

GUIDELINE SERIES

OAQPS NO. 1.2-011 (revision)

GUIDELINES FOR DETERMINING THE NEED FOR
PLAN REVISIONS TO THE CONTROL STRATEGY
PORTION OF THE APPROVED
STATE IMPLEMENTATION PLAN



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards

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ENVIRONMENTAL PROTECTION AGENCY

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I. INTRODUCTION

Section 110 (a)(2)(H) of the Clean Air Act, as amended requires that State Implementation Plans (SIP's) provide "for revision, after public hearings, of such plan (i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard; or the availability of improved or more expeditious methods of achieving such primary or secondary standards; or (ii) whenever the Administrator finds on the basis of information available to him that the plan is substantially inadequate to achieve the national ambient air quality primary or secondary standard which it implements". (Emphasis added)

While the Act specifically identifies two reasons why SIP's can and must be revised, this guideline deals mainly with the second category, i.e., plan revisions to the SIP which are deemed necessary on the basis of information which indicates the approved SIP control strategy is substantially inadequate to attain and maintain the national standard it implements.

It is the Regional Administrator's responsibility to identify any SIP which is substantially inadequate to attain national standards and to call for a plan revision where necessary. Such determinations are to be made in Fiscal Year 1976 for all areas of the nation (i.e., both AQMA's and non-AQMA's) for each criteria pollutant (i.e., TSP, SO₂, CO, O_x and NO₂). Calls for revision to those existing SIP's which are substantially inadequate for attainment must be publicly announced without proposal prior to July 1, 1976. These calls for revisions must specify

the schedule for submission of revisions and must require that, to the extent needed to meet national primary standards, all emission limitations which it is reasonable to anticipate will be achievable within a reasonable period of time must be submitted by the State by July 1, 1977.* Any other control measures (generally referring to transportation controls and land use measures) necessary for attainment and maintenance must be submitted by the State by July 1, 1978. (NOTE: This is not intended to imply that some land use and transportation measures are not considered reasonable. These measures, though considered reasonable, generally require more time to implement due to need to obtain enabling legislation.)

While the Act requires attainment of both primary and secondary standards, priority attention shall be addressed to attainment of primary standards. However, it is recommended that when plan revisions are called for attainment of primary standards that they also be adequate to provide for the attainment of secondary standards. Further, any plan revision for attainment of national standards shall also consider maintenance of such standards.

The decision to call for a plan revision should be made only after detailed analysis of the status of air quality; the restrictiveness of the existing regulations; the status of major compliance actions and after thorough discussion with all pertinent program elements in the Regional Office and with the affected State and local control agencies.

*Thus "technology forcing" based upon reasonable (not crystal ball) projections should be required wherever necessary to attain and maintain the primary standards.

The Agency must exercise good judgment in determining whether the control strategy portion of an approved SIP is inadequate to achieve national standards on a timely basis. It is the Agency's policy to request such plan revisions only where they are clearly necessary. To declare that a SIP is substantially inadequate will imply a need for new and more stringent emission limitations. It will take some time to develop such limitations. Pollution sources might use this situation to resist coming into compliance with existing regulations and thus, ongoing abatement actions could be inhibited. Further, frequent revisions, particularly where they affect emission control requirements, are undesirable in that they confront source owners with a "moving target".

Another factor to be considered is that any plan revision submitted by a State that changes some part of the SIP or which adds a new part could result in a Section 307 challenge by the affected sources to the changed or added part. Such action may delay enforcement of the new requirements. (Section 307 provides for a process of judicial review of the Agency's action in approving or promulgating any implementation plan or revision thereof.) The Office of Enforcement's experience with §307 suits indicates that substantial delays in enforcement can result from such challenges. Therefore, this reason alone is good cause to minimize changes in regulations in the plan until present control requirements are fully implemented and any revision is clearly necessary.

This guideline addresses the procedures to be followed in determining those areas that may not attain national standards (i.e., both Air Quality Maintenance Areas (AQMA's) and non-AQMA's). Once it has been determined that a SIP is substantially inadequate, the degree of analysis

needed by the State to demonstrate attainment and maintenance varies depending upon whether the area is designated an AQMA or not. The analysis procedures for AQMA development are found in Part 51, Subpart D (Maintenance Regulations). These Maintenance Regulations will allow the Regional Administrator to modify certain analysis requirements by following specified procedures. Procedures for States to demonstrate attainment in non-AQMA areas are those existing Part 51 regulations on SIP development.

This guideline does not address procedures for areas where only a maintenance plan (i.e., no attainment plan necessary) is needed. Procedures for such maintenance plans are found in Part 51, Subpart D (Maintenance Regulations). It should be noted that calls for SIP revisions where only a maintenance plan is needed (i.e., where no attainment plan is needed) need not be accomplished by July, 1976. The Regional Administrator may schedule the call for a maintenance plan at any time for those areas that do not have an attainment problem but which may need a maintenance plan.

This guideline sets forth (1) the responsibilities of headquarters and Regional Office personnel in relation to determining the need for and calling for plan revisions, (2) the procedures for determining when a plan revision to the control strategy portion of the SIP is necessary, and (3) the procedures for notifying the State that a plan revision is necessary. EPA procedures for approving/disapproving SIP revisions submitted by States are not included in this Guideline but are contained within OAQPS Guideline 1.2-005A (as revised).

RESPONSIBILITIES CONCERNING PLAN REVISIONS

A. REGIONAL OFFICES

The Regional Office is responsible for reviewing available information to determine if the approved control strategy is substantially inadequate to attain and maintain the national standards. In making this determination, it is important that the various program elements within the Regional Office (OAHM, S&A, OE) be involved in the evaluation and decision-making process. The various activities required to determine the adequacy of the approved SIP generally involve the responsibilities of these three Divisions. For example, the analysis to determine the inadequacy of the SIP requires (1) a determination of the validity and representativeness of the ambient air quality data (S&A activity), (2) a determination of which portions of the control strategy need to be revised and what new regulations should be recommended (OAHM activity), and (3) a determination of the impact of these recommended regulations on on-going enforcement activities (OE activity). Interdivisional coordination is therefore essential to make the most effective call for plan revision. Similarly, coordination, as appropriate, with State and local agencies can also result in a more effective plan revision.

Specific Regional Office responsibilities require that each SIP for each pollutant (i.e., particulate matter, sulfur dioxide, carbon monoxide, photochemical oxidants and nitrogen dioxide) be reviewed during Fiscal Year 76 to determine if any such SIP is substantially inadequate to attain and maintain national standards. In cases where the SIP is determined to be substantially inadequate, the Regional Office must:

(1) By July 1, 1976, notify the State, and announce in the Federal Register that the control regulations contained in the SIP for the pollutant in question are inadequate to attain (and in most cases to maintain) national standards and that a plan revision is necessary. A call to the State for a plan revision should be as specific as possible in suggesting what new or revised regulations are needed. Further, the call for plan revision should establish a time schedule for the State to submit an indication of its intent to develop the necessary plan revision and also for the submittal of the actual plan revision. (See Chapter IV for additional details.)

(2) By July 1, 1977, the State must submit a plan revision that includes, to the extent needed to meet national primary standards, all emission limitations which it is reasonable to anticipate will be achievable within a reasonable period of time. Also, any other control measures (generally referring to transportation controls and land use measures) necessary for attainment and maintenance must be submitted by the State by July 1, 1978.

