

	On or after	Prior to
6	Jan. 1, 1979	July 1, 1979.
8 1/4	July 1, 1979	Jan. 1, 1980.
9 1/4	Jan. 1, 1980	July 1, 1980.
9 3/4	July 1, 1980	Jan. 1, 1981.
11 1/4	Jan. 1, 1981	July 1, 1981.
12 1/4	July 1, 1981	

(Sec. 211, 52 Stat. 23; (12 U.S.C. 1715b).
Interprets or applies sec. 220, 68 Stat. 596, as
amended; (12 U.S.C. 1715k))

Issued at Washington, D.C., August 4, 1981.

Philip D. Winn,

*Deputy Assistant Secretary for Housing-
Federal Housing Commissioner.*

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 50, 51, and 58

[AD-FRL 1827-4]

Air Programs; Ambient Air Quality Monitoring, Data Reporting, and Surveillance Provisions for Lead

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Final rulemaking.

SUMMARY: Today's action promulgates revisions to Part 58 that establish ambient air monitoring and data reporting requirements for lead comparable to those already established for the other criteria pollutants. These revisions were proposed on October 10, 1980 (45 FR 67564). Included within these regulations are requirements for reporting and for assuring the quality of ambient lead data. Also included are requirements for the design of lead monitoring networks and the siting of lead monitors which will supersede less complete requirements currently contained in § 51.17b, which are being revoked in this action, and in EPA's "Supplementary Guidelines for Lead Implementation Plans" (EPA/450-2-78-038, 8/78). Provisions are also established which allow State or local agencies to operate special purpose ambient air quality monitors according to specifications approved by the Regional Administrator where the data are to be used for SIP-related functions other than a demonstration of attainment or non-attainment. Appendix G of Part 50 is being revised to incorporate provisions dealing with the Federal Reference Method for lead which were included in § 51.17b.

DATES: This regulation takes effect on October 5, 1981.

ADDRESS: Docket No. A-80-33
containing material relevant to this

action, is located in West Tower Lobby, Gallery 1, U.S. Environmental Protection Agency, Central Docket Section, 401 M Street, S.W., Washington, D.C. 20460.

The docket may be inspected between 8:00 a.m. and 4:00 p.m. on weekdays and a reasonable fee may be charged for copying.

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SUPPLEMENTARY INFORMATION:

Background

On October 5, 1978 (43 FR 46246), the Administrator of the Environmental Protection Agency promulgated a national ambient air quality standard for lead and regulations for the preparation, adoption, and submittal of implementation plans for attaining and maintaining the lead air quality standard.

A new § 51.17b was established in these regulations to set forth requirements for air quality surveillance relative to plans for attaining and maintaining the lead air quality standard. Section 51.17b called for the States to establish and operate networks for monitoring ambient lead and to report the resulting data to EPA. The data were to be used, among other things, for developing control strategies, tracking attainment and maintenance of the national ambient air quality standard (NAAQS), and in analyzing air quality trends. However, complete requirements for quality assurance and certain aspects of monitor siting had not yet been developed by October 1978; only those minimum requirements related to plan development and surveillance of ambient levels were contained in the October 1978 action. Additional guidance on monitor siting was presented in the "Supplementary Guidelines for Lead Implementation Plans." At the time these regulations were promulgated, EPA was actively involved in a major revision to the ambient air quality monitoring and data reporting requirements for all of the other criteria pollutants (proposed on August 7, 1978, 43 FR 34892). In addition to presenting far more comprehensive requirements than had been in effect since 1971, a key portion of the August 1978 action proposed the creation of a new Part 58 to include most of the regulatory requirements dealing with air quality monitoring. On May 10, 1979 (44 FR 27558), final rules were promulgated to establish Part 58 which provided

complete and detailed requirements for air quality monitoring, data reporting, and surveillance for all of the criteria pollutants except lead. Today's action carries out the intent expressed in the October 5, 1978 and May 10, 1979 actions, by establishing requirements for lead that are closely patterned after the requirements for the other criteria pollutants.

In addition to the requirements dealing solely with lead, today's action revises § 58.14 to give State and local agencies additional flexibility in conducting special ambient monitoring studies. These changes allow a State to use the data collected from special purpose monitors (SPM) for purposes other than demonstrating attainment or nonattainment or computing a design value for control purposes without meeting the SLAMS requirements, provided the monitors are located and operated according to requirements approved by the Regional Administrator. Such requirements would include a monitoring schedule, instrument methodology, quality assurance procedures, and probe-siting criteria for each instrument.

Public Comments

EPA received a total of 19 written comment letters on the proposal of October 10, 1980. The origin of the letters is as follows: Federal Agencies, 4; Industry, 4; State Air Pollution Control Agencies, 8; Local Air Pollution Control Agencies, 2; and State Laboratories, 1.

The bulk of the letters dealt with the proposed changes to Part 58; however, three organizations commented on several matters related to Reference No. 10, EPA's "Guidance for Lead Monitoring in the Vicinity of Point Sources." At the time of proposal, this guideline was available only as a draft dated June 15, 1979. In January 1981, this guideline was revised and issued in final form (EPA-450/4-81-006). The purpose of this guideline is to present technical considerations which may be of use in designing a network which meets the monitoring objective of determining the impact of point sources on ambient lead levels.

Five comments on the point source guideline were received. One commenter requested that EPA withhold finalization of the October 10, 1980 proposal to Part 58 pending peer review and finalization of the June 15, 1979 draft guideline. Since it has never been the Agency's intent to incorporate by reference in Part 58 the procedures contained in this guideline, the Agency decided not to provide formal notice of opportunity to comment on this

guideline. However, all of the comments received were considered in preparing the final version of the guideline. These comments are discussed below.

Two commenters expressed the view that measurement of background concentrations must include contributions from other sources in the common geological region around a source. EPA agrees that background measurements should include other sources of lead being transported into the area of the point source. The final guideline reflects revisions which present siting guidance for multi-source areas.

Two commenters suggested that after modeling has been used to estimate the areas of maximum impact for purposes of monitor siting, monitor locations should be restricted to populous areas. EPA rejects this suggestion primarily because it implies that the standards have to be met only where substantial numbers of people are exposed. In fact, the standards apply to all areas meeting the definition of "ambient air" contained in 40 CFR 50.1(e). Under that section, "ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access. Given this requirement and definition, EPA contends it is a valid monitoring objective to determine the impact of significant lead sources in all places meeting the definition of "ambient air" whether the area is sparsely or densely populated. The final guideline specifies that monitors should be placed in those locations satisfying the definition of ambient air in situations where significant ambient concentrations are expected.

One commenter suggested that Appendix D to Part 58 should state that data collected using the guideline not be used for determining compliance with the ambient lead standard and that the purpose of lead point source monitors should be limited to determining where SLAMS monitors should be placed. EPA rejects this suggestion, for essentially the same reasons cited in response to the previous comment. Where monitors are sited according to the guideline and placed in locations that satisfy the definition of ambient air, there are no technical or legal constraints from using the data to determine compliance with the National Ambient Air Quality Standard (NAAQS).

Two commenters suggested that the guideline should be flexible as to the number and location of monitors because of factors such as terrain, meteorology, population density, and population distribution. EPA agrees that such flexibility is desirable and attempted to indicate this in the draft

guideline. The need to employ a case-by-case approach relative to the location and number of monitors has been emphasized in the final version of the guideline.

Differences Between the Final Rule and Proposal

The following discussion lists each section of the regulation where a change was proposed in the October 10, 1980 action, presents the respective comments received for each, and explains what action is being taken for each section by today's rulemaking.

Addition to Part 50, Appendix G. No comments were received on the proposed change. Today's action carries out the revision proposed on October 10, 1980. In summary, today's action takes the substance of § 51.17b(h) and moves it to Appendix G of Part 50. The substance of the affected wording provides for the analysis of individual lead samples or composites of samples collected over a calendar month or quarter. As discussed below, today's action revokes all of § 51.17b.

Revocation of Section 51.17b. No comments were received on the proposed change. Today's revisions to Appendices D and E of Part 58 incorporate the substance of what was contained in § 51.17b(b), (c), (d) and (f). The substance of § 51.17b(e) is already contained in § 58.13(b). Today's action moves the substance of § 51.17b(g) to §§ 58.23 and 58.34. The substance of § 51.17b(j) is already contained in § 58.20(e) and the substance of § 51.17b(k) is already contained in Part 58, Appendix C, section 2.1.

Section 58.1—Definitions. One commenter pointed out the need for clarifying the U.S. Census Bureau's figures for population of urbanized areas, since in Appendix D population is one of the criteria used to determine areas requiring monitoring stations. Section 58.40 defined urbanized areas for purposes of index reporting as those listed in the U.S. Bureau of Census, October 1976 Supplementary Report. This report updated the 1970 census figures for urbanized areas and has been used in determining the number of National Air Monitoring Stations for other criteria pollutants. Concerning lead monitoring, it is EPA's intent to also use this report in determining which areas are urbanized and which meet the 500,000 population criteria. Therefore, the definition of urbanized area has been added to the list of definitions in § 58.1.

Section 58.14—Special purpose monitors. One comment was received relative to this section. The commenter urged that States should not only be

allowed to perform special purpose monitoring but encouraged to anticipate and measure possible air quality problems which may not be identifiable by the SLAMS network. While suggesting no particular change to what was proposed, the commenter appeared to feel that perhaps the discretion given to each Regional Administrator relative to standardizing siting and operational procedures would not provide sufficient flexibility for some types of investigations. EPA believes that the changes proposed should provide sufficient flexibility for special purpose studies since case-by-case decisions can be made by the Regional Administrator. Today's action makes final the revisions to § 58.14 which were proposed on October 10, 1980.

Section 58.20—Air quality surveillance: Plan content. EPA inadvertently proposed to revise the introductory sentence of § 58.20 to require the States to revise their SIPs to incorporate descriptions of their lead monitoring networks by April 1, 1981. EPA intended to require the States to make their network descriptions available to the Regional Administrators as required for the other criteria pollutants by § 58.20(e). EPA did not intend to require the States to revise their SIPs to include lead network descriptions. Accordingly, EPA is withdrawing the proposed change to the introductory sentence of § 58.20 and inserting a reference to lead networks in § 58.20(e). EPA is making this change without providing an additional opportunity to comment because it will not impose additional requirements on the States. In fact, this change will eliminate the need for the States to comply with SIP revision procedures when preparing their network descriptions.

EPA received three comments requesting additional time for the preparation of lead network descriptions because States would not be able to finish planning their networks by April 1, 1981. EPA realizes that the April 1, 1981 deadline has passed. EPA is revising § 58.20(e) to require these descriptions to be made available by December 1, 1981.

EPA is also revising paragraph (c) of § 58.20 to add the words "except Pb" as proposed.

Section 58.23—Monitoring network completion. Two comments were received on the proposed revision and both recommended that additional time be provided for completion of the approved SLAMS network for lead. The revision to this section proposed in October 1980 would have required that

by January 1, 1982, each lead monitor in the approved SLAMS network must:

Be in operation;

Be sited in accordance with Appendix E;

Be located as described on the station's SAROAD identification form; and

Meet all of the quality assurance requirements pertinent to lead in Appendix A.

After considering the current status of the lead networks, the delays in making today's action final and the additional resources needed by some control agencies, EPA believes it appropriate to withdraw the proposed changes in § 58.23. Thus, today's action provides that the lead portion of the approved SLAMS networks must meet all requirements of Part 58 by January 1, 1983. This is the same compliance date which applies to the SLAMS network for the other pollutants.

Section 58.30—NAMS network establishment. Two comments were received on the proposed revision and both recommended that additional time be provided for establishment of the NAMS network. Both felt that the changes proposed to Appendix D would require many agencies to move existing urban monitors. Given this input and the delay in issuing today's rulemaking, the Administrator believes that an eight-month deferral of the date proposed is appropriate. Thus, today's action adds "with the exception of Pb, which shall be by December 1, 1981" after "January 1, 1980" in paragraph (a). The purpose of this revision is to set a date by which the lead NAMS portion of the SLAMS network must be fully described and documented in a submittal to the Administrator (through the appropriate Regional Office).

Section 58.34—NAMS network completion. Two comments were received on the proposed revision and both recommended that additional time be provided for completion of the NAMS network. As discussed above, the Administrator recognizes that bringing the NAMS into full compliance may require additional time and resources and may not be possible for all agencies to accomplish during 1981. Given this situation, the completion date proposed is deferred by 6 months. Today's action adds "with the exception of Pb, which shall be by July 1, 1982" after "January 1, 1981" in the introductory sentence. This means that by July 1, 1982, all lead NAMS must be in operation, be sited in accordance with the criteria in Appendix E, be located as described in the station's SAROAD site identification form, and be operated under the quality assurance requirements of Appendix A.

Section 58.35—NAMS data submittal. The single comment received on this section expressed the view that the submission of ambient lead data within 90 days after the completion of each calendar quarter will not be possible for many small agencies. After reviewing data from a survey of State and local agencies, EPA believes that most agencies view the 90 day schedule as reasonable. Therefore, no change is being made to this portion of § 58.35. As a result of the deferral of the requirements of § 58.34, the Administrator believes that also delaying the first quarterly reporting of ambient lead data by six months is appropriate. Today's action deletes the current wording in paragraph (d) and replaces it with the following: "For TSP, SO₂, CO, O₃, and NO₂, the first quarterly report will be due on or before June 30, 1981, for data collected during the first quarter of 1981. For Pb, the first quarterly report will be due on December 31, 1982, for data collected during the third quarter of 1982." The purpose of this revision is to establish a date for submission of the first quarterly reports of data from Pb NAMS and to make it clear that the June 30, 1981 date applies only to TSP, SO₂, CO, O₃, and NO₂. States having one or more Pb NAMS operating according to all Part 58 criteria prior to July 1, 1982, are encouraged to submit data from those monitors in accordance with the reporting requirements of this section for other pollutants.

Appendix A—Quality Assurance Requirements for State and Local Air Monitoring Stations (SLAMS). The overall purpose of today's revisions to Appendix A is to establish requirements for assuring the quality of ambient lead data produced by the SLAMS networks which are comparable to the requirements for the other criteria pollutants already in Appendix A. Today's revisions, therefore, present procedures for assessing the precision and accuracy of lead data and generally require quarterly submissions of calculated precision and accuracy data to EPA similar to that required for the other pollutants.

It should be noted that many of the requirements already contained in Appendix A will also apply to lead. In general, the sections relating to manual methods will pertain to lead as well as to TSP. Persons reviewing today's revisions to Appendix A are urged to refer to the materials already in this Appendix and to the references of Appendix A.

Three commenters urged that EPA supply lead audit samples to all

laboratories performing analyses of lead from the SLAMS networks. One suggested that Appendix A be revised to specify that standardized audit samples be made available by EPA through its national audit program. The Agency disagrees with this suggestion because for EPA to supply such standards would seriously compromise the independence of the EPA audit from routine SLAMS audit procedures. Therefore, no action will be taken to revise the EPA audit program to adopt this suggestion.

Since the sampling methods for TSP and Pb are identical, four commenters urged that Appendix A be changed to allow a reporting organization to use collocated TSP sites to serve as the collocated sites for estimating the precision of lead measurements. This change would eliminate the need for paired hi-volume samplers at the lead sites and would significantly reduce the equipment and manpower requirements of the operating agency. EPA agrees with the need to minimize resource requirements but is also concerned about obtaining Pb precision estimates from sites closely representing the highest ambient Pb concentrations. Since some selected collocated TSP sites may not adequately reflect the highest Pb concentrations, section 3.2.1 of Appendix A has been modified to require Pb precision estimates to be determined from a single Pb site. The estimates would be determined by analysis of duplicate strips taken from one filter. This approach eliminates the additional expense of collocated Pb samplers and is responsive to the intent of the commenters.

One commenter urged that Appendix A be revised to require only one collocated lead monitor per reporting organization rather than the two required. This suggestion is closely related to those discussed in the preceding paragraph. As discussed above, the revisions to Appendix A now allow precision to be estimated from a single site. Thus, no collocation is required.

One commenter suggested that Appendix A be revised to combine the TSP and lead networks for accuracy flow audits. Thus, the requirement to audit 25% of the TSP monitors and 25% of the lead monitors could be met by auditing not less than 25% of the combined network. EPA agrees that the implementation of this suggestion should reduce manpower requirements while still providing an adequate assessment of flow rates. A new paragraph (d) has been added to section 3.2.2 to allow the quarterly flow audits

to be based on 25% of the entire hi-vol network.

One commenter expressed the view that the samples used in the intralaboratory audit program should be more representative of actual air samples. To do this, such samples would contain insoluble lead compounds typically present in ambient air. The type of audit sample described in the October proposal has worked well in current EPA audits and may be prepared by State and local agencies. Audit samples of the type suggested are not producible by most State and local agencies. Therefore, today's action makes final the procedures for preparing audit samples as proposed in October 1980.

Two commenters suggested that accuracy audits be performed once every quarter or once every two quarters, rather than each day that samples are analyzed. After reviewing this suggestion, EPA believes it has some merit but would trade off too much information on accuracy. EPA believes that estimates of accuracy are needed throughout the analytical period. Performing such audits only once every 3 or 6 months would not yield enough data to make meaningful estimates of accuracy. In response to this suggestion, today's action modifies Appendix A to require at least six audit sample analyses spread out over a calendar quarter. EPA believes that this will produce sufficient information on accuracy while requiring less manpower than the requirement proposed in October 1980.

One commenter urged that sites with the highest quarterly averages rather than sites with the highest yearly averages be selected for collocation. As discussed above, Appendix A has been altered so that collocation is no longer required and that sites reflecting the highest average concentrations will be used for estimating precision.

One commenter urged that control agencies be allowed to continue to do their lead analyses under existing quality assurance plans even if they do not require audit samples. This suggestion would change a cornerstone of EPA's quality assurance program since without the use of audit samples there would be no estimate of the accuracy of the data being produced. Today's rulemaking takes no action on this request.

Although not specifically addressed during the public comment period, the EPA has received technical suggestions for correcting a current problem with section 3.1.2 of Appendix A. This section requires audits of the SLAMS monitored each calendar quarter and specifies four

audit point concentration ranges. Audit point number 3 specifies a concentration range of 0.40-0.45 ppm for SO₂, NO₂, and O₃ and of 40-45 ppm for CO. In attempting to adhere to the reference method calibration procedure for NO₂, it has been found that it is impossible to generate audit points within the audit point number 3 range of 0.40-0.45 ppm. To resolve this unintended technical error, EPA is changing the range of audit point number 3 from 0.40-0.45 to 0.35-0.45 ppm for SO₂, NO₂, and O₃. For consistency reasons, the audit range for CO is changed from 40-45 to 35-45 ppm.

Appendix B—Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring. The purpose of today's revision to Appendix B is to establish, as required by §§ 51.24m and 52.21m, requirements for quality assurance procedures for the monitoring of ambient lead for PSD purposes. A substantial amount of the TSP requirements already contained in Appendix B will also apply to Pb. Thus, readers of today's revisions should refer to the material currently in Appendix B. Since the requirements for lead are very similar to those for TSP, the equipment and manpower requirements for carrying out the Pb quality assurance procedures are minimal.

