GUIDELINES ON EPA'S REGS TO PREVENT SIGNIFICANT

DETERIORATION OF AIR QUALITY

PREPARED BY OFFICE OF

TRANSPORTATION AND

LAND USE POLICY

ENVIRONMENTAL PROTECTION AGENCY

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APPENDICES

The program to prevent significant deterioration of air quality is based on the principal that clean air is a natural resource of great importance, a resource whose value cannot always be measured in terms of proven health or property damage. EPA has attempted to articulate the principle into a general policy and to translate that policy into effective regulations in response to the May 30, 1972 Court decision, Sierra Club v. Ruckelshaus, affirmed in 1973 by the Supreme Court.1

The regulations are the result of long and full study and of extensive public participation, including nationwide public hearings. At the core of the regulations is the question of what constitutes "significant" deterioration of clean air and the process and procedures to be used to resolve that question for any given area. Because the program deals with air quality levels that have not been proven to cause health or property damage, the determination of significant deterioration must take into account factors other than air quality alone. Economic and social effects and subjective concerns, such as aesthetic values, must also be considered in resolving the question of significance. Because these effects are best evaluated by those who reside in the areas involved, EPA has developed a regulatory framework that gives States, Federal Land Managers, and Indian governing bodies the flexibility to decide what levels of deterioration are significant within the context of three "classes" of different levels of allowable incremental increases in total suspended particulate matter (TSP) and sulfur dioxide (SO2).

Class I applies to areas in which practically any change in air quality would be considered significant; Class II applies to areas in which deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to those areas in which deterioration up to the national standards would be considered insignificant. All areas of the country are designated Class II initially, but States, Federal Land Managers, and Indian governing bodies may request redesignation of any area to accommodate social, economic, and environmental needs.

The provisions that allow for redesignation are based on the premises that the significance of deterioration must be determined

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1 For a fuller description of the background of the regulations see: Technical Support Document - EPA Regulations for Preventing the Significant Deterioration of Air Quality, January 1975.

partially on the basis of the practical effect of the determination and the present or intended use of the land (e.g., pristine recreational area or commercial-industrial area) and that the people in the area for which the determination is being made should make the determination of what level of deterioration should be considered significant. EPA lacks the resources or knowledge to determine what air quality deterioration would be considered significant in every area of the country. However, the Administrator will not approve requested designations which are arbitrary or capricious.

In order that the Administrator will have an adequate basis for determining whether an application to redesignate an area should be approved or disapproved, the regulations require that the necessary information be a part of the hearing record on the proposed designation. Specifically, the hearing record must show that the social, environmental, and economic effects of the proposed redesignation have been evaluated for the area being reclassified as well as for adjacent areas and that regional and national interests have been considered. Although EPA gives the State the primary responsibility for making reclassification determinations, the Agency expects that the State will make a good faith effort to provide EPA and the public with the fullest possible disclosure of these interests and effects. EPA will disapprove a proposed redesignation if the State has not properly examined the effects of the redesignation or has arbitrarily and capriciously disregarded such effects.

The purpose of these guidelines is to give guidance on how to develop what EPA expects will be an approvable redesignation proposal. The guidelines do not have the effect of a binding regulation requiring literal compliance. They do, however, indicate the type of analysis EPA is looking for in a reclassification proposal. Any major departures from the guidelines will be a matter of serious concern and subject to question by the Administrator. In meeting EPA's expectation of full disclosure of the effects of redesignation, application of the guidelines may differ according to the circumstances of specific redesignation situations and of different States' analytic capabilities and available data bases. Naturally, such differences among States and circumstances will influence the application of the guidelines. In asking for adequate information on a variety of relevant issues, EPA is not attempting to generate paperwork but to achieve the fullest disclosure possible for informed public decision-making. Responses to the information asked for should be clear, simple, and brief with the emphasis on quality, not quantity.

There are two main divisions in these guidelines. The sections in the first division set forth the criteria upon which EPA will approve or disapprove a redesignation proposal, the information required for the redesignation analysis documents to meet those criteria, and the necessary procedures for involving affected governmental and public entities in the decision-making process. The sections in the second division are for information purposes only. They discuss considerations in drawing area boundaries for a proposed redesignation, when a State may need to reclassify, what approaches are available in determining that need, and considerations in balancing various objectives. As reflected in Division One, the reclassification analysis document will form the basis for not only the State's reclassification decision, but, along with the hearing record, for EPA's evaluation of the proposed reclassification as well.

DIVISION ONE

Section 52.21 (c)(3)(ii)(d) of the regulations states that "the proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests." EPA is including in these guidelines a set of information requirements to guide the States in preparing their reclassification analysis documents. Compliance with the information requirements should provide reasonable assurance to EPA that a State has adequately examined the environmental, social, and economic, effects of the redesignation as well as consideration of national and regional interests. In addition, availability of the information should reveal to EPA any effects that are arbitrarily or capriciously disregarded.

The information gathered and the analysis performed on them will be useful to the States in several ways. The document will, as the regulations state, be the subject of discussion at the public hearing and the focal point for public participation, as discussed elsewhere in these guidelines. It will also be useful, EPA hopes, to State policy makers, providing them with the information they need to make the best possible reclassification decisions. (Note: the word "State" is used throughout this section as a convenience. We expect Federal Land Managers and Indian governing bodies to also use this section as a guide in preparing their analysis documents. State governments, Federal Land Managers, and Indian governing bodies can obtain further aid in completing their analyses from the appropriate EPA regional office.)

The questions that must be answered in the analysis document are similar to those addressed in an Environmental Impact Statement (EIS) prepared under the National Environmental Policy Act (NEPA). It includes a gathering of information to describe the projected environmental, economic, and social effects, consideration of national and regional interests, consideration of alternatives to the proposed reclassification, and the reasons for the proposal. This compilation of information and analysis should adequately demonstrate the "need" for a reclassification and should be considered as part of the framework for deciding what constitutes "significant" deterioration in a particular area.

Because there is a risk of significant environmental harm associated with a decision to reclassify a relatively clean area from a Class II to a Class III, and because the rapid growth and uses of land associated with the Class III reclassification choice could cause irreversible or very costly

to "repair" environmental effects, the analysis of effects to change from a Class II to Class III would likely be more extensive than the analysis required to change from a Class II to a Class I. EPA realizes that some economically pressed States may find the basic information requirements a burden on resources. However, a State is not expected to bear the responsibility alone. States should be able to assign the task of compiling the required information to other local or regional agencies. In addition, where industries would benefit from a reclassification, the State may request that they participate in supplying the data necessary to answer the analysis questions. EPA expects there will be differences in the level of detail required and expects variations according to individual capabilities and circumstances. EPA requires that a State make a good faith effort in answering the required questions. All relevant available data should be used to surface the fullest information possible and to raise the pertinent issues for well-informed public consideration of the reclassisfication proposal.

EPA does not anticipate a large number of reclassifications. The initial Class II increment will accommodate most moderate well-planned development while providing safeguards for air quality. Because a State, Federal Land Manager, or Indian governing body must fully discuss the reasons for a proposed redesignation at a public hearing, any proposal that did not show a definite need for such redesignation or would preclude economic growth throughout a State or seriously endanger valued preservation areas would likely meet with considerable public resistance at the public hearing. Should a State submit a proposed redesignation without adequate justification, EPA would disapprove the proposal as having arbitrarily and capriciously disregarded the environmental effects of the redesignation. In developing a reclassification proposal and analysis, EPA strongly advises that there be early and continued consultation with the appropriate EPA regional office. The regional office can help a State conform with the basic requirements while working with a State to meet its particular situation and needs.

The significant deterioration regulations have great potential impact on the nature, extent, and location of future industrial, commercial, and residential development throughout the United States, and specifically their impact on the utilization of the Nation's mineral resources, the availability of employment and housing in many areas, and the costs of producing and transporting electricity and manufactured goods. On the one hand, for example, relatively minor deterioration of the aesthetic quality of the air may be very significant in a recreational area in which great pride (and economic development) is derived from the "clean air". Conversely, in areas with severe unemployment and little recreational value, the same level of deterioration might very well be considered "insignificant" in comparison to the favorable impact of new industrial growth with resultant employment and other economic opportunities. The Administrator believes that it is most important to recognize and consider these implications, since the consideration of air quality factors alone provides no basis for selecting one deterioration increment over another.

Proposals for redesignation will be evaluated by the Administrator using the following criteria:

1. Demonstration of need: To redesignate from a Class II there must be an affirmative statement of the reasons for the redesignation and why such a change is necessary. (E.g., if the need is economic, there must be data and projections to show that the Class II could not accommodate the desired and anticipated level of development.) To redesignate from a Class II to a Class I a similar explanation is required. (E.g., to preserve a pristine area, its unique or special environmental features should be discussed as well as how the Class II might not adequately protect those features.)

2. Adequate analysis to support a redesignation request: There should be a thorough examination of the environmental, social, and economic effects, including consideration of national and regional interests, answering the questions provided below in this section. There should be full public disclosure of the proposal's advantages and disadvantages so that the issues can be discussed at the public hearing.

3. No inordinate harm to the total environment: This consideration must be part of the analysis whenever there is a proposal to redesignate to a Class III. See III. 2, 3 and 6 below.

4. Full consideration of inter-state effects: When a reclassification to a Class III is proposed, attention must be given to how facility siting plans might effect the air quality increments of neighboring states, federal lands, and lands of Indian governing bodies. Any violation or infringement of an adjacent area's increment would not be permitted. Thus, any area can be redesignated but individual facilities within that area would not be able to locate where they would violate an adjacent State's increment. When a reclassification to a Class I is proposed, full consideration must be given to the potential limiting effects of development in adjacent areas that may not be able to use their full increment, since they would not be permitted to violate the stricter increment of the proposed Class I. Affected states and/or federal land managers and Indian governing bodies must be given the opportunity to comment in all cases.

Disregard of any of the four criteria would be grounds for the Administrator to disapprove a proposed reclassification. The information requirements for the analysis document for reclassification to any class follows:

Requirements for the Reclassification Analysis

I. Administrative and Procedural Facts

A. Responsible agency: The State should designate an agency as the lead (i.e., responsible) agency for the proposed reclassification, and provide its name, address, function, (e.g., air pollution control, economic development, planning) and a contact person in the agency who could be reached for questions.

B. Explanation of Program: A brief explanation of the function and operation of the program to prevent significant deterioration of air quality, including a description of new source review should be provided.

C. Purpose of document: The purpose of the analysis should be stated to provide background for the proposal and a focus for public participation.

D. Explanation of public participation: The procedure and timetable for written comments, as well as the time, date, and place of the public hearing should be given. States also should show that they have considered all significant issues raised at the public hearing.