On October 15, 1973, the Administrator delegated his authority to request plan revisions from States to the Regional Administrators through EPA Order 1270.5 (see Appendix C). In cases where a plan revision is requested by The Regional Office, the Assistant Administrators for OAWM and OE should be notified.*

*NOTE: It has been recommended that EPA Order 1270.5 be amended to read as indicated. Presently the order requires the RO's to obtain the concurrence of the AA's on significant plan revisions. The order also presently states that concurrence should be obtained on other plan revisions.

Once the plan revision has been submitted by the State, the Regional Office is further responsible to review, to recommend approval/disapproval and promulgation and to prepare the Federal Register package associated with any measures which have been determined to be necessary to assure that the national standards will be achieved. These procedures are contained in the July 22, 1975 Strelow/Legro memo to all Regional Administrators and will be incorporated in OAQPS Guideline 1.2-005A for processing SIP revisions.

B. HEADQUARTERS (OAWM/OAQPS/OTLUP AND OE/DSSE/MSED)

OAWM/OAQPS/OTLUP will provide policy and technical assistance to the Regions concerning the plan revision issue. OAQPS has prepared various policy guidelines concerning operational procedures and the criteria to be considered in calling for plan revisions. Various technical documents are also available to assist in the analysis of the adequacy of the existing control strategy. For example, many of the technical guidelines prepared primarily for the development of maintenance plans such as Volume 11 and Volume 12 dealing with data analysis and modeling respectively can be of value when considering plan revisions for the attainment and maintenance of national standards. In addition, guidance on control regulations and "cookbook" type manuals that provide step-by-step guidance on the development of approvable SIP's for NO_x and O_x will be provided during the Fiscal Year. Further, OAQPS will provide additional assistance as appropriate to the Regions in the plan revision area.

The Office of Transportation and Land Use Policy (OTLUP) is a staff office of OAWM which provides technical support to the Regional Offices in the development, evaluation and promulgation of transportation and land use related SIP actions. As such, OTLUP will provide policy guidance to the Agency on land use and transportation measures (see August 5, 1975, DRAFT policy memo on subject) and will participate in the review of such control strategies being implemented by the Regions as outlined in OAQPS Guideline No. 1.2-005A (Revised)

The Office of Enforcement (DSSE and MSED) will provide appropriate assistance to the Regions regarding enforcement policy with respect to stationary sources and transportation control plan elements, respectively.

C. ALTERNATE RESPONSIBILITIES

The responsibilities within the Agency are somewhat different in those cases where plan revisions are necessary to take account of new or revised national standards. In this case, OAWM has the primary responsibility of preparing and publishing in the Federal Register (1) the new or revised national standards and (2) specific guidelines on what actions States need to take to develop, adopt and submit an approvable plan to implement the new or revised standard. In general, all States will be required to submit a plan for a new national standard or will be required to augment and/or revise their existing SIP's to consider a revised national standard. After OAWM has published guidelines for the development of approvable SIP's, the Regional Offices are then responsible to assist States in the development of SIP's, to develop plans where States fail, etc.

In situations where the SIP regulations (40 CFR Part 51) are modified in such a way as to affect the control strategy requirements (such as the action in relation to maintenance of standards, 40 CFR 51.12, June 18, 1973) OAWM and Regional Office responsibilities are identical to those described for a new or revised standard.

III. PROCEDURES FOR DETERMINING WHETHER A SIP/CONTROL STRATEGY NEEDS TO BE REVISED

A. IDENTIFICATION OF PROBLEM AIR QUALITY CONTROL REGIONS

It is difficult to develop comprehensive guidelines for all cases on exactly how to determine whether a control strategy will need to be revised. While there may be a few situations where it is obvious that a plan revision is necessary, in general it will be a difficult task to determine that a plan is substantially inadequate to attain national standards. The basic problem is to determine whether AQCR's are progressing satisfactorily toward attainment of national standards as sources come into compliance with emission limitations contained within the SIP.

Some factors that could be considered in making a determination as to whether a SIP is substantially inadequate are as follows:

1. Factors favoring a finding that the SIP is not substantially inadequate:
 - a. Available data provide a reasonable expectation that NAAQS have been or will be achieved by the currently approved SIP under provisions of the existing control strategy.
 - b. The most recent air quality data are below or not far above NAAQS.
 - c. Much abatement work is ongoing or yet to be completed under existing regulations.
 - d. Air quality and emission data are not yet extensive in terms of time and geographical coverage.
 - e. Air quality levels have varied erratically up and down in recent years and a clear trend is not yet determinable.

- f. Emission control regulations have been made more stringent or more comprehensive in the past 1 to 3 years but are not yet fully implemented.
- g. Existing regulations are very stringent -- at or bordering on a requirement that all reasonable control measures that can be achievable are being used.
- h. Major reductions in emissions have been made in the past year or two and perhaps more reductions are programmed for the near future.
- i. The governmental air pollution control program has grown substantially in the past few (1 to 3) years and enforcement actions are being intensified.

2. Factors favoring a finding that the SIP is substantially inadequate:

- a. There is good evidence that compliance with existing regulations will not result in achieving NAAQS by the existing attainment date.
- b. Recent air quality levels are substantially above NAAQS.
- c. Most existing regulations have been fully implemented; future improvement in air quality under existing regulations will not be substantial.
- d. Air quality levels over the past few years show an evident trend which, in consideration of abatement yet to occur, shows clearly that NAAQS will not be attained by existing control measures.

- e. Air quality and emission data are generally accurate and extensive as to time series and geographic coverage.
- f. Emission control regulations have not changed greatly in recent years.
- g. Existing regulations are not particularly stringent and do not include all emission limitations which it is reasonable to anticipate will be achievable within a reasonable period of time.
- h. There has not been much change in air quality over the past 1 to 3 years (and levels are above NAAQS).
- i. Governmental control activities have been reasonably adequate for the past few years (1 to 3) and regulations are probably enforced well.

Of course, a number of factors other than air quality and emission data must be considered in the determination of the need for a plan revision, and/or the timing of the call for plan revision. These factors include the following:

1. The Clean Air Act requires that SIP's which are substantially inadequate to attain national standards be revised. Simply because ambient air quality data exceed a national standard by 10% or 15% does not in itself indicate an immediate need for a plan revision. Clearly, the normal variation of ambient air quality due to meteorological conditions, etc., may cause such a condition to exist. The requirement of substantially inadequate provides the Regional Office with flexibility in assessing the need for, and especially the timing of a call for plan revision.

2. The Agency has submitted to Congress a number of amendments to the Clean Air Act. The most pertinent amendments affecting the call for plan revisions involve:

- (a) The TSP Act Amendment, and
- (b) The Transportation Control Plan Act Amendment.

These two amendments are very similar and if accepted by Congress, it is anticipated that they would provide extensions to attain the national standards and provide guidance with respect to those areas where unreasonable controls are needed to attain standards. Additionally, the Senate is considering a new Section 120 to the Clean Air Act which would require the establishment of a planning organization in any area where SIP's are inadequate to attain and maintain NAAQS. Since these amendments are presently being discussed by the Congress, calls for plan revisions should be postponed until after the amendments are fully considered and adopted by the Congress. It is presently estimated that the revised amendments may be available toward the latter part of 1975. (NOTE: It is recommended that calls for plan revision be postponed, however the analysis necessary to determine the extent of the problem should proceed.)