There were no specific comments suggesting changes to the proposed revisions to Appendix B. However, changes are being made to the audit point table in section 3.2 for the same technical reasons that were presented in the preceding discussion of Appendix A. The changes are in audit point number 3 and are identical to those noted in Appendix A.

To conserve resources, EPA has changed section 3.3.2 by adding a sentence that would allow collocated TSP samplers to serve as the collocated lead samplers. EPA believes that precision of the Pb monitors can be adequately assessed in this manner.

Appendix D—Network Design for State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS). Today's action establishes requirements which closely parallel the requirements on monitor location which have been contained in § 51.17b and also reflect criteria very similar to the material on network design presented in the "Supplementary Guidelines for Lead Implementation Plans." Today's action establishes section 2.7 which presents the overall network design requirements for the SLAMS network and section 3.6 which specifies network design requirements for NAMS. Of the 19 responses received on the October 1980 proposal, nine

raised one or more issues related to Appendix D. The majority of these comments were constructive but did not call for major changes to the proposed requirements. The modifications to Appendix D being made final today, therefore, reflect these comments but differ little from those proposed. The following paragraphs present the comments received and explain what action has been taken.

Two commenters expressed the view that the Regional Administrator would have too much authority in setting the number of SLAMS monitors in the lead network. This type of authority is already provided to the Regional Administrator for the other criteria pollutants. The purpose of EPA participation in network design is to insure that all monitoring necessary for purposes of the SIP are carried out. Adequate monitoring is essential to the development of effective strategies for pollution control. EPA has broad responsibilities to ensure that the SIPs contain effective pollution control strategies. Therefore, EPA is providing the Regional Administrator with authority to approve the State's networks as proposed.

Three commenters recommended that changes be made to the criteria for determining the need for monitors within the SLAMS network. One felt that the period for counting violations of the ambient standards should start in 1977 rather than 1974. The suggestion was in reaction to a situation where NAAQS exceedances had been experienced during one quarter of 1975 but all subsequent data from these sites had shown no exceedances. While EPA agrees that the issue raised here has merit, it believes that the Regional Administrators have adequate discretion to determine through case-by-case reviews which areas are clearly attaining the lead NAAQS and do not require monitors. To clarify the Administrator's intent on this matter, a new provision has been added to section 2.7 which allows the Regional Administrator to waive lead monitoring where there have been no violations of the lead NAAQS for the most recent eight quarters preceding the submission of the SLAMS network description for lead required by section 58.20. For locations where monitors are no longer being operated, data showing attainment during the final eight quarters of operation may provide the basis for such a waiver. This change should virtually eliminate the need for monitoring in smaller urban areas where historical data show clear evidence of attainment. One commenter suggested

that the requirement calling for two NAMS stations in any urbanized area with a population exceeding 500,000 be revised to employ a criteria of 1,000,000. No action has been taken on this comment. EPA believes that the 500,000 population criterion is representative of potential problem areas from mobile sources.

One commenter felt that since leaded gasoline sales are declining annually, many urban areas are projecting attainment within the next 1-2 years. Given this situation, this commenter felt that requiring such areas to establish lead monitoring networks would strain the resources of State or local control agencies unnecessarily. While EPA recognizes the very real resource constraints facing control agencies, it does not agree that operating lead networks for 1-2 years in such areas is unnecessary. If ambient lead levels are in fact dropping due to decreasing sales of leaded gasoline, ambient data to document this occurrence need to be obtained. Since the lead NAAQS is based upon health-related criteria, agencies concerned with protecting public health have a need to regularly evaluate the impact of areas exceeding the NAAQS.

Three commenters recommended that some mechanism be added to overcome the difficulties they foresee in establishing and operating sites meeting the requirements proposed for category (a) stations. The commenters felt that adherence to the microscale setback criteria would often be difficult to achieve, particularly in urban areas where schools or other large public facilities are located close to heavily traveled roadways. Other problems foreseen were obtaining electric power, exposure to vandalism, and difficult operator access. A related comment also questioned whether the 5-15 meter setback was reasonably related to population exposure, given the 3-month averaging time for the lead NAAQS. After evaluating these comments, EPA agrees that substantial practical difficulties would be likely in satisfying the category (a) requirements as proposed. To provide control agencies greater flexibility in establishing and operating their maximum concentration sites, Appendix D has been modified to allow either a middle scale or microscale site and in rare cases, a neighborhood scale site to serve as the category (a) station in NAMS and SLAMS. This change will allow those areas that have the maximum traffic on limited access highways with large fences, rights of way, and restricted operator access to use a middle scale

site to satisfy the requirements for a category (a) station. This change should also be useful in areas where schools or nursing homes are located close to major arterial highways.

Appendix E—Probe Siting Criteria for Ambient Air Quality Monitoring. One commenter felt that minimizing re-entrainment and eliminating non-representativeness should serve as the primary basis for the 2-meter minimum height specified for lead monitors. The commenter felt that this requirement should not be based on considerations such as the security of the equipment or the prevention of vandalism. The Agency agrees and as a partial response to this comment, the discussion within Appendix E has been amended to explain that the lower limit reflects a compromise between ease of servicing the sampler and the desire to avoid unrepresentative conditions due to re-entrainment from dusty surfaces. The upper limit represents a compromise between the desire to have measurements which are most representative of population exposures and a consideration of the practical factors noted above.

One commenter pointed out that the 5-15 meter setback distance for the micro and middle scales proposed in Table 5 was inconsistent with section 7.3 which specifies a setback distance of greater than 15 meters for all scales larger than the microscale. This problem was corrected by revising Table 5. The middle scale no longer shares the same criteria as the microscale. The middle scale has been aligned with the neighborhood, urban, and regional scale and shares their criteria. Therefore, middle scale sites are no longer limited to a 5-15 meter setback from major roadways but may be set back from roadways according to guidance in Table 4 of Appendix E.

Appendix F—Annual SLAMS Air Quality Information. No comments were received; thus the final rulemaking appears as proposed.

Regulatory Analysis

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 is not major because this action imposes no new major regulatory requirements, but principally recodifies existing lead ambient air monitoring and data reporting requirements and establishes them in a format similar to those established for the other criteria pollutants. The additional resources necessary for network design, instrument probe siting, and quality

assurance are not considered significant since only the procedures for quality assurance are new requirements. On the other hand, the reporting requirements in the revised regulations should slightly reduce the overall data reporting burden of State and local agencies since the amount of data required to be reported quarterly will decrease substantially.

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

This regulation has also been submitted to OMB for review under the Paperwork Reduction Act of 1980 (44 U.S.C. Sec. 3501 et seq.).

This rulemaking is promulgated under authority of Sections 110, 301(a) and 319 of the Clean Air Act 42 U.S.C 7410, 7601(a), 7619.

Dated: August 24, 1981.

Anne M. Gorsuch,
Administrator.

EPA amends Chapter I, Title 40, Code of Federal Regulations, as follows:

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

1. Appendix G to Part 50 is amended by adding new sentences after the first sentence in Section 1.1 as follows:

1. Principle and Applicability.

1.1 * * * The analysis of the 24-hour samples may be performed for either individual samples or composites of the samples collected over a calendar month or quarter, provided that the compositing procedure has been approved in accordance with section 2.8 of Appendix C to Part 50 of this chapter—*Modifications of methods by users.* (Guidance or assistance in requesting approval under Section 2.8 can be obtained from the address given in section 2.7 of Appendix C to Part 50 of this chapter.) (Secs. 110, 301(a) and 319 of the Clean Air Act (42 U.S.C. 7410, 7601(a), 7619))

PART 51—PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

§ 51.17b [Removed]

1. Section 51.17b is removed.

(Secs. 110, 301(a) and 319 of the Clean Air Act (42 U.S.C. 7410, 7601(a), 7619))

PART 58—AMBIENT AIR QUALITY SURVEILLANCE

1. Section 58.1 is amended by adding a new paragraph (r) as follows:

§ 58.1 Definitions.

(r) "Urban area population" means the population defined in "1970 Census of Population; Supplementary Report:

Population of Urbanized Areas Established Since the 1970 Census, for the United States; 1970," U.S. Bureau of Census, PC(S)-106, U.S. Government Printing Office, Washington, D.C., October, 1976.

2. Section 58.14 is revised to read as follows:

§ 58.14 Special purpose monitors.

(a) Any ambient air quality monitoring station other than a SLAMS or PSD station from which the State intends to use the data as part of a demonstration of attainment or nonattainment or in computing a design value for control purposes of the National Ambient Air Quality Standards (NAAQS) must meet the requirements for SLAMS described in § 58.22 and, after January 1, 1983, must also meet the requirements for SLAMS as described in § 58.13 and Appendices A and E to this part.

(b) Any ambient air quality monitoring station other than a SLAMS or PSD station from which the State intends to use the data for SIP-related functions other than as described in paragraph (a) of this section is not necessarily required to comply with the requirements for a SLAMS station under paragraph (a) but must be operated in accordance with a monitoring schedule, methodology, quality assurance procedures, and probe or instrument-siting specifications approved by the Regional Administrator.

§ 58.20 [Amended]

3. Section 58.20 is amended by adding "except Pb," after "per pollutant" in paragraph (c) and by adding in the second sentence of paragraph (e), "except for Pb which must be available by December 1, 1981" after "plan revision submittal."

§ 58.30 [Amended]

4. Section 58.30 is amended by adding "with the exception of Pb, which shall be by December 1, 1981," after "January 1, 1980," in paragraph (a).

§ 58.34 [Amended]

5. Section 58.34 is amended by adding "with the exception of Pb, which shall be by July 1, 1982," after "January 1, 1981," in the introductory sentence.

6. Section 58.35, paragraph (d), is revised to read as follows:

§ 58.35 NAMS data submittal.

(d) For TSP, CO, SO₂, O₃, and NO₂, the first quarterly report will be due on or before June 30, 1981, for data collected during the first quarter of 1981. For Pb, the first quarterly report will be due on

December 31, 1982, for data collected during the third quarter of 1982.

Appendix A [Amended]

7. Appendix A is amended as follows:

a. In section 2.2, a new sentence is inserted after the first sentence as follows:

2. Quality Control Requirements.

2.2 * * * Section 2.09 of Reference 2 describes specific guidance for the development of a quality control program for SLAMS automated analyzers and manual methods. * * *

b. In section 3, the table in section 3.1.2 listing audit points and concentration ranges is amended; a new paragraph is added at the end of section 3.2.1; in section 3.2.2, the introductory text is revised, and paragraph (d) is added as set forth below:

3. Data Quality Assessment Requirements

3.1.2 Accuracy. * * *

Audit point	Concentration range, ppm	
	SO ₂ , NO ₂ , O ₃	CO
1. _____	0.03-0.08	3-8
2. _____	0.15-0.20	15-20
3. _____	0.35-0.45	35-45
4. _____	0.60-0.90	60-90

3.2 Manual Methods

3.2.1 Precision. * * *

For the Pb reference method, precision will be estimated from duplicate filter strip analyses performed on samples from the expected highest concentration lead site. The precision of an equivalent lead method may be assessed by analyzing identical aliquots of the samples collected at the expected highest concentration lead site. For each day lead samples are collected, cut two identical strips from the filter or take two identical aliquots. Designate the first strip/aliquot as the sample which will be used to report air quality for the site and designate the other as the duplicate sample. The difference in measured concentration ($\mu\text{g}/\text{m}^3$) between the two samples is used to calculate precision as described in 4.2.1.

3.2.2 Accuracy. The accuracy of manual sampling methods is assessed by auditing a portion of the measurement process. For TSP, the flow rate during sample collection is audited. For Pb, the flow rate and analytical measurement are audited. The flow audit should be scheduled so as to avoid interference with a scheduled sampling period. For SO₂ and NO₂ methods, the analytical measurement is audited.

(d) Pb Methods. For the reference method (Appendix G of Part 50 of this chapter) the

flow rates of the high volume Pb samplers are to be audited as part of the TSP network using the same procedures described in 3.2.2(a) above. For agencies operating both TSP and Pb networks, 25 percent of the total number of high volume samplers are to be audited each quarter.

Each calendar quarter, audit the Pb reference method analyses using glass fiber filter strips containing a known quantity of Pb. Audit samples are prepared by depositing a lead solution on 1.9 cm by 20.3 cm (3/4 inch by 8 inch) unexposed glass fiber filter strips, and allowing to dry thoroughly. The audit samples must be prepared using reagents different from those used to calibrate the lead analytical equipment being audited. Prepare audit samples in the following concentration ranges:

Range	Pb concentration $\mu\text{g}/\text{strip}$	Equivalent ambient Pb concentration $\mu\text{g}/\text{m}^3$
1. _____	100-300	0.5-1.5
2. _____	600-1000	3.0-5.0

* Equivalent ambient Pb concentration in $\mu\text{g}/\text{m}^3$ is based on sampling at 1.7 m³/min for 24 hours on 20.3 cm x 25.4 cm (8 inch x 10 inch) glass fiber filter.

Audit samples must be extracted using the same extraction procedure used for exposed filters.

Analyze three audit samples in each of the two ranges each quarter samples are analyzed. The audit sample analyses are to be spread out as much as possible over the entire calendar quarter. The percent difference between the audit concentration (in $\mu\text{g Pb}/\text{strip}$) and the analyst's measured concentration (in $\mu\text{g Pb}/\text{strip}$) is used to calculate analysis accuracy as described in section 4.2.2.

The accuracy of an equivalent method is assessed in the same manner as the reference method. The flow auditing device and Pb analysis audit samples must be compatible with the specific requirements of the equivalent method.

c. In section 4, the introductory sentence of section 4.2.1 and the list of pollutants in paragraph (a) of section 4.2.1 are revised; in section 4.2.2, paragraph (c) is revised and a new sentence is added to paragraph (d) and new paragraphs (e) and (f) are added as follows:

4. Calculations for Data Quality Assessment

4.2.1 Precision. Estimates of precision are calculated from the results obtained from collocation of two samplers or from the analyses of duplicate strips/aliquots as described in section 3.2.1. * * *

a. Single Instruments Precision. * * *

TSP less than 20 $\mu\text{g}/\text{m}^3$

SO₂ less than 40 $\mu\text{g}/\text{m}^3$

NO₂ less than 30 $\mu\text{g}/\text{m}^3$

Pb less than 0.15 $\mu\text{g}/\text{m}^3$

4.2.2 Accuracy. * * *

(c) *Single-Analysis-Day Accuracy (SO₂, NO₂, and Pb)*. For each of the audits of the analyses for SO₂, NO₂, and Pb described in section 3.2.2(b), (c), and (d) let X_i represent the known value of the audit sample and Y_i the indicated value of SO₂, NO₂, and Pb. Calculate the percentage difference (d_i) for each audit at each concentration level using equation 1.

(d) *Accuracy for Reporting Organization (SO₂, NO₂, and Pb)*. Calculate * * * Calculate the 95 Percent Probability Limits for the accuracy for the reporting organization using equations 6 and 7 and record these limits on the back of Form 1 for each concentration level under columns 40-57 for SO₂ and NO₂, and under columns 40-45 and 46-51 for the Range 1 and Range 2 Pb concentrations, respectively.

(e) *Single Sampler Accuracy (Pb)*. For high-volume samplers, flow audit calculations and reporting audit results are included with the TSP determinations as described in section 4.2.2(a) and (b) above. The remainder of paragraphs (e) and (f) apply to equivalent methods which do not use the high-volume sampler.

For the flow rate audit described in section 3.2.2(d), let X_i represent the known flow rate and Y_i represent the indicated flow rate. Calculate the percentage difference (d_i) for each audit using equation 1.

(f) *Sampling Accuracy for Reporting Organization (Non-High Volume Sampler Pb Methods)*. Using equation 8, calculate the average ($\bar{D}$) of the individual percent differences for all samplers audited during the calendar quarter. Compute the standard deviation (S_d) of all the percentage differences for all of the instruments audited during the calendar quarter using equation 9.

Calculate the 95 Percent Probability Limits for the accuracy of a reporting organization using equations 6 and 7, and record these limits on the back of Form 1 under columns 52-57. Note that since the audit is conducted at only one level, columns 40-45 and 46-51 are not used for reporting accuracy during sampling; however, these

columns will be used for reporting accuracy during analyses as described in (d). For reporting organizations having four or fewer samplers for Pb, which will be the usual case, only one audit is required each quarter. For such reporting organizations, the audit results of two consecutive quarters are required to calculate an average and a standard deviation using equations 8 and 9. Therefore, semi-annual reporting (instead of quarterly) of probability limits is required.

d. In section 5, the instructions in section 5.3 are amended as follows:

(1) By revising the instructions for Automated Analyzers, blocks 34 and 35, and adding instructions for new blocks 63-65 as follows:

5. Reporting Requirements

5.3 Instructions for Form 1

Block No. Automated analyzers (form 1, front)

25 to 27 * * *

34. Traceability. If audit gases were traced to NBS by the reporting organization, put 1 in block 34. If audit gases were traced to NBS by

Block No. Automated analyzers (form 1, front)

someone outside the reporting organization, put 2 in block 34.
35. Source of Local Primary Standard: For accuracy determination, refer to code listed in Note 2.

63 to 65. Number of Audits at Level 4: Report the total number of audits performed at level 4.

(2) By revising the instructions for manual methods for blocks 20-23, block 36, and the Table of Information for blocks 40-57, and by adding instructions for new blocks 58-60 as follows:

Manual methods (form 1, back)

20 to 23. Number of Collocated samples below the limit:

TSP-20 µg TSP/m³
SO₂-40 µg SO₂/m³
NO₂-30 µg NO₂/m³
Pb-0.15 µg Pb/m³

36. Not applicable

40 to 57. Probability Limits, Accuracy: * * *

Blocks	Levels	TSP cfm	Pb cfm	Audit concentrations	
				Pb µg/strip ¹	SO ₂ , NO ₂ µg/ml
40-45	1			100 to 300	0.2 to 0.3
46-51	2	One within 40-60 cfm.		600 to 1,000	0.5 to 0.6
52-57	3		(²)		0.8 to 0.9
58-60			(²)	(²)	(²)

¹ Audit ranges apply only to the Pb reference method. Audit ranges for an equivalent Pb method must be compatible with the specific requirements of the equivalent method.

² Flow audit of equivalent method should be in normal operating range of the sampler.