E. Timetable for State actions: The timetable should specify periods for circulating the analysis document, holding the public hearing, submitting the proposal to EPA, and any other significant actions related to the proposal.

II. Description of Proposed Action

A. Statement of reclassification action: The section should state the proposed change from Class ___ to Class ___. It should explain (in terms comprehensible to the layperson) the difference between the increment allowed under the present class and under the proposed class. It should particularly make clear the difference in the level of development that is permitted under the present class and that which would be permitted under the proposed class.

B. Reasons for the reclassification: There must be an affirmative statement of the reasons for redesignation and why such a change is necessary. The explanation must be based on air quality considerations and how they relate to the determination of significant deterioration that takes into account social, environmental, and economic considerations including regional and national interests. Include meteorological data and any other available air quality data that demonstrate the need to reclassify in relation to the inability to achieve the desired social, environmental, and/or economic objectives under the present classification.

C. Proposed boundaries: Both a verbal description and a map should be included indicating the location and boundaries of the proposed redesignation area in the State and in relation to any adjacent States.

D. Impact on future character of area: A brief description of the likely impact of redesignation on the future uses and development of the area.

III. Supporting Analysis and Consideration of Alternatives

A. List of 8 questions requiring response:

1. Is the decision to reclassify consistent with historic and/or projected growth, social and economic characteristics of the area? (This includes, for example, consideration of resource areas, growth projections for the 18 major industrial source categories relevant to the affected area, and the degree of change in the area from current land uses.) If not, explain why.

2. Is the decision consistent with not only air quality considerations but also with broad environmental concerns of the area (e.g. water supply and water quality, noise, solid waste)?

3. Are there any sub-areas within the reclassification boundaries of special value that may require additional environmental protection? (For a proposed Class I, it would likely be the dominant portion of the area. For a proposed Class III there may be areas within it that require some special or additional environmental protection. This could be accomplished by siting major sources in a way to minimize the impact on the sensitive area.

4. What related plans and programs affecting growth, energy facility and industrial location, and environmental management are intended for or are existing in the area? How are they affected by the proposed reclassification?

5. What, if any, harmful spill-over effects would be caused in adjacent areas and States by the proposed reclassification? (E.g., for a change from a Class II to a III, is there a problem with long distance transport of pollutants; for a change from a Class II to a I are there any restrictions imposed on an adjacent area's growth and development?)

6. What are the advantages and disadvantages in terms of social, environmental, and economic effects of the proposed reclassification? Include disclosure of any potential irreversible effects.

7. Have national and regional concerns been taken into account including but not limited to: 1) the critical food supply shortage and need for agricultural land for food production; 2) the preservation of sufficient recreational, wilderness, forests, and open space areas to accommodate the present and future needs of an expanding population; 3) preservation of historical or archeological areas to protect a cultural heritage; and 4) the critical energy supply situation and the need to develop energy resources? In weighing these national concerns, as in weighing different and sometimes competing State/regional/local interests, it is the role of the States to balance varying needs and to decide which factors are most critical in each area. However, where a State, Federal Land Manager, or Indian governing body protests a redesignation to the State proposing the redesignation and to the Administrator, the Administrator will take an expanded role and balance the competing interests.

8. What alternatives exist to meet the desired objectives without reclassifying? What advantages and disadvantages do these alternatives offer?

II. INTERGOVERNMENTAL COOPERATION AND NOTIFICATION

Introduction

Under the Clean Air Act, the primary responsibility for air pollution control programs rests with the State. This structure provides a central focus for air pollution control and a means of balancing the various interests and resource needs within the State. Such balancing of different, sometimes competing, interests is vital to the non-siginificant deterioration program, as discussed in Section VII of these guidelines.

The non-significant deterioration program will focus at the State level. As discussed in the section on Approaches, the program deals with the explicit relating of land use and air quality concerns. It will affect the siting and distribution of polluting facilities in some areas and preclude the construction of certain facilities in other areas. It will require the setting of air quality goals, with consideration given to either change from or adherance to current land uses for the proposed area. These are issues that affect the tax base, economic growth, employment, recreation, tourism, and other vital concerns of local government, however. Indian governing bodies will also find themselves faced with similar issues in carrying out their responsibilities, and Federal Land Managers will need to make similar critical choices about the lands and natural resources they administer.

Because of the far reaching effects of the program, it is particularly important to involve all affected parties in the decision-making process. This section of the guidelines spells out a precise and formal minimum procedure for consultation between those proposing reclassifications and those potentially affected by them. It also offers suggestions for informal, more extensive consultation procedures the State may wish to consider.

The Agency expects that the consultation process will be used by all parties to share data and expertise. Local and regional governments have unique knowledge about their jurisdictions and lengthy experience in establishing land use goals that address many divergent interests. Local governments also have land use and environmental protection powers upon which the State should draw upon to the maximum extent possible. Similarly, Federal agencies, Federal Land Managers, and Indian governing bodies have special experience and powers within their jurisdictions that States may wish to enlist in carrying out the program. Certainly all policy makers involved will wish to share data to avoid duplication in data gathering.

Besides easing the data problem, the consultation process can avoid the inequity of subjecting a local area to the requirements of a program in whose formulation it has had no formal voice. The State, through an air pollution control agency or other arm, will be responsible for proposing classifications, and in many cases a single-purpose air pollution control agency will

perform the new source reviews that enforce the classifications. This leaves no formal role or responsibility for local or regional general-purpose government except through the mechanism of a formal consultation. EPA's experience with other programs affecting land use (e.g., Indirect Source Review, Transportation Control) has shown that no such program succeeds without the cooperation of local government and that this cooperation is usually forthcoming when local government is given a full partnership role.

The same considerations apply to Federal Land Managers and Indian governing bodies. The consultation process establishes a similar formal role for them as well as for concerned groups and individuals wishing to participate in the consultation process.

EPA encourages that notification of and consultation with affected parties should also be part of the new source review process. EPA also expects that, as part of a notice of proposed approval, the reviewing agency will state how much of the allowable air quality increment the proposed source will use up and how much will remain. This will allow affected governments to assess the impact of a proposed source on their areas and take any steps they deem appropriate.

State Consultation with Local Governments

As soon as the State considers reclassifying an area, it must initiate a process of formally notifying and requesting comments from all affected governments and persons. For information on the timing of this process, see the Timetable Section of these guidelines. At a minimum, the procedure will consist of the following:

1. The State must send to all general purpose governments that may be affected by reclassification of an area written notice that the State is considering proposing a reclassification. It is essential that at a minimum States are required to consult with the local elected officials of general purpose governments. While we encourage consultation with as many groups as possible, in Appendix C, it is essential that the local elected officials be consulted in all cases. The notice must specify the class in which the State wishes to place the area, the proposed area boundaries, and the timetable for State action on the proposed reclassification. In addition, the notice must be on public display in announced designated locations.

2. The notice must also request comments on the action. A summary of the comments received will be included by the State in the economic, social, and environmental analysis of the advantages and disadvantages of the proposed reclassification. (See Section III. A(6) in Information Requirements Section)

The above represents a minimum requirement for consultation. EPA strongly recommends that States encourage local governments to take a full partnership role in reclassification. Local governments themselves, however, should define the scope and nature of participation best suited to their needs and resources. The following are approaches that States and localities may wish to consider.

A. In some States (notably California) the State government has formed an ad hoc Task Force with regional and local governments to respond to certain EPA programs, such as Transportation Control Plans. These Task Forces have had some success in developing local regulations to replace the Federal ones and in many cases are being reformed or extended to do Air Quality Maintenance planning. This approach has proven itself effective in producing useable plans and regulations.

B. Another approach is to utilize the A-95 Clearinghouse or other regional agencies as focal points for local participation. These regional agencies could serve to disseminate information, coordinate local data and comment collection, and provide a complete package of comments and suggestions on the proposal to the State. This approach is a logical extension of the A-95 review of reclassification proposals required by the regulations.

C. A third approach is for the State agency itself to hold local or regional workshops on the reclassification process and on specific reclassifications it is considering. At these workshops, the State could provide information, discuss specific problems, and receive local and regional comments. This approach provides the greatest direct contact between State policy makers and those governmental entities most directly affected by the reclassification.

In carrying out any consultation approach, EPA cannot urge strongly enough that State and local governments involve representatives of the general public, business, labor, and industry. No program can hope to succeed without the cooperation of these groups.

Federal Facilities

As soon as the State considers reclassifying an area that includes a Federal facility (e.g., a military base or a government research center), it must initiate a process of formally notifying the facility. The minimum

procedure the State must follow is the one detailed on page 7 of these guidelines (i.e., notice, request for comments, and public disclosure of summary of comments).

The General Services Administrator (GSA) has compiled a list of all Federal facilities in the United States. States may obtain copies by contacting the EPA Office of Federal Activities or the appropriate Regional Office. It should be noted, however, that the list reflects a 1971 base year and was not complete for that year. Therefore, other sources are necessary for a complete listing.

Federally Administered Lands

As soon as a State considers reclassifying an area that includes Federally administered lands, it must initiate a process of formally notifying the Federal Land Manager of the area, both through the managing agency's headquarters and the appropriate field or regional offices. The minimum procedure that must be follwed is the one detailed above as Steps 1-2 in the State consultation with local governments subsection (notice, request for comments, and public disclosure of comments.)

(The regulations provide that Federal Land Managers may propose reclassifications more stringent than those proposed by the State or promulgated by EPA for the lands they administer. As soon as a Federal Land Manager considers such a proposal, he or she must initiate a process of formally notifying all State, local, and Indian governmental bodies and all persons who request such notification of the proposal. The minimum procedure that must be followed is the one detailed above as Steps 1-2 in the State consultation with local governments section (i.e., notice, request for comments, and public disclosure of summary of comments).

Indian Lands

Where a State has assumed authority over Indian lands in environmental matters under other laws, it has authority to propose reclassifications for these lands. In so doing, it must treat the governing body or bodies of the Indians inhabiting the lands as "affected" governmental bodies and include them in the notification and consultation process.

Where the State has not assumed such jurisdiction, the Indian governing body has the authority to propose reclassifications. As soon as this body considers such a proposal, it must initiate a process of formally notifying all affected Federal, State, and local governments and any person who requests such notification of the proposal. The minimum procedure the governing body must follow is the one detailed above as Steps 1-2 in the State consultation with local governments sub section (i.e., notice, request for comments, and public disclosure of summary of comments).

Note: EPA realizes that Indian governing bodies may desire assistance in performing reclassifications. Each EPA Regional Office will have a designated Indian Affairs liaison person and will be glad to answer any questions that an Indian governing body may have on the procedures for reclassification. This aid may, however, be insufficient to the need. The Bureau of Indian Affairs may wish to aid Indian governing bodies where EPA cannot.