3. In some cases, little or no ambient air quality data exist to allow for a determination of the adequacy of the SIP. For example, in many cases, nitrogen dioxide data may not be available due to the controversy concerning the original reference method. While adequate and sufficient data should exist in many major urban areas (due to the

special field projects over the past few years) there may be some areas where sufficient data are not available. In these cases, any decision on attainment and the need for plan revisions may have to be delayed from the Fiscal Year 76 time period.

B. Review of Specific Conditions within Individual AQCR's

To attain national standards, EPA policy is that air quality levels throughout an AQCR must be equal to or below (i.e., better than) national standards (see OAQPS Guideline Document 1.2-008, Revised August 22, 1974). In many cases, much of an AQCR may have ambient air quality at or below the national standards, however, a few sites may have air quality that is above the national standards. A review of the specific conditions that cause these high ambient concentrations on a site-by-site basis will allow the Agency (a) to determine if a plan revision is necessary, and (b) to call for plan revisions that address localized problem areas. Control strategy revisions based on site-by-site reviews may not be possible in many large urban areas, especially for particulate matter, where non-attainment of standards may be a relatively widespread problem with perhaps more than 50% of the monitoring sites above the national standard. In these cases, it is more appropriate to review the entire control strategy for the area (i.e., AQCR, county or some other geographic area). It is suggested, however, that even in such urban areas each site be examined to determine the quality of data being collected and to determine if local sources excessively bias ambient measurements.

Prior to the review of the adequacy of the control strategy, it is important to investigate the available ambient air quality to determine (1) its validity and (2) its representativeness (i.e., what does the data represent and how should such data be used as the basis for requiring a plan revision?).

1. Evaluation of Data

The validity of the air quality data is a major item in the review of potential problem sites. Monitoring and Data Analysis Division, OAQPS, has prepared several guidelines to assist in the certification and interpretation of air quality data (See Appendix B).

While EPA should generally be confident of the validity of the air quality data submitted by State and local agencies, it is also necessary to review the validity of specific data, especially those data which indicate the need for a plan revision. The National Air Data Branch (NADB) periodically questions State and local agencies concerning apparent data anomalies via a form letter; however, a more thorough investigation of the ambient data which indicates a problem would be conducted by the Regional Office. The Regional Office should refer to the guidelines mentioned above for the specific items that should be reviewed to assure valid data. Briefly, the review should determine:

- (a) Are the proper numbers and kinds of monitoring equipment operating in the area?
- (b) Are monitoring sites properly located in accordance with published guidelines?
- (c) Are they properly calibrated and properly operated?
- (d) Are the collected data properly validated?

- (e) Have all abnormal values been checked?
- (f) Have peak concentrations which are of most concern been evaluated to determine their accuracy?
- (g) Are the data accurate and valid and can they withstand a legal challenge of their validity?

In cases where data are questionable, they should generally not be used in control strategy development. It is anticipated that many Section 307 challenges will be filed in relation to revised SIP's. Therefore, it is prudent to base the need for plan revisions on valid and defensible data.

If it is determined that the air quality values are valid, then a further review of the data should be made to determine if the data are representative and if such data should serve as the basis of a revised control strategy. The review of the data should attempt to determine if a nearby source(s) overly impacts on a monitoring site.

The purpose of determining the "representativeness" of the data is so that the control regulations that will be adopted will affect the sources that cause high ambient concentrations. For example, if an ambient monitor is overly influenced by street dust, it is improbable that new control regulations which place stringent requirements on stationary sources will have a beneficial impact on the ambient levels at the site. Similarly, requiring particulate matter control on fuel combustion sources may not provide for attainment where recorded ambient levels in excess of national standards are due to windblown fugitive dust. It is recommended, therefore, that each site be examined to determine its "representativeness" for use in the development of a general control

strategy, and/or to determine the sources which the site does represent. If a site is source oriented, the data collected at that site should be used to determine the degree of control that source may need to attain standards but should not be used as the basis for control regulations for all sources with the AQCR.

In examining the representativeness of the data, it may be determined that unusual conditions existed such that the data should not be used in control strategy development. For example, if the frequency and duration of inversions and stagnations were unusually high, air quality levels could be higher than normal. Unusually warm or cold weather will result in a change in fuel use which may increase ambient levels above normal. If conditions conducive to higher pollution levels were so unusual as to not be expected to occur again for many years (e.g., 5 or 10 years), it may be appropriate to discount high pollution levels occurring during such rare events. Other examples of unusual events include dust storms, fires or unusual control equipment malfunction or shut-down which could temporarily cause abnormally high ambient concentrations. Generally, data collected during such situations should not be used as a basis for requiring additional control of stationary sources.

In the investigation of air quality data, the Regional Offices should obtain the very latest air quality concentrations for the site in question. It may be necessary to obtain these data from the State or local agency if they are not included in SAROAD. (In these cases, the new data should be submitted to SAROAD to assure the availability of the latest data to all users.) The data used for the review of the adequacy of the SIP need not be for a calendar year, but should represent the most recent 12 months (or four quarters) for which data are available.

While OAQPS Guideline 1.2-008 points out that compliance with annual NAAQS shall be based upon calendar year data, it further **points out** that a continued appraisal of air quality on a quarterly basis is needed to assess the status and progress with respect to the adequacy of the SIP. Hence, it is not inconsistent with other Guidelines to use non-calendar ambient data to determine if a SIP is inadequate to attain standards.

2. Analysis of Control Strategy

With the addition of the latest air quality data, a comparison of the trends in air quality levels at the site in question with the air quality trends noted at other sites within the Region (State, city or other areas where comparable results should exist) should be made. If the increase or decrease is significantly different from that at the other sites, it would appear that a localized problem exists.

For the purposes of this guideline, consider three hypothetical cases:

Case 1: Assume that one site is above the national standards in an AQCR. In this case, it is recommended that a review of the emission data and compliance status of sources within the immediate vicinity of the site in question (say within a 1 to 3 mile radius--particulate matter, sulfur dioxide, and CO; oxidant would require a much larger area) be made. Points to consider include:

- (a) Are all sources, both point and area sources, included in the inventory?
- (b) Are some sources presently uncontrolled? If so, are there control regulations with which these sources must ultimately comply?

If not, do these sources impact sufficiently on the site to warrant a recommendation for a plan revision to require further emission limitations on these sources?

(c) If the sources reviewed in (a) have applicable regulations that they must adhere to at some later date, is the anticipated emission reduction adequate to reduce ambient levels to below the standard?

(d) Do the sources reviewed in (a) have applicable emission limitations they must presently comply with? Are the sources in compliance with the regulations? If so, will additional emission reductions be needed to provide for the attainment of the national standard? If the sources are not in compliance with the emission limitation, is the source on a compliance schedule? Should EPA/State enforcement action be initiated against the source?

(e) Have the source emissions in the vicinity of the site in question increased significantly? Is a plan revision necessary to compensate for increases in emissions? What action is needed in relation to assuring that the State adequately considers ambient standards prior to approval for construction of new sources?

