENNSYLVANIA ELEVATION ABOVE GROUND: 012 FT.
SUPPORTING AGENCY: PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES ELEVATION ABOVE MSL: 0825 FT.
COMMENTS: CUPAMS STATION 006 DIFF. GMT: WEST 05 HOURS

POLLUTANT NAME		METHOD OF COLLECTION AND ANALYSIS										INTERVAL		STANDARD UNITS				
POLLUTANT-METHOD-INTERVAL-UNITS CODE																		
REP	%	#	EXCURSIONS	MIN	MIN	PERCENTILES					MAX	2ND	ARIT	GEOM	GEOM			
YR-QT	UGS	UGS	PRI	SIC	DETEC	OBS	10	30	50	70	90	95	99	OBS	MAX	MEAN	MEAN	STD DEV

NITROGEN DIOXIDE		INSTRUMENTAL CHEMILUMINESCENCE										1-HOUR		UG/CU METER (25 C)					
42602-14-1-07																			
82-01	001	93	1999	0	0	9.	5.	15.	28.	53.	83.	120.	126.	150.	182.	175.	59.	45.	2.3
82-02	001	93	2025	0	0	9.	5.	5.	15.	24.	39.	62.	75.	98.	137.	128.	30.	22.	2.4
82-03	001	99	1937	0	0	9.	5.	9.	19.	26.	39.	62.	73.	98.	135.	126.	32.	25.	2.1
82-04	001	86	1909	0	0	9.	5.	13.	28.	41.	53.	70.	81.	105.	141.	135.	42.	35.	2.0
83-01	001	93	2014	0	0	9.	5.	9.	17.	28.	45.	68.	79.	103.	165.	152.	35.	26.	2.2
83-02	001	96	2097	0	0	9.	5.	9.	15.	24.	39.	66.	77.	96.	135.	130.	32.	24.	2.2
83-03	001	88	1939	0	0	9.	5.	5.	17.	26.	39.	60.	73.	103.	164.	152.	31.	24.	2.2

OXIDES OF NITROGEN		INSTRUMENTAL CHEMILUMINESCENCE										1-HOUR		UG/CU METER (25 C)					
42603-14-1-07																			
82-01	001	92	1994	0	0	19.	9.	21.	36.	66.	117.	250.	365.	528.	699.	681.	106.	66.	2.7
82-02	001	93	2028	0	0	19.	9.	9.	19.	30.	49.	90.	120.	197.	340.	306.	42.	29.	2.4
82-03	001	86	1908	0	0	19.	9.	9.	24.	36.	53.	92.	118.	179.	241.	237.	46.	35.	2.1
82-04	001	95	1895	0	0	19.	9.	21.	39.	70.	109.	207.	269.	402.	579.	547.	94.	64.	2.5
83-01	001	89	1909	0	0	19.	9.	9.	24.	38.	71.	150.	220.	402.	594.	545.	66.	42.	2.6
83-02	001	96	2087	0	0	19.	9.	9.	21.	30.	47.	96.	124.	197.	491.	368.	44.	31.	2.3
83-03	001	87	1914	0	0	19.	9.	9.	23.	34.	55.	103.	133.	216.	466.	393.	48.	34.	2.4

OZONE		INSTRUMENTAL CHEMILUMINESCENCE										1-HOUR		PARTS PER MILLION					
44201-11-1-07																			
82-01	001	93	84	0	0	0.005	0.003	0.018	0.029	0.033	0.039	0.048	0.093	0.073	0.073	0.063	0.034	0.031	1.5978
82-02	001	97	88	1	1	0.005	0.028	0.041	0.049	0.058	0.071	0.090	0.103	0.175	0.175	0.114	0.063	0.059	1.3750
82-03	001	90	83	3	3	0.005	0.015	0.027	0.043	0.052	0.063	0.089	0.105	0.158	0.158	0.131	0.057	0.051	1.6196
82-04	001	76	70	0	0	0.005	0.003	0.013	0.021	0.026	0.031	0.045	0.051	0.088	0.088	0.072	0.029	0.024	1.8661
83-01	001	92	83	0	0	0.005	0.006	0.020	0.025	0.030	0.035	0.039	0.041	0.047	0.047	0.047	0.030	0.028	1.4134
83-02	001	98	89	0	0	0.005	0.027	0.033	0.042	0.051	0.059	0.080	0.100	0.115	0.115	0.113	0.054	0.051	1.3953
83-03	001	97	89	0	0	0.005	0.011	0.035	0.045	0.057	0.069	0.091	0.094	0.102	0.102	0.100	0.059	0.055	1.4807

PA-4

02-03-84

NATIONAL AEROMETRIC DATA BANK
QUARTERLY FREQUENCY DISTRIBUTION
STATE (39): PENNSYLVANIA

PAGE 39-0319

SITECODE: 399430101F01 LOCATION: WILKES-BARRE LATITUDE: 41 D. 15 M. 56 S. N
AGENCY/PROJECT: F01 COUNTY (5220): LUZERNE CO LONGITUDE: 075 D. 50 M. 48 S. W
AGENCY TYPE: STATE SITE ADDR: CHILWICK & WASHINGTON STS UTM ZONE: 18
CITY POPULATION: 51,551 STATION TYPE (22): SUBURBAN - RESIDENTIAL UTM NORTHING: 4568370
AQC POPULATION: 2,018,114 AQCR (151): NORTHEAST PENNSYLVANIA-UPPER DELAWARE VALLEY UTM EASTING: 00429078
EPA-REGION: 3 SMSA (5745): NORTHEAST PENNSYLVANIA ELEVATION ABOVE GROUND: 013 FT.
SUPPORTING AGENCY: PA DEPT ENVIRONMENTAL RESOURCES ELEVATION ABOVE MSL: 0565 FT.
COMMENTS: ADJACENT TO HOLLENBACK GOLF COURSE DIFF. GMT: WEST 05 HOURS
S-0001128 PA SITE CODE (MOVED COPAMS SITE S21)

POLLUTANT NAME		METHOD OF COLLECTION AND ANALYSIS										INTERVAL		STANDARD UNITS				
POLLUTANT-METHOD-INTERVAL-UNITS CODE																		
REP	%	#	EXCURSIONS	MIN	MIN	PERCENTILES					MAX	2ND	ARIT	GEOM	GEOM			
YR-QT	ORG	OBS	OBS PRI	SEC	DETEC	OBS	10	30	50	70	90	95	99	OBS	MAX	MEAN	MEAN	STD DEV

OZONE		INSTRUMENTAL CHEMILUMINESCENCE										1-HOUR		PARTS PER MILLION				
64201-11-1-07																		
82-02	001	31	28	0	0	0.005	0.029	0.042	0.046	0.057	0.076	0.099	0.107	0.112	0.112	0.107		
82-03	001	87	80	0	0	0.005	0.026	0.037	0.049	0.057	0.069	0.087	0.102	0.116	0.116	0.107	0.061	0.058
82-04	001	88	81	0	0	0.005	0.003	0.009	0.020	0.027	0.031	0.046	0.053	0.081	0.081	0.062	0.027	0.022
83-01	001	89	79	0	0	0.005	0.006	0.019	0.025	0.030	0.034	0.042	0.044	0.057	0.057	0.049	0.030	0.029
83-02	001	89	81	3	3	0.005	0.024	0.035	0.045	0.053	0.064	0.090	0.095	0.135	0.135	0.130	0.058	0.054
83-03	001	95	87	0	0	0.005	0.011	0.038	0.051	0.063	0.080	0.100	0.104	0.114	0.114	0.107	0.066	0.062

WIND SPEED		INSTRUMENTAL SPOT READING										1-HOUR		KNOTS		
61101-20-1-12																
82-02	13	284	0	0	0.1	0.4	0.4	0.4	0.7	1.7	3.8	5.1	7.8	9.1	8.1	
82-03	89	1962	0	0	0.1	0.4	0.4	0.6	1.1	2.5	4.5	5.3	7.0	10.2	9.9	1.9
82-04	90	1993	0	0	0.1	0.4	0.6	1.2	2.4	4.1	6.4	7.6	9.9	12.9	12.7	3.1
83-01	91	1968	0	0	0.1	0.2	0.8	2.0	3.6	5.0	7.1	8.1	9.8	12.6	12.1	3.8
83-02	96	2104	0	0	0.1	0.2	0.2	0.8	2.0	3.6	5.7	6.9	8.9	12.9	12.2	2.6
83-03	95	2097	0	0	0.1	0.2	0.2	0.3	0.9	2.0	4.1	5.0	6.9	9.4	8.4	1.6

WIND DIRECTION		INSTRUMENTAL SPOT READING										1-HOUR		DEGREES, COMPASS		
61102-20-1-14																
82-03	11	238	0	0	1	1	14	43	142	289	333	346	358	360	359	
82-04	90	1984	0	0	1	1	37	233	259	300	334	346	397	360	360	242
83-01	91	1968	0	0	1	1	17	215	263	312	343	350	398	360	360	222
83-02	96	2107	0	0	1	1	23	219	253	306	340	352	359	360	360	229
83-03	95	2097	0	0	1	1	24	233	260	309	341	350	359	360	360	237

DRY-BULB TEMPERATURE		INSTRUMENTAL SPOT READING										1-HOUR		DEGREES, FAHRENHEIT		
62101-20-1-15																
82-02	14	733	0	0	-998.9	71.9	79.1	85.2	90.8	95.6	102.0	104.3	108.0	110.9	110.6	
82-03	89	1961	0	0	-998.9	62.0	79.5	86.9	92.9	98.6	106.7	109.7	113.7	117.3	116.7	92.8
82-04	90	1993	0	0	-998.9	34.1	53.3	60.6	68.9	75.9	86.9	93.2	99.8	106.2	105.5	69.1

02-03-84

NATIONAL AEROMETRIC DATA BANK
QUARTERLY FREQUENCY DISTRIBUTION
STATE (39): PENNSYLVANIA

PAGE 39-0070

SITECODE: 391400100F01 LOCATION: CARBONDALE LATITUDE: 41 D. 34 M. 14 S. N
AGENCY/PROJECT: F01 COUNTY (4640): LACKAWANNA CO LONGITUDE: 075 D. 30 M. 41 S. W
AGENCY TYPE: STATE SITE ADDR: SEVENTH AVE UTM ZONE: 18
CITY POPULATION: 11,255 STATION TYPE (23): SUBURBAN - COMMERCIAL UTM NORTHING: 4602010
AQCR POPULATION: 2,018,114 AQCR (151): NORTHEAST PENNSYLVANIA-UPPER DELAWARE VALLEY UTM EASTING: 00457363
EPA-REGION: 3 SMSA (5745): NORTHEAST PENNSYLVANIA ELEVATION ABOVE GROUND: 010 FT.
SUPPORTING AGENCY: PA DEPT ENVIRONMENTAL RESOURCES - AIR QUALITY CONTROL ELEVATION ABOVE MSL: 1050 FT.
COMMENTS: ARMY RESERVE OPERATIONAL MAINTENANCE SHED DIFF. GMT: WEST 05 HOURS
PAQSS MONITORING FOR OZONE

POLLUTANT NAME								METHOD OF COLLECTION AND ANALYSIS								INTERVAL		STANDARD UNITS			
POLLUTANT-METHOD-INTERVAL-UNITS CODE																					
REP		%	#	EXCURSIONS	MIN	MIN	PERCENTILES								MAX	2ND	ARIT	GEOM	GEOM		
YR-QT	URG	UBS	OBS	PRI	SEC	DETEC	OBS	10	30	50	70	90	95	99	OBS	MAX	MEAN	MEAN	STD DEV		
OZONE								INSTRUMENTAL				CHEMILUMINESCENCE				1-HOUR		PARTS PER MILLION			
44201-11-1-07																					
82-01	001	82	74	0	0	0.005	0.017	0.024	0.031	0.037	0.044	0.053	0.056	0.063	0.063	0.061	0.038	0.036	1.3700		
82-02	001	88	80	1	1	0.005	0.031	0.042	0.048	0.054	0.063	0.073	0.088	0.132	0.132	0.101	0.058	0.056	1.2859		
82-03	001	97	89	0	0	0.005	0.017	0.033	0.044	0.051	0.064	0.080	0.091	0.119	0.119	0.104	0.054	0.051	1.4142		
82-04	001	95	87	0	0	0.005	0.003	0.017	0.023	0.027	0.031	0.046	0.054	0.067	0.067	0.057	0.029	0.026	1.6030		
83-01	001	84	76	0	0	0.005	0.009	0.022	0.027	0.031	0.040	0.049	0.052	0.061	0.061	0.056	0.033	0.032	1.4038		
83-04	001	90	82	0	0	0.005	0.023	0.039	0.047	0.052	0.061	0.075	0.080	0.102	0.102	0.096	0.055	0.053	1.3133		
83-03	001	90	83	0	0	0.005	0.015	0.035	0.044	0.054	0.068	0.082	0.092	0.100	0.100	0.095	0.057	0.054	1.4188		

U2-03-84

NATIONAL AEROMETRIC DATA BANK
 QUARTERLY FREQUENCY DISTRIBUTION
 STATE (39): PENNSYLVANIA

PAGE 39-0168

SITECODE: 396300100F01

LOCATION: NANTICORE

LATITUDE: 41 D. 12 M. 37 S. N

AGENCY/PROJECT: F01

COUNTY (5220): LUZERNE CO

LONGITUDE: 076 D. 00 M. 15 S. W

AGENCY TYPE: STATE

SITE ADDR: 255 LOWER BROADWAY(NEXT TO LEON&EDDY'S)

UTM ZONE: 18

CITY POPULATION: 13,044

STATION TYPE (23): SUBURBAN - COMMERCIAL

UTM NORTHING: 4562374

AQCR POPULATION: 2,018,114

AQCR (151): NORTHEAST PENNSYLVANIA-UPPER DELAWARE VALLEY

UTM EASTING: 00415814

CPA-REGION: 3

SMSA (5745): NORTHEAST PENNSYLVANIA

ELEVATION ABOVE GROUND: 007 FT.

SUPPORTING AGENCY: PA. DEPT. OF ENVIRONMENTAL RESOURCES

ELEVATION ABOVE MSL: 0540 FT.

COMMENTS: PA. SITE CODE 5400426

DIFF. GMT: WEST 05 HOURS

POLLUTANT NAME

METHOD OF COLLECTION AND ANALYSIS

INTERVAL

STANDARD UNITS

POLLUTANT-METHOD-INTERVAL-UNITS CODE

REP	#	EXCURSIONS	MIN	MIN	PERCENTILES								MAX	2ND	ARIT	GEOM	GEOM	
YR-QT	ORG	OBS	PRI	SEC	DETEC	OBS	10	30	50	70	90	95	99	OBS	MAX	MEAN	MEAN	STD DEV

OZONE

INSTRUMENTAL CHEMILUMINESCENCE

1-HOUR

PARTS PER MILLION

44201-11-1-07

82-01	001	48	43	0	0	0.005	0.003	0.029	0.033	0.038	0.045	0.052	0.057	0.086	0.086	0.059			
82-02	001	80	73	1	1	0.005	0.021	0.039	0.050	0.055	0.072	0.089	0.097	0.125	0.125	0.098	0.061	0.057	1.3933
82-03	001	92	85	0	0	0.005	0.018	0.027	0.041	0.049	0.059	0.083	0.088	0.094	0.094	0.091	0.051	0.048	1.4724
82-04	001	86	79	0	0	0.005	0.003	0.010	0.019	0.025	0.027	0.042	0.051	0.065	0.065	0.062	0.024	0.022	1.7118
83-01	001	86	77	0	0	0.005	0.005	0.016	0.026	0.030	0.035	0.043	0.046	0.051	0.051	0.048	0.030	0.028	1.5285
83-02	001	95	86	0	0	0.005	0.024	0.033	0.044	0.052	0.062	0.089	0.096	0.120	0.120	0.103	0.056	0.053	1.4106
83-03	001	95	32	0	0	0.005	0.015	0.030	0.033	0.048	0.057	0.076	0.096	0.096	0.096	0.096			

PA-7

Region IV

Georgia

FEB 03 1983

Validation of Atlanta Ozone Data

Doyle T. Brittain
Environmental Services Division

J. Ron McHenry
A&WMD

On February 1, 1983, I met with Bill Estes and Rafael Ballagas for the purpose of validating the Atlanta ozone data questioned in the January 14, 1983 letter from J. Leonard Ledbetter to Charles Jeter. In that letter, three main questions were raised concerning the validity of data collected at the South DeKalb site. However, before addressing those questions, two background points merit noting.

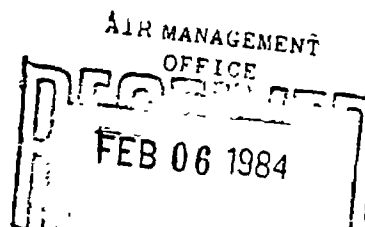
First, on June 20, 1980, Mr. Ledbetter submitted the Quality Assurance Plan for the Georgia Air Sampling Network which was approved by Rebecca W. Hammer on March 5, 1981. The introduction of that document states in part that:

"The Environmental Protection Division, State of Georgia, in compliance with the requirements outlined in Appendix A, Part 58.51 of the May 10, 1979 Federal Register is committed to achieve the maximum precision and accuracy in air quality measurements by implementing a comprehensive program to include: (1) compliance with all guidance and regulatory documents issued by the U.S. EPA in Technical Guidance Series and Federal Registers; (2) performance of all necessary precision and accuracy checks; (3) development of written standard operating procedures for routine operational activities; (4) explaining to all personnel the importance and need of Quality Assurance and Quality Control requirements; (5) documenting properly and completely specific activities which influence data quality; (6) assessing and reporting data quality; and (7) revising and updating Quality Assurance activities on an as-needed basis."

Twelve specific commitments are then made on how the above commitments are to be carried out. Detailed standard operating procedures are provided.

Second, on January 24-25, 1983, Ray Hemphill conducted the annual System Audit in accordance with 40 CFR 58, Appendix A, Section 2.4. In summary, Mr. Hemphill concluded that the Georgia Environmental Protection Division (EPD) has implemented their EPA approved Quality Assurance Plan and have met the criteria necessary for Regional approval of their ambient air monitoring program.

Mr. Ledbetter's letter raises questions about the validity of certain ozone data collected on June 6, 1982 and July 2, 1982 at the South DeKalb ozone site. It should be noted that these data were collected by Georgia EPD personnel, passed Georgia's Quality Control audit checks, and were submitted by Georgia to the SAROAD system where they have been stored.



02/06 14:38

GA-2

7209065

#02

Since certain data were questioned at the South DeKalb ozone site, they were compared to data collected at the Conyers ozone site for general patterns. The Conyers site is roughly twenty miles further downwind of the South DeKalb site, which is downwind of the city of Atlanta. Dates for which data were more closely compared are:

- o June 6 - 8, 1982
- o July 1 - 3, 1982
- o July 12 - 14, 1982
- o July 19 - 22, 1982

In general, the data compare favorably and there is a general pattern. When the concentrations are low at one site, they are also low at the other. When the concentrations are elevated at one site, they are elevated at the other. When the concentrations increase or decrease at one site, they also increase or decrease at the other. The main difference is in the actual concentrations measured, the duration of the elevated concentrations, and some lag in time to allow for transport of an air mass from the South DeKalb site to the Conyers site.

The South DeKalb monitor blew a fuse about 8:15 A. M. on June 6, 1982. The fuse was replaced about 7:45 A. M. on June 7, 1982. The monitor was allowed to warm-up and stabilize until about 9:40 A. M. at which time it was calibrated.

- o A "zero-check" was performed before and after the calibration to ensure the absence of ozone from the monitor before the calibration was performed and before the monitor was returned to sampling ambient air.

- o The zero-checks and the calibration points were stable (there was no drift) indicating the warm-up and stabilization time was adequate. This also indicates the absence of any ozone being collected in the instrument at one time, and released and measured as residual ozone at another time.

- o At most, a 0.5% recorder chart scale adjustment was made on the monitor. This corresponds to ten micrograms per cubic meter ($10 \mu\text{g}/\text{M}^3$) of ozone. This attests to the stability of the monitor's calibration and measurement ability even though interrupted by a blown fuse.

The monitor was returned to sampling ambient air about 12:10 P. M. A fuse blew again about 9:35 P. M. This fuse was replaced on June 8, 1982 about 7:35 A. M. The sequence of zero-check, span-check, followed by zero-check was performed, considered acceptable, and the monitor returned to sampling ambient air about 8:45 A. M.

Because of the calibration and checks performed on the monitor, and the monitor's response during this time period, there is no reason to invalidate any of these ambient air data. It is especially interesting to note that the data measured at the Conyers site for this time period have higher concentrations than those measured at the DeKalb site.

On July 2, 1982, the South DeKalb monitor experienced a flowmeter problem which was corrected about 8:00 A. M. on July 2, 1982. The monitor was allowed to stabilize until about 12:20 P. M. at which time it was calibrated. As described

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

- 3 -

above for the June 7, 1982 calibration, a zero-check was performed before and after the calibration. The zero-checks and the calibration points were stable. At most, a 0.5% recorder chart scale adjustment was made on the monitor. The monitor was returned to sampling ambient air about 2:40 P. M. There is no reason to invalidate any ambient air data subsequent to this calibration. It is interesting to note that the Conyers recorder chart trace compares favorably to the South DeKalb chart trace; the only difference is that the Conyers site did not measure concentrations as high as the DeKalb site.

Finally, Mr. Ledbetter's letter raises a question about residual ozone lingering in the monitor and being measured along with ambient air after a calibration was performed. This issue was also raised during the February 1, 1983 meeting. A representative of the company which manufactured the monitor was quoted as the source of this concept. So, Mr. Ballagas and I called this representative, a Mr. Sloan, and discussed the matter with him. He did not support that concept in our conversation.

The concept of residual ozone lingering in the capillaries of the monitor is not even remotely possible, for the following reasons:

- o The design of the monitor prohibits such a possibility.
- o The stability of the zero- and span- checks demonstrate the absence of residual ozone.
- o The Federal reference and equivalent method determinations, 40 CFR 53, would have identified such a design inadequacy during the required monitor testing. Such a determination would have prohibited this monitor from being designated as either a Federal reference or equivalent method.

In conclusion, there is no sound basis for invalidating the ambient air ozone data collected at the South DeKalb site on June 7, 1982 or July 24, 1982. I recommend that these data be considered as valid and used at face-value.

Please, incorporate these comments in Mr. Jeter's response to Mr. Ledbetter.

Doyle T. Brittain

cc: James H. Finger
Ray Hemphill
Bcc: Lee Tebo
Dave Hill

D.BRITTAIN:bh:ESD:X3197:2/3/83

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

EPA Form 1320-1 (12-78)

OFFICIAL FILE COPY

GA-4

02/06 14:40
02/06 14:39

7209065 #04 OF 04
/209065 #03

Alabama

VALIDATION OF THE 1980-1982 JEFFERSON COUNTY,
ALABAMA OZONE AND CARBON MONOXIDE DATA

June 28, 1983

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY
Region IV
Athens, Georgia

SUMMARY

At the request of the Air and Waste Management Division, EPA Region IV, the Environmental Services Division, EPA Region IV, evaluated the 1980-1982 ozone and carbon monoxide data collected by the Jefferson County (Alabama) Bureau of Environmental Health. These data are acceptable for decision-making purposes. Violations of the ozone standard were measured at all monitoring sites. Exceedances of the carbon monoxide eight-hour standard were measured at two sites.

Carbon monoxide monitoring is not being performed where the general public would be exposed to maximum concentrations. The carbon monoxide network needs to be re-designed. This is a major issue.

During the data validation, several minor issues also became apparent. These include the addition to or deletion from SAROAD, as appropriate, of certain data, improved documentation, a monitoring system improvement, and instrument replacement.

CONCLUSIONS

The 1980-1982 ozone and carbon monoxide data collected by the Jefferson County (Alabama) Bureau of Environmental Health are acceptable for decision making purposes. Violations of the ozone standard have been measured. Exceedances of carbon monoxide standard have been measured.

Certain data were identified as being available but not in SAROAD. These need to be entered. Certain data were identified in SAROAD which should not be. These need to be deleted.

The current carbon monoxide network design does not provide for monitoring the maximum concentrations to which the general public has access. EPA Region IV needs to address this network design.

RECOMMENDATIONS

The 1980-1982 ozone and carbon monoxide data collected by the Jefferson County (Alabama) Bureau of Environmental Health are summarized in Attachments 1 and 2. They are valid and should be used for decision-making purposes.

Prudence needs to be exercised in the interpretation of carbon monoxide data in Attachment 2. The Jefferson County Bureau of Environmental Health needs to conduct a timely review of their carbon monoxide network and re-design it to monitor areas where the general public has access to maximum concentrations. EPA Region IV will provide assistance if necessary.

July 1, 1981, 0700-1300 hours, ozone data for site 01-1980-002 need to be deleted from SAROAD.

June 16, 1981, 1100 hours, ozone data for site 01-1300-003 need to be deleted from SAROAD.

May 10, 1982, 1200-2300 hours, ozone data for site 01-1300-003 need to be entered into SAROAD.

Ozone data at site 01-1300-003 need to be deleted from SAROAD for:

Start Date	Start Hour	End Date	End Hour
10/25/82	2200	10/26/82	1900
10/28/82	0300	10/28/82	2200
10/30/82	0000	11/3/82	0900
11/4/82	0900	11/5/82	1900
11/6/82	0700	11/7/82	1700
11/8/82	2000	11/9/82	1300
11/19/82	0000	11/19/82	2200
11/21/82	1400	11/22/82	2300

Carbon monoxide data for site 01-0380-025 for 10/10/80 - 1/1/81 need to be entered into SAROAD.

Specific terminology needs to be used to document all causes for missing data.

Consideration should be given to using a two-liter surge bottle on all carbon monoxide monitors which have a lot of recorder pen activity.

Consideration needs to be given to the replacement of air monitors on a phased in basis over the next two or three years. Consideration should be given to replacing them with monitors which do not require expensive or explosive expendables.

INTRODUCTION

On May 24, 1982, the Air and Waste Management Division of EPA Region IV requested that the Environmental Services Division of EPA Region IV validate the 1980-1982 ozone and carbon monoxide data in Jefferson County, Alabama. This report describes the results of that validation. It provides conclusions and recommendations for the use of those data and resolution of related issues.

DATA VALIDATION

The 1980-1982 ozone and carbon monoxide data collected by the Jefferson County (Alabama) Bureau of Environmental Health were evaluated and their validity determined. Information collected on March 8, 1983 during the annual system audit was used. This information was supplemented by an on-site visit on June 9, 1983. During the on-site visit, all periods of missing data were accounted for, and all measurements approaching the National Ambient Air Quality Standards were evaluated. Evaluation consisted of checking appropriate records and recorder strip charts.

Attachment 1 lists all elevated ozone measurements at each monitoring site and the corresponding measurements at the other two sites. In summary, Attachment 1 shows that:

1. A number of violations of the standard have occurred each year.
2. Violations of the standard at one site are, in most cases, accompanied by elevated measurements at the other sites.
3. The highest concentrations measured each year were:

Year	Site Number	Concentration (PPM)
1980	01-1300-003	0.161
1981	01-1980-002	0.166
1982	01-1300-003	0.169

The ozone data for sites 01-1300-003, 01-1980-002, and 01-1300-003 for 1980-1982 have been validated and may be used for decision-making purposes.

Attachment 2 lists all elevated carbon monoxide measurements at each monitoring site and the corresponding measurements at the other sites. In summary, Attachment 2 shows that:

1. Exceedances of the 8-hour standard have been measured every year.
2. The magnitude of the exceedances has not been very high.

The carbon monoxide data for these sites have been validated and may be used for decision-making purposes.

Attachment 3 lists some important dates which must be considered in interpreting the data in Attachment 2. Note that site 01-0380-012 operated only eleven days during which four exceedances of the standard were measured. Note that site 01-0380-024 operated only when exceedances were least likely to be measured. It remains unknown what the concentrations would have been if all of these sites had been fully operational for 1980 - 1982.

Attachment 3 also identifies each type of monitoring site. In summary, Attachment 3 shows that:

1. There is no microscale monitoring in a downtown street canyon.
2. There is very limited monitoring where maximum concentrations would be expected.

Prudence must be exercised in the interpretation of carbon monoxide data collected by the Jefferson County Bureau of Environmental Health.

RELATED ISSUES

During the on-site visit, several issues became apparent which need to be addressed. These involve monitoring data and other related issues.

Data

Ozone data are in SAROAD for July 1, 1981 from 0700-1300 hours for site 01-1980-002. A power failure occurred during this time. These data need to be deleted from SAROAD.

Ozone data in SAROAD for June 16, 1981 at 1100 hours for site 01-1300-003. A precision check was performed during this time. These data need to be deleted from SAROAD.

Ozone data are available in the Jefferson County Bureau of Environmental Health for May 10, 1982 from 1200-2300 hours for site 01-1300-003. These data are not in SAROAD. They need to be entered into SAROAD.

An obvious localized interference caused periods of excessive ozone measurements at site 01-1300-003. The recorder chart trace and measurements are characteristic of what would happen if someone did some electric arc welding at the site. These

data need to be deleted from SAROAD. They include:

Start Date	Start Hour	End Date	End Hour
10/25/82	2200	10/26/82	1900
10/28/82	0300	10/28/82	2200
10/30/82	0000	11/3/82	0900
11/4/82	0900	11/5/82	1900
11/6/82	0700	11/7/82	1700
11/8/82	2000	11/9/82	1300
11/19/82	0000	11/19/82	2200
11/21/82	1400	11/22/82	2300

Carbon monoxide data are available in the Jefferson County Bureau of Environmental Health for 10/10/80 - 1/1/81 for site 01-0380-025. These data are not in SAROAD. They need to be entered into SAROAD.

A unique situation arose at site 01-0380-028 because of the electrical grounding of the carbon monoxide monitor to the site shelter and the shelter to the surrounding chain link fence. From 0000-1100 hours on a number of different days, the chain link fence served as an aerial and received radio signals which were plotted out on the recorder strip charts. These data have been invalidated and the grounding changed. No further action is required.

Missing data records use general terms to document missing data. General terminology is of limited value during data validation. More specific terminology is needed.

OTHER ISSUES

Some carbon monoxide recorder strip chart traces show so much pen activity that it is difficult to read the charts. A two-liter surge bottle could be installed in the sample inlet line to dampen the sample measurements. The surge bottle must have an all glass or teflon surface in all areas accessible to the sample air. Care must be exercised in selecting the point to install the bottle so it will not explode or implode. Consideration should be given to using a surge bottle on carbon monoxide monitors which have a lot of recorder pen activity.

The normal life expectancy of an ambient air monitor is five years. Jefferson County has experienced considerable difficulty in keeping the carbon monoxide monitors operational even though they are less than five years old. This is more of a reflection on the monitors than on the Jefferson County personnel. The ozone monitors are approaching the age when they will become more unreliable. Plans need to be made now for a phased in replacement of these monitors before they become resource intensive to keep operational. Consideration needs to be given to replacing these monitors with some type which does not require expensive or explosive expendables, such as cylinders of ethylene.

A review of the carbon monoxide monitoring network is urgently needed. Monitors which have been generating relatively low concentrations need to be relocated into areas where maximum concentrations would be expected. Reportedly this has been attempted but getting permission to use the desired sites has not been possible. If permission can not be obtained in existing buildings, Jefferson County may have to resort to portable buildings located on public right of way or other public property.

ATTACHMENT 1
OZONE DATA
BIRMINGHAM, ALABAMA

1

YEAR	MONTH	DAY	START HOUR	PPM O ₃ AT 01-1300-003	PPM O ₃ AT 01-1980-002	PPM O ₃ AT 01-3200-002
1980	July	1	1200	0.118		0.124
			1300	0.133		0.142
			1400	0.138		0.147
			1500	0.117		0.132
			1600	0.112		0.127
		8	1000	0.087		0.123
			1100	0.098		0.139
			1200	0.103		0.146
		15	1000			0.122
			1100	0.102		0.142
			1200	0.107		0.150
			1300	0.111		0.138
			1400	0.127		0.133
			1500	0.157		0.122
			1600	0.132		0.105
		18	1100	0.143		0.118
			1200	0.156		
			1300	0.129		0.102
			1400	0.125		0.101
			1500	0.127		0.103

AL-11

ATTACHMENT 1
OZONE DATA
BIRMINGHAM, ALABAMA

2

YEAR	MONTH	DAY	START HOUR	PPM O ₃ AT 01-1300-003	PPM O ₃ AT 01-1980-002	PPM O ₃ AT 01-3200-002
1981	August	30	1100	0.082	0.132	0.116
			1200	0.080	0.132	0.096
			1300	0.067	0.118	0.083
			1400	0.067	0.114	0.086
			1500	0.078	0.112	0.110
			1600	0.082	0.125	0.111
		31	1100	0.093	0.122	0.102
			1200	0.092	0.135	0.107
			1300	0.083	0.143	0.123
			1400	0.096	0.142	0.127
			1500	0.091	0.134	0.121
			1600	0.088	0.122	0.093
		8	1000	0.123	0.098	0.106
			1100	0.161	0.102	0.108
			1200	0.123	0.115	0.112
		14	1100	0.080	0.096	0.123
			1200	0.083	0.121	0.138
			1300	0.087	0.143	0.124
			1400	0.073	0.147	0.111
		27	1300	0.081	0.127	0.094
			1400	0.077	0.124	0.091
			1500	0.072	0.121	0.087

AL-12

ATTACHMENT 1
OZONE DATA
BIRMINGHAM, ALABAMA

3

YEAR	MONTH	DAY	START HOUR	PPM O ₃ AT 01-1300-003	PPM O ₃ AT 01-1300-002	PPM O ₃ AT 01-1300-002
1981	April	27	1300	0.086	0.096	0.126
			1400	0.069	0.132	0.121
			1500	0.067	0.145	0.098
	May	22	1200	0.094	0.129	0.124
			1300	0.099	0.140	0.127
			1400	0.103	0.149	0.142
			1500	0.106	0.159	0.148
			1600	0.110	0.161	0.141
			1700	0.097	0.121	0.108
		23	1100	0.079	0.131	0.084
			1200	0.078	0.124	0.084
	June	30	1100	0.084	0.097	0.124
	July	11	1300	0.085	0.148	0.103
			1400	0.093	0.136	0.095
		23	1100	0.140 ✓	0.086	0.103
		24	0900	0.094	0.103	0.129
			1000	0.094	0.148	0.128
			1100	0.089	0.166	0.112
			1200	0.090	0.133	0.114
			1300	0.089	0.120	0.109
		27	1500	0.050	0.120	0.079

AL-13

ATTACHMENT 1
OZONE DATA
BIRMINGHAM, ALABAMA

4

YEAR	MONTH	DAY	START HOUR	PPM O ₃ AT 01-1300-003	PPM O ₃ AT 01-1300-002	PPM O ₃ AT 01-1380-002
1981	August	4	1100	0.080	0.125	0.108
			1200	0.074	0.137	0.111
			1300	0.072	0.127	0.104
	September	21	1300	0.074	0.131	0.101
			1400	0.073	0.148	0.092
			1500	0.076	0.148	0.080
		30	1300	0.104	0.089	0.125
			1400	0.098	0.110	0.124
			1500	0.089	0.157	0.126
			1600	0.080	0.160	0.075
	October	5	1600	0.084	0.126	0.088
	November	8	2100	0.128	0.003	0.003
1982	May	11	1200	0.129	0.108	0.115
			1300	0.138	0.107	0.111
			1400	0.118	0.117	0.106
			1500	0.101	0.126	0.099
			1600	0.099	0.122	0.093
	June	8	1200	0.138	0.094	0.108
			1300	0.156	0.099	0.111
			1400	0.169	0.104	0.124
			1500	0.167	0.098	0.126
			1600	0.128	0.069	0.119

AL-14

ATTACHMENT 1
OZONE DATA
BIRMINGHAM, ALABAMA

5

YEAR	MONTH	DAY	START HOUR	PPM O ₃ AT 01-1300-003	PPM O ₃ AT 01-1300-002	PPM O ₃ AT 01-1300-002
1982	June	25	1100	0.110	0.100	0.126
			1200	0.107	0.100	0.138
			1300	0.123	0.095	0.138
			1400	0.122	0.080	0.123
			1500	0.147	0.069	0.107
			1600	0.142	0.082	0.102
	August	17	1200	0.084	0.057	0.127

ATTACHMENT 2
CARBON MONOXIDE DATA
BIRMINGHAM, ALABAMA
(8-Hour Running Average)

YEAR	MONTH	DAY	START HOUR	mg/M ³ CO AT 01-0380-012	mg/M ³ CO AT 01-0380-024	mg/M ³ CO AT 01-0380-025	mg/M ³ CO AT 01-0380-027	mg/M ³ CO AT 01-0380-028	mg/M ³ CO AT 01-0380-003
1980	January	2	0700	10.4					4.6
			0800	11.0					5.0
			0900	10.7					5.4
			1000	10.2					5.8
1981	November	13	2300			5.4	3.8	10.8	5.7
			0000			5.9	3.9	12.2	6.6
			0100			6.1	3.7	12.2	7.2
			0200			6.2	4.0	11.5	7.6
			0300			5.8	4.1	11.0	7.9
1982	October	27	0600			5.3		10.4	1.7
			0700			5.7		11.1	2.3
			0800			5.5		10.8	2.7
	November	9							
			0000			5.6		10.0	

ATTACHMENT 3
SITE INFORMATION

SITE NUMBER	PARAMETER	DATE SITE STARTED UP	DATE SITE SHUT DOWN	SITE TYPE
01-0380-012	CO	1/1/80	1/11/80	SLAMS; Middle Scale; Category A; Emergency episode site
01-0380-024	CO	3/20/80	10/26/80	NAMS; Micro Scale; Category A; Street Canyon
01-0380-025	CO	10/10/80		SLAMS; Middle Scale; Category B; Population oriented
01-0380-027	CO	6/8/80		SLAMS; Neighborhood Scale; Category I Population oriented
01-0380-028	CO	3/17/81		NAMS; Micro Scale; Category A; Max intersection
01-1300-003	CO	2/1/75		NAMS; Neighborhood Scale; Category B; Population Oriented
01-1300-003	O ₃	3/21/80		SLAMS; Neighborhood Scale; Category B; 12 kilometers upwind
01-1980-002	O ₃	7/21/80		NAMS; Urban Scale; Category A; 32 kilometers downwind
01-3200-002	O ₃	6/25/80		NAMS; Neighborhood Scale; Category B 13 kilometers downwind

AL-17

Florida

Validation of the 1980-1982 Miami Ozone
and Carbon Monoxide Data

May 26, 1983

Environmental Services Division
U.S. Environmental Protection Agency
Region IV
Athens, Georgia

SUMMARY

At the request of the Air and Waste Management Division, EPA Region IV, the Environmental Services Division, EPA Region IV, evaluated the 1980-1982 ozone and carbon monoxide data collected by the Metropolitan Dade County Department of Environmental Resources. These data are acceptable for EPA decision-making purposes. Violations of the ozone standard were measured at both monitoring sites. Violations of the carbon monoxide eight-hour standard were measured at four of the five monitoring sites. EPA needs to act on these data.

During the data validation, several related issues became apparent. Minor issues involved the addition to or deletion from SAROAD, as appropriate, of certain data. Major issues involved the lack of required traceability of calibration standards, worn out equipment, and the shortage of personnel needed to collect the quality and quantity of data needed for EPA decision making purposes. Pending resolution of these issues, the Environmental Services Division will conduct quarterly systems audits of the Dade County ambient air monitoring program jointly with the Florida Department of Environmental Regulation.

CONCLUSIONS

The 1980-1982 ozone and carbon monoxide data collected by the Metropolitan Dade County Department of Environmental Resources Management are acceptable for EPA decision making purposes. Violations of the ozone and carbon monoxide standards have been measured. The measurement of a violation at one site may or may not correspond to the measurement of a violation at other sites. The measurement of a violation at one site may not indicate a violation at other sites.

Certain data were identified as being available but not in SAROAD. These need to be entered. Certain data were identified in SAROAD which should not be. These need to be deleted.

Inadequate resources are available in the ambient air monitoring program to ensure data of acceptable quality and quantity are available for decision making purposes. EPA will be conducting quarterly system audits of this program until this situation has been improved.

RECOMMENDATIONS

The 1980-1982 ozone and carbon monoxide data collected by the Metropolitan Dade County Department of Environmental Resources are summarized in Attachments 1 and 2. They are valid and should be used by EPA for decision-making purposes.

January 1980 ozone data for site 10-0860-021 need to be entered into SAROAD.

March 17-23, 1982 ozone data for site 10-0860-023 need to be entered into SAROAD.

April 22-30, 1980 ozone data for site 10-0860-023 need to be deleted from SAROAD.

Dade County needs to develop the capability to maintain current the traceability of their ozone calibration system.

Dade County needs to use only NBS calibration standards or calibration standards that are traceable to NBS according to EPA Protocol 2.

Dade County needs to inventory all ambient air monitors needed to operate their program and replace those over five years old.

Dade County needs to assign at least two additional persons to the ambient air monitoring program to conduct field type monitoring activities.

The Florida Department of Environmental Management needs to work closely with EPA and Dade County to improve the Dade County ambient air monitoring program.

INTRODUCTION

On April 19, 1983, the Air and Waste Management Division of EPA Region IV requested that the Environmental Services Division of EPA Region IV validate the 1980-1982 ozone and carbon monoxide data in Metropolitan Dade County Florida. This report describes the results of that validation. It provides conclusions and recommendations for the use of those data and resolution of related issues.

DATA VALIDATION

The 1980-1982 ozone and carbon monoxide data collected by the Metropolitan Dade County Department of Environmental Resources Management were evaluated and their validity determined. Information collected on April 22, 1983 during the annual system audit was used. This information was supplemented by an on-site visit on April 28, 1983. During the on-site visit, all periods of missing data were accounted for, and all measurements approaching the National Ambient Air Quality Standards were evaluated. Evaluation consisted of checking appropriate records and recorder strip charts.

Attachment 1 lists all elevated ozone measurements at either of the two monitoring sites and the corresponding measurements at the other site. Site 10-086-021 is a NAMS site located at Krome Avenue and Thompson Park, U. S. Highway 27, approximately thirty miles downwind of Miami. Site 10-0860-023 is a NAMS site located on Virginia Key, the eastern most part of Miami. In summary, Attachment 1 shows that:

1. Elevated measurements at site 10-0860-021 may be accompanied by relatively low measurements at site 10-0860-023, such as on August 27, 1980 and May 13, 1981.
2. Elevated measurements at site 10-0860-023 may be accompanied by relatively low measurements at site 10-0860-021, such as on October 20, 1980; August 2, 1982; and December 23-24, 1982.
3. Elevated measurements may be measured at both sites at approximately the same time, such as on September 29, 1980; April 30, 1981; May 16, 1981; and May 29, 1981.
4. A violation of the standard occurred at site 10-0860-021 in 1981. Violations at site 10-0860-023 occurred in 1980, 1981, and 1982.
5. Violations at one time or site are not significantly different from violations at another time or site.

Thus, elevated measurements at one site may not be used to confirm the presence or absence of elevated measurements at the other site.

A review of raw data shows that elevated measurements at site 10-0860-023 on December 23, 1982 last until December 27, 1982 with peak concentrations measured at midnight on December 23, 1982. Monitor operational records and recorder strip chart traces indicate the instrument has not received all of the routine service necessary to operate at its best. However, these records indicate the instrument was operating properly so there is no reason to question the data generated.

The ozone data for sites 10-0860-021 and 10-0860-023 for 1980-1982 have been validated and may be used for decision-making purposes.

Attachment 2 lists all elevated carbon monoxide measurements at each of the monitoring sites and the corresponding measurements at the other sites. Attachment 3 identifies the location of these sites. In summary, Attachment 2 shows that:

1. Site 10-2700-018 is where the standard is most frequently violated. Site 10-2700-021 is the only site where no violations were measured.
2. The highest violations measured were:

<u>YEAR</u>	<u>SITE</u>	<u>8-HOUR AVERAGE CONCENTRATION (Mg/M³)</u>
1980	10-2700-018	17.3
1981	10-2700-019	21.7
1982	10-2700-019	14.6

3. In 1980, two sites were operated but only one measured violations of the standard. In 1981, five sites were operated at least a portion of the year with four measuring violations. In 1982, five sites were operated at least a portion of the year with two measuring violations.
4. Elevated measurements at one site may be accompanied by elevated measurements at other sites, such as on November 20, 1981.
5. Elevated measurements at one site may be accompanied by relatively low measurements at other sites, such as on January 19, 1982; and January 28, 1982.

Thus, elevated measurements at one site may not be used to confirm the presence or absence of elevated measurements at the other sites.

Carbon monoxide data for sites 10-2700-002, 10-2700-018, 10-2700-019, 10-2700-021, and 10-2700-022 have been validated and may be used for decision-making purposes.

RELATED ISSUES

During the on-site visit, several issues became apparent which need to be addressed. These involve monitoring data and resources.

Data

Dade County has January 1980 ozone data for site 10-0860-021. However, these data are not in SAROAD; they need to be entered.

Dade County has March 17-23, 1982 ozone data for site 10-0860-023. However, these data are not in SAROAD; they need to be entered.

Dade County did not operate the ozone monitor at site 10-0860-021 for April 22-30, 1980. However, data are in SAROAD for this period; they need to be deleted.

Resources

Dade County does not have the capability to maintain current the traceability of their ozone calibration system. The Florida Department of Environmental Resources does not have adequate resources to provide this service as often as required. Dade County needs to purchase a primary ozone standard.

Dade County does not have sulfur dioxide or nitrogen dioxide permeation tubes which are traceable to NBS according to EPA Protocol 2. At the time of the on-site visit, Dade County did not have any type of nitrogen dioxide permeation tube on-hand. All calibration and audit standards must be either purchased from NBS or be traceable to NBS according to EPA Protocol 2. This recommendation was made during the 1982 system audit and has still not been adequately addressed.

Monitoring equipment are rapidly becoming outdated. The normal life expectancy of ambient air monitors is five years beyond which they become resource intensive to keep operational and have excessive down-time. One Bendix carbon monoxide monitor is six years old and is not operational. One Thermoelectron sulfur dioxide monitor is eight years old and is requiring excessive repairs. Dade County needs to inventory all ambient air monitors needed to operate their program and replace those over five years old.

The Dade County ambient air monitoring program is understaffed. The shortage of personnel does not allow available personnel to perform adequate preventive maintenance. Instrument failure results in remedial maintenance with a corresponding reduction in data quality and quantity. There simply aren't enough monitoring personnel to visit the sites as often as necessary or to spend the time actually needed once at the sites. At least two additional persons are needed to perform field type monitoring activities.

EPA expects Dade County to commit sufficient resources to the ambient air monitoring program so that data of acceptable quality and quantity are available for planning and decision making purposes. Pending evidence of this commitment, EPA will conduct quarterly system audits of the Dade County ambient air monitoring program. The Florida Department of Environmental Regulation will be encouraged to jointly conduct these system audits.

ATTACHMENT 1
SELECT OZONE DATA
MIAMI, FLORIDA

1

FL-10

YEAR	MONTH	DAY	START HOUR	PPM O ₃ At 10-0860-021	PPM O ₃ At 10-0860-023
1980	August	22	1200		0.120
			1300		0.155
			1400		0.130
		27	1300	0.120	0.020
			1400	0.105	0.020
	September	29	1300	0.015	0.130
			1400	0.015	0.120
			1800	0.075	0.105
	October	20	1200	0.015	0.130
			1300	0.025	0.150
			1400	0.035	0.140
1981	April	30	1200	0.050	0.125
			1300	0.050	0.150
			1400	0.050	0.120
			1500	0.055	0.090
			1600	0.100	0.070
			1700	0.110	0.050
	May	13	1500	0.130	0.025
		16	1300	0.060	0.090
			1400	0.070	0.080
			1500	0.105	0.070
			1600	0.130	0.055
			1700	0.115	0.050

ATTACHMENT 1
SELECT OZONE DATA
MIAMI, FLORIDA

2

YEAR	MONTH	DAY	START HOUR	PPM O ₃ At 10-0860-021	PPM O ₃ At 10-0860-023
1981	May	29	1200	0.035	0.130
			1300	0.040	0.140
			1400	0.085	0.080
1982	August	2	1200	0.015	0.140
			1300	0.015	0.120
	December	23	2200	0.005	0.125
			2300	0.005	0.140
		24	0000	0.005	0.125

FL-11

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	September	2	1600		10.5	1.8		
			1700		11.4	2.2		
			1800		11.2	2.3		
			1900		10.6	2.2		
			2000		10.3	2.2		
		4	1400		10.4	0.3		
			1500		10.8	0.3		
			1600		11.4	0.3		
			1700		11.1	0.3		
			1800		10.3	0.3		
		5	1600		10.4	0.6		
			1700		10.5	0.6		
			1800		10.4	0.6		
		8	1100		10.3	1.9		
			1200		13.2	2.0		
			1300		14.7	2.0		
			1400		15.7	1.4		
			1500		16.1	0.8		
			1600		17.0	0.7		
			1700		16.1	0.7		
			1800		15.2	0.6		
			1900		13.2	0.5		
			2000		10.4	0.4		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	September	9	1300		11.1	2.0		
			1400		12.1	1.7		
			1500		11.8	1.5		
			1600		12.6	1.7		
			1700		12.6	1.8		
			1800		11.6	1.6		
		10	1400		11.4	2.2		
			1500		12.0	1.8		
			1600		13.1	1.7		
			1700		12.7	1.7		
			1800		11.9	1.6		
			1900		10.9	1.5		
		19	1600		11.2	0.9		
			1700		11.0	0.9		
			1800		10.4	0.9		
1980	October	6	1100		10.0	2.4		
			1200		11.7	2.5		
			1300		13.2	2.5		
			1400		14.2	2.4		
			1500		13.7	2.0		
			1600		12.7	1.6		
			1700		12.2	1.3		
			1800		10.5	1.2		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	October	7	1300		10.4	1.0		
			1400		11.4	1.0		
			1500		11.6	1.0		
			1600		11.9	1.1		
			1700		11.4	1.1		
			1800		10.4	1.1		
		8	1500		10.0	1.6		
			1600		10.2	1.8		
			1700		11.6			
			1800		11.6			
			1900		10.1			
		9	1200		10.4			
			1300		11.9			
			1400		12.9			
			1500		13.2			
			1600		14.0			
			1700		14.7			
			1800		13.4			
			1900		11.1			
		10	1200		10.3			
			1300		11.4			
			1400		12.2			
			1500		12.9			
			1600		12.5			
			1700		12.3			
			1800		11.4			

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	October	13	1600		10.2			
			1700		10.7			
			1800		10.3			
		14	1300		10.5			
			1400		11.5			
			1500		10.9			
			1600		10.1			
		15	1800		11.7			
			1900		10.2			
		16	1300		10.5			
			1400		11.6			
			1500		11.6	2.5		
			1600		12.0	2.8		
			1700		12.9	2.9		
			1800		12.4	2.9		
			1900		10.1	2.9		
		17	1200		10.0	3.1		
			1300		11.7	3.1		
			1400		12.8	3.2		
			1500		13.6			
			1600		14.7			
			1700		15.3			
			1800		14.5			
			1900		12.9			
			2000		11.2			

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	October	24	1100		10.4			
			1200		10.9			
			1300		11.7			
			1400		11.9			
			1500		11.0	2.2		
		27	1700		10.4	1.3		
		31	1300		10.0	2.4		
			1400		11.1	2.4		
			1500		12.5	2.3		
			1600		12.4	2.4		
			1700		11.6	2.4		
			1800		10.1	3.0		
1980	November	3	1500		10.8	1.2		
			1600		11.0	1.2		
		7	1600		10.0	1.3		
			1700		11.2	1.4		
			1800		11.2	1.7		
			1900		11.4	1.9		
			2000		10.5	1.9		
		11	1400		11.7	0.7		
			1500		13.2	0.8		
			1600		13.9	1.1		
			1700		14.6	1.4		
			1800		14.0	1.5		
			1900		13.3	1.5		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	November	11	2000		12.0	1.4		
		12	1400		10.2	0.3		
			1500		11.4	0.3		
			1600		11.6	0.4		
			1700		11.9	0.5		
			1800		11.9	0.5		
			1900		10.4	0.5		
		19	1400		10.0	0.3		
			1500		11.3	0.3		
			1600		12.2	0.3		
			1700		13.1	0.4		
			1800		12.8	0.5		
			1900		12.1	0.5		
			2000		11.0	0.5		
		20	1500		10.1	0.4		
			1600		10.9	0.4		
			1700		11.6	0.6		
			1800		13.1	0.8		
			1900		12.8	1.0		
			2000		11.9	1.2		
			2100		10.6	1.4		

FL-17

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	November	21	1300		10.2	1.6		
			1400		11.8	1.7		
			1500		13.9	1.8		
			1600		15.0	1.8		
			1700		15.9	1.9		
			1800		16.5	2.1		
			1900		16.2	2.2		
			2000		14.9	2.2		
			2100		13.6	2.2		
			2200		12.2	2.1		
			2300		10.1	1.9		
		25	1200		10.2	2.4		
			1300		12.1	2.5		
			1400		14.3	2.7		
			1500		16.1	2.4		
			1600		17.0	2.0		
			1700		16.6	1.8		
			1800		16.7	1.7		
			1900		15.9	1.8		
			2000		14.2	1.6		
			2100		12.3	1.4		
			2200		10.3	1.4		
		28	1700		10.1	0.5		
			1800		10.8	0.5		
			1900		11.0	0.5		
			2000		10.4	0.5		
		29	1800		10.1	0.6		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	December	1	1200		10.9	5.2		
			1300		11.9	5.2		
			1400		12.7	5.1		
			1500		12.9	4.5		
			1600		11.9	3.2		
			1700		11.3	1.4		
			1800		11.5	1.2		
			1900		11.1	1.3		
		2	1200		10.4	3.8		
			1300		10.9	3.7		
			1400		11.4	3.5		
			1500		11.5	3.0		
			1600		10.6	2.5		
		3	1400		10.9	1.7		
			1500		12.4	1.6		
			1600		12.9	1.5		
			1700		13.1	1.5		
			1800		12.8	1.6		
			1900		12.3	1.6		
			2000		11.1	1.5		
		4	1300		10.1	1.5		
			1400		11.5	1.3		
			1500		12.3	1.1		
			1600		12.4	1.2		
			1700		12.4	1.3		
			1800		12.0	1.2		
			1900		11.2	1.1		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	December	5	1400		10.1	1.3		
			1500		11.6	1.4		
			1600		11.7	1.4		
			1700		12.0	1.4		
			1800		11.9	1.4		
			1900		11.6	1.3		
			2000		10.5	1.2		
		6	1700		10.0	1.2		
			1800		10.6	1.3		
			1900		10.1	1.3		
		8	1600		10.1	1.2		
			1700		10.3	1.3		
			1800		10.6	1.5		
			1900		10.1	1.5		
		11	1200		10.4	3.8		
			1300		12.1	3.6		
			1400		12.9	3.1		
			1500		13.4	1.8		
			1600		13.9	1.3		
			1700		14.7	1.6		
			1800		15.1	1.9		
			1900		13.7	1.9		
			2000		12.1	1.9		
			2100		10.6	1.8		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	December	12	1400		11.1	1.7		
			1500		13.6	1.7		
			1600		14.8	1.6		
			1700		15.4	1.6		
			1800		15.8	1.6		
			1900		15.5	1.6		
			2000		14.2	1.4		
			2100		12.7	1.2		
			2200		11.5	1.0		
		13	1400		10.7	1.9		
			1500		12.1	1.8		
			1600		13.7	1.6		
			1700		13.9	1.4		
			1800		14.4	1.3		
			1900		13.7	1.5		
			2000		12.6	2.1		
			2100		11.4	2.9		
			2200		10.4	3.5		
		17	1500		10.1	0.4		
			1600		11.0	0.4		
			1700		11.7	0.5		
			1800		11.8	0.6		
			1900		10.8	0.7		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	December	18	1400		10.4	1.6		
			1500		11.2	1.5		
			1600		12.4	1.5		
			1700		13.5	1.8		
			1800		13.7	1.9		
			1900		13.1	1.9		
			2000		12.0	1.9		
			2100		11.1	1.9		
		19	1100		11.1	3.8		
			1200		13.1	3.7		
			1300		14.5	3.7		
			1400		14.8	3.2		
			1500		14.7	2.2		
			1600		13.9	1.5		
			1700		14.6	1.2		
			1800		14.2	1.2		
			1900		12.4	1.4		
			2000		10.5	1.9		
		22	1200		11.9	1.5		
			1300		12.9	1.6		
			1400		13.9	1.8		
			1500		14.3	1.7		
			1600		14.3	1.7		
			1700		14.9	1.5		
			1800		13.9	1.4		
			1900		12.1	1.3		
			2000		10.4	1.4		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1980	December	24	1200		11.1	1.0		
			1300		13.1	1.2		
			1400		14.6	1.3		
			1500		16.0	1.3		
			1600		17.3	1.3		
			1700		18.5	1.5		
			1800		17.3	1.8		
			1900		15.5	1.8		
			2000		13.3	1.8		
			2100		11.6	2.0		
			2200		10.1	2.0		
		26	1400		11.5	0.6		
			1500		12.7	0.7		
			1600		13.2	0.8		
			1700		13.1	1.0		
			1800		12.4	1.1		
			1900		10.9	1.2		
		29	1700		10.1	1.2		
			1800		10.1	1.5		
		31	1500		10.5	1.2		
			1600		11.1	1.2		
			1700		11.2	1.2		
			1800		11.0	1.5		
			1900		10.4	1.9		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	January	2	1400		10.8	2.4		
			1500		11.8	1.9		
			1600		12.9	1.4		
			1700		14.4	1.4		
			1800		14.7	1.5		
			1900		13.9	1.6		
			2000		11.8	1.6		
			2100		10.7	1.7		
		5	1300		10.7	1.9		
			1400		11.6	1.9		
			1500		12.1	1.6		
			1600		11.9	1.4		
			1700		12.4	1.4		
			1800		12.2	1.5		
			1900		10.9	1.5		
		6	1700		10.0	1.4		
		8	1500		10.0	1.2		
			1600		9.8	1.2		
			1700		10.4	1.2		
			1800		10.4	1.4		
		9	1700		10.6	1.2		
		13	1700		11.4	1.7		
			1800		11.7	2.0		
			1900		11.3	2.4		
			2000		10.5	2.4		