III. TIMETABLE FOR RECLASSIFICATION

Given the complexity of a reclassification proposal and analysis document and given the wide range of governmental entities and citizens who will wish to evaluate and comment on the proposal and the analysis, the timetable for reclassification must include ample time for public participation. EPA has designed a timetable that follows the public hearing requirements of the Clean Air Act while incorporating lengthy inter-agency consultation and public comment periods. The timetable, depicted in Figure 1, is as follows:

OPTIONAL TIMING

1. As described in the Intergovernmental Cooperation Section of these guidelines, as soon as the State considers reclassifying an area, it must notify and request comments from those general purpose governments potentially affected. The length of this period of consultation, which will be concurrent with State development of the analysis document, is not specified here because it will vary so widely. Some analysis documents may take only a short time to prepare; others may take a very long time. The only timing requirement for this section is that the State begin the formal notification and consultation process described in the Intergovernmental Cooperation section as soon as it considers a reclassification. It would be appropriate, at this time, to consult with an EPA regional office.

2. The second step is the completion of the formal notification and consultation process, where the State receives the comments it has requested and prepares a summary for inclusion in the analysis document under Section III.A.(6) The time necessary for this step will also vary widely.

3. When the State has completed the consultation and analysis preparation phase it may submit a proposed reclassification to EPA. Concurrent with its submission to EPA, the State may make the document available for public inspection and comment, prior to announcement of the public hearing. To ensure adequate availability, the State should place the document in at least one location in each county in the proposed area and in each county in any other area that might be affected by the proposed reclassification. The State should also advise all those agencies, governments, and persons it formally notified in Step #1 above, of the availability of the document for inspection and comment.

4. The State should ideally make the document available to the public for comments at least 30 days before announcement of the public hearing. Although EPA may be provided with a copy of the document, it will not formally comment until the formal submittal and notification period in Step 8.

REQUIRED TIMING

5. The State must publish notice of the public hearing on the proposed reclassification at least 30 days prior to the hearing. At this time the analysis document must also be made available to the public (if not already done in step 3). A public notice

(in a newspaper) is required to announce availability of the document. (This period, together with the optional 30 days in Step 3 above, could make the document available to the public for at least 30 days to an optional total of 60 days before the public hearing).

6. After 30-days notice described in Step #5 the State will hold a public hearing on the proposed reclassification.

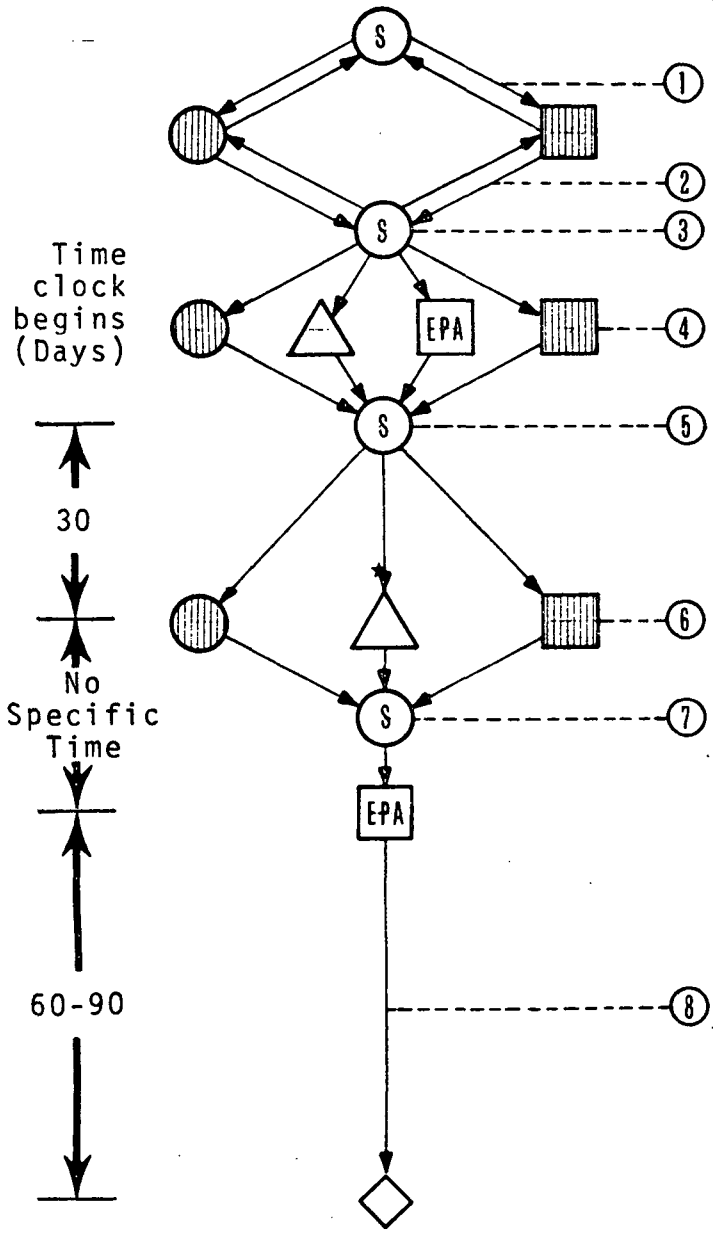
7. Following the public hearing, the State may receive written comments, revise the analysis document, or refine the reclassification action based on public comment. At the end of that period, the State should submit its final reclassification proposal to EPA for approval or disapproval. The analysis document and a summary of the hearing record must accompany the proposal. During this period, any neighboring State that feels it will be adversely affected by the proposed reclassification and is unable to resolve its differences with the proposing State may appeal to EPA to resolve the dispute. If negotiation fails to bring agreement between the States, EPA will itself make the Classification decision for the area. The same conditions will apply to disputes between States and Indian governing bodies.

8. EPA will publish proposed rulemaking in the Federal Register soliciting public comments for a minimum of 30 days. Following that period, EPA will publish in the Federal Register its final determination on the State submittal. Should EPA disapprove the proposal, the State is free to reconsider, rework, and repropose the classification at any time providing it follows all prescribed procedures.

The formal process will probably take a minimum of 6 months. Administrative delays and time for the hearing itself will probably extend it beyond that point. Any individual time period may be extended if the State and EPA agree to do so. Because of the length of time required for the reclassification process, it is important for States to anticipate and plan for needed reclassifications. With proper planning and adherence to the required procedures presented in Section I, II, and III of these guidelines States should be able to meet, with few difficulties, the occasional circumstances that would require consideration of a redesignation to a Class III or to a Class I.

TIMETABLE AND CONSULTATION PROCESS FOR RECLASSIFICATION PROPOSAL

Figure I



1. Consultation and preparation of reclassification analysis.
2. Continued collection of relevant data; task force or other consultation.
3. State may make available reclassification proposal and analysis to public.
4. Comments on documents, if made available, begin. (EPA does not comment until Step 8.)
5. State announces public hearing. Document must be made available for review and comment for 30 days up to and at hearing.
6. Public hearing.
7. State submits the analysis document and hearing record summary to EPA for a decision.
8. EPA will publish notice of proposed rulemaking in the Federal Register for a minimum of 30 days soliciting public comment. After that period EPA will publish the final determination on the State submittal.

(S) State or delegated State agency

Local and regional governments and planning agencies

Federal agencies (see Intergovernmental Section)

EPA U.S. Environmental Protection Agency

Public interest groups, organizations and individuals

U.S. Federal Register

DIVISION II

INTRODUCTION TO DIVISION II

The information in this division is strictly advisory and states may use it at their discretion. EPA has included the following discussion and information in response to State requests to clarify some of the fundamental issues associated with the reclassification process. The information in Division II addresses when a State may need or want to reclassify, what approaches are available in determining the need, what considerations are useful in drawing area boundaries for a proposed redesignation, what approaches are appropriate for balancing various objectives, and what format may be desirable to use in answering the information requirements set forth in Division I.

Because the discussion here is primarily conceptual and necessarily general, EPA encourages a State to discuss the specific circumstances of a proposed reclassification with their EPA regional office.

A STATE WANT TO RECLASSIFY?

Under the December 5, 1974 regulations, all areas of all States were designated Class II on January 6, 1975. The regulations provide for new source review of 18 source categories commencing construction on or after June 1, 1975. EPA will perform the review and enforce the Class II increment until a State requests delegation for the new source review. Only after a State requests and receives delegation of authority for the new source review procedure will it be able to receive an approval for a reclassification proposal. (Delegation guidelines are forthcoming.) Consideration of reclassification needs should begin as soon as possible. For any given area, a State has three alternatives:*

1. It may choose to have an area remain a Class II. This would allow well controlled and managed growth accommodating, for example, 1,000 megawatt power plants.

2. It may choose to reclassify an area to a Class I. As a consequence, almost no change in air quality could occur, preserving the existing air quality of the area.

3. It may choose to reclassify an area to a Class III. Intensive development could then occur, allowing a change in air quality up to the national standards.

There is no requirement that a State must consider reclassification. As noted above, a State may choose the alternative of maintaining the Class II designation. However, there are likely to be circumstances that will create strong incentives for consideration of a reclassification. The existence of

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* A State may find that certain counties or comparable areas are already pervasively violating the national standards and request that EPA permit those areas to be exempt from any class designation. Although not in a designated class, these areas still would be subject to all other requirements of the regulations. (For guidance on identifying and designating these areas, see Appendix A.)

circumstances calling for a redesignation decision can be identified by asking three basic categories of questions:

1. Where might the Class II increment constrain growth and development? Is this desirable? What are the alternatives?

2. Where might the Class II increment be inadequate to protect desired air quality?

3. What is known about air quality and about development and preservation goals in the State?

Where A Class II Increment Might Be Constraining

There are three types of concerns that may trigger a State to consider redesignation from a Class II to a Class III. They are:

-- Projected new industrial development (within the 18 new source categories)
-- Projected new power plant development (included in the 18 source categories)
-- Resource area development

As an example of the above concerns consider a proposed power plant that is identified by both the State and the public as economically and socially desirable. Assume the power plant would not receive a permit because its emissions would violate the area's Class II increment. Air quality data shows that the addition of the facility would not cause a violation of national standards and would not create an air quality problem for a neighboring area or State. The State has carefully explored alternatives, such as alternative sites for the facility or phasing out or retrofitting older existing facilities to make more "room" in the increment available to the new facility, and has even assessed the various impacts of not building the facility at all.

After considering all reasonable options, the decision is that the facility is necessary and desirable. To accommodate the facility, the State decides to redesignate the area in which the proposed plant is to be located to a Class III.