Case 2: Suppose the attainment date for an AQCR has passed. If the air quality data are found to be above the NAAQS, it would seem at first to indicate that the SIP needs revision. However, the Regional Office should consider some other items prior to requesting a revision:

- a. Are all affected sources in compliance with the SIP?
- b. Has sufficient time elapsed for recent emission reductions to be reflected in the air quality data?

- c. Have any of the sources affecting the site received a variance from the State? Was such a variance legal? If not, is enforcement action necessary?
- d. Are new sources affecting the site? Is the State giving proper consideration to the NAAQS when approving new sources?
- e. Should EPA action be taken to implement new source review procedures?

Case 3: Suppose that an AQCR was originally classified Priority III because no data were available to indicate if any problems existed. More recent data however show that an air quality problem does exist. What action should be taken?*

In this case, the regulatory structure of the SIP should be reviewed since the SIP may contain emission control regulations adequate to attain NAAQS. Though the AQCR was classified Priority III, the example region approach may have been used for plan development resulting in the adoption of State-wide regulations. The implementation of these regulations may be adequate to attain NAAQS.

*NOTE: In the Draft of this Guideline that was circulated for review in August, 1975, a discussion was provided which indicated that the AQCR identified above should be reclassified to indicate that an air quality problem existed. Many commentators correctly noted that this was contrary to previous guidance on the recommended use of the Priority Classification System (8/12 memo from Mr. Steigerwald to Mr. Holman, Region I). Since that memo, additional discussions have lead to the belief that the Priority Classification Scheme is useful and should be retained. Consequently, work is underway to improve the classification system (e.g., to delete regulatory requirements associated with it and to revise it to indicate current Agency priorities). Additional information will be provided to the Regional Offices for review and comment prior to finalization of a modernized classification scheme.

3. Available Analytical Techniques

Predictions of future air quality, especially when abatement actions are still going on or to be taken, are not precise. Therefore, any finding on what future air quality will be is not precise and a finding that a SIP is substantially inadequate at this time should consider a number of variables rather than be based on simplistic calculations. Various analytical techniques are available to assess the source/receptor relationship, and the effect of emission control limitations on this relationship. Some of these techniques are described below:

a. Abbreviated Roll-back Procedure

This procedure is useful when the amount of additional emission reduction expected between the present time and completion of actions to assure compliance with all existing regulations can be readily calculated, such as when only a few sources remain out of compliance. In using this procedure, the following calculations are made:

(1) Prepare an estimate of the emission reductions that will occur because of completion of remaining abatement actions. For example, 25 sources may remain out of compliance. Their present emissions are 140 tons per day. When controlled in accordance with existing regulations, their emissions will total 40 tons per day (100 tons not yet controlled).

(2) Prepare an estimate of total emissions in the area as of the present time, either by:

(a) Updating the on-going emission inventory, or

*Though not discussed in detail herein, it is assumed that a current emission inventory for point and non-point source and source compliance information is available. Point sources are generally defined as those sources with a potential for emitting 100 tons or more of a criteria pollutant.

(b) Taking the original SIP estimate of emissions after the control strategy is implemented and add to it the "not yet controlled" value from Step 1. For example say that present emissions are 1000 tons per day.

(3) Estimate future air quality after remaining abatement is accomplished by use of the proportional model, using the following formula:

$$\frac{\text{Future AQ}}{\text{Present AQ}} = \frac{\text{Present emissions} - \text{emissions yet to be controlled}}{\text{Present emissions}}$$

assume present air quality is 90 ug/m³

$$\frac{\text{Future AQ}}{90 \text{ ug/m}^3} = \frac{1000 - 100}{1000}$$

Future air quality = 81 ug/m³

If the pollutant of concern involves a background (rural area) factor, it must be considered. For example, assume the pollutant is particulate matter and background levels are 30. Future air quality is then calculated, in this example, to be:

$$\frac{\text{Future AQ} - \text{Background}}{\text{Present AQ} - \text{Background}} = \frac{1000 - 100}{1000}$$

$$\frac{\text{Future AQ} - 30}{90 - 30 \text{ ug/m}^3} = \frac{900}{1000}$$

Future air quality = 84 ug/m³

Such a procedure is useful in that it considers current air quality, emission and compliance information to assess the potential of future emission reductions. However, other more sophisticated techniques are available to relate emissions to air quality. It is generally recommended that in determining the need for a plan revision a more detailed approach be utilized in defining the relationship between emission reductions and air quality.

b. Modified Rollback

The modified rollback model represents an improved form of the basic rollback model and allows for direct consideration of additional parameters not considered by the basic rollback model. The modified rollback models can be used manually or by computer depending on the complexity of the study area. They are available in four basic forms which are progressively more detailed and accurate and progressively require a more extensive data base and computation time.

The first form of the modified rollback models extends the basic rollback to multiple categories of sources, which may experience differing rates of growth and degrees of control. The second modified form extends this multiple-source version to include the effects of average stack heights for the various categories. The third model includes the radial distance from source to receptor, and the fourth model adds wind direction frequency. The technique is described in a paper entitled "Rollback Modeling - Basic and Modified" by Noel de Nevers and Roger Morris, and is further summarized in Volume 12 of the Maintenance Guideline Series: Applying Atmospheric Simulation Models to Air Quality Maintenance Areas.

c. Diffusion Modeling

This is the preferred predictive tool available in relating emissions to air quality data. A number of diffusion models, Air Quality Display Model (AQDM), the Implementation Planning Program (IPP), etc., are available for defining urban situations on an annual basis and are listed in Table 1 (see OAQPS Guideline Document No. 1.2-031, September 1974 for detailed discussion). Diffusion models such as these, as well as technical

Table 1
Summary of Simulation Model Characteristics

Model Name	Pollutant Specification	Averaging Time Specification	Emission Data	Meteorological Data	Concentration Estimates	Ease of Use	Availability	Reliability	Applicability to AQM
Rollback	Any	Any	1	1	3	1	1	3	3
Appendix J	O _x	1 Hour	1	1	3	1	1	3	3
Miller-Holzworth	SO ₂ , TSP	1 Hour, Annual	1	3	3	1	1	1	3
Hanna-Gifford	SO ₂ , TSP, CO ₂	Annual	1	2	3	1	1	1	3
Hanna-Gifford	SO ₂ , TSP	1-24 Hour	2	5	2	2	1	1	2
w. Point Source model	SO ₂ , TSP	1-24 Hour	3	5	1	2	2	1	1
w. HIWAY	CO ₂	1-24 Hour	3	5	1	2	2	1	1
AQDM	SO ₂ , TSP	Annual	3	4	1	3	2	1	1
SCIM*	SO ₂ , TSP	1-24 Hour	3	5	1	3	3	2	1
APRAC-1A	CO	1-24 Hour	3	5	1	3	2	2	1
SAI*	CO, NO ₂ , O _x	1-10 Hour	2	5	2	3	3	2	2

*These models are currently in a developmental and debugging phase; they are not available for general distribution as computer programs.