³ Number of Valid Collocated Data Pairs: Enter the total number of data pairs from all the collocated sites.

e. The Data Assessment Report Form front and back, is revised to read as follows:

BILLING CODE 6560-26-M

OMB No 158-R0012
Expires

DATA ASSESSMENT REPORT

REPORTING ORGANIZATION YEAR QUARTER
 STATE 1 2 3 4 5 6 7 8
 1 2 3 4 5 6 7 8

SEND COMPLETED FORM
 TO REGIONAL OFFICE
 WITH COPY TO EMSLRTP

NAME OF REPORTING ORGANIZATION

AUTOMATED ANALYZERS

	PRECISION		PROBABILITY LIMITS	
	NO. OF ANALYZERS ¹	PRECISION CHECKS	LOWER	UPPER
A CO	15 17	18-21	22-20	22-20
B NO ₂	15 17	18-21	22-27	22-27
C O ₃	15 17	18-21	22-27	22-27
D SO ₂	15 17	18-21	22-27	22-27
E —	15 17	18-21	22-27	22-27

ACCURACY

	SOURCE OF LOCAL PRIMARY STANDARD ²		NO. OF ANALYSES		NO. OF AUDITS AT LEVEL 4	
	TRACEABILITY	NO. OF ANALYSES	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
A CO	34	28-33	35-45	45-50	51-56	57-62
B NO ₂	34	28-33	35-45	45-50	51-56	57-62
C O ₃	34	28-33	35-45	45-50	51-56	57-62
D SO ₂	34	28-33	35-45	45-50	51-56	57-62
E —	34	28-33	35-45	45-50	51-56	57-62

¹ COUNT ONLY REFERENCE OR EQUIVALENT MONITORING METHODS² Identify according to the following code

- A. NBS SRM
 B. EMIL REFERENCE GAS
 C. VENDOR CRM
 D. PHOTOMETER
 E. BAKI
 F. OTHER, SPECIFY _____

FIGURE 1 FORM 1 (FRONT)

Appendix B [Amended]

8. Appendix B is amended as follows:

a. In section 2, a new sentence is inserted after the first sentence of section 2.2 to read as follows:

2. Quality Control Requirements.

2.2 * * * Section 2.09 of Reference 2 describes specific guidance for the development of a quality control program for PSD automated analyzers and manual methods. * * *

b. In section 2.2, the second sentence is amended by removing the word "Method" and inserting the word "Many".

c. In section 3, the concentration range table in section 3.2 is amended, and sections 3.3.2 and 3.4.2 are added in the appropriate places as set forth below:

3. Data Quality Assessment Requirements.

3.2 Accuracy of Automated Methods.

Audit point	Concentration range, ppm		
	SO ₂	NO _x	CO
1	0.03-0.08	3-8	
2	0.15-0.20	15-20	
3	0.35-0.45	35-45	
4	0.80-0.90	80-90	

3.3.2 *Pb Method.* The operation of collocated samplers at one sampling site must be used to assess the precision of the reference or an equivalent Pb method. The procedure to be followed for Pb methods is the same as described in 3.3.1 for the TSP method. If approved by the permit granting authority, the collocated TSP samplers may serve as the collocated lead samplers.

3.4.2 *Pb Method.* For the reference method (Appendix G of Part 50 of this chapter) during each sampling quarter audit the flow rate of each high-volume Pb sampler at least once. The procedure to be followed for lead methods is the same as described in section 3.4.1 for the TSP method.

For each sampling quarter, audit the Pb analysis using glass fiber filter strips containing a known quantity of lead. Audit samples are prepared by depositing a Pb solution on 1.9 cm by 20.3 cm (¾ inch by 8 inch) unexposed glass fiber filter strips and allowing to dry thoroughly. The audit samples must be prepared using reagents different from those used to calibrate the Pb analytical equipment being audited. Prepare audit samples in the following concentration ranges:

Ranges	Pb concentration µg/strip	Equivalent ambient Pb concentration ¹ µg/m ³
1	100 to 300	0.5 to 1.5
2	600 to 1,000	3.0 to 5.0

¹ Equivalent ambient Pb concentration in µg/m³ is based on sampling at 1.7 m/min for 24 hours on 20.3 cm x 25.4 cm (8 inch x 10 inch) glass fiber filter.

Audit samples must be extracted using the same extraction procedure used for exposed filters.

Analyze at least one audit sample in each of the two ranges each day that samples are analyzed. The difference between the audit concentration (in µg Pb/strip) and the analyst's measured concentration (in µg Pb/strip) is used to calculate accuracy as described in section 5.4.

The accuracy of an equivalent method is assessed in the same manner as the reference method. The flow auditing device and Pb analysis audit samples must be compatible with the specific requirements of the equivalent method.

d. In section 5, section 5.1 is revised and sections 5.3 and 5.4 are added as set forth below:

5. Calculations for Manual Methods.

5.1 *Single Instrument Precision for TSP and Pb.* Estimates of precision for ambient air quality measurements from the TSP and Pb methods are calculated from results obtained from the collocation of two samplers at one sampling site as described in section 3.3.1 for TSP and 3.3.2 for Pb. At the end of each sampling quarter, calculate and report a precision probability interval using weekly collocation sampler results. Directions for calculation are given below and directions for reporting are given in section 6.

For the paired measurements described in section 3.3.1 or 3.3.2 calculate the percentage difference (d_i) using equation 1 where Y_i is the TSP or Pb concentration measured by the duplicate sampler and X_i is the TSP or Pb concentration measured by the sampler reporting air quality for the site. Calculate the quarterly average percentage difference (d_i), equation 2, standard deviation (S_i), equation 3, and upper and lower 95 percent probability limits for precision (equations 6 and 7).

Upper 95 Percent Probability Limit =

$$d_i + 1.96S_i \sqrt{2} \quad (6)$$

Lower 95 Percent Probability Limit =

$$d_i - 1.96S_i \sqrt{2} \quad (7)$$

5.3 *Single Instrument Accuracy for Pb.*

Each organization, at the end of each sampling quarter, shall calculate and report the percentage difference for each high-volume lead sampler audited during the quarter. Directions for calculation are given in 5.2 and directions for reporting are given in section 6.

5.4 *Single-Analysis-Day Accuracy for Pb.*

Each organization, at the end of each sampling quarter, shall calculate and report the percentage difference for each Pb analysis audit during the quarter. Directions for calculations are given below and directions for reporting are given in section 6.

For each analysis audit for Pb described in section 3.4.2, let X_i represent the known value of the audit sample and Y_i the indicated value of Pb. Calculate the percentage difference (d_i) for each audit at each concentration level using equation 1.

6. Organization Reporting Requirements [Amended]

e. In section 6, the first paragraph is amended by deleting the words "section 5.2" and inserting in their place the words "sections 5.2 and 5.3."; and the first sentence of the second paragraph is amended by deleting the word "quarterly" and adding the phrase "for the entire sampling quarter" after the word "information".

Appendix D [Amended]

9. Appendix D is amended as follows:

a. In the Table of Contents, section 2.7 and 3.6 are added in the appropriate places as follows:

2.7 Lead (Pb) Design Criteria for SLAMS.

3.6 Lead (Pb) Design Criteria for NAMS.

b. In section 1, the fourth sentence of the third paragraph is revised to read as set forth below:

1. SLAMS Monitoring Objectives and Spatial Scales.

* * * It should be noted that this appendix contains no criteria for determining the total number of stations in SLAMS networks, except that a minimum number of lead SLAMS is prescribed. * * *

c. In section 2, the term "Slams" is corrected to read "SLAMS" in the title and section 2.7 is added as follows:

2. SLAMS Network Design Procedures.

2.7 *Lead (Pb) Design Criteria for SLAMS.* Presently, about 90 percent of the lead concentration in air originates from automobile exhaust, while the remaining 10 percent comes from industrial processes and stationary combustion sources. (6) The most important spatial scales to effectively characterize the emissions from both mobile and stationary sources are the micro, middle, and neighborhood scales. For purposes of establishing monitoring stations to represent large homogeneous areas other than the above scales of representativeness, urban or regional scale stations would also be needed.

Microscale.—This scale would typify areas such as downtown street canyons and traffic corridors where the general public would be exposed to maximum concentrations from mobile sources. Because of the very steep ambient Pb gradients resulting from Pb emissions from mobile sources, (7) the dimensions of the microscale for Pb generally would not extend beyond 15 meters from the roadway. Emissions from stationary sources such as primary and secondary lead smelters, and primary copper smelters may under

fumigation conditions likewise result in high ground level concentrations at the microscale. In the latter case, the microscale would represent an area impacted by the plume with dimensions extending up to approximately 100 meters. Data collected at microscale stations provide information for evaluating and developing "hot-spot" control measures.

Middle Scale—This scale generally represents lead air quality levels in areas up to several city blocks in size with dimensions on the order of approximately 100 meters to 500 meters. However, the dimensions for middle scale roadway type stations would probably be on the order of 50-150 meters because of the exponential decrease in lead concentration with increasing distances from roadways. The middle scale may for example, include schools and playgrounds in center city areas which are close to major roadways. Pb monitors in such areas are desirable because of the higher sensitivity of children to exposures to Pb concentrations. (7) Emissions from point sources frequently impact on areas at which single sites may be located to measure concentrations representing middle spatial scales.

Neighborhood Scale—The neighborhood scale would characterize air quality conditions throughout some relatively uniform land use areas with dimensions in the 0.5 to 4.0 kilometer range. Stations of this scale would provide monitoring data in areas representing conditions where children live and play. Monitoring in such areas is important since this segment of the population is more susceptible to the effects of lead.

Urban Scale—Such stations would be used to present ambient Pb concentrations over an entire metropolitan area with dimensions in the 4 to 50 kilometer range. An urban scale station would be useful for assessing trends in city-wide air quality and the effectiveness of larger scale air pollution control strategies.

Regional Scale—Measurements from these stations would characterize air quality levels over areas having dimensions of 50 to hundreds of kilometers. This large scale of representativeness would be most applicable to sparsely populated areas and could provide information on background air quality and interregional pollutant transport.

Monitoring data for ambient Pb levels are required in major urbanized areas, particularly where Pb levels have been shown or are expected to be of significant concern such locations are to be expected in urban areas having high population densities and accompanying high traffic densities. The total number and type of stations for SLAMS are not prescribed but must be determined on a case-by-case basis. As a minimum there must be two stations in any urbanized area which has a population exceeding 500,000. Also, as a minimum, there must be two stations in any area where lead concentrations currently exceed or have exceeded $1.5 \mu\text{g}/\text{m}^3$ quarterly arithmetic mean measured since January 1, 1974. For those areas less than 500,000 population where the lead concentrations have exceeded

$1.5 \mu\text{g}/\text{m}^3$ quarterly arithmetic mean, the Regional Administrator may waive the requirement for establishing SLAMS provided the State can demonstrate that measured lead concentrations have not exceeded the NAAQS for the eight quarters preceding the lead monitoring plan submission required by § 58.20. For locations where monitors are not being operated at the time of the Pb monitoring plan submission, data showing attainment during the final eight quarters of operation will generally provide the basis for the waiver. The EPA Regional Administrator may specify more than two monitoring stations if it is found that two stations are insufficient to adequately determine if the Pb standard is being attained and maintained. The Regional Administrator may also specify that stations be located in areas outside the boundaries of the urbanized areas.

Concerning the previously discussed required minimum of two stations, one of the stations must be a category (a) type station and the second a category (b) station. Both of these categories of stations are defined in section 3. For areas where the predominant lead levels come from automotive sources, the category (a) station must be a microscale or middle scale station located near a major roadway ($>30,000$ average daily traffic, [ADT]) in order to measure maximum Pb concentrations from mobile sources. In areas where there are no roadways exceeding 30,000 ADT, the station should be located near the roadway with the largest traffic volume. Studies (7, 8) indicate that lead levels decrease exponentially with distance from roadways. Thus, the higher concentrations are close to the roadway and stations located in such areas because of the steep concentration gradients, are most often found to represent the microscale and middle scale dimension. For areas where predominant lead levels come from point sources, the category (a) station generally represents the microscale or middle scale impact of the point source. However, in a few cases, sufficient mixing may occur during transport of the emissions from the source to the ground so that the category (a) station represents a neighborhood scale. The required category (b) station must be a neighborhood scale station since the microscale and middle scale station would not represent the air quality over large geographical areas and frequently may not be located in highly populated areas. It is recognized that in certain areas, a middle scale station may be located at schools or playgrounds near major roadways. However, in most cases, they are not located in such areas and since children (7) are the segment of the population most susceptible to the effects of lead and are more likely to live and play in the residential section of the urban area, the category (b) station should be located in residential areas having a combination of high population and traffic density. In the case where lead levels come primarily from point sources, the category (b) station generally represents a neighborhood scale impact of the point source.

To locate monitoring stations, it will be

necessary to obtain background information such as stationary and mobile source emissions inventories, morning and evening traffic patterns, climatological summaries, and local geographical characteristics. Such information should be used to identify areas that are most suitable to the particular monitoring objective and spatial scale of representativeness desired. Reference 9 provides additional guidance on locating sites to meet specific urban area monitoring objectives and must be used in locating new stations or evaluating the adequacy of existing stations.

After locating each Pb station, and, to the extent practicable, taking into consideration the collective impact of all Pb sources and surrounding physical characteristics of the siting area, a spatial scale of representativeness must be assigned to each station.

Guidance on locating monitoring stations in the vicinity of stationary lead sources is given in reference 10. This reference provides assistance in designing a network to meet the monitoring objective of determining the impact of point sources on ambient Pb levels.

d. In section 3, the third paragraph is revised to read as follows and section 3.6 is added as set forth below:

3. Network Design for National Air Monitoring Stations (NAMS).

Category (a): Stations located in the area(s) of expected maximum concentrations (generally neighborhood scale, except microscale for CO, microscale or middle scale for Pb, and urban scale for O_3);

3.6 Lead (Pb) Design Criteria for NAMS.

In order to achieve the national monitoring objective, two of the SLAMS located in urbanized areas with populations greater than 500,000 will be designated as NAMS. One of the stations must be a microscale or middle scale category (a) station, located adjacent to a major roadway ($\geq 30,000$ ADT) or near the roadway with the largest traffic volume if the volume is less than 30,000 ADT. A microscale location is preferred, but a middle scale is also acceptable if a suitable microscale location cannot be found.

The second station must be a neighborhood scale category (b) station located in a highly populated residential section of the urbanized area where traffic density is high, preferably ($\geq 30,000$ ADT) or near the roadway with the largest traffic volume if the volume is less than 30,000 ADT.

In certain urbanized areas greater than 500,000 population, point sources may have a significant impact on air quality lead levels in populated areas. To measure the impact of such sources, other monitors in the SLAMS network would normally be used.

e. In section 4, Table 4 is revised to include Pb and a title is added to the table as follows:

4. Summary

Table 4.—Summary of Spatial Scales for SLAMS and Required Scales for NAMS

Spatial scale	Scales applicable for SLAMS						Scales required for NAMS					
	TSP	SO ₂	CO	O ₃	NO _x	Pb	TSP	SO ₂	CO	O ₃	NO _x	Pb
Micro.....			✓			✓			✓			✓
Middle.....	✓	✓	✓	✓	✓	✓						✓
Neighborhood.....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Urban.....	✓	✓		✓	✓	✓				✓	✓	
Regional.....	✓	✓		✓		✓						

f. In section 5, the list of references is amended by adding references 6 through 10 as follows:

5. References

6. Control Techniques for Lead Air Emissions, OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-450/2-77-012. December 1977.

7. Air Quality Criteria for Lead. Office of Research and Development, U.S. Environmental Protection Agency, Washington, DC. EPA-600/8-77-017. December 1977.

8. Johnson, D. E., et al. Epidemiologic Study of the Effects of Automobile Traffic on Blood Lead Levels, Southwest Research Institute, Houston, TX. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-600/1-78-055. August 1978.

9. Optimum Site Exposure Criteria for Lead Monitoring. PEDCo Environmental, Inc., Cincinnati, OH. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA Contract No. 68-02-3013. (May 1981.)

10. Guidance for Lead Monitoring in the Vicinity of Point Sources. Office of Air Quality Planning and Standards, and Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-450/4-81-008. January 1981.

10. Appendix E is amended as follows:
a. The Table of Contents is amended by adding a new section 7 and renumbering the original sections 7 through 10 as sections 8 through 11 as follows:

Appendix E—Probe Siting Criteria for Ambient Air Quality Monitoring

7. Lead (Pb).

7.1 Vertical Placement.

7.2 Spacing from Obstructions.

7.3 Spacing from Roadways.

8. Probe Material and Pollutant Sample Residence Time.

9. Waiver Provisions.

10. Discussion and Summary.

11. References.

1. Introduction [amended].

b. In Section 1, the last sentence of the second paragraph is amended by changing the term "Section 8" to "Section 9".

2. Total Suspended Particulates (TSP) [amended].

c. In section 2.3, *Spacing from Roads*, the fourth sentence in the first paragraph is amended by deleting the words "special purpose monitoring studies" and adding the word "situations" in their place. Also, in section 2.3 a new sentence is inserted after the fourth sentence to read as follows: "NAMS would not be located to measure the impact of one or two point sources if the impact only extends over a geographic scale smaller than a neighborhood scale."

d. Section 7 is revised to read as follows:

7. Lead (Pb).

7.1 *Vertical placement.* Several studies (5, 14-15) on the relationship between roadway placement of lead samplers and measured ambient concentrations do not typically indicate large gradients within the first 6 to 7 meters above ground level. Similar to monitoring for other pollutants, optimal placement of the sampler inlet for lead monitoring should be at breathing height level. However, practical factors such as prevention of vandalism, security, and safety precautions must also be considered when siting a lead monitor. Given these considerations, the sampler inlet for microscale lead monitors must be 2-7 meters above ground level. The lower limit was based on a compromise between ease of servicing the sampler and the desire to avoid unrepresentative conditions due to re-entrainment from dusty surfaces. The upper limit represents a compromise between the desire to have measurements which are most representative of population exposures and a consideration of the practical factors noted above.

For middle or larger spatial scales, increased diffusion results in vertical concentration gradients which are not as great as for the small scales. Thus, the required height of the air intake for middle or larger scales is 2-15 meters.

7.2 *Spacing from Obstructions.* The sampler should be placed at least 20 meters from trees, since trees absorb particles as well as restrict airflow. The sampler must be located away from obstacles such as buildings, so that the distance between obstacles and the sampler is at least twice the height that the obstacle protrudes above the sampler.

A minimum of 2 meters of separation from walls, parapets, and penthouses is required

for rooftop samplers. No furnace or incinerator flues should be nearby. The height and type of flues and the type, quality, and quantity of waste or fuel burned determine the separation distances. For example, if the emissions from the chimney have high lead content and there is a high probability that the plume would impact on the sampler during most of the sampling period, then other buildings/locations in the area that are free from the described sources should be chosen for the monitoring site.

There must be unrestricted airflow in an arc of at least 270° around the sampler. Since the intent of the category (a) site is to measure the maximum concentrations from a road or point source, there must be no significant obstruction between a road or point source and the monitor, even though other spacing from obstruction criteria are met. The predominant direction for the season with the greatest pollutant concentration potential must be included in the 270° arc.