As another example, consider a State that has assessed general growth and population statistics and has used industrial growth projections that indicate that a relatively clean air area is likely to attract intensified development. Supported by extensive analysis of environmental, economic, social, national and regional factors, the State proposes that the identified area be redesignated from a Class II to a Class III. The State expects to accommodate intensive growth in this sector and will probably allow air quality to come close to or reach the national standards. This area has already been designated an Air Quality Maintenance Area (AQMA) because its 10-year growth projections indicated the potential for future air quality standards violations. Therefore, the State is required to develop an Air Quality Maintenance Plan (AQMP) which will ensure that despite the projected intensive growth, no primary or secondary standards will be violated.

The preceding hypothetical examples suggest trigger situations for reclassification. A State might select an area for a redesignation, and then, if it is consistent with the results of the analysis, proceed to propose the change.

Where A Class II Increment Might be Inadequate To Prevent Significant Deterioration of Air Quality

There are certain types of land use areas where more stringent protection than that provided by the Class II designation is or may be desirable. Examples of these land use areas include:

-- Agricultural Areas
-- Recreational Areas
-- Areas of Rural Character
-- National Parks and Forests
-- Pristine and Historic Areas
-- National Seashores and Coastal Areas
-- Other areas where substantial industrial growth is not desired

If a State or Federal Land Manager or Indian governing body having authority over such areas decide that they require for their preservation a limit of practically no additional air pollution resulting from the 18 source categories identified as major emitters of sulfur oxides and particulate matter, reclassification from a Class II to a Class I may be necessary. One trigger to this decision could be a proposed siting of one of the specified sources, a siting that would potentially conflict with accepted air quality and related land uses in the area. However, waiting for a proposed source to request review would not allow sufficient time to reclassify, and it would probably be too late to legitimately prevent construction. Therefore, advanced planning approaches are more desirable.

Conclusions

As the foregoing discussion of trigger situations indicates, there are several ways for a State to identify a need to reclassify. A State may simply track the projections for the 18 source categories. The Office of Business and Economic Research (OBERS) in the Department of Commerce has projected future output and growth of all major industrial sources throughout the nation. Simply tracking the specified sources is an ad hoc mechanism that would be activated only as a State faced permit decisions for one of the 18 source categories. Advanced planning has more advantages making it the preferable approach.

One planning approach is the establishment of an inventory of the anticipated and desired land uses of areas in the State. Based on the inventory, a State could identify areas where the Class II could constrain growth or be inadequate for preservation. Air quality might be one of many considerations in developing the land use inventory.

Finally, a State may choose to execute an areawide plan integrating air quality into its analysis and objectives. Such a plan, although having many advantages over more incremental approaches, would require large resource expenditures.

The advantages and disadvantages of these options are discussed in the next section.

II. APPROACHES TO RECLASSIFICATION

The preceding section discussed the problems that may face a state that retains the Class II designation promulgated nationwide by EPA. Should a State face or anticipate one or more of the problems discussed in the preceding section, it may take any one of several approaches to reclassification. Its options, however, fall into two major categories: (1) ad hoc reclassifications, done to respond to specific source or area needs; and (2) reclassifications done on a comprehensive Statewide basis.

The options discussed in this section by no means comprise an exhaustive listing of the alternatives available to the States. The discussion is provided only to suggest a few approaches States might usefully consider. This list of alternatives and the discussion of each are neither exhaustive nor definitive. EPA strongly encourages States to find and carry out the approach to reclassification that best suits their individual needs.

Approach #1: Ad Hoc Redesignations

Ad hoc approaches can be used where States desire specific sources to be sited, generalized growth to occur which would not be permissible in a Class II area, and preservation of particular areas where no change of existing air quality is desired.

A. Tracking the 18 source categories.

If a State chooses this ad hoc approach, it will consider reclassification only in response to the actual or projected desire of a source to locate in an area where it would either be constrained by the Class II increment, or significantly deteriorate air the State wishes to preserve in its existing state. The State can wait for sources actually to file for permits. However, this could delay construction of a desired source or sources until the reclassification proposal to a Class III is approved. Therefore, it would be preferable for the State to anticipate the proposed siting of sources by consulting with the affected utilities or industries, and by utilizing the projections of future source expansion by the Office of Business and Economic Research (OBERS), or some other projections it feels accurately predicts future source locations in the State. Once the State faces or projects the location of a source in an area the State could then request to reclassify, and going through the analysis and balancing procedures described elsewhere in these guidelines. Where a State wishes to preserve existing air quality, waiting for one of the major industrial sources to request a permit may be too late to protect the area with a redesignation to a Class I.

B. Inventory of "need" areas.

The second of the ad hoc approaches the State may take is to make an inventory of areas within the State, reclassifying them where analysis shows there is an immediate "need" and retaining the Class II in all other cases.

There would be at least two kinds of areas the State would wish to inventory and consider reclassifying. First are those areas targeted for the growth potential of a Class III. An example of such an area is one where there is very clean air and where further growth is desired than that permitted by the Class II increment. Second would be those areas already identified under other laws and programs as having special values related to the clean air resource that the State wishes to preserve. Obvious examples are national and State parks and recreational or historic areas. These would be candidates for the special protection of Class I.

Advantages and Disadvantages of Ad Hoc Redesignations

The advantages of the tracking or sources approach revolve around optimal short-term use of State financial and labor resources. This approach ensures that a State proposes reclassification only where it really needs to, only where and when it faces an actual constraint to desired growth or encroachment on clean air quality the State wishes to preserve. Resources can thus be concentrated on highest need areas. States that do not expect any great number of sources -- or consequent reclassification decisions-- may consider this approach to be the most conservative of State fiscal resources.

However, this approach has drawbacks inherent in its ad hoc nature. Reclassification cannot be done without a reclassification analysis and a public hearing. This process takes time, and in the end the analysis may convince the State and/or public that the reclassification is not the best use of the clean air resource. This means that (if a State takes the ad hoc approach to reclassification) no one not the State, the local jurisdictions, nor the potential sources themselves-can be certain where new sources may or may not locate or what delays they may face.

Another disadvantage of this approach is that there is no over-all balancing of the number and extent of various Class areas within the State. A State may eventually find itself with more Class III areas than it really needs to accommodate desired growth or with some Class I areas the State will later wish to reclassify in order to accommodate such growth.

The advantages of identifying "need" areas also center on the best use of State financial and labor resources. The State can focus its resources on examining those areas most likely to be unduly restricted by Class II or to need the protection of Class I.

In the case of areas that can easily be identified as potential Class IIIs, this approach can focus State resources on removing the Class II restraints in areas where growth is predicted and where its associated air quality deterioration will not be considered significant. This will provide a measure of certainty to sources and governments, the impact on non-significant deterioration by fuel-switching, and avoid delays in beginning the reclassification analysis.

This approach also shares some disadvantages with the tracking of sources method. While most immediate need areas will probably be inventoried and addressed, sources may well apply to locate in areas not inventoried. Where this happens, the State will again be faced with the same problems of delay and uncertainty. The possibility also exists that some areas that should be considered for redesignation will be missed by the inventory and that special clean air values may be compromised or Class II constraints imposed on areas where they are inappropriate.

Approach #2: Comprehensive Approach

The State may choose to take the approach of establishing areas and proposing reclassifications on a Statewide basis. Using this approach, the State would not classify areas on a reactive basis, but in a comprehensive fashion.

The program to prevent significant air quality deterioration is essentially one of emissions allocation within each Class designation. A limited amount of additional emissions (the increment) are available to areas and to sources. It is likely that new sources will compete for these allowable emissions increases within each Class area, and that the State will have a decision as to how the emissions are allocated. States may decide that the most advantageous way to make the allocation is on a Statewide basis.

The advantages of this approach are many. The first is equity. Classifications, rather than being done on a case-by-case basis, will be done for all areas against standard criteria. This will mean consistency in the decision making process. States may therefore feel that evaluating the various areas and sources competing for allowable emissions on this standardized basis is the fairest treatment for all concerned. The approach also guarantees attention to all areas, since all will be evaluated as part of the same process.

A second advantage is that a comprehensive approach can avoid certain technical problems. Area boundaries, for example, may be drawn on the most logical and technically defensible basis. When boundaires are drawn for areas proposed on an ad hoc basis, they may not correspond to logical meteorological or planning boundaries. In fact, some areas may be defined simply by being left out of other areas. Determining all boundaries at one time should prevent this problem.

Another problem that can be dealt with or avoided under this approach is the transport of pollutants from area to area, either within one State or between States. In a Statewide classification process, the State may consciously decide to allocate the emissions of a source or sources over more than one area. This would not eliminate the transport problem, but would allow affected areas to plan for this eventuality and make appropriate adjustments. Transport between States must be addressed, and procedures (e.g., inter-State agreements) set up to deal with it.

Another advantage is that the comprehensive classification action would be more visible, a better focus for public and governmental participation than a series of smaller ad hoc actions. Local areas, State agencies, potential sources, and various concerned groups and individuals could more easily participate in the full process and be made aware of its outcome and probable impacts when it is more visible.

A final advantage of the Statewide approach is that the State may utilize a wider range of knowledge and options than would be possible in a case-by-case approach. For example, for any particular proposed reclassification, the reclassification analysis will reveal whether the services infrastructure (of water, power, transportation, etc.) needed to support the level of growth allowed by the proposed class is (or will be) available, if it is in fact planned and funded or fundable. If it is not, a State using the case-by-case approach may simply decide to drop the proposal. However, if this knowledge surfaces in a comprehensive reclassification process, the State may look to other areas where the infrastructure is available and choose to allocate more emissions and growth there, other considerations permitting. This greater range of knowledge and options should increase the State's flexibility in carrying out the program and lessen any adverse impact of the regulations.

While the advantages of this option are many, so are its drawbacks. The first and perhaps most serious of these is the resource question. The State simply may not have the resources necessary to perform Statewide classifications where there is a critical need. One response to this problem may be a phase approach, with the State reclassifying critical areas first and other areas in stages according to a set timetable. However, for some States the long-term benefits of the comprehensive approach may be outweighed by its short-term initial costs. Some States may wish not to make the resource investment of a comprehensive approach because they expect few sources and few reclassification decisions. For such States, an ad hoc approach may be all that is necessary to carry out the full intent of the regulations. Other States may feel that the reclassification analysis, with its consideration of alternative actions and boundaries, is sufficient to deal with the problems of pollutant transport, equitable emissions allocation, and adequate attention to all areas, without further resource investment.

EPA recognizes that a Statewide reclassification process will affect land use through emissions allocation and that land use decisions have traditionally been the province of local governments. However, the Agency would point out that the State will be making decisions whether it reclassifies or not, simply by either retaining Class II or by reclassifying on an ad hoc basis. Also, EPA points out that the non-significant deterioration regulations do not call for decision-making on the basis of air quality alone but specifically require consideration of social, economic, national and other environmental factors in determining what is "significant." Further, EPA encourages States to involve local governments directly in the decision-making.