FL-24

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	January	15	0800	6.6	13.4	11.4		
			0900	8.8	14.7	13.7		
			1000	9.9	15.0	13.4		
			1100	10.1	15.2	13.1		
			1200	10.0	15.0	12.8		
			1300	9.8	14.6	12.4		
			1400	10.4	13.6	11.6		
			1500	9.8	10.6	8.6		
		23	1300	1.4	10.0	1.8		
			1400	1.4	11.2	1.7		
			1500	1.4	11.1	1.4		
			1600	1.2	11.3	1.4		
			1700	1.0	11.9	1.7		
			1800	0.9	11.6	1.7		
			1900	0.9	10.4	1.8		
		26	1300	0.9	10.2	1.2		
			1400	0.9	11.5	1.0		
			1500	0.8	12.0	0.6		
			1600	0.6	12.4	0.5		
			1700	0.4	12.7	0.6		
			1800	0.3	12.7	1.2		
			1900	0.4	12.0	1.9		
			2000	0.5	11.1	2.3		
			2100	0.6	10.5	2.5		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	January	29	1400	1.4	10.9	2.2		
			1500	1.3	11.4	2.0		
			1600	1.3	12.0	1.8		
			1700	1.0	12.2	1.7		
			1800	0.9	12.3	1.9		
			1900	0.9	11.1	2.2		
			2000	1.0	10.1	2.7		
1981	February	5	1700	0.6	10.1	1.2		
			1800	0.5	10.3	1.2		
		9	1200	1.6	11.1	1.9		
			1300	1.7	13.1	2.1		
			1400	1.7	14.3	2.1		
			1500	1.6	15.0	1.8		
			1600	1.6	14.8	1.7		
			1700	1.4	14.4	1.7		
			1800	1.4	13.7	1.5		
			1900	1.4	12.1	1.5		
			2000	1.4	10.0	1.3		
		13	1400	0.3	10.2	0.7		
			1500	0.3	11.5	0.8		
			1600	0.3	12.3	0.9		
			1700	0.3	12.7	1.0		
			1800	0.3	13.2	1.0		
			1900	0.3	12.1	0.9		
			2000	0.3	10.9	0.8		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	February	23	1300	0.3	11.9	1.7		
			1400	0.3	13.2	1.9		
			1500	0.3	13.4	1.8		
			1600	0.3	12.7	1.5		
			1700	0.3	12.7	1.2		
			1800	0.3	11.8	1.3		
			1900	0.3	10.1	1.3		
		25	1800	1.4	10.0	1.5		
		26	1400	2.3	10.1	3.1		
			1500	1.9	10.4	2.4		
			1600	1.7	9.7	1.7		
			1700	1.4	10.3	1.6		
			1800	1.3	10.6	1.6		
			1900	1.2	10.0	1.6		
		27	1300	0.4	10.2	2.2		
			1400	0.5	11.4	2.2		
			1500	0.7	12.0	1.9		
			1600	0.8	12.4	1.4		
			1700	0.8	12.6	1.4		
			1800	0.8	13.2	1.4		
			1900	0.9	12.7	1.4		
			2000	0.9	11.4	1.5		
			2100	1.1	10.3	1.8		

FL-27

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	March	3	1400		10.6	1.2		
			1500		11.3	1.2		
			1600		11.8	1.2		
			1700		12.1	1.3		
			1800		11.6	1.3		
			1900		10.6	1.3		
	April	6	1300	1.7	10.8			
			1400	1.6	11.6			
			1500	1.4	11.6			
			1600	1.4	11.4			
			1700	1.3	10.6			
			1800	1.2	10.0			
		7	1500	1.1	10.0			
			1600	1.2	10.6	1.8		
			1700	1.2	10.4	1.8		
	May	22	1400	1.3	10.4	2.5		
			1500	1.2	10.8	2.6		
			1600	1.0	11.4	2.6		
			1700	0.9	10.4	2.5		
	August	14	1500		10.2			
			1600		11.1			
			1700		11.1			
			1800		10.1			2.2

FL-28

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	August	25	1500		13.3	2.5		4.0
			1600		12.7	2.4		3.8
			1700		11.9	2.2		3.7
			1800		10.2	2.2		3.1
		31	1400	1.1	10.4	1.9		4.4
			1500	0.8	10.4	2.1		4.2
			1600	0.9	10.8	2.2		4.4
			1700	0.8	10.1	2.2		3.7
	September	1	1200	2.1	10.5	2.3		4.2
			1300	2.4	11.8	2.5		4.7
			1400	2.6	12.5	2.5		5.2
			1500	2.4	12.7	2.8		5.3
			1600	2.3	14.4	2.9		5.5
			1700	2.2	14.8	3.0		5.2
			1800	2.1	13.2	3.1		5.1
			1900	2.2	11.4	3.3		4.8
			2000	2.3	10.1	3.2		4.6
		2	1100		10.2	2.8		4.9
			1200		12.4	3.0		5.1
			1300		14.2	3.3		5.1
			1400		14.8	2.9		4.7
			1500		13.8	2.5		3.8
			1600		13.1	2.5		3.5
			1700		12.7	2.6		3.2
			1800		11.4	2.5		2.9
			1900		10.1	2.4		2.6

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	September	3	1500	0.3	10.3	2.8		3.4
			1600	0.4	9.9	2.9		3.2
			1700	0.4	10.4	3.0		2.9
		4	1300	2.4	10.4	4.0		4.5
			1400	1.8	11.5	3.4		4.0
			1500	1.0	11.2	2.8		3.2
			1600	0.7	10.4	2.6		2.7
			1700	0.8	10.5	2.5		2.6
			1800	0.7	10.7	2.6		2.4
		23	1400		10.6	2.0		4.2
			1500		11.6	1.9		3.7
			1600		11.6	1.9		3.5
			1700	0.3	12.0	1.8		3.2
			1800	0.3	11.6	1.8		2.5
		24	1500	1.2	10.9	1.7		2.4
			1600	1.2	10.9	1.7		2.5
			1700	1.2	11.2	1.7		2.4
			1800	1.2	10.9	1.8		2.1
		25	1400	2.0	10.0	2.9		3.2
			1500	2.2	10.5	3.5		4.2
			1600	2.7	10.3	4.3		4.5
		28	1300	2.8	10.6	4.7		3.2
			1400	1.7	11.0	3.7		3.1
			1500	1.0	11.5	2.7		2.9
			1600	1.0	12.1	2.6		2.7

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	September	28	1700	0.9	11.7	2.7		2.4
1981	October	2	1200	2.4	11.6		2.4	4.8
			1300	2.2	12.1		2.6	4.7
			1400	1.8	11.9		2.3	4.3
			1500	1.4	11.4		2.1	3.8
			1600	1.4	10.4		2.0	3.7
		5	1200	0.8	10.1	2.2	0.3	1.5
			1300	0.8	11.4	2.4	0.3	1.5
			1400	0.7	12.0	2.5	0.3	1.7
			1500	0.5	12.0	2.7	0.3	1.6
			1600	0.4	11.9	2.7	0.3	1.7
			1700	0.3	11.4	2.7	0.3	1.4
		13	1300	1.1	10.7	2.4		2.6
			1400	1.0	11.1	2.2		2.4
			1500	0.9	10.9	2.3		2.2
			1600	0.7	10.9	2.4		2.0
		14	1500	0.3	10.4	1.7		1.4
			1600	0.3	10.5	1.7		1.4
		16	1300	1.3	10.0	2.2	1.8	2.9
			1400	1.1	10.6	2.2	1.7	2.9
			1500	0.9	10.9	2.3	1.6	3.1
			1600	0.9	11.9	2.4	1.6	3.2
			1700	0.9	12.1	2.4	1.3	3.0
			1800	1.1	11.1	2.6	1.2	2.9

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	October	19	1200	2.7	10.0	2.8	1.7	4.0
			1300	2.5	11.4	2.8	1.6	4.1
			1400	2.0	11.7	2.7	1.4	3.8
			1500	1.4	11.8	2.4	1.0	2.9
			1600	1.0	11.9	2.2	0.7	2.6
			1700	0.9	11.1	2.2	0.4	2.3
		20	1300	0.7	10.4	1.4		1.6
			1400	0.7	11.1	1.4	0.3	1.6
			1500	0.7	11.4	1.5	0.3	1.6
			1600	0.7	11.6	1.6	0.3	1.5
			1700	0.7	10.9	1.6	0.3	1.3
		21	1300	1.1	10.5	1.5	0.3	2.4
			1400	1.1	11.6	1.6	0.3	2.5
			1500	1.1	11.9	1.9	0.3	2.4
			1600	1.1	11.6	2.1	0.3	2.4
			1700	1.2	11.2	2.2	0.3	2.0
		22	1600	0.9	10.6	1.8	0.3	1.8
			1700	0.9	11.2	1.9	0.3	1.5
			1800	0.9	10.8	1.9	0.3	1.3
		28	1400		10.4	3.0	2.6	3.7
			1500		11.0	2.7	2.0	3.1
			1600		11.0	2.3	1.3	2.7
			1700		12.4	2.3	0.9	2.5
			1800		12.5	2.4	0.7	2.5
			1900		11.4	2.4	0.6	2.4
			2000		10.4	2.4	0.5	2.2

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	October	29	1300		10.0	4.4	1.7	4.0
			1400		11.0	4.0	1.7	3.9
			1500		11.7	2.9	1.8	3.6
			1600		12.4	1.8	1.7	3.6
			1700		12.0	1.9	1.6	3.5
			1800		11.6	1.9	1.7	3.2
			1900		10.9	1.9	1.5	2.9
			2000		10.3	1.8	1.3	2.7
		30	1200		11.2	2.4	3.3	4.7
			1300		13.1	2.5	3.4	4.8
			1400		14.0	2.4	3.4	4.6
			1500		14.4	2.0	3.0	3.9
			1600		14.7	1.7	2.4	3.4
			1700		14.9	1.7	2.0	3.2
			1800		13.9	1.8	1.9	2.9
			1900		12.2	1.8	1.7	2.7
			2000		10.2	1.7	1.4	2.4
1981	November	2	1500		10.1	1.4	2.2	1.9
			1600		10.2	1.5	2.2	1.9
			1700		10.8	1.7	2.2	2.0
			1800		10.5	1.7	2.1	1.9
		3	1600	2.4	10.1	1.8	1.8	2.5
			1700	2.2	10.1	2.0	1.7	2.7
			1800	2.1	10.1	2.0	1.5	2.6
		6	1700	0.9	10.4	1.6		3.7
			1800	1.2	10.7	1.8		4.0

FL-33

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	November	6	1900	1.8	10.4	2.0		4.2
		12	1400	0.4	10.9	1.9	1.3	3.3
			1500	0.3	11.6	2.0	1.4	3.3
			1600	0.3	11.8	2.2	1.6	3.1
			1700	0.4	11.9	2.4	1.8	3.4
			1800	0.5	11.9	2.7	1.8	3.5
			1900	0.5	10.7	2.8	1.5	3.4
		13	1300	1.1	10.0	2.3	2.1	3.5
			1400	1.0	11.2	2.4	1.9	3.5
			1500	0.6	12.3	2.3	1.5	3.3
			1600	0.4	12.1	2.2	1.1	2.8
			1700	0.4	12.4	2.2	0.8	2.4
			1800	0.5	12.8	2.4	0.6	2.3
			1900	0.5	11.9	2.5	0.5	2.0
			2000	0.6	10.6	2.6	0.4	1.8
		14	1500	0.4	10.0	1.9	1.9	2.4
			1600	0.4	10.6	1.8	1.9	2.2
			1700	0.5	10.6	1.8	1.9	2.2
			1800	0.8	10.5	2.0	2.0	2.4
			1900	1.1	10.4	2.2	2.1	2.5
		16	1300	1.7	10.4	3.0		4.7
			1400	1.3	10.6	3.2		4.6
			1500	0.7	10.2	3.0	3.4	4.2
		17	1700	0.5	10.6	1.7	2.6	2.7
			1800	1.0	11.2	2.1	3.4	3.0

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	November	17	1900	1.5	11.1	3.0	3.7	3.2
			2000	1.9	10.7	3.6	3.8	3.3
			2100	1.9	10.1	3.7	4.0	3.2
		18	1400	1.0	10.3	2.2	2.1	2.7
			1500	0.8	11.1	1.9	1.8	2.4
			1600	0.6	11.3	1.7	1.3	2.2
			1700	0.7	11.6	1.7	1.4	2.4
			1800	1.1	11.5	2.0	1.5	2.5
			1900	1.6	11.1	2.5	1.6	2.6
			2000	2.3	10.4	3.0	1.7	2.7
		19	1200	2.3	10.2	4.0	2.3	3.8
			1300	2.3	11.6	4.2	2.3	4.0
			1400	2.0	12.1	4.3	2.2	3.9
			1500	1.4	12.0	3.6	1.9	3.2
			1600	1.2	11.5	2.8	1.5	2.5
			1700	1.2	11.3	2.5	1.0	2.4
			1800	1.3	10.1	2.9	0.9	2.6
		19 20	2300	8.4	10.8	11.6	3.2	7.8
			0000	10.6	11.6	15.1	4.4	9.4
			0100	12.8	11.8	18.1	5.5	10.6
			0200	14.3	12.5	20.5	6.6	10.9
			0300	14.5	12.6	21.7	7.1	10.9
			0400	13.9	12.0	21.2	7.3	10.1
			0500	12.7	10.9	20.1	7.1	8.8
			0600	11.5	9.5	18.2	6.8	7.6
			0700	10.6	8.5	16.7	6.5	7.0
			0800	9.1	8.6	15.0	6.0	6.5

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	November	20	0900	7.2	9.2	12.7	5.7	5.8
			1000	5.7	9.3	10.1	5.0	5.4
1981	November	23	1200	2.8	10.7	2.7	2.5	4.5
			1300	2.9	12.4	3.1	2.7	4.7
			1400	2.7	13.0	3.5	2.7	4.7
			1500	2.3	13.1	3.3	2.6	4.1
			1600	1.8	12.1	2.8	2.2	3.3
			1700	1.6	11.9	2.7	2.2	3.0
			1800	1.8	11.8	3.0	2.1	2.9
			1900	2.0	10.9	3.5	1.9	2.9
		25	1300	1.3	11.7	2.2	2.7	3.5
			1400	1.3	12.7	2.3	2.7	3.7
			1500	1.2	13.6	2.3	2.3	3.5
			1600	1.0	14.4	2.2	1.8	3.5
			1700	1.1	15.2	2.3	1.4	3.5
			1800	1.3	15.3	2.4	1.4	3.3
			1900	1.4	14.2	2.4	1.1	3.0
			2000	1.4	13.0	2.4	0.9	2.9
			2100	1.4	11.4	2.2	0.8	2.3
			2200	1.4	10.4	2.2	0.6	2.0
1981	December	3	1400	1.2	10.6	1.7	0.5	2.6
			1500	1.2	11.9	1.7	0.5	2.7
			1600	1.2	12.4	1.8	0.5	2.6
			1700	1.2	13.2	1.9	0.5	2.8
			1800	1.3	13.9	2.1	0.5	2.6
			1900	1.4	13.5	2.4	0.5	2.3
			2000	1.3	12.4	2.5	0.4	2.1

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	December	3	2100	1.2	11.4	2.4	0.3	2.0
			2200	1.8	10.4	3.0	0.3	1.8
1981	December	4	1200	2.1	10.0	2.7	3.5	3.7
			1300	2.1	11.0	2.7	3.7	3.8
			1400	1.8	11.7	2.6	3.9	3.9
			1500	1.2	12.2	1.9	3.5	3.3
			1600	1.0	11.9	1.4	2.9	3.2
			1700	1.3	12.7	1.6	2.8	3.7
			1800	2.1	13.7	2.2	2.9	4.0
			1900	3.0	13.5	3.1	3.1	4.2
			2000	4.0	12.9	4.0	3.4	4.4
			2100	4.5	12.4	4.5	3.5	4.3
			2200	4.5	11.8	4.5	3.2	3.9
			2300	4.3	10.8	4.3	2.9	3.6
		7	1100	1.7	10.1	2.0	4.5	3.6
			1200	1.8	11.1	2.3	5.1	3.7
			1300	2.0	11.8	2.5	5.6	3.9
			1400	1.9	12.4	2.7	6.1	3.9
			1500	1.6	12.8	2.6	5.8	3.4
			1600	1.6	12.5	2.7	4.9	3.2
			1700	1.5	11.4	2.9	4.0	2.9
			1800	1.5	10.8	3.5	3.6	2.7
			1900	1.9	10.0	4.5	3.1	2.7
		7	2300	8.1	8.6	11.2	1.9	3.7
		8	0000	9.8	8.5	13.0	2.5	4.5
			0100	11.6	8.6	14.7	3.0	5.0
			0200	13.1	8.3	16.0	3.2	4.9

FL-37

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	December	8	0300	13.9	8.1	16.6	3.6	5.0
			0400	13.7	8.1	16.7	3.8	5.0
			0500	12.6	8.1	15.5	4.0	5.3
			0600	10.9	7.8	13.9	4.1	5.5
			0700	9.3	7.8	12.4	4.2	5.2
			0800	7.8	8.4	10.9	4.0	5.1
			0900	6.0	9.1	9.1	3.7	5.0
			1000	4.4	10.1	7.0	3.5	5.2
			1100	3.2	11.1	5.4	3.3	5.5
			1200	2.6	11.9	4.2	3.2	5.5
			1300	2.4	12.9	3.7	3.2	5.6
			1400	2.0	13.9	3.3	3.4	5.5
			1500	1.4	14.8	2.5	3.2	5.2
			1600	1.0	14.4	1.9	3.0	4.7
			1700	1.2	14.5	2.0	2.8	4.7
			1800	1.7	14.6	2.8	2.8	4.5
			1900	2.3	13.9	3.3	2.7	4.5
			2000	2.9	13.2	3.8	2.5	4.8
			2100	3.8	12.5	4.5	2.6	5.0
			2200	4.6	11.9	5.5	2.6	5.2
			2300	5.1	10.8	6.1	2.6	5.2
		9	1400	1.0	10.4	1.5		3.1
			1500	0.8	11.4	1.4		2.9
			1600	0.9	11.8	1.3		2.6
			1700	1.0	12.1	1.4		2.6
			1800	1.2	12.7	1.5		2.7
			1900	1.4	12.3	1.7		2.6
			2000	1.7	11.6	1.8		2.4
			2100	1.9	10.9	1.9		2.4
			2200	2.0	10.1	1.9		2.2

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	December	10	1300	0.8	10.1	1.4		1.9
			1400	0.8	11.0	1.3		1.9
			1500	0.6	11.5	1.0		1.8
			1600	0.4	11.5	0.9		1.7
			1700	0.3	12.7	1.1		1.8
			1800	0.4	13.4	1.2		1.7
			1900	0.4	12.4	1.1		1.5
			2000	0.4	11.5	1.0		1.4
			2100	0.4	10.6	0.9		1.3
		11	1300	0.5	10.9	1.4		2.0
			1400	0.5	12.0	1.4		2.2
			1500	0.5	12.5	1.2		2.2
			1600	0.4	12.7	1.2	1.7	2.3
			1700	0.3	13.7	1.4	2.0	2.7
			1800	0.3	14.4	2.1	2.2	3.1
			1900	0.3	14.2	3.2	2.3	3.3
			2000	0.4	13.9	4.3	2.4	3.7
			2100	0.7	13.2	5.6	2.7	3.9
			2200	1.4	12.5	7.2	2.9	4.0
		12	2300	2.4	12.2	8.6	3.2	4.2
			0000	2.8	11.5	9.3	3.2	4.0
		12	1700	1.4	10.6	2.4		2.9
			1800	1.7	11.6	2.9		3.2
			1900	2.0	11.6	3.6		3.5
			2000	2.5	11.6	3.8		3.5
			2100	2.8	11.5	3.8		3.5
			2200	2.9	10.8	3.7		3.6
			2300	3.0	10.1	3.8		3.7

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	December	13	0000	3.2	10.0	3.9		3.7
		16	1300	1.2	10.1	1.7	1.3	2.9
			1400	1.2	10.9	1.8	1.4	3.1
			1500	1.1	11.3	1.7	1.4	3.1
			1600	1.0	11.4	1.8	1.4	3.3
			1700	1.1	12.2	2.0	1.4	3.5
			1800	1.1	13.1	2.5	1.0	3.5
			1900	1.0	12.7	2.6	0.6	3.2
			2000	0.9	11.4	2.5	0.4	2.9
			2100	0.9	10.8	2.4	0.4	2.7
			2200	0.9	10.4	2.4	0.3	2.6
		21	1100	0.3	10.4	3.3		4.0
			1200	0.3	11.8	3.5		4.7
			1300	0.3	12.9	3.7		5.2
			1400	0.3	13.4	3.5		5.2
			1500	0.3	13.2	2.8		4.3
			1600	0.3	12.4	1.8		4.2
			1700	0.3	12.8	2.1	1.9	4.2
			1800	0.3	12.4	2.1	1.8	4.0
			1900	0.3	11.6	2.0	1.6	3.7
			2000	0.3	10.6	1.9	1.4	3.1
		23	1700	1.2	10.2	2.4	4.3	3.4
			1800	1.5	10.7	2.7	4.4	3.5
			1900	1.7	10.6	3.0	4.2	3.5
			2000	1.9	10.1	3.2	3.9	3.2

FL-40

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1981	December	28	1100	3.7	10.0	4.9	2.6	4.5
			1200	3.5	11.6	5.1	3.0	5.1
			1300	3.7	12.7	5.2	3.7	5.8
			1400	3.5	13.4	4.7	3.9	5.9
			1500		12.9	3.8	3.4	4.7
			1600		12.1	3.2	2.9	3.7
			1700		12.7	3.0	3.0	3.6
			1800		12.3	2.9	2.8	3.6
			1900		11.7	2.9	2.6	3.5
			2000		10.4	2.7	2.2	2.9
		29	1400	0.4	10.4	2.5	3.1	2.7
			1500	0.4	10.7	2.1	3.0	2.7
			1600	0.4	10.7		3.0	2.9
			1700	0.4	11.1		2.8	3.2
			1800	0.4	11.1		2.2	3.2
			1900	0.4	10.4		1.7	3.1
			2000	0.5	10.0		1.5	2.9
		30	1300		10.4		1.8	2.9
			1400	0.7	11.7		1.9	2.9
			1500	0.8	13.2		2.1	2.9
			1600	0.9	14.3		2.2	3.2
			1700	0.9	15.9		2.0	3.2
			1800	0.8	17.0		1.6	3.2
			1900	0.8	16.2		1.4	2.9
			2000	0.8	15.0		1.1	2.7
			2100	0.8	13.9		0.9	2.2
			2200	0.7	12.6		0.8	1.9
			2300	0.6	10.9		0.6	1.6

FL-41

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	January	15	1700		10.4	1.8	2.7	3.3
			1800		10.2	2.2	2.7	3.4
		17	0100		4.6	10.1	5.3	5.0
			0200		4.2	10.1	5.7	4.8
		19	0000		4.7	11.5	2.7	2.3
			0100		3.2	12.9	2.4	1.8
			0200		2.2	13.9	2.1	1.4
			0300		1.6	14.6	1.9	1.0
			0400		1.2	14.6	1.7	0.8
			0500		0.9	13.9	1.9	0.8
			0600		1.3	13.0	2.7	1.5
			0700		2.8	13.2	4.2	2.8
			0800		4.7	13.4	5.3	5.0
			0900		5.8	12.1	5.8	5.6
			1000		6.4	10.7	6.2	5.9
		27	1700	0.7	10.4	1.6	5.1	2.3
			1800	0.5	10.3	1.6	4.8	1.9
		28	1500	1.5	10.5	3.5	4.4	2.2
			1600	0.8	10.4	2.5	4.4	2.2
			1700	0.4	11.3	1.9	4.5	2.3
			1800	0.5	11.1	2.1	4.6	2.2
			1900	0.6	10.1	2.3	4.7	2.0
		29	1700	0.3	10.8	1.7	4.3	2.4
			1800	0.3	10.2	1.7	4.2	2.2

FL-42

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	February	18	1600	0.7	10.4	1.6	2.4	3.4
			1700	0.7	10.7	1.7	2.2	3.2
			1800	0.8	10.6	1.7	1.8	3.0
		19	1400	1.8	10.2	2.8	3.4	4.2
			1500	1.4	10.3	2.4	2.9	3.7
			1600	0.9	10.3	2.2	2.4	3.2
			1700	0.7	10.5	2.2	2.4	2.9
			1800	0.7	10.5	2.2	2.3	2.9
		24	1300	2.8	10.1	4.0	3.7	3.8
			1400	2.6	10.4	3.3	3.7	3.5
			1500	1.9	10.1	2.7	3.2	3.1
1982	March	2	1700	1.3	10.1	1.3	3.3	3.5
			1800	1.3	10.4	1.5	3.0	3.5

FL-43

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	March	10	1600		10.1	1.4		2.0
			1700		10.4	1.6		1.9
			1800		10.5	1.7		1.9
1982	April	7	1600	1.2	10.1	1.6		
		12	1500	1.3	10.2	2.0		
			1600	1.0	10.4	1.7		
			1700	0.9	10.7	1.7		
			1800	0.9	10.4	1.7		
		30	1300	2.2	10.9	3.2		
			1400	1.8	11.4	2.8		
			1500	1.4	11.1	2.4		
			1600	1.2	11.6	2.4		
			1700	1.2	11.6	2.4		
			1800	1.2	10.5	2.4		
1982	May	3	1200	1.5	10.1	2.2		
			1300	1.3	11.4	2.2		
			1400	1.0	11.8	1.9		
			1500	0.8	11.2	1.8		
			1600	0.8	10.7	1.7		
			1700	0.9	10.1	1.7		
		4	1300	1.7	10.4	2.1		
			1400	1.6	11.1	2.0		
			1500	1.7	11.3	1.9		
			1600	1.5	11.8	1.8		
			1700	1.4	11.8	1.8		
			1800	1.4	10.8	1.7		

FL-44

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	May	5	1400	1.2	10.2	1.5		
			1500	1.2	10.4	1.7		
			1600	1.2	10.6	1.7		
			1700	1.2	10.1	1.7		
		10	1700	1.3	11.7	2.1		
			1800	1.3	10.5	1.9		
		11	1400	1.4	10.4			
			1500	1.3	10.5			
			1600	1.2	10.5			
			1700	1.2	10.2			
		17	1300	1.3	10.5	2.2		
			1400	1.2	11.1	2.1		
			1500	1.2	11.6	2.0		
			1600	1.2	11.7	2.1		
			1700	1.2	11.6	2.1		
			1800	1.2	10.4	2.1		
		18	1400	1.2	10.4	1.8		
			1500	1.2	10.7	1.9		
			1600	1.2	11.1	1.9		
			1700	1.2	10.6	2.0		
		20	1300	2.1	10.7	2.4		
			1400	1.8	10.5	2.4		
			1500	1.5	9.8	2.2		
			1600	1.4	10.0	2.3		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	May	21	1200	2.8	10.0	3.4		
			1300	2.7	10.2	3.4		
			1400	2.2	10.1	2.9		
1982	June	8	1600		10.6	2.4		
			1700		10.1	2.4		
		9	1400		10.1	2.1		
			1500		10.3	2.2		
			1600		10.6	2.4		
			1700		10.3	2.4		
1982	August	6	1400		10.4	4.3		
			1500		11.4	4.2		
			1600		11.6	4.4		
			1700		11.9	4.5		
			1800		10.4	4.0		
		30	1300		11.1	1.8		
			1400		12.1	1.7		
			1500		12.2	1.7		
			1600		12.1	1.9		
			1700		11.6	1.9		
			1800		10.4	1.9		

FL-46

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	September	13	1300		10.2	2.6		
			1400		10.9	2.8		
			1500		11.2	3.0		
			1600		11.6	3.2		
			1700		10.5	3.4		
		17	1200		10.4	3.4		
			1300		11.6	3.5		
			1400		11.8	3.2		
			1500		11.4	2.8		
			1600		11.0	2.9		
			1700		10.4	2.9		
		23	1300		10.6	4.5		
			1400		10.9	4.0		
			1500		10.8	3.4		
			1600		11.0	2.9		
			1700		11.1	2.9		
			1800		10.3	3.1		
		24	1200		11.1	3.3		
			1300		12.2	3.5		
			1400		13.2	3.5		
			1500		12.5	3.2		
			1600		12.1	2.9		
			1700		11.4	2.9		
			1800		10.1	3.0		

FL-47

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	October	6	1200		10.3	3.8		
			1300		11.0	3.7		
			1400		11.3	3.0		
			1500		11.0	2.4		
			1600		11.1	2.1		
			1700		10.3	1.9		
		7	1400		10.3	1.4		
			1500		10.6	1.6		
			1600	0.4	10.7	1.9		
			1700	0.5	10.5	2.0		
		15	1200	1.9	10.4	3.3		
			1300	1.9	11.9	3.5		
			1400	1.4	11.9	3.2		
			1500	1.3	11.6	3.2		
			1600	1.4	11.9	3.1		
			1700	1.5	11.9	3.1		
			1800	1.7	10.7	3.2		
		22	1200	2.4	10.7	4.5		
			1300	2.1	11.4	4.9		
			1400	1.4	11.8	5.0		
			1500	0.7	11.4	4.5		
			1600	0.3	11.7	3.5		
			1700	0.3	11.7	2.9		
			1800	0.3	10.4	2.8		

FL-48

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	November	8	1500	1.3	10.8	3.2		
			1600	1.0	10.9	3.2		
			1700	0.9	10.4	3.1		
			1800	0.8	10.0	3.0		
		15	1300	2.9	10.7	4.2		
			1400	2.5	11.8	4.2		
			1500	1.9	12.1	3.7		
			1600	1.9	12.0	3.2		
			1700	1.7	12.1	3.0		
			1800	1.7	11.1	3.1		
		22	1500	1.4	10.3	2.9		
			1600	0.9	10.6	2.5		
			1700	0.6	10.9	2.2		
			1800	0.6	10.6	2.2		
		23	1400	1.3	10.4	3.3		
			1500	1.1	10.2	2.9		
			1600	0.9	10.2	2.7		
			1700	0.9	10.7	2.5		
			1800	0.8	10.2	2.5		

ATTACHMENT 2
SELECT CARBON MONOXIDE DATA
MIAMI, FLORIDA
(8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	November	24	1300	3.5	11.1	4.8		
			1400	3.2	11.7	4.7		
			1500	2.4	11.2	4.0		
			1600	1.4	11.0	2.9		
			1700	1.2	11.7	2.4		
			1800	1.3	11.9	2.4		
			1900	1.4	11.0	2.4		
1982	December	9	1300	2.2	10.5	3.3		
			1400	2.0	11.1	3.2		
			1500	1.5	11.4	2.7		
			1600	1.1	11.4	2.2		
			1700	1.0	11.1	1.9		
			1800	1.0	10.4	1.9		
		20	1600	0.9	10.2	2.0		
			1700	1.1	11.1	2.2		
			1800	1.5	11.6	2.8		
			1900	2.2	11.5	3.3		
			2000	2.9	10.7	4.0		
			2100	3.9	10.1	4.6		
		21	1400	2.4	12.0	4.2		
			1500	1.9	13.0	3.4		
			1600	1.5	13.2	2.9		
			1700	1.4	14.1	2.9		
			1800	1.8	14.6	3.5		
			1900	2.9	14.2	4.7		
			2000	4.0	13.2	6.0		

FL-50

ATTACHMENT 2
 SELECT CARBON MONOXIDE DATA
 MIAMI, FLORIDA
 (8-HOUR AVERAGE)

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO AT 10- 2700-002	Mg/M ³ CO AT 10- 2700-018	Mg/M ³ CO AT 10- 2700-019	Mg/M ³ CO AT 10- 2700-021	Mg/M ³ CO AT 10- 2700-022
1982	December	21	2100	5.2	12.2	7.0		
			2200	6.5	11.3	8.2		
			2300	7.7	10.5	9.3		
		22	0000	8.6	9.8	10.2		
			0100	9.1	8.1	10.8		
			0200	9.2	6.7	10.4		

FL-51

ATTACHMENT 3

CARBON MONOXIDE MONITORING SITES
MIAMI, FLORIDA

10-2700-002	SLAMS Center-city-commercial	864 Northwest 23rd Street
10-2700-018	NAMS Center-city-commercial	1101 East Flagler Street
10-2700-019	NAMS Suburban-residential	2201 Southwest 4th Street
10-2700-021	SPM Center-city-industrial	54 Northeast 2nd Street
10-2700-022	SPM Center-city-commercial	64 Southwest 1st Street

Validation of the 1980-1982 Palm Beach County
Ozone, Carbon Monoxide And Nitrogen
Dioxide Data

July 25, 1983

Environmental Services Division
U.S. Environmental Protection Agency
Region IV
Athens, Georgia

SUMMARY

At the request of the Air and Waste Management Division, EPA Region IV, the Environmental Services Division, EPA Region IV, evaluated the 1980-1982 ozone, carbon monoxide and nitrogen dioxide data collected by the Broward County (Florida) Environmental Quality Control Board. Ozone and carbon monoxide data are valid for decision making purposes. Only 1982 ozone data are sufficiently complete for decision making purposes. Nitrogen dioxide data are neither valid nor complete. No violations of the ozone standard were measured in 1980-1982. Violations of the carbon monoxide standard were measured in 1980 and 1981.

During the data validation, several related issues became apparent. These involve the addition to SAROAD of certain data, nitrogen dioxide monitoring problems, and the absence of a very strong corrective action program to minimize the loss of data.

CONCLUSIONS

The 1980-1982 ozone and carbon monoxide data collected by the Broward County (Florida) Environmental Quality Control Board are valid for decision making purposes. Only 1982 ozone data are sufficiently complete for decision making purposes - that is one year of data. No violations of the ozone standard were measured during 1980-1982. Carbon monoxide data are sufficiently complete for 1980-1982 for sites 10-0420-002 and 10-3700-004 and all sites in 1982 for decision making purposes. Violations of the carbon monoxide standard were measured in 1980 and 1981; one exceedance of the standard was measured in 1982.

Nitrogen dioxide data for 1980 through 1982 are neither valid nor sufficiently complete for decision-making purposes. Broward County has had considerable difficulty in trying to operate a nitrogen dioxide monitor. Federal funds should not be expended for the purchase of a replacement nitrogen dioxide monitor for Broward County.

Broward County does not have a very strong corrective action program to identify and permanently correct the cause of data losses.

RECOMMENDATIONS

The 1980-1982 ozone and carbon monoxide data collected by the Broward County (Florida) Environmental Quality Control Board are summarized in Attachments 1 and 2. They are valid and should be used for decision-making purposes.

Discretion should be exercised in the interpretation of the ozone data since they are sufficiently complete for decision making purposes for only one year (1982).

Consideration needs to be given to relocating the carbon monoxide monitors which are measuring only low concentrations. They should be moved to areas where the public would have access to maximum concentrations.

Broward County needs to ensure all key personnel are available to meet with EPA personnel on occasions such as this recent data validation. This includes future data validations, system audits and performance audits.

The following data need to be entered into SAROAD:

SITE	PARAMETER	START DATE	START HOUR	END DATE	END HOUR
10-0420-003	Ozone	1/01/81	0000	2/18/81	1300
		4/20/81	1000	4/24/81	1100
		3/29/82	1200	3/31/82	2300
		7/14/82	2200	7/22/82	1400
10-0420-002	Carbon Monoxide	7/28/82	1000	7/29/82	1600
		9/03/82	2300	9/04/82	0400

Broward County needs to implement an aggressive corrective action program to ensure the loss of data is minimized for reasons over which the operator has reasonable control. Missing data forms should be used to initiate permanent corrective action.

Federal funds should not be expended for the purchase of another nitrogen dioxide monitor for Broward County at this time.

INTRODUCTION

On July 15, 1983, the Air and Waste Management Division of EPA Region IV requested that the Environmental Services Division of EPA Region IV validate the 1980-1982 ozone, carbon monoxide and nitrogen dioxide data in Broward County, Florida. This report describes the results of that validation. It provides conclusions and recommendations for the use of those data and resolution of related issues.

DATA VALIDATION

The 1980-1982 ozone, carbon monoxide and nitrogen dioxide data collected by the Broward County (Florida) Environmental Quality Control Board were evaluated and their validity determined. Information collected on April 21, 1983 during the annual system audit was used. This information was supplemented by an on-site visit on July 21, 1983. During the on-site visit, periods of missing data were accounted for, and measurements approaching the National Ambient Air Quality Standards were evaluated. Evaluation consisted of checking appropriate records and recorder strip charts.

Attachment 1 lists all elevated ozone measurements at either of the two monitoring sites and the corresponding measurements at the other site. Site 10-0420-003 is a NAMS site located at 12300 Northwest 41st Street in Coral Springs. It is twenty kilometers downwind of Fort Lauderdale. Site 10-0420-004 is a NAMS site located at 941 Southwest 71st Avenue North in Fort Lauderdale. It is ten kilometers downwind of Fort Lauderdale.

In summary, Attachment 1, shows that:

1. Elevated measurements were made at site 10-0420-003 in 1980 and 1981, but not in 1982.
2. Data are unavailable at site 10-0420-004 to compare concentrations there with the elevated measurements made at site 10-0420-003.
3. No violations of the National Ambient Air Quality Standard were measured in 1980, 1981, or 1982.

Maximum concentrations measured and percent of valid data obtained were:

Year	PPM O ³ AT		PERCENT VALID DATA AT	
	10-0420-003	10-0420-004	10-0420-003	10-0420-004
1980	0.162	0.104	43.5	56.8
1981	0.187	0.120	60.7	72.1
1982	0.092	0.090	87.4	96.4

The ozone data for sites 10-0420-003 and 10-0420-004 for 1980-1982 are valid. However, only 1982 data are sufficiently complete for decision-making purposes.

Attachment 2 lists all elevated carbon monoxide measurements at each of the monitoring sites and the corresponding measurements at the other sites. Attachment 3 identifies the location of these sites. In summary, Attachment 2 shows that:

1. Violations of the National Ambient Air Quality Standard for carbon monoxide were measured in 1980 and 1981. One exceedance of the standard was measured in 1982.
2. Site 10-0420-002 is the only site where the standard was violated. Site 10-1260-003 is the only other site where an exceedance of the standard was measured.

Carbon monoxide data for sites 10-0420-002, 10-1260-003, 10-2270-001, 10-3700-004 and 10-1840-002 are valid. Attachment 4 shows the maximum concentrations measured and the percent valid data obtained each year at each site. All sites have sufficient 1982 data for use in decision-making purposes. However, only sites 10-0420-002 and 10-2270-001 have sufficient data in 1980 and 1981 for decision-making purposes.

No nitrogen dioxide data were validated. The instrument operator most familiar with this instrument was unavailable to discuss the operation of this instrument. This eliminated any possibility of EPA being able to identify or resolve any problems.

RELATED ISSUES

During the on-site visit, several issues became apparent which need to be addressed. These involve monitoring data and related issues.

Data

Broward County has certain data which are not in SAROAD. These data need to be entered:

SITE	PARAMETER	START DATE	START HOUR	END DATE	END HOUR
10-0420-003	Ozone	1/01/80	0000	2/18/80	1300
		4/20/81	1000	4/24/81	1100
		3/29/82	1200	3/31/82	2300
		7/14/82	2200	7/22/82	1400
10-0420-002	Carbon monoxide*	7/28/82	1000	7/29/82	1600
		9/03/82	2300	9/04/82	0400

*8-hour running averages

Other Issues

Broward County has lost data for the reasons most common to most agencies. However, the most frequent cause of lost data has been some type of problem with the recorders. Problems include: out of ink, pen not inking, pen stuck, out of chart paper, chart paper stuck, etc.

YEAR	NUMBER OF INSTANCES OF DATA LOST BECAUSE OF PROBLEMS WITH RECORDER
1980	7
1981	9
1982	44
	<hr/> TOTAL 60

April and May 1982 at ozone site 10-0420-003 had fifteen such instances. There was no evidence on the recorder charts of any attempts to take permanent corrective action.

Broward County is currently negotiating with Columbia Scientific Industries for a partial refund on the nitrogen dioxide monitor from a different manufacturer. Because of the nature and frequency of recorder problems, and because of the complexity of nitrogen dioxide monitors, it is recommended that Broward County not purchase another nitrogen dioxide monitor, at this time.

On March 25, 1981, the ozone monitor at site 10-0420-033 had a power failure. The instrument was not recalibrated until April 10, 1981. All data between March 25 and April 10, 1981 were lost. This is excessive.

40 CFR 58, Appendix A, Sections 1 and 2 require the development of a quality control program (quality assurance plan). This program involves the routine assessment of data and the use of that assessment data to initiate needed corrective action. The assessment function and the corrective action function thus form a control loop. However, Broward County is not using the missing data forms to take needed corrective action as evidence by problems with data completeness and recorder operation. This needs to be corrected.

ATTACHMENT 1
SELECT OZONE DATA
BROWARD COUNTY, FLORIDA

YEAR	MONTH	DAY	START HOUR	PPM O ₃ At 10-0420-003	PPM O ₃ At 10-0420-004
1980	July	8	1300	0.162	0.069
			1400	0.136	
		11	1500	0.122	
1981	May	29	1300	0.049	0.120
	July	15	0000	0.187	
			0100	0.171	
			0200	0.137	

ATTACHMENT 2
 SELECT CARBON MONOXIDE DATA (8-HOUR RUNNING AVERAGE)
 BROWARD COUNTY, FLORIDA

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO at 10-0420-002	Mg/M ³ CO at 10-1260-003	Mg/M ³ CO at 10-2270-001	Mg/M ³ CO at 10-3700-004	Mg/M ³ CO at 10-1840-002	
1980	January	7	2200	10.2		6.4			
			2300	10.7		6.6			
		8	0000	11.0		6.5			
			0100	10.7		6.3			
			0200	10.6		5.7			
			0300	10.4		5.0			
		11	2200	10.2		5.8			
			2300	10.4		6.0			
		18	1800	10.8		4.1			
			1900	11.2		4.5			
			2000	11.5		4.8			
			2100	11.9		4.8			
			2200	12.0		4.8			
			2300	11.0		4.8			
		19	0000	10.3		4.8			
		22	1100	10.1		5.1			
			1200	10.5		5.2			
			1300	10.9		5.4			
			1400	10.3		5.3			
		25	2100	10.1		4.8			
			2200	9.8		5.0			
			2300	10.1		4.9			
		26	0000	10.0		4.5			
	February	15	1300	10.8		4.5			
			1400	10.8		4.3			

FL-72

ATTACHMENT 2
 SELECT CARBON MONOXIDE DATA (8-HOUR RUNNING AVERAGE)
 BROWARD COUNTY, FLORIDA

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO at 10-0420-002	Mg/M ³ CO at 10-1260-003	Mg/M ³ CO at 10-2270-001	Mg/M ³ CO at 10-3700-004	Mg/M ³ CO at 10-1840-002	
1981	January	15	0900	10.1		4.6			
			1000	10.1		4.6			
			1100	10.0		4.5			
			1200	10.1		4.3			
			1300	10.4		4.3			
			1400	10.1		4.3			
		31	0000	10.0		6.2			
	February	28	0000	10.0		5.4			
			0100	10.6		5.7			
			0200	10.7		6.0			
			0300	10.9		6.2			
			0400	11.2		6.2			
			0500	11.1		5.9			
			0600	10.4		5.5			
	March	1	0200	10.4		5.2			
			0300	10.4		5.3			
	November	19	2300	10.6	7.7		4.6	3.6	
			0000	11.4	9.1		5.5	4.5	
			0100	11.1	10.0		5.8	5.7	
			0200	9.7	10.1		5.8	6.7	
	December	7	2100	10.6	5.8	6.8	2.7	2.6	
			2200	11.0	7.5	7.3	3.6	3.4	
			2300	10.7	8.8	7.9	4.5	4.3	
		8	0000	9.8	10.0	8.6	5.1	5.1	
			0100	8.3	10.8	8.5	5.7	5.8	
			0200	7.0	10.9	8.1	5.9	6.4	
			0300	5.5	10.4	7.3	5.7	6.7	

FL-73

ATTACHMENT 2
 SELECT CARBON MONOXIDE DATA (8-HOUR RUNNING AVERAGE)
 BROWARD COUNTY, FLORIDA

3

YEAR	MONTH	DAY	START HOUR	Mg/M ³ CO at 10-0420-002	Mg/M ³ CO at 10-1260-003	Mg/M ³ CO at 10-2270-001	Mg/M ³ CO at 10-3700-004	Mg/M ³ CO at 10-1840-002	
1981	December	17	2100	10.4	2.6	5.8	1.7	2.1	
			2200	11.1	3.6	5.8	2.3	2.9	
			2300	10.9	4.8	5.4	2.6	3.4	
1982	January	8	0900	9.8	10.1	6.0	7.3	4.1	
		21	1300	10.5	4.6		1.6	1.5	

FL-74

ATTACHMENT 3
LOCATION OF CARBON MONOXIDE SITES
BROWARD COUNTY, FLORIDA

SITE	LOCATION
10-0420-002	2687 South State Road #7 Hacienda Village
10-1260-003	2101 Northwest 6th Street Fort Lauderdale, Florida
10-2270-001	3701 North State Road #7 Lauderdale Lakes
10-3700-004	851 Southwest 3rd Avenue Pompano Beach, Florida
10-1840-002	2701 Plunkett Street Hollywood, Florida

ATTACHMENT 4
 MAXIMUM CARBON MONOXIDE CONCENTRATIONS MEASURED
 AND DATA COMPLETENESS OBTAINED
 BROWARD COUNTY, FLORIDA

YEAR	Mg/M ³ CO AT					PERCENT VALID DATA OBTAINED AT				
	10-0420-002	10-1260-003	10-2270-001	10-3700-004	10-1840-002	10-0420-002	10-1260-003	10-2270-001	10-3700-004	10-1840-002
1980	12.0		7.1			81.0		96.0		
1981	11.4	10.9	8.6	5.9	7.0	80.6	18.8	92.6	21.2	27.5
1982	10.5	10.1	6.5	7.3	7.8	94.2	92.9	85.1	79.9	93.9

Region V

Indiana

The errors are corrected to read as follows:

1. On page 14114, second column, first paragraph of the Summary of Comments and Responses, the last sentence is changed to read, "The old section numbers are followed by the new section numbers in parentheses."

2. On page 14115, first column, sixth paragraph, second line, the section number § 657.33(c) is changed to read § 657.40(b).

3. On page 14115, first column, last paragraph, last line, the section number § 658.10(a)(3) is changed to read § 658.10(a)(2).

4. On page 14115, third column, the fourth paragraph is changed to read as follows: *Response*. Section 658.38 is deleted. The duration of a project is covered by Direct Grant Programs, 34 CFR 75.250.

(Catalog of Federal Domestic Assistance Number 84.015, International Studies Centers and Foreign Language and Area Studies Fellowships; 84.016, International Studies Program and 84.017, Foreign Language and Area Studies Research)

Dated: May 3, 1982.

Daniel Oliver,
General Counsel.

[FR Doc. 82-12979 Filed 5-13-82; 8:48 am]

BILLING CODE 4000-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

(A-5-FRL-2072-5)

Approval and Promulgation of Implementation Plans; Indiana

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rulemaking.

SUMMARY: The EPA today is approving a revision to the Vigo County, Indiana sulfur dioxide (SO₂) State Implementation Plan (SIP). Indiana submitted this revision in response to Part D of the Clean Air Act (CAA). EPA proposed approval of this revision on September 1, 1981 (46 FR 43855), received comments from six groups, and is responding to their comments in today's notice.

EFFECTIVE DATE: This final rulemaking becomes effective on May 13, 1982.

ADDRESSES: Copies of this revision to the Indiana SIP are available for inspection at: The Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, D.C. 20408.

Copies of the SIP revision, public comments on the notice of proposed rulemaking and other materials relating

to this rulemaking are available for inspection at the following addresses: (It is recommended that you telephone Robert B. Miller at (312) 886-8031 before visiting the Region V Office).

Environmental Protection Agency,
Region V, Air Programs Branch, 230
South Dearborn Street, Chicago,
Illinois 60604

Environmental Protection Agency,
Public Information Reference Unit, 401
M Street, SW., Washington, D.C.
20460

Indiana Air Pollution Control Division,
Indiana State Board of Health, 1330
West Michigan Street, Indianapolis,
Indiana 46206

Air Pollution Control, Vigo County
Health Department, 120 S. Seventh
Street, Terre Haute, Indiana 47807

FOR FURTHER INFORMATION CONTACT:
Robert B. Miller, Air Programs Branch,
Environmental Protection Agency,
Region V, Chicago, Illinois 60604, (312)
886-8031.

SUPPLEMENTARY INFORMATION: On March 3, 1978 (43 FR 8932) and on October 5, 1978 (43 FR 45993), pursuant to the requirements of Section 107 of the CAA, EPA designated certain areas in each Region V State as nonattainment with respect to the National Ambient Air Quality Standards (NAAQS) for total suspended particulates (TSP), SO₂, carbon monoxide, ozone, and nitrogen dioxide.

Part D of the CAA requires each State to revise its SIP to meet specific requirements for areas designated as nonattainment. These SIP revisions must demonstrate attainment of the primary SO₂ NAAQS by December 31, 1982.

These SIP revisions must also demonstrate attainment of the secondary NAAQS as expeditiously as practicable. The requirements for an approvable SIP are described in a Federal Register notice published April 4, 1979 (44 FR 20372). Supplements to the April 4, 1979 notice were published on July 2, 1979 (44 FR 38583), August 28, 1979 (44 FR 50371), September 17, 1979 (44 FR 53781), and November 23, 1979 (44 FR 67182).

In response to Part D of the CAA, on June 28, 1979, the State of Indiana submitted revised SO₂ control strategies and Air Pollution Control Regulation 13 (APC-13) to EPA. This submittal included a control strategy for Vigo County that was developed by the Indiana Air Pollution Control Division and regulations which were promulgated by the State on June 19, 1979.

While the State developed its SO₂ plan for the County, an industrial task force developed its own control strategy.

The Wabash Valley Environmental Association (WVEA), an organization of 20 local firms, submitted its county-wide plan to the Indiana Air Pollution Control Board (IAPCB) in September 1979. After reviewing the WVEA plan, the State agreed to substitute the WVEA plan for the State plan in APC-13. Consequently, on October 4, 1979, the IAPCB officially withdrew its control strategy for Vigo County, including the portion of APC-13 pertaining to Vigo County. On January 7, 1980, the State promulgated the WVEA SO₂ plan for Vigo County, including a revised APC-13 which incorporated the new Vigo County emission limitations.

On February 11, 1980, the State submitted to EPA its newly promulgated SO₂ control strategy for Vigo County. Technical support materials were submitted in September 1979, on December 10, 1979 and on May 30, 1980. The September 1979 submittal included the technical rationale for the new control strategy for SO₂ in Vigo County. The later submittals provided additional analyses to correct technical deficiencies in the initial submittal. The State recodified its SO₂ regulation APC-13 as 325 IAC Article 7 and submitted it to EPA on October 8, 1980. EPA proposed to approve the Vigo County SO₂ strategy on September 1, 1981 (46 FR 43855).

The Vigo County strategy consists of a general, statewide regulation, 325 IAC Article 7, and an appendix to the regulation (325 IAC 7-1-8) which establishes specific emission limitations for certain Vigo County sources, as well as for sources in other counties. On March 27, 1980, EPA proposed to approve, in part, the general, statewide SO₂ regulation, APC-13 (45 FR 20743). EPA proposed no action at that time on the Vigo County portion of APC-13. EPA has recently approved the recodified regulation, 325 IAC Article 7, with certain exceptions: it took no action on either the Vigo County strategy or the 30-day compliance method contained in the general regulation.

Today, EPA is approving the Vigo County portion of the SO₂ strategy. As with EPA's action on the general regulation, however, and as discussed more fully below, EPA will presently take no action on the 30-day averaging provision in the Vigo County strategy. EPA's detailed analysis of the Vigo County strategy is contained in an EPA technical memorandum and in the September 1, 1981 notice of proposed rulemaking. Both of these are available for review at the above addresses.

Public Comments

In response to its Notice of Proposed Rulemaking, EPA received comments from Indiana, three other States, Vigo County, and a local utility. Following is a summary of the significant comments and EPA's responses to each:

Comment: One commentator raised the following questions concerning the 10% derating of the Public Service Indiana (PSI) Wabash River power plant: a) is the derating enforceable; b) will the derating involve any physical changes; and c) can the load reduction be offset by increasing hours of operation?

Response: The 10% derating of the Wabash River power plant is contained in the State regulation and will become part of the federally approved SIP for Vigo County. EPA and the State maintain that the 10% derating in the capacity of the plant is properly enforceable, even though no physical changes to the plant are required, because compliance can be determined by reviewing charts, logs, and records kept by PSI. Because the plant was modeled assuming 24-hour continuous operations to determine its air quality impacts, any possible increase in the hours of operation will not affect attainment of the SO₂ standards.

Comment: PSI notified EPA that the new stack at its Wabash River plant will not be completed until July 1984. 325 IAC 7-1-8 requires compliance with the new regulations by December 1981, but allows the State to extend this deadline up to December 1982 under certain circumstances. The State has extended the compliance schedule for this plant until December 31, 1982. In PSI's comments, it requested an EPA extension of the compliance deadline or an exemption until July 1984.

Response: 325 IAC 7-1-8 requires that compliance be achieved by no later than December 31, 1981, except as noted above. EPA has no authority in the context of this rulemaking to extend the compliance date beyond that allowed by 325 IAC 7-1-8 or to exempt the Wabash River power plant from the compliance deadline. Any such request would have to be initiated by the State and would have to be the subject of separate rulemaking. Furthermore, EPA's Continuity Policy, as discussed in more detail below, does not normally allow a source additional time to come into compliance with a new, less stringent emission limitation.