7.3 *Spacing from Roadways.* Numerous studies have shown that ambient lead levels near mobile source are a function of the traffic volume and are most pronounced at ADT >30,000 within the first 15 meters, on the downwind side of the roadways. (1, 16-19) Therefore, stations to measure the peak concentration from mobile sources should be located at the distance most likely to produce the highest concentrations. For the microscale station, the location must be between 5 and 15 meters from the major roadway. For the middle scale station, a range of acceptable distances from the major roadway is shown in Table 4. This table also includes separation distances between a roadway and neighborhood or larger scale stations. These distances are based upon the data of reference 16 which illustrates that lead levels remain fairly constant after certain horizontal distances from the roadway. As depicted in the above reference, this distance is a function of the traffic volume.

Table 4.—Separation Distance Between Pb Stations and Roadways (Edge of Nearest Traffic Lane)

Roadway average daily traffic vehicles per day	Separation distance between roadways and stations, meters		
	Micro-scale	Middle scale	Neighborhood, urban, regional scale
<10,000	5-15	¹ >15-50	¹ >50
20,000	5-15	>15-75	>75
>40,000	5-15	>15-100	>100

¹ Distances should be interpolated based on traffic flow.

e. The original section 7 (Probe Material and Pollutant Sample Residence Time) is amended by renumbering it as section 8, and the references are renumbered as follows: references "14-18" to "20-24", references "19 to 25", references "20 to 26", and references "21-22" to "27-28".

f. The original section 8 (Waiver Provisions) is amended by renumbering it as section 9.

g. The original section 9 (Discussion and Summary) is renumbered as section 10; the table, therein, is renumbered as

Table 5; and the text and table are revised to read as follows: 10. Discussion and Summary.

Table 5—Summary of probe siting criteria

Pollutant	Scale	Height above ground, meters	Distance from supporting structure, meters		Other spacing criteria
			Vertical	Horizontal ^a	
TSP	All	2-15	—	>2	1. Should be >20 meters from trees. 2. Distance from sampler to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the sampler. ^b 3. Must have unrestricted airflow 270° around the sampler. 4. No furnace or incineration flues should be nearby. ^c 5. Must have minimum spacing from roads. This varies with height of monitor and spatial scale (see Figure 1).
SO ₂	All	3-15	>1	>1	1. Should be >20 meters from trees. 2. Distance from inlet probe to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the inlet probe. ^b 3. Must have unrestricted airflow 270° around the inlet probe, or 180° if probe is on the side of a building. 4. No furnace or incineration flues should be nearby. ^c 5. Must be >10 meters from intersection and should be at midblock location. 6. Must be 2-10 meters from edge of nearest traffic lane. 7. Must have unrestricted airflow 180° around the inlet probe.
CO	Micro	3±½	>1	>1	1. Must have unrestricted airflow 270° around the inlet probe, or 180° if probe is on the side of a building. 2. Spacing from roads varies with traffic (see Table 1).
	Middle, neighborhood	3-15	>1	>1	1. Should be >20 meters from trees. 2. Distance from inlet probe to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the inlet probe. 3. Must have unrestricted airflow 270° around the inlet probe, or 180° if probe is on the side of a building. 4. Spacing from roads varies with traffic (see Table 2).
O ₃	All	3-15	>1	>1	1. Should be >20 meters from trees. 2. Distance from inlet probe to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the inlet probe. 3. Must have unrestricted airflow 270° around the inlet probe, or 180° if probe is on the side of a building. 4. Spacing from roads varies with traffic (see Table 3).
NO _x	All	3-15	>1	>1	1. Should be >20 meters from trees. 2. Distance from inlet probe to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the inlet probe. ^b 3. Must have unrestricted airflow 270° around the inlet probe, or 180° if probe is on the side of a building. 4. Spacing from roads varies with traffic (see Table 3).
Pb	Micro	2-7	—	>2	1. Should be >20 meters from trees. 2. Distance from sampler to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the sampler. 3. Must have unrestricted airflow 270° around the sampler. 4. No furnace or incineration flues should be nearby. ^c 5. Must be 5 to 15 meters from major roadway.
	Middle, neighborhood, urban, and regional	2-15	—	>2	1. Should be >20 meters from trees. 2. Distance from sampler to obstacle, such as buildings, must be at least twice the height the obstacle protrudes above the sampler. 3. Must have unrestricted airflow 270° around the sampler. 4. No furnace or incineration flues should be nearby. ^c 5. Spacing from roads varies with traffic (see Table 4).

^aWhen probe is located on rooftop, this separation distance is in reference to walls, parapets, or penthouses located on the roof.

^bSites not meeting the criterion would be classified as middle-scale (see text).

^cDistance is dependent on height of furnace or incineration flue, type of fuel or waste burned, and quality of fuel (sulfur, ash, or lead content). This is to avoid undue influences from minor pollutant sources.

Table 5 presents a summary of the requirements for probe-siting criteria with respect to distances and heights. It is apparent from Table 5 that different elevation distances above the ground are shown for the various pollutants. The discussion in the text for each of the pollutants described reasons for elevating the monitor or probe. The differences in the specified range of heights are based on the vertical concentration gradients. For CO, the gradients in the vertical direction are very large for the microscale, so a small range of heights has been used. The upper limit of 15 meters was specified for consistency between pollutants and to allow the use of a single manifold for monitoring more than one pollutant.

h. The original section 10 (References) is renumbered as section 11, six new references are added after reference 13, and the original references 14 through 22 are renumbered as references 20 through 28 and reference 26 is amended by

inserting Anal. Chem. after ozone as follows:

11. References

14. Lead Analysis for Kansas City and Cincinnati. FEDCo Environmental, Inc., Cincinnati, OH. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA Contract No. 68-02-2515, June 1977.
15. Barltrop, D. and C. D. Strelow. Westway Nursery Testing Project. Report to the Greater London Council, August 1976.
16. Daines, R. H., H. Moto, and D. M. Chilko. Atmospheric Lead: Its Relationship to Traffic Volume and Proximity to Highways. Environ. Sci. and Technol., 4:318, 1970.
17. Johnson, D. E., et al. Epidemiologic Study of the Effects of Automobile Traffic on Blood Lead Levels. Southwest Research Institute, Houston, TX. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-600/1-78-055, August 1978.
18. Air Quality Criteria for Lead. Office of Research and Development, U.S. Environmental Protection Agency,

Washington, D.C. EPA-600/8-77-017. December 1977.

19. Lyman, D. R. The Atmospheric Diffusion of Carbon Monoxide and Lead from an Expressway. Ph.D. Dissertation, University of Cincinnati, Cincinnati, OH. 1972.

26. Butcher, S. S. and R. E. Ruff. Effect of Inlet Residence Time on Analysis of Atmospheric Nitrogen Oxides and Ozone. Anal. Chem., 43:1890, 1971.

11. Appendix F is amended as follows:

a. The Table of Contents is amended by correcting the term "Slams" to read "SLAMS" in the title, and by adding sections 2.6, 2.6.1, and 2.6.2 as follows:

Appendix F. Annual SLAMS Air Quality Information

- 2.6 Lead (Pb).
- 2.6.1 Site and Monitoring Information.
- 2.6.2 Annual Summary Statistics.

b. A new section 2.6 is added to section 2 immediately following the table of section 2.5.2 as set forth below:

2.6 Lead (Pb).

2.6.1 Site and Monitoring Information—City name (when applicable), county name, and street address of site location, SAROAD site code, SAROAD monitoring method code, Sampling interval of submitted data, e.g., twenty-four hour or quarterly composites.

2.6.2 Annual Summary Statistics—The four quarterly arithmetic averages given to two decimal places for the year together with the number of twenty-four hour samples included in the average, as in the following format:

Quarter	Number of 24-hour samples	Quarterly arithmetic average ($\mu\text{g}/\text{m}^3$)
Jan.-March _____		
April-June _____		
July-Sept. _____		
Oct.-Dec _____		

(Secs. 110, 301(a) and 319 of the Clean Air Act (42 U.S.C. 7410, 7601(a), 7619))

[FR Doc. 81-25421 Filed 9-3-81; 8:45 am]

BILLING CODE 6560-26-M

40 CFR Part 52

[A-5-FRL 1978-3]

Revision to the Illinois State Implementation Plan

AGENCY: Environmental Protection Agency (EPA or U.S. EPA).

ACTION: Final rule.

SUMMARY: The purpose of this notice is to announce final rulemaking on revisions to the Illinois State Implementation Plan (Plan) which address attainment of the particulate matter national ambient air quality standards in areas of Illinois designated as nonattainment for this pollutant. These revisions were prepared by Illinois to meet the requirements of Part D, "Plan Requirements for Nonattainment Areas", of the Clean Air Act, as amended, 42 U.S.C. 7401 *et seq.* EPA takes final action to conditionally approve, as a whole, the Illinois strategy to control particulate emissions from iron and steel sources in nonattainment areas. Specific provisions of the proposed revisions are approved, conditionally approved, or disapproved in accordance with EPA's analysis of the Illinois submittal.

EFFECTIVE DATE: This action is effective on October 5, 1981.

ADDRESSES: Copies of the SIP revisions submitted by Illinois, supplementary information, and public comments are available for inspection during normal

business hours at the following addresses:

Environmental Protection Agency,
Region V, Air Enforcement Branch,
13th Floor, 230 S. Dearborn Street,
Chicago, Illinois 60604.
Environmental Protection Agency,
Public Information Reference Unit, 401
M Street SW., Washington, D.C.
20460.

Copies of the Plan revisions and supplementary information are also available for inspection during normal business hours at the following addresses: The Office of the Federal Register, 1100 L Street NW., Room 8401, Washington, D.C. 20408.

FOR FURTHER INFORMATION CONTACT:
Carol Wilkowski, Docket Clerk, Air
Enforcement Branch, Environmental
Protection Agency, Region V, 230 South
Dearborn Street, Chicago, Illinois 60604,
312: 353-2082.

SUPPLEMENTARY INFORMATION:

I. Background

A. General Discussion

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 (Act), as amended in 1977, EPA designated specific geographical areas within each state that had failed to achieve attainment of the National Ambient Air Quality Standards for particulate matter, (TSP), sulfur dioxide (SO_2), carbon monoxide (CO), ozone (O_3), and nitrogen dioxide (NO_2).

Part D of the Act, added by the 1977 amendments to the Act, requires each state to revise its state implementation plan (Plan) to meet specific air pollution control requirements for geographic areas designated as nonattainment. These Plan revisions must provide for attainment of the Primary National Ambient Air Quality Standards by December 31, 1982, and in specific circumstances no later than December 31, 1987, for ozone and/or carbon monoxide. EPA's requirements for approval of a State Part D Plan revision 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 53761), and November 23, 1979 (44 FR 67182).

On April 3, 1979, the State of Illinois submitted to EPA proposed revisions to the Illinois Plan pursuant to the requirements of Part D of the Clean Air Act, as amended, 42 U.S.C. 7401 *et seq.* The revisions addressed, in part, those geographic areas in Illinois that had not attained the National Ambient Air Quality Standards for particulate

matter. The purpose of the revisions was to implement measures for controlling particulate matter emissions in the designated nonattainment areas to insure attainment of the national standards as expeditiously as practicable, but not later than December 31, 1982.

On July 2, 1979, (44 FR 38587) EPA announced receipt of the Illinois submittal, the results of EPA's review of the submittal, and invited public comment. Final rulemaking on the July 2, 1979 proposal was completed on February 21, 1980 (45 FR 11470). Expressly omitted, however, in the July 2, 1979 announcement was EPA's review and proposed action for that portion of the Illinois Part D submittal which addressed particulate matter emissions from iron and steel process sources.

On August 9, 1979 (44 FR 46894), EPA published notice of receipt and availability for public review of the review of the revisions to the Illinois iron and steel process source regulations. On July 31, 1980 (45 FR 50825), EPA published the results of its review of the proposed revisions and invited public comment. Comments on this proposal and EPA's action were due September 2, 1980. On September 8, 1980 (45 FR 59198), EPA announced the availability of a guidance document which summarizes emissions limitations for particulate matter which EPA believes are generally achievable on a retrofit basis for iron and steel process sources. In conjunction with the notice of the guidance document, EPA announced its intent to evaluate a state's analysis of such technology in light of the underlying technical data. On October 3, 1980 (45 FR 65828), the public comment period for the proposed revisions was subsequently extended to October 31, 1980 to accommodate specific requests from the Illinois iron and steel industry and an Illinois-based environmental group. The requests were made to permit review of the documents which formed the basis for the technical guidance summary.

In response to EPA's July 31, 1980 Notice of Proposed Rulemaking and EPA's notice of availability of its reasonably available control technology (RACT) guidance document, comments and supplemental information were received from the Illinois Environmental Protection Agency, the iron and steel industry in Illinois, and an environmental interest group. These comments addressed the legal basis for EPA's proposed action as well as the technical rationale for EPA's proposed action. As applicable, these comments are addressed in Section II, "Comments

Addressed to EPA Policy," and Section III, "Comments and Action on Proposed Rule 203(d)," of today's notice.

Based upon its review of the supplemental information and comments received, EPA is now taking final action to conditionally approve the Illinois Implementation Plan revisions that address the attainment of the primary national ambient air quality standards for iron and steel particulate matter sources located in designated geographic nonattainment areas within Illinois.

During the period when today's rulemaking was under preparation EPA intended that today's rulemaking would complete Part D rulemaking for particulates in Illinois subject to fulfillment of the conditions established during this and previous actions.

Recently, the United States Court of Appeals for the Seventh Circuit invalidated that portion of EPA's action that applied to the Illinois New Source Review rules. *Citizens For A Better Environment v. United States Environmental Protection Agency*, — F.2d —, No. 80-1531 (7th Cir. May 26, 1981) [hereafter CBE]. New Source Review rules are required by Sections 110(a)(2)(I), 172(b)(6) and 173 of the Act. EPA action on Illinois' attempt to replace the New Source Rule and complete Part D rulemaking will be the subject of a subsequent Federal Register notice.

B. Summary of Illinois' Approach To Control Particulate Matter Emissions From Iron and Steel Process Sources

The Illinois attainment strategy for national ambient air particulate matter standards relies on existing regulations and new regulations which deal with particulate emissions from iron and steel mills, industrially related fugitive dust, and from malfunctions. Despite the application of regulations representing reasonably available control technology for traditional sources of particulate matter, analysis conducted by Illinois demonstrates that without further controls attainment of the primary particulate matter standard will not be achieved by December 31, 1982. As a consequence, Illinois proposed to conduct studies on non-traditional particulate sources to determine whether more particulate matter controls are feasible. If such studies support additional regulations, Illinois proposed to have these new regulations in place by December 31, 1981 with compliance by December 31, 1982. 45 FR 11472.

To further control particulate matter emissions from iron and steel process sources within non-attainment areas

Illinois has proposed revisions to Illinois Rule 203(d). Rule 203(d) addresses particulate matter emissions from manufacturing processes at Illinois steel mills located primarily in the south Chicago-northwest Indiana Air Quality Control Region and Granite City, Illinois. The revised Rule consolidates emissions standards for process sources of particulate matter at steel mills and sets forth specific requirements for by-product coke plants, sinter processes, blast furnace casthouses, basic oxygen furnaces (BOFs), electric arc furnaces, argon-oxygen decarburization vessels, and liquid steel charging. With certain exceptions, previously approved particulate matter emissions standards for new and existing sources [Rule 203 (a) and (b)] are made inapplicable. The previously approved visible emission standard [Rule 203(d)(6)(i)(bb)] for certain by-product coke plant emission points is made inapplicable. 45 FR 50827.

II. Comments Addressed to EPA Policy

The majority of comments received by EPA can be grouped into these categories:

(1) The legality of EPA's action to conditionally approve the Illinois Part D Plan revisions, (2) EPA's use of its reasonably available control technology guidance document in this rulemaking, (3) the participation of EPA enforcement personnel in the rulemaking process, and (4) EPA's action on specific provisions of Illinois Rule 203(d).

The following are comments received by EPA and EPA's responses:

Comment: EPA's reliance on its "conditional approval" mechanism to approve revisions to the Illinois Plan is unauthorized in law. EPA must either approve or disapprove proposed revisions to the Illinois Plan. If disapproval is warranted, the Administrator has a non-discretionary duty to promulgate revisions to the Illinois Plan which meet the requirements of Part D of the Clean Air Act, which include a demonstration of attainment of the primary standards for particulate matter by December 31, 1982.

Response: A discussion of conditional approval and its practical effect appears at 44 FR 38583, July 2, 1979, and 44 FR 67182, November 23, 1979. Generally, EPA will approve revisions to a state's plan which are in substantial compliance with the requirements of Part D of the Act provided that noted deficiencies will be remedied within a prescribed period of time.

In its Final Rulemaking on the Illinois Plan (45 FR 11472), U.S. EPA reiterated its policy of conditionally approving a Plan which requires, at a minimum, RACT on all "traditional" sources of

particulate matter emissions plus a showing by the State that despite such application of RACT to traditional sources, the Plan fails to demonstrate attainment of the national primary particulate matter standard. In this case, approval of the Illinois revisions is conditioned on the State's commitment to conduct additional studies on the causes for the particulate nonattainment, including the degree to which nontraditional area sources of particulate matter affect air quality, and to develop and to submit to U.S. EPA additional enforceable strategies adequate to demonstrate attainment of the primary standard by December 31, 1982. This policy stems from EPA's recognition that nontraditional sources significantly impact the potential for attainment of the national standards for particulate matter. In addition, EPA is aware that there exists a problem in identifying and developing control strategies for "nontraditional" sources, such as fugitive dust, resuspended road dust, and dust from construction. It became apparent that by January 1979, the deadline for the States to submit Part D Plans, it was still not possible in many cases to identify, without further studies, the specific sources of the nonattainment problem. Also, control measures for nontraditional sources were in the infancy of their development.

EPA believes that its conditional approval policy is consistent with Congress' intent and purpose in enacting Part D of the Act. A primary purpose of Part D is to permit reasonable economic growth in nonattainment areas at the same time that reasonable further progress is being made toward attainment of the National Ambient Air Quality Standards. "Reasonable further progress" is defined in Sections 171 and 172(b) of the Act as annual incremental reductions in emissions sufficient to achieve attainment, including such reductions from existing sources as may be obtained, at a minimum through adoption of RACT. Illinois has provided adequate information that demonstrates that certain strategies are RACT for specific sources, has agreed to conduct further studies to identify and control nontraditional sources, and has agreed to submit additional control measures to demonstrate attainment by the statutory attainment date on an expeditious schedule. EPA believes that, considered as a whole, the Illinois approach to its nonattainment problem assures the level of protection required by Part D of the Act. Under these circumstances, disapproval of the Plan would not serve the purpose intended by Congress.

The Illinois particulate Plan, including the iron and steel provisions which are conditionally approved today, contains regulations requiring RACT on stationary sources or a commitment to adopt same. EPA's approval of New Source Review rules which will require the offset of emission reductions from existing sources greater than those projected from proposed new sources was recently invalidated by the *CBE* court. Illinois will effect positive reductions in particulate matter emissions during the period in which the State is developing and adopting the additional regulations necessary to achieve attainment and address the *CBE* court's concerns.