Finally, a State may find that is growth and preservation objectives change over time and that it wishes to reclassify many areas classified according to former objectives. Should this occur, the comprehensive coverage of Approach #2 may mean more areas to reclassify than an ad hoc approach could have created.

III. DETERMINATION OF BOUNDARIES AND SIZE OF RECLASSIFICATION AREA

When selecting a target area for reclassification, there are several important parameters that should be considered. Consideration of these parameters is particularly critical when distinct and functionally competing land use areas, such as a developing resource area and a pristine recreation area, are so situated that there may be pollutant transport from one area to another. (See U.S. Federal Register, December 5, 1975, Part 52, page 42512, column 3, Appendix E)

There are three major categories of parameters to consider in determining the size and boundaries of an area for reclassification. They are:

1. Air Quality parameters, including topographical and meteorological characteristics;
2. Political parameters, including regional, county, and local government jurisdictions and multi-and single-purpose planning agency jurisdictions; and
3. Program Planning parameters, relating wherever possible the various regulatory and planning program objectives of Federal, State, regional, and local governments being implemented in an area.

Air Quality Parameters

Air quality characteristics are among the most critical parameters for defining an appropriate size for an area to be considered for redesignation. Calculations have shown that because of the small air quality increments specified for Class I areas, these levels can be violated by a source located many miles inside an adjacent Class II or Class III area. For example, a power plant which just meets the Class II increment for SO_2 could under some rare conditions violate the Class I increment for SO_2 of an area 60 miles away. Under the regulations promulgated, a new source could not be allowed to construct if it would violate an air quality increment either in the area where it is to be located or in any neighboring area outside the State. Therefore, wherever a Class I area adjoins a Class II or III area, the potential growth restrictions -- especially for power plant development -- extend well beyond the Class I boundaries into the adjacent areas. A similar situation exists, to a greater or lesser degree, wherever areas of different classification are adjacent. Therefore, the area with the less restrictive classification should include an additional area at its periphery where it is clearly recognized that development will be somewhat restricted because of the adjacent "cleaner" area. As a result, a Class I redesignation could be fairly limited in size, yet the adjoining Class II or Class III areas would need to cover a substantial area in order to fully utilize the Class II or III increment. Again it should be emphasized that the Class II or III increment could be fully utilized toward the center of the area,

while at the periphery allowable deterioration would be dictated by the adjoining Class I area rather than the Class II or III increment.

The distance needed between a large source and a Class I area to protect the Class I area is more dependent on meteorological conditions than the size of the source. Where very long pollutant travel times from source to receptor are involved, the assumptions of wind direction and atmospheric stability are critical. At some point it can be assumed that a receptor will be virtually unaffected by a source regardless of the source strength, since the critical meteorological conditions would not be expected to persist long enough to move the pollutants from source to receptor for any significant period of time. This distance is, of course, dependent on local meteorological conditions, terrain, and the operating characteristics of the source.

Using an airshed to define an area's size and boundaries for a Class II or III would, as a rule, be a reasonable planning device. Depending on the meteorologicial conditions and size of the airshed, with some sub-basin planning an airshed that is largely Class II or III might be able to accommodate a Class I "pocket." For example, an airshed could have areas with high pollutant levels resulting from a concentration of sources in those areas. At the same time, upwind there could be clean air areas, where there are no sources. Providing that there is no pollution transport from the dirty areas to the clean areas, a clean air area could be preserved by preventing new sources from locating within it.* The potential for such planning will vary greatly among airsheds, as will their individual meteorological and topographical characteristics. There will be some circumstances where the airshed could not accommodate both a Class I and Class II or III. In that situation, a choice of just one designation would have to be made. The dominant or most "valued" land use characteristic in the airshed would probably prevail.

Political Parameters

Airsheds are not necessarily identical with local, county, or regional political jurisdictions or with the land area jurisdiction of multi- or single- purpose regulatory or planning agencies. An example of the potential multi-jurisdictional effects of single stationary sources is shown in Figure II, a pollutant concentration map developed in a study done by the Bureau of Domestic Commerce, U.S. Department of Commerce.[1] In this study, the Department

* This probably would not be a common airshed.

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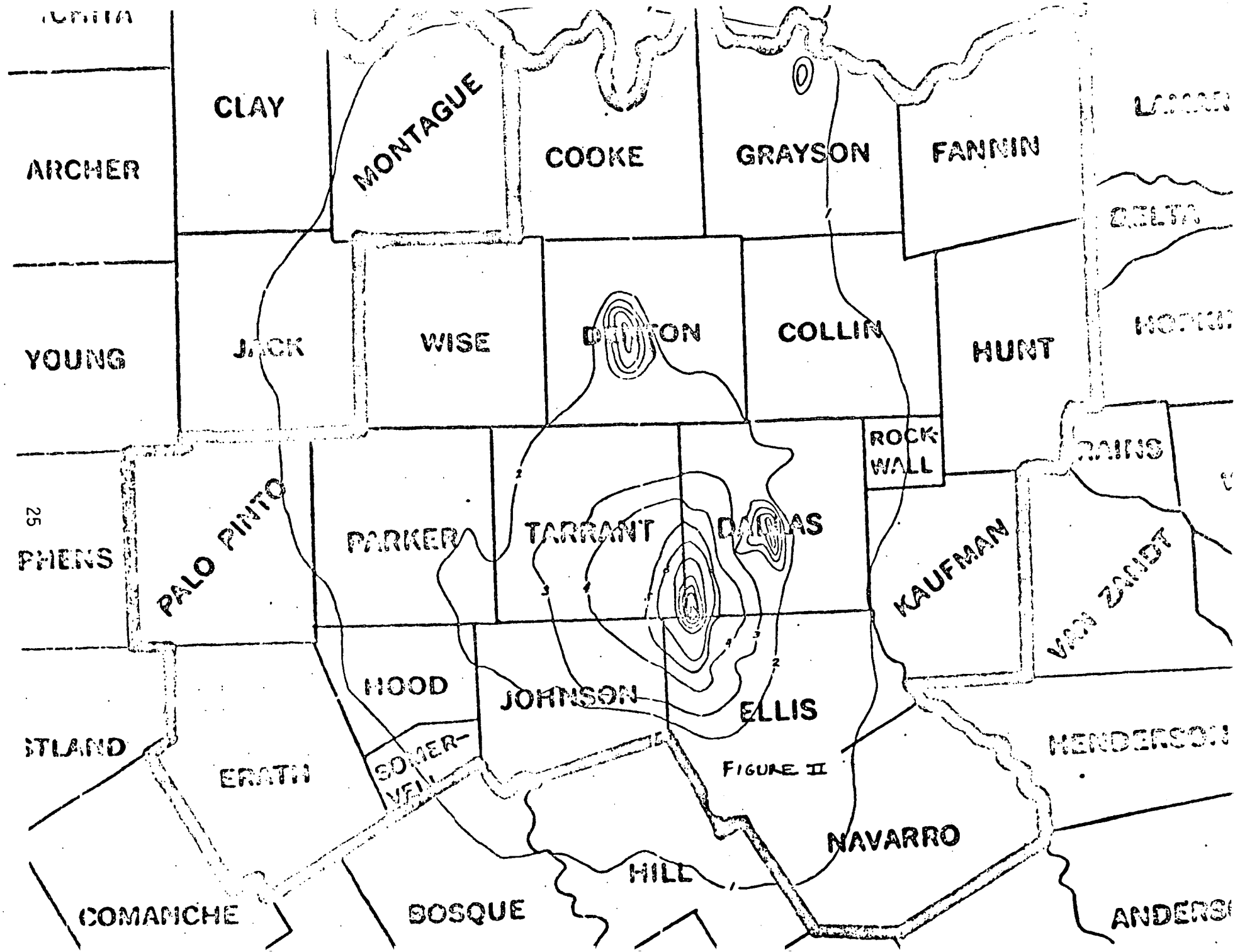
[1] U.S. Department of Commerce, Bureau of Domestic Commerce, Implications of Air Non-Degradation Policies on Clean Air Regions: A Case Study of the Dallas - Ft. Worth AQCR (215), May 1974, COM-74-11438.


CLAY
MONTAGUE
COOKE
GRAYSON
FANNIN
ARCHER
YOUNG
JACK
WISE
DENTON
COLLIN
HUNT
ROCK-
WALL
PALO PINTO
PARKER
TARRANT
DALLAS
KAUFMAN
VAN ZANDT
HOOD
JOHNSON
ELLIS
NAVARRO
HILL
COMANCHE
BOSQUE
FIGURE II

used OBER projections to predict future pollutant sources and modeling techniques to project over effected area the pollutant levels that would result.

Wherever possible, attempts should be made to reconcile air quality parameters with governmental and agency political jurisdictions. However, boundary consistency will not always be possible. Because of the long distance pollutant transport problem and the required consideration of one area's air quality impact on another, a larger area size for Class II and III will minimize the likelihood of intrastate conflicts. Decisions to define an area for reclassification should consider both air quality factors and the relationship of political jurisdictions to them.

Program Planning Parameters

The prevention of signficiant deterioration of air quality is just one of many programs related to land use with which States or local governments must cope. There are, for example, water quality programs such as EPA's "208" Areawide Waste Treatment Management, EPA's land use related Air Quality Maintenance program, and HUD's 701 Comprehensive Planning Assistance program. As the data requirements section of these guidelines suggests, there should be coordination of planning among these programs and consideration of the various program objectives. If feasible and not strongly inconsistent with air quality goals, boundaries and sizes of classification areas should be coordinated with the geographic areas of as many of the land use related planning programs as possible. To accomplish boundary coordination, early consultation would be beneficial between the State and the affected agencies.

Conclusions

In most cases, larger area size reduces the geographical potential for intra-and inter-State conflict. A larger area size gives a State the flexibility to consider the use of alternative facility siting to alleviate a potential long distance intrusion of pollution from one class area to another.

In most cases, airsheds and their sub-basins provide a useful threshold planning area. It is possible, of course, that there will be exceptions. For purposes of implementation, it would be beneficial to consider not only air quality, but also political jurisdictions and program coordination.

IV. BALANCING ENVIRONMENTAL, ECONOMIC, SOCIAL NATIONAL, AND REGIONAL CONSIDERATIONS

Once the basic data and information have been collected for the environmental, economic, social, national, and regional analysis, EPA expects that a State would use these data in an attempt to balance State development and preservation objectives and relevant public interests. The process of assigning priorities to and balancing the various interests is ultimately achieved by informed value judgements expressed through the political process. Apart from reconciliation in the political arena of the various valuations of individual actors, no one satisfactory methodology exists for making these choices.