Key to Table 1

A. Pollutant Specification

Any pollutant

Specific Pollutants (SO₂, TSP, CO, O_x, NO₂)

B. Averaging-time Specification

Any averaging-time

Annual Average

1 to 24 hour Average

C. Emission Data

1. Area-wide Emissions Total

2. Total emission distributed as finite area sources

3. Detailed point, line and area sources

D. Meteorological Data

1. None

2. Average wind speed

3. Average wind speed and mixing height

4. Frequency distribution of wind direction, wind speed, stability and mixing height

5. Hourly variations of wind direction, wind speed, stability and mixing height

E. Concentration Estimates

1. Estimates at any specified point

2. One estimate for each area source grid

3. One estimate applicable to entire AQMA

F. Ease of Use

1. Slide-rule

2. Small computer effort

3. Major computer effort

G. Availability

1. Open literature

2. National Technical Information Service

3. EPA, upon request

H. Reliability

1. Can be verified and calibrated

2. Verification is incomplete, possibility of calibration is uncertain

3. Questionable, acceptable for crude estimates only

I. Applicability to AQM

1. Can distinguish between specific source and land use types

2. Can distinguish between land use types only

3. Considers no distinction between sources or land uses

assistance to operate them on the EPA UNIVAC 1110 system is available from MDAD, OAQPS. Point source models are also available for single source short-term (1-hr and 24-hr) situations. Diffusion modeling requires detailed emission, air quality and meteorological data to mathematically simulate the emission/air quality relationship for a given AQCR. While there are certain limitations which restrict the use of diffusion models (lack of data, severe topographic variations, etc.), the method does provide the best available approach to predict resulting ambient levels caused by the application of emission limitations on emission sources. (See note)

C. Determination for Need for Plan Revision

During the technical analysis to determine if a plan revision is appropriate, the Regional Office should consider the impact of calling for a plan revision in relation to ongoing enforcement programs. The possibility of a Section 307 challenge, and its effect on compliance and enforcement should be discussed and considered. While plan revisions should be sought where determined necessary, attempts should be made where possible to minimize the impact of plan revisions on enforcement activities.

NOTE: Both rollback and diffusion modeling techniques have been discussed in this document. It should be noted that the Agency proposed in the Federal Register on September 14, 1973, that future control strategy development shall be based upon diffusion modeling analysis. This position may be somewhat modified prior to promulgation. Further, additional guidance on modeling techniques will be published in Appendix A, of the Part 51 regulations. For purposes of preliminary analysis of the problem AQCR's, rollback techniques may be used; however, when the revised control strategy is developed by either the State or EPA it is strongly recommended that diffusion modeling be utilized in most cases. In other words, rollback is adequate for the decision to call for a plan revision but is not as good as diffusion modeling as the basis of costly regulations that can be challenged under Section 307.

IV. PROCEDURES FOR REQUIRING PLAN REVISIONS

If the analysis of the problem indicates that a revision to the control strategy is needed, the following actions are necessary:

A. PLAN REVISION DOCUMENTATION

The Regional Office should document the reason why the plan revision is necessary, providing a reasonable amount of detail on the discovery analysis performed to determine the need for the revision. To the extent practical, the Regional Office should suggest specific source(s) or source categories or regulations which should be considered under the plan revision. While it is hoped that the approved SIP will be adequate to attain the national standard on an AQCR-wide basis, it is likely that portions of some AQCR's will need further controls to achieve the standards. In other AQCR's, area-wide changes in the SIP will be needed. Recommendations for SIP revisions should therefore be made as to the specific geographic area in which the revision is needed, i.e., by AQCR, by county, by "hot spot" areas or in some definable area where an air quality problem has been noted.

The analysis which is performed to determine the need for a plan revision should be discussed with appropriate State and local officials. Similarly, the particular regulations which should be revised or added should be identified, to the extent practicable at this stage of evaluation, with appropriate State and local officials.

B. NOTIFICATION OF STATE AND PUBLIC

The Regional Offices should first confer with the State and/or local agencies involved and advise them of the need for plan revision and explore with them, any particular regulations which clearly need revision or

need to be added and those which do not. Subsequently, the Regional Administrator should officially notify the State that a revision is necessary via a letter to the Governor followed by a Federal Register notice.

1. Federal Register Notice

Various Federal Register actions will need to be taken in relation to advising the State and the public that the Agency has determined that a plan revision is necessary. The first Federal Register action involves a Federal Register notice indicating EPA's determination of an SIP deficiency and requesting corrective action on the part of the State agency.

The Federal Register notice can be considered as an "open letter" to the State and it should contain a summary of the detailed analysis on which the need for the plan revision is based. Specifically, the notice should discuss the following:

- a. Specific reasons why the plan revision is necessary;
- b. Recommendations as to the actions which appear to be necessary to correct the deficiency, if known, e.g., what sources appear to cause the need for further controls; what regulations, if any, should probably be revised or added; and which regulations appear to be adequate.
- c. The Federal Register Notice should also indicate that the plan revision should include the degree of emission reduction necessary to offset emission increases that can reasonably be expected to result from projected growth of population, industrial activity, motor vehicle traffic and other factors that may cause or contribute to increases in emissions; (NOTE: In non-AQMA areas, it is not necessary to require the detailed consideration of growth as is required for

AQMA's. In non-AQMA's, the FMVCP, NSPS, and the review of new source procedures should generally be adequate to maintain NAAQS. However, the plan revision should consider growth in an area and, where necessary, include the degree of emission control to provide for continued maintenance of NAAQS.)

d. The Federal Register Notice should identify the specific geographic area within an AQCR where the problem exists.

e. If the non-attainment area is an AQMA, the Federal Register Notice should inform the State that the plan revision for attainment and maintenance should be developed and submitted in accordance with procedures set forth in Subparts A, B, and D and other EPA guidance, and should provide a schedule under which the full attainment and maintenance plan must be submitted.*

f. The other portions of the SIP which may need to be revised as a consequence of the control strategy revision. These may include portions required under the following sections of 40 CFR 51:

(i) Section 51.11 Legal Authority--especially if transportation or land use controls are deemed necessary.

(ii) Section 51.15 Compliance Schedules--must be provided if new control regulations are adopted.

(iii) Section 51.17 Air Quality Surveillance--if the Region has a substantial air quality problem, more ambient sampling may be required to define the extent of the problem and monitor progress.

*The final 40 CFR 51 regulations for maintenance plan for areas that need to submit a plan to attain national standards may specify a constraint on the length of this schedule (such as July, 1978).

(iv) Section 51.21 Intergovernmental Cooperation--portions may need to be revised if the State delegates new responsibility to other State or local agencies to carry out portions of the plan.

(v) Section 51.20 Resources--new control regulations may require additional resources for enforcement purposes. Such information should be reported with the plan revision.

(vi) Section 51.10 General Requirements--the control regulations submitted as part of the plan revision will probably indicate the need for a change in the date of attainment of the national standards. The notice should specify that the revision must provide for the attainment of the primary standards "as expeditiously as practicable." Until the Clean Air Act is amended to provide for extensions of the deadlines, the mid-77 attainment date is still technically the "no later than" cut-off point of the Act for most areas. [A one-year deferral mechanism (i.e., Section 110(f)) exists for source specific extension cases. However, OE advises that use of such a mechanism, because of the requirements of adjudicatory hearings, can be time consuming and should probably be minimized.]

For those few areas with pre-1977 attainment dates in which it is reasonably certain that a control strategy can be developed which could attain the standards by mid-1977, the state should be required to submit revisions which will attain the standards "as expeditiously as practicable," but no later than mid-1977. The state should be told that it will be necessary to apply formally for a deadline extension of the original attainment date (e.g., May, 1975) pursuant to Section

110(e) and 40 CFR 51.30. If these requirements are otherwise met, an extension can be granted if the revised plan requires significantly more stringent controls than contained within the original SIP.