If the Administrator acted to disapprove the Plan, rather than accept the State's schedule to develop and adopt necessary additional control measures, EPA would have to conduct the same type of studies which the State itself has voluntarily undertaken in order to develop control strategies which accurately demonstrate attainment. Should EPA be obligated to conduct such studies and engage in rulemaking for each nonattainment area in each State with a nontraditional source problem, it is likely EPA's assumption of the regulatory process at this point would serve no purpose but to delay further Congress' goal of attaining the primary particulate standard by December 31, 1982.

EPA believes that its conditional approval policy is procedurally consistent with Section 110(c)(1) of the Act. By proposing conditional approval, the Administrator notified the State that further revisions were required to make the Plan fully approvable and, as contemplated by that subsection, the State and EPA's Regional Office will negotiate a prescribed time period which will be the subject of rulemaking to correct the deficiencies. If the State fails to meet its commitments to remedy the deficiencies, the Administrator will then take such further action as is necessary to provide for attainment of the national ambient particulate matter standards.

As for the development of the regulations for nontraditional sources, EPA agrees with the State that a technically sound basis for adopting such regulations must await completion of the studies now in process, and neither the State nor EPA can do more to assure attainment by the statutory deadline. Disapproval of the entire Plan and subsequent Federal action would serve merely to delay further the implementation of the Act's goal to

achieve attainment of the air quality standards by the end of 1982.

Comment: EPA's proposed rulemaking is a violation of Section 110(a)(2) and (a)(3) of the Act because the Illinois revisions do not require nor does the Illinois Plan require source monitoring and reporting provisions. The commentator further claimed that in light of this deficiency, the Administrator has a duty under Section 110(c) of the Act to promulgate such regulations.

Response: In the Administrator's view, comments related to deficiencies under Section 110(a)(2)(F) of the Act are not properly before the Agency in the context of the present Part D rulemaking. Rather, the commentator's objections are actually challenges to the Administrator's implementation of this statute at 40 CFR 51.19(e). This regulation, promulgated on October 6, 1975 (40 FR 46247), required that States include certain procedures in their plans for continuous emission monitoring of four specific source categories; requirements pertaining to iron and steel sources were not included. The Agency indicated at that time that the chosen categories represented "significant source of emissions," and that the list would be expanded:

"... from time to time when the economic and technological feasibility of continuous emissions monitoring is demonstrated and where such monitoring is deemed appropriate for other significant source categories. (40 FR 46241).

Thus, the remedy for parties believing that 40 CFR 51.19(e) was deficient for failure to include emission monitoring requirements for certain sources was to challenge this promulgation under Section 307(b) of the Clean Air Act, within the appropriate time frame and in the proper forum. Similarly, if new information on this issue has arisen subsequent to the Agency's October 1975 promulgation, the remedy lies with the appropriate Federal Appellate Court within the statutory time period "after such grounds arise." See Section 307(b)(1).

It should be noted that, as a matter of national policy, U.S. EPA is examining current requirements for monitoring emissions from various pollution sources. As noted by the commentator, however, the language of the Clean Air Act "allows the exercise of broad discretion by the rulemaking authority" in implementing Section 110(a)(2)(F). As of this rulemaking the Administrator has not yet determined that categorical imposition of specific monitoring requirements on iron and steel sources is appropriate.

Comment: EPA's utilization of its "relaxation", "revocation", and "continuity" policies as criteria for approving Part D Plan revisions is unlawful. Further, if the revisions require attainment of the air quality standards by the statutorily mandated date, a State is free to choose any strategy to attain the standards, which may include the revocation or relaxation of pre-existing regulations.

Response: Under the commentators' analysis, a submitted strategy could conceivably permit a State to delay the effective date of compliance with all air pollution regulations until the last permissible statutory attainment date of December 31, 1982. However, in enacting the 1977 Amendments to the Clean Air Act, Congress did not intend the 1982 attainment date to authorize relaxations or delays in compliance with existing requirements.

The first suggestion was that the Act be amended to make clear that a revised attainment date under Section 172(a) would not be the basis for delaying the effective date of the emission limit for any source in effect prior to the adoption and submission of a plan revision under Part D. This Amendment was deemed unnecessary. Delays or relaxations of emission limits were not generally authorized or intended under Part D. (123 Cong. Rec. H 11958 daily ed. Nov. 1, 1977) (Remarks of Representative Rogers)

Further evidence of Congressional intent to avoid relaxation or revocation of pre-existing regulations through the Part D SIP revision process is found in Section 120 of the Clean Air Act. This section, contained in the 1977 Amendments to the Act, provides that failure of a source to meet applicable existing requirements will render that source liable to assessment of noncompliance penalties, with very few enumerated exceptions. 42 U.S.C. 7620.

The Administrator therefore believes it would be inconsistent with the Congressional intent to permit relaxation or revocation of existing requirements. As discussed in the General Preamble at 44 FR 20373-20374 (April 4, 1979), U.S. EPA continuity policy reflects and is consistent with the Congressional intent to prevent avoidance of pre-existing plan requirements. Present emission control requirements must be retained in order to prevent the operation of facilities without controls, or with less stringent controls while sources move toward compliance with, or challenge, the new requirements.

There are certain exceptions to the policies discussed above, as outlined in the General Preamble at 44 FR 20374, April 4, 1979. The exception most

pertinent to today's rulemaking is the acknowledgement that a State may submit a revocation of an existing requirement if an existing requirement conflicts with a new, more stringent requirement, making it highly impractical for a source to comply with the old requirement.

Comment: EPA's use of its guidance summary of reasonably available control technology for iron and steel process sources violates the Clean Air Act and the Due Process Clause of the Fifth Amendment to the Constitution of the United States.

Response: Commentators have challenged EPA's use of certain technical support documents as the basis for its July 31, 1980 proposed rulemaking. They contend that EPA intends to impose its assessments of what constitutes RACT, as outlined in the technical support documents, upon the States without the accompanying procedural due process safeguards, such as public hearings on the data, which are regularly imposed by formal rulemaking under the Clean Air Act and the Administrative Procedure Act. They base this argument predominantly upon the fact that in its Notice of Proposed Rulemaking of July 31, 1980, 45 FR 50827 EPA stated:

Where a state proposes regulations which are not technically supported by U.S. EPA's data, the State must submit adequate data supporting its proposal as representing RACT.

EPA believes that commentators have misunderstood EPA's goal in developing a technical support docket. Under the scheme of the Clean Air Act, each State has a statutory obligation pursuant to Section 172 to develop a revised Plan for designated nonattainment areas. Each Plan must include sufficient information for EPA to evaluate whether such revised Plan meets the requirements of Section 172, including the requirement to adopt measures to reduce emissions through the adoption, at a minimum, of reasonably available control technology. See Section 172(b)(3). While the Clean Air Act specifies that U.S. EPA is required to pursue formal rulemaking pursuant to Section 307(d) for certain actions, no such requirement applies to agency action on state submitted implementation plan revisions.

The applicable guidelines for agency action on State submitted Plan revisions appear in the Administrative Procedure Act (APA), 5 U.S.C. 553. These guidelines require publication of notice of the proposed rulemaking, including a statement of the time, place and nature of the proceedings, reference to the legal authority under which the rule is

proposed, and either the terms or substance of the proposed rule or a description of the subjects and issues involved. In addition, the Agency is required to give interested persons an opportunity to participate in the rulemaking through submission of written data, views or arguments. EPA has followed these guidelines in all its rulemaking on revisions to Illinois Plan regulations which apply to Illinois iron and steel sources.

Neither is the agency required by the Act to establish a rulemaking docket for its action in reviewing Part D Plan revision submittals. Nevertheless, in the course of pursuing its statutory obligation to review State submitted Part D Plan revisions, EPA has assembled a docket which contains legal and technical rationale for agency action on proposed Part D Plan revisions. The data accumulated in the technical support portion of the docket to which commentators refer, consists of comprehensive iron and steel emissions data from facilities across the country, and was compiled in direct response to EPA's mandated duty to evaluate the proposed Part D revisions in terms of Section 172 of the Act. This data is invaluable in analyzing the levels of emission control achievable for specific categories of sources within the iron and steel industry and is also useful in evaluating case-by-case RACT limitations in the event a State submits limitations which consider technological and economic feasibility. In contrast to commentators' contentions, EPA does not suggest that emission limitations and standards reflected in these documents constitute uniform and presumptive RACT standards for the iron and steel industry. In the same July 3, 1980, Notice of Proposed Rulemaking quoted *infra* by commentators, EPA explained its understanding of the Part D revision process and the uses to which it would put the technical support documents:

U.S. EPA believes the burden of demonstrating that a regulation represents RACT rests on the State. In reviewing a proposed SIP [Plan] revision to determine its adequacy, EPA can verify independently that the provisions in the State plan represent RACT. Although EPA has not specified uniform RACT standards for the iron and steel industry, it has collected data which reflects the emission limitations achieved by various iron and steel sources applying control technology. Where a State proposes regulations which are not technically supported by EPA's data, the State must submit adequate data supporting its proposal as RACT.

The intention is to indicate that the State must submit justification to

support its RACT determinations. EPA then considers the information submitted by the State, together with the data in the technical support docket and any public comments received to determine whether the specific regulatory revision satisfies the requirements of the Act for RACT.

EPA further clarified its position regarding the technical support documents in a September 8, 1980, Federal Register Notice of availability of guidance document, 45 FR 59198:

By gathering and evaluating the available data, U.S. EPA does not intend to set uniform RACT standards which the States are required to adopt, and the summary should not be so construed. The limitations and standards summarized in the table should not be regarded as categorical RACT requirements for iron and steel sources, but solely as guidance which EPA will utilize as the starting point in its review and evaluation of a State's submission. The State may develop its RACT requirements independently of EPA's guidance. * * * EPA * * * will carefully review and evaluate in detail the State's analysis to determine whether it in fact supports the State's proposed RACT requirements.

Only in those instances where U.S. EPA is actually engaged in promulgating uniform standards would rulemaking pursuant to Section 307(d) be appropriate. In the instant case, EPA has internally developed a guidance document designed to aid its evaluation of proposed revisions to state implementation plans in accordance with its statutory obligation under the Clean Air Act, and has made these documents publicly available. EPA has made clear its intent not to coerce a State into accepting a particular standard or technology but to require that a State technically justify its RACT determinations. In today's rulemaking, for example, EPA has changed its position on coke quenching operations in Illinois as a result of comments which justify the State's position.

Comment: EPA's use of technical material to assess RACT without also weighing the economic and sociological costs and benefits involved is improper. Evidence of the costs of meeting various limitations was introduced at the State hearing and absent testimony or evidence to the contrary EPA should be bound by the State's determination.

Response: Though some testimony regarding costs of compliance with proposed State rules was included in the State hearing record, for the most part nothing in the record supports a conclusion that Illinois iron and steel sources stand apart geographically, technically, or otherwise from those

sources identified in EPA's technical guidance document.

Many commentators also complained that EPA was not reviewing the State's proposals with the broad deference commentators read into EPA's early guidance. That guidance was intended (and continues) to permit the State to tailor regulations to the specific characteristics of its industrial community. It was not an invitation to ignore a large body of data demonstrating achievable control limitations. EPA's review of the State proposal must begin with some reference point from which to determine whether RACT has been required. Though a reference point is established, EPA's approach includes the flexibility to analyze economic or sociological factors which support variations from the conclusions it has reached. In other words, EPA will consider any State proposal differing from that based on its purely technical analysis where the State has articulated the site specific considerations justifying a different conclusion.

Certain Illinois proposals vary from EPA's conclusions. However, Illinois has not articulated a rationale for those variations nor provided economic or technological information from which such a rationale can be discussed. Consequently, EPA's analysis is therefore confined to the information before it. In addition, EPA cannot independently judge the adequacy of a State proposal by limiting its review to those matters raised during State rulemaking. EPA should not ignore its data as the commentator implies. In this instance EPA compared proposed Illinois requirements with documented performance by better control systems.

In a similar vein, a commentator urged EPA to accept certain standards based on site specific considerations. Certainly such considerations are appropriate to RACT determinations. However, because the State record reveals no factors to distinguish Illinois iron and steel sources from others in this country, the comment is inapposite.

Comment: That portion of EPA's guidance document for reasonably available control technology which addresses charging emissions contains flawed data and omissions of significant data from the iron and steel industry. The document also fails to include a technical rationale for the judgments contained therein.

Response: EPA has reviewed the commentator's argument and limited supporting documentation to determine whether the guidance document contains flawed data. Specific issues by the commentator are discussed in the

appropriate sections below. In general, EPA has determined that the data based errors, to the extent they exist, in its guidance document are insignificant. Consequently, EPA believes its technical judgments contained in the guidance document are sound.

Comment: EPA failed to articulate what data in the technical portion of the rulemaking docket provided the basis for EPA's technical based decisions on the rules, and further, this omission made impossible the rendering of meaningful comment.

Response: Because the technical data in the rulemaking docket was indexed by process category, EPA believes that adequate reference to support data was provided to permit meaningful comment. All commentators who requested an extension of the comment period for the stated purpose that such was needed to review the docket materials were granted an extension equal to or greater than that requested.

Additional opportunity for comment will be afforded at the State level as the State promulgates regulatory revisions in response to today's rulemaking. In addition, as EPA stated in its Supplement to the General Preamble published on November 23, 1979, when the State submits supporting data for its proposed revisions, or submits new revisions, EPA will review the adequacy of the State's submission and publish its determination as either a proposed or final rulemaking, depending on the nature of the submittal.

Therefore, EPA believes that adequate opportunity has been provided to comment on EPA's data.

Comment: EPA's use of its enforcement personnel in this rulemaking violates the Due Process Clause of the United States Constitution and the Administrative Procedures Act, 5 U.S.C. 554(d)(2), in that it is improper for personnel involved in the enforcement of air pollution control regulations to review the adequacy of proposed regulations.

Response: EPA believes the participation by certain members of EPA's Region V Enforcement Division in the review of the proposed iron and steel regulations does not violate either the separation of functions provisions of the Administrative Procedure Act or the Due Process Clause of the United States Constitution.

The Agency believes that the separation of functions requirement of the Administrative Procedure Act (APA) is not applicable to the present rulemaking. This requirement is relevant only when the applicable statute mandates a hearing on the record. *Bethlehem Steel Corporation v. U.S.*

EPA, — F.2d —, No. 79-2382 (7th Cir. December 22, 1980). See also *Buckeye Power Inc. v. EPA*, 481 F.2d 162, (6th Cir. 1973). Since the Clean Air Act does not require such a hearing for Plan approvals under Section 110(a), the APA's separation of functions requirement is inapplicable.

The Administrator has also examined the commentator's contention in light of the Due Process Clause and applicable case law. Region V's Office of Regional Counsel has reviewed the nature of involvement of Region V enforcement personnel in the instant rulemaking. The Agency has concluded that the commentator's claims of impropriety are groundless. A copy of the Regional Counsel's opinion is in the docket for public review.

Comment: EPA has no right to consider "enforceability" by reviewing State regulations for clarity and specificity.

Response: Section 110 of the Act generally requires that a plan be enforceable. See Sections 110(a)(1), (a)(2)(D). Based on those requirements, EPA must determine whether a plan is, in fact, enforceable. In determining whether a plan provision is enforceable, emission limitations and other requirements must be reviewed for clarity and specificity. Emission limitations and other controlled terms must be well defined, and must clearly state which sources and processes are being regulated, when the required actions are to be taken and by whom, and what constitutes compliance. In addition, the plan provision must specify any necessary test method by which compliance is to be determined, and, if the provision requires compliance at a future date, it must contain an adequate schedule for compliance. See 44 FR 20372, April 4, 1979. The requirements for enforceability would not be satisfied by unclear or imprecise plan provisions. Vagueness as to regulatory requirements or applicability would make it difficult, if not impossible, to enforce regulations against specific sources.

Comment: Several commentators argued that EPA is restricted in its rulemaking to concurrence with the testimony of its representatives at the Illinois public hearings held prior to State promulgation of the Plan revisions.

Response: EPA has the responsibility to review Part D revisions to state plans and approve such if the requirements of Section 110 *et seq.* and Section 172 *et seq.* are met. The Act's requirements include the installation of RACT on emitting sources in designated nonattainment areas. To provide a reference point from which to evaluate a

state's Part D submittal, EPA amassed and reviewed technical data from iron and steel sources located throughout the country.

EPA personnel testified before the Board in 1978 to provide the State with the Agency's initial evaluation of Illinois' proposed Part D Plan revisions. Though EPA personnel indicated that, with few exceptions, the proposed Part D revisions were acceptable, it was also indicated that EPA would not be precluded from changing its position in the rulemaking context.

Comment: EPA's compilation of a guidance document which summarizes emissions limitations for particulate matter for iron and steel manufacturing processes after the Notice of Proposed Rulemaking on Illinois Part D plan revisions is improper. See 45 FR 59198. EPA violates the due process rights of the iron and steel sources in Illinois if U.S. EPA's rulemaking is supported in any way by this guidance document.

Response: The summary of emission limitations referred to by the commentator does not establish regulatory requirements. Rather, as stated above, it represents guidance for use in the development and evaluation of State Implementation Plan provisions for iron and steel sources in the context of the RACT requirements of the Act. A State may develop its RACT requirements independently of EPA's guidance. EPA will approve any submitted RACT requirement that the State shows will satisfy the requirements of the Act for RACT, based on the economic and technical circumstances of the particulate sources being regulated. Subsequent to the compilation of the guidance document, EPA extended the public comment period to provide adequate time for review of the data. In total, the public was provided with 90 days to complete its review and respond accordingly.

Comment: EPA has no authority to require, as part of its conditional approval of the proposed regulations, authoritative interpretations of the regulations under consideration.

Response: Section 110(a)(2)(D) of the Act requires that a State's Plan provide, among other things, for the enforcement of emission limitations to assure that ambient air quality standards are achieved and maintained. Effective enforcement of emission limitations requires that regulations embodying such limitations be clear and concise. EPA determined that several of the provisions of Illinois Rule 203(d) were sufficiently vague to jeopardize their effective enforcement. As a consequence, EPA requested that

specific portions of Rule 203(d) be clarified to remove the vagueness.

The request for clarification was made to the Illinois Environmental Protection Agency, who by the terms of the Illinois Environmental Protection Act, has responsibility for enforcing the Illinois air pollution control regulations. EPA believes that the State agency empowered to enforce the State's regulations is in the best position to clarify how those regulations will be enforced.