The SIP relaxation to a 4.04 lbs/MMBTU emission limit for the Wabash River plant is based upon a new, taller stack. If the attainment demonstration had been based on the existing stacks, a different, probably more stringent,

emission limit would be required for this plant. Therefore, EPA cannot approve the 4.04 lbs/MMBTU emission limit without also requiring that the new stack be in place. EPA is today approving the 4.04 lbs/MMBTU emission limitation for the Wabash River power plant, to be effective when the new stack is in place. Until that time, the existing SIP emission limit of 12 lbs/MMBTU remains applicable.

Comment: Several commentators urged EPA to approve the 30-day averaging provision in 325 IAC 7-1-3.

Response: EPA recognizes the problem of sulfur variability. Consequently, on February 14, 1980, EPA published a Federal Register Notice notifying the public that EPA had begun a review of its policies and procedures for regulating large coal-fired boilers. Among the issues under review are: a) compliance test methods; b) sulfur variability; c) modeling guidelines; and d) averaging periods for emission limitations. This review will address 30-day averaging, appropriate methods for evaluating 30-day averages, and protection of the NAAQS. Based on its review, EPA will make any necessary modifications in its policies. Until this review is complete, EPA will not rulemake on 30-day averaging in Vigo County. EPA has also announced its intention to proceed under an interim enforcement policy for Indiana, which will be used to establish the Agency's enforcement priorities (December 31, 1981, 46 FR 83270).

Comment: One commentator questioned the application of the RAM-urban model to Vigo County. The commentator claimed that this model is inappropriate because it does not consider terrain effects and because there was no analysis of the urban/rural status of the area. The commentator also asked if the model was calibrated.

Response: Prior to the modeling analysis, EPA classified the area as urban based on the general characteristics of the City of Terre Haute (i.e., city size, source density, and land use), where the majority of the sources are located. This procedure was consistent with the EPA urban/rural policy at the time the modeling began. Furthermore, since the terrain in the area is gently rolling (i.e., no significant terrain differences), EPA additionally determined that the reference model for Vigo County at that time should be RAM-urban. No calibration of the short-term RAM-urban model was attempted. This is appropriate because calibration of short-term models requires much more data than that which is available for most areas, including Vigo County. Uncertainties in Vigo County source and

meteorological data restrict the ability to estimate the measured concentration at an exact location during a specific increment of time. These uncertainties prevent the calibration of short-term models, such as RAM-urban.

Comment: One commentator claimed that the modeling analysis was deficient because it used only one year of meteorological data, not five years as required by EPA guidelines.

Response: EPA has reviewed the issue of meteorological data and has determined that because EPA's policy required only one year of meteorological data for the Part D SIPs which were to be submitted by January 1, 1979, EPA is not requiring the State to remodel using 5 years of meteorological data. However, 5 years of appropriate meteorological data are currently available, and all future Vigo County modeling must use 5 years of data.

Comment: One commentator objected to the absence of area sources in the modeled emission inventory. The commentator maintained that the inclusion of area sources should increase the predicted annual concentrations enough to cause violations of the annual standard.

Response: Area sources were not modeled because an inventory was not available. Area sources are not expected to have a significant impact on Vigo County. All point sources in the County were considered, however, the impact from area sources was still included indirectly in the analysis through calculations of the background concentration. The derived background accounted for the impacts due to distant SO₂ sources, nearby area and small point sources, and natural sources. Consequently, inclusion of an area source inventory would be double-counting these source impacts and is, therefore, unnecessary.

Comment: One commentator claimed that the modeled concentrations should be running averages, not block averages.

Response: EPA modeling guidelines state that block averaging times should continue to be used for modeling purposes. Thus, modeled running averages are not required.

Comment: The States of New York and Connecticut raised a number of issues related to the potential interstate impacts of EPA's approval of the Vigo County plan. These States expressed a general concern that the Vigo County emissions, in combination with the SO₂ emissions from other midwest sources, will have a serious, detrimental impact on interstate air pollution levels. They also made the following additional, specific comments: 1) Approval of the

Vigo County strategy will result in increased SO₂ and TSP emissions. This will adversely affect the pollution levels in other states and thus an EPA approval would violate sections 110(a)(2)(E) and 126 of the CAA. 2) EPA and Indiana inappropriately utilized only short-range air pollution dispersion models, which are incapable of assessing long-range pollutant transport. 3) EPA should have modeled the SO₂ emissions for their effect on the particulate matter levels in other States. 4) Approval of the Vigo County plan will result in increased downwind sulfate concentrations. 5) If EPA does not disapprove the Vigo County plan, it must defer its decision until the completion of certain proceedings now pending under Section 126 of the CAA.

Response: EPA's review and approval of the Indiana SO₂ SIP revision will not result in increased SO₂ and TSP levels, and thus is consistent with Sections 110(a)(2)(E) and 126 for several reasons. Because the emission limitations for Vigo County generally reflect status quo emissions or restrictions, no significant increase in SO₂ or TSP emissions and, consequently, no increase in net impact is expected. In addition, the J.L. Case and Anaconda Aluminum stack height changes are only minor increases up to 30 meters (m). EPA has determined that stack heights of up to 65 m may automatically be credited to most significant sources of SO₂ without violating section 123 of the CAA (February 8, 1982, 47 FR 5864). These two increases are well below EPA's de minimis stack height of 65 m. Further, because the PSI stack height change is accompanied by a derating requirement and a reduction from maximum status quo emissions, the expected net effect of today's rulemaking is to reduce PSI's actual impacts.

With regard to comments on the use of EPA reference models, EPA has not yet established any techniques which evaluate impacts beyond 50 kilometers (km) from a source. Consequently, contrary to the commentor's claim, there are no EPA-approved regulatory tools currently available to assess long-range impacts.

Pursuant to Section 110(a)(2)(E), EPA has reviewed this action for potential interstate impacts to the extent that EPA's modeling allows. The only State within 50 km of Vigo County is Illinois. There are no SO₂ nonattainment areas in Illinois within 50 km. There is only one county in Illinois within 50 km where the baseline date has been triggered. As discussed below, there are no problems concerning PSD increment

consumption or violations of the NAAQS in Illinois.

The largest SO₂ source in Vigo County is the PSI Wabash River Plant, located about 13.5 km east of the Illinois State line. Modeling predicts the highest SO₂ concentrations to occur in the vicinity of the Wabash River Plant. The highest, second high 24-hour modeled concentration was 362 µg/m³ and occurred at a receptor located 3 km east of the Plant. West of the Plant (towards Illinois), the high, second high impact was 323 µg/m³, located 1.5 km WNW of the Plant and 12.5 km east of the State line. The predicted concentrations west of this receptor decrease to approximately 200 µg/m³ within 10 km of the State line. Furthermore, a conservative screening analysis demonstrated that maximum concentrations in Illinois due to Vigo County sources are less than 90 µg/m³. Because the concentrations are decreasing away from Vigo County in Illinois and concentrations due to Vigo County sources in Illinois are well below the NAAQS, no violations due to Vigo County sources are expected to occur in Illinois.

The closest major source in Illinois to the Indiana Border is outside the modeling range of 50 km. Consequently, EPA was unable to consider possible source interaction in Illinois. However, beyond 50 km the Illinois sources would almost certainly contribute far more than Indiana sources to ambient SO₂ concentrations.

EPA has also considered under section 110(a)(2)(E) whether revision of the emission limits for the named sources interferes with measures "required to be included in the applicable implementation plan for any other State under Part C to prevent significant deterioration of air quality." A conservative screening analysis demonstrated that the net effect of the Vigo County plan would be to reduce PSI's actual impact on the Illinois PSD area. Therefore, EPA has concluded that the revised SIP will not interfere with Illinois' ability to prevent significant deterioration of its air quality.

With respect to Connecticut's claim that EPA should have modeled the SO₂ emissions for their effect on the particulate matter levels in other States, EPA's currently approved models are not capable of such an analysis. EPA models estimate ground-level SO₂ concentrations caused by a plant's SO₂ emissions. Similarly, EPA models estimate ground-level particulate concentrations caused by a source's particulate matter emissions. Although

models capable of estimating the impact of SO₂ emissions on ground-level particulate matter concentrations have been developed by researchers, EPA is still evaluating their predictive accuracy as part of an overall revision to its Modeling Guidelines. Application of these models at this time, therefore, is premature. For the purposes of section 110(a)(2)(E), EPA notes that the commentor has not submitted any information which demonstrates that the SO₂ emissions from the Vigo County sources contribute or impact particulate pollution in other States.

The sulfate question raised by the commentors is a complex one. To date, EPA has not established a national ambient air quality standard for sulfates. However, the sulfate issue is being evaluated as part of EPA's current review, under section 109(d)(1) of the CAA, 42 U.S.C. 7409(d)(1), of the criteria and national standards for sulfur oxides and particulate matter (see "Second External Review Draft Air Quality Criteria for Particulate Matter and Sulfur Oxides," and notice announcing comment period on draft, 48 FR 15569 (March 6, 1981)). At present, in the absence of a national standard for sulfates, EPA need not consider the impact of the Indiana SO₂ plan on sulfate levels.

On June 18 and 19, 1981, as a result of petitions filed by the States of New York and Pennsylvania under section 126 of the CAA, EPA held a hearing in Washington, D.C. to consider the possible interstate impact of a number of proposed and final SO₂ revisions for sources located in Indiana, Tennessee, Ohio, and West Virginia. (Docket No. A-81-9) To the extent that New York and Connecticut's comments to the Vigo County proposal relate to the same aggregate air quality impact issues as in the section 126 action, they will be addressed in the Agency's Section 126 determination. EPA is not required to delay a plan revision until it reaches a decision on a Section 126 petition. *Connecticut vs. EPA*, 902 F.2d 656 (2d Cir. 1981). In light of the congressional mandate to act expeditiously under Part D of the Act, EPA does not believe that it would be appropriate to withhold the Vigo County rulemaking until EPA acts on the Section 126 petitions. At the time the Agency makes such a determination and to the extent necessary, EPA can and will reevaluate the adequacy of the Vigo County plan.

Based on its review, EPA approves, in part, the revised Vigo County SO₂ strategy as a revision to the SIP. The compliance dates contained in the current federally approved APC-13

(May 14, 1973) will continue to apply to those sources for which the revised SO₂ strategy contains less stringent emission limitations. In those cases where the revised SO₂ strategy requires more stringent emission limitations, the compliance timetables listed in Section 8 of 325 IAC Article 7 are approved in Vigo County. Section 8 requires final compliance by December 31, 1981. Sources subject to the plan requirements and deadlines established under Section 110(a)(2)(A) prior to the 1977 Amendments remain obligated to comply with those requirements until such time as they come into compliance with the new Part D plan requirements.

EPA is presently taking no action on 30-day averaging. This will not affect approvability of the Vigo County strategy as a whole, because 325 IAC Article 7 contains an approvable compliance method, stack testing in accordance with 40 CFR Part 60, Appendix A Method 8. Article 7 also permits the Indiana Air Pollution Control Board to approve alternate compliance methods. Any such methods approved by the Board must be submitted to EPA for its action.

EPA has determined that good cause exists for making these revisions immediately effective and deviating from the requirement of 5 U.S.C. 553(d) (the Administrative Procedures Act) that substantive rules be published thirty days before their effective date. By making this final rulemaking immediately effective, some of the restrictions on industrial growth contained in Section 110(a)(2)(I) of the Clean Air Act will be lifted from the State of Indiana. These restrictions are imposed for failure to have a SIP which meets the requirements of Part D after the final date for SIP approval specified in the Act. EPA has determined that the Vigo County SO₂ SIP on the whole, meets the requirements of Part D. Therefore, it would be contrary to the public interest to continue the restrictions on industrial growth for thirty days after the publication of this notice.

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that the attached rule will not have a significant economic impact on a substantial number of small entities. This action only approves state actions. It will impose no new requirements.

This regulation was exempted from review by the Office of Management and Budget under Section 3 of Executive Order 12291.

Under section 307(b)(1) of the Clean Air Act, judicial review of this action is available only by the filing of a petition for review in the United States Court of

Appeals for the appropriate circuit within 60 days of today. Under section 307(b)(2) of the Clean Air Act, the requirements which are the subject of today's notice may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

Note.—Incorporation by reference of the State Implementation Plan for the State of Indiana was approved by the Director of the Federal Register on July 1, 1981.

(Secs. 110 and 172, Clean Air Act, as amended (42 U.S.C. 7410 and 7502))

Dated: April 30, 1982.

Anne M. Gorsuch,
Administrator.

List of Subjects in 40 CFR Part 52

Air pollution control, Ozone, Sulfur oxides, Nitrogen dioxide, Lead, Particulate matter, Carbon monoxide, Hydrocarbons.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Title 40 of the Code of Federal Regulations, Chapter I, Part 52, Subpart F—Indiana is amended as follows:

1. Section 52.770(c) is amended by adding subparagraph (31) as follows:

§ 52.770 Identification of plan.

• • • • •

(c) • • •

(31) On February 11, 1980, Indiana submitted a revised sulfur dioxide strategy for Vigo County. Technical information was submitted on December 10, 1979 and on May 30, 1980. On October 6, 1980, the State submitted a recodified version of the Vigo County Regulations, 325 IAC Article 7, which was promulgated by the State on August 27, 1980. EPA is not taking action on the 30-day averaging compliance method contained in 325 IAC 7-1-3 as it applies to Vigo County.

2. Section 52.773 is amended by revising paragraph (b) as follows:

§ 52.773 Approval status.

• • • • •

(b) The Administrator finds that the SO₂ strategies for Lake, LaPorte, Marion and Vigo Counties satisfy all requirements of Part D, Title I of the Clean Air Act as amended in 1977, except as noted below.

• • • • •

(FR Doc. 82-12082 Filed 5-12-82; 8:44 am)
BILLING CODE 6560-50-6

40 CFR Parts 52 and 81

[A-5-FRL-2063-6]

Approval and Promulgation of Implementation Plans; Ohio

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: EPA is approving the State of Ohio's sulfur dioxide (SO₂) emission limitations for portions of the following counties: Athens County; Columbus and Southern Ohio Electric (C&SOE)—Poston, Hamilton County; DuPont—Fort Hill, Montgomery County; Dayton Power and Light—Tart and Hutchings, Pike County; Southern Wood Piedmont, Seneca County; Union Carbide Postoria Plant, and Wayne County; Orrville Municipal Power Plant. Additionally, EPA is redefining the SO₂ attainment area for Hamilton County into two distinct attainment areas. These revisions are based on the request and the supporting data submitted by the State of Ohio.

EFFECTIVE DATE: This final rulemaking becomes effective on June 14, 1982.

ADDRESSES: Copies of the Docket #5A-80-3 are on file for copying and inspection during normal business hours at the following address. (It is recommended that you telephone the contact person given below before visiting the Region V office).

Environmental Protection Agency,

Region V, Air Programs Branch, 230
South Dearborn Street, 11th Floor,
Chicago, Illinois 60604

Environmental Protection Agency,
Central Docket Section, West Tower
Lobby, Gallery 1, 401 M Street, SW.,
Washington, D.C. 20460

Copies of the Ohio Administrative
Code (OAC) Rules for this SIP revision
are available for inspection in the
Docket #5A-80-3 cited above and at:
The Office of the Federal Register, 1100
L Street, NW., Room 8401,
Washington, D.C. 20460

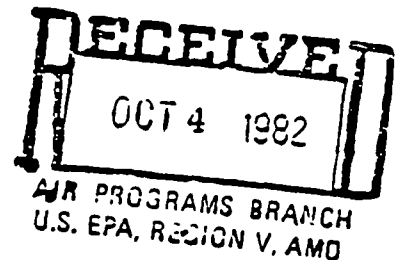
Ohio Environmental Protection Agency,
Office of Air Pollution Control
Division of Authorization and
Compliance, 381 East Broad Street, 6th
Floor, Columbus, Ohio 43215

FOR FURTHER INFORMATION CONTACT:
Debra Marcantonio at 886-6088.

SUPPLEMENTARY INFORMATION: On
November 13, 1981 (46 FR 55994), EPA
proposed to approve the State of Ohio's
sulfur dioxide emission limitations for
the following sources: Athens County;
Columbus and Southern Ohio Electric
(C&SOE)—Poston, Hamilton County;

OCT 01 1982

Mr. Steve Rothblatt, Chief
Air Programs Branch (SAP-11)
Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604



Dear Mr. Rothblatt:

Re: Comment Period for Proposed
Revision to Indiana SIP

The Indiana Air Pollution Control Board is proposing to amend its
State Implementation Plan (SIP) as listed on the enclosed public notice.

Please submit any comments on the intended SIP revision by November 1,
1982, so the Board will be informed of EPA decision prior to taking action.

Questions on the SIP revision should be directed to me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "E. F. Stresino".

E. F. Stresino, Chief
Enforcement Branch
Air Pollution Control Division

SES/lt
Enclosure



AIR POLLUTION CONTROL BOARD
1330 WEST MICHIGAN STREET
P.O. BOX 1964

NOTICE OF PROPOSED DELAYED COMPLIANCE ORDER
FOR

Public Service Company of Indiana, Inc.
Wabash River Generating Station
Vigo County, Indiana

Notice is hereby given that the Indiana Air Pollution Control Board is considering the issuance of a Delayed Compliance Order to Public Service Company of Indiana, Inc. ("PSI") Wabash River Generating Station, pursuant to Section 113(d) of the Federal Clean Air Act, 42 U.S.C. Section 7413(d). By the terms of 325 IAC 7-1, PSI is required to construct a new 450-foot smokestack at the Wabash River Generating Station by December 31, 1982. Because the U.S. Environmental Protection Agency failed to approve that provision of the Indiana regulations until May 13, 1982, PSI delayed construction and will be unable to complete the stack within the required time. The proposed Order being considered would require compliance on or before June 30, 1984.

Notice is hereby given that the proposed Order will be considered at the November 3, 1982, meeting of the Air Pollution Control Board in the Indiana State Board of Health Building, 1330 West Michigan Street, Indianapolis, Indiana, to be held at 1:00 p.m. Any person may appear and submit oral or written comments on the issuance or content of the proposed Order at that meeting, or may submit written comment to the above address at any time prior to that meeting.

A copy of the proposed Order is available for examination at the office of the Air Pollution Control Division of the Indiana State Board of Health, 1330 West Michigan Street, Indianapolis, Indiana, or at the office of the Vigo County Air Pollution Control Division, Terre Haute, Indiana.

Interested parties may call Mr. E.F. Stresino at 317/633-0617 if they have questions about this matter.

Harry D. Williams

Harry D. Williams
Technical Secretary

METHUD; NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	RFP YR ORG	OBS	MAX 1-HR 1ST 2ND 40	MAX 8-HR 1ST 2ND 10	OBS	METH
151180010H01	EAST CHICAGO	LAKE CO	900 EAST CHICAGO	75	1040	3.4 3.4	3.2 3.2		11
151180010H01	EAST CHICAGO	LAKE CO	900 EAST CHICAGO	76	7146	20.1 18.9	13.6 11.9	7	11
151180010H01	EAST CHICAGO	LAKE CO	900 EAST CHICAGO	77	6615	20.1 20.1	12.5 12.1	2	11
151180010H01	EAST CHICAGO	LAKE CO	900 EAST CHICAGO	78	8265	20.1 19.6	12.2 9.0	1	11
151180010H01	EAST CHICAGO	LAKE CO	900 EAST CHICAGO	79	8444	21.3 19.5	10.3 9.2		11
151180011H01	EAST CHICAGO	LAKE CO	4818 INDIANAPOLI	80	2073	8.6 6.3	4.5 4.4		11
151180011H01	EAST CHICAGO	LAKE CO	4818 INDIANAPOLI	81	006 6226	16.1 14.4	11.4 11.1	3	11
151180011H01	EAST CHICAGO	LAKE CO	4818 INDIANAPOLI	82	006 2063	12.1 12.1	7.4 4.9		11
151300001H01	EVANSVILLE	VANDERBURGH CO	1065 WEST PENNSY	81	2023	11.0 10.7	7.0 7.0	1	11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	75	1925	15.5 14.3	8.8 8.7		11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	76	5668	12.9 12.0	9.2 7.0		11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	78	2672	23.6 20.7	15.0 14.7	4	11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	79	6080	10.4 9.8	6.2 6.0		11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	80	1055	8.1 7.5	4.9 3.9		11
151300008H01	EVANSVILLE	VANDERBURGH CO	CIVIC CENTER PEN	81	002 3574	8.6 7.4	5.2 3.5		11
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	81	5902	19.3 14.3	10.9 7.7	1	11
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	82	2224	13.5 11.3	6.4 6.1		11
151780008F01	HAMMOND	LAKE CO	1300 141ST STREE	79	3433	9.6 8.2	6.5 6.2		11
151780008F01	HAMMOND	LAKE CO	1300 141ST STREE	80	687	7.5 6.3	3.0 2.7		11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	76	1496	27.7 20.9	20.7 15.5	5	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	77	8399	22.3 20.9	18.5 11.0	2	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	78	6745	33.9 29.1	24.9 15.1	4	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	79	7767	18.5 16.7	13.2 10.0	1	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	80	8200	23.8 19.2	16.3 11.1	2	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	81	001 6055	16.7 16.0	10.7 9.5	1	11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	82	001 707	5.8 5.5	3.6 3.6		11
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	75	640	13.3 10.0	8.1 5.8		21
152040030F01	INDIANAPOLIS	HARTON CO	WOMEN'S PRISON	77	645	7.8 6.7	6.3 3.9		21
152040031F01	INDIANAPOLIS	HARTON CO	71ST AND TACOMA	75	2583	15.5 15.2	11.8 8.8	1	11
152040031F01	INDIANAPOLIS	HARTON CO	71ST AND TACOMA	76	6440	19.6 19.4	13.2 9.7	1	11
152040031F01	INDIANAPOLIS	HARTON CO	71ST AND TACOMA	77	5181	14.6 12.2	8.9 8.6		11
152040031F01	INDIANAPOLIS	HARTON CO	71ST AND TACOMA	78	6413	28.3 19.7	13.1 12.3	3	11
152040031F01	INDIANAPOLIS	HARTON CO	71ST AND TACOMA	79	5369	15.7 13.8	5.7 5.4		11
152040032F01	INDIANAPOLIS	HARTON CO	9TH AND MERIDIAN	75	2229	29.8 28.6	18.6 17.2	12	11
152040032F01	INDIANAPOLIS	HARTON CO	9TH AND MERIDIAN	76	4283	26.7 20.9	10.1 9.7	1	11
152040034F01	INDIANAPOLIS	HARTON CO	L S AYVES BUILDI	77	4693	32.3 30.4	20.1 14.4	24	11
152040034F01	INDIANAPOLIS	HARTON CO	L S AYVES BUILDI	78	5742	31.6 24.1	13.2 12.7	15	11
152040034F01	INDIANAPOLIS	HARTON CO	L S AYVES BUILDI	79	8178	24.8 24.5	15.8 13.9	26	11
152040034F01	INDIANAPOLIS	HARTON CO	L S AYVES BUILDI	80	7826	19.8 19.4	13.6 12.7	17	11

09/08/82

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 6

CARBON MONOXIDE (MG/M3) INDIANA 75-82

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	#OBS	MAX 1-HR OBS>			MAX 8-HR OBS>			METH
						1ST	2ND	40	1ST	2ND	10	
152040034F01	INDIANAPOLIS	MARTON CO	L S AYVES BUILD	81 001	7912	23.9	22.3		17.6	13.6	10	11
152040034F01	INDIANAPOLIS	MARTON CO	L S AYVES BUILD	82 001	1312	17.6	17.3		10.7	10.1	1	11
151880008F01	SOUTH BEND	ST JOSEPH CO	ANGELA & EDDY ST	82	710	8.2	6.8		5.2	3.5		11

6-NI

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

(A-5-FRL-2016-4)

Approval and Promulgation of Implementation Plans; Indiana

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The United States Environmental Protection Agency (USEPA) announces today final rulemaking on revisions to the carbon monoxide (CO) and ozone (O₃) portions of the Indiana State Implementation Plan (SIP). The State submitted these revisions to USEPA to satisfy the requirements of Part D of the Clean Air Act (Act). USEPA proposed rulemaking on these revisions to the Indiana SIP in the August 27, 1981 (46 FR 43188) Federal Register. One public comment was received.

This notice announces final rulemaking today approving revisions to the Transportation Control Plans (TCP's) for: a Lake, Porter, Clark, Floyd, St. Joseph, Elkhart and Allen Counties; approving the O₃ attainment demonstration for Lake, Porter, Clark, and Floyd Counties, and approving the CO strategy for Lake County.

EFFECTIVE DATE: March 15, 1982.

ADDRESSES: Copies of the SIP revision, public comments on the NPR and USEPA's comments are available for inspection at the following addresses:

Air Programs Branch, Region V, U.S. Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604

U.S. Environmental Protection Agency, Public Information Reference Unit, 401 M Street, SW, Washington, D.C. 20460

Air Pollution Control Division, Indiana Board of Health, 1330 West Michigan Street, Indianapolis, Indiana 46206

Copies of the SIP revision only are available at: The Office of the Federal Register, 1100 L Street, NW., Room 6401, Washington, D.C. 20408.

FOR FURTHER INFORMATION CONTACT: Gerald Kellman, Air Programs Branch, U.S. Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604 (312) 866-6069

SUPPLEMENTARY INFORMATION: On June 26, 1979, the State of Indiana submitted, among other items O₃ plans for Lake, Porter, Clark, Floyd, St. Joseph, Elkhart, and Allen Counties and a CO plan for Lake County. The State of Indiana submitted revisions to these plans on

May 19, 1980, September 24, 1980, October 9, 1980 and October 15, 1980.

On August 27, 1981 (46 FR 43188) USEPA proposed approval of these SIP revisions, and requested comments from the State and the public. The requirements for an approvable transportation plan were referenced in the August 27, 1981 notice of proposed rulemaking. During the public comment period the State commented on USEPA's proposed action. There were no other comments. Based on the previous submittals and a review of the State's comments, USEPA is today briefly summarizing the proposal, addressing the State's comments and acting on the Indiana submittals as revisions to the federally approved Indiana SIP. A discussion of this rulemaking action is presented below for each geographic area:

Clark and Floyd Counties

Based on measured violations of the O₃ National Ambient Air Quality Standards (NAAQS) in the Indiana portion of the Louisville urban area, Clark and Floyd Counties were designated as nonattainment areas for O₃. The TCP for Clark and Floyd Counties was prepared by the Kentuckiana Regional Planning and Development Agency. The transportation control plan contains measures designed to attain and maintain the NAAQS for O₃ in Clark and Floyd Counties.

Based on review of the TCP and the demonstration of attainment, USEPA approves all portions of the TCP and the demonstration of attainment for O₃ in Clark and Floyd Counties.

St. Joseph and Elkhart Counties

The TCP for St. Joseph and Elkhart Counties was prepared by the Michiana Area Council of Governments. It contains measures designed to reduce the level of hydrocarbon emissions in the area. The strategy projects that the percent reduction in hydrocarbon emissions required to ensure attainment of the O₃ NAAQS in the area will be achieved.

USEPA has reviewed the control strategy developed for St. Joseph and Elkhart Counties. The TCP portion of the control strategy satisfies the TCP requirements of an approvable nonattainment area SIP and USEPA approves it. However, USEPA must examine further the adequacy of the State's control requirements for volatile organic compounds for stationary sources. The adequacy of Indiana's requirements for stationary source controls and the demonstration of

attainment will be discussed in a future notice of proposed rulemaking.

Lake and Porter Counties

Based on measured violations of the O₃ NAAQS, Lake and Porter Counties were designated as nonattainment areas for O₃. The TCP for Lake and Porter Counties was prepared by the Northwestern Indiana Regional Planning Commission. The transportation control plan contains measures designed to attain and maintain the NAAQS for O₃ in Lake and Porter Counties.

USEPA has reviewed the O₃ control strategy developed for Lake and Porter Counties. The TCP satisfies the TCP requirements for an approvable nonattainment SIP. Based on this review, USEPA approves the transportation control measures for O₃ and the demonstration of attainment for O₃ in Lake and Porter Counties.

USEPA has reviewed the CO control strategy developed for Lake County. While Indiana's submittal did not include all materials for a demonstration of attainment, USEPA concludes that the final requirements can be met through elements of Indiana's transportation plan required to be submitted as part of the 1982 SIP. These requirements were set forth in detail in the notice of proposed rulemaking 46 FR 43188. Therefore, USEPA approves the CO transportation control measures and demonstration of attainment for Lake County. This action removes the Section 110(a)(2)(I) growth restrictions for carbon monoxide in Lake County.

Allen County

The transportation control plan for Allen County was prepared by the Northeastern Indiana Regional Coordinating Council. It contains measures designed to reduce the level of hydrocarbon emissions in the area. USEPA has reviewed the control strategy developed for Allen County. The TCP portion of the control strategy satisfies all of the TCP requirements for an approvable nonattainment area SIP and USEPA approves it. However, USEPA needs to further examine the adequacy of the State's control requirements for volatile organic compounds for stationary sources. The adequacy of Indiana's stationary source requirements and the demonstration of attainment will be discussed in a future notice of proposed rulemaking.

Public Comments and Responses

In response to the August 27, 1981 notice of proposed rulemaking, the State of Indiana submitted the only comments. EPA has carefully considered the State's

comments in reaching today's rulemaking action. The State's comments and USEPA's response follow:

Comment. The State commented that the Indiana SIP submittal includes a demonstration of attainment for St. Joseph, Elkhart and Allen Counties. The State asked EPA to approve the attainment demonstration for these counties.

Response. In the August 27, 1981 Federal Register, USEPA proposed to approve the State's submittal with the exception of the demonstration of attainment for St. Joseph, Elkhart and Allen Counties. The State has not required RACT for stationary sources in these counties. EPA policy requires RACT in all ozone nonattainment areas, unless dispersion modeling has been used for the demonstration of attainment. Because dispersion modeling was not used for these counties and because RACT is required in these counties, EPA will not take action on the attainment demonstration at this time. EPA will take action at a later date after additional air quality data is collected and the need for RACT is reassessed.

Comment. The State objected to the statement in the proposed rulemaking which required the State to replace transportation projects which cannot be implemented with a project of equal or greater air quality benefit. The State cites USEPA policy which requires conformance of transportation plans and programs with the SIP, and not with individual transportation projects.

Response. The State's citation of USEPA policy is correct and USEPA agrees with the State's position. USEPA's statement on replacing nonimplemented projects of equal or greater benefit was intended to refer to achieving the total necessary emission reduction goals and not substitution on a project by project basis.

Comment. The State commented that the proposed rule approves the transportation control measures study for Clark and Floyd Counties, although the study has not been completed.

Response. The proposed rulemaking did not propose approval of the study, but proposes approval of the schedule for completing the process which will lead to the adoption of the plan as well as the commitment to adopt the plan.

Comment. The State disagrees with the requirement in the proposed rule that extensive documentation of

attainment for CO in Lake County be provided as part of the 1982 SIP.

Response. Because Indiana's transportation submittals for Lake County did not include all information necessary to demonstrate attainment of the CO standards, USEPA is approving the material submitted as only meeting the requirements of the 1979 SIP. EPA still finds that the additional information specified in the notice of proposed rulemaking (46 FR 433188) is necessary in Indiana's transportation plan and requires that it be submitted as a part of the 1982 CO SIP.

Comment. The State objected to the use of the term "Transportation Control Plan" in reference to the Indiana O₃ and CO SIP. The State asserts that this term is outdated and has a negative connotation. Also, the State points out that the term does not adequately reflect all of the activities contained in this portion of the SIP.

Response. USEPA generally agrees with the State's comments related to the term "Transportation Control Plan," but for reasons of consistency with the proposed notices on this subject and with rulemaking actions for the same requirements in other States, EPA is retaining this term for the final notice.

Summary of Action

Lake County		
CO Transportation control measures	_____	Approved
O ₃ Transportation control measures	_____	Approved
CO Demonstration of attainment	_____	Approved
O ₃ Demonstration of attainment	_____	Approved
Porter County		
O ₃ Transportation control measures	_____	Approved
O ₃ Demonstration of attainment	_____	Approved
Clark and Floyd Counties		
O ₃ Transportation control measures	_____	Approved
O ₃ Demonstration of attainment	_____	Approved
St. Joseph and Elkhart Counties		
O ₃ Transportation control measures	_____	Approved
O ₃ Demonstration of attainment	_____	Approved
Allen County		
O ₃ Transportation control measures	_____	Approved
O ₃ Demonstration of attainment	_____	Approved

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the provisions of 5 U.S.C. 605(b), I certify that these revisions to Indiana's SIP will not have a significant economic impact on a substantial number of small entities. This action only approves the State's action and imposes no new requirements.

Under Section 307(b)(1) of the Clean Air Act, judicial review of this action is available only by the filing of a petition for review in the United States Court of Appeals for the appropriate circuit

within 60 days of today. Under Section 307(b)(2) of the Clean Air Act, the requirements which are the subject of today's notice may not be challenged later in civil or criminal proceedings brought by USEPA to enforce these requirements.

Note.—Incorporation by reference of the State Implementation Plan for the State was approved by the Director of the Federal Register on July 1, 1981.

(Sec. 110.172, Clean Air Act, as amended (42 U.S.C. 7410 and 7502))

Dated February 4, 1982.

Anne M. Gorsuch,

Administrator

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Title 40 of the Code of Federal Regulations Chapter I, Part 52 is amended as follows:

1. Section 52.770 is amended by adding paragraph (c)(29) as follows:

§ 52.770 Identification of plan.

(c) . . .
(29) On June 26, 1979, May 19, 1980, September 24, 1980, October 9, 1980 and October 15, 1980, Indiana submitted transportation control plans and ozone demonstrations of attainment for Lake, Porter, Clark, Floyd, St. Joseph, Elkhart and Allen Counties. It also submitted a carbon monoxide demonstration of attainment for Lake County. EPA is taking no action on the ozone demonstration of attainment for St. Joseph, Elkhart and Allen Counties.

2. Section 52.773 is amended by adding new paragraph (e) as follows:

§ 52.773 Approval status.

(e) The Administrator finds that the carbon monoxide strategy for Lake County satisfies all the requirements of Part D, Title I of the Clean Air Act.

3. The carbon monoxide and ozone attainment dates listed in the table of § 52.783(a) are revised as follows:

§ 52.783 Attainment dates for national standards.

(a) The following table presents the latest dates by which the national standards are to be attained. These dates reflect the information presented in Indiana's plan, except where noted.

POLLUTANT

Air quality control region	Particulate matter		Sulfur oxides		Nitrogen dioxide	Carbon monoxide	Ozone
	Primary	Secondary	Primary	Secondary			
East Central Indiana Interstate (AQCR 76)							
a. Primary and Secondary	m	m	n	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e
Evansville (Indiana)—Owensboro Henderson (Kentucky) Interstate (AQCR 77)							
a. Primary and Secondary	m	m	f	f	m	l	m
b. Remainder of AQCR	e	e	e	e	e	e	e
Louisville Interstate (AQCR 78)							
a. Primary and Secondary	m	m	f	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e
Metropolitan Chicago Interstate (Indiana/Illinois) (AQCR 67)							
a. Primary and Secondary	m	m	n	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e
Metropolitan Cincinnati Interstate (AQCR 79)							
a. Primary and Secondary	m	m	f	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e
Metropolitan Indianapolis Interstate (AQCR 80)							
a. Primary and Secondary	m	m	n	f	m	h	h
b. Remainder of AQCR	e	e	e	e	e	kg	h
Northwest Indiana Interstate (AQCR 81)							
a. Primary and Secondary	m	m	f	f	m	l	h
b. Remainder of AQCR	e	e	e	e	e	e	e
South Bend-Elihu (Indiana) Benton Harbor (Michigan) Interstate (AQCR 82)							
a. Primary and Secondary	m	m	f	f	m	l	h
b. Remainder of AQCR	e	e	e	e	e	e	e
Southern Indiana Interstate (AQCR 83)							
a. Primary and Secondary	m	m	f	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e
Wabash Valley Interstate (AQCR 84)							
a. Primary and Secondary	m	m	n	f	m	l	l
b. Remainder of AQCR	e	e	e	e	e	e	e

NOTE.—Dates or footnotes which are reflected are prescribed by the Administrator because the plan did not provide a specific date or the date provided was not ascertainable.

NOTE.—For actual nonattainment designations, refer to 40 CFR Part 81.

NOTE.—Sources subject to the plan requirement and attainment dates established under section 110(c)(2)(A) prior to the 1977 Clean Air Act Amendments remain obligated to comply with these requirements by the earlier deadlines. The earlier attainment dates are set out at 40 CFR 52.780.

- a. July 1975
- b. Five years from plan approval or promulgation.
- c. Eighteen-month extension granted.
- d. Air quality levels presently below the primary standards.
- e. Air quality levels presently below the secondary standards.
- f. Thirteen-month extension granted.
- g. Transportation and/or land use control strategy to be submitted no later than April 15, 1973.
- h. December 31, 1982.
- i. December 31, 1985.
- j. December 31, 1987.
- k. May 31, 1975.
- l. None designated.
- m. Attainment date will be specified in the future.

[FR Doc. 82-3609 Filed 2-10-82; 8:48 am]

BILLING CODE 6560-38-M

COUNCIL ON ENVIRONMENTAL QUALITY

40 CFR Part 1517

Public Meeting Procedures

February 4, 1982.

AGENCY: Council on Environmental Quality, Executive Office of the President.

ACTION: Final rule amending procedures.

SUMMARY: The Council on Environmental Quality is amending its Public Meeting Procedures to make them consistent with recent judicial direction. Under the former regulations, only

Council action which required an affirmative vote of at least two Council Members is subject to the Sunshine Act's open meeting requirement. The proposed revision will apply the Sunshine Act to all meetings of the Council unless otherwise exempted by statute.

DATES: February 11, 1982.

FOR FURTHER INFORMATION CONTACT: Nancy Nord, General Counsel, Council on Environmental Quality, 722 Jackson Place NW, Washington, D.C. 20006; (202) 395-5750.

SUPPLEMENTARY INFORMATION: On October 27, 1980 the Court of Appeals for the District of Columbia Circuit ruled

that the Council on Environmental Quality's public meeting regulations were not in conformance with the open meeting requirements of the Government in the Sunshine Act because meetings to formulate advice to the President were excluded. The Court also overturned that portion of the regulations defining the term "official collegial Council business." (See *Pacific Legal Foundation v. Council on Environmental Quality*, 636 F.2d 1259 (D.C. Cir. 1980), petition for rehearing denied.) A rule to bring the Council's public meeting regulations into conformity with this case was proposed on July 27, 1981, at page 38389 in the Federal Register. Comments were invited for 30 days with the comment period ending August 26, 1981.

The Council received one comment in response to its invitation. The commenter objected to the proposed rule's use of the word "collegial" to describe the kinds of meetings subject to the procedures since all meetings which result in the joint conduct of agency business must be open to the public. In response, the Council has deleted the word "collegial" describing covered meetings. The rule emphasizes, however, that Council actions to advise the President are outside the scope of these procedures when that advice is not formulated in a collegial manner.

The commenter objected to that portion of the proposal which exempted from the Act's coverage actions taken by the Chairman of the Council acting as Director of the Office of Environmental Quality. This portion of the comments is without merit. The Environmental Quality Act of 1970, 42 U.S.C. 4371 (1970), authorizes the Chairman to take certain action in his capacity as Director of the Office of Environmental Quality. When the Chairman is acting in this capacity his actions do not constitute meetings within the meaning of the Act.

The rule being adopted will bring the Council's public meeting requirements into conformity with the Court decision cited above. The rule also eliminates a requirement that the Council hold biweekly meetings. Accordingly, Title 40 of the Code of Federal Regulations is proposed to be amended as set forth below.

REGULATORY FLEXIBILITY ACT

CERTIFICATION: This rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. The purpose of the rule is to implement the "open meetings" section of the Government in

Preservation Officer, and to local public officials.

(u) Any such notice must be published in one or more local newspapers.

(iii) Any such notice must be posted on and near any proposed and alternate sites for an action.

(iv) Any such notice may be mailed to potentially interested community organizations, including small business associations.

(v) Any such notice may be mailed to owners and occupants of nearby or affected property.

(4) A copy of every notice of intent to prepare an environmental impact statement must be furnished to the Assistant General Counsel, Legislative Division, Law Department, who will have it published in the Federal Register.

(39 U.S.C. 401)

W. Allen Sanders,

Associate General Counsel, Office of General Law and Administration.

(FR Doc. 82-6529 Filed 3-11-82; 8:45 am)

BILLING CODE 7710-12-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[A-5-FRL 1933-2]

Approval and Promulgation of Implementations Plans; Indiana

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rulemaking.

SUMMARY: EPA announced elsewhere in today's Federal Register final rulemaking on parts of the Indiana sulfur dioxide (SO₂) State Implementation Plan (SIP). Indiana submitted these revisions to partially satisfy the requirements of Part D of the Clean Air Act, as amended in 1977. In the final rulemaking, EPA conditionally approved certain revisions to the Indiana SO₂ SIP. This notice solicits public comment on the deadline by which the State of Indiana has committed itself to remedy the conditionally approved portions of SO₂ SIP.

DATES: Comments must be received on or before April 12, 1982.

ADDRESSES: Comments should be sent to the following address:

Gary Gulezian, Chief, Regulatory Analysis Section, Air Programs Branch, U.S. Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604.

Copies of the materials submitted by the State and the public during the comment period announced in this notice of proposed rulemaking are available for review during normal business hours at the following addresses:

USEPA, Region V, Air Programs Branch, 230 South Dearborn Street, Chicago, Illinois 60604.

Air Pollution Control Division, 1330 W. Michigan Street, Indianapolis, Indiana 46206.

USEPA, Public Information Reference Unit, 401 M Street SW, Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT: Robert B. Miller, Regulatory Analysis Section, Air Programs Branch, Region V, U.S. Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886-6031.

SUPPLEMENTARY INFORMATION: In final rulemaking action published in today's Federal Register, EPA approved, conditionally approved, and disapproved portions of Indiana's SO₂ control strategies. A discussion of conditional approval and its practical effects appears in the July 2, 1979 and the November 23, 1979 Federal Registers (44 FR 38583 and 67182). A conditional approval requires the State to remedy identified deficiencies by specified deadlines. Although public comment is solicited on the deadlines, the State remains bound by its commitments unless the schedules are disapproved by EPA in its final rulemaking action. A conditional approval means that the restriction on new source construction in designated nonattainment areas will not apply unless the State fails to submit the corrections by the specified date, or unless the corrections are ultimately determined to be inadequate.

In today's final rulemaking, EPA also identified the conditions which must be satisfied by the State of Indiana to correct the specified deficiencies in the SO₂ revision to the Part D Indiana SIP. The State of Indiana has provided assurances in letters dated August 27, 1980 and July 18, 1981 that it will satisfy these conditions on a specific schedule.

EPA proposes to approve the following schedule for Indiana to correct the remaining minor deficiencies in the Lake, LaPorte and Marion Counties SO₂ SIP.

Schedules

1. The State of Indiana believes that the twenty-four hour standard is the limiting standard, and if a demonstration is made that it has been attained and will be maintained, the three hour standard and annual

standards will also be met. The State of Indiana committed itself to submit documentation substantiating this belief. If protection of the three hour and annual standard cannot be justified, the State committed itself to investigate further and make necessary changes, including changes to affected regulations, and submit the same to EPA by November 1982.

2. The State of Indiana committed itself to submit the justification for the background concentrations for all appropriate averaging periods to EPA. If this documentation is not sufficient, the State of Indiana committed itself to investigate and make any necessary revisions, including changes to affected regulations, and submit the same to EPA by November 1982.

3. The State of Indiana committed itself to submit to EPA the corrected emission inventories for Marion and Lake Counties. If the submission is not adequate, the State committed itself to investigate and make necessary corrections, including changes to regulations, and submit the same to EPA by November 1982.

4. The State of Indiana committed itself to submit to EPA the corrected receptor network coverage and resolution, including a listing of the high and second high concentrations on critical days. If additional documentation is necessary, the State committed itself to investigate and make further revisions, including changes to affected regulations, and submit the same to EPA by November 1982.

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator certified on January 27, 1981 (46 FR 8709) that regulatory actions approving revisions to SIP's under Sections 110 and 172 of the Act will not have a significant economic impact on a substantial number of small entities. This action, if promulgated, only approves State actions. It will impose no new requirements.

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the requirement of a regulatory impact analysis. This regulation, if promulgated, will not be major as defined by Executive Order 12291, because this action only approves a State action. This action only proposes for public comment those dates by which Indiana has committed itself to submit technical support and/or revisions to the SO₂ SIP which was conditionally approved elsewhere in today's Federal Register. This action should have no economic costs involved above those necessary to perform the revised analyses.

This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

(Sec. 110, 172, and 301(a) of the Clean Air Act as amended)

Dated: March 5 1982.

Valdas V. Adamkus,
Regional Administrator

(FR Doc. 82-6621 Filed 3-11-82, 8:45 am)

BILLING CODE 6560-38-M.

40 CFR Part 123

[SW-4-FRL-2073-3]

Georgia's Application for Interim Authorization, Phase II, Components A and B, Hazardous Waste Program; Public Hearing and Comment Period

AGENCY: Environmental Protection Agency, Region IV

ACTION: Notice of public hearing and public comment period.

SUMMARY: Regulations to protect human health and the environment from the improper management of hazardous waste were published in the Federal Register on May 19, 1980. (45 FR 33063). The hazardous waste management program regulations include provisions for authorization of State programs to operate in lieu of the Federal program and for a transitional stage in which States can be granted interim program authorization. This document announces the availability for public review of the Georgia application for Phase II, Components A and B Interim Authorization, invites public comment, and gives notice of a public hearing held on the application.

DATE: Written comments on Georgia Interim Authorization application must be received by the close of business on April 19, 1982.

Public hearing: EPA will conduct a public hearing on the Georgia Interim Authorization application at 7:00 p.m. on Monday, April 12, 1982. The State of Georgia will participate in the public hearing held by EPA on this subject.

ADDRESSES: Copies of the Georgia Interim Authorization application are available at the following addresses for inspection and copying by the public:
Land Protection Branch, Environmental Protection Division, Georgia Department of Natural Resources, 270 Washington Street, SW, Room 824, Atlanta, Georgia 30334. Telephone 404/656-2833

Environmental Protection Agency, Regional Office Library, Room 121, 345 Courtland Street NE., Atlanta, Georgia 30365. Telephone: 404/881-3016.

Environmental Protection Agency, Headquarters Library, 401 M Street, SW, Washington, D.C. 20460. 202/755-0308.

Written comments should be sent to: James H. Scarbrough, Chief, Residuals Management Branch, Environmental Protection Agency, 345 Courtland Street NE., Atlanta, Georgia 30365. Telephone: 404/881-3016

The public hearing will be held at: Environmental Protection Agency, First Floor Conference Room, 345 Courtland Street NE., Atlanta, Georgia 30365. Telephone: 404/881-3016.

FOR FURTHER INFORMATION CONTACT: James H. Scarbrough, Chief, Residuals Management Branch, Environmental Protection Agency, 345 Courtland Street, NE., Atlanta, Georgia 30365. Telephone: 404/881-3016

SUPPLEMENTARY INFORMATION: In the May 19, 1980, Federal Register (45 FR 33063) the Environmental Protection Agency promulgated regulations, pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended, to protect human health and the environment from the improper management of hazardous waste. These regulations included provisions under which EPA can authorize qualified State hazardous waste management programs to operate in lieu of the Federal program. The regulations provide for a transitional stage in which qualified State programs can be granted Interim Authorization. The Interim Authorization program is being implemented in two phases corresponding to the two stages in which the underlying Federal program will take effect. The State of Georgia received Interim Authorization for Phase I on February 3, 1981.

In the January 26, 1981, Federal Register (46 FR 7965), the Environmental Protection Agency announced the availability of portions or components of Phase II of Interim Authorization. Component A, published in the Federal Register January 12, 1981, (46 FR 2802) contains standards for permitting containers, tanks, surface impoundments, and waste piles. Component B published in the Federal Register January 23, 1981, (46 FR 7666) contains standards for permitting hazardous waste incinerators.

A full description of the requirements and procedures for State Interim Authorization is included in 40 CFR Part 123 Subpart F (45 FR 33479). As noted in the May 19, 1980, Federal Register copies of complete State submittals for Phase II Interim Authorization will be made available for public inspection and comment. In addition, a public

hearing will be held on the submittal.

The purpose of this notice is to announce the availability of the Georgia submittal for Phase II Interim Authorization, Component A and Component B to invite public comment, and to give notice of a public hearing to be held on Georgia's application.

In addition, Georgia has applied for delegation from EPA of its authority under the temporary regulations promulgated as the Interim Land Disposal Permitting Program (40 CFR Part 207).

Dated: March 5, 1982.

Charles R. Jeter,
Regional Administrator

(FR Doc. 82-6683 Filed 3-11-82, 8:45 am)

BILLING CODE 6560-38-M

40 CFR Part 123

[WH-S-FRL-2073-2]

Illinois Department of Mines and Minerals Underground Injection Control Primacy Application; Cancellation of Public Hearing

AGENCY: Environmental Protection Agency.

ACTION: Notice of cancellation of public hearing.

SUMMARY: The public hearing on the Illinois Department of Mines and Minerals Underground Injection Control Primacy Application, scheduled for March 16, 1982, has been cancelled. The public hearing had been announced in the Friday, February 12, 1982 Federal Register (47 FR 6445). No requests for a public hearing have been received.

FOR FURTHER INFORMATION CONTACT: James Mayka, Ground Water Section (5WD-26), Environmental Protection Agency, Region 5, 230 S. Dearborn Street, Chicago, Illinois 60604, (312) 886-6194.

Dated: March 5, 1982.

Bruce R. Barrett,
Acting Assistant Administrator for Water.

(FR Doc. 82-6814 Filed 3-11-82, 8:45 am)

BILLING CODE 6560-38-M

40 CFR Parts 122, 123, 124, 146

[WH-FRL-2073-1]

Oklahoma State Department of Public Health Underground Injection Control Primacy Application; Correction

AGENCY: Environmental Protection Agency

ACTION: Proposed rule, correction.

SUMMARY: The Environmental Protection Agency on March 2, 1982, in 47 FR 8792 gave notice of intent to hold a public hearing on the Oklahoma Underground

Koerber

as determined in section 4107(b)(1) of title 38, United States Code. A physician serving a period of obligated service is not eligible for incentive special pay during the first three years of such obligated service. He or she may be paid primary special pay at the discretion of the Administrator upon the recommendation of the Chief Medical Director (Pub. L. 96-330, Sec. 202; 38 U.S.C. 4118(b)).

§ 17.610 Failure to comply with terms and conditions of participation.

(a) If a participant, other than one described in paragraph (b) of this section fails to accept payment or instructs the school not to accept payment of the scholarship provided by the Administrator, the participant must, in addition to any service or other obligation incurred under the contract, pay to the United States the amount of \$1,500 liquidated damages. Payment of this amount must be made within 90 days of the date on which the participant fails to accept payment of the scholarship award or instructs the school not to accept payment. (38 U.S.C. 4144(a)).

(b) When a participant fails to maintain an acceptable level of academic standing, is dismissed from the school for disciplinary reasons, voluntarily terminates the course of study or program for which the scholarship was awarded before completing the course of study or program, or fails to become licensed to practice medicine or osteopathy in a State or fails to become licensed as a registered nurse in a State within 1 year from the date such person becomes eligible to apply for State licensure, the participant must, instead of performing any service obligation, pay to the United States an amount equal to all scholarship funds awarded under the written contract executed in accordance with § 17.602. Payment of this amount must be made within 3 years from the date academic training terminates. (38 U.S.C. 4144(b)).

(c) Participants who breach their contracts by failing to begin or complete their service obligation (for any reason) other than as provided for under paragraph (b) of this section are liable to repay the amount of all scholarship funds paid to them and to the school on their behalf, plus interest, as determined by the following formula:

$$A = 20 \frac{t}{(1-s)}$$

where:

A is the amount the United States is entitled to recover;

"0" is the sum of the amounts paid to or on behalf of the applicant and the interest on such amounts which would be payable if, at the time the amounts were paid, they were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States

"t" is the total number of months in the applicant's period of obligated service; and

"s" is the number of months of the period of obligated service served by the participant.

The amount which the United States is entitled to recover shall be paid within 1 year of the date on which the applicant failed to begin or complete the period of obligated service, as determined by the Administrator. (38 U.S.C. 4144(c)).

§ 17.611 Bankruptcy.

Any payment obligation incurred may not be discharged in bankruptcy under title 11 of the United States Code until 5 years after the date on which the payment obligation is due. (38 U.S.C. 4144(d)(3)).

§ 17.612 Cancellation, waiver, or suspension of obligation.

(a) Any obligation of a participant for service or payment will be canceled upon the death of the participant. (38 U.S.C. 4144(d)(1)).

(b)(1) A participant may seek a waiver or suspension of the service or payment obligation incurred under this program by written request to the Administrator setting forth the basis, circumstances, and causes which support the requested action. The Administrator may approve an initial request for a suspension for a period of up to 1 year. A renewal of this suspension may also be granted.

(2) The Administrator may waive or suspend any service or payment obligation incurred by a participant whenever compliance by the participant (i) is impossible, due to circumstances beyond the control of the participant or (ii) whenever the Administrator concludes that a waiver or suspension of compliance would be in the best interest of the Veterans Administration. (38 U.S.C. 4144(d)(2)).

(c) Compliance by a participant with a service or payment obligation will be considered impossible due to circumstances beyond the control of the participant if the Administrator determines, on the basis of such information and documentation as may be required, that the participant suffers from a physical or mental disability resulting in permanent inability to perform the service or other activities which would be necessary to comply with the obligation. (38 U.S.C. 4144(d)(2)).

(d) Waivers or suspensions of service or payment obligations, when not related to paragraph (c) of this section, and when considered in the best interest of the Veterans Administration, will be determined by the Administrator on an individual basis. (38 U.S.C. 4144(d)(2)).

(FR Doc. 82-0763 Filed 3-11-82; 8:45 am)
BILLING CODE 3320-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[A-5-FRL-1934-7]

Approval and Promulgation of Implementation Plans; Indiana

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rulemaking.

SUMMARY: On June 28, 1979, Indiana submitted as a revision to its State Implementation Plan (SIP) a revised sulfur dioxide (SO₂) regulation, Air Pollution Control 13 (APC 13), and SO₂ control strategies for certain designated nonattainment counties. EPA proposed rulemaking to conditionally approve, in part, these control strategies on March 27, 1980 (45 FR 20432). Indiana recodified its regulations and on October 8, 1980 submitted essentially identical regulations. EPA is taking final action today to conditionally approve, in part, the recodified regulations and the control strategies contained in the submissions. EPA is taking no action on an alternate method of determining compliance within the regulation which permits averaging of SO₂ emissions over 30 days. It is disapproving the plans for Wayne, Dearborn, Porter, and Warrick Counties because those plans do not assure attainment and maintenance of the national ambient air quality standards (NAAQS). On January 27, 1981, EPA disapproved the plan for Jefferson County (46 FR 8473). EPA is proposing rulemaking elsewhere in today's Federal Register on the dates by which Indiana has committed itself to meet the conditions on EPA's approval.

DATES: This action is effective as of March 12, 1982.

ADDRESSES: Copies of Indiana's submissions, EPA's technical support document, and the public comments on this revision to the SIP are available at: U.S. Environmental Protection Agency, Air Programs Branch, Region V, 230 South Dearborn Street, Chicago, Illinois 60604.

U.S. Environmental Protection Agency,
Public Information Reference Unit, 401
M Street, S.W., Washington, D.C.
20460

Indiana State Board of Health, Air
Pollution Control Division, 1330 West
Michigan Street, Indianapolis, Indiana
46206

Copies of the regulations and
commitments are available for review
at: The Office of Federal Register, 1100 L
Street, S.W., Room 8401, Washington,
D.C. 20460.

FOR FURTHER INFORMATION CONTACT:
Robert Miller, Regulatory Analysis
Section, Air Programs Branch, U.S.
Environmental Protection Agency, 230
South Dearborn Street, Chicago, Illinois
60604 (312) 886-6031.