For most areas it will be impossible to identify an appropriate attainment date in the notice because, although the analysis supporting the notice must identify the nature and extent of the problem, an appropriate attainment date will not be identifiable until the control strategy is developed. For these cases, the notice should require the State to identify a new attainment date, which must be "as expeditiously as practicable", and submit it for approval with the plan revision. (It should be noted that this is an interim policy until the Act is amended to provide new attainment deadlines and/or extension procedures.)

g. The notice should specify the date for submission of the revision. Section 51.6(b), Revision, states that "the plan shall be revised within 60 days following notification by the Administrator, or by such later date prescribed by the Administrator after consultation with the State." Since a control strategy will need to be developed, compliance schedules determined and negotiated with regulations subjected to a public hearing and adoption, it appears that six months or more may be needed to revise the control strategy portion of the plan.

The Agency has established firm end dates for the submittal of plan revisions by States to attain national standards. Plan revisions, containing emission limitations, shall be submitted by July 1, 1977. In cases where additional measures are necessary (e.g., land use and transportation controls)

such measures may be submitted no later than July 1, 1978. It should be noted that these are "no-later-than" dates and that plan revisions should be submitted as expeditiously as practicable. (NOTE: No firm end dates exist for areas that need only maintenance plans. The schedule for the development and submittal of such plans is to be established by the Regional Administrators.)

h. The Federal Register Notice should also request that the Governor of the State advise EPA within 60 days of its intention to comply with the request for a plan revision and to set forth a timetable for starting and completing each major element of the work to be done in developing the revision. Major milestones may include (a) the development of the control strategy, (b) preparing draft legislative amendments, where necessary, (c) public hearing dates, and (d) submission of plan to EPA. The State should also advise the Regional Offices of the agencies responsible for the development of the plan revision and where appropriate, an identification of the responsibilities of each agency when multi-agencies are involved with the development of the plan revisions. The notice should clearly state that EPA will begin to take action to disapprove the pertinent sections of the SIP and/or to develop, propose and promulgate EPA regulations, if the State does not provide an indication of its intent to comply with the revision notice within the stated time period.

i. The Federal Register Notice should declare that all existing elements in the plan remain in effect (and are fully enforceable) until the revision is submitted by the State and approved by EPA or EPA promulgates any needed revision. In other words, there should always be a plan in effect. Also, since only the specific regulations that are added or changed by a plan revision are subject to a Section 307 challenge, it would be prudent

in those cases where possible, not to change any currently approved regulations but rather add new regulations to the SIP. However, where the alternative of revising an existing regulation is clearly superior to adding a new regulation, fear of litigation should not deter a revision of the existing regulation.

j. The Notice ~~should~~ point out that the plan revision must be submitted in accordance with the provisions of 40 CFR 51.4, Public Hearings, and 51.6, Revisions and the other requirements of Part 51. In addition, the Federal Register Notice should contain a justification indicating why the finding of a plan deficiency is not subject to public comment at this time. OGC believes that the Agency's technical determination of the necessity for a plan revision does not need to undergo rulemaking procedures at the time of calling for a plan revision. The public will have ample opportunity to comment on the action when the plan revision has been submitted by the State (or when EPA proposes its own remedial measures). As with other plan submittals, the public must be advised of any plan revision submission and be allowed to comment on the action. An example Federal Register notice is provided in Appendix A.

2. Other Federal Register Actions

In addition to the Federal Register Notice discussed above, other Federal Register actions need to be taken. These actions depend upon the State's response in relation to the plan revision requirement.

In those cases where the State submits a letter of intent, followed by a plan revision, no action should be taken to disapprove the original SIP prior to the review of the SIP revision. After the State submits its revisions and EPA reviews them, concurrent actions can be taken to

disapprove particular parts of the original SIP and approve the new or revised parts. Such procedure would minimize the paper work involved in the preparation of the Federal Register and briefing memo documents, and avoid discontinuities in the regulatory process.

In those cases where a negative response or where no letter of intent is received from the State in relation to the request to modify the SIP, or where no plan revision is submitted as required, the Agency shall take action in a timely fashion to simultaneously propose disapproval of the pertinent portions of the SIP and propose EPA substitute and/or additional regulations. Such disapproval and regulatory actions should seek to minimize disruptions in implementing acceptable regulations, and be taken in such a manner so that a plan remains in effect at all time. Agency procedures for preparation of Federal Register actions are provided in OAQPS Guidelines Series Document No. 1.2-005A (revised).

3. Letter to the Governor

It is recommended that a letter be sent to the Governor(s) of the affected State(s) of the necessary action prior to publication in the Federal Register. Since some explanation of the reason for the plan revision is in order, it may be appropriate to attach a draft copy of the Federal Register notice.

The State Agency should also be advised of the pending Federal Register action. However, since the State should already be intimately aware of the content of the call for plan revision from ongoing discussions with them on the attainment problems, the letter to advise them of the publication of the notice in the Federal Register is more of a courtesy.

C. PLAN SUBMITTAL

Once the plan revision is submitted by the State, the Agency procedures outlined in the OAQPS Guideline No. 1.2-005A govern the review and approval/disapproval process.

V. Overview of Necessary Actions in Relation to Substantially Inadequate SIP's

The purpose of this Chapter is to provide an overview of the necessary actions in relation to identifying substantially inadequate SIP's and calling for Plan Revisions. While this guideline thus far has discussed procedures to be followed for all areas of the nation to determine if a SIP is substantially inadequate, certain follow-up actions are different, depending upon whether an area has been designated as an AQMA (Air Quality Maintenance Area) or as non-AQMA. Consequently, two slightly different flow charts that sequentially identify the necessary actions are provided for AQMA's (Table 2) and non-AQMA's (Table 3). These minor differences can be seen in Steps 1 and 4 and result from specific activities and requirements for AQMA areas that do not exist for non-AQMA areas.

TABLE 2

ACTION STEPS FOR AQMA AREAS WHERE SIP'S ARE SUBSTANTIALLY INADEQUATE TO ATTAIN NAAQS

- STEP 1. RO's, with State and local agency assistance as appropriate, determine those areas of the nation for each criteria pollutant where the SIP is substantially inadequate to attain NAAQS. Determination by 7/76.
(RO's may wish to use as input the AQMA analysis proposed (in the maintenance regulations) to be submitted by the State to EPA by April, 1976.)
- STEP 2. RO discusses findings of analysis with State and local agencies and determines which control regulations should be modified or added by 7/76.
- STEP 3. RO advises Governor of State by letter of necessary plan revision by 7/76.
- STEP 4. RO publishes a Federal Register Notice (without proposal) to publicly announce need for plan revision, by 7/76. Proposal indicates among other things that all emission limitations (as needed) which it is reasonable to anticipate will be achievable within a reasonable period of time must be submitted by 7/77, other measures (e.g., land use and transportation measures) by 7/78 and a requirement that the State notify EPA within 60 days of its intent to propose and submit plan revision. Further, RO should advise State that plan revision should be developed in relation to Subpart D and other EPA guidance for maintenance area. Also, since the final 40 CFR 51 regulations for maintenance plans may specify a constraint (such as July, 1978) for submittal of maintenance plans in non-attainment AQMA's, this should be noted in the Federal Register.
- STEP 5. State submits to RO within 60 days letter of intent with schedule for completion of major plan items to develop plan revision. If no response, RO proposes plan revision to attain and maintain NAAQS in a timely fashion.
- STEP 6. State submits, by 7/77, plan revision with adopted regulations.
- STEP 7. RO notifies public of 7/77 plan submittal in the Federal Register, seeks comments and proposes to approve or disapprove 7/77 plan submittal.
- STEP 8. RO approves 7/77 plan submittal, or disapproves and proposes EPA substitute regulations.
- STEP 9. Where necessary, State submits by 7/78 other control measures needed to attain and maintain national standards, such as land use and transportation control measures.
- STEP 10. RO notifies public of 7/78 plan submittal in the Federal Register, seeks comments and proposes to approve or disapprove 7/78 plan submittal.
- STEP 11. RO approves 7/78 plan submittal or disapproves and proposes EPA substitute measures.