Many scholars and public policy decision makers have addressed the question of balancing and reconciling economic and environmental interests. (See Appendix B for reference list.) Some have attempted to develop methodologies that quantitatively measure environmental values in order to use the assigned numerical values in cost-benefit analyses. Other scholars, addressing the feasibility of a cost-benefit approach for a public good like environmental preservation, express serious reservations about the possibility — or the desirability — of quantifying environmental values.

A clean, healthful environment is a public good, one benefiting society as a whole. As a public good, it is not priced in the marketplace. While there is general recognition today that the environment is a valuable resource, how valuable it is in a quantitative, objective sense is not really appreciated. These difficulties, in attempting to measure the benefits of clean air and water frequently contribute to misvaluation of the environment. Misvaluation can have serious consequences. Decisions based on insufficient valuation of the environment, for example, may be irreversible. Thus a valuable resource may be lost to future generations.

There has been some success in evaluating the economic benefits and costs of cleaning up the air to achieve the National Ambient Air Quality Standards: one can measure damage to property values and vegetation at levels of pollution above primary and secondary standards; loss of life, health, and employment resulting from emissions of sulfur oxides, particulate matter, carbon monoxide and other pollutants can be documented. However, where air quality is cleaner than the primary and secondary standards and where there is no certifiable damage to health as a result of air pollution, it becomes increasingly difficult and less desirable to assign a market value. That does not mean, however, that there is not a value in maintaining some air cleaner than the standards. We know that there are some hard-to-quantify effects that occur below the levels of the national air quality standards. Furthermore, when air quality is allowed to deteriorate up to the standards, the costs of returning to clean air increase dramatically. Although there is no perfect methodology for assigning quantitative values to environmental

objectives so that they can be systematically weighed and balanced with economic objectives, the environmental objectives can be qualitatively considered. Economists usually agree that all relevant factors (especially non-market factors like social and environmental objectives) can not be included in quantitative cost-benefit analyses. But, subjective social values, judgements and political decisions are important elements in the policy-maker's choice. Therefore, these guidelines do not recommend any cost-benefit format or weighted system of priorities for balancing all of the factors that go into a reclassification decision. The decision must be reached through the State's political process. The State and local levels of government are closest to the areas affected by a redesignation decision, and are thereby most qualified to execute the balancing process of the analysis and to make the land use choice. EPA's concern is for a State to make a good faith effort and produce a thorough qualitative review.

It should be recognized that a State should attempt to achieve as many of its environmental, economic, and social goals as possible. Environmental, economic, and social objectives can be mutually reinforcing and complementary. Indeed, it should be an objective of the State to reconcile goals wherever possible. To accomplish this, a State might want to examine several alternatives, application of additional control technology and alternative facility siting, for example. Reconciliation is more easily accomplished, however, when a State is able to balance objectives from a broad Statewide base of public interest. The task is more difficult if the focus of analysis is limited to a smaller constituent area within the State with correspondingly more interests. Longer time frames for planning provide more opportunities to achieve multiple objectives than do short-term ad hoc time frames.

While a State should meet all criteria for the collection and consideration of environmental, economic, and social factors, the balancing and evaluation of the data should remain within the discretion of the State and its political process, in consultation with all appropriate local and regional governments. EPA will disapprove a State's balancing of objectives only if there is an arbitrary or capricious disregard of environmental, social, economic, regional, or national effects, or if there is inadequate information supporting the State's conclusions. However, where a State or Indian governing body protests a redesignation to the State proposing the redesignation and to the Administrator, the Administrator will take an expanded role of review in which he will balance the competing interests involved.

V. SUGGESTED FORMAT FOR RECLASSIFICATION FROM CLASS II TO CLASS III

Introduction

The format below is similar to that of an Environmental Impact Statement (EIS) prepared under the National Environmental Policy Act (NEPA). It includes a gathering of information to describe the projected environmental, economic, and social effects, consideration of national and regional interests, consideration of alternatives to the proposed reclassification, and the reasons for the proposal. This format should amply address all of the information requirements set forth in Division I, Section I.

Because there is a risk of significant environmental harm associated with a decision to reclassify a relatively clean area from a Class II to a Class III, and because the rapid growth and uses of land associated with the Class III reclassification choice could cause irreversible or very costly to "repair" environmental effects, the analysis required to change from a Class II to Class III would be more extensive than the analysis required to change from a Class II to a Class I. To reclassify from a Class II to a Class I, the format could be substantially abridged. Decisions to redesignate clean areas to a Class III cannot be made cavalierly without serious consideration of the impacts. Therefore, EPA strongly encourages States, when redesignating to a Class III, to use the comprehensive format below in considering the social, environmental and economic impacts.

The level of detail necessary for addressing each item can vary according to individual capabilities and circumstances. In some cases, for example, several of the items on the list could be addressed in a few sentences. EPA recognizes that at first blush the format suggested below may seem to place a heavy burden on resources. However, as mentioned earlier, a State does not have to bear the burden alone. Local and regional governments and agencies can contribute to the analysis, as well as the major industries that would gain from a reclassification. It is useful to restate that what EPA expects is that the State will make a good faith effort in using available data to surface the fullest information possible raising the pertinent issues for consideration of the reclassification proposal.

I. Summary and relevant facts

A. Responsible agency: The State should designate an agency as the lead (i.e., responsible) agency for the proposed reclassification, and provide its name, address, function, (e.g., air pollution control, economic development, planning) and a contact person in the agency who could be reached for questions.

B. Explanation of program: A brief explanation of the function and operation of the program to prevent signficant deterioration of air quality, including a description of the new source review, should be provided.

C. Purpose of document: The purpose of the analysis should be stated to provide background for the proposal and a focus for public participation.

D. Explanation of public participation: The procedure and timetable for written comments, as well as the time, date, and place of the public hearing should be given.

II. Description of proposed action

A. Reclassification from Class II to Class III: The section should explain (in terms comprehensible to the layperson) the difference between the increment allowed under the present class and under the proposed class. It should particularly make clear the difference in the level of development that is permitted under the present class and that which would be permitted under the proposed class.

B. Proposed boundaries: Both a verbal description and a map should be included.

C. Timetable for State actions: The timetable should specify periods for circulating the analysis document, holding the public hearing, submitting the proposal to EPA, and any other significant actions related to the proposal.

III. Description of the proposed area: An inventory should be made of the natural and human environment of the proposed area. It should include the area's natural resources and economic characteristics, any planning and mandated program requirements to which it is subject, and projections of its future population and economic growth.

A. General description: This would encompass location within the State, total area in relation to the State's total area, neighboring areas, and the dominant land uses and character of the area (i.e., urban, rural, developing, a combination of these).

B. Air resources: The State should present at least the following items.

1. From the State Implementation Plan (SIP) for meeting and maintaining the national air quality standards or other sources:

(a) The emissions inventory being used by the State to calculate or estimate the 1974 air quality inventory baseline. The location of point and area sources in the proposed area should be shown on a map.

(b) Air quality data, if any, being used by the State in calculating or estimating the 1974 air quality baseline. These data should be presented in a manner comprehensive to the layperson, and the locations of the samplers reporting the data should be shown on a map.

(c) Control strategies for SO_x and TSP applicable to the area and air quality projections and emissions reductions expected from these strategies in future years, including projections based on the growth assumptions in the SIP. (These regulations should be explained.) The level of mandatory fuel-switching, if any, expected in the proposed area and its effects on air quality should be discussed.

2. Meteorology: an explanation, comprehensible to the layperson, of the proposed area's meteorological conditions, including average wind speeds and directions, inversion conditions, and other relevant climatological data. The potential or actual transport of pollutants into the proposed area from other areas and/or from the proposed area to others should be discussed.

C. Water resources: The State should examine at least the following items.

1. Water quality standards, proposed or approved, and any constraint they may present (e.g., consider whether the effluent from a proposed source among the 18 source categories would be such that it might violate applicable water quality standards in the proposed area).

2. Pristine waters the State may wish to preserve and any constraint they may present.

3. Water supply and any constraint it may present (e.g., consider whether sufficient water is available now and will continue to be available in the future to supply the needs of sources among the 18 categories that may locate in the area (e.g., cooling water or water for process use) as well as the population and industrial or commercial growth the sources may attract.

4. Flood control and its constraints (e.g., consider the physical capability of flood control plains to bear various levels of development as well as any legal restrictions on development in flood plains).

5. "208" Areawide Waste Treatment Management Plans (e.g., area classifications and the land uses they permit should be examined for consistency with these plans).

D. Land resources: Classifications can preserve or lead to the controlled, orderly development of various land resources. The State should consider at least the following items:

1. Geology and geography of the proposed area: The ability of the land to bear various uses and levels of development should be assessed. Any special geological features of the area (e.g., canyons, mountains, deserts) that possess special values or present special problems should be discussed.

2. Agricultural lands: The quality of the land currently under cultivation or planned for such use, its current and projected productivity, and its contribution to the State's and the proposed area's economics and land use objectives should be discussed.

3. Resource areas: These include any mineral deposits (e.g., oil shale, coal, tar sands) and potential sources of hydroelectric or geothermal power within the proposed area. Already committed development of these resources should be described, as should the level of development that could be allowed under both the present and the proposed classifications.

4. Parks and wilderness areas, designated or proposed: The analysis should discuss the special values and constraints imposed by national or state parks, forests, deserts, wilderness areas, and wild life refuges. These areas should be indicated on a map.

E. Historical and archaeologically important areas: These should be described, shown on a map, and their special values and limitations discussed. Plans to preserve and/or explore the areas should be described.

F. Present land uses: A description of the uses and activities currently supported by the proposed area's land should be provided. Maps, charts, and other visual aids should be used to make the presentation clear to the layperson. The discussion should present the land uses by type (e.g., residential, light industry, agricultural, open or recreational space) and describe the extent of each type of use in the proposed area.

G. Planning and mandated programs: For each of the programs listed below in this subsection, the State should explain the program in lay language; show, by maps, tables, and similar aids, the location and extent of the planning or program areas; and specify the constraints or opportunities posed by the programs in the proposed area. Besides the State and local Federally funded programs listed, the State might well wish to discuss State, regional, or local programs. An inventory map showing all Federal facilities, Federal lands, and Indian reservations in the proposed area should be included. The programs that should be discussed include:

1. Air Quality Maintenance Areas
2. Water resource development (e.g., by the Bureau of Reclamation or the U.S. Army Corps of Engineers)
3. U.S. Department of Housing and Urban Development "701" Comprehensive Planning and Housing Element
4. U.S. Department of Transportation actions
5. U.S. Department of Agriculture planning (including Forest Service planning, Rural Development Act planning)
6. Federal Energy Administration energy supply activities.