SUPPLEMENTARY INFORMATION: On
March 3, 1978 (43 FR 8962), and on
October 5, 1978 (43 FR 45993), pursuant
to the requirements of section 107 of the
Clean Air Act (CAA), as amended in
1977, the EPA designated certain areas
in each Region V state as not attaining
the National Ambient Air Quality
standards (NAAQS) for SO₂. Areas in
Lake, LaPorte, Marion, Vigo, and Wayne
Counties, Indiana were designated as
not attaining the primary standard. For
lack of sufficient information, Dearborn,
Gibson, Jefferson, Porter, and Warrick
Counties were designated as
unclassifiable.

Part D of the CAA, as added by the
1977 amendments, requires each state to
revise its SIP to meet specific
requirements for areas designated as
nonattainment. These SIP revisions must
demonstrate attainment of the primary
NAAQS as expeditiously as practicable,
but for SO₂, not later than December 31,
1982. The requirements for an
approvable SIP are described in the
April 4, 1979 Federal Register (44 FR
20372) and supplements dated July 2,
August 28, September 17, and November
23, 1979 (44 FR 38583, 50371, 53761,
67182).

EPA's final determinations take one of
three forms: approval, conditional
approval, or disapproval. A discussion
of conditional approval and its practical
effect appears in the July 2, 1979 Federal
Register (44 FR 38583) and in the
November 23, 1979 Federal Register (44
FR 67182). Conditional approval requires
the state to submit additional materials
by specified deadlines negotiated
between the state and the EPA.
Schedules submitted by Indiana are
proposed for public comment elsewhere
in today's Federal Register. Although
public comment is solicited on the
deadlines, and the deadlines may be
changed in light of the comments, the
State remains bound by its commitment

to meet the proposed deadlines, unless
they are changed. EPA will follow the
procedures described below when
determining if requirements of
conditional approval have been met:

1. When a state submits the required
additional documentation, EPA will
publish a notice in the Federal Register
announcing receipt and availability of
the materials for public comment. The
notice will also announce that the
conditional approval is continuing
pending EPA's final action on the
submission.

2. EPA will evaluate the state's
submissions and public comment on the
submission to determine if noted
deficiencies have been fully corrected.
After review is complete, a Federal
Register notice will either fully approve
the plan if all conditions have been met,
or withdraw the conditional approval
and disapprove the plan. If the plan is
disapproved, then the Section
110(a)(2)(I) restrictions on construction
will be in effect.

3. If the state fails to submit the
required materials according to the
negotiated schedule, EPA will publish a
Federal Register notice shortly after the
expiration of the time limit for
submission. The notice will announce
that the conditional approval is
withdrawn, the SIP is disapproved, and
Section 110(a)(2)(I) restrictions on
growth are in effect.

In response to Part D of the CAA, on
June 26, 1979, the State of Indiana
submitted, among other items, revised
SO₂ control strategies and a revised
regulation, APC 13, to EPA. It submitted
additional data and comments on the
SO₂ plan on June 25, 1980; August 27,
1980; October 15, 1981; and July 18, 1981.
The June 26, 1979 submission included
control strategies for Lake, LaPorte,
Marion, and Vigo Counties that were
adopted by the Indiana Air Pollution
Control Board (IAPCB). The revised
APC 13 was promulgated by the State
on June 19, 1979. The Vigo County
strategy was withdrawn by the State on
October 4, 1979, and an amended
strategy for Vigo County was submitted
on February 11, 1980. Therefore,
rulemaking on Vigo County is being
handled in a separate rulemaking. On
August 27, 1980, Indiana recodified its
regulations and submitted them on
October 6, 1980. APC 13 (1979) was
recodified as 325 IAC Article 7, Sulfur
Dioxide Regulations: 325 IAC 12-3-1 and
2(a), Fossil Fuel Fired Steam Generators;
325 IAC 12-9-1 and 4, Petroleum
Refineries; 325 IAC 12-18-1 and 2,
Sulfuric Acid Plants; 325 IAC 1.1-
61(a)(2) and 2, Stack Height Provisions,
and 325 IAC 7-1-3 Appendix A for Lake,
LaPorte, and Marion Counties. Source

Specific Emission Limitations. Because
these provisions are essentially identical
to those in 1979 APC 13, EPA is
rulemaking today on the recodified
regulations.

In response to petitions under section
126 of the Act, EPA is reviewing the SO₂
strategies in Jefferson and Floyd
Counties. Because of these petitions,
EPA is rulemaking on these two
Counties separately from the rulemaking
for the remainder of the State. On
January 27, 1981 (46 FR 8473), EPA
disapproved the strategy for Jefferson
County. EPA is taking action today on
the SO₂ plan for all counties in Indiana
except Floyd, Jefferson, and Vigo.

The measures promulgated today will
be in addition to, and not in lieu of,
existing SIP regulations. The present
emission control regulations for any
source will remain applicable and
enforceable to prevent a source from
operating without controls, or under less
stringent controls, while it is moving
toward compliance with the new
regulations or if it chooses, challenging
the new regulations. In some instances,
the present emission control regulations
contained in the federally-approved SIP
are different from the regulations
currently being enforced by the State,
because the State is presently enforcing
the regulations which EPA is
conditionally approving today as
opposed to the SIP. In these situations,
the existing federally-approved SIP will
remain applicable and enforceable by
the EPA until there is compliance with
the newly promulgated and federally-
approved regulations. Failure of a
source to meet applicable pre-existing
regulations will result in appropriate
enforcement action, including
assessment of noncompliance penalties.
Furthermore, if there is any instance of
delay or lapse in the applicability of the
new regulations, because of a court
order or for any other reason, the pre-
existing regulations will be applicable
and enforceable.

The only exception to this rule is in
cases where there is a conflict between
the requirements of the new regulations
and the requirements of the existing
regulations, such that it would be
impossible for a source to comply with
the pre-existing SIP while moving
toward compliance with the new
regulations. In these situations, the State
may exempt a source from compliance
with the pre-existing regulations. Any
exemption granted will be reviewed and
acted on by EPA.

Background

EPA first fully approved the Indiana
SO₂ SIP on May 14, 1973 (38 FR 12689).

This SIP required most sources in Indiana to reduce their SO₂ emissions to between 10.8 and 2.16 grams/megacalorie (g/Mcal) (6.0 and 1.2 pounds/Million British Thermal Units (BTU) or 2580 and 516 nanograms/(g/l), depending upon the size of the source. On August 24, 1976, EPA approved, in part, a revised SO₂ strategy for most areas of Indiana, but did not approve the revised strategies for Jefferson, LaPorte, Porter, Vigo, and Warrick Counties. Therefore, the 1973 regulations are the SIP requirements for sources in these 5 counties and the 1976 regulations are the SIP requirements for sources throughout the remainder of the

State. The 1976 regulations removed SO₂ emissions limitations from most existing sources in the State but left emission limitations similar to those in the 1973 regulations in effect for new sources throughout the State and for existing sources in Lake, Marion, and Dearborn Counties.

Indiana's June 28, 1979 submission contains a revised APC 13, which includes an Appendix A that lists source specific emission limitations, and area specific technical support. On October 6, 1980, the recodified SO₂ strategy was submitted. The recodified strategy consists of the following parts:

Recorded	Subject	1979
AC 7-1-1	Applicability	APC-13 Sec. 2
AC 7-1-2	Emissions limitations	APC-13 Sec. 3
AC 7-1-3	Test methods to determine compliance	APC-13 Sec. 5
AC 7-1-4	Ambient monitoring	APC-13 Sec. 6
AC 7-1-5	Control strategies	APC-13 Sec. 8
AC 7-1-6	Compliance timetables	APC-13 Sec. 7
AC 7-1-7	SIP Revisions	APC-13 Sec. 9
AC 7-1-8 App. A	Source specific emissions limitations (Lake, LaPorte, and Marion Co.)	APC-13 App. A
AC 11-6-1(A)(2) and (2)	Stack height provisions	APC 13 Sec. 4
AC 11-7-2	Severability	APC 13 Sec. 11
AC 11-7-4	Force and effect	APC 13 Sec. 10
AC 12-5-1 and 2(a)	Fossil fuel fired steam generators	APC 13 Sec. 3(f)
AC 12-9-1 and 4	Petroleum refineries	APC 13 Sec. 3(h)
AC 12-18-1 and 2	Sulfuric acid plants	APC 13 Sec. 3(g)

Regulation 325 LAC 7 restricts SO₂ emissions from sources with a potential to emit 22.3 metric tons (Megagrams or Mg) of sulfur dioxide per year (25 tons per year) or 4.5 kilograms of SO₂ per hour (10 lbs. of SO₂ per hour). The emission limitations contained in 325 LAC 7 apply statewide. Most existing fuel burning sources are limited to 10.8 g/Mcal (6.0 pounds/MMBTU or 2580 ng/l) Process sources, unless included in 325 LAC 7-1-8, Appendix A, are not controlled.

Where computer modeling studies showed that specific sources, either process or fuel burning, in nonattainment areas required more stringent controls, site-specific emission limitations were developed by either local industrial task forces or by the Indiana Air Pollution Control Division (IAPCD). In either case, they were then adopted by the IAPCB. These emission limitations are contained in Appendix A to Regulation APC 13. Any change in an emission limitation or condition specified in Regulation APC 13 or in Appendix A to Regulation APC 13 must be submitted to EPA as a revision to the federally-approved SIP.

On March 27, 1980, EPA issued a notice of proposed rulemaking (NPR) to conditionally approve, in part, the Indiana SO₂ plan (45 FR 20432). This Federal Register notice also proposed various actions on other portions of the

Indiana SIP. EPA will rulemake on these other portions in separate final rulemaking notices.

At Indiana's request, on May 7, 1980, EPA extended the public comment period on the NPR until June 27, 1980 (45 FR 30089). At the request of two Indiana sources and with the concurrence of the State, EPA again extended the comment period until August 1, 1980 (45 FR 48168, July 18, 1980).

In the NPR, EPA proposed to:

(a) Approve Sections 3(b) and 8 of Regulation APC 13 if the State submitted certification from the Indiana Attorney General that emission limitations contained in permits will have the force and effect of regulations in Indiana.

(b) Disapprove APC 13, Section 5, Test Methods to Determine Compliance, as it applies to 30 day averaging and approve Section 5 of APC 13 as it applies to stack tests.

(c) Approve Section 7, Compliance Timetables, if the State restored existing compliance schedules for sources that have the same or relaxed emissions limits under the new APC 13.

(d) Conditionally approve the control strategy demonstrations for Marion, Lake, and LaPorte Counties, provided the State committed itself to correct certain minor deficiencies according to a schedule agreed to by EPA.

(e) Disapprove APC 13 as it applies to Dearborn, Jefferson, Porter, Warrick,

and Wayne Counties, unless the State submitted adequate attainment demonstrations during the public comment period.

On June 25, 1980, the State submitted comments on the notice of proposed rulemaking including:

(a) An administrative advisory letter from the Attorney General's Office on the force and effect of permit conditions.

(b) A commitment to withdraw the 30 day averaging compliance method from Section 5 (325 LAC 7-1-3) if EPA agrees to a revision of this section that would allow " " sources on a case-by-case basis to utilize fuel averaging periods if it can be demonstrated that these averaging periods will still allow for attainment and maintenance of the NAAQS when considered as part of the applicable SO₂ control strategy. Such fuel averaging periods will have to be approved by the Board and will be submitted to EPA as SIP revisions."

(c) A statement reiterating the State's support for the compliance timetables contained in Section 7 (325 LAC 7-1-6).

(d) Timetables for correcting the deficiencies in the control strategies for Lake, LaPorte, and Marion Counties.

(e) A commitment and schedule for the reanalysis of Wayne County, but no additional technical support to demonstrate that APC-13 is adequate to assure the NAAQS in Dearborn, Jefferson, Porter, and Warrick Counties.

The State clarified its comments for the submission of information on Lake, LaPorte, and Marion Counties in an August 27, 1980 letter. A timetable for their submission was given in a July 16, 1981 letter. A discussion of the State's submittals, public comments, and EPA's final action is available in an August 7, 1981 technical support document. A summary of these items is presented below.

(a) *Force and Effect of Operating Permit Emission Limitations.* In the March 27, 1980 Notice of Proposed Rulemaking (45 FR 20434), EPA reviewed Indiana's scheme for establishing SO₂ and particulate emission limitations through State issued operating permits (APC 19). EPA proposed to approve the scheme if the Attorney General of Indiana would certify that limitations established in the permits have the force and effect of a regulation. Sections 3(b) and 8 of APC 13 (325 LAC 7-1-2(b) and 5) were part of the scheme, and approval of those sections depended on approval of the scheme.

Indiana provided EPA with an administrative advisory letter from the Attorney General's Office. Although this letter disclaimed any status as an

official Attorney General Opinion, the author said that violation of an operating permit condition could be used as "the basis for revoking the permit or proceeding under IC 13-1-1-9, 13-7-3-1(1), 13-7-12-2, 13-7-13-1, or 13-7-13-3" of the Indiana Statutes. The writer concluded that violators of permits were subject to the same legal consequences as violators of the statutes or regulations of the APCB and thus permits had the "force and effect of a rule or regulation under Indiana law."

Appendix A limitations (which are an enforceable part of 325 IAC 7) are superseded as a matter of State law when limitations are incorporated into an operating permit for a given source, and they remain superseded for as long as the permit exists. The State may revoke a permit upon violation of the emission limitations contained therein, and may bring an enforcement action for operating without a valid permit or for violating the underlying State emission limitation. Therefore, the State appears to have an effective enforcement mechanism. Accordingly, EPA will approve the State scheme for establishing emission limitations.

Indiana is required by 325 IAC 7 to submit operating permits to EPA for approval. If a given permit reflects only the emission limitations and conditions already approved in the SIP, EPA will take no further action with respect to the permit and the Federally enforceable emission limitation remains the one approved as a part of the SIP.

Because 325 IAC 7-1-2(b) authorizes the Board to establish emission limitations in an operating permit for a given source that may vary from the Appendix A limitation, submission of such permits will be treated by EPA as SIP revisions and will be approved or disapproved in accordance with Section 110 of the Clean Air Act. These submissions must comply with EPA notice and public hearing requirements and be supported by adequate technical information to assure that the revision will not jeopardize attainment and maintenance of the NAAQS. If the emission limitations are less stringent than the approved SIP limitations, a prevention of significant deterioration analysis with respect to the increment consumed may be required.

If EPA approves the operating permit as a SIP revision, the emission limitations and conditions therein become the new SIP requirements. If these emission limitations and conditions become unenforceable by EPA, then the applicable emission limitations and conditions for the affected source will be the ones originally approved as a part of the SIP.

The State submission did not deal with the issue of maintenance of the ambient standards once they have been attained. Although some allowance for future growth was included in the analyses discussed below, this may not be sufficient to account for all increases in SO₂ emissions in the future. To ensure maintenance of the standards, Indiana will rely on its permit program for both existing and new or modified sources. First, as part of each new source permit review, a complete ambient air quality impact analysis is required. Second, New Source Performance Standards authority has been delegated to Indiana. Third, EPA has partially delegated Prevention of Significant Deterioration authority to Indiana. Thus, new source review requirements will be used to maintain the ambient standards.

(b) *Test Methods To Determine Compliance.* The Indiana Air Pollution Control Board committed itself to act on 30 day averaging upon EPA final action on the issue. On February 14, 1980 (45 FR 9994), EPA initiated a review of its policies and procedures for regulating coal fired power plant. As a part of this review, EPA is investigating methods that use longer averaging times and at the same time ensure the protection of the NAAQS. Therefore, EPA is not rulemaking today on the 30-day averaging provision of 325 IAC 7-1-3.

Section 3 includes three methods for determining compliance: a stack test performed in accordance with 40 CFR Appendix A Method 6, a 30 day average of the fuel sulfur content, or other methods approved by the IAPCB. EPA is approving the stack test portion of Section 5 but is taking no action on the 30-day averaging provision. All alternate compliance methods approved by the IAPCB must be submitted to EPA for approval as revisions to the SIP.

(c) *Compliance Timetables.* EPA proposed to approve 325 IAC 7-1-6, Compliance Timetables, if the State modified it to include the timetables included in the present SIP for those sources whose emission limitations are either not changing or being relaxed. The State declined to change this section, however, because it felt that it would be unfair to require immediate compliance for those sources out of compliance with the existing SIP, but in compliance with State law. EPA's policy, as stated earlier in this notice, is that compliance with the existing SIP must be maintained until compliance with the revised SIP is achieved. Therefore, because of the State's continued support of Section 8, EPA has no alternative but to disapprove the extended compliance date for those sources with relaxed or equivalent

emission limitations. For these sources, the existing federally approved compliance dates remain in effect.

(d) *Part D SO₂ Plans for LaPorte, Lake, and Marion Counties.* The proposed control strategy for each county must be adequate to ensure attainment and maintenance of the annual primary, the 24-hour primary, and the 3-hour secondary ambient standards. A review of the control strategies, attainment analyses, and State commitments follows.

LaPorte County

The three major SO₂ sources in LaPorte County are the Beatty Memorial Hospital (Westville), the Indiana State Prison (Michigan City), and the NIPSCO Michigan City Station. The LaPorte County control strategy requires only the Indiana State Prison to meet a more stringent emission limitation than the statewide limit. The prison limitation is 8.01 g/Mcal (4.44 pounds/MMBTU or 1910 ng/l) with its existing 21m stacks or, if it raises its 3 stacks to 30m, it is allowed 9.22 g/Mcal (5.12 pounds/MMBTU or 2203 ng/l). All other sources in the County are subject to the general limit of 10.8 g/Mcal.

On January 12, 1979 (44 FR 2608), EPA proposed stack height regulations to implement Section 123 of the Clean Air Act. These regulations generally allowed sources automatic credit for stack heights up to a good engineering practice height, as determined by an EPA formula. EPA proposed changes to this policy on October 7, 1981 (45 FR 49814). The stack height increase at the Indiana State Prison meets the criteria in the proposed regulations.

To develop its proposed control strategy for LaPorte County, the Air Pollution Control Division of the Indiana State Board of Health performed a modeling analysis. EPA has defined certain computer models as being "reference models" for development of SIPs. The State employed the RAM-rural model in its analysis. RAM-rural was the appropriate reference model for multi-source rural areas at the time the State did the modeling. Since then, however, the reference rural multi-source model has become MPTER. Thus, although the State's analysis is acceptable, any future modeling of this county must employ MPTER.

The NWS station at which the meteorological data was collected was not clearly identified in the State's technical support. This minor deficiency was cited in the NPR. Subsequent discussion with the State revealed that the data were from Midway (surface data) and Peoria (upper air data).

Because these NWS stations are appropriate for LaPorte County modeling this deficiency has been adequately resolved.

The State used a constant background level based on LaPorte County monitoring data to account for all man-made and natural sources which are not in the State's inventory. The State did not provide sufficient data, however, to support its background level, as EPA noted in the NPR. The State subsequently committed itself to submit the justification for the background concentrations for all appropriate averaging periods to EPA. If this documentation is not sufficient, then the State committed itself to investigate and make necessary revisions, including changes to affected regulations, and submit these to EPA by November 1982.

The EPA accepts the State's commitment for resolving this minor deficiency. The November-1982 date is proposed for approval elsewhere in today's Federal Register.

The State's modeling analysis focused on the 24-hour ambient standard. Because the State claimed that this was the constraining standard, it did not submit a 3-hour or an annual modeling analysis. Although the 24-hour standard has been shown to be constraining for some rural counties, this has not been demonstrated for LaPorte County. This deficiency was noted in the NPR. The State of Indiana committed itself to investigate the 3-hour and annual standard further and make necessary changes, including changes to affected regulations and submit this information and any changes to EPA by November 1982. EPA accepts this commitment to resolve this deficiency. EPA proposes to approve the State's schedule elsewhere in today's Federal Register.

EPA is today conditionally approving the LaPorte County SO₂ strategy.

Lake County

The Lake County control strategy was based on reducing emissions from those sources that have the greatest impact on air quality and that can be controlled with the least cost and operating effect on a company. In general, reductions are required for Jones and Laughlin Steel, U.S. Steel, Inland Steel, Amoco, Energy Cooperative, and Commonwealth Edison sources within the County. Two aspects of this strategy should be noted.

First several U.S. Steel sources are restricted to operation below design capacity. This restriction, identified in the regulations, was used in the modeling with the use of emission parameters for the reduced load conditions.

Second, the control strategy includes a stack height increase at the Northern Indiana Public Service Co. Mitchell Station from 71.9m to 104m. The Mitchell Station is restricted to the existing federally recognized emission limit of 2.16 g/Mcal (1.2 pounds/MMBTU or 516 ng/l).

RAM-urban, the appropriate multi-source reference model for urban areas, was applied in the analysis. In one section of its technical support document, the State characterized dispersion with the NRC Delta-T stability classification scheme. Although this use of a technique which has not been approved by EPA for the development of SIPs was cited in the NPR, this portion of the submission was not used by the State for the development of the actual attainment demonstration but was only used to determine the applicability of RAM-urban to Lake County. In addition, the State removed this section from its technical support document. Because the State has withdrawn this portion of the submittal and because it was not used in the actual attainment demonstration, EPA has determined that this issue should not be part of the conditional approval.

In the NPR, the emissions inventory was cited as being incomplete since the inventory did not appear to include the American Brick Company in Munster. During the public comment, Indiana pointed out that American Brick was included in the area source inventory. As discussed in the technical support document, recent site-specific monitored violations indicate that treatment of this source as an area source is inappropriate. Because its SO₂ emissions are released from a roof monitor running the length of the main shed, American Brick would more properly be treated as a line or volume source.

The State also committed itself to submit to EPA corrected emissions inventories for Lake County. If the submittal is not adequate, the State committed itself to investigate and make necessary corrections, including revisions to affected regulations, by November 1982.

EPA accepts this commitment and conditionally approves the emissions inventory for Lake County. Because Indiana removed emission controls from process sources other than those specifically included in Appendix A, the State must utilize emission factors which estimate emissions without controls for these uncontrolled sources in all modeling studies. EPA is proposing to approve the November 1982 date elsewhere in today's Federal Register.

Midway-Argonne surface/Peoria upper air meteorological data were used in the modeling. Argonne wind data were substituted for those hours of reported calm winds in the Midway data set. EPA determined that this substitution was appropriate.

Background levels were derived from 1976 and 1977 monitoring data collected in the Lake County area. Levels were developed for various ranges of wind direction. The State provided insufficient support for these values, as noted in the NPR. The State has committed itself to submit justification for the background concentrations for all appropriate averaging periods. If this documentation is not sufficient, the State committed itself to investigate and make any necessary revisions, including changes to affected regulations, and submit them to EPA by November 1982. This commitment is acceptable, and EPA conditionally approves this portion of the submittal. EPA is proposing to approve the November 1982 date elsewhere in today's Federal Register.

Initially, the theoretical receptor points, where the computer modeling predicts ambient concentrations, were laid out in a 1 km square grid network. Receptors situated on industry-owned property were either discarded or shifted to either public or nonindustrial off-property locations. In general, the network consisted of 71 receptors in a 4 km wide band parallel to the shoreline stretching from the Illinois border to the Porter County line. EPA has cited several deficiencies with the receptor grid (i.e., inadequate resolution and insufficient support for the dismissal of on-property receptors). Although these issues were not raised in the NPR, they must be resolved in the State's conditional approval submittal.

The State's modeling analysis focused on the 24-hour standard. Although Indiana claimed that this was the constraining standard, no annual analysis and an inadequate 3-hour analysis were provided. Although this issue was cited in general in the NPR, EPA's particular concern with the 3-hour modeling is the unjustified use of a plume rise enhancement factor. Application of a plume rise enhancement factor is not acceptable without adequate on-site supporting data.

The State has committed itself to submit documentation substantiating its belief that the 24-hour standard is the limiting standard. If protection of the three-hour and annual standards cannot be demonstrated, the State committed itself to investigate further and make necessary changes, including changes to

affected regulations, and submit them to EPA by November 1982. EPA accepts this commitment and conditionally approves this portion of the plan. EPA is proposing to approve the November 1982 date elsewhere in today's Federal Register.

The stack height increase in Lake County meets EPA's most recent approvability criteria, which were discussed earlier. Therefore, EPA is approving this portion of the plan.

Based on the State commitments, EPA conditionally approves the Lake County SO₂ plan.

Marion County

The Marion County control strategy, called Scenario V, was submitted by the State and applies only to the industrial portions of southwest Marion County. Scenario V is comprised of the following source specific elements.

- (1) Detroit Diesel Allison Plant #8, 2001 S. Tibbs Avenue: Stack height increase (from 18.78 to 38.0m) and use of 1.4% oil (2.52 g/Mcal or 1.4 pounds/MMBTU);
- (2) Detroit Diesel Allison Plant #5, 2355 S. Tibbs Avenue: Use of 1.6% sulfur coal (4.41 g/Mcal or 2.45 pounds/MMBTU);
- (3) Indianapolis Power & Light (IPALCO) Stout Plant, 3700 S. Harding Street: Stack height increases (from 2@ 76.0m to 2@ 176.0m) and use of 9.54 g/Mcal (5.3 pounds/MMBTU or 2280 ng/l) coal and 0.63 g/Mcal (0.35 pounds/MMBTU or 150 ng/l) oil;
- (4) Bridgeport Brass, 1800 S. Holt Road: Use of 4.97g/Mcal (2.76 pounds/MMBTU or 1280 ng/l) coal;
- (5) Reilly Tar & Chemical, 1800 S. Tibbs Avenue: Use of 1.69-2.25 g/Mcal (0.94-1.25 pounds/MMBTU or 404-538 ng/l) oil;
- (6) National Starch, 1515 Drover: Stack height increases (from 4 short stacks serving Boilers 1, 2, 3, and 5 to one 52.1m stack for Boilers 1, 2, and 3 and one 52.1m stack for Boiler 5), use of 7.18 g/Mcal (3.99 pounds/MMBTU or 1718 ng/l) coal, and specification of standby boiler capacity.

To support the Marion County control strategy, the State submitted RAM-urban modeling. The modeling contained numerous technical deficiencies that were cited in the NPR. The deficiencies include:

- (1) The background levels used were not technically supported.
- (2) The emissions inventory was incomplete.
- (3) The meteorological data base was neither identified nor justified.
- (4) No justification was provided for the claim that the 24-hour standard is

constraining. (Based on this claim, no annual nor 3-hour analyses were submitted).

(5) The receptor network was neither identified nor justified.

(6) The high and second high 24-hour concentrations were not identified.

During the public comment period, there were three developments related to these deficiencies.

First, several commentators pointed out that EPA had received a copy of the modeling output on microfiche. EPA's review of the microfiche clarified some of the documentation issues (i.e., concentration and meteorological data).

Second, commentators stated that EPA had received the receptor network data in a December 28, 1979 supplemental submittal. EPA has reviewed these data and has determined that improvement in the spatial resolution of the receptor network is necessary to assure that the network is adequate to determine SO₂ hotspots.

Third, in its comments, the State noted that a City of Indianapolis-industry task force has been working directly with EPA to develop an acceptable SIP for the entire County. This recent task force effort is designed to produce an alternative control strategy that the State indicated it will adopt after a public hearing and submit to supersede the submission discussed here. In this reanalysis, the task force is attempting to correct any deficiencies noted in the NPR. EPA will propose rulemaking on this alternative control strategy upon its receipt from the State.

Fourth, the State committed itself to the following:

1. To submit the justification for the background concentrations for all appropriate averaging periods to EPA. If this documentation is not sufficient, the State will investigate and make any necessary revisions, including changes to affected regulations, and submit them to the EPA by November 1982.

2. To submit to EPA corrected emissions inventories for Marion County. If the submittal is not adequate, the State committed itself to investigate and make necessary corrections, including revisions to affected regulations, and submit them to EPA by November 1982.

3. To submit to EPA the corrected receptor network coverage and resolution, including a listing of the high and second high concentrations on critical days. If additional documentation is necessary, it committed itself to investigate and make further revisions, including changes to affected regulations, and submit them to EPA by November 1982.

4. To submit all documentation substantiating the State's belief that (1)

the 24 hour standard is the limiting standard and (2) if the 24 hour standard has been attained and will be maintained, then the three hour standard and annual standards are also being met. If protection of the three hour standard and annual standards cannot be justified by protection of the 24 hour standard, then the State committed itself to investigate further and make necessary changes, including changes to affected regulations, and submit them to EPA by November 1982.

EPA finds these four commitments acceptable. Additionally, the stack height increases meet EPA's most recent guidelines which were discussed earlier. Therefore, EPA is conditionally approving the Marion County SO₂ plan based on the four commitments. The November 1982 schedule date for submittal of the conditionally approved items is being proposed for approval elsewhere in today's Federal Register.

(e) SO₂ Plan for Other Indiana Counties.

Floyd and Jefferson Counties

Recent analyses have shown that 325 LAC 7, as it applies to the major SO₂ sources in Floyd and Jefferson Counties, may not be adequate to protect the NAAQS. Sources in these counties, however, are being currently reviewed under Section 128 petitions. These petitions allege that facilities in Floyd and Jefferson Counties may cause violations of the NAAQS in the adjoining Commonwealth of Kentucky.

Floyd and Jefferson Counties are not included in today's rulemaking action on 325 LAC 7. The strategy for Jefferson County was disapproved on January 27, 1981, (46 FR 3473).

Wayne County

No Part D revision was received for Wayne County. The State originally claimed that the County should be redesignated as attaining the SO₂ NAAQS. Therefore, the State believed that no Part D SIP was necessary. No technical support, however, was provided for either the recommended redesignation or the contention that the emission limitations in 325 LAC 7 will assure attainment and maintenance of the NAAQS in the vicinity of the municipally owned electric generating station in Richmond. Furthermore, recent monitored violations reinforce the need for more stringent SO₂ regulations in Wayne County. During the public comment period, the State agreed to revise its designation of Wayne County to nonattainment for SO₂. It also committed itself to develop a control strategy when its redesignation

However, without a control strategy and attainment demonstration for Dearborn County, EPA must disapprove the SO₂ SIP as it applies to Dearborn County.

Dearborn, Porter, and Warrick Counties

Under 325 IAC 7 all sources with the potential to emit 22.3 Mg (25 tons) or more of SO₂ per year in Dearborn, Porter, and Warrick Counties are subject to the general emission limit of 10.8 g/Mcal (2580 ng/l). This represents a relaxation from the existing federally approved emission limits for these counties. Inadequate technical support was provided to demonstrate that this relaxation would protect the NAAQS.

In its public comments, the State argued that since these counties are designated as unclassifiable, no control strategy is necessary. It admitted that the 10.8 g/Mcal limit represents a relaxation, but argued that this is irrelevant since the federally recognized SIP is outdated. The State agreed to develop a control strategy only if the designations are changed to nonattainment. To this end, the State committed itself to assess that attainment status of these counties according to a fixed schedule. The State has recently modeled these counties with computer dispersion models and has submitted ambient monitoring data. These analyses and data are currently under EPA review. Additionally, on June 17, 1981, Indiana submitted as a revision to its SIP new emission limitations for the Tanner's Creek power plant in Dearborn County. EPA will rulemake on this submission in the future. However, based on the evidence currently available to the Agency, EPA must disapprove 325 IAC 7 as it applies to Dearborn, Porter, and Warrick Counties because the State has not demonstrated that a 10.8 g/Mcal emission limitation is sufficient to protect the NAAQS in these three counties.

Public Comments

In response to the March 27, 1980 notice of proposed rulemaking, EPA received many public comments. EPA has carefully considered those comments in reaching today's rulemaking action. EPA discussed earlier in this notice its response to some of these issues and will not repeat a response here. Summaries of the remaining issues raised by the comments and EPA's responses to these issues are as follows:

General Procedural Comments

Issue: One commentator submitted extensive national comments and

requested the comments be considered part of the record for each State plan.

Response: Some of the issues raised in the comments are not relevant to provisions in Indiana's submittal. However, EPA notified the public of its response to all of the issues in the February 21, 1980 Federal Register (45 FR 11472).

Issue: Several industrial commenters questioned EPA's authority under the Clean Air Act to review a State's submission in terms of "enforceability," "stringency," "relaxation or revocation," or "continuity."

Response: EPA responded to similar comments from some of the same commenters in the February 21, 1980 Federal Register (45 FR 11472, 11475-76). EPA incorporates its February 21, 1980 response by reference in today's rulemaking.

Issue: Numerous industrial commenters argued that EPA's policy of conditional approval is not sanctioned by the Clean Air Act. Some of the commenters claim that EPA must promulgate a federal SIP and comply with procedural requirements for such promulgation if the Administrator finds a State plan inadequate. The commenter further contends that conditional approval circumvents the procedural safeguards of Section 307 of the Act and coerces State modification of the plan through threat of disapproval.

Response: In the Administrator's view, conditional approval provides procedural safeguards equivalent to those available when the Administrator promulgates a plan. A discussion of conditional approval and its practical effect appears in supplements to the General Preamble published on July 2, 1979 (44 FR 38583) and November 23, 1979 (44 FR 67182). In the case of Indiana, for example, the Administrator has proposed to conditionally approve certain provisions. The commenter has had an opportunity to submit extensive written comments and receive EPA's response. Today's final conditional approval may be challenged in the appropriate United States Court of Appeals within 60 days. The rulemaking and judicial review procedures thus provide opportunities for comment and review similar to those provided for promulgations under Section 307(d).

Conditional approval is also consistent with the Administrator's obligation under Section 110(c)(1)(C). That subsection requires the Administrator to promulgate regulations for a state if "the state fails, within 60 days after notification by the Administrator or such later period as he may prescribe, to revise an

implementation plan as required pursuant to a provision of its plan referred to in subsection (a)(2)(II)." When the Administrator proposes conditional approval, he is essentially notifying the state that further revisions are required to make the plan or regulations fully approvable. If the state fails to satisfy the Administrator's conditions, the Administrator will disapprove the plan or regulation and may then promulgate regulations to correct the deficiency. The state is simply offered the option of correcting the inadequacies itself.

Issue: Several industrial commenters allege that their ability to comment was impaired by the absence of a complete record during the comment period. The commenters argue that a complete record is required at the time of the proposed rulemaking by either or both the Administrative Procedure Act (5 U.S.C. 551 *et seq.*) and section 307(d) of the Clean Air Act. The commenters complain that EPA's files relating to the proposed rulemaking did not contain all the materials submitted to it by one of the commenters, documentation to support EPA's positions in the proposed rulemaking, and the entire State hearing record. Consequently, the commenters requested that EPA accept supplementary comments on materials not available during the comment period. Finally, the commenters state that EPA must hold its own public hearings on the proposal if the entire record of the State proceedings was not incorporated into the Federal record.

Response: EPA disagrees with the commenter's assertion that either the Administrative Procedure Act or section 307(d) of the Clean Air Act requires EPA to compile a complete record at the time EPA proposes rulemaking. The procedural requirements of section 307(d) apply only to those actions listed in section 307(d)(1). State-initiated SIP revisions are not included in the list. Therefore, state-initiated SIP revisions are subject to the procedural requirements of the Administrative Procedure Act, which does not require the compilation and availability of a complete record at the time of proposed rulemaking.

Citing *Appalachian Power Company v. Environmental Protection Agency*, 477 F.2d 495 (1973), the commenters state that if EPA does not consider the State record in its entirety, the Agency must conduct full public hearings itself. EPA believes that applicable case law is contained in *Buckeye Power, Inc. v. Environmental Protection Agency*, 481 F.2d 162 (1973), in which the Court determined, among other things, that the

Agency need not supplement the record with transcripts of public hearings held in states in connection with adoption of state plans. EPA conducted this rulemaking in accordance with the holding in that case and with the requirements of the Administrative Procedure Act and the Clean Air Act. Further, in accordance with the regulatory provisions of 40 CFR 51.4(c) and (d), the State has prepared and retains for inspection by the Administrator upon his request a record of each hearing. The State also submitted with the revision a certification that the required hearings were held after appropriate notice. Therefore, EPA believes that it has satisfied the applicable statutory and regulatory rulemaking requirements.

Finally, EPA declines the commenters' request that it accept supplementary comment on materials not available during the comment period. During the comment period, all State submittals and technical support were available for inspection. Public comments were added to the file on this revision as they were submitted. State hearing records were available from the State Agency. EPA believes that the Notice of Proposed Rulemaking summarized the bases for its positions. Therefore, EPA believes that the commenters had a full and fair opportunity to comment on this SIP revision.

Issue: One industrial commenter expressed its concern that by approving, disapproving, and conditionally approving different portions of a regulation, EPA was rewriting the State's submittal. The commentator believes that EPA has authority only to approve or disapprove the entire SIP for a given area.

Response: Section 110(a)(2) of the Clean Air Act expressly provides that for each SIP submittal, the Administrator must "approve or disapprove such plan or each portion thereof." The section further provides that the Administrator must "approve such plan, or any portion thereof" if he determines that it was adopted after reasonable notice and hearing and that it satisfied specified criteria. Consequently, EPA believes it is authorized by the Clean Air Act to approve, disapprove, and conditionally approve different portions of a SIP for a given area.

Long Range Transport of SO₂ and Sulfates

Issue: New York claims that EPA failed to comply with Sections 110(a)(2)(E) and 126 of the Clean Air Act. The commentator argued that EPA erred by not considering the long-range

impacts of SO₂ on sulfate formation, total suspended particulate levels, and acid deposition. New York's comments specifically address the revised limits at IPALCO's Stout Plant (Stout) and NIPSCO's Michigan City Station (Michigan City). The commentator does not contend that the Stout or Michigan City plants, specifically, will interfere with attainment or maintenance of SO₂ standards in New York, or any other state, or that EPA erred in its determination that the plants would have an insignificant impact on SO₂ concentrations in other states. Rather, the commentator argued that EPA was required to calculate the impacts of the SO₂ revisions on sulfate and particulate matter concentrations in other states. Furthermore, the commentator claimed that modeling tools are available and should have been used by EPA to address the long-range transport problem.

Response: EPA's review and approval of the Indiana SO₂ SIP revision is consistent with Sections 110(a)(2)(E) and 126 for several reasons. First, 325 LAC 7 involves only SO₂ emission limitations. Accordingly, the revisions were only modeled for their impact on SO₂ concentrations. Indiana's revisions to its particulate SIP do not relax the particulate matter emission limitations for Stout and Michigan City. Indiana, therefore, was not required to model the effect of its revisions on particulate matter levels.

Second, EPA reference models are only valid out to 50 kilometers (km) from a source. No reference techniques have yet been established for accurately evaluating impacts beyond 50 km. The "state-of-the-art" of long-range transport models is not sufficiently advanced to be used for regulatory purposes. Consequently, contrary to the commentator's claim, there are no EPA-approved regulatory tools currently available to assess long-range impacts.

Third, with respect to interstate impact within the range of EPA's reference models, because there are no SO₂ nonattainment areas within 50 km of either Stout or Michigan City, EPA believes that these sources do not cause or contribute to a violation in any interstate area within 50 km of these sources. Additionally, because these revised emission limits do not differ greatly from the emissions the plants are presently emitting, EPA believes that these facilities will not cause or contribute to violations in these areas in the future. All interaction with other sources within LaPorte and Marion Counties will be analyzed by Indiana in addressing the deficiencies identified by this notice.

EPA has also considered whether revision of the emission limits for the named sources interferes with measures "required to be included in the applicable implementation plan for any other state under Part C to prevent significant deterioration of air quality" There is only one State, Michigan, within 50 km of the named sources, and there are no counties in Michigan within 50 km of the named sources for which the PSD baseline has been triggered. Therefore, EPA has concluded that no such interference will result for those counties which are within the range of EPA's reference models.

Fourth, with respect to the claim that EPA should have modeled the SO₂ emissions for their effect on the particulate matter levels in other states, EPA's currently adopted models are simply not capable of such an analysis. EPA models estimate ground-level SO₂ concentrations caused by a plant's SO₂ emissions. Similarly, EPA models estimate ground-level particulate matter concentrations caused by a plant's particulate matter emissions. Models capable of estimating the impact of SO₂ emissions on ground-level particulate matter concentrations have been developed by researchers, and EPA is presently evaluating their predictive accuracy as part of an overall revision to its Modeling Guideline. Application of these models at this time, however, is premature.

Fifth, for the purposes of Section 110(a)(2)(E), it is important to note that the commentator has not shown that the SO₂ emissions from the two named Indiana plants actually contribute materially or at all to particulate pollution in other states. The commentator cites nothing that supports a finding that Stout or Michigan City is responsible for any pollutant concentrations in another state, let alone concentrations that would prevent a state from attaining or maintaining particulate matter standards.

New York's comments focus primarily on the aggregate impact of numerous Midwest sources. At New York's request, a Section 126 hearing was held on the aggregate impact of SO₂ emissions from Midwest sources. (On June 18 and 19, 1981, in Washington, D.C.) EPA will, if necessary, reevaluate the adequacy of the Indiana plan when the findings on New York's Section 126 petition become available.

Finally, the sulfate question raised by the commentator is a complex one. To date, EPA has not established a national ambient air quality standard for sulfates. However, the sulfate issue is

was evaluated as part of EPA's current review, under Section 109(d)(1), 42

U.S.C. 7409(d)(1), of the criteria and national standards for sulfur oxides and particulate matter (see "Second External Review Draft Air Quality Criteria for Sulfur Dioxide and Sulfur Oxides." Notice announcing comment period, draft 46 FR 15589 (March 6, 1981)). At present, in the absence of a national standard for sulfates, EPA is not required to consider the impact of Indiana SO₂ plan on sulfate levels. *Issue:* The Province of Ontario,

Canada, claimed that emissions from ALCO's Stout and NIPSCO's Michigan City plants and other sources in the Great Lakes region adversely affect air quality in southern Ontario in violation of Section 115 of the Clean Air Act. The principles of international law and the Memorandum of Intent Between the Government of Canada and the Government of the United States of America Concerning Transboundary Air Pollution (August 5, 1980) Ontario argued that the long-range transport of the sulfate derivatives of SO₂ causes acid deposition and decreased visibility in that province.

Response: Ontario's claim that Section 115 prohibits international air pollution is not appropriately raised in the context of this SIP revision. Section 115(a)(2)(E) addresses only interstate pollution; not international pollution. EPA is not required, nor would it be appropriate, to consider claims concerning international air pollution as part of this proceeding. Under Section 115 the Administrator may notify a State that a SIP revision is necessary to prevent transboundary air pollution if reports or studies submitted by an international agency lead her to believe that public health or welfare in a foreign country is endangered. 42 U.S.C. 7415. Present formal notification, however, Section 115 does not require EPA to consider transboundary air pollution in approving a SIP revision.

Ontario also argues that principles of international law prohibit EPA, as an agency of the federal government, from permitting individuals within the U.S. to violate Canadian territory or property. However, Ontario bases its claim of injury from transboundary air pollution on the cumulative impacts of total SO₂ emissions from the midwestern and northeastern U.S., and not solely upon emissions from the Indiana plants that are subject of this rulemaking. Ontario has had an opportunity to submit its views on the cumulative interstate effects of SO₂ and sulfates at a hearing

held by EPA on June 18 and 19. See 46 FR 24602 (May 8, 1981). Furthermore, transboundary SO₂ emissions are subject of ongoing negotiations between Canada and the U.S. In view of the limited scope of this proceeding and the other fora available in which Ontario may raise issues of aggregate SO₂ emissions and international law, EPA does not believe that it is required to consider these issues here.

Finally, Ontario claims that the Memorandum of Intent (MOI) between the Government of Canada and the United States of America places affirmative obligations upon EPA. In that document Canada and the U.S. stated their intent to "promote vigorous enforcement of existing laws and regulations . . . in a way that is responsive to the problems of transboundary air pollution," pending the conclusion of a formal agreement on air pollution between the two countries. The U.S. has honored the intent of the MOI by controlling its SO₂ emissions to the extent allowed by the provisions of domestic law. In this rulemaking EPA has concluded that the current emission limits are adequate to protect and maintain the NAAQS. Therefore it has met its obligations under the MOI to enforce domestic law.

Comments on Measurement Methods and Enforcement Procedures

Issue: Several comments were received relating to sulfur variability. Specific issues included 30-day averaging, the Expected Exceedance (ExEx) Method for determining emissions limitations, and the effectiveness of stack tests to determine compliance.

Response: EPA recognizes the problem of sulfur variability. Consequently, on February 14, 1980, EPA published a Federal Register notice notifying the public that EPA had begun a review of its policies and procedures for regulating large coal-fired boilers. Among the issues under review are: (a) Compliance test methods, (b) sulfur variability, (c) modeling guidelines, and (d) averaging periods for emission limitations. This review will address 30-day averaging, appropriate methods for evaluating 30-day averages, and protection of the NAAQS. Based on its review, EPA will make any necessary modifications in its policies. Until this review is complete, EPA will not rulemake on 30-day averaging in Indiana.

Issue: Commentors stated that until methods are available to address sulfur variability, EPA should have an interim SO₂ enforcement policy similar to the one that EPA approved in Ohio. These

commentors believe that the daily cap should be 1.9 times the applicable emission limit.

Response: EPA has discussed with the State the possibility of adopting such a policy. However, any such enforcement policy would not modify the applicable SO₂ SIP emission limitations, but would only be a statement of enforcement priorities. EPA is taking no action today on 30-day averaging.

Issue: A commentor suggested that power plant units that operate only under peak load conditions should not be required to maintain emission controls based on full, continuous load operation.

Response: Units reserved for emergency and stand-by operation were not considered in the development of overall county-wide control strategies. However, sources which operate during peak load periods must be included in all strategies, because peak loads for any one source may occur when other sources are also experiencing peaks.

Compliance Date Comments

Issue: Commentors argued that EPA's proposed disapproval of 325 IAC 7-1-6 (compliance timetables) is not valid, stating that the Clean Air Act (Section 110 and Part D) requires attainment by the statutory date and reasonable further progress in the meantime. Thus, the December 31, 1981 (with possible extensions to December 31, 1982) compliance date in 325 IAC 7 should be acceptable. In addition, the commentors alleged that there should not be a requirement for immediate compliance from sources which are emitting at emission limitations representing a relaxation (i.e., operating out of compliance) of the federally approved SIP because the emission limitations in the federal SIP are outdated and have never been enforced against these sources.

Response: 325 IAC 7 revises some existing emission limitations. As discussed earlier, EPA policy is that the existing emission limits for any source remain in effect to prevent a source from operating uncontrolled, or under less stringent controls, while it is moving toward compliance with the new regulations (44 FR 20373, April 4, 1979).

Sources for which the 325 IAC 7 represents a relaxation from the previous federally approved SIP, therefore, cannot be given additional time to achieve compliance with 325 IAC 7. The act requires "reasonable further progress" (RFP) in the interim period prior to attaining the NAAQS. Reasonable further progress does not mean that time is provided for a source

¹ A Secretary of State may also request the Administrator to give such notification to a State

to do less. Nor does allowing additional time comply with the " . . . implementation of all reasonably available control measures as expeditiously as practicable." (Section 172(b)(2) of the Act). New compliance schedules can only be approved for sources that are subject to more stringent regulations under 325 LAC 7

Lake County Comments

Issue: Several commentors supported approval of the Lake County SO₂ control strategy. One commentor also noted that the minor deficiencies cited in the NPR have been resolved by the Lake County Industrial Task Force.

Response: During the public comment period, EPA received no formal submissions from the State that resolved the deficiencies cited in the NPR. EPA can consider only official State submissions in its rulemaking. In view of the commitments made by the State to resolve these deficiencies, however, EPA feels that conditional approval of the Lake County Plan is justified.

Issue: A commentor claimed that short-term background concentrations were derived and submitted to EPA in late 1979, and that no estimate of an annual background was necessary because there have been no monitored violations of the annual standard in Lake County over the past few years. Thus, EPA's comment regarding background values is alleged to be inappropriate.

Response: The Agency informed the State and the Lake County Industrial Task Force of the problems with the background levels in a letter dated January 9, 1980 from David Kee, Director, Air and Hazardous Materials Division, Region V, EPA to James Dickerson, Chairman, Lake County Industrial Task Force. As discussed in that letter, additional technical justification (e.g., map of monitor locations, list of concentrations, and computations used to derive the background) is required to support the short-term backgrounds. In addition, a valid attainment demonstration for the annual standard must be provided. Consequently, further support is still required to resolve the background concentration issue. Finally, even if there have been no monitored violations of the annual standard in Lake County, EPA still requires an analysis of the annual standard to assure that no violations of the annual standard take place, perhaps at a location which is not presently being monitored.

Issue: Commentors maintained that a valid attainment demonstration for the 3-hour standard was submitted to EPA

in 1979 and that no annual attainment demonstration is needed since there have been no measured annual violations. Thus, EPA's deficiency comment concerning the need for a 3-hour and an annual attainment demonstration is alleged to be in error.

Response: The Agency has previously informed the State and the Lake County Industrial Task Force of problems with the 3-hour and annual attainment demonstration in the January 9, 1980 letter from Kee to Dickerson. As noted in that letter, the 3-hour and annual analyses which we have received do not adequately justify attainment and maintenance of the 3-hour and annual standards. The annual analysis is deficient since it relied solely on monitoring data that is not temporally and spatially adequate, by itself, for an attainment demonstration. Consequently, valid 3-hour and annual attainment demonstrations must still be provided.

Issue: A commentor submitted various technical papers supporting, in general, the use of a plume rise enhancement factor due to the merging of several individual plumes.

Response: The Agency informed the State and the Lake County Industrial Task Force of the problems with the application of a plume rise enhancement factor in the January 9, 1980 letter from Kee to Dickerson. As noted in that letter, use of such a factor has not been demonstrated to be appropriate because: (a) No site-specific or representative supporting data have been provided, (b) the validity of this factor needs to be examined on a source-by-source basis, and (c) even if the first two points can be shown, then the enhancement factor must be applied uniformly.

Issue: The Lake County Task Force claimed that it has submitted adequate justification for the modeled receptor network.

Response: The Agency informed the State and the Lake County Industrial Task Force of problems with the receptor network in the January 9, 1980 letter from Kee to Dickerson. As noted in that letter, the receptor resolution is inadequate and the dismissal of certain on-land receptors has not been supported. Thus, the modeled receptor network still contains several deficiencies that must be resolved.

Marion County Comments

Issue: Commentors stated that an SO₂ background concentration was not developed for the 3-hour and annual averaging periods in the Marion County SO₂ analysis because the 24-hour averaging period proved to be the

limiting factor. The commentors claimed that this was supported by inspection of the 1-hour concentrations. The commentors also asserted that a 24-hour background was applied in the 24-hour analysis. They claimed that this analysis demonstrated attainment and maintenance of the NAAQS.

Response: The documentation submitted by the commentors purporting to demonstrate that the 24-hour standard is constraining is inadequate. Conversion of the second highest 1-hour concentration to a 3-hour average value results in a concentration greater than the 3-hour secondary standard. Thus, it has not been shown the 24-hour standard is constraining. Without this demonstration, 3-hour and annual attainment demonstrations with appropriate background levels are required. Additionally, justification for the 24-hour background concentration is necessary to support the 24-hour attainment demonstration.

Issue: The commentors claimed that a complete emissions inventory consisting of 83 point and 54 area sources was employed. The inventory included: (a) The SO₂ control strategy originally proposed by the State in an October, 1978 study for all sources (except those located in the southwest quadrant of Marion County) and (b) the control strategy proposed by an Industrial Task Force for sources located in the Southwest quadrant of Marion County.

Response: EPA believes that the reference SO₂ emissions inventory is deficient. Current SO₂ emissions inventory data collected by the City of Indianapolis Division of Air Pollution Control indicates that 92 point sources and 64 area sources need to be included in a detailed modeling analysis for Marion County. The State must certify that the proposed SO₂ control strategy for Marion County includes all of the sources and their current emissions parameters in the modeling analysis in order to properly assess attainment and maintenance of SO₂ NAAQS.

Issue: In response to the NPR, the commentors pointed out that the SO₂ modeling analysis for Marion County used 1974 Indianapolis surface and Dayton, Ohio upper air observations provided by the National Weather Service (NWS).

Response: EPA believes that the meteorological data base cited by the commentors is an appropriate data base for the Marion County modeling analysis. However, all future modeling analyses for Marion County must employ five years of recent representative NWS data, or, for source

specific modeling, at least one year of source-specific data.

Issue: In response to the NPR, the commentors said that documentation showing the specifics of the receptor network used in the Marion County SO₂ analysis are included in a supplemental report submitted to EPA on December 2, 1979. This report established that the receptor network employed in modeling analysis of the proposed control strategy for Marion County includes the original input receptors used in the State's October 1978 modeling analysis for Marion County and an additional 56 receptors chosen around critical "hot spots."

Response: No demonstration has been provided to show that the additional 56 receptors are sufficient to analyze the air quality impacts due to the proposed revised control strategy (e.g., use of GEP stack heights, boiler derating, fuel adjustments, etc.) where it differs from the control strategy originally addressed in the State's October 1978 analysis. The change in control strategy can be expected to shift the location of the "hot spot" areas. Documentation has not been provided to show that "hot spots" due to the proposed control strategy can be adequately assessed with this revised receptor network.

Issue: One commentor advised EPA that caution should be exercised when associating a source either directly or by implication with "potential" or "actual" violations of the NAAQS through multi-source modeling data. The commentor further emphasized that assessing multi-source interaction under varying meteorology often makes it difficult to identify one source as a primary factor without considering other source impacts on other receptors on other days.

Response: EPA agrees that it is often difficult to determine source culpability. Consequently, EPA recommends that source applicability tables be obtained in multi-source situations to assist the State in developing and supporting a control strategy. EPA, however, only determines if a strategy, as submitted, attains and maintains the NAAQS. It does not review the criteria by which the State chooses its strategy.

Comments on Warrick, Dearborn, and Porter Counties

Issue: The commentors claim that dispersion modeling studies prove that a 10.8 g/Mcal (8.0 pound/MMBTU or 2580 g/1000 cubic feet) emission limit is sufficient to attain the annual and 24-hour NAAQS in Warrick County. The commentors claimed that quality assured on-site monitoring data based on a recent one-year record showed no violations of the

primary or secondary NAAQS. Therefore, they argue that EPA should approve the 10.8 g/Mcal emission limitation proposed for Warrick County.

Response: The proposed 10.8 g/Mcal emission limitation represents a relaxation of the currently enforceable SIP emission limitation of 2.16 g/Mcal (1.2 pound/MMBTU or 516 ng/l) (38 FR 12698, May 14, 1973). The most recent SO₂ SIP revision submission by the State of Indiana in early 1979 indicates that the 10.8 g/Mcal emission limitation is not sufficient to attain and maintain the NAAQS in Warrick County. In addition, the monitoring network has not been shown to provide adequate spatial coverage to identify and measure SO₂ "hot spots." Thus, a site-specific modeling study employing EPA reference modeling techniques as described in the Guidelines on Air Quality Models must be performed to support the 10.8 g/Mcal emission limitation.

Wayne County Comments

Issue: Commentors claimed that the SO₂ nonattainment designation for Wayne County, Indiana, should be changed to attainment.

Response: The commentors' claim that Wayne County be designated attainment for SO₂ is not sufficiently justified. The nonattainment designation is supported by monitored violations of the short-term SO₂ NAAQS in the years 1976, 1977 and 1980. Furthermore, a downwash modeling analysis performed by the State using emissions data for the municipally owned electric generating station indicated air quality impacts that violate the NAAQS. Therefore, EPA maintains its determination that Wayne County is nonattainment for SO₂, that a control strategy must be developed for Wayne County, and that appropriate Wayne County emission limitations must be included in 325 IAC-7 in order to meet the requirements of section 110 of the Clean Air Act.

Conclusion

EPA is conditionally approving Indiana's revised 325 IAC 7 with the following exceptions: (1) Disapproving the compliance dates in Section 8 for those sources only where emission limitations have either not changed or are numerically higher; (2) disapproving the strategies for Dearborn, Porter, Warrick, and Wayne Counties because the State did not demonstrate that a 10.8 g/Mcal emission limitation is sufficient to attain and maintain the NAAQS, and (3) taking no action on the 30-day averaging compliance concept in Section 3. EPA is approving the SO₂ emission limitations for new Fossil Fuel Fired

Steam Generators, Petroleum Refineries and Sulfuric Acid Plants, the stack height provisions for SO₂ sources, and the severability and force and effect regulations as they apply to the SO₂ regulations.