NOTE: (1) Dates do not apply to those AQMA's where only a maintenance plan is required. In such cases, the Regional Administrator can establish any date for submittal of a plan that considers maintenance only (i.e., not attainment and maintenance).

(2) All dates are latest dates acceptable for this sequence of events.

(3) Step 1, 2, 3 and 4 all have end dates of July 1976. It should be noted that such steps are sequential and require time between steps for implementation. It is recommended that these steps be spread out from April to July, 1976, however Regional Offices have the latitude to establish interim dates as they consider appropriate. Only the July, 1976, notice to the States of a need for a plan revision is a firm Agency date.

TABLE 3

ACTION STEPS FOR NON-AQMA AREAS WHERE SIP'S ARE SUBSTANTIALLY INADEQUATE TO ATTAIN NAAQS

- STEP 1. RO's, with State and local agency assistance as appropriate, determine those areas of the nation for each criteria pollutant where the SIP is substantially inadequate to attain NAAQS. Determination by 7/76.
- STEP 2. RO discusses findings of analysis with State and local agencies and determines which control regulations should be modified or added by 7/76.
- STEP 3. RO advises Governor of State by letter of necessary plan revision by 7/76.
- STEP 4. RO publishes a Federal Register Notice (without proposal) to publicly announce need for plan revision, by 7/76. Proposal indicates among other things that all emission limitations (as needed) which it is reasonable to anticipate will be achievable within a reasonable period of time must be submitted by 7/77, other measures (e.g., land use and transportation measures) by 7/78 and a requirement that the State notify EPA within 60 days of its intent to propose and submit plan revision.
- STEP 5. State submits to RO within 60 days letter of intent to develop plan revision with schedule for completion of major plan items to develop plan revision. If no response, RO proposes plan revision to attain and maintain NAAQS in a timely fashion.
- STEP 6. State submits, by 7/77, plan revision with adopted regulations up to RACT (as needed).
- STEP 7. RO notifies public of 7/77 plan submittal in the Federal Register, seeks comments and proposes to approve or disapprove 7/77 plan submittal.
- STEP 8. RO approves 7/77 plan submittal, or disapproves and proposes EPA substitute regulations.
- STEP 9. Where necessary, State submits by 7/78 other control measures needed to attain and maintain national standards.
- STEP 10. RO notifies public of 7/78 plan submittal in the Federal Register, seeks comments and proposes to approve or disapprove 7/78 plan submittal.
- STEP 11. RO approves 7/78 plan submittal or disapproves and proposes EPA substitute measures.

NOTE:

(1) All dates are latest dates acceptable for this sequence of events.

(2) Step 1, 2, 3 and 4 all have end dates of July 1976. It should be noted that such steps are sequential and require time between steps for implementation. It is recommended that these steps be spread out from April to July, 1976, however Regional Offices have the latitude to establish interim dates as they consider appropriate. Only the July, 1976, notice to the States of a need for a plan revision is a firm Agency date.

APPENDIX A

(Example Federal Register Notice)

NON-AQMA AREA

ENVIRONMENTAL PROTECTION AGENCY

APPROVAL OF STATE IMPLEMENTATION PLANS

Notice of Required Revision to Part of the State Implementation Plan for the Metropolitan Smogtown Intrastate Air Quality Control Region

On May 31, 1972 (37 F.R. 10842), pursuant to Section 110 of the Clean Air Act, and 40 CFR Part 51, the Administrator approved the control strategy for the attainment of national primary and secondary standards for suspended particulate matter in the Metropolitan Smogtown Intrastate Region. The plan was designed to attain these national standards by date, (such as June 1975).

On the basis of recent air quality data submitted by the State in fulfillment of the requirements of Section 51.7 (Reports), and from the evaluation of various compliance actions taken by the State to implement the adopted particulate emission control regulations of the applicable plan, it is the technical judgement of the Regional Administrator for Region III, that the presently approved control strategy portion of the plan for particulate matter (i.e., pursuant to 40CFR Section 51.13) is inadequate to attain the national particulate matter standards. Therefore it is necessary to add additional control measures to the plan or revise one or more existing regulations for control of particulate matter. Specifically, this finding is based upon a detailed diffusion modeling analysis of the urban-industrialized section of Southeast Smogtown, (State). This analysis, which has been summarized in a technical report entitled

"The Suspended Particulate Problem in Smogtown" is available for inspection and copying at the Environmental Protection Agency, Region III, Curtis Building, 6th and Walnut Streets, Philadelphia, PA 19106, and the Public Information Reference Unit, Room 2922 (EPA Library), 401 M St., S.W., Washington, D.C. 20460. Copies of this technical report have been provided to the appropriate State and local air pollution control agencies within the (State).

The mathematical diffusion modelling analysis, summarized in the report, indicates that two sources contribute significant particulate matter emissions to the atmosphere in southeast Smogtown. Emissions from these sources, which include an uncontrolled cement plant and a moderately controlled integrated steel mill, are such that national particulate matter standards are predicted to be violated beyond the scheduled date of attainment of the national standards (i.e., July 1975). The report also identifies that the intermittent open burning at various dumps and small uncontrolled incinerators contribute to more localized excursions above the national standards. Based upon this analysis, the Regional Administrator, Region III, has determined that a substantial (in the range of 30%) reduction of 1974 annual particulate matter emissions from these plants or other sources will be needed to provide for the attainment of the standards. Further, more vigorous enforcement of currently adopted regulations for controlling open burning and incinerators must be undertaken by the appropriate air pollution control agency. Alternatively, other equivalent improvements in the particulate control strategy may be employed, as determined by the State and approved by EPA.

Because of this identified deficiency, the Regional Administrator finds that a revision to parts of the control strategy for **particulate**

matter in the applicable plan is needed. This Federal Register Notice is intended to officially advise the (State) of this requirement. Accordingly, the State shall prepare and submit, by July 1, 1977, a plan revision containing adopted emission limiting regulations, as needed, which it is reasonable to anticipate will be achievable within a reasonable period of time to provide for the attainment and maintenance of the national primary particulate matter standards. If additional control measures (e.g., land use and transportation measures) are needed, such measures may be submitted no later than July, 1978. The plan revision should identify the nature and sources of emissions within the Southeast portion of Smogtown and demonstrate how the adopted regulations will provide for the attainment and maintenance of the national standards. The plan should include a demonstration that emission increases that will result from projected growth of population, industrial activity, etc., will not cause the national standard to be violated. Compliance schedules for any source affected by any new or revised regulation must be submitted in accordance with the requirements of 40 CFR 51.15 (Compliance Schedules). The plan revision should also indicate any additional resources needed to implement the control plan beyond those already provided for in the plan, along with the State's commitment to provide additional manpower and money to implement the control measures. If responsibility for implementing any portion of the plan revision is delegated to other State and/or local agencies, a description of the specific responsibility of each agency in implementing the plan shall be submitted. The plan revision shall be submitted by the State in accordance with the provisions of Section 51.4, Public Hearings, and Section 51.5, Submission of Plans and otherwise fulfill the requirements of Part 51.