III. Comment and Action on Proposed Rule 203(d)

The following is a synopsis of today's action on specific proposed revisions to the Illinois Plan for the control of particulate matter from iron and steel process sources:

Approval and Effected Sources

Rule 203(d)(5)(B)(i)—General opacity
Rule 203(d)(5)(B)(iv)(bb)—Coke oven doors
Rule 203(d)(5)(B)(vii)—Coke battery stacks
Rule 203(d)(5)(C)—Center plants
Rule 203(d)(5)(E)(i) and (ii)—Basic oxygen furnaces
Rule 203(d)(5)(F)—Hot metal desulfurization
Rule 203(d)(5)(G)—Electric arc furnaces
Rule 203(d)(5)(H)—A-O decarburization
Rule 203(d)(5)(I)—Leak liquid steel charging
Rule 203(d)(5)(J)—Scarfing

Conditional Approval

Rule 203(d)(5)(B)(iv)(aa)—Coke oven doors
Rule 203(d)(5)(B)(v)—Coke oven lids
Rule 203(d)(5)(B)(vi)—Coke offtake piping
Rule 203(d)(5)(B)(viii)—Coke quenching

Disapproval

Rule 203(d)(5)(B)(ii)—Coke oven charging
Rule 203(d)(5)(B)(iii)—Coke oven pushing
Rule 203(d)(5)(D)—Blast furnace cast houses
Rule 203(d)(5)(K)—Measurement methods
Rule 203(d)(5)(L)—Compliance Dates

No Action

Rule 203(d)(5)(B)(ix)—Work rules

The above synopsis depicts the result of EPA's analysis and review of supplemental information provided by commentators during the public comment period. The following summarizes specific comments raised during the public comment period about specific provisions of proposed Rule 203(d). A complete discussion of the comments appears in the docket for this rulemaking.

Today's notice contains, in part, conditional approval of portions of proposed Rule 203(d)(5). The conditions for approval will have to be satisfied by the State on an expeditious schedule. Failure of the State to meet the conditions will require EPA to take such further actions as necessary to provide for attainment of the national ambient particulate matter standards. If the State elects to meet the conditions, a schedule

for such will have to be approved by EPA. The State will have sixty days from today's notice to submit to EPA a schedule to meet the conditions. A notice soliciting public comment on the acceptability of this schedule will be published in a subsequent Federal Register. Rule 203(d)(5)(B)(i) *By-Product Coke Plants*.

EPA proposed to approve this rule which states that the general opacity regulation in Illinois, Rule 202, does not apply to by-product coke plants. All commentators agreed with EPA's proposal.

EPA Final Action: EPA approves Rule 203(d)(5)(B)(i).

Rule 203(d)(5)(B)(ii) *By-Product Coke Plant Charging Emissions*.

EPA stated in the Notice of Proposed Rulemaking (45 FR 50825) on the Illinois SIP that it intended to disapprove Illinois Rule 203(d)(5)(B)(ii), because Illinois had not submitted a method or procedure for determining compliance with the proposed charging standard and because this standard was not sufficiently stringent to be considered reasonable available control technology (RACT). Comments have been received on both points from the State of Illinois (IEPA), from steel companies in Illinois, and from Citizens for a Better Environment (CBE).

EPA has carefully reviewed all comments received and has developed a lengthy response to the significant arguments received during this public comment period concerning its proposed action on this rule. This response has been formally docketed and is available for public inspection. In summary, EPA believes the deficiencies noted in the Notice of Proposed Rulemaking are not cured by the IEPA's promulgation of the administrative definitions and inspection techniques. EPA believes the Illinois submittal is vague because of the absence of definition of specific terms of the Rule. Also, and equally important, even if the submitted rule did not suffer the infirmity of vagueness, the record supports a more stringent standard than 170 seconds for 5 charges.

Approving the rule standard would result in approval of a regulation which could allow an entire charge to emit essentially uncontrolled puffing particulate matter. Specifically, when the IPCB issued the submitted standard it exempted via its opinion "mere wisps of smoke" and stated that only "sustained-smoke evolution" is to be counted, even though the State asserts the rule requires counting the total number of seconds that emissions are visible. Though the propose of the rule is to limit the magnitude and duration of

emissions, the exempting of wisps without further clarification can result in the emission of wisps of a sustained duration. Determination of compliance with the submitted standard is not possible because the terms "mere wisps of smoke" and "sustained smoke evolution" are wholly undefined.

EPA believes that 170 seconds for 5 charges, even if it were based on all visible emissions, is not RACT. As an example of an appropriate definition of RACT for Illinois, EPA has described a standard of 125 seconds for 5 consecutive charges with a one-in-20 charge exception (125-5(1/20)), in accordance with the observation and data reduction procedures it placed in Illinois' docket at the time the Notice of Proposed Rulemaking was published. The 125/5 (1-in-20) standard would result in significantly less emissions than that which the submitted Rule 170/5 will permit, at no increase in risk of violation and no change in the technology employed to comply. Therefore, EPA will disapprove the submitted rule.

IEPA, the steel industry commentators, and CBE disagree with EPA's determination that the submitted standard was not RACT. The first two commentators state that the rule submitted by Illinois is RACT and criticized EPA's data base contained in the above-referenced technical docket document. CBE states that the submitted rule does not represent RACT and recommends that a standard more stringent than the acceptable to EPA be promulgated by EPA. However, EPA concludes from its analysis that its position stated in the Notice of Proposed Rulemaking is sound in that the submitted standard for by-product coke plant charging emissions does not represent RACT for this source of particulate matter emissions. In this rulemaking EPA can act only on the proposed rule as submitted. EPA believes Illinois coke batteries can achieve, via its recommended testing and reduction procedures, a visible emission performance of 125 seconds for 5 consecutive charges because coke plants of similar configuration have been observed to do so. A review and summary of the data upon which EPA bases its judgment is docketed for public review.

EPA Final Action: EPA disapproves Rule 203(d)(5)(B)(ii). Consequently, the approved Illinois Plan regulation which controls by-product coke plant charging emissions is Rule 203(a)(6)(B)(i).

Rule 203(d)(5)(B)(iii) By-Product Coke Plant Pushing Emissions.

EPA proposed to disapprove this rule as submitted because: (1) the mass

emission limitations of the rule are not acceptable due to its failure to define "pushing emissions," (2) the 0.03 grains per dry standard cubic foot (g/dscf) mass standard for sheds does not represent RACT, and (3) 90 percent capture efficiency for fugitive pushing emissions is not a determinable quantity and, as it is only a design standard, will not limit actual emissions from occurring.

The State of Illinois responded by stating: (1) the definition of "pushing operations" is widely known and therefore not a fatal flaw in the submitted rule, (2) Illinois Rule 203(f) [fugitive emissions] is an alternative to opacity standard that applies to by-product coke plant fugitive pushing emissions, (3) the burden of proof for demonstrating the capture efficiency of a particular source rests with the source and an adequate capture efficiency must be demonstrated before the State will issue an operating permit, and (4) there is only one shed system in Illinois and it will cease operations in 1982; therefore, the mass limitation proposed is appropriate.

Industry commented that competent engineers can determine whether a system is designed to achieve a stated capture efficiency and technical data does not support the basis for an opacity standard for pushing operations. The steel industry also remarked that there is no means to enforce an opacity standard were one approved. CBE commented that: (1) EPA should propose an opacity standard to evaluate the capture efficiency of pushing control systems, and (2) EPA should propose a 0.010 gr/dscf standard for shed systems and a 0.040 gr/dscf standard for mobile pushing control systems because the data base indicates these levels have been achieved on existing by-product coke plants.

EPA has analyzed the above comments and docketed its analysis for public inspection. EPA concludes from its analysis that: First, that the mass limitation provisions are unapprovable because, although the 0.06 gr/dscf provision for mobile systems represents, according to this record, RACT in Illinois, the submitted rule is: (1) ambiguous about the applicability of the 0.03 or 0.06 gr/dscf limitation to traveling hood stationary gas cleaner control systems and that while the 0.03 gr/dscf standard would be an appropriate RACT standard for such systems, a 0.06 gr/dscf is not RACT, (2) the term "stationary hood system" applies to coke side sheds and an emissions limitation of 0.03 gr/dscf is excessively lenient because of unique

shed dilution effects; and, (3) the lack of testing definitions is a serious deficiency. Second, with respect to the fugitive component of pushing emissions, EPA concluded that (1) the 90 percent design efficiency provision does not prevent coke batteries and/or their pushing systems from emitting excessive emissions because it is not an actual emission limitation and is not a determinable quantity even on a design basis, and (2) the 203(f) alternative is wholly inapplicable to coke pushing emissions. EPA finds there is a need and supported basis for a pushing opacity standard.

EPA believes these deficiencies require disapproval of the rule as proposed.

EPA Final Action: EPA disapproves Rule 203(d)(5)(B)(iii). Because the approved Illinois Plan regulation which controls by-product coke plant pushing emissions (Rule 203(a)(6)(B)(ii)) contains neither an opacity or mass emission limitation, approval of the overall Part D Plan is conditioned on submittal of a RACT rule for coke oven pushing. The Illinois commitment to satisfy this condition and the schedule for doing so should be submitted with the schedule referred to above.

Rule 203(d)(5)(B)(iv)(aa) and (bb) By-product Coke Plant Oven Door Emissions.

EPA proposed to conditionally approve Illinois Rule 203(d)(5)(B)(iv)(aa) on the condition that Illinois make a commitment during the comment period to correct deficiencies relating to the absence of a test procedure, within a time period which was to be negotiated between the appropriate Illinois and U.S. EPA Region V officials. In response to that proposal Illinois EPA promulgated procedures for determining compliance with the Illinois Pollution Control Board coke oven regulations and submitted such for the docket as Exhibit 8. Section 110(a)(2)(D) of the Act requires that an approved plan and subsequent revision include a program for the enforcement of emission limitations and regulation. Since the close of the comment period, the United States Court of Appeals for the Seventh Circuit has determined that the Illinois Pollution Control Board (IPCB) is the proper entity, under the terms of the Illinois Environmental Protection Act, to promulgate substantive environmental control standards. Such standards, if promulgated by the IEPA, are invalid as a matter of State law. The Court did not distinguish between "substantive" and procedural rules and EPA thinks it remains unclear whether such a distinction survives this decision.

Therefore, satisfaction of this condition will require submission of the IEPA procedures, or similarly acceptable procedures, which have been validly promulgated and meet the requirements for plan revisions.

EPA reviewed the IEPA promulgated rules and believes they clarify the definition of a "door" in that it would eliminate the ambiguity noted by U.S. EPA relative to chuck doors. The formula provided in the Illinois testing procedure clearly limits the door standard to operating ovens, consistent with another U.S. EPA request. A description of emissions to be observed, where the observers ought to be located, and other pertinent testing details have also been provided. EPA had also noted that it was unclear whether the IPCB door standard was to apply as a battery or plant-wide average regulation. The steel commentator stated, and EPA agrees, that the Board's Opinion contains the requirement that the 10 percent door standard pertains to each battery separately. IEPA appears to have made significant progress toward formulating the necessary testing procedure.

Comment 1: One commentator believes that the submitted door regulation itself is "specifically definite in its present form and must be approved by U.S. EPA," and that a test procedure is not necessary.

Response 1: This commentator, in apparent reference to Exhibit 6, also noted that IEPA has been in the process of formulating an observation procedure applicable to door leaks and that it would be submitting this procedure to U.S. EPA. EPA considers the observation procedure it conditioned Rule approval upon to be absolutely essential, particularly in light of the *Donner-Hanna* case.

Otherwise, as stated in the Notice of Proposed Rulemaking, the coke oven door standard submitted by Illinois is potentially undefined and therefore unenforceable.

As an illustration consider a 50 oven coke battery, containing 50 coke side doors, 50 pusher side doors, and 50 chuck doors¹ which is observed to have

¹ The coke oven door is a structure which weighs 3-5 tons, is 10-20 feet high, and 2-3 feet wide. The purpose of the door is to keep coal contained in a coke oven and also to retain heat and emissions. Within the pusher side door is a smaller door which can be opened even though the main door is latched to the oven opening on the pusher side. The purpose of this chuck door is to admit, during the charging operation, a horizontal bar on the pusher machine for the purpose of leveling coal piles during the charging operation. Both coke side and pusher side doors are mounted on oven openings, one on each side of an oven, between vertical support beams, called buckstays. The space between the vertical

six leaking coke side doors and six leaking pusher side doors. Under one possible rule interpretation this pattern would be a 12 percent leakage rate—(12 leaking doors divided by 100 total doors excluding the 50 chuck doors), and thus a violation of the submitted standard. Another possible interpretation (12 leaking doors divided by 150 doors) would lead to the same leak pattern to be defined as an 8 percent leak rate and thus in compliance with the IPCB door standard. Therefore, the requirement that Illinois adopt an inspection technique in conjunction with its door regulation is necessary.

Comment 2: The steel industry commentator also comments on EPA's assertion that it considers a 10 percent door standard to represent RACT. Its RACT comments are offered despite its expression that EPA must approve the submitted regulations. The commentator argues that EPA collected its clean plant door leak data via a procedure known as "Method C." The commentator notes that Method C provides a list of those structural elements of a coke battery which are not to be counted by the procedure (p. 500922). The commentator then goes on to say that IEPA, via Exhibit 6, is formulating a procedure which requires an observer to count all door area leaks, including those from areas which Method C does not count.

Response 2: EPA has reviewed the commentator's methodology point and agrees that much of the technical data that EPA placed in this docket was collected by Method C observations. These were the same type of data considered by the IPCB when it promulgated the submitted Rule.

The commentator's criticism of the use of Method C is predicated on the assumption that Exhibit 6's method for observing doors is the rule upon which EPA is acting. However, in EPA's review of the door emissions rule and supporting IPCB's opinion (and the underlying state hearing record) nowhere did it find any reference made to the term "door area." That phrase only entered this rulemaking proceeding via IEPA's Exhibit 6, which was first proposed in Illinois by IEPA on August 22, 1980, three weeks after the Federal Notice of Proposed Rulemaking on the Illinois door standard was published in the *Federal Register*, and approximately one year after the coke oven door standard became effective in Illinois. In the IPCB's Opinion it states, "The

outer edges of a coke oven door and these buckstays, which principally consists of oven brickwork, is defined by Exhibit 6 as part of the "door area" which Exhibit 6 makes part of the door inspection procedure.

Board's Final Order allows no more than 10 percent of the coke oven doors on a given battery to leak at a given time." The Board cites two witnesses who had testified about the achievability of a 10 percent door standard. Both of these witnesses testified about the percentage of door, not door area, leaks. The EPA witness, who was one of the two witnesses the Board cites, testified on the basis of Method C door data. The Illinois Pollution Control Board stated that it found that a 10 percent door standard was achievable.² Therefore, this commentator is arguing that the 10% door standard submitted by Illinois as modified by the adoption by IEPA's door area procedure is more stringent than RACT.

Despite the potential modification of the meaning of the IPCB standard, if the Illinois door standard is more restrictive than RACT, EPA will still approve the Rule under discussion. Under Section 116 of the Clean Air Act (42 U.S.C. 7416) the State has the right to adopt a regulation requiring more than RACT. For purposes of Section 172(b)(3) of the Act, it is only necessary that a coke oven door emission standard be at least as stringent as RACT, and be enforceable, for EPA to approve.

EPA Final Action: EPA conditionally approves Rule 203(d)(5)(B)(iv)(aa) and approves Rule 203(d)(5)(B)(iv)(bb).

Rule 203(d)(5)(B)(v) By-Product Coke Plant Oven Lid Emissions.

EPA stated in the Notice of Proposed Rulemaking that it intended to conditionally approve the submitted rule on the condition that during the comment period the State make a commitment to correct noted testing deficiencies. These testing deficiencies were of the same character as noted for doors and offtake piping, namely that the submitted rule needed to be precise about the inspection technique utilized to define compliance.

Illinois has adopted a set of testing rules which it submitted as a comment to this record as Exhibit 6. With respect to oven port lids the inspection technique it adopted is satisfactory with respect to each of the points that EPA noted.

As with the door rule EPA will approve the proposed rule upon submission of the IEPA test procedures.

² Commentator asserts that it is a deficiency of the coke oven door data base relative to this proceeding that no data on door emissions from any coke battery in Illinois is contained in the record. Yet, the other of the two witnesses which the IPCB specifically cites, Mr. Petkus from the City of Chicago, testified that coke oven doors at Wisconsin Steel Corporation's Chicago coke plant complied with 10 percent door standards.

or similarly acceptable test procedures, which have been validly promulgated and meet the requirements for plan revisions.

Comment 1: The steel industry commentator stated that the proposed Illinois regulation is approvable in its present form and that approval should not be conditioned on the basis of enforceability considerations.

Response 1: This commentator raised the same question with a respect to coke oven doors. U.S. EPA's response to this comment is found in response to coke oven door Comment 1.

Comment 2: IEPA stated that it believes that Exhibit 6 rectifies the deficiencies noted by EPA.

Response 2: The substance of Exhibit 6, as stated above, is satisfactory to EPA. Exhibit 6, however, is not yet part of the Illinois SIP. Illinois needs to submit Exhibit 6 as a SIP revision in order to satisfy the condition of the approval of its submitted regulation.

Comment 3: CBE states that it disagrees with EPA's proposal to approve a five percent lid standard. It

states that visible emissions data in the technical record show that a three percent level has been achieved by careful maintenance practices. CBE states that EPA should disapprove the Illinois standard and propose a three percent standard. CBE also states that EPA should base the standard on total operating coke ovens rather than on the total number of offtake lids because otherwise the stringency of the rule would be impaired.

Response 3: On the last point, IEPA's Exhibit 6 bases the allowable percent leaks on an operating oven basis.

EPA has carefully considered CBE's point about the achievability of a three percent standard. Table I below, indicates that the CBE suggested 3% level and the Illinois proposed 5% level are both highly achievable. Of particular interest to EPA is the observation that raising the standard from 3% to 5% does not appear, for the coke battery inspections in this record, to increase the proportion of inspections which would be termed in compliance. For example, about 60% of the data base

consists of observations at the Clairton Works of U.S. Steel Corporation. Table I shows that 99.6% of the inspections at this plant met the 3% level and 99.9% met the Illinois standard. At the J&L coke plant in Pittsburgh, 99.5% of the battery traverses² met both the 3% and 5% levels. The same is true for the Bethlehem, PA batteries cited by CBE (99.1% at each level). In all of these cases, there was an extremely high percentage of the traverses that were under the 3% level (but not 100%) and which experienced no greater degree of compliance at the 5% level.

In the case of one plant (National) whose compliance rate with a 3% level was only 65%, Table I shows that increasing the standard to 5% did not produce a significantly different compliance rate. Therefore, for this plant, a change in the standard from 3% to 5% would not have produced compliance. This last plant is one which EPA found during its inspection not to be consistently using the good maintenance practices which CBE mentions and it violated the 5% rule.