EPA's conditional approval requires the State to determine or submit, with revisions to the regulations as needed, the following by November 1982. The November 1982 date is being proposed for approval elsewhere in today's Federal Register.

LaPorte County

(1) Background levels for all appropriate averaging periods (i.e., 3-hour, 24-hour and annual) must be justified and must be applied in the analysis.

(2) The 24-hour standard must be demonstrated to be the constraining standard. In lieu of such a demonstration, 3-hour and annual attainment analyses must be provided.

Lake County

(1) The emissions inventory is incomplete. All process sources must be included within the emissions inventory. In particular, proper treatment of American Brick is necessary.

(2) Background levels for all appropriate averaging periods must be justified and must be applied in the analysis.

(3) The 24-hour standard must be demonstrated to be the constraining standard. In lieu of such a demonstration, 3-hour and annual attainment analyses must be provided.

(4) The analyses must contain adequate receptor resolution.

Marion County

(1) Background levels for all appropriate averaging periods must be justified and must be applied in the analysis.

(2) The emission inventory is incomplete. A comprehensive inventory, including all significant process and fuel burning SO₂ sources, must be applied in the control strategy evaluation.

(3) The 24-hour standard must be demonstrated to be the constraining standard. In lieu of such a demonstration, 3-hour and annual attainment analyses must be provided.

(4) The analyses must contain adequate receptor resolution.

EPA's conditional approval of the SO₂ control strategies for Lake, LaPorte, and Marion Counties removes the SO₂ growth restrictions of Section 110(a)(2)(I) from these counties. Section 110(a)(2)(I) requires that an approved Part D SIP must be in place for a

particular area and pollutant before the restrictions are lifted. One portion of an approved Part D SIP is that an approved new source review (NSR) program, which meets the requirements of Section 173, must be in place. EPA has recently approved Indiana's Part D NSR Plan.

Wayne County's plan is being disapproved today. Therefore, the 110(a)(2)(I) restrictions will continue to apply in Wayne County. The SIP regulations for Wayne County remain those approved by EPA in 1976. Dearborn, Porter, and Warrick Counties are designated unclassifiable. Therefore, the 110(a)(2)(I) restrictions are not in effect in these three counties. The SIP regulations remain those approved by EPA in 1973 for Porter and Warrick Counties and those that were approved in 1976 for Dearborn County.

The conditional approval granted through this notice will remain in effect as long as the State meets its commitments according to the agreed upon schedule. This schedule is being proposed today elsewhere in the Federal Register. Failure to submit the necessary material by the scheduled date or inadequate submissions will require SIP disapproval by EPA (44 FR 67182, November 23, 1979). This would result in the imposition of growth restrictions for the disapproved counties. Furthermore, the SIP emission limitations would again become those contained in the regulations approved in 1978 for Lake and Marion Counties and those approved in 1973 for LaPorte County.

The 1980 edition of 40 CFR Part 52 lists in the subpart for each State, the applicable deadlines for attaining ambient standards (attainment dates) required by section 110(a)(2)(A) of the Act. For each nonattainment area where a revised plan provides attainment by the deadlines required by section 172(a) of the Act, the new deadlines will be substituted on the attainment date charts. The earlier attainment dates under section 110(a)(2)(A) will continue to appear in a footnote to charts published earlier. Sources subject to the plan requirements and deadlines established under section 110(a)(2)(A) prior to the 1977 Amendments remain obligated to comply with those requirements, as well as with the new section 172 plan requirements.

Congress established new deadlines under section 172(a) to provide additional time for previously regulated sources to comply with new, more stringent requirements and to permit previously uncontrolled sources to comply with newly applicable emission limitations. If these new deadlines were permitted to supersede the deadlines established prior to the 1977

Amendments, sources that failed to comply with pre-1977 plan requirements by the earlier deadlines would improperly receive more time to comply with those requirements. Congress, however, intended that the new deadlines apply only to new, additional control requirements and not to earlier requirements. As stated by Congressman Paul Rogers in discussing the 1977 Amendments:

Section 110(a)(2) of the Act made clear that each source has to meet its emission limits "as expeditiously as practicable" but not later than three years after the approval of a plan. This provision was not changed by the 1977 Amendments. It would be a perversion of clear congressional intent to construe Part D to authorize relaxation or delay of emission limits for particular sources. The added time for attainment of the national ambient air quality standards was provided, if necessary, because of the need to tighten emission limits or bring previously uncontrolled sources under control. Delays or relaxation of emission limits were not generally authorized or intended under Part D. (123 Cong. Rec., II 11958, daily ed. November 1, 1977)

To comply fully with the intent of Congress that sources remain subject to pre-existing plan requirements, sources cannot be granted variances extending compliance dates beyond attainment dates established prior to the 1977 Amendment. Such variances would impermissibly relax existing requirements beyond the applicable section 110(a)(2)(A) attainment date under the plan. Therefore, for requirements adopted before the 1977 Amendments, EPA will not approve a compliance date extension beyond pre-existing 110(a)(2)(A) attainment dates, even though a section 172 plan revision with a later attainment date has been approved.

However, in certain exceptional circumstances, extensions beyond a pre-existing attainment date are permitted. For example, if a section 172 plan imposes new, more stringent control requirements that are incompatible with controls required to meet the pre-existing regulations, the pre-existing requirements and deadlines may be revised if a state makes a case-by-case demonstration that a relaxation or revocation is necessary. Any such exemption granted by a state will be reviewed and acted upon by EPA as a SIP revision. In addition, as discussed in the April 4, 1979 Federal Register (44 FR 20373), an extension may be granted if it will not contribute to a violation of an ambient standard or a PSD increment.

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the

requirement of a regulatory impact analysis. This regulation will not be major as defined by Executive Order 12291, because this action either conditionally approves a State action and therefore imposes no new requirements beyond those imposed by the State, or it disapproves a State action and leaves in place a previous State action which also imposes no new requirements beyond those previously imposed by the State.

This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

Under Section 307(b)(1) of the Clean Air Act, judicial review of this SIP action is available only by the filing of a petition for review in the United States Court of Appeals for the appropriate circuit within 60 days of today. Under Section 307(b)(2) of the Clean Air Act, the requirements which are the subject of today's notice may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

The Administrator finds good cause to make this rulemaking effective immediately because such approval imposes no new constraints above those already required by State law and because this rulemaking is a partial step to remove in some areas of Indiana the prohibitions on growth under section 110(a)(2)(I).

Note.—Incorporation by reference of the State Implementation Plan for the State of Indiana was approved by the Director of the Federal Register on July 1, 1981.

(Secs. 110 and 172 of the Clean Air Act, as amended)

Dated, March 1, 1982.

Anne M. Gorsuch,
Administrator

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Title 40 of the Code of Federal Regulations, Chapter I, Part 52, Subpart P—Indiana is amended as follows:

1. Section 52.770 is amended by adding paragraph (c)(19) as follows:

§ 52.770 Identification of plan.

• • • • •

(c) • • •
(19) On June 28, 1979, the Governor submitted a revised sulfur dioxide strategy, including regulation APC 13 with appendix, which was promulgated by the State on June 19, 1979 for all areas of the State. This included the Part D sulfur dioxide regulations for Lake, LaPorte, and Marion Counties. On

August 27, 1980 and July 16, 1981 the site committed itself to correct conditionally approved items within our strategy. On October 6, 1980, the site submitted a recodified version of 325 LAC 1.1-6, 325 LAC 1.1-7-1 and 4, 325 LAC 12-3-1 and 2(a), 325 LAC 12-3-1 and 4, and 325 LAC 12-18-1. EPA is not taking action on 325 LAC 12-3-1 as it applies to Floyd and Vigo Counties or on the 30-day averaging compliance method contained in 325 LAC 12-1-3.

2. Section 52.773 is amended by revising paragraph (a) and adding new paragraph (b) as follows:

52.773 Approval status.

(a) With the exceptions set forth in this subpart, the Administrator approves a plan for attainment and maintenance of the National Ambient Air Quality Standards under Section 110 of the Clean Air Act.

(b) The Administrator finds that the air quality standards for Lake, LaPorte, and Marion County satisfy all requirements of Part D, Title I of the Clean Air Act as amended in 1977, except as noted below:

1. Section 52.795 is amended by adding paragraphs (c), (d) and (e) as follows:

52.795 Control strategy: Sulfur dioxide.

(c) The requirements of section 52.10(d) are not met by Wayne, Dearborn, Jefferson, Porter, and Warrick Counties.

(d) 325 LAC 7 (October 6, 1980 submission) is disapproved insofar as the provisions identified below will interfere with the attainment and maintenance of the sulfur dioxide ambient air quality standards.

(1) The compliance timetables in Section 6 for sources with identical or relaxed emission limitations from those contained in the previously approved SIP.

(e) Part D—Conditional Approval)—The Indiana plan for Lake, LaPorte, and Marion Counties is approved provided that the following conditions are satisfied:

(1) Lake County—The plan must either contain an acceptable demonstration that the 24-hour standard is the constraining standard or 3-hour and annual attainment analyses must be provided. The plan must justify appropriate SO₂ background levels for averaging periods. These must be used in all analyses. The plan must contain a complete emission inventory,

including process sources. This inventory must be appropriately used in all analyses. Adequate receptor resolution must be used in the attainment analyses. If revisions to the limitations are necessary, they must be submitted as revisions to the SIP.

(2) LaPorte County—The plan must either contain an acceptable demonstration that the 24-hour standard is the constraining standard or 3-hour and annual attainment analyses must be provided. The plan must justify appropriate SO₂ background levels for all averaging periods. They must be used in all analyses. If revisions to the emission limitation are necessary, they must be submitted as revisions to the SIP.

(3) Marion County—The plan must either contain an acceptable demonstration that the 24-hour standard is the constraining standard or 3-hour and annual attainment analyses must be provided. The plan must justify appropriate background levels for all averaging periods. These must be used in all analyses. The plan must justify the adequacy of the resolution in a computer modeling receptor network. The plan must contain a complete emission inventory, including process sources. This inventory must be appropriately used in all analyses. If revisions to the emission limitations are necessary, they must be submitted as revisions to the SIP.

(FR Doc. 82-622 Filed 3-11-82; 8:45 am)
BILLING CODE 4310-04-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

43 CFR Public Land Order 6185

(W-71339)

Wyoming; Partial Revocation of Public Land Order No. 648

AGENCY: Bureau of Land Management, Interior.

ACTION: Public Land Order.

SUMMARY: This order partially revokes a public land order as to 161.00 acres of land which were withdrawn for a Bureau of Land Management administrative site. A portion of the lands have been patented under the recreation and public purposes (R&PP) Act. The remainder are under R&PP lease. Consequently the lands will remain closed to operation of the public land laws, including the mining laws. The lands have been and will remain open to mineral leasing.

EFFECTIVE DATE: March 12, 1982.

FOR FURTHER INFORMATION CONTACT: W. Scott Gilmer, Wyoming State Office, 307-778-2220, extension 2336.

By virtue of the authority vested in the Secretary of the Interior by Section 204 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2751, 43 U.S.C. 1714, it is ordered as follows:

1. Public Land Order No. 648 of June 5, 1950, which withdrew land for use by the Bureau of Land Management as administrative sites, is hereby revoked in part as to the following described lands.

Sixth Principal Meridian

T. 48 N., R. 92 W.,

Sec. 7, lots 9-A, 9-B, 10-A, 10-B, 11-A,

11-B, and 12, (formerly lots 1 to 12 inclusive).

The lands described contains 161.00 acres in Washakie County.

2. The surface estate in 102.28 acres of the above described lands has been conveyed from United States ownership pursuant to the Recreation and Public Purposes Act of June 14, 1926, as amended (43 U.S.C. 869 et seq.), the remaining 58.72 acres are presently leased under that act; therefore, the lands will not be open to location under the United States mining laws. The lands have been and will continue to be open to applications and offers under the mineral leasing laws.

Inquiries concerning the lands should be addressed to the Chief, Branch of Lands and Minerals Operations, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82001.

Garry E. Carruthers,

Assistant Secretary of the Interior.

March 2, 1982

(FR Doc. 82-6731 Filed 3-11-82; 8:45 am)

BILLING CODE 4310-04-M

43 CFR Public Land Order 6188

(A-16916)

Arizona; Revocation of Secretarial Order of July 26, 1928, Air Navigation Site No. 4

AGENCY: Bureau of Land Management, Interior.

ACTION: Public Land Order.

SUMMARY: This order revokes a Secretarial order creating Air Navigation Site No. 4. This action which involves 640 acres of land is merely record clearing, since both the surface and mineral estates have been patented.

EFFECTIVE DATE: March 12, 1982.

signed 7/6/82

5AMM

Harry D. Williams, Technical Secretary
Indiana Air Pollution Control Board
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

Dear Mr. Williams:

We have received your request of April 16, 1982, to redesignate Marion County from primary nonattainment to attainment for the SO₂ National Ambient Air Quality Standards (NAAQS). The SO₂ monitoring data used to support this request were submitted with your letter dated May 21, 1982. The technical justification materials, which were prepared by the City of Indianapolis Air Pollution Control Division (CIAPCD) and then submitted by Indiana, reference the SO₂ monitoring data collected during the years 1979-1981 from 13 sites in Marion County as support for the proposed redesignation in much of the county. The materials also include air quality modeling analyses as support for the redesignation in the eastern and northwestern areas of the county.

It is noted that the referenced monitoring data do not show violations of the SO₂ NAAQS. However, our review of the data shows that four of the seven sites which were recognized by the CIAPCD as the most adequate for redesignation purposes in the central and southwest parts of the county do not have the required eight quarters of data. Specifically, only three quarters of data (of which only one quarter has 75% data capture) were submitted for three of the sites (54J02, 55J02, and 56J02), and 41J02 has less than eight quarters of data available which meet minimum data recovery requirements. Therefore, there are nine monitors in the county with at least eight quarters of data that meet minimum data capture requirements which can be used to support a redesignation of portions of Marion County. These nine monitors are not sufficient, however, to characterize the SO₂ air quality throughout all of Marion County.

The reference RAM urban air quality modeling, which was performed previously by CIAPCD using the conditionally approved control strategy as an input, predicts attainment for much of the county, including most of the nine monitor locations (even based on maximum allowable rather than actual emissions). However, it also predicts nonattainment of the SO₂ NAAQS in some of the areas where no monitors are located.

Finally, as there are no monitors located near the major SO₂ sources on the east and far northwest sides of the county, the State submitted new modeling analyses using MPTER to support the redesignation of these areas. A review of these analyses identified the following deficiencies which must be corrected before we can support redesignation to attainment of these areas based on modeling:

1. The sources must be modeled at their federally enforceable SIP emission limits (i.e., 6.0 lbs/MMBTU for sources not in 325 IAC 7-1-8, Appendix A) rather than their more restrictive Indiana operating permit limits, unless these permits are submitted to U.S. EPA and approved as revisions to the SIP.
2. Five years, instead of one year, of National Weather Service meteorological data (or one year if on-site data is available) should be used in this new analysis.
3. An urban/rural analysis should be performed for all sources included in a reference rural modeling analysis (as RAM urban is the previously accepted model for all sources in Marion County).

Consequently, we cannot approve the redesignation as requested because it is neither supported by sufficient monitor data nor by acceptable modeling analyses. The available information does support, however, redesignation of a substantial portion of Marion County. For example, the data from the nine monitoring sites indicate that much of the northern half, a portion of the central area, and the far southwestern part of the county are presently attaining the SO₂ standards. Also, the CIAPCD modeling (with RAM urban) indicates that the conditionally approved SO₂ emission limits will assure attainment and maintenance of the SO₂ NAAQS (if the sources are in compliance and the taller stacks are constructed) throughout the county with the exception of: a) the central and southwestern industrialized areas and b) small areas surrounding many of the major SO₂ sources. If Indiana chooses to pursue a partial redesignation, we suggest that the regional office be contacted for further guidance to facilitate an approvable submittal.

We also take this opportunity to note that Indiana has not yet submitted an approvable schedule for remedying the conditional approved items in the Marion County SO₂ SIP. On March 12, 1982 (47 FR 10860), EPA proposed Indiana's November 1982 commitment date for submitting revised attainment strategies and revised regulations, if necessary, to satisfy the Lake, Laporte, and Marion Counties' SO₂ conditions. On May 7, 1982 Indiana responded by committing to submit the strategies for Lake and LaPorte Counties by November 1982. The State did not give a specific date as to when it would submit any necessary enforceable emission limits required by the strategies. Due to its redesignation request, it also did not give dates by which either the Marion County strategy or any necessary revised enforceable emission limitations would be submitted for Marion County.

It is important to understand that the recently approved emission limits for the Marion County SO₂ sources (i.e., the conditionally approved control strategy) must be supported by an acceptable modeling analysis which demonstrates that these limits will assure attainment and maintenance the SO₂ NAAQS or an acceptable alternative strategy must be submitted. This is true regardless of the Marion County attainment status, because EPA's conditional approval relaxed certain Marion County SO₂ emission limits. This position

is consistent with guidance previously provided to Indiana on September 3, 1981 (letter from Walter Barber to Ralph Pickard). Therefore, we await a timely submittal of Indiana's schedule for submitting its response to the conditions for Marion County as well as the schedule for submitting the enforceable emission limitations for Lake and LaPorte Counties.

In conclusion, monitoring and modeling data in this multi-source area do not demonstrate that the SO_2 standards are presently attained throughout the county or that the existing, conditionally approved emission limits are adequate to assure attainment and maintenance of the standards throughout the county in the future. EPA is, therefore, denying your requested redesignation of all of Marion County to attainment for SO_2 . We would be able, however, to redesignate specific areas of the county if you so requested.

If you have any questions on this matter, please contact myself (312) 353-2212 or Tim Method at (312) 886-6055.

Sincerely yours,

David Kee, Director
Air Management Division

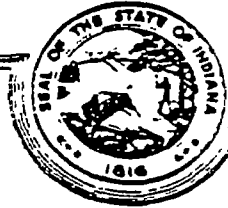
cc: Steve Dixon, CIAPCD

bcc: J. Paisie
G. Gulezian
B. Miller
C. Nash
M. Koerber
D. Trout

SAMD:APB:TAS:METHOD:cab:7/1/82

STATE OF INDIANA

-JF- 3



INDIANAPOLIS, 46206

AIR POLLUTION CONTROL BOARD
1330 WEST MICHIGAN STREET
P.O. BOX 1964

March 7, 1982

Mr. David Kee, Director
Air and Hazardous Materials Division
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604

Dear Mr. Kee:

Re: March 12, 1982 Federal Register

On March 12, 1982, U.S. EPA published final rulemaking on parts of the Indiana SO₂ SIP. Also, comments were solicited on deadlines for the remedy of conditionally approved portions of the SIP. The following comments have been prepared and are submitted on behalf of the Indiana Air Pollution Control Board:

LaPorte County

Subsequent to the state's submission of the referenced modeling study, a monitored violation of the SO₂ NAAQS was recorded in LaPorte County. A special study of this violation determined that the violation was the result of building downwash from a source other than the State Prison. Therefore, the proposed strategy is insufficient to insure attainment of the SO₂ standards.

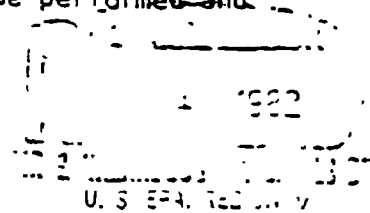
To resolve this issue, the State of Indiana has conducted a revised analysis using the ISC reference model. A new control strategy has been developed and a final report is in preparation. The results of this new analysis will be submitted to EPA by November 1982, and revised permits or regulations will be forwarded upon completion.

Because a new modeling study has been performed, no comments will be submitted on the noted deficiencies of the previous analysis.

Lake County

The Lake County control strategy was developed by the Lake County SO₂ Task Force. Attached is a copy of a letter from J.H. Dickerson, Chairman of the Lake County Task Force. The letter indicates the Task Force intends to work with the State to prepare the necessary clarification by November of 1982. Therefore, a revised analysis will be performed and submitted by November 1982.

IN-31



Another matter that has come to our attention in connection with the Lake County strategy is the stack height situation at Northern Indiana Public Service Company's (NIPSCO) Mitchell Station. The State regulations do not require an increased stack height at this source, even though such increase was included in the technical support for the strategy. NIPSCO has reported that the FAA will not allow increased stack height due to proximity to the Gary airport. Therefore, this matter will be reevaluated in connection with the reanalysis of the entire Lake County strategy. In the interim we would request that no action be taken to require a stack height increase at the Mitchell Station.

Marion County

The Marion County control strategy was developed by the Marion County SO₂ Task Force. The APCD has been working with the Task Force and the Indianapolis local agency to resolve the noted deficiencies.

On April 7, 1982, the Indianapolis local agency petitioned the Indiana Air Pollution Control Board to request that U.S. EPA redesignate Marion County as attainment for SO₂ based on eight quarters of monitoring data with no recorded violations.² The Board accepted the request and directed the Technical Secretary to forward the petition and supporting monitor data to U.S. EPA. This action by the Board fulfills all requirements for Marion County because a separate control strategy will not be necessary. Therefore, the approvability issues listed in the Federal Register are no longer appropriate and no comments are necessary. No further actions will be taken on Marion County unless and until EPA rejects the Board's petition, at which time a new schedule for development of an appropriate control strategy must be made.

Floyd and Jefferson Counties

A revised modeling analysis for Jefferson County was submitted to U.S. EPA on March 13, 1981. U.S. EPA subsequently raised three questions on the study. Two of these issues have been answered to U.S. EPA's satisfaction. The final question will be answered by the letter of amendment approved by the Board on March 3, 1982, which revises the operation permit of the Clifty Creek generating station.

Indiana has no comments on Floyd County at this time.

Wayne County

The state is currently under a judicial restraining order, prohibiting the redesignation of Wayne County as nonattainment. This order is under appeal and until lifted, no further actions can be taken.

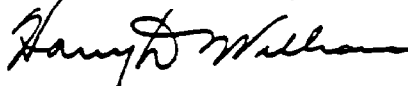
Dearborn, Porter, and Warrick Counties

The state is preparing to submit monitoring data for Dearborn, Porter, and Warrick Counties, with petitions requesting redesignation of these counties

as attainment for SO₂ based on no recorded violations of the SO₂ NAAQS. This action will fulfill all requirements for these counties because no control strategies will be necessary.

If you have any questions on these comments, please do not hesitate to contact me at (317) 633-0610.

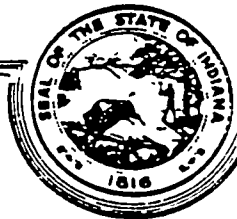
Very truly yours, .

A handwritten signature in cursive script, appearing to read "Harry D. Williams".

Harry D. Williams
Technical Secretary

WEM/sdp
Attachment

STATE OF INDIANA



INDIANAPOLIS, 46206

AIR POLLUTION CONTROL BOARD
1330 WEST MICHIGAN STREET
P. O. BOX 1964

May 11, 1982

Mr. Robert Miller
Regulatory Analysis Section
U.S. EPA, Region V
230 S. Dearborn St.
Chicago, Illinois 60604

Dear Mr. Miller:

Re: SO₂ and VOC Rulemaking

This is to acknowledge a telephone conversation you had with Harinder Kaur on May 6, 1982, during which you requested the Air Pollution Control Division to provide you with dates for promulgation of regulations pertinent to the SO₂ and VOC SIP. We are not able to commit ourselves beyond the reevaluation of the SO₂ strategy because we are not sure of the outcome of this. Upon completion of the reevaluation, it is possible that we will discover that only a few sources will be effected. If that is the case, we plan to incorporate the changes as limits in the permits. This would be a more efficient method of dealing with the necessary changes than changing the regulation, which could take six to eight months.

In regards to the VOC SIP, staff is willing to request the Board to preliminarily adopt the appropriate regulations within ninety (90) days of EPA's publication of the notice of the RACT II proposed rule. The regulation would incorporate the commitments made by the Board in the May 7, 1982, letter sent to you in response to EPA's proposed rulemaking.

Since staff was not informed about EPA's concern about the absence of committal dates in the staff's response letters on the two rules, any further changes to the May 7, 1982, letters will have to be presented to the Board at the next Board meeting on June 2, 1982.

If you have any questions about this matter, please contact me at the above address or at the following telephone number: (317) 633-0610.

Very truly yours,

Harry D. Williams
Technical Secretary

HK/sd

IN-34

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR DPG	#OBS	MAX 24-HR		OBS> 260	OBS> 150	ARIT MEAN	GEO MEAN	GSD
						1ST	2ND					
151000001J02	DEARBORN CO	DEARBORN CO	DUTCH HOLLOW STA 81		303	109	99			38	34	1.6
151000001J02	DEARBORN CO	DEARBORN CO	DUTCH HOLLOW STA 82		5	54	34			32?	30?	1.6
151000002J02	DEARBORN CO	DEARBORN CO	WILSON CREEK STA 79		301	148	113			48?	44?	1.6
151000002J02	DEARBORN CO	DEARBORN CO	WILSON CREEK STA 80		357	115	110			41	38	1.6
151000002J02	DEARBORN CO	DEARBORN CO	WILSON CREEK STA 81		305	103	101			39	36	1.5
151000002J02	DEARBORN CO	DEARBORN CO	WILSON CREEK STA 82		5	67	47			42?	38?	1.8
151120003F05	DUBOIS CO	DUBOIS CO	MAIN STREET 81		37	117	108			73?	69?	1.4
151120003F05	DUBOIS CO	DUBOIS CO	MAIN STREET 82		27	123	118			62?	57?	1.5
151180001F01	EAST CHICAGO	LAKE CO	405 E. COLUMBUS 78		18	161	158		3	98?	92?	1.4
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 77		47	191	172		3	100?	93?	1.5
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 78		33	223	212		6	122?	115?	1.4
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 79		37	290	229	1	11	125?	112?	1.6
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 80		46	376	265	2	12	117?	100?	1.8
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 81	006	57	221	213		10	108	108	1.5
151180001H02	EAST CHICAGO	LAKE CO	405 EAST COLUMBU 82	006	30	135	133			84?	78?	1.5
151180001P01	EAST CHICAGO	LAKE CO	405 E. COLUMBUS 77		8	137	134			107?	104?	1.3
151180003H01	EAST CHICAGO	LAKE CO	BROAD & PINE STS 81	006	8	333	231	1	2	167?	142?	1.9
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 77		50	206	193		5	100?	92?	1.5
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 78		61	393	296	2	19	130	115	1.7
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 79		39	325	298	3	9	124?	107?	1.7
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 80		46	301	223	1	9	115?	101?	1.7
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 81	006	58	333	239	1	11	114	102	1.6
151180003H02	EAST CHICAGO	LAKE CO	BROAD & PINE ST 82	006	26	219	144		1	93?	86?	1.5
151180003P02	EAST CHICAGO	LAKE CO	BROAD & PINE STR 80		39	329	298	5	21	168?	157?	1.5
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 77		48	301	275	2	16	136?	126?	1.5
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 78		56	372	286	7	26	156	138	1.7
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 79		36	335	287	3	18	158?	142?	1.6
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 80		39	398	374	6	22	166?	146?	1.7
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 81	006	38	338	256	1	13	138?	121?	1.7
151180004H02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 82	006	30	223	197		5	110?	102?	1.8
151180004P02	EAST CHICAGO	LAKE CO	FIELD SCHOOL 80		42	371	346	5	25	187?	176?	1.4
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 77		45	214	153		2	89?	83?	1.5
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 78		37	236	215		7	111?	101?	1.6
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 79		33	240	236		9	126?	114?	1.6
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 80		44	260	180		5	105?	95?	1.6
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 81	006	45	281	176	1	5	95	86	1.6
151180006H02	EAST CHICAGO	LAKE CO	FRANKLIN SCHOOL 82	006	29	205	139		1	75?	66?	1.7
151180901P02	EAST CHICAGO	LAKE CO	WAYNE ADAMS BUIC 80		34	331	598	17	29	280?	250?	1.6
151180902P02	EAST CHICAGO	LAKE CO	MILLGATE INN 80		23	577	436	6	17	239?	217?	1.6

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE ID	LOCATION	COUNTY	ADDRESS	REP		#OBS	MAX 24-HR		OBS> OBS>		ARIT	GEO	GSD
				YR	ORG.		1ST	2ND	260	150	MEAN	MFAN	
151300012H01	EVANSVILLE	VANDERBURGH CO	425 W MILL RD	82	002	34	110	98			55?	51?	1.5
151380002P01	FORT WAYNE	ALLEN CO	1 MAIN ST	77		3	125	43			64?	51?	2.3
151380002P01	FORT WAYNE	ALLEN CO	1 MAIN ST	78		3	150	148			110?	88?	2.5
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	77		48	124	109			60	5?	1.4
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	78		48	167	163		8	87	78	1.6
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	79		60	170	147		1	84	76	1.6
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	80		59	150	138			82	78	1.5
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	81	001	57	152	138		1	75	71	1.4
151380003F01	FORT WAYNE	ALLEN CO	FORT WAYNE POLIC	82	001	22	105	95			60?	56?	1.4
151380003F09	FORT WAYNE	ALLEN CO	1717 S. LAFAYETT	78		27	167	155		2	83?	77?	1.5
151380003P01	FORT WAYNE	ALLEN CO	1717 S LAFAYETTE	77		6	73	70			56?	53?	1.4
151380004F01	FORT WAYNE	ALLEN CO	2022 NORTH BEACO	79		26	119	107			63?	56?	1.6
151380004F01	FORT WAYNE	ALLEN CO	2022 NORTH BEACO	80		49	122	97			56	52	1.5
151380004F01	FORT WAYNE	ALLEN CO	2022 NORTH BEACO	81	001	60	112	103			57	54	1.5
151380004F01	FORT WAYNE	ALLEN CO	2022 NORTH BEACO	82	001	28	119	80			49?	48?	1.6
151520001F01	GARY	LAKE CO	3600 W. 3RD AVE.	78		24	504	217	1	3	109?	90?	1.8
151520001F01	GARY	LAKE CO	3600 W. 3RD AVE.	79		19	209	207		2	110?	99?	1.6
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	77		44	216	209		4	93?	84?	1.6
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	78		48	589	214	1	12	118?	101?	1.7
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	79		27	234	184		4	103?	92?	1.7
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	80		21	192	178		3	100?	90?	1.6
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	81	004	54	212	194		6	92	83	1.6
151520001H01	GARY	LAKE CO	3600 WEST 3RD AV	82	004	35	199	172		2	86?	79?	1.5
151520001H09	GARY	LAKE CO	3600 W 3RD AVE.	80		5	111	79			74?	70?	1.5
151520001P01	GARY	LAKE CO	3600 W 3RD AVE	77		26	225	128		1	90?	83?	1.5
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	77		40	322	190	1	6	92?	79?	1.7
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	78		57	354	296	2	13	114	97?	1.8
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	79		28	183	180		2	97?	84?	1.6
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	80		33	224	135		1	87?	80?	1.5
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	81	004	54	191	186		8	94	88	1.5
151520002H01	GARY	LAKE CO	GARY MUN. AIRPOR	82	004	32	166	154		2	91?	83?	1.6
151520002H09	GARY	LAKE CO	GARY AIRPORT	80		9	112	103			73?	69?	1.5
151520002H09	GARY	LAKE CO	GARY AIRPORT	81	004	53	183	168		4	96	91	1.4
151520002H09	GARY	LAKE CO	GARY AIRPORT	82	004	27	189	156		2	91?	80?	1.7
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	77		41	240	223		4	92?	82?	1.6
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	78		47	174	155		3	94	85	1.6
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	79		41	179	227	1	4	103	91	1.7
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	80		33	188	137		1	76?	68?	1.6
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	81	004	58	191	184		4	85	80	1.4

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE ID	LOCATION	COUNTY	ADDRESS	REP		OBS	MAX 24-HR		OBS	OBS	ARIT	GEO	GSD
				YR	ORG		1ST	2ND	260	150	MEAN	MEAN	
151520003H01	GARY	LAKE CO	IVANHOE SCHOOL	82	004	33	178	154		3	83?	75?	1.6
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	77		39	240	201		4	80?	70?	1.7
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	78		54	196	190		5	78	65	1.9
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	79		52	192	180		4	89	70	1.7
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	80		29	198	155		2	89?	82?	1.6
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	81	004	53	212	153		2	75	69	1.8
151520005H01	GARY	LAKE CO	210 NO GRAND BLV	82	004	31	151	113		1	58?	52?	1.6
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	77		45	233	218		5	75?	63?	1.8
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	78		59	149	139			65	58	1.7
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	79		54	147	143			74	68	1.9
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	80		35	143	141			66?	60?	1.6
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	81	004	59	148	146			68	63	1.9
151520008H01	GARY	LAKE CO	KUNY SCHOOL 5050	82	004	33	159	126		1	63?	57?	1.6
151520014H01	GARY	LAKE CO	DOUGLASS SCHOOL	80		5	118	86			79?	76?	1.9
151520014H01	GARY	LAKE CO	DOUGLASS SCHOOL	82	004	5	161	153		2	118?	113?	1.4
151520016F01	GARY	LAKE CO	FEDERAL BUILDING	77		41	157	146		1	89	82	1.5
151520016F01	GARY	LAKE CO	FEDERAL BUILDING	80		25	171	139		1	85?	79?	1.5
151520016F01	GARY	LAKE CO	FEDERAL BUILDING	81	004	59	322	213	1	13	107	98	1.6
151520016F01	GARY	LAKE CO	FEDERAL BUILDING	82	004	28	229	191		7	102?	89?	1.7
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	77		165	363	293	3	26	104?	93?	1.6
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	78		350	516	525	22	89	128	108	1.7
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	79		315	878	557	16	96	131	111	1.8
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	80		198	414	409	12	41	121?	105?	1.7
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	81	004	327	354	344	18	81	121	106	1.7
151520016H01	GARY	LAKE CO	FEDERAL BUILDING	82	004	150	565	411	5	35	116?	97?	1.8
151520016H09	GARY	LAKE CO	FEDERAL BLDG	80		10	188	144		1	108?	102?	1.4
151520016H09	GARY	LAKE CO	FEDERAL BLDG	81	004	66	524	257	1	12	121	106	1.6
151520016H09	GARY	LAKE CO	FEDERAL BLDG	82	004	39	326	310	3	13	126?	107?	1.8
151520018F01	GARY	LAKE CO	GARY POST OFFICE	77		42	202	157		2	76	70	1.5
151520018F01	GARY	LAKE CO	GARY POST OFFICE	78		4	110	78			66?	58?	1.7
151520901P02	GARY	LAKE CO	U.S. STEEL SITE	79		77	603	476	10	28	149?	116?	2.0
151520902P02	GARY	LAKE CO	U.S. STEEL SITE	80		71	437	366	14	36	165?	139?	1.9
151520902P02	GARY	LAKE CO	U.S. STEEL SITE	79		61	338	274	3	16	117?	99?	1.8
151520902P02	GARY	LAKE CO	U.S. STEEL SITE	80		73	393	352	6	33	146?	120?	2.0
151520903P02	GARY	LAKE CO	U.S. STEEL SITE	79		48	159	139		1	70?	64?	1.6
151520903P02	GARY	LAKE CO	U.S. STEEL SITE	80		29	190	149		1	69?	60?	1.7
151560001J02	GIBSON CO	GIBSON CO	GIBSON - PLANT R	78		6	105	48			46?	40?	1.7
151560001J02	GIBSON CO	GIBSON CO	GIBSON - PLANT R	79		29	156	135		1	52?	42?	1.9
151560001J02	GIBSON CO	GIBSON CO	GIBSON - PLANT R	80		41	194	177		5	76?	61?	2.0

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Minnesota

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	YR	REP ORG	#OBS	MAX 1-HR OBS		MAX 8-HR OBS		METH		
							1ST	2ND	1ST	2ND			
241040016G01	DULUTH	ST LOUIS CO	314 W SUPERIOR S	75		7597	23.0	23.0	12.7	12.1	11	11	
241040016G01	DULUTH	ST LOUIS CO	314 W SUPERIOR S	76		5456	20.7	19.6	12.3	11.7	5	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	76		1730	19.6	19.6	13.9	11.6	6	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	77		7881	29.3	28.8	18.4	17.3	61	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	78		7682	45.4	42.0	2	19.7	16.2	31	11
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	79		6415	29.9	28.8	14.3	14.1	17	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	80		8654	29.9	23.6	16.5	14.2	11	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	81	001	8260	31.1	30.5	14.2	13.2	6	11	
241040018G01	DULUTH	ST LOUIS CO	314 W. SUPERIOR	82	001	1734	19.6	19.6	11.6	11.0	2	11	
242260022H01	MINNEAPOLIS	HENNEPIN CO	3RD AVE & 4TH ST	75		8098	23.3	20.1	13.2	10.3	3	11	
242260022H01	MINNEAPOLIS	HENNEPIN CO	3RD AVE & 4TH ST	76		7479	21.3	18.4	13.4	12.8	4	11	
242260022H01	MINNEAPOLIS	HENNEPIN CO	3RD AVE & 4TH ST	77		6933	21.3	20.8	17.1	14.1	9	11	
242260022H01	MINNEAPOLIS	HENNEPIN CO	3RD AVE & 4TH ST	78		8238	19.2	18.5	12.1	10.9	3	11	
242260022H01	MINNEAPOLIS	HENNEPIN CO	3RD AVE & 4TH ST	79		4605	19.3	16.7	9.8	9.3		11	
242260027F01	MINNEAPOLIS	HENNEPIN CO	3405 UNIVERSITY	75		8381	14.4	14.0	8.7	8.5		11	
242260027F01	MINNEAPOLIS	HENNEPIN CO	3405 UNIVERSITY	76		7743	19.0	15.9	14.0	10.2	2	11	
242260027F01	MINNEAPOLIS	HENNEPIN CO	3405 UNIVERSITY	77		8349	13.6	13.5	10.0	9.0		11	
242260027F01	MINNEAPOLIS	HENNEPIN CO	3405 UNIVERSITY	78		7971	20.4	19.8	18.1	17.3	4	11	
242260027F01	MINNEAPOLIS	HENNEPIN CO	3405 UNIVERSITY	79		2756	9.9	9.7	6.3	5.4		11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	76		3711	32.0	30.9	20.2	19.1	51	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	77		8591	30.7	26.2	16.3	15.5	95	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	78		8504	28.8	25.4	16.7	16.6	71	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	79		7890	26.6	23.8	18.9	15.7	35	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	80		8344	24.2	23.6	15.0	13.8	12	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	81	001	8327	18.4	18.3	12.4	12.1	9	11	
242260047F01	MINNEAPOLIS	HENNEPIN CO	S 7TH & HENNEPIN	82	001	2621	13.1	12.4	9.5	7.2		11	
242260052F01	MINNEAPOLIS	HENNEPIN CO	3RD AVE, S & 4TH	80		3900	26.5	23.2	9.0	8.3		11	
242260052F01	MINNEAPOLIS	HENNEPIN CO	3RD AVE. S & 4TH	81	001	7206	11.0	10.8	7.7	6.7		11	
242260052F01	MINNEAPOLIS	HENNEPIN CO	3RD AVE. S & 4TH	82	001	2806	8.1	7.8	6.5	5.8		11	
242260054F01	MINNEAPOLIS	HENNEPIN CO	MT SAAHAI HOSPITA	80		1851	10.5	9.7	5.6	5.2		11	
242260054F01	MINNEAPOLIS	HENNEPIN CO	MT SAAHAI HOSPITA	81	001	2128	13.2	12.4	8.9	7.4		11	
242260056F01	MINNEAPOLIS	HENNEPIN CO	1829 PORTLAND AV	81		2198	9.3	8.6	5.2	5.1		11	
242260056F01	MINNEAPOLIS	HENNEPIN CO	1829 PORTLAND AV	82		2778	18.1	17.7	5.5	5.2		11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	75		6267	34.5	32.2	20.4	16.1	100	11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	76		7128	37.1	22.8	13.9	13.6	28	11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	77		8138	18.4	17.1	13.7	11.7	12	11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	78		7934	24.4	21.5	15.0	14.2	22	11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	79		8523	26.1	20.6	14.5	13.8	16	11	
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRS	80		8558	27.9	27.6	18.4	14.5	8	11	

CARBON MONOXIDE (MG/M3)

MINNESOTA

75-82

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	RFP YR ORG	OBS	MAX 1-HR OBS 1ST 2ND 40	MAX 8-HR 1ST 2ND	OBS 10	METH
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRB	81 001	8521	20.2 17.4	12.8 11.8	3	11
241120018G01	ROCHESTER	OLMSTED CO	BROADWAY AT FIRB	82 001	1414	16.2 14.5	10.5 9.6	1	11
241180003F01	ROSEVILLE	RAMSEY CO	1935 W. COUNTY R	81	3638	9.8 9.3	4.3 4.2		11
241180003F01	ROSEVILLE	RAMSEY CO	1935 W. COUNTY R	81	981	8.1 7.7	4.8 4.6		21
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	76	3944	25.3 25.3	20.2 18.6	39	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	77	7352	37.1 33.7	25.6 20.7	36	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	78	7908	28.8 22.4	15.6 13.3	8	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	79	8099	31.1 28.8	21.9 16.7	7	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	80	8068	27.6 22.2	13.2 10.7	3	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	81 001	8167	33.9 28.8	19.1 13.1	4	11
241220025H01	ST CLOUD	SHERBURNE CO	911 ST. GERMAIN	82 001	2429	21.9 18.4	11.9 11.6	2	11
241300001H01	ST PAUL	RAMSEY CO	100 E 10TH ST	75	129	9.1 7.9	5.0 3.7		11
241300030H01	ST PAUL	RAMSEY CO	345 JACKSON ST	75	8323	24.2 20.7	10.9 10.2	2	11
241300030H01	ST PAUL	RAMSEY CO	345 JACKSON ST	76	1835	11.2 9.9	6.3 6.0		11
241300030H01	ST PAUL	RAMSEY CO	345 JACKSON ST	77	4923	18.5 17.6	10.5 10.3	2	11
241300030H01	ST PAUL	RAMSEY CO	345 JACKSON ST	78	6539	27.6 25.4	21.8 21.2	4	11
241300030H01	ST PAUL	RAMSEY CO	345 JACKSON ST	79	881	14.3 10.7	6.8 6.6		11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	75	8192	17.4 15.9	10.6 9.2	1	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	76	8032	21.9 21.3	12.9 11.7	4	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	77	8499	23.0 20.7	13.6 13.2	3	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	78	7579	21.4 16.8	11.7 9.6	1	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	79	7747	16.4 15.4	10.3 9.9		11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	80	8628	18.2 15.6	12.3 9.7	1	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	81 001	8539	19.7 14.3	11.5 11.4	2	11
241300031H01	ST PAUL	RAMSEY CO	TENTH & MINNESOT	82 001	2814	11.2 10.8	6.1 5.6		11
241300037F01	ST PAUL	RAMSEY CO	17 W. 4TH STREET	79	6270	16.6 14.8	9.0 8.4		11
241300037F01	ST PAUL	RAMSEY CO	17 W. 4TH STREET	80	8507	16.1 16.0	11.6 10.0	1	11
241300037F01	ST PAUL	RAMSEY CO	17 W. 4TH STREET	81 001	6725	20.8 17.3	8.1 7.5		11
241300037F01	ST PAUL	RAMSEY CO	17 W. 4TH STREET	82 001	2505	17.6 16.0	8.7 8.4		11
241300039F01	ST PAUL	RAMSEY CO	1563 UNIVERSITY	79	7386	19.0 19.0	16.1 14.1	15	11
241300039F01	ST PAUL	RAMSEY CO	1563 UNIVERSITY	80	7819	19.8 18.4	15.6 13.0	11	11
241300039F01	ST PAUL	RAMSEY CO	1563 UNIVERSITY	81 001	2598	14.0 13.9	11.1 8.2	1	11
241300042F01	ST PAUL	RAMSEY CO	1569 UNIVERSITY	81	3123	23.9 23.3	17.0 15.3	23	11
241300042F01	ST PAUL	RAMSEY CO	1569 UNIVERSITY	82	2719	25.1 18.3	13.5 11.0	9	11

MN-3

10/27/82

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 47

SULFUR DIOXIDE (UG/M3) MINNESOTA 77-82

METHODS: HOURLY VALUES WEST-GAEKE COLORIMETRIC-11, CONDUCTIMETRIC-13, COULOMETRIC-14, FLAME PHOTOMETRIC-16,
HYDROGEN PEROXIDE NAOH TITRATION-18, CATALYST FLAME PHOTOMETRIC-19, PULSED FLUORESCENT-20, SECOND DERIVATIVE SPECTROSCOPY-21,
CONDUCTANCE ASHCO-22, ULTRA VIOLET STIMULATED FLUORESCENCE-23, SEQUENTIAL CONDUCTIMETRIC-33,
24-HOUR GAS BUBBLERS PARAROSANILINE-SULFAMIC ACID-91, PARAROSANILINE SULFAMIC ACID TEMPERATURE CONTROLLED-97

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	#OBS	MAX 24-HR 1ST 2ND	OBS> 365	MAX 3-HR 1ST 2ND	OBS> 1300	MAX 1-HR 1ST 2ND	ARIT MEAN	MTH			
240260002F01	BEMIDJI	BELTRAMI CO	BEMIDJI ST COLL	77	11	13	8				57	91			
240360009F01	BLOOMINGTON	HENNEPIN CO	600 W 95TH STREE	77	6121	304	268	854	798	1072	1040	287	14		
240360009F01	BLOOMINGTON	HENNEPIN CO	600 W 95TH STREE	78	7050	81	75	169	157	430	377	22	14		
240360009F01	BLOOMINGTON	HENNEPIN CO	600 W 95TH STREE	79	6134	120	88	176	159	508	372	197	14		
240420001F01	BRAINERD	CROW WING CO	CITY HALL	77	28	3	3					37	91		
240420001F01	BRAINERD	CROW WING CO	CITY HALL	78	57	5	3					3	97		
240420001F01	BRAINERD	CROW WING CO	CITY HALL	79	52	10	5					3	97		
240760011F01	CLOQUET	CARLTON CO	WATER METERING S	77	57	8	3					3	91		
240760011F01	CLOQUET	CARLTON CO	WATER METERING S	78	40	5	5					37	97		
240760011F01	CLOQUET	CARLTON CO	WATER METERING S	79	26	5	5					37	97		
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	77	8219	2096	1390	18	2096	1865	24	2439	2146	(02)	14
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	78	1096	1030	804	2	1289	1258		1551	1546	177	14
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	82	768	390	187	1	838	725		1218	1069	467	14
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	78	7483	835	646	4	2071	1665	4	2345	2269	64	20
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	79	8384	414	390	3	1085	928		1436	1394	49	20
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	80	8420	641	450	4	1278	1277		1789	1527	50	20
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	81	7089	619	418	2	1605	1572	4	2070	1860	39	20
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	82	3558	471	429	3	1139	1027		1417	1378	487	20
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	77	58	291	246							62	91
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	78	58	645	304	1						40	97
240940020F02	DAKOTA CO	DAKOTA CO	55 & 52 (PINE BE	79	53	176	170							18	97
240940020F05	DAKOTA CO	DAKOTA CO	HWYS 55 & 52 (PI	81	001 3270	372	296	1	1327	1088	1	1729	1491	227	14
240940020F05	DAKOTA CO	DAKOTA CO	HWYS 55 & 52 (PI	82	001 3368	446	333	1	1134	990		1425	1352	427	14
241040001F01	DULUTH	ST LOUIS CO	CITY HALL	77	6	75	13							207	91
241040002G01	DULUTH	ST LOUIS CO	1412 108TH AVE W	77	16	3	3							37	91
241040002G01	DULUTH	ST LOUIS CO	1412 108TH AVE W	78	42	31	21							4	97
241040002G01	DULUTH	ST LOUIS CO	1412 108TH AVE W	79	25	3	3							37	97
241040005G01	DULUTH	ST LOUIS CO	1628 W SUPERIOR	77	57	13	10							3	91
241040005G01	DULUTH	ST LOUIS CO	1628 W SUPERIOR	78	18	31	31							77	97
241040005G01	DULUTH	ST LOUIS CO	1628 W SUPERIOR	79	25	3	3							37	97
241040016G01	DULUTH	ST LOUIS CO	314 W SUPERIOR S	77	6271	46	44	124	96	173	118	117	14		
241040016G01	DULUTH	ST LOUIS CO	314 W SUPERIOR S	78	4064	43	34	109	95	149	144	127	14		
241040018G01	DULUTH	ST LOUIS CO	314 W SUPERIOR	79	2225	22	22	22	22	22	22	22	22	22	22

MN-4

Ohio

01/11/83

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 11

OZONE (PARTS PER MILLION) OHIO

79-82

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	OBS	DAILY MAX 1ST	1-HR 2ND	VALS > 3RD	MEAS MEAS	.125 EST	NBR VALID DAILY MAX	MISS ABS	DAYS < 8TD	ME
360060015H01	AKRON	SUMMIT CO	207 S BROADWAY	79	3307	.130	.128	.125	3	7.9	139	1	11	
360060018H01	AKRON	SUMMIT CO	259 S. BROADWAY	79	3552	.080	.080	.077	0	0.0	149	2	11	
360060018H01	AKRON	SUMMIT CO	259 S. BROADWAY	80	2797	.072	.062	.055	0	0.0	119	0	11	
360060020H01	AKRON	SUMMIT CO	800 PATTERSON AV	80	5585	.133	.115	.110	1	1.6	236	0	11	
360060020H01	AKRON	SUMMIT CO	800 PATTERSON AV	81 006	7281	.283	.268	.238	6	7.2	305	1	11	
360060020H01	AKRON	SUMMIT CO	800 PATTERSON AV	82 006	5404	.128	.128	.123	2	3.2	223	3	11	
360080001F01	ALLEN CO	ALLEN CO	1787 OLD NORTH D	79	5173	.140	.105	.093	1	1.7	214	0	11	
360080001F01	ALLEN CO	ALLEN CO	1787 OLD NORTH D	80	761	.036	.036	.034	0	0.0	31	0	11	
360080001F01	ALLEN CO	ALLEN CO	1787 OLD NORTH D	81 003	3465	.112	.095	.089	0	0.0	141	2	11	
360080002F01	ALLEN CO	ALLEN CO	2650 BIBLE RD	82 003	3608	.120	.104	.100	0	0.0	144	2	11	
360080002F01	ALLEN CO	ALLEN CO	2650 BIBLE RD	82 003	1376	.055	.050	.049	0	0.0	56	3	14	
360360008H01	BARBENTON	SUMMIT CO	NOBLE STREET	80	2724	.118	.110	.105	0	0.0	113	0	11	
360580002H01	BEREA	CUYAHOGA CO	320 FRONT ST	79	7269	.120	.113	.110	0	0.0	288	8	11	
360580002H01	BEREA	CUYAHOGA CO	320 FRONT ST	80	7309	.095	.093	.088	0	0.0	295	13	11	
360580002H01	BEREA	CUYAHOGA CO	320 FRONT ST	81 009	3886	.125	.115	.108	1	2.3	161	1	11	
360580002H01	BEREA	CUYAHOGA CO	320 FRONT ST	82 009	5469	.140	.125	.123	2	3.2	230	2	11	
361000001H02	CANTON	STARK CO	CITY HALL 218 CL	79	7487	.125	.115	.115	1	1.2	309	3	11	
361000001H02	CANTON	STARK CO	CITY HALL 218 CL	80	6945	.100	.095	.095	0	0.0	282	11	11	
361000001H02	CANTON	STARK CO	CITY HALL 218 CL	81 007	2724	.109	.109	.065	0	0.0	82	3	11	
361000016H02	CANTON	STARK CO	HALONE COLLEGE	81 007	5007	.115	.115	.115	0	0.0	184	14	11	
361000016H02	CANTON	STARK CO	HALONE COLLEGE	82 007	5373	.125	.125	.123	2	3.6	197	12	11	
361080001G09	CELINA	MERCER CO	GRAND LAKE ROAD	81	1132	.102	.082	.082	0	0.0	46	1	14	
361220019G01	CINCINNATI	HAMILTON CO	1675 GEST STREET	81 008	8626	.117	.107	.106	0	0.0	364	1	14	
361220019G01	CINCINNATI	HAMILTON CO	1675 GEST STREET	82 008	5630	.112	.111	.108	0	0.0	243	0	14	
361220019H01	CINCINNATI	HAMILTON CO	1675 GEST ST	79	8721	.132	.123	.122	1	1.0	365	0	11	
361220019H01	CINCINNATI	HAMILTON CO	1675 GEST ST	80	3620	.120	.095	.095	0	0.0	151	1	11	
361220019H01	CINCINNATI	HAMILTON CO	1675 GEST ST	80	5084	.150	.150	.135	5	8.6	214	0	14	
361220020G01	CINCINNATI	HAMILTON CO	DRAKE MEMORIAL H	81 008	4107	.105	.097	.092	0	0.0	170	2	11	
361220020H01	CINCINNATI	HAMILTON CO	DRAKE MEMORIAL H	79	8117	.107	.103	.102	0	0.0	338	5	11	
361220020H01	CINCINNATI	HAMILTON CO	DRAKE MEMORIAL H	80	8647	.134	.133	.120	2	2.0	361	3	11	
361220035G01	CINCINNATI	HAMILTON CO	VINE AND ST. CLA	81 008	8674	.100	.098	.098	0	0.0	362	1	14	
361220035G01	CINCINNATI	HAMILTON CO	VINE AND ST. CLA	82 008	4836	.115	.108	.098	0	0.0	202	7	14	
361220035H01	CINCINNATI	HAMILTON CO	VINE + ST CLAIR	79	8455	.102	.100	.100	0	0.0	355	2	11	

OH-2

01/11/83

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 14

OZONE (PARTS PER MILLION) OHIO

79-82

METHODS: HOUPLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	PEP YR ORG	NOBS	DAILY MAX 1-HR 1ST 2ND 3RD	VALS > .125 MEAS EST	NBR VALID DAILY MAX	MISS DAYS ASS < STD	ME
364500007G01	MONTGOMERY CO	MONTGOMERY CO	1900 MARSHMAN RD	82 010	5411	.170 .127 .122	2 3.2	227	1	11
365320002G02	PAINESVILLE	LAKE CO	71 E HIGH STREET	79	8255	.122 .112 .102	0 0.0	337	10	11
365320002G02	PAINESVILLE	LAKE CO	71 E HIGH STREET	80	8305	.152 .116 .110	1 1.1	344	3	11
365320002G02	PAINESVILLE	LAKE CO	71 E HIGH STREET	81 012	5954	.128 .117 .114	1 1.4	252	2	11
365320002G02	PAINESVILLE	LAKE CO	71 E HIGH STREET	82 012	5623	.125 .112 .112	1 1.5	236	2	11
365580001H01	PORTAGE CO	PORTAGE CO	1570 RAVENNA ROA	79	7050	.155 .146 .146	8 9.8	294	5	11
365580001H01	PORTAGE CO	PORTAGE CO	1570 RAVENNA ROA	80	8033	.153 .115 .105	1 1.1	337	1	11
365580001H01	PORTAGE CO	PORTAGE CO	1570 RAVENNA ROA	81 006	7271	.180 .158 .130	5 5.2	307	2	11
365580001H01	PORTAGE CO	PORTAGE CO	1570 RAVENNA ROA	82 006	5171	.350 .138 .135	3 5.0	217	1	11
365640001G01	PREBLE CO	PREBLE CO	NATIONAL TRAILS	79	6126	.145 .140 .120	2 2.9	254	0	11
365640001G01	PREBLE CO	PREBLE CO	NATIONAL TRAILS	80	7782	.112 .110 .100	0 0.0	324	2	11
365640001G01	PREBLE CO	PREBLE CO	NATIONAL TRAILS	81	8705	.127 .115 .107	1 1.0	363	0	11
365640001G01	PREBLE CO	PREBLE CO	NATIONAL TRAILS	82	5291	.162 .158 .132	6 9.8	223	1	11
366400009H01	STARK CO	STARK CO	6318 HEMINGER AV	80	3505	.110 .110 .105	0 0.0	146	2	14
366400009H01	STARK CO	STARK CO	6318 HEMINGER AV	81 007	6652	.130 .107 .100	1 1.3	268	7	14
366400009H01	STARK CO	STARK CO	6318 HEMINGER AV	82 007	3434	.120 .106 .106	0 0.0	140	2	14
366420012I01	STEUERENVILLE	JEFFERSON CO	814 ADAMS STREET	79	8726	.130 .122 .120	1 1.0	364	1	11
366420012I01	STEUERENVILLE	JEFFERSON CO	814 ADAMS STREET	80	8361	.160 .160 .156	7 7.3	349	1	11
366420012I01	STEUERENVILLE	JEFFERSON CO	814 ADAMS STREET	81 014	7565	.100 .095 .095	0 0.0	315	0	11
366420012I01	STEUERENVILLE	JEFFERSON CO	814 ADAMS STREET	82 014	5818	.120 .110 .105	0 0.0	242	1	11
366600006H09	TOLEDO	LUCAS CO	26 MAIN STREET	79	8655	.130 .130 .110	2 2.0	361	1	11
366600006H09	TOLEDO	LUCAS CO	26 MAIN STREET	80	5648	.095 .095 .070	0 0.0	233	6	11
366600006H09	TOLEDO	LUCAS CO	26 MAIN STREET	81 015	8573	.135 .130 .125	3 3.0	156	7	11
366600006H09	TOLEDO	LUCAS CO	26 MAIN STREET	82 015	5646	.130 .125 .125	3 4.6	238	3	11
366600006H09	TOLEDO	LUCAS CO	26 MAIN STREET	80	2892	.115 .110 .110	0 0.0	121	1	14
366600008H09	TOLEDO	LUCAS CO	FRIENDSHIP PARK	79	8386	.160 .150 .140	6 6.1	351	8	11
366600008H09	TOLEDO	LUCAS CO	FRIENDSHIP PARK	80	6329	.145 .140 .125	4 5.4	269	3	11
366600008H09	TOLEDO	LUCAS CO	FRIENDSHIP PARK	80	2163	.080 .060 .050	0 0.0	90	2	14
366600008H09	TOLEDO	LUCAS CO	FRIENDSHIP PARK	81 015	8551	.130 .120 .115	1 1.0	356	5	14
366600008H09	TOLEDO	LUCAS CO	FRIENDSHIP PARK	82 015	5100	.110 .105 .105	0 0.0	208	3	14
367280003H01	WESTLAKE	CUYAHOGA CO	810 CLAGUE ROAD	79	8143	.125 .125 .120	2 2.1	333	10	11
367280003H01	WESTLAKE	CUYAHOGA CO	810 CLAGUE ROAD	80	7458	.115 .113 .103	0 0.0	308	3	11
367280003H01	WESTLAKE	CUYAHOGA CO	810 CLAGUE ROAD	81 009	6192	.105 .098 .095	0 0.0	257	1	11
367280003H01	WESTLAKE	CUYAHOGA CO	810 CLAGUE ROAD	82 009	4158	.105 .080 .085	0 0.0	171	1	11

OH-3

Region VI

Louisiana

LOUISIANA

I. Bibliography of Material Reviewed for Louisiana

1. EPA National Aerometric Data Bank Quick Look Reports for 1981 and 1982 (ID No. NA 273.)
2. EPA National Aerometric Data Bank SAROAD Violation Day Count Report for 1981 and 1982 (ID No. NA 282).
3. Louisiana 1979 State Implementation Plan for Ozone, submitted April 30, 1979, transmitted by letter from Governor Edwin Edwards to Adlene Harrison, Regional Administrator for EPA-Region 6.
4. Louisiana Reasonable Further Progress report for 1982. Submitted October 21, 1982, letter from Terrie Lotten, Louisiana Department of Natural Resources, to Ellen Greeney, EPA, Region 6.
5. Rural Ozone Policy as explained in Federal Register, April 4, 1979, volume 44, on page 20376. Also as explained in a Jan. 3, 1978 memo, entitled "Attainment/Nonattainment Status Designations," from David Hawkins, Assistant Administrator for Air and Waste Management, EPA, to Regional Administrators.
6. EPA National Aerometric Data Bank, Quick Look Reports for 1983.
7. EPA National Aerometric Data Bank, SAROAD Violation Day Count Report for 1983.