The State is advised that the plan revision must provide for the attainment of primary standards as expeditiously as practicable. It is the judgment of the Regional Administrator that adequate time exists for the State to revise the plan so as to provide for attainment of primary standards by mid-1977 as provided under the Clean Air Act. If the plan revision requires substantially more restrictive emission controls than are presently included in the approved plan, and if the requirements of 40 CFR 51.30 are met, then an extension to mid-1977 can be approved by the Agency for the attainment of national primary particulate matter standards. Such an extension should be formally requested by the Governor when submitting the plan revision. The State is further advised that additional time can be provided for the attainment of secondary standards, so long as such standards are attained within a "reasonable time". The revised plan **shall** indicate the date the national standards will be attained.

The Governor **shall** submit, within 60 days, a letter of intent to the Regional Administrator, EPA, Region III which identifies the various action steps (along with target dates for completion) which the State will take to develop the plan revision in accordance with the requirements set forth in this notice. The State must also identify the agencies that have been given responsibility to prepare the plan revision. Failure by the State to submit a letter of intent within the allotted 60 days will be considered by EPA as an indication that no plan revision will be forthcoming from the State. In this case, EPA will begin to develop for promulgation a federal plan to attain and maintain national standards.

All of the applicable plan remains in effect until the plan revision is submitted by the State to EPA and is approved by EPA or until EPA promulgates substitute (or additional) regulations.

This notice is not subject to rulemaking procedures. The need for a plan revision is based upon a technical finding of the Regional Administrator which clearly shows that the control strategy for particulate matter in the Metropolitan Smogtown Intrastate Region is inadequate and needs to be revised. Authority for such action is provided in Sections 110(a)(2)(H) and 110(c) of the Clean Air Act, 1970. Ample opportunity for public comment on the Regional Administrator's determination will be provided. If the State develops its own revisions and submits them to EPA, public hearings will be required at the State level and EPA will provide opportunity for written comments prior to taking action on the submission; if EPA must propose and promulgate its own regulations, EPA will provide opportunity for written comments and, if the State held no hearing on the revisions, will provide opportunity for a public hearing. Authority: Section 110(a)(2)(H) of the Clean Air Act, as amended, 42 U.S.C. 1857c-5(a)(2)(H) and Section 110(c) of the Clean Air Act, as amended, 42 U.S.C. 1857c-5(c).

Date _____

Regional Administrator
Environmental Protection Agency

APPENDIX B. GUIDELINES ON AMBIENT TREND MONITORING

- | | | |
|----|---|----------|
| 1. | General Guidelines for Regional Office Monitoring Programs | 1.2-007 |
| | PURPOSE: General summary of existing ambient trend monitoring guidelines | |
| 2. | Guidelines for Interpretation of Air Quality Standards | 1.2-008* |
| | PURPOSE: Answer questions on how NAAQS and air quality is related | |
| 3. | Guidelines for Network Design and Instrument Siting | 1.2-012* |
| | PURPOSE: Network design and instrument siting criteria | |
| 4. | Procedures for Flow and Auditing of Air Quality Data | 1.2-013* |
| | PURPOSE: Steps to insure valid data | |
| 5. | Guidelines for Evaluation of Air Quality Trends | 1.2-014* |
| | PURPOSE: Trend evaluation | |
| 6. | Guidelines for the Evaluation of Air Quality Data | 1.2-015* |
| | PURPOSE: Evaluation methodology | |
| 7. | A Description of Analytical Techniques and Associated SAROAD Method Codes Used in Storing Data in NADB | 1.2-017 |
| | PURPOSE: Decoding of method codes used in NADB | |
| 8. | Designation of Criteria Pollution Analytical Methods as Acceptable/Not Acceptable for Purposes of Data Analysis | 1.2-018* |
| | PURPOSE: Acceptability of data and instruments | |
| 9. | Air Quality Monitoring Site Description Guidelines | 1.2-019* |
| | PURPOSE: Information on Monitoring Sites | |

*Also included in Volume 11, Air Quality Maintenance Guidelines

**ENVIRONMENTAL
PROTECTION
AGENCY**

TRANSMITTAL

Addressee

1270.5

October 15, 1973

DELEGATIONS OF AUTHORITY - AIR AND WATER PROGRAMS

MATERIAL TRANSMITTED:

EPA Order No. 1270.5 - Delegation of Authority to Request States to
Revise State Implementation Plans.

MATERIAL SUPERSEDED:

None.

FILING INSTRUCTIONS:

File the attached material in numerical order in a three-ring binder
established for the EPA Directives System.



Howard M. Messner
Deputy Assistant Administrator
for Administration

Dist: Directives Distribution

ENVIRONMENTAL
PROTECTION
AGENCY**ORDER**

1270.5

October 15, 1973

DELEGATIONS OF AUTHORITY - AIR AND WATER PROGRAMS

DELEGATION OF AUTHORITY TO REQUEST STATES TO
REVISE STATE IMPLEMENTATION PLANS

1. PURPOSE. This Order delegates to the Regional Administrators the authority to request States to revise State Implementation Plans under Section 110(a)(2)(H)(ii) of the Clean Air Act.
2. BACKGROUND. Section 110(a)(2)(H)(ii) of the Clean Air Act provides for the revision of State Implementation Plans (SIP's) "whenever the Administrator finds on the basis of information available to him that the plan is substantially inadequate to achieve the national ambient air quality primary or secondary standard which it implements." In view of the emphasis on utilizing regional offices in supervising the SIP's, a delegation of authority to the Regional Administrators to request the revisions is in order.
3. DELEGATION. The Regional Administrators are delegated authority to perform the responsibilities indicated above within their respective regions.
4. LIMITATIONS.
 - a. Revisions will be requested only when such revisions are clearly necessary.
 - b. Where the requested revision would affect emission control regulations significantly, or the enforcement thereof, Regional Administrators should obtain the concurrence of the Assistant Administrator for Air and Water Programs and the Assistant Administrator for Enforcement and General Counsel.
 - c. Where the requested revision would have significant national policy implications or would establish a significant precedent, the concurrence of the aforesaid Assistant Administrators is required.

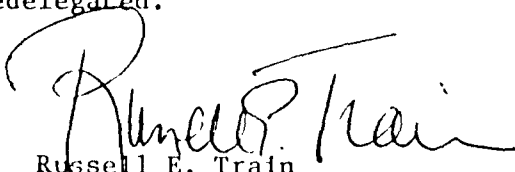
Dist: Directives Distribution

Initiated by: AF

ORDER1270.5
October 15, 1973

d. Insofar as other revisions are concerned, Regional Administrators should simply notify the two Assistant Administrators of requests made.

e. This authority may not be redelegated.



Russell E. Train
Administrator

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