An inventory map showing all Federal facilities, Federal lands, and Indian reservations in the proposed area should be included.

H. Economic and social profile: The profile should describe the types and/or levels of business, tourism, and industrial and commercial activity in the proposed area. Such data as employment levels, income groupings, housing patterns, urban and non-urban density patterns, and business and industrial investment trends should be included and the relationship of the proposed area's economy to the State's discussed.

I. Growth projections for the proposed area:

1. Population projections compiled for SIPs, or general State or local planning for transportation control, wastewater control, or any other State or Federal planning purposes thought relevant can be used. If any data differ, all should be presented.

2. Infrastructure availability should be projected for growth supporting services like transportation (including roads and highways, railroads and port facilities). Water power, sewage disposal and wastewater disposition. The analysis should discuss current load on these services and the availability of funds to pay for their future provision.

3. Industrial expansion projections (like the Office of Business and Economic Research (OBERS) projections of major industrial growth) should be presented with special attention to sources expected to locate within the proposed area.

IV. Alternatives to the proposed reclassification

A. No action alternative (i.e., keeping the area's present classification):

The State should discuss means of dealing with the special values (if applicable) it wishes to protect within the Class III and the development it wishes to permit should the proposed area's present classification not be changed. At a minimum, the State should consider the following:

1. Alternative siting of proposed sources to better distribute emissions or take advantage of favorable meteorological conditions.
2. Retrofitting or otherwise further controlling present sources to reduce their emissions, thereby creating more "room" in the increment for new sources.
3. Controlling the influx, if any, of pollutants from other areas to create more "room" in the increment. This might be done by using retrofit, alternative siting, or buffer zones in adjoining areas.

B. Redraw the boundaries of the proposed area: Boundaries could be redrawn to take advantage of favorable meteorology, terrain, or other siting conditions; to create larger buffer zones in adjoining areas; or to shift a particular source from an area that cannot accommodate its emissions to one that could.

C. Change the timing of the proposed reclassification: The State may wish to delay the reclassification of some areas pending the outcome of studies, the acquisition of further data, or the development of improved technology (primary or retrofit).

V. Impact of the proposed reclassification

The impact of the proposed reclassification upon the natural and social environment can only be predicted and evaluated in light of the information possessed by the State at the time of the proposal. This means that the depth of impact analysis the State can perform will vary according to the approach to reclassification the State employs.

A. Single source: If the reclassification is triggered by the actual application of a single source to construct, the State may be able to predict with certainty only the effects of that single source upon the proposed area. Nevertheless, there should be some consideration of other sources that would locate in the area once it is reclassified. Such an analysis would include at least the following considerations.

1. Natural environment: The impacts of the proposed source on the air, water, land values, land use, historical or achaeological values, and planning programs in the proposed area should be projected and evaluated. These evaluations may at times be highly subjective and resistant to quantification. It is difficult, for example, to evaluate air quality impacts, since by definition what is involved are pollutant levels below those at which public health effects or property damage can be proven. Also, the effect of any one source upon the full matrix of resources and values may be small. The State should, of course, consider the effects of any industrial, commercial, or other growth that might reasonably be induced by the construction and operation of the proposed source. It must examine any effects of the proposal on other areas. (See subsection IX in this section.)

2. Economic environment: Both a micro and a macro analysis of the costs and benefits involved in source construction and operation should be done. The micro analysis should include the costs to the source of the program (e.g., of alternate siting or required control technology). The macro analysis should examine the effects of the proposed source on the State's economy, on the local economy (e.g., employment and tax base effects). It should also examine any costs of the proposed source not fully borne by the source or the proposed area (e.g., pollutants transported from the source to another area using up part of that area's increment; see subsection IX).

B. Tracking of sources or areas: If the State determines a need to reclassify an area from OBERS projections or from an inventory of special need areas, a fuller analysis may be possible, since the State may possess more data. In this case, the State should present and evaluate the effects of projected sources it expects on the natural, social, and economic environment of the proposed area in the same manner as for a single source. All foreseen effects should be discussed, and the State should clearly indicate how certain or uncertain, complete or incomplete, it judges its projections or inventories to be.

C. Statewide classification: This approach will allow the most complete impact analysis, since the State will be able to predict at least some land uses that will or will not occur in the proposed area and will be able to predict the future character of an area without waiting for a source or sources to propose locating there. Since the State will possess more data, it will be better able to assess impacts of reclassification on the natural, social, and economic environment. The State should prepare the impact analysis for the sources and effects it anticipates in the same manner described in Subsection A above.

VI. Degree of change from current land use

The reclassification decision should reflect the State's desire for change from or continuation of present uses of land and the clean air resource in the proposed area. In this section of the analysis, the degree and nature of that change or continuance should be explained, and should be evaluated in terms of local, regional, State, and national objectives. State/local/regional objectives might consist of (1) a desire to preserve the rural, recreational, agricultural, or wilderness character and use of some areas; (2) a desire to ensure orderly growth in areas targeted for growth; and (3) a desire to place some areas in a protected state until decisions can be made about their future use. In applying whatever are the State/local/regional objectives, the State should make those objectives and their application to the proposed area explicit.

VII. Consideration of national concerns

The States must, in their deliberations, take national concerns into account, including but not limited to: 1) the critical food supply shortage, and need for food production; 2) the preservation of sufficient recreational, wilderness, and open space areas to accommodate the present and future needs of an expanding population; and 3) the critical energy supply situation and the need to develop energy resources. In weighing these national concerns, as in weighing different and sometimes competing State/regional/local interests, it is the role of the States to balance varying needs and to decide which factors are most critical in each area. However, where a State, Federal Land Manager, or Indian governing body protests a redesignation to the State proposing the redesignation and to the Administrator, the Administrator will take an expanded role in determining the balance of the competing interests.

VIII. Irreversible effects of the proposed reclassification

The express purpose of this program is protection of the clean air resource through a searching and thorough determination of the relative significance of increasing increments in specific areas. One of the central elements in making this determination is the question of irreversibility; that is, which options does the State foreclose by a reclassification, and which does it keep open? The irreversibility of a deterioration decision may be a key to its significance. For this reason, the States should pay special attention to the question. (This item may be combined with V - Impact of the proposed reclassification.)

In this section the State should discuss any special values connected with the clean air resource that may be lost by the reclassification, any irreversible commitment of the resource, and any uses of the resource that are permanently precluded by the effects of the proposed reclassification. While the State may decide that no such special values or uses exist in the proposed area and that further industrial and economic growth is the best use of the proposed area's air resource, full examination and full disclosure of the irreversible effects, both short and long-term, of the proposed reclassification should be made.

IX. Effects on adjacent areas

This section should summarize the findings of the analysis done in subsections III.A.,B.(2), and V.A.(1) and (2) and assess the overall likely impact on adjacent areas (e.g., neighboring States and Federal and Indian lands). If a harmful impact is indicated, there should also be an analysis indicating what would be foregone economically, socially, or nationally if there were no redesignation .

X. Conclusion

This section should briefly summarize the action the State is taking and the technical and policy justifications for determining that the proposed reclassification accurately represents what is "significant" deterioration in the proposed area. The discussion should include a summary of the advantages and disadvantages associated with the reclassification.

XI. Public comments

A summary of public comments on the proposed action and the State's reply to those comments should be presented here. (See the procedures outlined in the Intergovernmental Cooperation Section of these guidelines.)

APPENDIX A

GUIDELINES FOR DETERMINING WHETHER AN AREA PERVASIVELY EXCEEDS NATIONAL AMBIENT AIR QUALITY STANDARDS

Introduction

EPA's final regulations for preventing significant deterioration of air quality published on December 5, 1974 (39 FR 42510) include a provision exempting all counties or other functionally equivalent areas that pervasively exceed any national ambient air quality standards for sulfur dioxide or total suspended particulates from the area designation requirements of paragraph (c). This provision makes it clear that no air quality deterioration increments are applicable in counties which pervasively exceeded the national standards for SO_2 or TSP during 1974. However, the regulations still require that major sources located in such areas be reviewed to determine whether significant deterioration increments in adjacent areas would be violated and to assure that Best Available Control Technology (i.e., NSPS where such standards have been set) will be applied. These guidelines provide criteria for determining whether an area pervasively exceeded the national standards for SO_2 or TSP during 1974.

General

Demonstration of whether air quality pervasively exceeded the national standards may be based on measured air quality data or atmospheric simulation modeling or both, but in any case should be representative of 1974 air quality. Exemption from the area classification requirements may be granted for either TSP or SO_2 or both. Since the baseline for determining whether significant deterioration has occurred is based on 1974 air quality, an area that is exempt originally remains exempt, even if air quality is

ments applicable in Class I or II areas. Other mechanisms in the implementation plans (i.e., new source review and air quality maintenance plans) would ensure that air quality would not increase above the national standards.

Although the NSD regulations require states to provide the Administrator a list of areas to be exempted by June 1, 1975, current plans are to amend the regulation to remove the above date restriction. Therefore, it may be assumed that requests for exemptions will be accepted at any time.

It should be noted that exempting a county does not necessarily mean that the county will not attain standards by the prescribed attainment date or that an SIP revision is needed. The area classification exemption is always based on 1974 air quality, whereas the attainment dates are generally July 1975 and in some cases may extend to July 1977. In most cases, the control strategy will not be fully implemented until very close to the attainiment date or even later (where sources have been issued enforcement orders extending beyond the attainment date).

Definition of Pervasively Exceeds Standard

The significant deterioration regulations, while including provision for exempting areas which pervasively exceed the national standards for SO_2 or TSP, did not specifically define the term "pervasively exceed." Therefore, the following definition is provided and will be used to determine if a county qualifies for an exemption from the area designation provisions of the regulations.

"The ambient air quality in 75% or more of the county or other functionally equivalent area was above any national standard for sulfur dioxide or total suspended particulates, or both during 1974."

For clarification, the following table provides the controlling standards to which the above definition should be applied as a test for violations.

TSP	
Annual Geometric Mean	75 $\mu g/m^3$[1]
Second-highest 24-hour concentration	150 $\mu g/m^3$
SO_2	
Annual Arithmetic Mean	80 $\mu g/m^3$[2]
Second-highest 24-hour concentration	365 $\mu g/m^3$[2]
Second-highest 3-hour concentration	1300 $\mu g/m^3$

Violation of any standard listed above for a pollutant constitutes a violation for that pollutant. For example, if the annual geometric mean of 75 $\mu g/m^3$ for TSP is exceeded in 50% of the area and the second highest concentration exceeds 150 $\mu g/m^3$ in an additional 25% of the area, that area qualifies for an exemption with respect to TSP.