II. Documentation of Determinations

A. Determinations Based on Monitoring Data

Ozone

1. Baton Rouge Urban Nonattainment Area (East Baton Rouge Parish and West Baton Rouge Parish)
 - a. East Baton Rouge Parish - 4 violations at site 190280003F01 in 1982 (10 violations in 1981), expected exceedances in 1982 for this site are 8.3;

1 violation at site #190280004F01 in 1982 (4 violations in 1981), expected exceedances in 1982 for this site are 4.6;

2 violations at site #190840001F02 in 1982 (10 violations in 1981), expected exceedances in 1982 for this site are 9.5.

2 violations at site #190280003F01 in 1983, expected exceedances in 1983 for this site are 2.8.

2 violations at site #190280004F01 in 1983, expected exceedances in 1983 for this site are 2.8.

2 violations at site #190840001F02 in 1983, expected exceedances in 1983 for this site are 2.0.

See Nov. 10, 1982 SAROAD printout [NA 282] for La., pages attached.

- b. West Baton Rouge Parish - part of Baton Rouge urban non-attainment area, across river from E. Baton Rouge parish. No monitors located in parish during 1982 or 1981.

One violation at site #192300001F01 in 1983, expected exceedances in 1983 for this is 1.0.

2. New Orleans Urban Nonattainment Area (Orleans Parish, St. Bernard Parish and Jefferson Parish)

- a. Orleans Parish - No violations of .14 or greater in 1982 or 1981. Part of New Orleans urban area. The expected exceedances for site #192020012F01 for 1982 are 2.2. See 1982 Quick Look Report [NA 282] for La., page attached.
- b. St. Bernard Parish - One violation at site #192500002F01 in 1982 (none in 1981). The expected exceedances for this site for 1982 are 2.1. See Nov. 10, 1982 SAROAD printout [NA 282] for La., page attached.
- c. Jefferson Parish - 3 violations at site #191460001F01 in 1982 (none in 1981). The expected exceedances for this site for 1982 are 17.4. See Nov. 10, 1982 SAROAD printout [NA 282] for La., page attached.
- d. No exceedances for Orleans parish, St. Bernard parish, or Jefferson parish were measured in 1983. EPA proposes to change the designation of New Orleans urban area to Tier 1. Redesignation to attainment will be contingent on 1984 monitoring data.

NA 273

09/82

NATIONAL NEOTOMIC DATA BANK
QUICK LOOK REPORT

PAGE 26

NOISE (PARTS PER MILLION) LOUISIANA H2-H2

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASTRI COMPOSITION-14, CHEMILUMINESCENCE RHODAMINE H DYE-15

ITE ID	LOCATION	COUNTY	ADDRESS	REP Y4 006 00RS	DAILY MAX 1ST 2ND 3RD	VALS > .125 MEAS EST	NBR VALID DAILY MAX	MISS DAYS ASS < STD	ME		
240003F01	HATON ROUGE	EAST HATON ROUGE	EAST END OF ATE	42 001	4124	1.11 1.145	43	8.3	175	3	11
240004F01	HATON ROUGE	EAST HATON ROUGE	STATE CAPITOL HU	42 002	3450	1.11 1.115	43	4.6	154	3	11
300001F01	CANNO PAH	CANNO PAH	KEEL MARCO STATI	42 002	3115	.094 .093 .087	0	0.0	133	6	11
340001F02	EAST HATON ROUGE PA	EAST HATON ROUGE	LOUISIANA TRAINI	42 002	2023	.091 .091 .084	0	0.0	80	0	11
340001F02	EAST HATON ROUGE PA	EAST HATON ROUGE	LOUISIANA TRAINI	42 002	1424	1.11 1.122	2	9.5	77	0	14
340002F01	THEVILLE PAH	THEVILLE PAH	CARVILLE	42 001	4026	1.11 1.125	2	4.3	164	3	14
360001F01	KEINER	JEFFERSON PAH	L P A L POWELLIN	42	1524	1.11 1.145	3	17.4	61	0	11
390101A04	KISATCHIE NATIONAL	GRANT PAH		42	242	.050 .050 .045	0	0.0	19	0	11
400002F01	MONROE	ORLEANS PAH	ATLANTIC STATION	42	3611	.067 .064 .077	0	0.0	144	5	14
420005F01	NEW ORLEANS	ORLEANS PAH	321 LOYOLA AVE	42 001	4106	1.11 1.104	1	2.1	173	0	14
420012F01	NEW ORLEANS	ORLEANS PAH	CITY PARK	42 002	3804	1.11 1.115	1	2.2	162	5	11
430002F01	ST HERMAN PAH	ST HERMAN PAH	ST. HERMAN SCHU	42	4134	1.11 1.121	1	2.1	172	2	14
480002F01	ST JOHN THE BAPTIST	ST JOHN THE BAPTIST	AZALEA & SOUTH A	42 001	4228	.110 .109 .101	0	0.0	170	1	14
740008F01	SHIFFERPORT	MOSSIER PAH	DOWNTOWN MUNICI	42 002	3472	.105 .102 .100	0	0.0	170	4	11
440003F01	WESTLAKE	CALCASIEU PAH	ANTHONY FERRY	42 002	4027	1.11 1.130	2	4.2	173	4	11

LA-4

OZONE (PARTS PER MILLION) LOUISIANA

81-81

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIH CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	RFP YR ORG	#ORS	DAILY MAX 1ST	1-HR 2ND	VALS > .125 3RD	MEAS	EST	NRR VALID DAILY MAX	MISS DAYS ASS < STD	ME
190280003F01	HATON HOUSE ✓	EAST HATON PAR	EAST END OF ASTE	H1 001	4982	.104	.144	.148	9	15.8	205	4	11
190280003F01	HATON HOUSE ✓	EAST HATON PAR	EAST END OF ASTE	H1 001	2568	.174	.101	.080	1	3.4	108	0	14
190280004F01	HATON HOUSE ✓	EAST HATON PAR	STATE CAPITOL RD	H1 002	7978	.140	.130	.136	4	4.1	344	11	11
190500001F01	CADDO PAR	CADDO PAR	KELI RADIO STAT	H1 002	6701	.110	.115	.115	1	1.2	289	12	11
190840001F02	EAST HATON HOUSE PA	EAST HATON PAR	LOUISIANA TRAIN	H1 002	7878	.182	.174	.162	10	10.2	353	4	11
191280002F01	IBERVILLE PAR	IBERVILLE PAR	CARVILLE	H1 001	8076	.160	.142	.139	4	4.3	340	3	14
191490101A08	KISATCHIE NATIONAL	GRANT PAR		H1	1921	.095	.090	.075	0	0.0	76	2	11
191900002F01	MONROE	OUACHITA PAR	AIRPORT STATION	H1	5080	.112	.108	.105	0	0.0	206	7	14
192020005F01	NEW ORLEANS	ORLEANS PAR	325 LUYOLA AVE	H1 001	8256	.104	.098	.094	0	0.0	351	2	14
192020012F01	NEW ORLEANS	ORLEANS PAR	CITY PARK	H1 002	7128	.105	.099	.098	0	0.0	303	6	11
192500002F01	ST HERNARD PAR	ST HERNARD PAR	ST. HERNARD SCHO	H1	6551	.120	.115	.106	0	0.0	269	9	14
192580002F01	ST JOHN THE BAPTIST	ST JOHN THE PAR	AZALEA & SOUTH A	H1 001	7170	.161	.125	.118	2	2.4	302	3	14
192740008F01	SHREVEPORT	BOSSIER PAR	DOWNTOWN MUNICI	H1 002	7532	.139	.100	.106	1	1.1	335	10	11
193180003F01	WESTLAKE	CALCASIEU PAR	ANTHONY FERRY	H1 002	7208	.135	.119	.115	1	1.1	321	11	11

NA 292

PAGE : 10

NATIONAL AERONAUTICAL DATA BANK

DATE: 11/10/82

SARNOU VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HH

UNIT: PARTS PER MILLION

YEARLY SUMMARY FOR YEAR 1982

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	APFA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE
05/04/82	190230004F01	MAINTENANCE	1	.138	02
05/21/82	191450001F01	KEENE	1	.145	N.A. ✓
06/05/82	191240002F01	MAINTENANCE	1	.125	
06/06/82	190240003F01	MAINTENANCE	1	.171	04 ✓
06/07/82	191240002F01	MAINTENANCE	6	.201	
06/08/82	191450001F01	MAINTENANCE	4	.188	Nat ✓
06/24/82	190230003F01	MAINTENANCE	1	.145	02
06/27/82	17200111F01	MAINTENANCE	1	.130	10

TOTAL NUMBER OF VIOLATION DAYS: 4

LA-6

HAPHAZ VIOLATION DAY COUNT REPORT

POLLUTANT: CO/PM

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	82	19025 003F01	BATJ1 HOUSE	00/06/82	.171	16	1
					00/07/82	.165	17	1
					00/08/82	.130	13	1
					00/24/82	.145	14	1
SUMMARY FOR SITE 190250003F01 YEAR 82								

TOTAL NUMBER OF VIOLATION DAYS					4			
TOTAL NUMBER OF HOURLY VIOLATIONS					4			
TOTAL NUMBER OF VALID DAYS MONITORED					91			
MAXIMUM VALUE FOR SITE					.185			

LA-7

DATE: 04/28/86

FILE NO. 1 - 114

UNITS: PARTS PER MILLION

DATE	TIME	LOCATION	TYPE OF VIOLATION	MAXIMUM VALUE	NUMBER OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
11/11/66	11:00	1000	100	11	1	

YR 515-1706-1004F01 YEARS -C

1941	Cost of production	15
1942	Cost of production	1
1943	Cost of production	20
1944	Cost of production	100

PAGE : 3

NATIONAL AERONAUTICS DATA BANK

DATE: 11/10/82

SARAO VIOLATION DAY COUNT REPORT

POLLUTANT: CO/PM

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
CO/PM	14	1	82	19004 201F02	EAST UNION BOUGE PAR	09/07/82	.164	17	1
						09/05/82	.138	17	1

MONITOR FOR SITE 190040001F02 YEAR 82
 #####

TOTAL NUMBER OF VIOLATION DAYS 2
 TOTAL NUMBER OF MONITOR VIOLATIONS 2
 TOTAL NUMBER OF VALID DAYS MONITORED 19
 MAXIMUM VALUE FOR SITE .164

LA-9

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: COAL

INTERVAL: 1 - HH

UNITS: PARTS PER MILLION

POLLUTANT	IFTH	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOURLY MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
COAL	14	1	82	191200002F01	IBERVILLE PAR.	06/05/82	.125	15	1
						06/07/82	.201	16	1

SUMMARY FOR SITE 191200002F01 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	73
MAXIMUM VALUE FOR SITE	.201

SARAD VIOLATION DAY COUNT REPORT

POLLUTANT: CO2

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	82	192020005F01	NEW ORLEANS	00/01/82	.126	15	1

SUMMARY FOR SITE 192020005F01 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS

1

TOTAL NUMBER OF HOURLY VIOLATIONS

1

TOTAL NUMBER OF VALID DAYS MONITORED

85

MAXIMUM VALUE FOR SITE

.126

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	82	192020012F01	NEW ORLEANS	06/08/82	.132	14	1

SUMMARY FOR SITE 192020012F01 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS

1

TOTAL NUMBER OF HOURLY VIOLATIONS

1

TOTAL NUMBER OF VALID DAYS MONITORED

14

MAXIMUM VALUE FOR SITE

.132

LA-13

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	82	192500002F01	ST BERNARD PAR	06/07/82	.142	14	1

SUMMARY FOR SITE 192500002F01 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS

1

TOTAL NUMBER OF HOURLY VIOLATIONS

1

TOTAL NUMBER OF VALID DAYS MONITORED

09

MAXIMUM VALUE FOR SITE

.142

14 01 05

1100 042: 1 - 11K

UNITS: PARTS PER MILLION

DATE OF VIOLATION	MINIMUM VALUE	MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
5/1/82	.130	13	1
6/22/82	.158	16	1

NY 001 0111 0003F01 YEAR 16

1-1-2	SA OF VOLUME	4
1-1-2	SA OF VOLUME	4
1-1-2	SA OF VOLUME	4
1-1-2	SA OF VOLUME	4

01/17/84

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 34

OZONE (PARTS PER MILLION) LOUISIANA 83-83

OZONE SEASON. JANUARY TO DECEMBER

METHODS. HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

LA-16

SITE ID	LOCATION	COUNTY	ADDRESS	YR	DRG	REP	#	VALID	#	DAILY	1-HR	MAXIMUM	#	MISS DAYS	#	ASS < STD	ME
190280003F01	BATON ROUGE	EAST BATON ROUGE	EAST END OF ASSE	83	001		263	365	169	139	124	2	2.8	3	14		
190280004F01	BATON ROUGE	EAST BATON ROUGE	STATE CAPITOL BU	83	002		255	365	130	130	112	2	2.8	9	14		
190500001F01	CADDO PAR	CADDO PAR	KEEL RADIO STATI	83	002		25	365	069	067	058			1	11		
190500001F01	CADDO PAR	CADDO PAR	KEEL RADIO STATI	83	002		108	365	084	082	076			2	14		
190520001F01	CALCASIEU PAR	CALCASIEU PAR	COLTRIN SITE	83	001		232	365	103	102	101			1	14		
190800001F01	DE RIDDER	BEAUREGARD PAR	BEAUREGARD AIRPO	83			99	365	078	071	070				14		
190820003F01	DONALDSONVILLE	ASCENSION PAR	FIRE STATION	83			103	365	130	110	095	1	3.5	5	14		
190840001F02	EAST BATON ROUGE PA	EAST BATON ROUGE	LOUISIANA TRAINI	83	002		154	365	108	090	068				11		
190840001F02	EAST BATON ROUGE PA	EAST BATON ROUGE	LOUISIANA TRAINI	83	002		73	365	133	125	111	2	10.0	1	14		
191025001F01	GALLIANO	LAFOURCHE PAR	LAF PAR PORT	83			121	365	114	114	103			3	14		
191280002F01	IBERVILLE PAR	IBERVILLE PAR	CARVILLE	83	001		255	365	188	134	134	4	5.7	3	14		
191460001F01	KENNER	JEFFERSON PAR	L P & L POWERLIN	83	001		212	365	124	121	119			1	11		
191460001F01	KENNER	JEFFERSON PAR	L P & L POWERLIN	83	001		23	365	117	097	091				14		
191500003F01	LAFAYETTE	LAFAYETTE PAR	ACADIAN REGIONAL	83			113	365	117	098	097			2	14		
191870003F01	METAIRIE	JEFFERSON PAR	SE REGIONAL OFFI	83			116	365	095	094	093			2	14		
191900002F01	MONROE	QUACHITA PAR	AIRPORT STATION	83	001		247	365	098	097	096			10	14		
191940002F01	MORGAN CITY	ST MARY PAR	ST MARY PAR. POL	83			115	365	101	098	096			1	14		
192020012F01	NEW ORLEANS	ORLEANS PAR	CITY PARK	83	002		42	365	094	088	075			4	11		
192020012F01	NEW ORLEANS	ORLEANS PAR	CITY PARK	83	002		181	365	106	097	096			3	14		
192260002F01	POINTE COUPEE PAR	POINTE COUPEE P	ALMA PLANTATION	83			109	365	116	106	104			2	14		
192300001F01	PORT ALLEN	WEST BATON ROUGE	WLUX RADIO STATI	83	001		197	365	130	120	119	1	1.8	3	11		
192500002F01	ST BERNARD PAR	ST BERNARD PAR	ST BERNARD SCHO	83	001		227	365	115	111	103			4	14		
192560001F02	ST JAMES PAR	ST JAMES PAR	PAUL KELLER'S RE	83			113	365	103	096	092			6	14		
192580002F01	ST JOHN THE BAPTIST	ST JOHN THE BAP	AZALEA & SOUTH A	83	001		240	365	115	113	110			4	14		
192740008F01	SHREVEPORT	BOSSIER PAR	DOWNTOWN MUNICI	83	002		229	365	124	115	106			6	14		
193180003F01	WESTLAKE	CALCASIEU PAR	ANTHONY FERRY	83	002		166	365	134	108	105	1	2.2	4	11		
193180003F01	WESTLAKE	CALCASIEU PAR	ANTHONY FERRY	83	002		91	365	142	112	088	1	4.0	1	14		

FORM 1113

PRINTED IN U.S.A.

PAGE : 1

NATIONAL AEROMETRIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

LA-17

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	83	190280003F01	BATON ROUGE	08/06/83	.169	10	1
						09/03/83	.139	11	1

SUMMARY FOR SITE 190280003F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	263
MAXIMUM VALUE FOR SITE	.169

SARGAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

LA-18

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	83	190280004F01	HATON ROUGE	05/26/83	.130	09	1
						08/06/83	.130	11	1

SUMMARY FOR SITE 190280004F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	255
MAXIMUM VALUE FOR SITE	.130

1
2
3
4
5
6
7
8
9
10
11
12

FORM 411-3

PRINTED IN U.S.A.

PAGE 1 4

NATIONAL AEROMETRIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

A-19

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	83	190840001F02	EAST BATON ROUGE PAR	07/22/83	.125	11	1
						09/16/83	.133	12	1

SUMMARY FOR SITE 190840001F02 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	73
MAXIMUM VALUE FOR SITE	.133

3
4
5
6
7
8
9
10
11
12

AGE 1 5 NATIONAL AEROMETRIC DATA BANK DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE INTERVAL: 1 - HR UNITS: PARTS PER MILLION

LA 20

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOURLY MAXIMUM	NUMBER OF VIOLATIONS PER
								VALUE	VIOLATION DAY
44201	14	1	83	191280002F01	IBERVILLE PAR	05/23/83	.134	14	1
						05/30/83	.134	15	1
						06/01/83	.128	14	1
						06/31/83	.188	09	1

SUMMARY FOR SITE 191280002F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS 4
TOTAL NUMBER OF HOURLY VIOLATIONS 4
TOTAL NUMBER OF VALID DAYS MONITORED 255
MAXIMUM VALUE FOR SITE .188

FORM 1011-3

PRINTED IN U.S.

1
4
5
6
7
8
9
10
11
12

FORM 111-3

PRINTED IN U.S.A.

PAGE 1 NATIONAL AERONAUTIC DATA BANK DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE INTERVAL: 1 - HR UNITS: PARTS PER MILLION

LA-21

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	83	193180003F01	WESTLAKE	08/23/83	.142	13	1

SUMMARY FOR SITE 193180003F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS 1
TOTAL NUMBER OF HOURLY VIOLATIONS 1
TOTAL NUMBER OF VALID DAYS MONITORED 91
MAXIMUM VALUE FOR SITE .142

1
4
5
6
7
8
9
10
11
12

LA-22
FORM 141-3

PRINTED IN U.S.A.

AGE : 7

NATIONAL AERONAUTIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	83	193180003F01	WESTLAKE	05/28/83	.134	13	1

SUMMARY FOR SITE 193180003F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	1
TOTAL NUMBER OF HOURLY VIOLATIONS	1
TOTAL NUMBER OF VALID DAYS MONITORED	166
MAXIMUM VALUE FOR SITE	.134

1
4
5
6
7
8
9
10
11
12

FORM 1411-3

PRINTED IN U.S.A.

PAGE 1 3

NATIONAL AEROMETRIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	14	1	83	190820003F01	DONALDSONVILLE	08/22/83	.130	11	1

SUMMARY FOR SITE 190820003F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	1
TOTAL NUMBER OF HOURLY VIOLATIONS	1
TOTAL NUMBER OF VALID DAYS MONITORED	103
MAXIMUM VALUE FOR SITE	.130

3
4
5
6
7
8
9
10
11
12

PAGE : 0

NATIONAL AERONAUTIC DATA BANK

DATE: 01/17/84

SAFEGUARD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

LA-24

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	83	192300001F01	PORT ALLEN	06/18/83	.130	14	1

SUMMARY FOR SITE 192300001F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	1
TOTAL NUMBER OF HOURLY VIOLATIONS	1
TOTAL NUMBER OF VALID DAYS MONITORED	197
MAXIMUM VALUE FOR SITE	.130

FORM 1011-3

PRINTED IN U.S.

LA-25

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

YEARLY SUMMARY FOR YEAR 1943

LA-03

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	AREA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE
02/17/43	452330029F01	HARRIS CO	2	.140	15
02/23/43	454715001F01	SEARSMOOR	1	.140	14
03/06/43	452560034F01	HOUSTON	3	.140	11
03/12/43	452330024F01	HARRIS CO	4	.150	13
03/14/43	452330029F01	HARRIS CO	1	.150	14
03/22/43	452560039H01	HOUSTON	4	.160	14
04/16/43	452560035H01	HOUSTON	3	.130	12
04/16/43	454715001F01	SEARSMOOR	1	.140	15
05/04/43	452560039H01	HOUSTON	1	.160	10
05/16/43	452560051H01	HOUSTON	2	.180	16
05/22/43	452560034F01	HOUSTON	11	.290	13
05/23/43	452330029F01	HARRIS CO	4	.200	14
05/24/43	452560039H01	HOUSTON	5	.210	11
05/25/43	452560051H01	HOUSTON	9	.190	09
05/26/43	452560035H01	HOUSTON	11	.180	11
05/27/43	452560035H01	HOUSTON	11	.210	10
05/28/43	452330024F01	HARRIS CO	11	.220	14
05/29/43	452560035H01	HOUSTON	11	.190	15
05/30/43	451370003F01	DEER PARK	2	.150	11
06/01/43	452330024F01	HARRIS CO	11	.230	15
06/08/43	452560039H01	HOUSTON	9	.210	15
06/09/43	452560037H02	HOUSTON	6	.200	10
06/10/43	452330029F01	HARRIS CO	1	.160	15
06/16/43	452330024F01	HARRIS CO	2	.140	12
06/16/43	452560051H01	HOUSTON	4	.150	14
06/24/43	452560051H01	HOUSTON	1	.130	13
06/25/43	452560035H01	HOUSTON	1	.130	10
06/26/43	452330029F01	HARRIS CO	1	.140	17
06/29/43	451310044H01	DALLAS	2	.170	14
07/08/43	372800137F01	SKIA'POOK	1	.125	13
07/11/43	372800137F01	SKIA'POOK	1	.127	15
07/12/43	373000127F02	TULSA	1	.133	11
07/22/43	190840001F02	EAST BATON ROUGE PAR	1	.125	11
07/26/43	372800137F01	SKIA'POOK	1	.138	12
08/06/43	190280003F01	BATON ROUGE	2	.169	10
08/22/43	190420003F01	WINDLASSONVILLE	1	.130	11
08/23/43	193180003F01	WESTLAKE	1	.142	13
08/27/43	373000127F02	TULSA	1	.132	11
08/29/43	372800137F01	SKIA'POOK	1	.131	14

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	AREA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE
00/01/83	190280003F01	NATOL ROUGE	1	.139	11
00/16/83	190H40001F02	EAST NATOL ROUGE PAP	1	.133	12

TOTAL NUMBER OF VIOLATION DAYS 42

Oklahoma

OKLAHOMA

I. Bibliography of Material Reviewed for Oklahoma

1. EPA National Aerometric Data Bank Quick Look Report for 1981 to 1982 (Report No. NA 273).
2. EPA National Aerometric Data Bank SAROAD Violation Day Count Report for 1981, dated 8/18/82.
3. Oklahoma Part D State Implementation Plan revision dated April 1979, Control Strategy demonstration for O₃ in Tulsa County (pages 4-82 to 4-100).

II. Documentation of Determinations in Oklahoma

A. Based on monitoring data

Ozone

Tulsa County, Oklahoma - 3 exceedances of primary O₃ standard at site #373000127F02 - 1981 with a maximum value of 0.157 ppm and expected exceedance of 3.1. See January 14, 1983, NADB Quick Look Report for State of Oklahoma, page 122 (attached).

III. Exceptions - NONE

04/25/87

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 34

OZONE (PARTS PER MILLION) OKLAHOMA 81-82

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASHI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

OK-3

SITE ID	LOCATION	COUNTY	ADDRESS	REF YR ORG	#ORS	DAILY MAX 1-HR			VALS > .125	NBR VALID	MISS DAYS	
						1ST	2ND	3RD	MEAS	EST	DAILY MAX	ASS < STD ME
370940037F02	EDMOND	OKLAHOMA CO	OKLA CHRISTIAN C	H1 102	7190	.115	.112	.104	0	0.0	299	3 11
370940037F02	EDMOND	OKLAHOMA CO	OKLA CHRISTIAN C	H2 102	4744	.114	.110	.110	0	0.0	194	0 11
371740073F03	MC CLAIN CO	MC CLAIN CO	TRIF FARM	H1 101	1815	.081	.073	.073	0	0.0	75	0 14
371740073F03	MC CLAIN CO	MC CLAIN CO	TRIF FARM	H2 101	730	.033	.030	.025	0	0.0	31	0 14
371950044F01	MOORE	CLIFVFLAND CO	HEALTH CENTER	H1 101	5068	.078	.078	.072	0	0.0	212	1 11
371950044F01	MOORE	CLIFVFLAND CO	HEALTH CENTER	H2 101	6160	.083	.078	.078	0	0.0	254	5 11
372200033F01	OKLAHOMA CITY	OKLAHOMA CO	NF 10TH & STONEW	H1 101	8290	.103	.090	.087	0	0.0	348	10 11
372200033F01	OKLAHOMA CITY	OKLAHOMA CO	NF 10TH & STONEW	H2 101	8085	.103	.083	.083	0	0.0	321	20 11
372400137F01	SKIAFOOK	TULSA CO	900 SOUTH USAGE	H1 103	8485	.133	.127	.121	2	2.0	356	3 11
372400137F01	SKIAFOOK	TULSA CO	900 SOUTH USAGE	H2 103	7015	.130	.117	.106	1	1.2	292	3 11
373000127F02	TULSA	TULSA CO	1326 MOHAWK BLVD	H1 103	8436	.157	.148	.148	3	3.1	352	3 11
373000127F02	TULSA	TULSA CO	1326 MOHAWK BLVD	H2 103	8602	.148	.127	.125	4	4.0	361	0 11
373020174F03	TULSA CO	TULSA CO	502 E. 144 TH PL	H1 103	3648	.122	.120	.117	0	0.0	153	0 11
373020174F03	TULSA CO	TULSA CO	502 E. 144 TH PL	H2 103	7947	.097	.094	.088	0	0.0	330	1 11
373020174F03	TULSA CO	TULSA CO	502 E. 144 TH PL	H1 103	4292	.093	.094	.087	0	0.0	176	2 14

01/17/84

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 36

OZONE (PARTS PER MILLION) OKLAHOMA 83-83

OZONE SEASON MARCH TO NOVEMBER

OK-4

METHODS. HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	YR	REQ	VALID			DAILY			1-HR		MAXIMUM		* MISS DAYS		
						REP	*	#	1ST	2ND	3RD	MEAS	EST	* ASS	< STD	ME		
370940037F02	EDMOND	OKLAHOMA CO	OKLA CHRISTIAN C	83	102	204	275	116	107	103						2	11	
371740073F03	MC CLAIN CO	MC CLAIN CO	TREE FARM	83	101	204	275	108	092	087							14	
371950044F01	MOORE	CLEVELAND CO	HEALTH CENTER	83	101	209	275	099	094	094						1	11	
372200033F01	OKLAHOMA CITY	OKLAHOMA CO	NE 10TH & STONEW	83	101	207	275	154	113	113	1	1	3			2	11	
372800137F01	SKIATOOK	TULSA CO	900 SOUTH OSAGE	83	103	193	275	138	131	127	4	5	7				11	
373000127F02	TULSA	TULSA CO	1326 MOHAWK BLVD	83	103	168	275	133	132	121	2	3	3				11	
373020174F03	TULSA CO	TULSA CO	502 E. 144 TH PL	83	103	184	275	112	099	093							11	

PAGE : 1

NATIONAL AFROMETRIC DATA BANK

DATE: 04/28/83

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	81	372800137F01	SKIAFOOK	07/16/81	.133	14	1
						08/06/81	.127	14	1

SUMMARY FOR SITE 372800137F01 YEAR 81

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	356
MAXIMUM VALUE FOR SITE	.133

PAGE : 2

NATIONAL AEROMETRIC DATA BANK

DATE: 04/28/83

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
46201	11	1	81	373000127F02	INDSA	07/01/81	.148	14	1
						07/16/81	.157	13	1
						08/06/81	.148	13	1

SUMMARY FOR SITE 373000127F02 YEAR 81

TOTAL NUMBER OF VIOLATION DAYS	3
TOTAL NUMBER OF HOURLY VIOLATIONS	3
TOTAL NUMBER OF VALID DAYS MONITORED	352
MAXIMUM VALUE FOR SITE	.157

PAGE : 3

NATIONAL AEROMETRIC DATA BANK

DATE: 04/28/83

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

YEARLY SUMMARY FOR YEAR 1981

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	AREA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE
07/01/81	373000127E02	TULSA	1	.148	14
07/16/81	374000127E02	TULSA	2	.157	13
08/06/81	373000127E02	TULSA	2	.148	13

TOTAL NUMBER OF VIOLATION DAYS 3

OK-7

PAGE : 4

NATIONAL AEROMETRIC DATA BANK

DATE: 04/28/83

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
66201	11	1	82	372H00137F01	SKIAPOOK	06/29/82	.130	10	1

SUMMARY FOR SITE 372H00137F01 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS	1
TOTAL NUMBER OF HOURLY VIOLATIONS	1
TOTAL NUMBER OF VALID DAYS MONITORED	242
MAXIMUM VALUE FOR SITE	.130

PAGE : 5

NATIONAL AEROMETRIC DATA BANK

DATE: 04/28/83

SARHAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

OK
9

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	82	373000127F02	TULSA	01/23/82	.148	12	1
						08/27/82	.127	14	1

SUMMARY FOR SITE 373000127F02 YEAR 82

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	361
MAXIMUM VALUE FOR SITE	.148

PAGE : 6

NATIONAL AFROMETRIC DATA BANK

DATE: 04/28/83

SARAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

YEARLY SUMMARY FOR YEAR 1982

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	AREA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE
06/29/82	37280013/F01	SRL-100R	1	.130	10
08/24/82	373000127F02	TULSA	1	.148	12
08/27/82	373000127F02	TULSA	1	.127	14

TOTAL NUMBER OF VIOLATION DAYS 3

OK-10

OK

PAGE 1 9

NATIONAL AERONMETRIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

OK-11

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	83	372200033F01	OKLAHOMA CITY	05/27/83	.154	19	1

SUMMARY FOR SITE 372200033F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	1
TOTAL NUMBER OF HOURLY VIOLATIONS	1
TOTAL NUMBER OF VALID DAYS MONITORED	259
MAXIMUM VALUE FOR SITE	.154

FORM 1411-2

PRINTED IN

AGE 1 10

NATIONAL AEROMETRIC DATA BANK

DATE 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

OK-12

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	83	372800137F01	SKIATOOK	07/08/83	.125	13	1
						07/11/83	.127	15	1
						07/26/83	.138	12	1
						08/29/83	.131	14	1

SUMMARY FOR SITE 372800137F01 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	4
TOTAL NUMBER OF HOURLY VIOLATIONS	4
TOTAL NUMBER OF VALID DAYS MONITORED	221
MAXIMUM VALUE FOR SITE	.138

PAGE 1 11

NATIONAL AEROMETRIC DATA BANK

DATE: 01/17/84

SAROAD VIOLATION DAY COUNT REPORT

POLLUTANT: OZONE

INTERVAL: 1 - HR

UNITS: PARTS PER MILLION

OK-13

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	HOUR OF MAXIMUM VALUE	NUMBER OF VIOLATIONS PER VIOLATION DAY
44201	11	1	83	373000127F02	TULSA	07/12/83	.133	11	1
						08/27/83	.132	11	1

SUMMARY FOR SITE 373000127F02 YEAR 83

TOTAL NUMBER OF VIOLATION DAYS	2
TOTAL NUMBER OF HOURLY VIOLATIONS	2
TOTAL NUMBER OF VALID DAYS MONITORED	227
MAXIMUM VALUE FOR SITE	.133

Texas

TEXAS

I. Bibliography of Material Reviewed for Texas

1. EPA National Aerometric Data Bank Quick Look Reports for 1977 through 1982 and 1983 (Report No. NA273).
2. EPA National Aerometric Data Bank SAROAD Violation Day Count Report for 1981 and 1982, dated 1/14/83.
3. Texas Air Control Board 1981 SLAMS Annual Report for Texas, dated June 1982.
4. Texas Part D State Implementation Plan revision dated April 13, 1979.
5. Federal Register, 45 FR 19231 - 19244 dated March 25, 1980.
6. TACB O₃ Summary Report, 1980 - 1983.

II. Documentation of Determinations for Texas

Carbon Monoxide (CO)

El Paso, Texas - 8 exceedances of the 8-hr primary CO standard at site #451700027F01 with a second high of 16.8 mg/m³ in 1981. 10 exceedances of the 8 hr primary CO standard at site #451700002G01 with a second high of 14.8 ug/m³ in 1982. See NADB Quick Look Report for Texas dated January 14, 1982, page 66 (copy attached), and Quicklook Report dated September 15, 1983, page 11. (copy attached).

Ozone

Dallas County, Texas - 6 exceedances at site #451310044H01, 4 exceedances at site #451310045F01, and 2 exceedances at site #451310052H01 (all 1981); 7 exceedances (maximum daily value of .170 ppm) at site #451310044H01 and 11 exceedances (maximum daily value of .200 ppm) at site #451310045F01 (all 1982); 4 exceedances (maximum daily value of .150 ppm) at site #451310045F01 in 1983 (2 quarters only). See NADB Quick Look Reports for Texas dated January 14, 1983, page 125; September 15, 1983, page 15; and January 17, 1984 page 37 (copies attached).

Tarrant County, Texas - 4 exceedances at site #451880002F01 in 1981; 5 exceedances (maximum daily value of .200 ppm) at site #451880002F01 in 1982. See NADB Quick Look Reports of Texas dated January 15, 1983, page 126 and September 15, 1983, page 15. 7 exceedances (maximum daily value of .15 ppm) at site #451880002F01 in 1983 (3 quarters of data). See TACB O₃ summary report (copy attached).

El Paso County, Texas - 1 exceedance with an estimated expected exceedance of 1.1, at site #451700027F01, 1 exceedance with an estimated expected exceedance of 4.1 at site #451700036F01 (all 1981); 2 exceedances at site #451700037F01 (maximum daily value of .14 ppm; less than 75% data for O₃ season at this site) in 1982; 3 exceedances at site 451700037F01 (maximum daily value of .15 ppm) in 1983 (3 quarters of data). See TACB O₃ summary report (copy attached).

Total Suspended Particulate Matter (TSP)

Harris County, Texas - no approved SIP in place due to lack of adequate justification from State that RACT has been applied to certain industrial categories. See Federal Register March 25, 1980, p. 19235; letter from Regional Administrator to Executive Director of Texas Air Control Board, February 12, 1980 (all attached). The following air quality data was also considered: annual geometric mean (AGM) of 92 ug/m³ in 1981 at site #45260017H02; AGM of 125 ug/m³ in 1981 at site #452560019H01; AGM of 151 ug/m³ and second high 24-hour value of 339 ug/m³ in 1981 at site #452560035H01. AGM of 133 ug/m³ and second high 24 hr of 343 ug/m₃ in 1982 at site #452560035H01. See NADB Quick Look Report for Texas dated January 14, 1983, pages 50-51 and September 15, 1983 (copies attached).

III. Exceptions

All Nonattainment Areas for all Pollutants

The Texas SIP was approved on the condition that the State submit a revised definition of "major source" and "major modification," under their new source review (NSR) program. This condition has been met and EPA has proposed approval of the revision (48 FR 55483, December 13, 1983).

09/15/83

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 16

OZONE (PARTS PER MILLION) TEXAS 82-83

OZONE SEASON. JANUARY TO DECEMBER

METHODS HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

TX-4	SITE ID	LOCATION	COUNTY	ADDRESS	YR ORG	REP * #	VALID * # MEAS REQ	DAILY 1ST	2ND	3RD	1-HR MAXIMUM VALS > 125 MEAS EST	* MISS DAYS * ASS < STD	ME
	452560034F01	HOUSTON	HARRIS CO	HARRIS ELEM SCHO	82		302 365	230	210	210	20 23 7	7	11
	452560034F01	HOUSTON	HARRIS CO	HARRIS ELEM SCHO	83		86 365	140	130	130	3 12 7	2	11
	452560035H01	HOUSTON	HARRIS CO	9525 CLINTON DRI	82 006		262 365	190	190	190	20 26 9	13	11
	452560035H01	HOUSTON	HARRIS CO	9525 CLINTON DRI	83 006		69 365	140	110	100	1 5 2	6	11
	452560037H02	HOUSTON	HARRIS CO	SITE T 19	82 006		292 365	200	190	190	12 14 5	13	11
	452560037H02	HOUSTON	HARRIS CO	SITE T 19	83 006		71 365	140	130	120	2 10 2	2	11
	452560038H01	HOUSTON	HARRIS CO	8314 PARKHURST	82 006		123 365	220	130	130	3 8 8	6	11
	452560039H01	HOUSTON	HARRIS CO	7834 FUQUA	82 006		306 365	180	170	160	11 12 5	17	11
	452560039H01	HOUSTON	HARRIS CO	7834 FUQUA	83 006		83 365	160	100	090	1 4 4	4	11
	452560047H01	HOUSTON	HARRIS CO	4401 1/2 LANG RD	82 006		283 365	260	190	190	10 12 4	14	11
	452560047H01	HOUSTON	HARRIS CO	4401 1/2 LANG RD	83 006		79 365	130	110	100	1 4 6	1	11
	452560051H01	HOUSTON	HARRIS CO	13826 CROQUET	82 006		313 365	280	190	190	25 27 6	19	11
	452560051H01	HOUSTON	HARRIS CO	13826 CROQUET	83 006		82 365	130	120	110	1 4 4	4	11
	453910002F01	ODESSA	ECTOR CO	PARKER PARK	82		264 365	130	090	090	1 1 3	10	11
	453910002F01	ODESSA	ECTOR CO	PARKER PARK	83		83 365	070	070	060		6	11
	454190010F01	PORT ARTHUR	JEFFERSON CO	PORT ARTHUR NORT	82		256 365	220	210	180	7 9 6	13	11
	454190010F01	PORT ARTHUR	JEFFERSON CO	PORT ARTHUR NORT	83		59 365	120	090	090		4	11
	454570032F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAN	82 001		251 365	150	140	120	2 2 8	9	11
	454570032F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAN	83 001		78 365	080	080	070		4	11
	454570036F01	SAN ANTONIO	BEXAR CO	DELLVIEW PARK	82 001		315 365	120	120	120		7	11
	454570036F01	SAN ANTONIO	BEXAR CO	DELLVIEW PARK	83 001		87 365	090	070	070		1	11
	454650002F01	SAN PATRICIO CO	SAN PATRICIO CO	WATER STORAGE FA	82 001		270 365	140	100	100	1 1 3	17	11
	454650002F01	SAN PATRICIO CO	SAN PATRICIO CO	WATER STORAGE FA	83 001		80 365	090	080	070		4	11
	454715001F01	SEABROOK	HARRIS CO	SEABROOK INTERME	82		228 365	270	210	200	16 25 1	8	11
	454715001F01	SEABROOK	HARRIS CO	SEABROOK INTERME	83		84 365	140	130	120	2 8 6	2	11
	455070002F01	TARRANT CO	TARRANT CO	BLUE MOUND RD &	82 001		91 365	110	110	100		4	11
	455070003F01	TARRANT CO	TARRANT CO	TARRANT COUNTY (	82 001		85 365	100	100	100		5	11
	455070003F01	TARRANT CO	TARRANT CO	TARRANT COUNTY (	83 001		44 365	070	070	060		6	11
	455170002F01	TEXAS CITY	DALLAS CO	2701 13TH AVE NW	82 001		204 365	120	120	110	12 22 8		

09/15/83

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE

OZONE (PARTS PER MILLION) TEXAS

82-83

OZONE SEASON. JANUARY TO DECEMBER

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

BITE ID	LOCATION	COUNTY	ADDRESS	REP YR	* OZG	* #	* #	VALID MEAS	DAILY REQ	1ST	2ND	1-HR 3RD	MAXIMUM MEAS	* VALS > 125 EST	* MISSED DAYS ASS < STD
450220014F01	AUSTIN	TRAVIS CO	NORTH HILLS DR A	82	001	277	365	120	110	110					16
450220014F01	AUSTIN	TRAVIS CO	NORTH HILLS DR A	83	001	57	365	080	070	070					4
450220014F01	AUSTIN	TRAVIS CO	NORTH HILLS DR A	83	001	15	365	070	060	060					
450330009F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNNI	82	001	258	365	170	160	160	5	7	0		6
450330009F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNNI	83	001	15	365	080	070	070					1
450950003F01	CLUTE	BRAZORIA CO	COBB FIELD NR CO	82		258	365	160	140	130	4	5	6		5
450950003F01	CLUTE	BRAZORIA CO	COBB FIELD NR CO	83		81	365	080	080	080					3
451150025F01	CORPUS CHRISTI	NUECES CO	MHMR	82	001	308	365	130	120	110	1	1	1		13
451150025F01	CORPUS CHRISTI	NUECES CO	MHMR	83	001	84	365	090	080	070					2
451310044H01	DALLAS	DALLAS CO	CITY 44	82	002	308	365	170	160	150	7	7	6		30
451310044H01	DALLAS	DALLAS CO	CITY 44	83	002	88	365	080	080	070					2
451310045F01	DALLAS	DALLAS CO	12532 NUESTRA DR	82	001	311	365	200	170	170	11	12	3		17
451310045F01	DALLAS	DALLAS CO	12532 NUESTRA DR	83	001	82	365	080	070	070					3
451310052H01	DALLAS	DALLAS CO	4230 W ILLINOIS	82	002	218	365	150	120	110	1	1	7		2
451310052H01	DALLAS	DALLAS CO	4230 W ILLINOIS	83	002	89	365	080	070	070					1
451370003F01	DEER PARK	HARRIS CO	BONNETTE JR HI	82		276	365	220	210	190	10	12	7		14
451370003F01	DEER PARK	HARRIS CO	BONNETTE JR HI	83		82	365	120	100	100					4
451420054H01	DENTON CO	DENTON CO	DENTON COUNTY	82	002	158	365	120	100	100					4
451700027F01	EL PASO	EL PASO CO	500 NORTH CAMPBE	82		274	365	110	110	100					8
451700027F01	EL PASO	EL PASO CO	500 NORTH CAMPBE	83		81	365	090	090	090					5
451700036F01	EL PASO	EL PASO CO	LINCOLN SCHOOL	82	001	205	365	120	110	100					13
451700036F01	EL PASO	EL PASO CO	LINCOLN SCHOOL	83	001	88	365	080	080	070					2
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TE	82	001	226	365	140	130	120	2	3	1		11
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TE	83	001	82	365	090	080	080					2
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	82	001	321	365	200	140	140	5	5	5		10
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	83	001	85	365	070	070	060					5
452180001F03	GREGG CO	GREGG CO	AIRPORT NEAR LON	82		309	365	150	130	120	2	2	2		19
452180001F03	GREGG CO	GREGG CO	AIRPORT NEAR LON	83		78	365	090	080	080					5
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	82	001	314	365	180	140	140	8	9	0		13
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	83	001	81	365	150	100	090	1	4	5		2
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	83	001	222	365	100	100	100					

TX-5

09/15/83

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 11

CARBON MONOXIDE (MG/M3)

TEXAS

82-83

METHOD, NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	#OBS	MAX 1-HR OBS>			MAX 8-HR OBS>			METH
						1ST	2ND	40	1ST	2ND	10	
450330009F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNNI	82	6803	8 5	6 1		3 3	3 0		11
450330009F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNNI	83	1312	4 0	2 8		1 6	1 1		11
451310044H01	DALLAS	DALLAS CO	CITY 44	82 002	7226	10 8	9 9		6 0	5 3		11
451310044H01	DALLAS	DALLAS CO	CITY 44	83 002	1662	12 9	7 0		5 0	4 4		11
451310053H01	DALLAS	DALLAS CO	400 NORTH ERVAY	82 002	7435	16 8	15 5		9 3	7 8		11
451310053H01	DALLAS	DALLAS CO	400 NORTH ERVAY	83 002	2119	11 4	10 6		6 6	6 1		11
451700002G01	EL PASO	EL PASO CO	220 SO CAMPBELL	82 003	7052	25 3	24 7		16 4	14 8	10	11
451700027F01	EL PASO	EL PASO CO	500 NORTH CAMPBE	82	6645	21 5	21 2		14 7	12 9	6	11
451700027F01	EL PASO	EL PASO CO	500 NORTH CAMPBE	83	1824	17 1	16 4		12 7	9 2	1	11
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TE	82 001	5868	15 5	14 3		10 2	9 6		11
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TE	83 001	1842	12 5	10 8		7 3	5 8		11
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	82 001	6672	10 2	9 1		4 5	3 9		11
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	83 001	1968	6 8	5 8		3 0	2 8		11
451880003F01	FORT WORTH	TARRANT CO	100 N PECAN	82 001	6076	13 3	13 1		8 4	7 1		11
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	83 001	1874	11 2	10 2		5 4	5 3		11
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	82 001	6071	13 7	12 8		8 9	7 5		11
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	83 001	1934	14 4	13 7		7 1	5 4		11
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RO	82	6587	8 1	6 6		3 7	3 2		11
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RO	83	1867	7 9	6 4		3 6	3 4		11
452560034F01	HOUSTON	HARRIS CO	HARRIS ELEM SCHO	82	7106	18 5	14 4		7 8	7 3		11
452560034F01	HOUSTON	HARRIS CO	HARRIS ELEM SCHO	83	1990	17 5	14 7		8 8	6 7		11
452560035H01	HOUSTON	HARRIS CO	9525 CLINTON DRI	82 006	1789	11 5	11 5		7 5	7 1		21
452560035H01	HOUSTON	HARRIS CO	9525 CLINTON DRI	83 006	1207	13 8	12 7		8 8	5 3		21
452560037H02	HOUSTON	HARRIS CO	SITE T 19	82 006	6781	19 6	17 3		11 9	11 5	3	11
452560037H02	HOUSTON	HARRIS CO	SITE T 19	83 006	1942	15 0	11 5		8 1	6 3		11
452560037H02	HOUSTON	HARRIS CO	SITE T 19	82 006	4991	18 4	15 0		10 2	9 3		21
452560037H02	HOUSTON	HARRIS CO	SITE T 19	83 006	1901	15 0	9 2		7 5	5 6		21
453910002F01	ODESSA	ECTOR CO	PARKER PARK	82	6789	15 5	14 1		6 4	5 5		11
453910002F01	ODESSA	ECTOR CO	PARKER PARK	83	1722	10 6	9 4		4 0	4 0		11
454970036F01	SAN ANTONIO	BEXAR CO	DELLVIEW PARK	82 001	6970	14 4	13 7		7 3	6 9		11
454970036F01	SAN ANTONIO	BEXAR CO	DELLVIEW PARK	83 001	1888	12 7	11 4		5 7	5 2		11
454970036F01	SAN ANTONIO	BEXAR CO	OLD FEDERAL BULK	82 001	7414	14 1	14 0		11 5	9 1	1	11

01/17/84

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE

OZONE (PARTS PER MILLION) TEXAS

83-83

OZONE SEASON JANUARY TO DECEMBER

METHODS. HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DASIBI CORPORATION-14, CHEMILUMINESCENCE RHODAMINE B DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	YR	ORQ	REP	*	#	#	VALID	DAILY	1-HR	MAXIMUM	*	MISS DAYS
											1ST	2ND	3RD	MEAS	EST
450220014F01	AUSTIN	TRAVIS CO	NORTH HILLS DR A	83	001			57	365		080	070	070		4
450220014F01	AUSTIN	TRAVIS CO	NORTH HILLS DR A	83	001			92	365		120	110	100		
450330009F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNNI	83	001			75	365		170	160	150	4	19 3
450950003F01	CLUTE	BRAZORIA CO	COBB FIELD NR CO	83				163	365		150	140	120	2	4 4
451150025F01	CORPUS CHRISTI	NUECES CO	MHMR	83	001			125	365		110	090	090		4
451150025F01	CORPUS CHRISTI	NUECES CO	MHMR	83	001			35	365		100	090	080		
451310044H01	DALLAS	DALLAS CO	CITY 44	83	002			178	365		170	120	110	1	2 0
451310045F01	DALLAS	DALLAS CO	12532 NUESTRA DR	83	001			109	365		090	080	080		3
451310045F01	DALLAS	DALLAS CO	12532 NUESTRA DR	83	001			60	365		150	140	140	4	24 3
451310052H01	DALLAS	DALLAS CO	4230 W ILLINOIS	83	002			180	365		120	120	110		1
451310055H01	DALLAS	DALLAS CO	10501 BONNIE VIE	83	002			82	365		130	120	090	1	4 4
451370003F01	DEER PARK	HARRIS CO	BONNETTE JR HIG	83				161	365		280	180	180	9	19 9
451420054H01	DENTON CO	DENTON CO	DENTON COUNTY	83	002			86	365		150	130	130	4	16 9
451700027F01	EL PASO	EL PASO CO	500 NORTH CAMPBE	83				158	365		100	090	090		8
451700036F01	EL PASO	EL PASO CO	LINCOLN SCHOOL	83	001			176	365		100	100	090		5
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TE	83	001			153	365		110	110	110		2
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	83	001			110	365		070	070	070		6
451880002F01	FORT WORTH	TARRANT CO	MEACHAM FIELD	83	001			58	365		120	120	120		2
452180001F03	GREGG CO	GREGG CO	AIRPORT NEAR LON	83				150	365		110	100	100		12
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (	83	001			163	365		240	230	220	8	17 8
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RD	83				166	365		110	110	110		2
452330029F01	HARRIS CO	HARRIS CO	DYESS PARK	83	001			172	365		210	200	190	13	27 4
452560034F01	HOUSTON	HARRIS CO	HARRIS ELEM SCHQ	83				176	365		290	190	190	12	24 7
452560035H01	HOUSTON	HARRIS CO	9925 CLINTON DRI	83	006			148	365		280	210	210	12	28 9
452560037H02	HOUSTON	HARRIS CO	SITE T 19	83	006			156	365		260	210	200	10	23 0
452560039H01	HOUSTON	HARRIS CO	7834 FUGUA	83	006			171	365		210	210	200	12	25 1
452560046H01	HOUSTON	HARRIS CO	7330 N WAYSIDE	83				44	365		260	220	160	4	33 0
452560047H01	HOUSTON	HARRIS CO	4401 1/2 LANG RD	83	006			164	365		270	200	200	11	24 2
452560051H01	HOUSTON	HARRIS CO	13826 CROQUET	83	006			167	365		190	190	180	14	30 0
453910002F01	ODESSA	ECTOR CO	PARKER PARK	83				154	365		100	090	090		13
454190010F01	PORT ARTHUR	JEFFERSON CO	PORT ARTHUR NORT	83				88	365		120	110	110		5
454570032F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAN	83	001			82	365		080	080	070		4
454570032F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAN	83	001			74	365		110	100	090		

TX-7

KEY

TX-8

OZONE - O ₃ (Units are ppm) High/2nd High 1-hr Averages/Number of Days Over O ₃ Standard*					
REG.	LOCATION/CAMS NUMBER	1980	1981	1982	1983 ⁺
03	AUSTIN, NORTHWEST/3	.13/.13/2	.13/.12/1	.12/.11/0	.12/.12/0
03	AUSTIN, TACB/15	.10/.10/0	--Moved to Channelview on 7/80--		
03	AUSTIN, NORTH OF/25	ND	.13/.12/1** @	.11/.11/0	.09/.09/0
05	CORPUS CHRISTI, URBAN/4	.15/.15/3	.10/.09/0** @	--Moved to W Corpus Christi 9/81--	
05	CORPUS CHRISTI, WEST/4	ND	.11/.09/0** @	.13/.12/1	.11/.11/0
05	CORPUS CHRISTI, DOWNWIND/21	.12/.12/0* @	.10/.09/0** @	--Moved to Odem on 4/81--	
05	ODEM, SAN PATRICIO CTY/21	ND	.13/.12/1 @	.14/.10/1	.10/.09/0*
06	ODESSA/14	.11/.10/0	.10/.10/0	.13/.09/1	.11/.10/0
07	HOUSTON, EAST/1	.34/.27/26	.27/.19/11	.23/.21/20	.29/.26/20
07	ALDINE, HARRIS CTY/8	.22/.21/10* @	.25/.22/23	.18/.14/8	.24/.23/22
07	TEXAS CITY/10	.19/.18/14	.11/.08/0** @	.18/.17/13 @	.16/.13/2**
07	CLUTE/11	.15/.13/1** @	.20/.16/4 @	.16/.14/4** @	.15/.14/4
07	CHANNELVIEW/15	.10/.09/0** @	.26/.23/30* @	.18/.15/5	.11/.11/0
07	DEER PARK/18	ND	.28/.20/12* @	.22/.21/10	.28/.24/17
07	SEABROOK/20	.23/.23/16* @	.21/.19/19	.27/.21/16* @	.25/.25/16*
07	HARRIS COUNTY, NW/26	ND	.26/.22/14 @	.20/.18/12	.21/.20/20
08	DALLAS, NORTH/5	.18/.18/10	.15/.15/4	.20/.17/11	.15/.14/7
08	FORT WORTH, NORTHWEST/13	.16/.15/4	.14/.13/4	.20/.14/5	.17/.12/3
08	FORT WORTH, DOWNTOWN/16	.14/.12/1	.12/.06/0** @	--Ozone Monitor Deactivated 6/81--	
08	HASLET, TARRANT CTY/17	ND	.13/.13/2	.11/.11/0** @	--to Keller 8/82--
08	KELLER, TARRANT CTY/17	ND	ND	.10/.10/0** @	.16/.15/7
08	ARLINGTON/22	.16/.14/3	.11/.11/0** @	--Ozone Monitor Deactivated 6/81--	
09	SAN ANTONIO, NORTH/7	.12/.12/0	.15/.12/1	.12/.12/0	.13/.12/1
09	SAN ANTONIO, DOWNTOWN/18	.12/.11/0	.06/.06/0** @	--Moved to Deer Park 6/81--	
09	BEXAR COUNTY, SOUTHEAST/23	.11/.10/0	.07/.07/0** @	--Moved to NW San Antonio 5/81--	
09	SAN ANTONIO, NORTHWEST/23	ND	.10/.10/0* @	.15/.13/2 @	.14/.11/1
10	BEAUMONT, LAMAR UNIV/2	.18/.17/13 @	--Moved to Downtown Beaumont on 12/80--		
10	BEAUMONT, DOWNTOWN/18	ND	.14/.14/2	.17/.16/5* @	.17/.16/6**
10	WEST ORANGE/9	.18/.17/26 @	.15/.15/5* @	.14/.13/2* @	.13/.10/1*
10	PORT ARTHUR, NORTH/29	ND	.20/.20/4** @	.22/.21/7* @	.13/.12/1**
11	EL PASO, DOWNTOWN/6	.10/.09/0** @	.14/.12/1	.11/.11/0	.12/.10/0
11	EL PASO, EAST/12	.16/.16/7	.09/.09/0** @	--Moved to UTEP El Paso 6/81--	
11	EL PASO, UTEP/12	ND	.13/.12/1** @	.14/.13/2* @	.15/.14/3
11	EL PASO, LINC/30	ND	.13/.12/1** @	.12/.11/0* @	.12/.12/0*
12	GREGG CTY/19	.14/.13/2	.13/.12/1	.15/.13/2	.16/.15/4

- Primary Standard is .12 ppm/hr, not to be exceeded more than once during 3 yr avging. period
- @ Indicates less than 75% data recorded for that year. (1983 not included since data incomplete)
- * Indicates less than 75% data for the "O3 Season"
- ** Indicates less than 50% data for the "O3 Season"
- + Data collected from Jan.-Sept. 30, 1983
- ND Indicates "no data" (CAMS or O₃ Monitor was not in operation at that location)
- "Ozone Season"--April-October each year.
- 2nd High--If 2nd High for that yr. occurred on the same day as the high, the next highest amount from a different date was used.