TABLE 1.—Summary of Oven Port (LID) Leak Rates: Data in Illinois Record

Plant and battery No.	Inspection dates	Performance observations	Number of traverses	Percent of traverses over (under) 3 percent	Percent of traverses over (under) 5 percent	Leak rate range of percents	Number of courses over 3 percent	Number of traverses under 5 percent
US Steel, Clairton Works	July 9, 1979	EPA and US Steel	1,584	99.6	99.9	0.0-6.3	6	2
Kaiser Steel Corp., Fontana, CA: F, G	May 1979	EPA	18	100	100	0-1.7	0	0
US Steel, Fairfield Works Batteries: 2, 6, 9, 5	Dec. 1976	EPA	83	96.8	100	0.2	1	0
Bethlehem Steel, Bethlehem, PA: A, 2, 3, 5	June 1979 Aug.-Oct. 1975 Sept. 1973	EPA/PA DER	111	99.1	99.1	0-19.1	1	1
BSC, Johnstown, PA	Dec. 1978	EPA	2	100	100	0.6-1.3	0	0
J & L Pittsburgh Works: P-1, P-2, P-3S	Jan. 10, 1979	PA DER	199	99.5	99.5	0-5.1	1	1
CF&I Steel, Pueblo, CO: B, C, D	July 1977 ¹ Mar. 1978 June, 1978	EPA	101	62.4	73.2	0-20.7	36	24
CF&I, same	July 1978-May 1979	EPA	335	96.5	100	0-3.8	5	0
National Steel, Weirton Batteries: 1, 5, 6, 7, 8 ¹	Oct. 1978	EPA	54	66	72	6.0-17.0	19	15
Interlake ²	Oct. 1978-June 1980	EPA	8	100	100	0-2.0	0	0
Overall			2,493	97.2	96.3		71	43

¹ U.S. EPA observed that this plant was not consistently using wet sealing practice during this inspection.

² CBE submitted data of U.S. EPA inspections.

Unlike coke charging, lid emissions, on a pounds per hour mass basis, are approximately proportional to the number of leaks that occur on a battery. A battery with a 10% leak rate is emitting roughly twice the amount of emissions as a battery with a 5% leak rate. Unlike coke charging, there is no disproportionate increase in mass emissions associated with a 3%-to-5% increase.

EPA considers oven port (lid) leaks to be a very small source of particulate emissions. Mass emission rates have not yet been established because the emissions are fugitive. Nevertheless,

they are a relatively minor source at coke plants. EPA believes the difference between 5% and 3%, which for a 50 oven, 4 hole battery (typical of Illinois batteries) is the difference between 10 lid leaks (5%) and 6 leaks (3%) to be even smaller.

Therefore, no useful purpose would be served if the submitted 5% rule were disapproved. In the subsequent time period which would be required by Illinois or EPA to set forth a 3% standard, emissions from coke oven lids in Illinois could occur at a 50%, 75% or 100% level because the 5% standard would not be applicable.

EPA Final Action: EPA conditionally approves Rule 203(d)(5)(B)(v).

Rule 203(d)(5)(B)(vi) *By-Product Coke Plant Offtake Piping Emissions*.

EPA proposed to conditionally approve the submitted offtake rule if the State committed to correct deficiencies relating to the absence of a test procedure and the definition of the source which the 10% leak rate standard applies.

Illinois submitted as a comment its Exhibit 6 which contains a testing procedure for coke battery offtakes. This

² A traverse is a single battery inspection.

procedure does define clearly each of the properties discussed in the Notice of Proposed Rulemaking. As with the door rule EPA will approve the proposed rule upon submission of the IEPA test procedures, or similarly acceptable test procedures, which have been validly promulgated and meet the requirements for plan revisions.

Comment 1: The steel industry commentator asserts that a specific testing procedure is unnecessary for EPA to approve the rule which it states must be approved in its present form. Commentator CBE agrees with EPA's Notice of Proposed Rulemaking position.

Response 1: U.S. EPA provided this response in its discussion of the proposed standard for by-product coke plant door emissions. The issues here are the same.

Comment 2: CBE disagrees with EPA's proposed approval of the rule because it states the standard is not stringent enough to be RACT. Its reasons is that batteries at U.S. Steel's Clairton Works and at other plants have demonstrated they could meet a 5% standard.

The commentator is correct that Clairton batteries 1, 2, 16, 17 met a 5% level in 1978 and 1979. So did battery 3 and batteries 7-10 in 1978. On the other hand batteries 11, 12, 19, 20, 21, and 22 met the 10% but not the 5% level during 1978 and 1979 inspections. Batteries 7-14 met 10% but not 5% in 1979, reversing earlier behavior.

Data in this record from other plants are also spotty. Two of Fairfield's three short batteries were far more successful at the 10% level than at 5%, but one battery met both. Republic Steel of Gadsden did meet 5% but CF&I's and Kaiser batteries did not meet 5%. (It is also true that the latter two plants also did not meet 10%). Process data in the record do not generally allow one to differentiate between the better and more mediocre performances. Therefore, EPA believes approval of the 10% Rule is reasonable.

EPA Final Action: EPA conditionally approves Rule 203(d)(5)(B)(vi).

Rule 203(d)(5)(B)(vii) By-Product Coke Plant Combustion Stacks Emissions.

Illinois proposed a mass emission concentration standard of 0.05 gr/dscf, which EPA proposed to approve. The only commentator, CBE, contends that "it would be arbitrary, capricious and a violation of the enforceability requirements of Section 110 and 172 for EPA to approve the Illinois standard for coke oven stack without a visible emission limitation," because visible emission, regulated by an opacity standard, provide "an early warning system as long as periodic source monitoring and reporting is not required,

in order to guarantee that a battery has not been allowed to deteriorate and, therefore, requires control equipment." CBE contends that the intermittent fluctuating nature of particulate emissions from waste heat stacks, combined with the "time and expense of lengthy stack test procedures" enhances the need for a visible emission standard for this source category.

Nevertheless, mass tests can be performed because these emissions are vented to the atmosphere via a stack, and are measurable by standard EPA and Illinois methods (U.S. EPA Method 5, 40 CFR Part 60, Appendix A). Thus unlike the situation with fugitive coke oven emissions where mass tests are infeasible, (e.g. charging), a visible emission standard is not essential for the determination of the amount of air pollution emitted from waste heat stacks.

Therefore, EPA will approve this rule.

Comment: CBE recommends that EPA should propose a specific visible emission standard, which would permit exceedances of 20% opacity but only for periods aggregating less than 3 minutes in any one hour (which it contends is being achieved at batteries in Pennsylvania).

Response: CBE appears to recognize that mass may not relate to opacity at a combustion stack. And, CBE does not present test data indicating a relationship between the Illinois 0.05-gr/dscf standard and this particular visible emission standard.

By approving the specific mass rule which Illinois proposes, EPA does not forfeit its authority to observe the coke batteries stacks to determine whether a mass test is indicated. The visual appearance of a stack is readily apparent to any observer, who usually need not be in a coke plant proper to observe such emissions. Intense visible emissions may well indicate a mass emissions problem. Therefore, U.S. EPA does not agree with CBE's comment that "companies which have allowed their batteries to deteriorate can avoid any emission controls while waiting for an agency to go to the time and expense of lengthy stack test procedures."

EPA Final Action: EPA approves Rule 203(d)(5)(B)(vii).

Rule 203(d)(5)(B)(viii) By-Product Coke Plant Quenching Emissions.

EPA stated in the Notice of Proposed Rulemaking that it proposed to disapprove the submitted Illinois quenching regulation because EPA believed this regulation permitted coke to be quenched with water containing as much as 3000 mg/l total dissolved solids (TDS). EPA had stated that it thought that Illinois coke plants were using

water containing about 400-450 mg/l TDS and therefore, that, the submitted rule permitted more air emissions than were actually being emitted. Comments were received from the IEPA and from the steel industry on this standard.

After reviewing these comments, EPA has determined that it will conditionally approve the submitted rule because it now believes that the 1500 mg/l limitation of total dissolved solids in the quench make-up water is a reasonable limitation for Illinois coke plants.

EPA believes that a linear relationship exists between the air emission rates from a coke quench tower (in lb/ton of coke) and the quality of water used for quenching coke (mg/l of total dissolved solids, TDS). This conclusion derives from three studies of quench tower emissions. Tests have been conducted at quench towers at the U.S. Steel Corporation plants in Lorain, Ohio (by U.S. EPA and its contractor) and in Gary, Indiana (by the company), and at the Dominion Foundry and Steel Company (Dofasco) plant in Hamilton, Ontario (by a contractor for that company). Reports of these tests are in the record at p. 508889, 509249, 509305, 509337, 509943, and 510243.

The pertinent data are summarized in Table I and Figures 3-5 of a review paper prepared by EPA and placed in the docket of this proceeding. On a filterable solids basis (EPA Method 5, 40 CFR Part 60, App. A), an increase of 1000 mg/l TDS in quench water results in an increase in air emission rates of about 0.32 lb/ton of coal charged into a coke oven. Therefore, EPA believes that controlling the TDS levels in water applied to coke affects air emission rates. After reviewing the comments submitted by commentators in this action EPA still believes this to be true.

EPA had thought that water with TDS levels of about 400-450 mg/l was consistently available to Illinois coke producers. Comments received, as discussed below, indicate that actual TDS levels range upwards from that, depending upon when a river is sampled. Persuasive to EPA is the statement by the IEPA that:

A review of data referenced (in its submission) might lead U.S. EPA to suggest a limit somewhat lower than 1500 mg/l. However, the data clearly does not support a limit of 400-450 mg/l as suggested by U.S. EPA. . . . Although the IEPA is of the opinion that the 1500 mg/l limit is sufficient to ensure the continuation of current operating practices and will not, as a practical matter, result in any increase in emissions, it is willing to concede that a somewhat lower theoretical limit might be established on the basis of available data. However, the IEPA is also of the firm opinion

that the establishment of this lower limit would have absolutely no real impact on pollutant emissions, and, thus, does not warrant the expenditure of the resources required to bring about the necessary regulatory change.

IEPA submitted information indicating that the principal Chicago water source for the steel industry, the Little Calumet River, has been sampled at TDS levels in excess of 800 mg/l during a long sampling period in the mid-1970's. IEPA also submitted information indicating that TDS levels in the Mississippi River in the vicinity of the Granite City Steel coke plant ranged from 200 to 800 mg/l. In addition, the only other source of clean water for the Chicago area coke producers, Lake Michigan, may not be available to these operators because diversion of Lake Michigan water for industrial use would require the obtaining of a permit which IEPA believes is highly unlikely to be granted. Therefore, a standard of 1500 mg/l does seem reasonable to EPA.

Additionally, EPA has re-examined one of its assumptions stated in the Notice of Proposed Rulemaking, that "the proposed Illinois standard, 1500 mg/l TDS in the make-up water, is roughly equivalent to 3000 mg/l TDS in the quench water." This concentration effect, which EPA had thought to exist because of the Lorain tests, is inconsistent with the results obtained by U.S. Steel at the Gary plant. The Gary plant experienced make-up water/quench water ratios of 1:1; therefore, scientific evidence on the matter of TDS concentration in a quench tower system is mixed. Since it is possible that Illinois quench towers which receive 1500 mg/l TDS make-up water will quench coke with water of the same quality, EPA, which was willing to accept the 1500 mg/l limit provided it applied to water actually sprayed on incandescent coke, is willing to accept the 1500 level in make-up water.

Illinois has not submitted a method by which their 1500 mg/l limit is to be sampled, however. The method of analyzing for dissolved solids, the number of samples to be taken over a specified time period, and the definition of make-up water need to be defined. On the condition that Illinois develops and submits such a method as a revision to the Illinois Plan, EPA will approve Rule 203(d)(5)(B)(viii).

Comment 1: IEPA stated that the two Chicago area rivers supplying the steel industry and the Mississippi, which supplies Granite City Steel, contain total dissolved solvents concentrations, at times, in excess of 400 mg/l, the EPA limit. IEPA states that the Little Calumet River experienced periods from 1972

through 1977 in which values up to 900 mg/l TDS occurred. In addition, it states that the Little Calumet River during the period 1975-1977 had a lower limit of 600 mg/l. IEPA states that the Mississippi River is sampled in the vicinity of or at 200-800 mg/l.

Response 1: EPA accepts these assertions as being true. Support data was supplied. Their significance to this action is discussed above.

Comment 2: The steel industry commentator asserts that the Calumet River has TDS concentrations of 800 to 1800 mg/l during certain periods and, that, therefore EPA is incorrect about its characterization that make-up water in Illinois currently is available in the range 400-450 mg/l TDS. This commentator also stated that the 450 level was too restrictive for Granite City Steel which has experienced makeup water TDS concentration as high as 757 mg/l.

Response 2: EPA accepts the statement by this commentator that 450 mg/l is too restrictive a limit for make-up water on a daily basis.

Comment 3: IEPA states that the phrasing of their rule to prohibit the "direct inclusion of coke by-product plant effluent in the make-up water" was intended to prohibit the use, as quench tower make-up water, of coke plant effluent which had been treated in a steel plant waste water treatment facility, and to allow the use of this type of water for quenching only indirectly, as a result of extraction from a river, after substantial dilution has occurred.

Response 3: EPA thinks this is a useful clarification because the prohibition of flushing liquor produced at by-product coke plants containing very high TDS limits is what the Agency believes to constitute reasonably available control technology.

Comment 4: IEPA states that extracting water from Lake Michigan for industrial process use, an alternative to using Little Calumet River water in Chicago, is highly unlikely to be permitted because of an existing water resources restriction.

Response 4: EPA agrees with this, as is stated above.

Comment 5: The steel commentator asserts that there is no direct relationship between TDS level in quench water and the amount of particulate matter emitted from a quench tower.

Response 5: EPA completely disagrees with this assertion. EPA has performed a review of the commentator's Gary data and the other two studies mentioned above. These constitute all the quenching data in this record. U.S. Steel's measurements indicate that for

conventional quench towers equipped with internal baffles, air emission rates increase from 0.32 lb/ton of coal to 0.64 lb/ton when make-up water concentrations increased from 466 mg/l TDS to approximately 1500 mg/l.

Comment 6: The steel commentators assert that Interlake Steel had stated to the IPCB that if it would have to construct a water treatment facility, a capital cost in excess of \$8,000,000 and an annual operating cost of \$1.7 million would be incurred. A more stringent limitation on the level of TDS in the make-up water than 1500 mg/l may trigger this cost is the implication of the comment.

Response 6: By its action today, EPA is conditionally approving the submitted Rule.

EPA Final Action: EPA conditionally approves Rule 203(d)(5)(B)(viii).

Rule 203(d)(5)(B)(ix) Work Rules.

EPA omitted comment on this rule in its Notice of Proposed Rulemaking. This rule requires that no person shall cause or allow the operation of a by-product coke plant except in accordance with operating and maintenance work rules approved by the [IEPA] Agency.

During the public comment period Illinois demanded that EPA review this rule and comment on its approvability.

Prior to the CBE opinion, *supra*, EPA determined that it could take no action on non-specific work rules not submitted as revisions to the Illinois Plan. This determination was made because of EPA's belief that specific process operating requirements, if not part of an approved Plan, were not enforceable by EPA. This belief was raised as an argument before the CBE Court, *supra*, and rejected. The Court discussed the enforceability of operating programs in effect as a result of an EPA approved rule though not specifically approved as a revision to a State's Plan.

In light of the Court's decision EPA will review Illinois Rule 203(d)(5)(B)(ix), to determine if, consistent with the holding in CBE, that rule would provide federally enforceable site-specific operating requirements for the controlled sources. Because EPA omitted proposing action on this rule in the Notice of Proposed Rulemaking, a separate notice will issue in the near future describing EPA's proposed action and soliciting public comments.

EPA Final Action: Consistent with the above comments, EPA takes no action on Rule 203(d)(5)(B)(ix) in today's notice.

Rule 203(d)(5)(C) Sinter Processes.

EPA proposed to approve the rule as proposed by the State. All commentators agreed with EPA's proposed action with the caveat by

industry that the rule should only apply to existing sinter plants.

EPA Final Action: EPA approves Rule 203(d)(5)(C).

Rule 203(d)(5)(D) *Blast Furnace Cast House*.

EPA had stated in the Notice of Proposed Rulemaking that it proposed to disapprove the submitted rule because (1) the mass emissions test upon which the rule is based is substantially vague, rendering the test both undefined and unenforceable, (2) the link between mass and visible emissions, coupled to the vagueness of the mass emissions test, renders the visible emissions rule unenforceable, and (3) the equipment which is required if the mass emissions limit is exceeded, is neither well defined nor RACT.

EPA has examined this position in the light of comments received from industry, the Illinois EPA, and from CBE. EPA also examined its proposed action in light of a recent Illinois Court of Appeals opinion relative to emissions control for casthouses and also with respect to a major technological development which has occurred since the close of this record. EPA disapproves the submitted rule because of the first and third reasons above based on this record.

The submitted regulation is based upon a limitation of mass emissions from the top of a casthouse with compliance to be determined by a high volume sampler test. In lieu of meeting this standard, compliance can only be effected by the installation of specific hooding equipment to capture and clean some casthouse emissions.

EPA has examined the test procedure contained in the submitted rule and finds that it is vague or silent on almost all the necessary aspects of a mass testing procedure, thereby transferring to technical field test personnel the effective definition of the mass limitation itself. The regulation, therefore is without meaning as submitted as to both its actual stringency and enforceability. This is explained in detail in an analysis placed in the docket.

In addition to the foregoing, EPA has had reason to change its view of what constitute RACT for blast furnace casthouses due to a major technological innovation since the publication of the Notice of Proposed Rulemaking. EPA believes that the alternative hood/gas cleaner requirement imposed by the submitted rule is significantly more expensive and less emissions reductive for existing casthouses than is now achievable by the new non-capture operating and maintenance practices.

EPA believes that the retention of a visible emission rule is necessary to maintain a definition of RACT in the Illinois SIP because the most effective and least costly means for reducing such emissions is not equipment-based. The opacity data which EPA just placed in the docket relevant to non-capture techniques provides a basis for development of such a regulation. Negative experience with the development of mass emissions testing, especially in the casthouse environment, further suggests the value of the opacity approach.

Therefore, the acceptability of existing Rule 202(b), in light of current opacity data, should be reexamined. The non-capture technique opacity data indicate that performance better than that required by existing Rule 202(b) has been measured. However, EPA is also aware that this conclusion has not been subject to wide discussion. Illinois is encouraged to examine its visible emission regulation in this regard.

Therefore, U.S. EPA believes deficiencies in the submitted rule require disapproval as proposed.

EPA Final Action: EPA disapproves Rule 203(d)(5)(D). Consequently, the approved Illinois Plan regulations which control blast furnace casthouse emissions are Rule 202(b) and Rule 203(a).

Rule 203(d)(5)(E)(i) and (ii) *Basic Oxygen Furnace (BOF) Emissions*.

EPA proposed to approve Rule 203(d)(5)(E)(i), which controls charging, refining, and tapping operations upon clarification that the operation of Rule 203 requires application of Rule 203(a) to the controlled operations. EPA proposed to disapprove Rule 203(d)(5)(E)(ii), which controls hot metal transfer, hot metal desulfurization, and ladle lancing operations, because the rule failed to contain a specific method of measurement for qualification under exemption provisions contained therein. In addition, another cited deficiency of Rule 203(d)(5)(E)(ii) was that the method set forth to determine the process weight rate is not relevant when determining a process weight rate for ladle lancing operations.