Areas Which May Be Exempted

The regulations state that any county or functionally equivalent area (i.e., parishes, townships, etc.) which qualifies may be exempted. Consideration was given to using other designations for the area, such as an AQCR. However, it was felt that the "county" designation would be the most appropriate size area from a management standpoint, since AQCR's tend to be too large to meet the 75% criterion, while an area smaller than the "county" could result in too many small areas to be manageable.

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[1]This is the primary standard; there is no annual secondary standard for TSP. The 60 $\mu g/m^3$ is a guideline.

[2]These are primary standards. The originally promulgated secondary standards for these time periods were revoked on September 14, 1973, as a result of a court challenge.

Therefore, as a general rule, the exemption shall apply to all the area within the boundaries of a county. However, it is recognized that some counties are very large and significant differences exist in the air quality in different parts of the county. Therefore, approval may be granted to exempt a well-defined contiguous sub-area of a large county, provided reasonable justification for such action is provided by the state. Also, exemptions may be granted to independent cities when they are not considered a portion of the county or functionally equivalent area. A demonstration shall be made for each county to be exempted.

Criteria for Demonstrating County Pervasively Exceeds Standards

Measured air quality data or atmospheric simulation modeling may be used either in combination or separately to demonstrate that a county qualifies for an exemption. Measured air quality data should be by an approved reference method or equivalent and a year's worth of valid data (as defined on p. 71 of "Monitoring and Air Quality Trends Report, 1973," EPA-45011-74-007, October 1974) should be used. If measured data is used, it must reasonably represent the air quality in at least 75% of the area in the county. Should monitoring data be available which indicates the air quality is above the NAAQS, but the data does not reasonably represent all portions of the county, modeling or gridded emission density maps may be used to demonstrate that violations can be expected in 75% of the county.

Also, air quality data recorded just outside the borders of a county being considered for exemption may be used in demonstrating the existence of pervasive violations. If 75% of the county can be shown to be in violation, it is not necessary to estimate air quality in other portions

if 75% of all samplers in the county show a violation of one or more of the standards for that pollutant, provided it can be shown that the selected samplers provide reasonable coverage of the county. The procedures outlined in "Guidelines for the Interpretation of Air Quality Standards," OAQPS No. 1.2- 008, shall be used to determine if a violation has occurred at a receptor.

It is desired to keep the resources devoted to determining if an area is "pervasively" above a standard to a minimum. Therefore, where modeling is required, it is not necessary that the most sophisticated techniques be used. Rather, unless the material and facilities are readily available to assist in the computation, it is recommended that the Hana-Gifford model be used in making the above determination. The model, along with others which may be used are explained in "Guidelines for Air Quality Maintenance Planning and Analysis," Volume 12, EPA-450/4-74-013. Also, for those situations where an air quality maintenance analysis has been performed (for 1974 air quality), the results of this analysis, appropriately applied to a county, may be used for demonstrating "pervasive" violations.

Responsibility for Determining Which Areas Are to be Exempted

There is no intent in the regulations to require that States apply for an exemption for all areas pervasively above the national standards; this is an option left strictly to the States. EPA will not initiate action to exempt any area, even in cases where EPA is implementing the new source review and certain areas are known to exceed standards. This is because there is little practical impact achieved by such exemption, as discussed below. However, the regulations included the exemption option

in response to public comments requesting such a provision and in order to be consistent with the court order which required EPA to prevent significant deterioration only in those areas where air quality was superior to the nationa standards.

The reason that the exemption of an area that is above standards has little impact as compared with designating the area Class I, II, or III, is that the significant deterioration increments apply only to air quality increases, whereas air quality in these areas must be decreased in order to attain the national standards. Therefore, the present new source review, which requires that a source cannot be constructed if it will interfere with the attainment or maintenance of a national ambient air quality standard, will be more restrictive in such areas than the requirements for preventing significant deterioration.

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APPENDIX C

-- GENERAL LISTING OF INSTITUTIONS AND OFFICES OF STATE, REGIONAL, AND LOCAL GOVERNMENT WHICH SHOULD BE CONSULTED IN PREPARING RECLASSIFICATION DOCUMENT

STATE

Governor's Office
Environmental Agency
Water Quality Board
Air Quality Board
Department of Health
State Office of Planning
State Recreation Department
Regional Office of Air Quality (part of State Environmental Agency or Department of Health)
Department of Transportation
Highway Administration
Department of Urban Development and Housing
Office of Intergovernmental Relations
Office of Economic Development

REGIONAL

Air Quality Control Agency
Regional Planning Council
Council of Governments
Environmental Quality Agency
Transportation Planning Department
Land-Use Planning Department
Economic Development Planning Department
Recreation and Open Space Planning Department
Citizens and Agency Air Quality Review or Advisory Committee (Task Force)
Water Quality Control Boards
Area-Wide Waste Water Treatment Planning Agencies (established under section 208 of the Federal Water Pollution Control Act Amendments of 1972)

LOCAL

Air Quality Control Agency
Chief Executive of the City and County Local Board or Committee charged with responsibility for activities in the conduct of the urban transportation planning process (3-C process)
Municipal (City, County, Township) elected officials
Municipal Planners (community, transportation, environmental, parks, and recreation)
Local Departments (health, water and sewer, solid waste disposal)
Local Development Offices
Local Zoning Administrators

APPENDIX D
DEFINITIONS OF KEY WORDS IN PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY REGULATIONS

1. The Classification Plan:

Class I designation involves those areas where almost no change from current air quality is allowed;

Class II designation indicates areas where moderate change is allowed to accomodate limited and managed growth;

Class III designation indicates areas where substantial industrial or other growth is allowed and where increases in concentrations up to the national standards, consistent with health and welfare requirements for air quality, is allowed.

All areas of all States are initially designated Class II, except those counties or other comparable areas that already violate the Federal secondary air standards.

A State must give sufficient evidence of pervasive violations of the standard and apply by June 1, 1975 if it desires the exemption from designation for such an area.

2. Increments:

The Class I and Class II designations involve numerical limitations on the allowable increases in sulfur oxides and particulate matter concentrations over a 1974 baseline. The numerical standards, or increments, expressed in micrograms per cubic meter of air, are:

ALLOWED POLLUTANT CONCENTRATION INCREASES

(OVER BASELINE) -MICROGRAMS PER CUBIC METER

POLLUTANT	AREA DESIGNATION CLASS I	CLASS II	APPLICABLE NATIONAL STANDARDS
PARTICULATE MATTER			
ANNUAL GEOMETRIC MEAN	5	10	75 (P)
24-HOUR MAXIMUM	10	30	150 (S)
SULFUR DIOXIDE			
ANNUAL ARITHMETIC MEAN	2	15	80 (P)
24-HOUR MAXIMUM	5	100	365 (P)
3-HOUR MAXIMUM	25	700	1300 (S)

NOTE: Class III areas are limited to concentrations no greater than the National Ambient Air Quality Standards.

(P) -Primary Standard
(S) -Secondary Standard

There is preconstruction review of 18 specified source categories to determine whether these sources would cause a violation of the increments associated with a I, II, or III classification. In all cases, no classification or increment would permit a violation of the national standards.

3. Baseline:

The phrase "baseline air quality concentration" refers to both sulfur dioxide and particulate matter. It is the sum of ambient concentration levels existing during 1974 and those additional concentrations estimated to result from sources granted approval for construction or modification but not yet operating prior to January 1, 1975. The baseline concentration

may be measured or estimated. The area classifications do not necessarily imply current air quality or current land use patterns. Classifications should reflect the desired degree of change from current levels and patterns.

Because the classification and increment procedures is designed to control and manage the level of change from existing air quality, a baseline of existing air quality concentration may be set at zero, for calculation purposes. This means, for example, that an area designated Class II could have a change in air quality by as much as +15 ug/m3 of SO2 and +10 ug/m3 of TSP from a baseline of zero. If a new source in that area uses 10 ug/m3 of SO2 and 5ug/m3 of TSP, the unused portion of the increment calculated from the baseline would be (15-10) or 5ug/m3 SO2 and (10-5) or 5ug/m3 TSP.

If an existing plant phased out, or through scrubbers reduced emissions, that amount of improvement could be credited to the increment. For example, if an existing plant in the Class II area with remaining increments of 5ug/m3 SO2 and 5ug/m3 TSP were to reduce emissions by either BACT or by curtailment of operation by 10 ug/m3 of SO2 and 6ug/m3 of TSP, the increment remaining to be used would be augmented by 10 ug/m3 SO2 and 6ug/m3 TSP, becoming (5+10) ug/m3 SO2 or 15 ug/m3 SO2 and (5+6) ug/m3 TSP or 10 ug/m3 TSP. Although the TSP sum is eleven ug/m3, the increment limit for TSP in Class II is 10 ug/m3. As this example shows, the increment is the limit of allowable change.

A baseline, therefore is what the incremental change in air quality is measured against.

4. BACT or "best available control technology":

The term "best available control technology," as applied to any affected facility subject to EPA's Part 60 regulations, means any emission control device or technique which is capable of limiting emissions to the levels proposed or promulgated in EPA's Part 60. Where no standard of performance has been proposed or promulgated for a source under Part 60, best available control technology shall be determined on a case-by-case basis considering the following:

(1) The process, fuels, and raw material available and to be employed in the facility involved,

(2) The engineering aspects of the application of various types of control techniques which have been adequately demonstrated;

(3) Process and fuel changes,

(4) The respective costs of the application of all such control techniques, process changes, alternative fuels, etc.,

(5) Any applicable State and local emission limitations, and

(6) Locational and siting considerations.

5. NSR or "new source review":

The regulations require a preconstruction review of new or expanded facilities of 18 types of industry in all three Classes. The review will apply to facilities whose construction or modification begins on or after June 1, 1975. The review is designed to insure that emissions from the facilities will not violate the allowable deterioration increments in the area where the source will be located nor the air quality increments

[illegible] areas. The review also requires that "best available control technology" (BACT) is employed.

6. NSPS or "new source performance standards":

A NSPS is defined in the Clean Air Act as "a standard for emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated."

NSPS may only apply to certain affected facilities within a large source. Where NSPS do not cover one of the sources within the 18 categories of sources in the non-significant deterioration regulations, BACT must be determined on a case-by-case basis until such time as NSPS are issued for these facilities.

7. Federal Land Manager

The Federal Land Manager as defined in the December 5, 1975, Federal Register 52.21(b)(3) is "the head, or his designated representative of any Department or Agency of the Federal Government which administers federally owned land, including public domain."

8. Indian Governing Body

An Indian Governing Body as defined in the December 5, 1975, Federal Register 52.21(b)(5) is "The governing body of any tribe land, or group of Indians subject to jurisdiction of the United States recognized by the limited States as possessing power of self-government."