KEY

LOCAL PROGRAM - 03 (Units are ppm)		High/2nd High 1-hr Averages/Number of Days Over 03 Standard			
REG.	LOCATION/LOCAL PROGRAM	1980	1981	1982	1983 ⁺
07	HOUSTON/CROQUET	.26/.24/28	.25/.20/28*	.28/19/25	.20/.20/29*
07	HOUSTON/LANG	.29/.22/16	.17/.16/12*	.26/.19/10*	.27/.20/14*
07	HOUSTON/FUQUA	.26/.22/26	.23/.21/26	.18/.17/11	.23/.21/21
07	HOUSTON/PARKHURST	.22/.20/24*	.24/.18/12*	.22/.13/3**	Discont'd 5/82
07	HOUSTON/CRAWFORD AT POLK	.27/.26/12	.22/.22/16*	.20/.19/12*	.26/.21/19
07	HOUSTON/CLINTON DRIVE	.35/.30/20	.24/.23/20	.19/.19/20	.34/.28/15
07	HOUSTON/MAC	MONITOR DISCONTINUED @ THIS SITE IN 1978			
07	HOUSTON/WAYSIDE	ND	ND	ND	.26/.23/10*

08	DENTON COUNTY	ND	.15/.14/8	.12/.10/0**	.16/.16/16
08	DALLAS/SUNNYVALE	.11/.10/0	.13/.12/1**	Discontinued 10/80	
08	DALLAS/ILLINOIS	.12/.11/0*	.13/.12/2	.15/.12/1	.17/.16/4
08	DALLAS/MOCKINGBIRD LANE	.14/.13/2	.18/.16/6	.17/.16/7	.17/.15/7
08	DALLAS/BONNIEVIEW	ND	ND	ND	.15/.13/3

• Primary Standard is .12 ppm/hr, not to be exceeded more than once during a 3 yr. avg'g. period

* Indicates less than 75% data for the "O₃ Season"

** Indicates less than 50% data for the "O₃ Season"

+ Data collected from Jan. - Sept. 30, 1982

ND Indicates "no data" (CAMS or O₃ Monitor was not in operation at that location)

"Ozone Season"--April - October of each year.

2nd High--If both the High & 2nd High occurred the same day they resulted in only one recorded violation, so the next highest amount from a different date was then used as the 2nd High for this chart.

QUICK LOOK REPORT

CARDIFF 2000100 (06/2/81)

TEXAS

77-82

EXTENDED NONDISPENSATIVE INTERFERENCE (CODE) CUMULATIVE, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REF	NOBS	MAX 1-HR ODS	MAX 8-HR ODS	DEPTH
						15T 200 40	15T 240	
450170005F01	ARI, INGTUR	TARRANT CO	MUNICIPAL AIRPORT	77	833	3.6 7.1	2.3 1.1	21
450170005F01	ARI, INGTUR	TARRANT CO	MUNICIPAL AIRPORT	78	6361	3.3 3.0	2.7 1.9	21
450170005F01	ARI, INGTUR	TARRANT CO	MUNICIPAL AIRPORT	79	6561	7.5 4.5	2.9 2.9	21
450170005F01	ARI, INGTUR	TARRANT CO	MUNICIPAL AIRPORT	80	4435	2.3 2.2	1.4 1.4	21
450270012F01	AUSTIN	DAVIS CO	TACR HEADQUARTER	77	6275	9.1 8.3	1.6 1.2	21
450270012F01	AUSTIN	DAVIS CO	TACR HEADQUARTER	78	6151	7.9 6.9	2.8 2.4	21
450270012F01	AUSTIN	DAVIS CO	TACR HEADQUARTER	79	4095	7.5 6.6	2.7 2.4	21
450270012F01	AUSTIN	DAVIS CO	17TH & LAVACA	77	4944	11.8 11.0	6.9 6.1	21
450270012F01	AUSTIN	DAVIS CO	17TH & LAVACA	79	4717	14.0 12.9	7.1 6.7	21
450270012F01	AUSTIN	DAVIS CO	17TH & LAVACA	79	5160	13.8 9.3	5.7 4.9	21
450270012F01	AUSTIN	DAVIS CO	HWY 290 EAST	80	1870	8.3 4.4	4.1 4.0	11
450370008F01	BEAUMONT	JEFFERSON CO	CANS 2	80	1410	6.4 4.8	2.4 2.3	11
450370008F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CHURCH	80	1809	6.0 5.2	1.0 2.7	11
450370008F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CHURCH	81	7990	8.4 7.2	5.1 3.6	11
450370008F01	BEAUMONT	JEFFERSON CO	GEORGIA AT CHURCH	82	3717	4.1 3.7	2.2 2.0	11
450450003F01	CLUTE	BRAXTON CO	CORR FIELD BR CO	77	6027	8.9 7.8	1.4 1.2	21
450450003F01	CLUTE	BRAXTON CO	CORR FIELD BR CO	78	3685	7.7 7.3	1.2 1.2	21
450450003F01	CLUTE	BRAXTON CO	CORR FIELD BR CO	79	2914	8.2 7.1	2.1 2.1	21
451150019F01	CORPUS CHRISTI	GUADALUPE CO	261 BRISCOLL	77	5721	10.9 10.8	6.8 1.1	21
451150019F01	CORPUS CHRISTI	GUADALUPE CO	261 BRISCOLL	78	6722	15.4 10.7	5.4 0.1	21
451150019F01	CORPUS CHRISTI	GUADALUPE CO	261 BRISCOLL	79	4062	9.4 8.7	3.5 1.5	21
451150019F01	CORPUS CHRISTI	GUADALUPE CO	261 BRISCOLL	80	916	8.5 3.1	3.3 1.1	21
451310043H01	DALLAS	DALLAS CO	CITY 44	81 002	5702	14.1 13.0	7.0 6.0	11
451310044H01	DALLAS	DALLAS CO	CITY 44	82 002	3424	6.7 6.0	1.9 1.6	11
451310043H01	DALLAS	DALLAS CO	CITY 44	79	1300	8.1 7.6	5.5 4.9	21
451310044H01	DALLAS	DALLAS CO	CITY 44	80	5102	9.9 8.2	5.7 5.1	21
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	77	1135	6.0 5.2	1.1 2.6	11
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	80	7144	6.3 6.2	4.1 3.6	11
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	79	2210	8.4 7.6	1.8 1.5	11
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	77	5787	6.8 6.4	4.9 4.9	21
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	78	6414	8.1 8.5	6.0 4.9	21
451310043F01	DALLAS	DALLAS CO	12512 BUESTRA DR	79	3842	5.2 5.2	3.1 3.0	21
451310047F01	DALLAS	DALLAS CO	PM CONCRETE DIVISION	77	1529	11.2 12.9	8.0 7.1	21
451310047F01	DALLAS	DALLAS CO	PM CONCRETE DIVISION	78	5208	16.3 15.1	6.2 6.1	21
451310051H01	DALLAS	DALLAS CO	400 NORTH FRWAY	81 002	3899	17.4 16.9	8.4 7.1	11
451310051H01	DALLAS	DALLAS CO	400 NORTH FRWAY	82 002	1099	14.0 13.2	7.7 7.4	11
451700002G01	EL PASO	EL PASO CO	2200 CARPENTER	80	1155	14.7 14.1	8.0 7.0	11
451700027F01	EL PASO	EL PASO CO	500 NORTH CARPENTER	80	1129	20.0 18.9	10.9 10.0	11
451700027F01	EL PASO	EL PASO CO	500 NORTH CARPENTER	81	2856	29.1 28.9	10.1 10.0	11

TX-10

QUICK LOOK REPORT

07010 (PARTS PER HIGHLIGHT)

TEXAS

77-87

METHODS: MONITOR VALUES: CHEMILUMINESCENCE-13, ULTRA VIOLET LASER CORPORATION-14, CHEMILUMINESCENCE CORPORATION-15

SITE ID	LOCATION	COUNTY	ADDRESS	RIP	DAILY MAX 1-HR				VALS > .125	PER VALS	TEST	DAILY MAX	TEST	TEST
					VR	OR	3095	1ST	2ND	3RD	PEAK	1ST	2ND	3RD
150070010101	AMARILLO	POTTER CO	7120 RIVER ROAD	80	2692	.096	.086	.079	0	0.0	110	2	11	11
150170005101	ARLINGTON	TARRANT CO	MUNICIPAL AIRPORT	77	820	.059	.058	.058	0	0.0	29	1	11	11
150170005101	ARLINGTON	TARRANT CO	MUNICIPAL AIRPORT	78	8080	.150	.140	.120	2	2.1	335	11	11	11
150170005101	ARLINGTON	TARRANT CO	MUNICIPAL AIRPORT	79	7418	.190	.140	.140	11	12.7	310	6	11	11
150170005101	ARLINGTON	TARRANT CO	MUNICIPAL AIRPORT	80	7986	.160	.140	.110	1	1.2	333	7	11	11
150170005101	ARLINGTON	TARRANT CO	MUNICIPAL AIRPORT	81	1511	.110	.110	.100	0	0.0	117	11	11	11
150220012101	AUSTIN	TRAVIS CO	TACN HEADQUARTER	77	6666	.118	.105	.105	0	0.0	275	1	11	11
150220012101	AUSTIN	TRAVIS CO	TACN HEADQUARTER	78	6437	.110	.110	.110	0	0.0	268	9	11	11
150220012101	AUSTIN	TRAVIS CO	TACN HEADQUARTER	79	1674	.120	.120	.110	0	0.0	146	1	11	11
150220011101	AUSTIN	TRAVIS CO	17TH & LAVACA	77	6842	.110	.105	.104	0	0.0	182	7	11	11
150220011101	AUSTIN	TRAVIS CO	17TH & LAVACA	78	7641	.090	.090	.090	0	0.0	117	3	11	11
150220011101	AUSTIN	TRAVIS CO	17TH & LAVACA	79	6176	.120	.110	.100	0	0.0	251	8	11	11
150220014101	AUSTIN	TRAVIS CO	NORTH HILLS DR A	79	2262	.130	.120	.110	1	1.9	94	1	11	11
150220014101	AUSTIN	TRAVIS CO	NORTH HILLS DR A	80	7117	.130	.130	.120	2	2.5	294	6	11	11
150220014101	AUSTIN	TRAVIS CO	NORTH HILLS DR A	81	7372	.130	.120	.110	1	1.2	306	3	11	11
150220014101	AUSTIN	TRAVIS CO	NORTH HILLS DR A	82	1231	.090	.090	.080	0	0.0	128	4	11	11
150330005101	BEAUMONT	JEFFERSON CO	BOY 290 EAST	80	3189	.100	.100	.090	0	0.0	141	4	11	11
150330005101	BEAUMONT	JEFFERSON CO	CAMP 2	79	3198	.190	.180	.160	7	19.7	120	5	11	11
150330005101	BEAUMONT	JEFFERSON CO	CAMP 2	80	4818	.180	.170	.170	13	21.5	200	4	11	11
150330005101	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNN	80	751	.160	.130	.100	2	26.0	20	2	11	11
150330005101	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNN	81	7442	.140	.140	.120	2	2.1	307	11	11	11
150330005101	BEAUMONT	JEFFERSON CO	GEORGIA AT CUNN	82	1582	.170	.160	.160	4	10.0	146	1	11	11
150420001103	BEAUMONT	BEAUMONT CO	CALAVENAS LAKE	77	1708	.065	.063	.061	0	0.0	70	2	11	11
150420001103	BEAUMONT	BEAUMONT CO	CALAVENAS LAKE	78	6133	.100	.090	.090	0	0.0	257	3	11	11
150420001103	BEAUMONT	BEAUMONT CO	CALAVENAS LAKE	79	6235	.110	.100	.100	0	0.0	251	12	11	11
150420001103	BEAUMONT	BEAUMONT CO	CALAVENAS LAKE	80	7088	.110	.100	.100	0	0.0	325	7	11	11
150420001103	BEAUMONT	BEAUMONT CO	CALAVENAS LAKE	81	2756	.070	.070	.070	0	0.0	115	2	11	11
150750101103	CANFORD CO	CANFORD CO	WATER PURIFICATION	79	1720	.100	.100	.090	0	0.0	162	4	11	11
150750101103	CANFORD CO	CANFORD CO	WATER PURIFICATION	80	876	.060	.050	.050	0	0.0	16	0	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	77	7128	.185	.176	.152	4	4.4	292	7	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	78	6405	.180	.160	.150	13	17.4	260	7	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	79	5711	.220	.210	.190	21	33.1	230	2	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	80	1600	.150	.120	.120	1	2.0	187	1	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	81	5865	.200	.160	.150	4	6.0	239	7	11	11
150950001101	CLUTE	WPAZORIA CO	COMM FIELD DR CO	82	2615	.160	.130	.120	2	6.1	115	2	11	11
151150012101	COOPER'S CHURCH	WHEELER CO	261 WHEELER	77	6794	.149	.134	.125	3	1.7	284	14	11	11
151150012101	COOPER'S CHURCH	WHEELER CO	261 WHEELER	78	7868	.160	.160	.150	5	5.5	325	10	11	11
151150012101	COOPER'S CHURCH	WHEELER CO	261 WHEELER	79	5975	.140	.120	.120	1	1.5	241	7	11	11
151150012101	COOPER'S CHURCH	WHEELER CO	261 WHEELER	80	6761	.150	.150	.130	3	1.8	282	8	11	11

TX-11

QUICK LOOK REPORT

NOZUF (PARTS PER MILLION)

TEXAS

77-82

MTTH0001 NOZUF VALUOS CHEMILUMINESCENCE-13, BLIPA M0001 PASO1 CORPORATION-14, CHEMILUMINESCENCE PROPRIETOR R 01-15

STY ID	LOCATID	COUNTY	ADDRESS	YR	HRG	NOZUF	DAILY MAX	1-HR	VALS > .12%	NOZUF VALUO	RESID DAYS	ASL < STD	RE
						1ST	2ND	3RD	MEAS	1.51	DAILY MAX		
451150019F01	CORPUS CHRISTI	BUFCEB CO	261 DRISCOLL	81	001	1843	.100	.090	.090	0	0.0	74	7
451150022F01	CORPUS CHRISTI	BUFCEB CO	WEST GUTH PARK	77		539	.064	.055	.052	0	0.0	21	2
451150022F01	CORPUS CHRISTI	BUFCEB CO	WEST GUTH PARK	78		7479	.150	.140	.130	4	4.5	311	12
451150022F01	CORPUS CHRISTI	BUFCEB CO	WEST GUTH PARK	79		6052	.140	.120	.120	1	1.5	241	5
451150022F01	CORPUS CHRISTI	BUFCEB CO	WEST GUTH PARK	80		6631	.170	.170	.160	0	0.0	277	8
451150022F01	CORPUS CHRISTI	BUFCEB CO	WEST GUTH PARK	81		2109	.100	.090	.090	0	0.0	92	1
451150025F01	CORPUS CHRISTI	BUFCEB CO	PHHP	81		1367	.110	.090	.090	0	0.0	50	2
451150025F01	CORPUS CHRISTI	BUFCEB CO	PHHP	82		3117	.110	.090	.090	0	0.0	136	5
451110044H01	DALLAS	DALLAS CO	CITY 44	79		6147	.190	.150	.150	6	6.5	256	7
451110044H01	DALLAS	DALLAS CO	CITY 44	80		7151	.140	.130	.120	2	2.3	101	11
451110044H01	DALLAS	DALLAS CO	CITY 44	81		7970	.180	.150	.140	6	6.4	332	11
451110044H01	DALLAS	DALLAS CO	CITY 14	82		1632	.160	.130	.130	2	4.0	151	15
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	77		6722	.195	.180	.181	11	11.1	272	10
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	78		7609	.140	.130	.120	2	2.1	314	8
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	79		7910	.170	.170	.150	11	12.1	321	4
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	80		8072	.180	.160	.150	10	12.7	282	7
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	81	001	6438	.150	.130	.130	4	5.1	279	7
451110045F01	DALLAS	DALLAS CO	12512 BULSTRA DR	82	001	1156	.200	.180	.130	4	10.0	142	10
451110047F01	DALLAS	DALLAS CO	84 CORPUS CHRISTI	77		4882	.110	.121	.110	1	1.0	201	7
451110047F01	DALLAS	DALLAS CO	84 CORPUS CHRISTI	78		5152	.110	.100	.100	0	0.0	222	11
451110052H01	DALLAS	DALLAS CO	4210 S. LELAND	80		4094	.120	.099	.090	0	0.0	179	1
451110052H01	DALLAS	DALLAS CO	4210 S. LELAND	81	002	3001	.130	.130	.120	2	2.2	311	0
451110052H01	DALLAS	DALLAS CO	4210 S. LELAND	82	002	3616	.150	.120	.120	1	2.1	151	0
451120047H01	DALLAS CO	DALLAS CO	6000 CREEK AVE	79		1440	.130	.120	.120	1	1.2	100	5
451120047H01	DALLAS CO	DALLAS CO	6000 CREEK AVE	80		1719	.110	.100	.090	0	0.0	152	4
451120047H01	DALLAS CO	DALLAS CO	6000 CREEK AVE	81		1572	.130	.120	.120	1	1.0	75	0
451170001F01	DIEN PARK	HARRIS CO	DIEN PARK DR	81		1311	.280	.200	.170	12	12.6	134	4
451170001F01	DIEN PARK	HARRIS CO	DIEN PARK DR	82		1169	.190	.140	.090	2	5.1	137	4
451420054H01	DIEN PARK CO	DIEN PARK CO	DIEN PARK COUNTY	81	002	7654	.150	.140	.140	0	10.1	117	4
451420054H01	DIEN PARK CO	DIEN PARK CO	DIEN PARK COUNTY	82	002	1380	.120	.100	.100	0	0.0	158	4
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	77		7944	.140	.140	.137	5	5.1	112	15
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	78		7761	.160	.130	.130	3	1.4	125	10
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	79		7810	.130	.120	.110	1	1.1	122	4
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	80		9042	.100	.100	.090	0	0.0	125	1
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	81		7862	.140	.120	.120	1	1.1	129	1
451700027F01	FL. PASO	FL. PASO CO	500 HURTH CAMPUS	82		2911	.110	.100	.100	0	0.0	126	1
451700027F01	FL. PASO	FL. PASO CO	6950 ALABAMA AVE	77		8059	.157	.139	.121	2	2.1	144	
451700027F01	FL. PASO	FL. PASO CO	6950 ALABAMA AVE	78		7690	.160	.150	.140	6	6.4	121	16
451700027F01	FL. PASO	FL. PASO CO	6950 ALABAMA AVE	79		6959	.180	.170	.150	2	0.3	230	8

TX-12

OZONE (PARTS PER BILLION) TEXAS

77-03

STATIONS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET RADIOMETER COMBINATION-14, CHEMILUMINESCENCE RADIOMETER-15

SITE ID	LOCATION	COUNTY	ADDRESS	REF YR ORG	DAILY MAX 1-HR VALS > .125			HHR VALS DAILY MAX	MIS DAYS
					1ST	2ND	3RD		
451700026F01	EL PASO	EL PASO CO	6950 ALAMEDA AVE RD	7029	.160	.160	.130	7	6.5
451700028F01	EL PASO	EL PASO CO	6950 ALAMEDA AVE	81	.090	.090	.090	0	0.0
451700036F01	EL PASO	EL PASO CO	LINCOLN SCHOOL	81	.130	.120	.110	1	4.1
451700038F01	EL PASO	EL PASO CO	LINCOLN SCHOOL	82	.090	.080	.080	0	0.0
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TX	81	.130	.120	.110	1	2.6
451700037F01	EL PASO	EL PASO CO	UNIVERSITY OF TX	82	.140	.120	.120	1	1.5
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	77	.179	.161	.161	9	10.5
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	78	.150	.140	.130	3	1.2
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	79	.160	.150	.140	6	7.4
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	80	.160	.150	.140	4	4.2
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	81 001	.140	.130	.130	4	4.7
451880002F01	FORT WORTH	TARRANT CO	HEACMAN FIELD	82 001	.130	.120	.110	1	2.2
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	77	.163	.136	.131	3	3.9
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	78	.120	.120	.100	0	0.0
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	79	.170	.160	.150	8	8.4
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	80	.140	.110	.110	1	1.2
451880003F01	FORT WORTH	TARRANT CO	100 N. PECAN	81	.120	.080	.060	0	0.0
452180001F03	GREGG CO	GREGG CO		77	.162	.151	.149	9	13.1
452180001F03	GREGG CO	GREGG CO		78	.160	.120	.120	1	1.2
452180001F03	GREGG CO	GREGG CO		79	.150	.110	.110	1	1.5
452180001F03	GREGG CO	GREGG CO		80	.140	.130	.120	2	2.5
452180001F03	GREGG CO	GREGG CO		81	.110	.120	.120	1	1.2
452180001F03	GREGG CO	GREGG CO		82	.130	.120	.110	1	2.2
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (77	8429	.270	.258	.251	23	11.1
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (78	7232	.210	.210	.210	13	11.3
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (79	7607	.240	.210	.210	10	45.0
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (80	7387	.220	.210	.180	10	16.6
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (81	7311	.250	.220	.200	23	25.0
452330024F01	HARRIS CO	HARRIS CO	4510 ALDINE RD (82	7510	.140	.100	.100	1	2.3
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RD 88	889	.100	.090	.080	0	0.0
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RD 81	8025	.260	.210	.210	10	40.1
452330026F01	HARRIS CO	HARRIS CO	1401A SHELTON RD 82	2095	.190	.110	.130	1	0.0
452330027J02	HARRIS CO	HARRIS CO	THURALL	80	.211	.191	.177	9	47.4
452330028J02	HARRIS CO	HARRIS CO	ROSE HILL	80	.222	.201	.187	9	10.1
452330029F01	HARRIS CO	HARRIS CO	DYESS PARK	87	.260	.220	.207	17	30.8
452330029F01	HARRIS CO	HARRIS CO	DYESS PARK	82	.180	.170	.150	5	12.0
452560007H01	HARRIS CO	HARRIS CO	HEALTH DEPT	78	.160	.150	.140	3	28.5
452560034F01	HARRIS CO	HARRIS CO	HARRIS FIELD RD 77	7539	.222	.220	.210	20	21.3

TX-13

1/4/83

470 C (PARTS PER HIGHLIGHT) TEXAS

17-87

P8 120

METHODS: HOURLY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET RADIOMETER CORPORATION-14, CHEMILUMINESCENCE TUBES 1 & 2-15

SITE ID	LOCATION	COUNTY	ADDRESS	REF. TR. NO.	DAILY PAX 1-HR				VALS > 1.0%	EST. DAILY PAX	EST. DAYS	
					3005	1ST	2ND	3RD			ASS. < STD.	
154910002F01	INDERSA	ECTOR CO	PARKER PARK	81	6691	.100	.100	.090	0	0.0	271	10
154910002F01	INDERSA	ECTOR CO	PARKER PARK	82	1172	.130	.090	.070	1	2.7	113	1
54190018F01	PORT ARTHUR	JEFFERSON CO	PORT ARTHUR HORT	81	2776	.200	.200	.150	4	12.6	114	6
54190010F01	PORT ARTHUR	JEFFERSON CO	PORT ARTHUR HORT	82	1561	.220	.100	.150	4	9.1	157	4
54250001303	POTTER CO	POTTER CO	DAY DIXON FARM	80	1631	.082	.076	.075	0	0.0	67	0
154570032F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAV	81	3720	.100	.100	.100	0	0.0	151	5
154570012F01	SAN ANTONIO	BEXAR CO	LEON VALLEY GRAV	82	2113	.110	.090	.090	0	0.0	91	1
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	77	7100	.146	.141	.130	5	6.4	281	2
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	78	7451	.130	.120	.110	1	1.2	299	10
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	79	6392	.120	.100	.100	0	0.0	261	6
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	80	7836	.120	.120	.120	0	0.0	321	6
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	81 001	8114	.150	.120	.120	1	1.0	113	4
154570036F01	SAN ANTONIO	BEXAR CO	DELEVIER PARK	82 001	1357	.100	.100	.090	0	0.0	111	1
154570041F01	SAN ANTONIO	BEXAR CO	PARKING LOT	77	5921	.124	.123	.110	0	0.0	244	5
154570041F01	SAN ANTONIO	BEXAR CO	PARKING LOT	78	7562	.110	.100	.090	0	0.0	111	12
154570041F01	SAN ANTONIO	BEXAR CO	PARKING LOT	79	7270	.110	.110	.100	0	0.0	101	5
154570041F01	SAN ANTONIO	BEXAR CO	PARKING LOT	80	8097	.120	.110	.110	0	0.0	111	0
154570041F01	SAN ANTONIO	BEXAR CO	PARKING LOT	81	2769	.060	.060	.060	0	0.0	116	1
154650002F01	SAN PATRICIO CO	SAN PATRICIO CO	WATER STORAGE FA	81	4675	.130	.120	.120	1	1.8	197	4
154650002F01	SAN PATRICIO CO	SAN PATRICIO CO	WATER STORAGE FA	82	1067	.100	.100	.090	0	0.0	124	11
154715001F01	SEABROOK	HARRIS CO	SEABROOK INTERNE	78	416	.090	.080	.070	0	0.0	19	0
154715001F01	SEABROOK	HARRIS CO	SEABROOK INTERNE	79	6181	.230	.220	.210	42	57.1	262	0
154715001F01	SEABROOK	HARRIS CO	SEABROOK INTERNE	80	5506	.230	.230	.220	16	25.9	221	1
154715001F01	SEABROOK	HARRIS CO	SEABROOK INTERNE	81	7090	.210	.190	.170	20	24.9	207	7
154715001F01	SEABROOK	HARRIS CO	SEABROOK INTERNE	82	2646	.270	.170	.160	5	16.9	107	4
155070002F01	TARRANT CO	TARRANT CO	LEON VALLEY GRAV	81	5737	.130	.130	.120	2	1.0	232	11
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	77	5596	.236	.221	.199	11	17.0	225	1
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	78	7800	.310	.230	.180	21	25.4	127	1
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	79	7630	.230	.210	.200	17	19.0	119	0
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	80	6469	.190	.180	.180	14	17.0	281	8
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	81	1170	.110	.080	.080	0	0.0	47	1
155170002F01	TEXAS CITY	GALVESTON CO	2701 11TH AVE. NO	82	1599	.150	.110	.110	4	20.2	72	1
155210001F01	TRAVIS CO	TRAVIS CO	OPTIMIST BASEBALL	81	1074	.130	.120	.110	1	2.9	121	14
155210001F01	TRAVIS CO	TRAVIS CO	OPTIMIST BASEBALL	82	1760	.110	.090	.090	0	0.0	150	15
155340002F01	VICTORIA	VICTORIA CO		77	964	.174	.134	.115	2	18.6	49	2
155350002F01	VICTORIA	VICTORIA CO		77	991	.150	.130	.130	1	22.4	40	0
155370002F01	WACO	MC LEODIAN CO	114TH ST WASH PK	77	7114	.126	.117	.117	1	1.2	299	14
155370002F01	WACO	MC LEODIAN CO	114TH ST WASH PK	78	6677	.120	.120	.110	0	0.0	277	0

TX-14

01/14/81

NATIONAL AERONAUTICS DATA BANK
QUICK LOOK REPORT

PAGE 129

OZONE (PARTS PER HUNDRED) TEXAS

77-82

METHODS: HUMIDITY VALUES CHEMILUMINESCENCE-11, ULTRA VIOLET DENSITY CORPORATION-14, CHEMILUMINESCENCE HUMIDIMETER W DYE-15

SITE ID	LOCATION	COUNTY	ADDRESS	WSP YR ORG	DAILY MAX 1-HR			VALS > 1ST	DAILY MAX	VALS 1ST	DAILY MAX	MISS DAYS	ASS'N STD	FF
					1ST	2ND	3RD							
455370001F01	WACO	MC LENNAN CO	N 4TH ST WASH PK 79	7104	.120	.080	.000	0	0.0	66	1	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 77	6014	.164	.160	.140	11	15.9	247	9	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 78	7198	.200	.170	.170	14	16.6	296	15	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 79	7140	.200	.150	.150	10	29.0	125	4	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 80	6366	.180	.170	.170	26	16.4	250	7	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 81	5830	.150	.150	.140	5	7.5	237	10	11		
455400001F01	WEST ORANGE	ORANGE CO	2700 AUSTIN AVE 82	7703	.140	.130	.100	2	4.7	154	5	11		

TX-15

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

File Code

FEB 12 1980

Mr. Bill Stewart, P.E.
Executive Director
Texas Air Control Board
6330 Hwy. 290 East
Austin, Texas 78723

Dear Mr. Stewart:

In a telephone conversation on February 1, 1980, Dr. Allyn Davis of my staff discussed with you requirements for the Texas State Implementation Plan (SIP) for the control of particulate matter at the Armco facility in the Houston 1 nonattainment area. On February 5, 1980, Mr. Jack Divita met with you and discussed this subject with you in more detail.

In reviewing the Texas particulate regulations subsequent to your certification of reasonably available control technology (RACT), it is EPA's opinion that these regulations do not fully constitute RACT for the Armco facility. I have enclosed a document which sets forth suggested levels of control for the various emission points at the Armco facility. I would appreciate your review of this document as soon as possible. I would also like to arrange for a meeting between our staffs, within the next two weeks, to reach an agreement on the level of control required for the Armco facility.

My staff is ready to assist you in developing corrections to this portion of the SIP as soon as you have completed your review. If my staff or I can be of any assistance to you regarding this matter, please do not hesitate to contact me.

Sincerely,

Very truly yours,

Adlene Harrison
Regional Administrator

cc: Mr. John Blair
Chairman, TACB

bcc: Ed Reich (DSSE) (/WEncls)
Diana Dutton (6AE) "

6AAH:JSDiv13:mkux72742:2 12 80

		CONCURRENCES						
SYMBOL	6AAH	6AGC						
SURNAME	Davis	ESW						
DATE	2	12/12/80						

could be renegotiated. The evidence also included a review of the nonattainment areas which could be covered in this plan and EPA has determined that these are commensurate with the plan that the Agency considers to be appropriate. As stated in the August 1, 1979 notice, conditional approval could be provided that the draft SIP contain:

An analysis of the impact of nontraditional sources on each of the attainment areas in question and a reasonable schedule to adopt controls if analysis indicated the need for such.

An analysis of the impact of nontraditional sources on the nonattainment areas in question and a reasonable schedule to conduct studies to control nontraditional sources.

On December 13, 1979, the State submitted a workplan for the development of the control strategies for the areas which would indicate attainment of the primary standards by December 1982 and the secondary standards by December 1987, and submitted a schedule for the completion of the major steps in their development.

Therefore, EPA is conditionally approving the TSP plans for San Benito, Del Rio, Corpus Christi 1, Corpus Christi 2, Dallas 1, Dallas 3, and El Paso based upon the State meeting the following schedule:

March 3, 1980—Draft SIP revision supplement submitted to EPA.
May 5, 1980—Public hearing completed.

August 1, 1980—Adopt revision, revised Regulation I as it pertains to control of nontraditional sources, if necessary, and submit to EPA.

Elsewhere in today's Federal Register, EPA is soliciting public comment on the acceptability of this schedule. While the State is developing these revisions, Regulation I as being acted on today, will apply to these areas.

For the remaining six areas for which the State developed control strategies (i.e., Aldine, Houston 1, Dallas 2, Fort Worth 1, El Paso 1, and El Paso 2), the August 1, 1979 notice identified several problems in the demonstrations of attainment.

First, EPA noted that the State had developed an emissions/air quality relationship that was not consistent with any EPA guideline for air quality

estimates, and that the State must submit a demonstration indicating that their method would result in at least as stringent reductions as the linear rollback method, and that the nonattainment areas for which this method was used showed no significant industrial influence. In response to this condition, the State submitted information showing the derivation of their method which verified that it resulted in reductions at least as stringent as the linear rollback method. Therefore, EPA accepts the State's method for determining the required percentages of reduction as being equivalent to EPA's accepted method.

Secondly, EPA noted that an error had been made in the calculation of emissions from unpaved parking lots which affected the demonstrations of attainment for all but one of these six nonattainment areas. The State has revised their calculation of this factor in accordance with the method discussed in EPA's detailed report on the Texas SIP.

Thirdly, EPA identified a number of errors in the individual control strategies for several of the nonattainment areas. In their correspondence of November 21, 1979, the State submitted revised control strategies for these areas which corrected these errors.

In the August 1, 1979 notice, EPA specified that for certain of these TSP nonattainment areas showing significant industrial influence, dispersion modelling must be used rather than linear rollback in the attainment demonstrations. The State indicated, in their correspondence of September 14, 1979, difficulty in complying with this requirement, since dispersion models have limited application in areas that are predominantly influenced by fugitive dust sources due to such problems as characterization of such sources into traditional classifications, etc. In addition, the State has certified that Regulation I is equivalent to RACT, and is therefore precluded from developing further stationary source controls, since all reasonable controls are presently required. Therefore, in the State's judgment, the requirement for modelling appears to be unreasonable, since the nonattainment problem in these areas is of a localized nature and predominantly due to fugitive dust sources.

EPA acknowledges the difficulties associated with the use of dispersion modelling in areas primarily influenced by fugitive dust sources. Therefore, since the state has certified that Regulation I is equivalent to RACT, and has committed to control fugitive dust sources to the extent needed to

demonstrate RFP and attainment through Regulation I as it is being approved today, EPA is eliminating the requirement for dispersion modelling in those TSP nonattainment areas identified as requiring such in the August 1, 1979 notice.

EPA concurs with the State's findings and actions on these nonattainment areas and the corrective action taken in regard to Regulation I. EPA is, hereby, approving the Texas plan for the TSP nonattainment areas of Aldine, Dallas 2, Fort Worth 1, El Paso 1, and El Paso 2. For the Houston 1 TSP nonattainment area, EPA requires further assurance that RACT is in place for certain industrial categories. Therefore, EPA is taking no action on the control strategy for the Houston 1 area until the Agency is assured that RACT is in place for these categories.

New Source Review

In the proposed rulemaking, EPA reviewed the provisions of Regulation VI, "Control of Air Pollution by Permit for New Construction or Modification," which was revised by the State so as to incorporate the requirements of Section 173 of the Act into its permit system. In that notice (see 44 FR 45209 Column 3 through 44210 Column 1) EPA noted three issues on which the State's regulation deviated from the provisions of Section 173 of the Act. In their correspondence of August 30, 1979, and through negotiation, the State has committed to the following corrective actions, to be taken by August 1, 1980 except as noted:

1. Regarding Subchapter 131.08.00.003(a)(13) the State has committed to revise the rule to provide for application of offsets in all nonattainment areas designated as such after March 3, 1978.

The offsets provision can remain in effect for no longer than nine months from the date of the area's nonattainment designation while the state develops and submits a nonattainment plan. If the state submits a plan within the nine month period, the offset policy can continue for an additional six months from the plan due date or until EPA takes action to approve or disapprove the plan, whichever comes first. However, if the state fails to submit a plan before the nine month period expires, the offset policy will expire when EPA acts to impose the construction moratorium specified in Section 170(a)(2)(F) of the Clean Air Act.

2. Regarding Subchapters 131.07.001 (29) and (30) of the general rules, the State has agreed to revise the definitions of "major source" and "major

*The document was used in the Texas SIP to demonstrate attainment among the non-attainment areas within the State. For example, the two nonattainment areas in the State are Corpus Christi 1 and Corpus Christi 2.

March 25, 1980 pg 19235

Region VII

Nebraska

09/08/82

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 26

CARBON MONOXIDE (MG/M3)

NEBRASKA

79-82

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REP. YR ORG	#OBS	MAX 1-HR OBS>			MAX 8-HR OBS>			METH
						1ST	2ND	40	1ST	2ND	10	
280640001J03	CUSTER CO	CUSTER CO	CONSTOCK HWY 106	79	6380	18.2	2.1		2.8	.5		11
280640001J03	CUSTER CO	CUSTER CO	CONSTOCK HWY 106	80	1670	5.8	.3		1.2	.3		11
280660001J05	DAKOTA CO	DAKOTA CO	NEBRASKA SITE	80	5432	3.0	2.8		2.2	2.1		11
280660001J05	DAKOTA CO	DAKOTA CO	NEBRASKA SITE	81	2701	1.0	1.0		.9	.8		11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	79	7675	16.6	16.4		12.0	10.8	3	11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	80	8460	22.0	20.1		12.1	11.4	3	11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	81	8223	60.3	50.4	2	29.2	20.8	9	11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	82	2151	25.5	17.4		8.2	7.0		11
281560010G01	LINCOLN	LANCASTER CO	51ST. AND COLBY	79	7182	17.9	17.1		14.4	12.6	3	11
281560010G01	LINCOLN	LANCASTER CO	51ST. AND COLBY	80	6534	11.8	11.8		8.5	8.4		11
281560010G01	LINCOLN	LANCASTER CO	51ST. AND COLBY	81 002	8509	29.2	28.4		24.9	22.2	9	11
281560010G01	LINCOLN	LANCASTER CO	51ST. AND COLBY	82 002	2076	18.5	17.3		9.7	7.5		11
281880024G01	OMAHA	DOUGLAS CO	11TH & DODGE	79	8002	21.3	17.3		14.3	10.9	2	11
281880024G01	OMAHA	DOUGLAS CO	11TH & DODGE	80	5290	11.2	10.4		8.2	7.0		11
281880031G01	OMAHA	DOUGLAS CO	30TH & FOWLER	79	8034	23.8	23.6		17.3	16.9	10	11
281880035G01	OMAHA	DOUGLAS CO	METRO-TECH CAMPUS	80	7488	23.2	23.0		7.7	6.8		11
281880035G01	OMAHA	DOUGLAS CO	METRO-TECH CAMPUS	81 003	8391	13.5	10.9		7.6	6.4		11
281880037G01	OMAHA	DOUGLAS CO	7425 WEST DODGE	81	5556	20.1	19.6		12.9	10.9	5	11
281880037G01	OMAHA	DOUGLAS CO	7425 WEST DODGE	82	1943	12.3	11.7		10.5	10.2	1	11

01706783

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 21

CARBON MONOXIDE (MG/M3)

NEBRASKA

80-82

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	DOBS	MAX 1-HR OBS>			MAX 8-HR OBS>			METH
						1ST	2ND	40	1ST	2ND	10	
280640001J03	CUSTER CO	CUSTER CO	CONSTOCK HWY 106	80	1670	8.8	.3		1.2	.3		11
280660001J05	DAKOTA CO	DAKOTA CO	NEBRASKA SITE	80	5437	3.0	2.8		2.2	2.1		11
280660001J05	DAKOTA CO	DAKOTA CO	NEBRASKA SITE	81	2701	1.0	1.0		.9	.8		11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	80	8460	22.0	20.1		12.1	11.4	3	11
281560007G01	LINCOLN	LANCASTER CO	2215 O ST	81	8223	60.3	50.4	1	29.2	20.8	9	11
281880007G01	LINCOLN	LANCASTER CO	2215 O ST	82	6430	25.5	17.4		8.2	7.0		11
281560010G01	LINCOLN	LANCASTER CO	51ST, AND COLBY	80	6534	11.8	11.8		8.5	8.4		11
281560010G01	LINCOLN	LANCASTER CO	51ST, AND COLBY	81 002	8509	29.2	28.4		24.9	22.2	9	11
281560010G01	LINCOLN	LANCASTER CO	51ST, AND COLBY	82 002	6433	18.5	17.3		9.7	7.5		11
281880024G01	OMAHA	DOUGLAS CO	11TH & DODGE	80	5290	11.2	10.4		8.2	7.0		11
281880035G01	OMAHA	DOUGLAS CO	METHU-TECH CAMPUS	80	7488	23.2	23.0		7.7	6.8		11
281880035G01	OMAHA	DOUGLAS CO	METHU-TECH CAMPUS	81 003	8391	13.8	10.9		7.6	6.4		11
281880035G01	OMAHA	DOUGLAS CO	METHU-TECH CAMPUS	82 003	6268	13.2	9.8		8.4	6.0		11
281880037G01	OMAHA	DOUGLAS CO	7425 WEST DODGE	81	5556	20.1	19.6		12.9	10.9	5	11
281880037G01	OMAHA	DOUGLAS CO	7425 WEST DODGE	82	6256	22.7	21.3		20.8	17.9	11	11

NE-3

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 52**

[A-7-FRC 1649-8]

Approval and Promulgation of State Implementation Plans: Nebraska**AGENCY:** Environmental Protection Agency**ACTION:** Notice of Availability and Advance Notice of Rulemaking

SUMMARY: The State of Nebraska submitted State Implementation Plan (SIP) revisions for the Omaha carbon monoxide (CO), and Douglas, Cass and Sarpy County total suspended particulate (TSP) nonattainment areas, as required by the Clean Air Act Amendments of 1977, on September 25, 1980. Interested persons are invited to examine the Nebraska SIP revisions and submit comments. Comments are also solicited on what EPA's final action should be.

EPA's proposed action on the submitted SIP revisions will appear in a Notice of Proposed Rulemaking, to be published at a later date.

DATES: The period for receiving comments on the state's submittal and what EPA's final action should be will extend from this date of publication until 30 days after publication of the proposed rulemaking.

ADDRESSES: Comments should be addressed to Eloise Reed, Air Support Branch, Environmental Protection Agency, 324 East 11th Street, Kansas City, Missouri 64108.

The Nebraska submittals may be examined during normal business hours at the above address and also at the following locations.

Environmental Protection Agency,

Public Information and Reference Unit, Room 2922, 401 M Street, S.W., Washington, D.C. 20460.

Nebraska Department of Environmental Control, 301 Centennial Mall, Lincoln, Nebraska 68509.

Lincoln-Lancaster County Air Pollution Control Agency, 2200 St. Mary's Avenue, Lincoln, Nebraska 68502.

Permits and Inspection Division, Housing and Community Development Department, 1819 Farnam, Room 402, Omaha, Nebraska 68102.

Lincoln-Lancaster County Planning Commission, 55 South Tenth Street, Lincoln, Nebraska 68508.

Omaha-Council Bluffs Metropolitan Area Planning Agency, 7000 West Center Road, Omaha, Nebraska 68106.

FOR FURTHER INFORMATION CONTACT: Eloise Reed, (816) 374-3791 (ETS 758-3741).

SUPPLEMENTARY INFORMATION: The SIP revisions were submitted, as required by Section 172 of the Clean Air Act Amendments of 1977, to provide for the attainment of the National Ambient Air Quality Standards (NAAQS) in areas which are currently nonattainment.

This notice supersedes the Notice of Availability on the original final SIP submission for Omaha CO which was published on August 15, 1979, (44 FR 47777). No comments were received. A withdrawal notice appears separately in the Federal Register. The Omaha CO plan was originally submitted on May 8, 1979, and supplemented with a schedule for further plan development and air quality dispersion modeling on July 9, 1979. On September 20, 1979, Governor Charles Thone informed EPA that the plan was being revised further and requested that EPA take no formal action on the original plan. The purpose of this notice is to announce that the revisions have been formally submitted and are available for public inspection. The public is encouraged to make written comments. A description of the revisions and the proposed EPA action on the revisions will appear in the Federal Register as a notice of proposed rulemaking at a later date.

Dated, October 22, 1980.

Kathleen Camin,
Regional Administrator.

(FR Doc. 80-34332 Filed 11-3-80; 8:45 am)
BILLING CODE 6560-18-M

INTERSTATE COMMERCE COMMISSION**49 CFR Ch. X**

[Ex Parte No. 358 (Sub-No. 1)]

Change of Policy, Railroad Contract Rates; Standards and Procedures**AGENCY:** Interstate Commerce Commission.**ACTION:** Withdrawal of proposed standards and termination of proceeding.

SUMMARY: On April 29, 1980 the Commission published for public comment (see 49 FR 28381) proposed standards and procedures for rail contract rates. Because recent legislation has rendered such standards unnecessary, they are being withdrawn and this proceeding is being terminated.

EFFECTIVE DATE: November 4, 1980

FOR FURTHER INFORMATION CONTACT:
Richard Felder or Jane Mackall, (202) 275-7656

SUPPLEMENTARY INFORMATION: In Ex Parte No. 358F, *Change of Policy, Railroad Contract Rates* (not printed), served November 9, 1978, and in a decision on reconsideration printed at 361 I.C.C. 205 (1979), the Commission adopted a policy of encouraging contract rates by rail carriers and shippers in appropriate circumstances. These decisions made clear that rail contract rates were not considered illegal *per se*, contrary to *dicta* in earlier proceedings.

By notice published in the Federal Register on April 29, 1980 the Commission invited comments on major contract rate issues. However, the Staggers Rail Act of 1980 provides for the filing of contract rates and provides appropriate guidelines. The legislation obviates the need for resolution of many of the issues raised in the notice. Accordingly, it is terminated and the request for comments published at 49 FR 28381 is withdrawn. The contract rates portion of the Act, Section 208, resolves many of the questions which have arisen concerning the filing of contracts. The Commission's rules at 49 C.F.R. §§ 1039.1-1039.4 concerning contract rates will be modified by separate notice.

This is not a significant action adversely affecting the quality of the human environment or the conservation of energy resources.

(49 U.S.C. 10321 and 10713, 5 U.S.C. 553)

Decided: October 23, 1980.

By the Commission, Chairman Gaskins, Vice-Chairman Gresham, Commissioners Clapp, Trantum, Alexis, and Gilliam.

Agatha L. Mergenovich,
Secretary.

(FR Doc. 80-34321 Filed 11-3-80; 8:45 am)
BILLING CODE 7035-01-M

49 CFR Part 1109

[Ex Parte No. 324 (Sub-1)]

Standards and Expeditious Procedures for Establishing Railroad Rates Based on Seasonal, Regional, or Peak-Period Demand for Rail Service**AGENCY:** Interstate Commerce Commission**ACTION:** Withdrawal of proposed rules.

SUMMARY: The Commission withdraws its earlier notice of proposed rulemaking at 45 Fed. Reg. 11142 (1980), which proposed changes in the Commission's rules at 49 C.F.R. 1109.10, which established standards and expeditious procedures designed to promote demand-sensitive railroad rates. The

monitors will be reference or equivalent, sited according to Appendix E to 40 CFR Part 58 and follow the quality assurance procedures of Appendix A to 40 CFR Part 58.

The SIP states that at least one SLAM site will be designated as an episode station for each pollutant in areas required by 40 CFR 51.16.

All SLAMS in the Indiana monitoring system will be operated in accordance with the criteria in Subpart D of 40 CFR Part 58. Each SLAM monitor will meet the siting criteria given in 40 CFR Part 58, Appendix C. Methods used in the SLAMS will be reference or equivalent as defined in 40 CFR Part 58, Appendix C. The quality assurance procedures given in 40 CFR Part 58, Appendix A will be followed when operating SLAMS stations and processing air quality data. The air monitoring system will be reviewed annually and any necessary modifications will be reported to USEPA by July 1 of each year. These annual reviews are necessary to eliminate any unnecessary stations and to correct inadequacies in the network.

The SIP revision includes a description of the proposed NAMS network. This description covers the proposed monitoring locations, sampling and analysis methods, monitoring objectives, and implementation dates.

USEPA has reviewed the submittal and has determined that it meets the requirements of sections 110 and 119 of the Clean Air Act, as amended, and USEPA regulations in 40 CFR Part 58. USEPA is therefore proposing approval of the revised Indiana Air Quality Monitoring Plan.

Interested persons are invited to comment on the revised Indiana SIP and on USEPA's proposed actions. Comments should be submitted to the address listed at the beginning of this Notice. Public comments received on or before March 9, 1981 will be considered in USEPA's final rulemaking. All comments received will be available for inspection at USEPA Region V, Air Programs Branch, 230 South Dearborn Street, Chicago, Illinois, 60604.

Pursuant to the provisions of 5 U.S.C. 552(b) I hereby certify that this proposed rule will not if promulgated, have a significant economic impact on a substantial number of small entities. The action relates only to air quality surveillance to be carried out by one state and will not cause any significant economic impacts.

This Notice of Proposed Rulemaking is issued under the authority of section's 110 and 119 of the Clean Air Act, as amended.

Dated, January 27, 1981.

John McGuire,

Regional Administrator

(R R Doc 81-4431 Filed 2-5-81 8 45 am)

BILLING CODE 6560-38-M

40 CFR Part 52

(A-7-FRL 1747-3)

Approval and Promulgation of State Implementation Plans: Nebraska

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: On September 25, 1980 and July 31, 1979, Governor Charles Thone submitted proposed revisions to the Nebraska State Implementation Plan (SIP) for the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) for total suspended particulates (TSP) and carbon monoxide (CO) in areas of the state which presently exceed the standard. These revisions were submitted to the Environmental Protection Agency (EPA) to meet the requirements of Part D of Title I of the Clean Air Act, as amended in 1977. The notice provides a description of the proposed SIP revisions, summarizes the Part D requirements, compares the revisions to these requirements, identifies major issues in the proposed revisions and suggests corrective actions, where appropriate. Regulations addressing requirements published by EPA on August 7, 1980, affecting new source review in nonattainment areas are also discussed.

EPA invites public comment on these revisions, the identified issues, the suggested corrections, and the question of whether the revision should be approved as submitted by the state, approved after making the suggested corrections, or disapproved.

DATES: An Advance Notice of Proposed Rulemaking published on November 4, 1980 officially opened the comment period on this action. Comments received on or before March 9, 1981, will be considered in EPA's final decision on approval or disapproval of the SIP.

ADDRESSES: Copies of the proposed SIP revision and the accompanying support documents are available for inspection during normal business hours at the following offices:

Environmental Protection Agency,
Public Information and Reference
Unit, Room 2922, 401 M Street, SW,
Washington, D.C. 20460;

Nebraska Department of Environmental Control, 301 Centennial Mall,
Lincoln, Nebraska 68509.

Lincoln-Lancaster County Air Pollution Control Agency, 2200 St. Mary's Avenue, Lincoln, Nebraska 68502;

Permits and Inspection Division,
Housing and Community
Development Department, 1819
Farnam, Room 402, Omaha,
Nebraska 68102;

Lincoln-Lancaster County Planning Commission, 555 South Tenth Street, Lincoln, Nebraska 68508;

Omaha-Council Bluffs Metropolitan Area Planning Agency, 7000 West Center Road, Omaha, Nebraska 68016.

All comments should be directed to Eloise Reed, Environmental Protection Agency, Region VII, Air, Noise and Radiation Branch, 324 E. 11th Street, Kansas City, Missouri 64106.

FOR FURTHER INFORMATION CONTACT: Eloise Reed at (816) 374-3791 (ETS: 758-3791).

SUPPLEMENTARY INFORMATION:

Background

Amendments to the Clean Air Act, enacted in August 1977, Pub. L. No. 95-95, required States to revise their SIPs for all areas where NAAQS had not been attained. The Administrator promulgated lists of these areas on March 3, 1978 (43 FR 8962) and on September 12, 1978 (43 FR 40502). Several areas in Nebraska were designated as nonattainment for total suspended particulates (Douglas, Cass and Sarpy Counties), carbon monoxide (Lincoln and Omaha) and ozone (Omaha). Consequently, the State of Nebraska was required to develop and adopt SIP revisions to bring these areas into compliance with the applicable standards.

Based on the final attainment designations, Nebraska is now submitting plans to attain the primary particulate standard in Douglas, Cass and Sarpy Counties and the carbon monoxide standard in Omaha. Requests from the state of redesignation are discussed in descriptions of the submittals for the appropriate pollutant. EPA is proposing action on these redesignation requests under 40 CFR Part 81 in a separate Federal Register notice. The proposed rulemaking for the Lincoln CO plan appeared at 44 FR 65408. Final action on the Lincoln CO plan will be published at a later date. Due to a change in the federal ozone standard, EPA intends to propose action on the Omaha designation for ozone in a separate notice.