The State of Illinois responded by clarifying that Rule 203(a) rather than Rule 203(b) applies to all BOF sources in Illinois and that Rule 203(d)(5)(E)(ii)(bb) will be used only if a source proves compliance with Rules 203(a) or 203(b). Illinois stated it would require a most rigorous proof that a source operator was entitled to an exemption under Rule 203(d)(5)(E)(ii).

Industry commented that Illinois Rule 203(b) applies to existing sources and, though the exception to Rule

203(d)(5)(E)(ii) is difficult to prove, the difficulty is not grounds to disapprove the rule as proposed.

EPA believes the clarification by the State that Rule 203(a) applies to charging, refining, and tapping operations is sufficient to remove the concern about the operation of Rule 203(d)(5)(E)(i). EPA also agrees, upon reconsideration, that difficulty in determining whether an exemption is warranted under the provisions of Rule 203(d)(5)(E)(ii)(bb) is not grounds for disapproving the rule. EPA believes, however, that operating permits issued as a result of the operation of Rule 203(d)(5)(E)(ii)(bb) should be closely monitored by enforcement personnel to assure continuing compliance.

EPA Final Action: EPA approves Rule 203(d)(5)(E)(i) and (ii).

Rule 203(d)(5)(F) *Hot Metal Desulfurization Not Located in the BOF*.

EPA proposed to approve this rule. All commentators agreed with EPA's proposed action.

EPA Final Action: EPA approves Rule 203(d)(5)(F).

Rule 203(d)(5)(G) *Electric Arc Furnaces*.

EPA proposed to approve this rule upon clarification by the State that: (1) the aggregate of the process weights from melt down, refining, charging, tapping, slagging, electrode port leakage, and ladle lancing is used to calculate the emission limitation for each furnace, and (2) that Illinois Rule 203(a) rather than Illinois Rule 203(b) applies to all electric arc furnaces in Illinois.

The State of Illinois responded to EPA's comment by stating that the regulation requires the aggregation of all process weights in order to determine a single emission limitation for each electric arc furnace. The State further stated that, as of April 14, 1972, no electric arc furnace in Illinois was in compliance with Rule 203(b). Therefore, Rule 203(a) applies to electric arc furnaces in Illinois.

Industry commented, without analysis, that Rule 203(b) applies to at least one electric arc furnace in Illinois and that there is no data in the docket to support EPA's technical discussion of the rule.

EPA believes the clarification by Illinois that an aggregation of all process weights to determine a shop's emission limitation is sufficient to remove EPA's concern about the operation of the Rule. Though industry's comment concerning the applicability of Rule 203(b) to existing furnaces in Illinois is noted, EPA believes that deference is proper to the IEPA position.

EPA Final Action: EPA approves Rule 203(d)(5)(G).

Rule 203(d)(5)(H) Argon-Oxygen Decarburization (AOD) Vessel.

EPA proposed to approve this rule upon clarification by the State that the aggregate of the process weights from charging, refining, alloy addition, and tapping operations is used to calculate the emission limitation; and, that Illinois Rule 203(a) rather than Illinois Rule 203(b) applies to all argon-oxygen decarburization vessels in Illinois.

The State responded by providing clarification similar to that necessary for approval of Rule 203(d)(5)(G) [Electric Arc Furnaces]. EPA believes this clarification is sufficient to remove the concern it expressed about the proposed rule.

Industry remarked, without analysis, that the proposed rule on its face required the application of Illinois Rule 203(b) to existing sources and asserted that EPA failed to provide a technical basis for its determination that application of Rule 203(b) to AOD vessels in Illinois is not RACT.

EPA has reviewed and analyzed all commentator remarks about its proposed action and believes the judgment expressed in the Notice of Proposed Rulemaking is sound.

EPA Final Action: EPA approves Rule 203(d)(5)(H).

Rule 203(d)(5)(I) Liquid Steel Charging.

EPA proposed to approve this Rule in the notice of proposed rulemaking. All commentators agreed with EPA's proposed action.

EPA Final Action: EPA approves Rule 203(d)(5)(I).

Rule 203(d)(5)(J) Hot Scarfing Machines.

EPA proposed to approve this rule upon clarification by the State that the testing period shall occur only during the hot scarfing operation. IEPA asserted in its comments that it will not accept any test of a hot scarfing process unless its test period coincides with the process operation. EPA will defer to the IEPA interpretation of the Illinois rule.

EPA Final Action: EPA approves Rule 203(d)(5)(J).

Rule 203(d)(5)(K) Measurement Methods.

This rule provides opacity and mass emission test procedures for compliance determinations. EPA had stated in the Notice of Proposed Rulemaking that it would disapprove the Illinois submission because it extended U.S. EPA Reference Method 9 to intermittent plumes and because the proposed mass stack test measurement procedure did not specify that stack testing is to be

performed only during periods of actual process operation.

Comments were received from the steel commentator, CBE, and IEPA. After reviewing these comments, EPA has determined that the submitted rule cannot be approved because of the first reason stated above.

Rule 203(d)(5)(K) merely adopts the Federal opacity test procedure. The Illinois Rule reads, "visible emission evaluation for determining compliance shall be conducted in accordance with procedures published in 40 CFR Part 60, Appendix A, Method 9. 42 FR 41754, *et seq.*, (August 18, 1977)." This procedure, however, does not apply to intermittent plumes (See Federal Register of November 12, 1974, Vol 39, No. 219). Yet, Illinois' opacity regulation, Rule 202(b), applies to all plumes. Illinois is either attempting to adopt the Federal visible emission procedure for both continuous and intermittent plumes or has left a deficiency in its regulations relative to intermittent plumes.

Important sources of intermittent plumes in the steel industry include emissions from charging and tapping of basic oxygen furnaces and electric arc furnaces. These operations are characterized by durations of only several minutes while emitting significant amounts of pollution during these durations. Reference Method 9 contains a data reduction procedure (Section 2.5) which requires that opacity is to be averaged over 24 consecutive observations which are recorded at 15-second intervals. EPA recognized that this 6-minute averaging procedure is inapplicable to plumes which only occur over shorter durations. (For example, the charging of hot metal into a basic oxygen furnace may only take one minute). Therefore, Rule 203(d)(5)(K) is deficient.

Though not a basis for this disapproval, but of concern to EPA is that the interpretation of the 8-minute exception in Rule 202(b) is still ambiguous as to all plumes. It states that "no person shall cause or allow the emission of smoke or other particulate matter from any other emission source into the atmosphere of any opacity greater than 30 percent" except that "The emission of smoke or other particulate matter from any such emission source may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period * * *." Adoption of Method 9 with its 6-minute averaging procedure is in conflict with the 8-minute time aggregated exception rule to the 30 percent limitation. If the 30 percent limitation is to be 6-minute averaged,

EPA finds the exception to be undefined because it appears to be stated as an aggregated exception to an instantaneous 30 percent limit.

Rule 203(d)(5)(K), therefore, is deficient because of the absence of an opacity test procedure for intermittent plumes by the adoption by Illinois of Reference Method 9, and because the aggregated time exception provision of Rule 202(b) is still unclear.

Substantively, the disapproval of Rule 202(d)(5)(K) means that the opacity regulation, Rule 202(b), cannot be enforced for intermittent sources. EPA considers Rule 202(b) necessary for the definition of RACT for basic oxygen furnace, electric arc furnace, and certain other iron and steel sources, because of the fugitive nature of some of their emissions.

It is possible to adopt alternative test procedures to 6-minute averaging which address this problem. EPA placed in the docket, for example, a data reduction procedure which permits the direct aggregation of individual 15-second readings, rather than averaging 24 consecutive such reading.

Illinois adopted EPA's mass test procedures, as Methods 1-5 (front half). EPA believes that its original position, to disapprove the rule because it did not specify that stack testing is performed only during periods of process operation, is incorrect. One commentator pointed out that this requirement is implicit in Reference Method 5 itself. This comment prompted EPA to reevaluate whether appropriate definitions of the beginning and ending of test periods for major steel source emissions limitations are specified or reasonably inferred in the applicable emissions limitation proper. This examination leads EPA to conclude that sufficient definition exists.

Comment 1: The steel commentator states that U.S. EPA did not suggest an alternative procedure to Method 9 for intermittent plumes but tells the states to develop such a procedure. IEPA states, EPA, uniquely, has the resources to do this.

Response 1: EPA did recommend a procedure which it previously had incorporated into consent decrees with three of the four steel companies of the commenting consortium.

Comment 2: The steel commentator believes that the stack testing deficiency noted in the Notice of Proposed Rulemaking is actually taken care of by the mass limitations of the Plan.

Response 2: Though EPA will disapprove Rule 203(d)(5)(K), EPA substantially agrees with this view. EPA

elected not to act differently as to different portions of the rule.

EPA Final Action: EPA disapproves Rule 203(d)(5)(K). Consequently, EPA Reference Methods 9 and 1-5 apply to the Illinois Rules. 40 CFR 52.12.

Rule 203(d)(5)(L) Compliance Dates.

EPA proposed to disapprove this Rule because the compliance dates for iron and steel particulate emission sources were determined to be equal to or less restrictive than existing federally approved rules for these sources. EPA further commented that the proposed compliance dates do not insure reasonable further progress or expeditious compliance.

The State of Illinois in its response to EPA's comments stated: (1) the rule as proposed requires each steel mill to reduce its total particulate emissions in one-third increments by December 31, 1982, (2) concurrent reduction of fugitive particulate emissions from iron and steel sources as required by Illinois law makes compliance with Rule 203(d)(5) expensive and unreasonable prior to December 31, 1982, (3) several of the previous rules applicable to iron and steel sources were unenforceable, therefore, overall reductions in particulate emissions under the submitted rules will be greater than the reduction possible under existing rules, (4) existing consent decree compliance dates executed by EPA and Illinois steel sources will remain unaffected by the submitted rule, and (5) as a matter of executive and legislative national policy, the steel industry is being seriously considered for a relaxation of compliance dates to cure its economic ills.

Industry likewise commented that more restrictive compliance dates would be economically unreasonable, and, in any event, the proposed regulations are more stringent than those they replace. Industry further commented that EPA's action was simply a restatement of its "Relaxation", "Revocation," and "Continuity" policies and therefore its action was improper in these proceedings.

EPA believes the proposed rule must be disapproved because the application of specific provisions of Rule 203(d)(5)(B) does not require the installation of additional control equipment. Therefore, in many instances, additional time is not necessary to achieve compliance with the applicable emission limitations. Further, the provisions of proposed Rule 203(d)(5)(B)(L)(iii) do not provide specific requirements that can be federally enforced against specific sources. That is, the compliance plans will not be part of the Illinois Plan and

therefore fail to meet the requirements of Section 110(a)(2)(D) of the Act. Further, requirements of consent decrees are not part of state implementation plans. Any relief provided through legislation will have to be implemented according to the terms of such legislation.

EPA Final Action: EPA disapproves Rule 203(d)(5)(L).

Under Executive Order 12291 (Order), EPA must judge whether a regulation is "major" and therefore, subject to the requirements of a regulatory impact analysis. EPA has determined that today's action does not constitute a major regulation. It approves or conditionally approves regulatory requirements which were developed by the State and are currently applicable to certain sources in the State. It also disapproves certain limitations which are currently in force in the State. This disapproval does not constitute a major regulation because the iron and steel sources in the State will as of the time of this rulemaking, remain subject to pre-existing State TSP limitations. This final rulemaking was submitted to the Office of Management and Budget (OMB) for review as required by the Order.

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

This notice of final rulemaking is issued under the authority of Sections 170 and 172 of the Clean Air Act (42 U.S.C. Sections 7410 and 7502).

Dated: August 20, 1981.

Anne M. Gorsuch,
Administrator.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

1. Section 52.720 is amended by revising paragraph (c)(16) as follows:

§ 52.720 Identification of plan.

(c) * * *

(16) On April 4, 1979, the State submitted its draft nonattainment area plan for all areas designated nonattainment as of March 3, 1978 and as revised on October 5, 1978. This submittal contained a request for extensions of the statutory attainment deadline for CO and O₃. The submittal also included a vehicle emission inspection and maintenance program and a new source review plan. Although the State submittal also included the following provisions, U.S. EPA is taking

no action to include them in the federally approved SIP at this time: the portions of Rules 101, 103 and 105 relating to the provisions addressing malfunctions, general requirements of the Clean Air Act which are not Part D requirements, and the provisions covering open burning, mobile source emission standards, diesel locomotive emission standards, adoption of ambient air quality standards, organic emission from organic water separation, carbon monoxide emissions from petroleum and petroleum chemical catalyst incinerators, sulfuric acid mist emissions, sulfur dioxide emissions for fuel combustion sources other than major metropolitan areas, emissions from hydrogen sulfide flares at chemical manufacturing plants, compliance dates for organic emission limitations, carbon monoxide from poly basic organic acid partial oxidation processes, nitrogen dioxide emissions from new facilities burning coal refuse, emission limitations for air furnaces, particulate emissions from low carbon waste incinerators, and adoption of Federal New Source Performance Standards. In addition, U.S. EPA is not rulemaking at this time on those portions of the following rules which contain specified changes made between the publication of the Notice of Proposed Rulemaking and the final rulemaking action:

§ 52.725 Control strategy: particulates. [Amended]

2. Section 52.725(a)(3) is revised to read as follows:

(a) * * *

(3) The State submit a schedule which provides for the expeditious submission of source definitions and testing methods for Rules 203(d)(5)(B)(iv)(aa), 203(d)(5)(B)(v), 203(d)(5)(B)(vi) and 203(d)(5)(B)(viii) as revisions to the Illinois Plan.

3. Section 52.725(b) is revised to read as follows:

(b) Part D—Disapproval

(1) U.S. EPA disapproves the provisions of Rule 203(f) which allow the use of an equivalent method without review and approval of that method. Any source subject to Rule 203(f) which chooses to use an equivalent method must have that equivalent method submitted to U.S. EPA and approved as a SIP revision.

(2) U.S. EPA disapproves the following portions of Rule 203(d)(5) which regulate the control of particulate

matter from specific sources within the iron and steel industry: Rule 203(d)(5)(B)(ii), Rule 203(d)(5)(B)(iii), Rule 203(d)(5)(D), Rule 203(d)(5)(K) and Rule 203(d)(5)(L).

Neither the disapproval contained in § 52.725(b)(1) nor the disapproval contained in § 52.725(b)(2) result in the growth restrictions of Section 110(a)(2)(I) of the Clean Air Act.

4. Section 52.725(c) is removed.

[FR Doc. 81-25364 Filed 9-3-81; 8:45 am]

BILLING CODE 6560-38-M

40 CFR Part 52

[A-1-FRL 1920-4]

Revision to the Massachusetts State Implementation Plan

AGENCY: Environmental Protection Agency.

ACTION: Final rulemaking.

SUMMARY: The purpose of this Notice is to approve a Massachusetts submission as satisfying one of the conditions, which the Environmental Protection Agency (EPA) imposed on Massachusetts State Implementation Plan (SIP) revisions submitted to EPA on December 31, 1978 and May 16, 1979. This condition required the State to submit, by October 7, 1980, policy guidance on the preparation of a comprehensive air quality analysis for transportation projects. This guidance was submitted to EPA on January 5, 1981 as Appendix J and EPA proposed to approve it on June 8, 1981 (46 FR 30365). One comment was received during the public comment period on the Notice of Proposed Rulemaking.

EFFECTIVE DATE: September 3, 1981.

FOR FURTHER INFORMATION CONTACT:

Thomas Wholley, Mobile Source Emissions Section, Environmental Protection Agency, Region I, J.F.K. Federal Building, Room 1903, Boston, Massachusetts 02203, (617) 223-5630.

ADDRESSES: Copies of the State's submittal are available for public inspection during normal business hours at the Environmental Protection Agency, Region I, Room 1903, J.F.K. Federal Building, Boston, Massachusetts 02203; Public Information Reference Unit, Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460; the Office of the Federal Register, 1100 L Street, N.W., Room 8401, Washington, DC; and the Massachusetts Department of Environmental Quality Engineering, Division of Air Quality Control, One Winter Street, 8th floor, Boston, Massachusetts 02110.

SUPPLEMENTARY INFORMATION: In a Notice of Proposed Rulemaking (NPR) published on June 8, 1981, (46 FR 30365), EPA proposed to approve the January 5, 1981 SIP revision submittal from DEQE entitled "Appendix J, Transportation Project Level Guideline." In response to the NPR, EPA received one letter of comment from the Federal Highway Administration (FHWA). The FHWA view was that each individual project requiring an Environmental Impact Statement (EIS) must demonstrate that the non-methane hydrocarbon (NMHC) emissions under the build option will be less than NMHC emissions under no-build conditions in order to be in conformance with the SIP. FHWA stated that this mesoscale analysis, comparing the build option with the no-build option should be prepared on a system-wide basis, not on a project specific basis.

EPA agrees that a system-wide analysis is far superior to a project by project analysis. In the Appendix J submittal, the State acknowledges that it should move toward a system-wide analysis and has proposed the project level mesoscale analysis as an interim procedure pending the development of system-wide analysis techniques. EPA agrees that a mesoscale analysis is a good interim technique for determining conformance, since any project which will result in a reduction of NMHC is consistent with the goal of the SIP. EPA will work with the state and the FHWA to develop a system-wide procedure as expeditiously as practicable.

Action:

EPA approves the "Appendix J Transportation Project Level Guidelines".

Pursuant to the provisions of 5 U.S.C. Section 605(b), I certify that the SIP approvals under Sections 110 and 172 of the Clean Air Act will not have a significant economic impact on a substantial number of small entities. The attached rule constitutes a SIP approval under Sections 110 and 172 of the Clean Air Act. This action only approves state actions. It imposes no new requirements.

Under Executive Order 12291 EPA must judge whether a regulation is "major" and therefore subject to the requirements of a Regulatory Impact Analysis. This regulation is not major because it only approves state actions.

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

After evaluation of the state's submittal, the Administrator has determined that the Massachusetts revision meets the requirements of the Clean Air Act and 40 CFR Part 51.

Accordingly, this revision is approved as a revision to the Massachusetts State Implementation Plan.

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.

[Sec. 110(a) and Section 301(a) of the Clean Air Act, as amended (42 U.S.C. 7401(a) and 7601(a))]

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

Dated: August 27, 1981.

Anne M. Gorsuch,
Administrator.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

Subpart W—Massachusetts

1. Section 52.1120, paragraph (c) is amended by adding subparagraph (35) as follows:

§ 52.1120 Identification of plan.

* * *

(c) * * *

(35) On January 5, 1981, the Acting Director of the Division of Air Quality Control, Massachusetts Department of Environmental Quality Engineering submitted a revision entitled "Appendix J Transportation Project Level Guidelines" relating to policy guidance on the preparation of air quality analysis for transportation projects.

[FR Doc. 81-25362 Filed 9-3-81; 8:45 am]

BILLING CODE 6560-38-M

40 CFR Part 52

[Docket No. AH032VA; A-3-FRL 1919-5]

Approval and Promulgation of Implementation Plans; Revision of the Commonwealth or Virginia State Implementation Plan

AGENCY: Environmental Protection Agency.

ACTION: Final rule.