On September 25, 1980 and July 31, 1979, the state also submitted regulatory revisions to the SIP to address attainment and maintenance of NAAQS in designated nonattainment areas. The submitted regulations are Rule 4, "New and Complex Sources, Standards for Performance, Application for Permit When Required," Rule 5A, "Controls for Loading, Conveying, Railroad and Ship Loading at Rock Processing Operations in Cass County," Rule 3, "Permitting and Operating Permits for Existing Sources When Required," and Rule 1, "Definitions." The state was advised of deficiencies to Rule 4, as discussed in this notice, and was proceeding to make the necessary changes. Meanwhile, on August 7, 1980, EPA published regulatory changes concerning new source review in nonattainment areas (45 FR 52676), requiring that states submit SIPs by May 1, 1981, to address these changes. Subsequently, Nebraska's new source review regulation, and Rules 1 and 3, proposed revisions designed to comply with all Part D requirements and with the August 7, 1980 regulations for new source review in nonattainment areas. The revisions are scheduled to go to the hearing on March 6, 1981, along with an air quality modeling report for Omaha and a revision to Rule 6 to represent reasonably available control technology (RACT). EPA's discussion of these corrections to deficiencies is based on the existing regulations as modified by the draft submittal. The proposed approvals of Part D requirements involving these drafts are based on submittal of final regulations substantially unchanged from the drafts. The requirements and criteria these revisions must satisfy are described or referenced in a Federal Register notice published on April 4, 1979 (44 FR 20372) entitled, "General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas," and supplemented on July 2, 1979 (44 FR 38583) August 28, 1979, (44 FR 20372) September 17, 1979 (44 FR 51761), and November 23, 1979. The July 2, 1979 supplement involves, among other things, conditional approval of nonattainment plans.

EPA may conditionally approve a plan where there are minor deficiencies and the state provides assurances that it will submit corrections by specified deadlines. A conditional approval would mean that the restrictions on new major source construction will not apply unless the state fails to submit the necessary SIP revisions by the scheduled dates, or unless the revisions are not approved by EPA.

Conditional approval is a possibility for certain provisions of the Nebraska SIP. However, EPA does not plan to take final action on the SIP until the major deficiency, lack of an approvable new source review regulation, is addressed satisfactorily. The state has indicated that corrections to the deficiencies in its new source review regulation can be made by May 15, 1981. If the state adopts and submits the identified new source review corrections, EPA can take final action on the SIP, including conditional approvals as discussed in this notice, and remove the growth restrictions if the SIP is approved. The growth restrictions will remain in effect in primary standard nonattainment areas until such action is taken.

The "General Preamble" and its supplements relating to approval of implementation plans for nonattainment areas, are incorporated herein by reference.

Terms. As used in this notice, a "design value" is the level of existing air quality used as a basis for determining the amount of change in pollutant emissions which is necessary to attain a desired air quality level. "Rollback" is a proportional model used to calculate the degree of improvement in ambient air quality needed for attainment of a national ambient air quality standard.

Existing Nebraska Rules 5, 6, 7, 13 and 14, referenced in this rulemaking as contained in the Nebraska State Implementation Plan, are:

Rule 5, "Process Operations; Particulate Emissions Limitations for Existing Sources"

Rule 6, "Fuel Burning Equipment; Particulate Emission Limitations for Existing Sources"

Rule 7, "Incinerators; Emission Standards"

Rule 13, "Visible emissions; Prohibited"

Rule 14, "Dust; Duty to Prevent Escape of"

Section 172 of the Act contains the requirements for nonattainment plan revisions. The requirements of Section 172 are listed below following a description of each plan, along with a discussion of how the Nebraska plan addresses each. Discussion of the requirements of Section 172(b)(1), (b)(9), (b)(11) and (c) is included under "General Comments"

Carbon Monoxide-Omaha

The Omaha nonattainment status was determined because the national CO standard for eight-hour average concentration, nine parts per million, was exceeded during the design year 1978 a number of times with the second highest measured level being 11.0. A 27.7

percent reduction of CO needs to be achieved by December 31, 1982 in order to attain the national standard.

A rollback method was used to determine whether the Omaha area would be able to meet the national standard. This method was used because the revised EPA mobile source emission factors computer program MOBILE 1 was delayed in being integrated into the Kansas Air Pollution Package (KAPP) air quality diffusion model, which has been used in Omaha in the past. Through use of rollback the SIP indicates that benefits gained from the Federal Motor Vehicle Emission Control Program (FMVCP) alone between 1978 and 1982 will allow the Omaha area to achieve a 24.3 percent reduction in CO levels by December 1982.

Detailed air quality diffusion modeling was conducted by the state to verify these results using the KAPP model with the Mobile 1 program incorporated into it. The final report submitted to EPA on October 6, 1980 and supplemented with a cover letter dated November 17, 1980, verifies the finding of attainment determined by the rollback method.

Demonstration of Attainment. Section 172(a)(1) requires the plan to provide for attainment of NAAQS as expeditiously as practicable. Primary standards are to be met no later than December 31, 1982.

A satisfactory preliminary demonstration of attainment by the end of 1982 using the rollback method was provided by the Metropolitan Area Planning Agency (MAPA), which prepared the CO SIP and coordinated completion of the air quality diffusion modeling report by the Nebraska Department of Roads. The report has not been adopted by the state yet.

The calibrated KAPP model was used to forecast 1982 CO levels based on the forecasted 1982 traffic volumes, the emission rates in the MOBILE 1 program and the meteorological conditions used in the calibration process.

The results of applying the KAPP air pollution diffusion model shows that the Omaha area will attain compliance with the national eight-hour average concentration standard for carbon monoxide of nine parts per million. The forecasted increase in vehicle miles traveled is counteracted by lower emissions resulting in an overall improvement in the level of CO. Expeditious attainment is addressed below under "Reasonably Available Control Measures."

Proposed Action. EPA proposes to conditionally approve the Omaha CO SIP revision as meeting the requirements of Section 172(a)(1), allowing the state until May 15, 1981 to adopt and submit

the Omaha air quality modeling report substantially as described above.

Attainment Date Extensions. Section 172(a)(2) authorizes an extension of the attainment date to not later than 1987 for CO and ozone if the state demonstrates the standards cannot be met by 1982 despite implementation of reasonably available control measures.

Nebraska has demonstrated through the rollback technique that the CO standard will be attained by 1982 and has not requested an extension. Air quality modeling verifies this preliminary demonstration. The provisions of Section 172(a)(2) are not applicable.

Reasonably Available Control Measures. Section 172(b)(2) requires SIPs to provide for the implementation of all reasonably available control measures as expeditiously as practicable.

The state maintains and EPA has determined that existing state regulations require measures which represent RACT. In addition, the November 17, 1980, supplement to the Omaha CO modeling report discusses on-going transportation control measures in the Omaha area which the state estimates will help maintain the CO standard, but would have only minimal air quality benefit. Many of the measures will not be fully implemented before the end of 1982. The measures include a ride sharing program, an expanded public transit program utilizing park-and-ride lots, and computerization of traffic signals for Omaha. Other transportation measures which are being considered are high occupancy vehicle lanes, variable work hours, and bike lanes.

An inspection and maintenance program was not considered because it could not be implemented before the end of 1982 and would not be cost effective considering the small magnitude of CO reductions needed to meet the standard.

EPA believes that the state has demonstrated expeditious attainment of the CO standard in the Omaha area before the end of 1982 through benefits derived from the FMVCP alone.

Additional on-going transportation measures may result in additional emission reductions, however, the additional emission reductions before 1982 would be so small that the standard would not be attained appreciably faster.

MAPA will be conducting future evaluations using the KAPP diffusion model to analyze CO attainment and maintenance beyond 1982 and through 1987. This analysis will look at not only changes in the emission rates, but also

the effect of additional controls and transportation measures which should be fully implemented by then.

Proposed Action. EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(2).

Reasonable Further Progress. Section 172(b)(3) requires reasonable further progress toward attainment, including regular, consistent reductions sufficient to assure attainment by the required date.

The state has submitted an RFP demonstration for the Omaha area in the draft Omaha CO modeling report based on the application of the KAPP model. The curve shows the CO level for the end of 1982 to be 7.7 parts per million (1.3 parts per million below the standard for eight hour concentration). EPA has reviewed the RFP curve and has found it to be adequate.

Proposed Action. EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(3), allowing the state until May 15, 1981, to adopt and submit the RFP demonstration based on application of the KAPP model substantially as described above.

Emission Inventory. Section 172(b)(4) requires the plan to include a comprehensive, accurate, and current inventory of all sources of each pollutant for which an area is designated nonattainment.

The plan includes a reasonably accurate and current categorical emission inventory for CO, identifying emission source categories and present emissions. The state also commits to update the inventory.

Proposed Action. EPA proposes to approve the Omaha CO SIP revision as meeting the requirements of Section 172(b)(4).

Emissions Growth. Section 172(b)(5) requires the plan to expressly identify and quantify the emissions, if any, which will be allowed to result from the construction and operation of major new or modified stationary sources in a nonattainment area.

Emission offsets and compliance with the lowest achievable emissions rate are required in Rule 4 before obtaining a construction permit for a new major source or major modification. The emission offsets are required in the rule to be submitted as SIP revisions to ensure federal enforceability. The state intends to comply with Section 173(1) which deals with conditions for issuance of permits by use of emission offsets and does not include margins for growth in the plan. Therefore, the state is not required to identify a margin for growth for Douglas County.

Proposed Action. EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(5).

Permit Requirements. Section 172(b)(6) requires plans to have a permit program for the construction and operation of new or modified major stationary sources in accordance with Section 173 (relating to permit requirements).

Rule 4 contains the provisions required in Section 173. It provides for offsets in the nonattainment areas, requires the lowest achievable emission rate for new sources, and requires a certification by owners of new sources that all existing sources are in compliance.

Rule 4, however, is applicable to sources which are required to report in Rule 3 of the Nebraska SIP, "Reporting and Operating Permits for Existing Sources, When Required". However, CO sources are not expressly required to report unless notified to do so by the Nebraska Department of Environmental Control. The state has revised Rule 3 to make it applicable to all processing machines, equipment, devices or other articles or combinations thereof having a potential to emit 100 tons/year or more of carbon monoxide.

EPA will not take final action as proposed below until Rule 3 is adopted substantially as described in this notice and submitted to EPA.

Proposed Action. EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(6), if the changes described in this notice are incorporated in the final rule submitted by the state.

Resources. Section 172(b)(7) requires the state to identify and commit the financial and manpower resources necessary to carry out the plan provisions.

Because the CO standard will be attained by December 1982 through benefits derived from controls on motor vehicles alone, no additional financial or manpower commitments are necessary.

Proposed Action. EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(7).

Schedules. Section 172(b)(8) requires that a SIP contain emission limitations, schedules of compliance and such other measures as may be necessary to meet the national standard in the nonattainment area before the end of 1982.

The state has certified and EPA has determined that attainment of the CO standard in the Omaha area through benefits derived from the FMVCP and existing RACT requirements on stationary CO sources represent expeditious attainment. The SIP states

and EPA believes that on-going transportation control measures will provide only minimal emission reductions before the end of 1982 and will not result in attainment any faster than benefits from the FMVCP alone. No other measures are needed to meet the standard before the end of 1982.

Proposed Action EPA proposes to approve the Omaha CO SIP as meeting the requirements of Section 172(b)(8).

Commitments. Section 172(b)(10) requires written evidence that all necessary measures have been adopted as legal requirements and that the agencies responsible are committed to their implementation and enforcement. Reductions from the FMVCP alone and existing CO emission requirements are shown to result in attainment before the end of 1982. No other measures are necessary for adoption. Rules 1, 3, 4 and 6 are to be heard at public hearing on March 6, 1981. EPA will not take the final action proposed below until Rules 1, 3 and 4 are adopted substantially as described in this notice and submitted to EPA.

Proposed Action EPA proposes to approve the Omaha CO plan as meeting the requirements of Section 172(b)(10).

Total Suspended Particulates—Douglas County

Based on 1977 air quality data, the area encompassing Douglas and Sarpy Counties in Nebraska and Pottawattamie County in Iowa was originally designated as nonattainment for the primary TSP standard. Air quality data collected since 1977 and the findings of a study conducted for EPA by PEDCO Environmental indicated that only the areas in the vicinity of 11th and Nicholas Streets and 24th and "O" Streets in Omaha should be classified as nonattainment. The state has developed a control strategy and approach toward demonstrating attainment on the basis of these boundary and designation changes. EPA has proposed to redesignate the remainder of the area in to FR 7009. Until final approval of the redesignation, the state remains obligated to submit a Part D plan.

The emission inventories for 1977 were used in calculating the emissions reductions necessary for attainment of the primary standards in these two areas. A detailed evaluation of control measures adopted by the City of Omaha by resolution and the air quality benefits for each is presented, along with a schedule for implementing the control measures in the resolutions.

Demonstration of Attainment. Section

172(a)(1) requires the plan to provide for attainment of NAAQS as expeditiously as practicable. Primary standards are to be met no later than December 31, 1982.

Nebraska includes an approach to demonstrating attainment of the primary particulate NAAQS by the end of 1981 in the two areas which the state believes should be the only primary nonattainment areas in Omaha, 11th and Nicholas and 24th and "O" Streets, through commitment to an emissions reduction schedule from April 1980 to December 31, 1981. The schedule for these measures follows:

Element 1. Request for redesignation of Omaha's non-attainment areas forwarded to Environmental Protection Agency

Done: October 17, 1979.

Element 2. Additional monitor already installed at 22nd and Charles Street which will increase monitoring by 50% (Formerly only monitors, 11th and Nicholas and 11th and Dodge were within 1 mile of area). One more monitor will be installed north of 11th and Nicholas area, at approximately 11th and Locust and Quarterly Evaluations by State and City to be started.

Date: April 1980 (has not been installed yet).

Element 3. Street cleaning Program will start.

Started: April 1980.

Completion: December 31, 1981.

Element 4. Hardsurfacing and Stabilization of exposed industrial areas is already underway. One man assigned full time on this strategy until all significant areas past problems have been corrected. Other inspectors will continue to include enforcement of this element in their work program.

Started: April 1980.

Completion: December 31, 1981.

Element 5. City asphalt plant at 11th and Nicholas surveyed to determine dust.

Started: May 1980.

Reduction Systems as determined will be installed or implemented.

Start Date: August-September 1980.

Completion: March 1981.

Element 6. Hard surfacing of dust access road at 11th & Locust and carry out.

Control to Start: April 1980 (has not started).

Completion: August 1980.

Element 7. Stringent enforcement of dust control at construction and demolition sites.

Started: April 1980.

Ongoing.

Element 8. Street paving program in areas will be assigned high priority.

Date: May 1980.

Ongoing.

A comprehensive assessment and evaluation of strategies will be carried out by state and local authorities.

Start Date: December 1980.

If attainment is not indicated, additional strategies indicated in resolution will be carried out.

Start Date: April 1981.

Proposed Action EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(a)(1).

Reasonably Available Control Measures. Section 172(b)(2) requires SIPs to provide for the implementation of all reasonably available control measures as expeditiously as practicable.

Nebraska states that all its existing major and minor sources are equipped with RACT for particulates as required by Rules 5, 6, 7, 13 and 14 of the Nebraska Air Pollution Control Regulations and corresponding sections of the Omaha Ordinance. In addition Rule 11 prohibits open burning.

EPA, in evaluating these regulations, has determined that only Rule 6, "Fuel Burning Equipment: Particulate Emission Limitations for Existing Sources," does not represent RACT. The state is aware of this deficiency and has proposed to revise Rule 6 to make it more stringent by increasing the maximum total heat input from 3,800 (10⁶) BTU to 10,000 (10⁶) British Thermal Units (BTU).

The allowable emission rate for equipment having immediate heat input between certain limits is determined by the equation

$$A = \frac{1.026}{I^{.233}}$$

where A = the allowable emission rate in pounds per hour per million BTU, and I = the total heat input in million BTUs per hour. The new regulation would allow use of the equation to further limit emissions from units up to 10,000 (10⁶) BTU (instead of the previous 3,800 (10⁶) BTU), and result in a more stringent lower emission rate limit of 12 pounds per million BTU, rather than the 15 pounds per million BTU allowed under the current regulation.

EPA believes that this regulation would represent RACT. If the state finds that there are sources out of compliance with revised Rule 6, appropriate compliance schedules must be submitted for those sources.

The plan commits to control programs for nontraditional sources in and around the primary nonattainment areas, as listed under "Demonstration of Attainment."

The City of Omaha also commits in its resolution to conduct studies and evaluations of the on-going control measures during implementation to determine whether additional measures are needed for expeditious attainment, and to submit SIP revisions for

additional measures if they are found to be necessary.

Proposed Action. EPA proposes to conditionally approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(2) allowing the state until August 15, 1981 to adopt and submit Rule 6 revised as discussed above.

Reasonable Further Progress. Section 172(b)(1) requires reasonable further progress in the period before attainment including regular, consistent reductions sufficient to assure attainment by the required date.

The State of Nebraska has submitted a graphical presentation of RFP for each primary nonattainment area. The RFP curves for each area is linear and represents the state's commitments to annual incremental reductions in TSP emissions. EPA has reviewed the RFP curves and has found them to be adequate.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(1).

Microinventory. Section 172(b)(1) requires the plan to include a comprehensive, accurate, and current inventory of all sources of each pollutant for which an area is designated nonattainment.

The plan presents a microinventory of the two primary TSP nonattainment areas and a 1977 point and area source emission inventory for Douglas County. The state also commits to update the inventory.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(4).

Emissions Growth. 172(b)(5) requires the plan to expressly identify and quantify the emissions, if any, which will be allowed to result from the construction and operation of major new or modified stationary sources in a nonattainment area.

Emission offsets and compliance with the lowest achievable emission rate are required in Rule 4 of the Nebraska Air Pollution Control Rules and Regulations before obtaining a construction permit for a new major source or major modification. The emission offsets are required in the rule to be submitted as SIP revisions to ensure federal enforceability. The state intends to comply with Section 173(1) which deal with conditions for issuance of permits by use of emission offsets and does not include margins for growth in the plan. Therefore, the state is not required to

identify a margin for growth for Douglas County TSP.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(5).

Permit Requirement. Section 172(b)(6) requires plans to have a permit program for the construction and operation of new or modified major stationary sources in accordance with Section 173 (relating to permit requirements).

Rule 4 contains the provisions required in Section 173. It provides for offsets in the nonattainment areas, requires the lowest achievable emission rate for new and modified sources, and requires a certification by owners of new sources that all existing sources in the state are in compliance, or on a schedule of compliance with applicable emission standards.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(6).

Resources. Section 172(b)(7) requires the state to identify and commit the financial and manpower resources necessary to carry out the plan provisions.

The SIP specifies that no additional resources are required by the City of Omaha to implement the control measures or to monitor progress, but does not provide verification that the projects have been entered into the budget for Omaha for the implementation period. Because the attainment and RFP demonstrations take credit for incremental reductions in emissions from six control measures adopted by the Omaha City Council, the state must provide verification that the city has or will have finances available and committed to those measures. The control measures include street cleaning, hard surfacing lots, chemical stabilization of exposed industrial areas, controlling major mud and dirt carryout sources, hard surfacing of access roads and paving unpaved streets.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(7), on condition that the state submit, by August 15, 1981, evidence that the necessary funding has been committed and is available for implementation of the plan.

Schedules. Section 172(b)(8) requires that a SIP contain emission limitations, schedules of compliance and such other measures as may be necessary to meet the national standard in the nonattainment area before the end of 1982.

The SIP does not contain schedules of compliance for particulate sources because the state maintains that all such sources are in compliance with existing state Rules 5, 6, 7, 13 and 14 which require measures that represent RACT.

EPA has reviewed these regulations and has determined that Rule 6, "Fuel Burning Equipment Particulate Emission Limitations for Existing Sources", does not represent RACT. The state is aware of this deficiency and has proposed to revise Rule 6 to make it more stringent by increasing the maximum total heat input from 3,800 (10⁶) BTU to 10,000 or more (10⁶) BTU.

The allowable emission rate for equipment having immediate heat input between certain limits is determined by the equation

$$A = \frac{1.026}{I^{.233}}$$

where A = the allowable emission rate in pounds per hour per million BTU, and I = the total heat input in million BTUs per hour. The new regulation would allow use of the equation to further limit emissions from units up to 10,000 (10⁶) BTU (instead of the previous 3,800 (10⁶) BTU), and result in a more stringent lower emission rate limit of 12 pounds per million BTU, rather than the 15 pounds per million BTU allowed under the current regulation.

EPA believes that this regulation would represent RACT. If the state finds that there are sources out of compliance with revised Rule 6, appropriate compliance schedules must be submitted for those sources.

In addition, the plan must contain other measures as necessary. The state has submitted commitments for future studies and activities and the planned schedule for their implementation. The schedules contain key milestones to be used for evaluating progress, with a description of what must be accomplished at each milestone. The milestones are shown in the state's RFP demonstration showing what reductions in emissions of TSP are predicted at each, and what total reductions are expected from implementation of the measures.

The City of Omaha commits to conduct an assessment of the impact of implementing those strategies described under "Demonstration of Attainment" concurrently with their implementation and to conduct an evaluation of their effectiveness. In the event the findings indicate additional controls are needed in the nonattainment area to meet the

standard by the end of 1982 beyond the strategies described, the city commits to additional control measures which may be found to be necessary. These would include additional controls on construction activities, scheduling additional unpaved roads for hard surfacing, curbing streets, and developing a schedule to either close or relocate the city asphalt plant if it is specifically found to be detrimental to expeditious attainment of the particulate standard. Should these additional measures be found to be necessary following the assessment, they must be submitted to EPA as a SIP revision, along with proof of commitment of the resources and adoption by the Nebraska Environmental Control Council.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(8).

Commitments. Section 172(b)(10) requires written evidence that all necessary measures have been adopted as legal requirements and that the agencies responsible are committed to their implementation and enforcement.

The SIP contains a resolution adopted by the City of Omaha which commits the city to on-going and future activities for control of nontraditional sources as discussed above under "Schedules." Should additional control measures be necessary for attainment prior to 1983, as discussed above, commitments must also be submitted for them.

Proposed Action. EPA proposes to approve the Douglas County TSP plan as meeting the requirements of Section 172(b)(10).

Total Suspended Particulates—Sarpy County

Sarpy County is presently classified as primary nonattainment, but Nebraska has requested that it be reclassified as attainment for the primary TSP standard. In support of this request, Nebraska has submitted 24 months of monitoring data indicating primary and secondary standard attainment except for the City of Bellevue. The state has requested that EPA change the designation for Bellevue to secondary nonattainment. EPA has proposed to redesignate the remainder of the area in 46 FR 7009. Until final approval of the redesignation, the state remains obligated to submit a Part D plan.

Total Suspended Particulates—Cass County

Description of Submittal. Based on 1977 air quality data Cass County was designated as nonattainment for particulates. The state requests redesignation of Cass County to

attainment with the exception of the cities of Weeping Water and Louisville. The state has developed a control strategy and approach toward demonstrating attainment based on these proposed boundary and designation changes which were proposed in a separate Federal Register notice (46 FR 7009). Air quality data for 1977 and 1978 is provided in support of the request. There were no 24-hour primary standard violations at either site. The design value at Louisville is the annual geometric mean of $103.4 \mu\text{g}/\text{m}^3$, based on 1977 data. The design value at Weeping Water is the annual geometric mean of $99 \mu\text{g}/\text{m}^3$, based on 1978 data. Data for 1978 was used for the Weeping Water design values, because in 1977 the monitor for the site was influenced by its location near a crushed gravel road.

Demonstration of Attainment. Section 172(a)(1) requires the plan to provide for attainment of the NAAQS as expeditiously as possible, but no later than the end of 1982 for primary standards.

The Cass County TSP SIP provides for attainment of the TSP primary standard before the end of 1982 in the two areas which the state believes should be the only primary nonattainment areas, Louisville and Weeping Water.

The Ash Grove Cement Plant, the major source of particulate emissions in Louisville, has submitted a letter which is a part of the SIP stating its intent to replace three older kilns with a single larger kiln. Using the rollback method, the estimated reductions from a dust suppression system on crushing and storing operations placed on the plant quarry in 1979 alone are shown to be sufficient to meet the primary particulate standard.

The state has submitted a letter dated November 26, 1980, from Ash Grove Cement committing to go forward with the construction of the new 1800 ton-per-day kiln. The engineering design phase has been in process since May 1980, and groundbreaking is scheduled for March 1981. Construction is scheduled to be completed on or before November 1, 1982. The state anticipates that the existing kilns will be retired by the end of 1982.

Controls required by Rule 5A, "Controls for Transferring, Conveying, Railcar and Truck Loading at Rock Processing Operations in Cass County" would require an 85% reduction in potential uncontrolled emissions.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(a)(1).

Reasonably Available Control Measures. Section 172(b)(2) requires implementation of all reasonably available control measures as expeditiously as practicable.

Nebraska states that all its existing major and minor sources in Cass County are equipped with RACT for particulates as required by Rule 5, 13, and 14 of the Nebraska Air Pollution Control Regulations. Rule 5A provides further controls for handling and transferring of process materials and products in Cass County. EPA has evaluated these rules and determined that all meet RACT requirements.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(2).

Reasonable Further Progress (RFP). Section 172(b)(3) requires reasonable further progress toward attainment of the NAAQS, including regular, consistent reductions sufficient to assure attainment by the required date.

The state's RFP graphs for Weeping Water and Louisville show sufficient annual reductions in TSP emission. EPA has reviewed the RFP curves and has found them to be adequate.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(3).

Emission Inventory. Section 172(b)(4) requires that plan to include a comprehensive, accurate, and current inventory of all sources of each pollutant for which an area is designated nonattainment.

The SIP presents a microinventory of the two proposed primary nonattainment areas, a 1977 point source emission inventory for both areas, and an emission inventory for the country. The state also commits to update the inventory for the nonattainment areas.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(4).

Emission Growth. Section 172(b)(5) requires the plan to expressly identify and quantify the emissions, if any which will be allowed to result from the construction and operation of major new or modified stationary sources in a nonattainment area.

Emission offsets and compliance with the lowest achievable emissions rate are required in Rule 4 before obtaining a construction permit for a new major source or major modification. The emission offsets are required in the rule to be submitted as SIP revisions to ensure federal enforceability. The state intends to provide for new particulate

emissions by requiring emissions offsets and does not include margins for growth in the plan. Therefore, the state is not required to identify a margin for growth for Cass County TSP.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(5).

Permit Requirements. Section 172(b)(6) requires plans to have a permit program for the construction and operation of new or modified major stationary sources in accordance with Section 173 (relating to permit requirements).

Rule 4 contains the provisions required in Section 173. It provides for offsets in the nonattainment areas, requires that lowest achievable emission rate for new sources, and requires a certification by owners or operators of new sources that all existing sources are in compliance, or on a compliance schedule, with all applicable emission standards.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(6).

Resources. Section 172(b)(7) requires the state to identify and commit the financial and manpower resources necessary to carry out the plan provisions.

The state indicates that no additional resources are required to carry out provisions in the SIP beyond their present program funds. EPA has determined that the state's present program funds are adequate to carry out the provisions of the plan.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(7).

Schedules. Section 172(b)(8) requires that a SIP contain emission limitations, schedules of compliance and such other measures as may be necessary to meet the national standard in the nonattainment area before the end of 1982.

The state certifies, as discussed under "Reasonably Available Control Measures", that all its existing major and minor sources are in compliance with regulations which represent RACT. An EPA evaluation confirms this.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(8).

Commitments. Section 172(b)(10) requires written evidence that all necessary measures have been adopted to meet legal requirements and that the agencies responsible are committed to their implementation and enforcement.

Rule 5A which is used in the state's attainment demonstration has been adopted as a state regulation. The state has submitted legally enforceable evidence in the form of the construction permit for the new kiln which shows that the credits taken for reductions at Ash Grove are assured. The requirement that the three existing kilns at Ash Grove be retired is included as a provision of the permit.

Rules 1, 3, 4 and 8 have been submitted in draft form, but are scheduled for public hearing on March 6, 1981. EPA's proposed actions are contingent upon receiving these regulations substantially as EPA has reviewed them in draft form. No final action will be taken until rules 1, 3 and 4 are submitted as adopted by the state.

Proposed Action. EPA proposes to approve the Cass County TSP plan as meeting the requirements of Section 172(b)(10).

General Comments

Public Notice. Section 172(b)(1) requires the plan to be adopted after reasonable notice and public hearing.

Nebraska's Environmental Control Council adopted the proposed SIP revisions after public hearings on December 7, 1979 and June 27, 1980. Adequate notice and proof of publication were provided.

Proposed Action. EPA proposes to approve the Nebraska SIP revisions as meeting the requirements of Section 172(b)(1).

Public, Local Government and State Legislative Involvement. Section 172(b)(9) requires evidence of involvement and consultation of the public, local government and state legislature in the planning process; an identification and analysis of the air quality, health, welfare, economic, energy and social effects of the revision; and a summary of public comments on the analysis.

The Nebraska SIP revisions contain adequate evidence to satisfy Section 172(b)(9).

Proposed Action. EPA proposes to approve the Nebraska SIP revision as meeting the requirements of Section 172(b)(9).

Delayed Attainment Dates and 1982 Submission. Section 172(b)(11) and Section 172(c) contain requirements for plans with attainment dates after 1982. None of the SIP revisions discussed today have attainment dates after 1982, therefore, these provisions are not applicable.

Secondary Standards

On September 25, 1980 the State of Nebraska submitted a number of

redesignation requests as part of the SIP revision required by the 1977 Clean Air Act Amendments. Certain requests also seek eighteen month extensions until July 1, 1980 to submit a SIP which addresses attainment of the secondary standard for TSP. Such extensions can be granted under 40 CFR 51.31(c) if the state shows that emissions reductions beyond those achievable through the application of RACT are required to attain the secondary standard.

EPA has granted extensions to July 1, 1980 in the past even though that date had passed, because the action allowed the provisions of the Emission Offset Interpretative Ruling (44 FR 3274) to go into effect in the secondary nonattainment area until January 1, 1981, the deadline for EPA's approval or disapproval of secondary plans which were due on July 1, 1980. Construction of new major sources or major modifications was then permitted under the offset policy until the January 1, 1981 deadline for approval/disapproval.

Because it is now EPA policy to apply the Emission Offset Interpretative Ruling in secondary standard nonattainment areas until a SIP is approved for those areas, granting an extension in those applicable areas until the elapsed July 1, 1980 date is no longer necessary.

The state requests eighteen month extensions for the following areas:

Proposed Secondary TSP Nonattainment Areas

1. Omaha (except for 11th and Nicholas, and 24th and "O" Streets)
2. Bellevue
3. Weeping Water
4. Louisville

Adequate demonstrations for secondary extensions are submitted for Bellevue, Weeping Water and Louisville. The demonstration for Omaha assumed that Rule 6 was representative of RACT, however, EPA has determined otherwise. Whether the application of a revised Rule 6 would result in attainment of the secondary standard before the end of 1982 without controls on nontraditional sources is not known.

Proposed Action. EPA proposes to deny the request for eighteen month extensions until July 1, 1980 to submit plans to attain the secondary standard in the areas listed above. The deadline has already passed and granting of the extension would serve no useful purpose.

Proposed Regulatory Changes for New Source Review

Rule 1—Additional definitions or changes to definitions associated with other regulations are submitted.

Definitions for "potential to emit," "secondary emissions," and "significant" (in relation to increases in emissions) are now included in Rule 1 to be consistent with definitions proposed in the August 7, 1980 Federal Register. The existing "major source" and "minor source" definitions are revised and defined by their potential to emit rather than their potential emissions. The definition of "potential emissions" has been deleted.

Rule 3—This rule requires sources which exceed the limits in the regulation to report their operations, and has been revised by the addition of Part 5 which requires that an operating permit be issued to the sources that are in compliance with the regulations.

The regulation is revised to specify processing machines, equipment, devices or other article or combinations thereof of subject to reporting and operating requirements in terms of their "potential to emit" rather than their potential emissions. The regulation is also made specifically applicable to CO and lead by adding emission limitations of 100 tons/year or more for CO and 5 tons/year or more for lead.

Rule 4—The industrial categories covered by the rule were expanded and sections were added in an effort to bring it into compliance with Sections 173 and 172(b)(6) of the Clean Air Act Amendments of 1977. Emission offsets and compliance with the lowest achievable emission rate are required as conditions for obtaining a construction permit for a new major source or major modification.

Proposed Rule 4(5)(b) has been revised to delete reference to permit requirements on certain sources in nonattainment areas which "adversely affect" the non-attainment areas. Rule 4(5)(b) is also revised to specify that modifications subject to the section must be "significant" (as defined now in Rule 1) and to eliminate the phrase "with potential increased emissions of 100 tons/year or more" in relation to modifications.

Rule 4 is revised to define the applicability of the permit requirement for "construction, reconstruction or modification of any processing machine, equipment or device or other article or combination thereof" in terms of "potential to emit" rather than potential emissions.

Rule 4(5)(b) has also been revised to delete the reference that requirements of the section will not apply if it can be demonstrated that the proposed source or modification will not have an adverse impact on the nonattainment area.

Proposed Action. EPA proposes to approve the changes to Rules 1, 3 and 4

as meeting the requirements specified in the August 7, 1980, Federal Register for new source review in nonattainment areas.

Summary and Conclusions

EPA proposes actions in this notice on 1) Part D requirements of the Nebraska SIPs for Omaha CO and Douglas, Sarpy and Cass County TSP; 2) regulatory changes affecting new source review in nonattainment areas (as required in the August 7, 1980, Federal Register), and 3) 18-month extensions. No final action will be taken as outlined below until Rules 1, 3 and 4 are adopted and submitted to EPA as described in this notice to satisfy Section 172(b)(b) and Section 173 requirements.

Part D Actions. EPA proposes full approval for all requirements of Section 172 of the Clean Air Act Amendments of 1977 with the following exceptions:

(a) Conditional approval is proposed for Section 172(a)(1) and Section 172(b)(3) relating to the Douglas County CO plan with a deadline of May 15, 1981, set to have the CO air quality modeling report for the Omaha area adopted and submitted substantially as described in this notice.

(b) Conditional approval is proposed for Section 172(b)(2) relating to the Douglas County TSP plan with a deadline of August 15, 1981 set to have Rule 6 adopted and submitted to EPA as described in this notice.

(c) Conditional approval is proposed for Section 172(b)(7) relating to the Douglas County TSP plan with a deadline of August 15, 1981 set for submittal of evidence of full funding for the TSP control measures for which the state takes credit in its attainment and RFP demonstrations.

New Source Review in Nonattainment Areas. EPA proposes to approve Rules 1, 3 and 4 once they are adopted and submitted substantially as described in this notice.

18-Month Extensions. EPA proposes to deny the requests for 18-month extensions for submittal of plans to demonstrate attainment of the secondary standard.

The measures proposed today would be in addition to, and not in lieu of, existing SIP regulations. The present emission control regulations for any source will remain applicable and enforceable to prevent a source from operating without control or under less stringent controls while it is moving toward compliance with the new regulations (or, if it chooses, challenging the new regulations). Failure of a source to meet applicable pre-existing regulations would result in appropriate enforcement action, including

assessment of non-compliance penalties. Furthermore, if there is any instance of delay or lapse in the applicability or enforceability of the new regulations because of a court order or for any other reason, the pre-existing regulations would be applicable and enforceable.

The only exceptions to this rule are cases where there are conflicts between the requirements of the new regulations and the requirements of the existing regulations such that it would be impossible for sources to comply with the new regulations. In these situations the State may exempt a source from compliance with the existing regulations. Any exemption granted would be reviewed and acted on by EPA either as part of these proposed regulations or as future SIP revisions.

The public is invited to submit comments on whether the proposed amendments to the Nebraska air pollution regulations should be approved as a revision of the Nebraska State Implementation Plan.

The Administrator's decision to approve or disapprove the proposed revisions will be based on the comments received and on a determination of whether the amendments meet the requirements of Part D and Section 110(a)(2) of the Clean Air Act and of 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans.

Under Executive Order 12044, EPA is required to judge whether a regulation is "significant," and therefore subject to the procedural requirements of the Order, or whether it may follow other specialized development procedures. EPA labels these other regulations "specialized." EPA has determined that this is a specialized regulation not subject to the procedural requirements of Executive Order 12044.

This proposed rulemaking is issued under the authority of Section 110 of the Clean Air Act Amendments of 1977.

Pursuant to the provisions of 5 U.S.C. 605(b) I hereby certify that the attached rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. This action only approves state actions. It imposes no new requirements. Moreover, due to the nature of the federal-state relationship, federal inquiry into the economic reasonableness of the state action would serve no practical purpose and could well be improper.

Dated: January 9, 1981
 Kathleen Carmin
 Regional Administrator
 EPA Doc. #1-A-10-FRL 1747-5
 BILLING CODE 6560-30-M

40 CFR Part 52

(A-10-FRL 1747-5)

State of Washington's Implementation Plan

AGENCY: Environmental Protection Agency (EPA)

ACTION: Proposed Rule.

SUMMARY: This Notice is to invite public comment on EPA's proposal to approve a revision to the State of Washington State Implementation Plan (SIP). This revision has been submitted to comply with EPA regulations contained in 40 CFR Part 58. The plan provides for the implementation of a statewide network for ambient air quality monitoring and data reporting. EPA has determined that the plan meets requirements for the monitoring, network design, instrument probe siting criteria, monitoring methods to be used, and establishing a quality assurance program.

DATE: Comments will be accepted up to March 9, 1981.

ADDRESSES: The related material in support of this revision may be examined during normal business hours at the following locations:

Central Docket Section (10A-00-10),
 West Tower Lobby, Gallery I,
 Environmental Protection Agency, 401
 M Street, S.W., Washington, D.C.
 20460

Air Programs Branch, Environmental
 Protection Agency, Region 10, 1200
 Sixth Avenue, Seattle, Washington
 98101

Department of Ecology, 4224—Sixth
 Ave. S.E., Rowesix, Building #4,
 Lumy, WA 98503

COMMENTS SHOULD BE ADDRESSED TO:
 Laurie M. Kral, Air Programs Branch, M/
 S 629, Environmental Protection Agency,
 1200 Sixth Avenue, Seattle, Washington
 98101.

FOR FURTHER INFORMATION CONTACT:
 William B. Schmidt, Air Programs
 Branch, M/S 345, Environmental
 Protection Agency, 1200 Sixth Avenue,
 Seattle, Washington 98101. Telephone:
 (206) 442-1106, FTS. 399-1106

SUPPLEMENTARY INFORMATION: Section
 319 of the Clean Air Act as amended,
 requires the Environmental Protection
 Agency (EPA) to establish monitoring
 criteria to be followed uniformly across
 the nation. Pursuant to this requirement
 and the recommendations of the

Standing Air Monitoring Work Group
 (SAMWG), EPA, on May 10, 1979 (44 FR
 27558) promulgated Rules and
 Regulations for Ambient Air Quality
 Monitoring, Data Reporting, and
 Surveillance Provisions. The regulations
 revoke Part 51 of Title 40 of the Code of
 Federal Regulations and establish a new
 Part 58 entitled Ambient Air Quality
 Surveillance.

40 CFR Part 58.20 requires that the
 State adopt and submit to the
 Administrator a revision to the plan
 which will:

(a) Provide for the establishment of an
 air quality surveillance system that
 consists of a network of monitoring
 stations designated as State and Local
 Air Monitoring Stations (SLAMS) which
 measure ambient concentrations of
 those pollutants for which standards
 have been established in 40 CFR Part 50.

(b) Provide for meeting the
 requirements of Appendices A, C, D,
 and E to this part.

(c) Provide the operation of at least
 one SLAMS per pollutant during any
 stage of an air pollution episode as
 defined in the contingency plan.

(d) Provide for the review of the air
 quality surveillance system on an
 annual basis to determine if the system
 meets the monitoring objectives defined
 in Appendix D to this part. Such review
 must identify needed modifications to
 the network such as termination or
 relocation of unnecessary stations or
 establishment of new stations which are
 necessary.

(e) Provide for having a SLAMS
 network description available for public
 inspection and submission to the
 Administrator upon request. The
 network description must be available
 at the time of plan revision submittal
 and must contain the following
 information for each SLAMS.

(1) The Storage and Retrieval of
 Aerometric Data (SAROAD) site
 identification form for existing stations.

(2) The proposed location for
 scheduled stations.

(3) The sampling and analysis method.

(4) The operating schedule.

(5) The monitoring objective and
 spatial scale of representativeness as
 defined in Appendix D to this part.

(6) A schedule for:

(i) Locating, placing into operation,
 and making available the SAROAD site
 identification form for each SLAMS
 which is not located and operating at
 the time of plan revision submittal;

(ii) Implementing quality assurance
 procedures of Appendix A to this part
 for each SLAMS for which such
 procedures are not implemented at the
 time of plan revision submittal, and

(iii) Resiting each SLAMS which does
 not meet the requirements of Appendix
 E to this part at the time of plan revision
 submittal.

Washington's Air Quality Monitoring Network

On March 5, 1980, the State of
 Washington's Department of Ecology
 (DOE) submitted to EPA a revision to its
 SIP which provides for the
 establishment of an air quality
 monitoring network. The submittal
 includes a description of the proposed
 network which will cover the criteria
 pollutants: Total suspended particulates
 (TSP), sulfur dioxide (SO₂) and carbon
 monoxide (CO) and ozone (O₃).

The Washington monitoring SIP
 commits the State to the implementation
 of statewide SLAMS and National Air
 Monitoring Stations (NAMS) monitoring
 system to meet the requirements of 40
 CFR Part 58. The system will be derived
 from the existing Washington Air
 Monitoring Network with adjustments
 and additions made where necessary.

Besides establishing the SLAMS and
 NAMS (a subset of SLAMS), the SIP
 revision provides for the establishment
 of Special Purpose Monitoring Stations
 (SPMS). These monitors may be placed
 and used to fill special monitoring study
 needs. If data are to be used for support
 of control strategies, determination of
 attainment/non-attainment, or air
 dispersion modeling validation, the
 monitors will be reference or equivalent,
 sited according to Appendix E to 40 CFR
 Part 58 and follow the quality assurance
 procedures of Appendix A to 40 CFR
 Part 58.

The SIP states that specific SLAM
 sites will be designated as Episode
 Monitoring Sites (EMS). These stations
 will be visited daily during the work
 week to ascertain proper operation and
 to detect elevated values. In the event
 an episode is declared, the pollutant(s)
 of concern will be followed continuously
 until episode termination.

All SLAMS in the Washington
 monitoring system will be operated in
 accordance with the criteria given in
 Subpart B of 40 CFR Part 58. Each
 SLAMS monitor will meet the siting
 criteria given in 40 CFR Part 58,
 Appendix E. Methods used in the
 SLAMS will be reference or equivalent
 as defined in 40 CFR Part 58, Appendix
 C. The quality assurance procedures of
 Appendix A to 40 CFR Part 58 will be
 followed when operating SLAMS and
 processing air quality data. The air
 monitoring network will be reviewed,
 annually to eliminate any unnecessary
 SLAMS, add necessary SLAMS and to
 correct inadequacies. All proposed
 changes to the network will be reported

09/08/82

NATIONAL AEROMETRIC DATA BANK
QUICK LOOK REPORT

PAGE 23

CARBON MONOXIDE (MG/M3)

KANSAS

79-82

METHOD: NONDISPERSIVE INFRARED (NDIR) CONTINUOUS, HOURLY VALUES-11, FLAME IONIZATION-21

SITE ID	LOCATION	COUNTY	ADDRESS	REP YR ORG	#OBS	MAX 1-HR OBS>			MAX 8-HR OBS>			METH
						1ST	2ND	40	1ST	2ND	10	
171800001F01	KANSAS CITY	WYANDOTTE CO	619 ANN ST	79	6275	23.0	17.0		9.4	9.3		11
171800001F01	KANSAS CITY	WYANDOTTE CO	619 ANN ST	80	8707	18.0	17.0		9.4	8.3		11
171800001F01	KANSAS CITY	WYANDOTTE CO	619 ANN ST	81 001	8667	21.0	13.0		10.1	8.0		11
171800001F01	KANSAS CITY	WYANDOTTE CO	619 ANN ST	82 001	2153	9.0	7.0		4.5	3.1		11
171800001H01	KANSAS CITY	WYANDOTTE CO	619 ANN AVE	79	2132	17.0	12.0		6.1	4.5		11
171800016F05	KANSAS CITY	WYANDOTTE CO	7TH & STATE	80	7605	22.0	16.0		9.1	8.5		11
171800016F05	KANSAS CITY	WYANDOTTE CO	7TH & STATE	81	335	15.0	12.0		8.3	7.6		11
172780002F05	OVERLAND PARK	JOHNSON CO	FIRE STA2 9500	79	251	14.0	12.0		6.5	6.4		11
172780002F05	OVERLAND PARK	JOHNSON CO	FIRE STA2 9500	80	5622	15.0	15.0		10.1	8.8		11
172780002F05	OVERLAND PARK	JOHNSON CO	FIRE STA2 9500	81	1310	21.0	14.0		4.6	4.6		11
173740003F01	WICHITA	SEDGWICK CO	FIRE STA TOPEKA	79	1944	29.0	29.0		25.0	15.5	3	11
173740003F01	WICHITA	SEDGWICK CO	FIRE STA TOPEKA	80	8662	22.0	21.0		14.1	13.4	4	11
173740003F01	WICHITA	SEDGWICK CO	FIRE STA TOPEKA	81 001	8564	22.0	21.0		16.8	12.4	5	11
173740003F01	WICHITA	SEDGWICK CO	FIRE STA TOPEKA	82 001	2159	22.0	18.0		11.4	9.3	1	11
173740010F01	WICHITA	SEDGWICK CO	1900 E NINTH ST	79	8731	23.0	22.0		18.0	11.6	4	11
173740010F01	WICHITA	SEDGWICK CO	1900 E NINTH ST	80	8481	40.0	25.0		16.5	12.8	5	11
173740010F01	WICHITA	SEDGWICK CO	1900 E NINTH ST	81 001	8664	19.0	18.0		15.0	12.9	7	11
173740010F01	WICHITA	SEDGWICK CO	1900 E NINTH ST	82 001	2150	20.0	20.0		12.3	11.4	2	11

KA-1

Region IX

Arizona

AZ-1

California

**CALIFORNIA
AIR RESOURCES BOARD**

CALIFORNIA

**AIR QUALITY
DATA**

**SUMMARY OF 1982 AIR QUALITY DATA
GASEOUS AND PARTICULATE POLLUTANTS**

TABLE 11 cont'd

CALIFORNIA AIR RESOURCES BOARD
AEROMETRIC DATA SYSTEM

06/23/83

1982 ANNUAL STATISTICS AND NUMBER OF OCCURRENCES OF HOURLY CONCENTRATIONS GREATER THAN OR EQUAL TO 25 PPM

NITROGEN DIOXIDE

M - - ANNUAL STATISTICS - - - - - OCCURRENCES OF HOURLY CONCENTRATIONS > OR = 25 PPM - - - -
 E HOURLY CONC ANNUAL MEANS
 T PPM
 H 1ST 2ND ALL DLY MAX JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ANNUAL NUM
 O HIGH HIGH HOURS HOUR HR HR HR HR HR HR HR HR HR HR HR HR HR HR HR HR HR OF
 D

BASIN NAME
COUNTY AND STATION
NAME AND ID CODESSOUTH COAST (CONT)
LOS ANGELES COUNTY - 70 (CONT)

MT LEE	00581-A22 DC	32°	28°	039°	077°	1	0	0	0	0	0								1	3895
						2	0	0	0	0	0							2		
NORTH LONG BEACH	00072-111 DC	30	27	051	094	0	1	1	0	0	0	0	0	0	1	0	1	4	8005	
						0	1	2	0	0	0	0	0	0	2	0	1	6		
PASADENA-WALNUT	00083-111 DC	21°	21°	059°	091°	0	0	0										0	1978	
						0	0	0										0		
PASADENA-WILSON	00088-111 DC	34°	30°	054°	090°			0	0	0	0	0	0	0	0	0	1	1	5689	
								0	0	0	0	0	0	0	0	0	2	2		
PICO RIVERA	00085-111 DC	29	28	058	093	0	0	0	0	0	0	0	0	0	0	0	2	2	8274	
						0	0	0	0	0	0	0	0	0	0	0	4	4		
POMONA	00075-111 DC	32	27	055	091	1	0	0	0	0	0	0	0	0	1	0	0	2	8226	
						1	0	0	0	0	0	0	0	0	2	0	0	3		
RESEDA	00074-111 DC	24	23	045	080	0	0	0	0	0	0	0	0	0	0	0	0	0	8134	
						0	0	0	0	0	0	0	0	0	0	0	0	0		
WEST LA-ROBERTSON	00086-111 DC	39	39	052	094	2	0	0	0	0	0	0	0	2	0	0	1	5	7806	
						3	0	0	0	0	0	0	0	6	0	0	1	10		
WHITTIER	00080-111 DC	30	30	053	088	1	0	0	0	0	0	0	0	0	0	0	3	4	8193	
						4	0	0	0	0	0	0	0	0	0	0	6	10		
COUNTY SUMMARY		41	39	051	088	3	1	1	0	0	0	0	1	4	3	0	5	18		
						14	1	2	0	0	0	0	1	10	8	0	20	56		

ORANGE COUNTY - 30

ANAHEIM	00176-111 DC	20	20	046	078	0	0	0	0	0	0	0	0	0	0	0	0	0	8292
						0	0	0	0	0	0	0	0	0	0	0	0	0	
COSTA MESA-PLACENTI	00192-111 DC	23	21	031	060	0	0	0	0	0	0	0	0	0	0	0	0	0	8145
						0	0	0	0	0	0	0	0	0	0	0	0	0	
LA HABRA	00177-111 DC	28	28	048	079	0	0	0	0	0	0	0	0	0	0	0	1	1	8270
						0	0	0	0	0	0	0	0	0	0	0	2	2	
COUNTY SUMMARY		28	28	042	072	0	0	0	0	0	0	0	0	0	0	0	1	1	
						0	0	0	0	0	0	0	0	0	0	0	2	2	

RIVERSIDE COUNTY - 33

RIVERSIDE-MAGNOLIA	00146-A11 DC	08°	06°	030°	051°	0												0	167
						0												0	
RIVERSIDE-RUBIDOUX	00144-111 DC	16	14	034	063	0	0	0	0	0	0	0	0	0	0	0	0	0	7609
						0	0	0	0	0	0	0	0	0	0	0	0	0	
RIVERSIDE-UCR WTHR	00147-A11 DC	13°	13°	031°	055°	0	0	0	0	0	0	0	0					0	5055
						0	0	0	0	0	0	0	0					0	
COUNTY SUMMARY		16	14	032	060	0	0	0	0	0	0	0	0	0	0	0	0	0	
						0	0	0	0	0	0	0	0	0	0	0	0	0	

SAN BERNARDINO COUNTY - 36

FONTANA-ARROW HWY	00197-111 DC	18°	18°	040°	073°					0	0	0	0	0	0	0	0	0	4597
										0	0	0	0	0	0	0	0	0	
FONTANA-FOOTHILL TR	00176-111 DC	17°	17°	029°	054°	0	0	0	0	0								0	2480
						0	0	0	0	0								0	

Table 10 cont'd

05/28/82

CALIFORNIA AIR RESOURCES BOARD
AEROMETRIC DATA SYSTEM

1981 ANNUAL STATISTICS AND NUMBER OF OCCURRENCES OF HOURLY CONCENTRATIONS GREATER THAN OR EQUAL TO 25 PPM

NITROGEN DIOXIDE

BASIN NAME, COUNTY AND STATION NAME AND ID CODES		ANNUAL STATISTICS - - - - -						OCCURRENCES OF HOURLY CONCENTRATIONS > OR = 25 PPM - - - - -														ANNUAL OBS	NUM OF
		HOURLY CONC		PPM		ANNUAL MEANS																	
		1ST	2ND	ALL	DLY	MAX	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
		HIGH	HIGH	HOURS	HOUR		HR	HR	HR	HR	HR	HR	HR	HR	HR	HR	HR	HR	HR				
SOUTH COAST (CONT.)																							
LOS ANGELES COUNTY - 70 (CONT.)																							
AZUSA	00060-111 CU	26°	26°	039°	077°	2	0	0												2	1946		
						2	0	0												2			
BURBANK	00069-111 CH	37°	37°	070°	112°			0	0	0	0	0	0	0	1	0	2	5	8	6816			
				071				0	0	0	0	0	0	0	2	0	4	18	24	814			
BURBANK	00069-111 CU	28°	26°	078°	127°	1	0												1	1325			
						3	0												3				
GLENDORA-LAUREL	00591-A22 CH	29°	26°	040°	074°	0	0	0	0	0	0	0	0	0	0	0	0	1	1	7631			
						0	0	0	0	0	0	0	0	0	0	0	0	3	3				
LENNOX	00076-111 CH	42	42	059°	099°	2	1	0	0	0	1	0	0	0	0	0	0	8	12	8239			
						2	2	0	0	0	1	0	0	0	0	0	0	19	24				
LOS ANGELES-NO MAIN	00087-111 CH	45	42	067°	114°	1	0	0	0	0	2	0	2	4	0	1	7	17	8114				
						3	0	0	0	0	2	0	5	6	0	3	32	51					
LYNWOOD	00084-111 CH	32°	30°	061°	103°							0	0	0	0	0	4	4	3947				
				057								0	0	0	0	0	9	9	7856				
LYNWOOD	00084-111 CU	29°	25°	053°	083°	0	1	0	0	0	0							1	3919				
						0	2	0	0	0	0							2					
MT LEE	00581-A22 CH	27°	26°	053°	118°												0	2	2	985			
																	0	2	2				
NORTH LONG BEACH	00072-111 CH	37°	35°	063°	116°							0	1	0	2	1	7	11	3932				
				054								0	1	0	4	2	14	21					
NORTH LONG BEACH	00072-111 CU	25°	25°	044°	080°	0	2	0	0	0	0							2	3788				
						0	2	0	0	0	0							2					
PASADENA-WALNUT	00083-111 CH	40	38	038	094	0	0	0	0	0	0	0	0	0	0	0	0	3	3	8306			
						0	0	0	0	0	0	0	0	0	0	0	0	5	5				
PICO RIVERA	00085-111 CH	36°	33°	059°	095°			0	0	0	0	0	0	0	2	0	4	6	6924				
				061				0	0	0	0	0	0	0	4	0	10	14	8155				
PICO RIVERA	00085-111 CU	34°	30°	071°	118°	2	0											2	1239				
						4	0											4					
POMONA	00075-111 CH	31°	28°	064°	105°					0	0	0	0	0	0	0	5	5	5251				
				053						0	0	0	0	0	0	0	9	9	7556				
POMONA	00075-111 CU	20°	10°	026°	050°	0	0	0	0									0	2034				
						0	0	0	0									0					
RESEDA	00074-111 CH	24°	24°	047°	082°			0	0	0	0	0	0	0	0	0	0	0	7005				
				046				0	0	0	0	0	0	0	0	0	0	0	7925				
RESEDA	00074-111 CU	21°	20°	059°	096°	0	0											0	877				
						0	0											0					
WEST LA-ROBERTSON	00086-111 CH	40°	37°	048°	093°					0	0	0	0	0	0	1	0	5	6	5900			
				052						0	0	0	0	0	0	1	0	12	13	7055			
WEST LA-ROBERTSON	00086-111 CU	29°	27°	065°	118°	2	0	0										2	2096				
						3	0	0										3					
WHITTIER	00080-111 CH	38°	36°	051°	086°			0	0	0	0	0	0	0	2	1	6	9	6350				
				054				0	0	0	0	0	0	0	6	1	17	24	7245				
WHITTIER	00080-111 CU	30°	27°	068°	119°	1	1											2	1292				
						1	1											2					

7-75963

87

CALIFORNIA
AIR RESOURCES BOARD

CALIFORNIA

AIR QUALITY
DATA

SUMMARY OF 1981 AIR QUALITY DATA
GASEOUS AND PARTICULATE POLLUTANTS

62

020 'E SEASID : JN-0-2Y TL EC: 2-24

$\frac{d^2}{dt^2} \left(\frac{1}{r} \right) = -\frac{GM}{r^3}$

[illegible]

Overall Average = $\frac{34.2 + 2.0 + 2.1}{3} = \underline{12.1} \text{ mm/100mm}$

Nevada

NV-1

Page

80-63

1

5. 1. 1.

$$\rightarrow \frac{11.3 + 17.0 + 3.5}{3} = \underline{\underline{9.4 \text{ DAYS/Y}}}$$