UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: Coordinating 208 Planning and Air Quality Maintenance Area Planning

DATE: OCT 30 1975

FROM: Mark Pisano
Director, Water Planning Division (WH-554)

TO: Regional Administrators

ATTN: Water Program Directors

PROGRAM GUIDANCE MEMORANDUM: AM-14

PURPOSE

This memorandum sets forth procedures for coordination between air quality maintenance area planning and 208 areawide waste treatment management planning. The Regional Offices will be responsible for assuring the implementation of these procedures. This guidance is to be implemented immediately.

BACKGROUND

Under the Clean Air Amendments of 1970, the states were required to develop State Implementation Plans (SIPs) for the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) for six pollutants: suspended particulate matter, sulfur oxides, carbon monoxide, hydrocarbons, nitrogen dioxide and photochemical oxidants. However, most state regulations did not fully address the problem of maintaining air quality and, as a result of a court case, EPA disapproved all SIPs because they lacked effective mechanisms for maintaining standards. EPA then required that the states identify areas that may have the potential for exceeding any NAAQS within the subsequent 10-year period. Based upon the information submitted by the states, EPA is publishing a list of these potential problem areas which are termed Air Quality Maintenance Areas or AQMAs. A detailed analysis of the impact on air quality of projected growth in each AQMA identified by EPA must be completed by either the state or Regional Office by April 1976. Where the analysis indicates that an area will either not attain the NAAQS, or will not be able to maintain them for the subsequent 10 years, the state must then develop a plan containing measures to ensure the attainment and/or maintenance of the standards. Furthermore, to ensure the continued maintenance of the NAAQSs, states must review the adequacy of the AQMA plan at least every 5 years.

Aspects of 208 planning and AQMA planning are interrelated, both in terms of their impact on one another and in terms of their similarities of approach. Both are concerned with maintaining environmental quality; both utilize an areawide approach in which areas of potential or existing problems are identified and a unified plan is developed for the entire area. However, when a program is designed to control pollution in just one medium, it can result in environmental deterioration in another. The goal of both AQM and 208 is to improve the quality of the environment, but by focusing on the problems within a single medium, conflict may arise with the attainment and maintenance of standards in the other medium. At the same time, if care is taken to coordinate their development, the plans produced through these two programs can be mutually supportive.

In order to facilitate coordination between 208 and AQM planning, the Regional Offices should encourage the states to:

1. Designate, when possible, the same agency to do both 208 and AQMA planning;

2. Incorporate 208 areas and AQMAs into common boundaries where there is already an existing overlap and when such an action appears practical;

3. Ensure that there is adequate and periodic reporting of 208 planning agencies with corresponding AQMA planning agencies;

4. Review 208 plans for consistency with any corresponding AQMA plan;

5. Resolve any conflict which may develop during the planning stage between an AQMA and a 208 area if it cannot be resolved informally by the planning agencies.

The Regional Office should also assure that the agencies responsible for developing 208 areawide plans:

1. Develop letters of agreement with corresponding AQMA planning agencies to cover such items as integration of work plans and consistency of data and control strategies;

2. Specify in their work plans how coordination will occur throughout the planning process;

3. Integrate their data requirements with the AQMA planning effort before gathering data so that the information obtained for the 208 plan is transferable to AQMA planning. 208 agencies should allow the AQMA planning agencies to utilize their population,

land use, economic and water quality data whenever possible;

4. Have representatives from any corresponding AQMA on their advisory group;

5. Inform the AQMA planning agency about alternatives being considered, and offer them an opportunity to review and comment on alternatives. In addition, the environmental assessment associated with a 208 plan must address the impact of the alternatives and the selected plan on air quality;

6. Report (as part of the semiannual report requirements) to the Regional Offices on coordination efforts with AQMA planning;

7. Review completed AQMA plans as a final check for consistency and allow the AQMA planning agency to review 208 plans;

8. Attempt to resolve any conflicts with the AQMA planning effort which may develop during the planning stage.

Finally, it is the Regional Office's responsibility:

1. When reviewing the plans for 208 areas, to make sure they are consistent with corresponding AQMA plans and not to approve plans which are in conflict;

2. To resolve conflicts between the two planning efforts which cannot be resolved by the state;

3. To resolve conflicts which involve other federal agencies.

The attached paper discusses the above points in greater detail and explains the interrelationships between the two programs. The paper also discusses the use of grant conditions as one mechanism to implement this guidance.

POLICY

The Regional Offices shall implement the steps described in this guidance memorandum to facilitate coordination between 208 areawide planning and AQMA planning.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: Procedures for Coordination Between Air Quality Maintenance Planning and 208 Areawide Waste Treatment Management Planning DATE: SEP 2 2 1975

FROM: John R. Quarles, Jr.
Deputy Administrator

TO: Regional Administrators

We are keenly aware of the importance of coordinating related EPA programs to ensure that they are mutually supportive and that they neither conflict nor duplicate effort. The 208 Areawide Waste Treatment Management Program and the Air Quality Maintenance Program are interrelated programs which are regional in scope and which will be developed concurrently in many areas. In many cases, the plans resulting from these programs will be addressing similar environmental problems in related media and will employ similar management alternatives.

The attached procedures were developed by the Office of Water and Hazardous Materials and the Office of Air and Waste Management to provide guidance on coordinating the 208 and AQMA programs. This guidance was distributed in draft form to all the Regions in May for comment and review. This final version incorporates those comments received and reflects the new proposed regulations for Air Quality Maintenance.

Copies of this guidance should be provided to all the state offices responsible for air and water quality and, in addition, should be given to all designated 208 planning agencies and AQMA planning agencies.

Attachment

PROCEDURES FOR COORDINATION BETWEEN AIR QUALITY MAINTENANCE PLANNING AND 208 AREAWIDE WASTE TREATMENT MANAGEMENT PLANNING

I. Introduction:

A. Rationale for the Programs

1. Air Quality Maintenance Planning

Under the Clean Air Amendments of 1970, the states were required to develop State Implementation Plans (SIPs) for the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) for six pollutants: suspended particulate matter, sulfur oxides, carbon monoxide, hydrocarbons, nitrogen dioxide and photochemical oxidants. However, most state regulations concentrated on the attainment of standards through emission controls and did not fully address the problem of maintaining air quality.

As a result of a court case won by the Natural Resources Defense Council, EPA disapproved all SIPs because they lacked effective mechanisms for maintaining standards. EPA then required that the states identify areas that may, as a consequence of current air quality and/or the projected growth rate of the area, have the potential for exceeding any NAAQS within the subsequent 10-year period. Based upon the information submitted by the states, EPA is publishing a list of these potential problem areas which are termed Air Quality Maintenance Areas or AQMAs.

By July 1, 1976, EPA will determine which areas need maintenance plans, and as discussed further below, by this same date the Regional Administrators will have to decide which Air Quality Control Regions (AQCRs) need plan revisions for both attainment and maintenance. An analysis performed by either the State or EPA is due by April 1, 1976 (RAs may modify this date), to determine which areas would need attainment and/or maintenance plan revisions. The Regional Administrators will specify a submittal date for the AQMA plan and the time period the plan must cover. To ensure the continued maintenance of the NAAQS, states must review the adequacy of the AQMA plan at least every 5 years or more frequently if the plan itself covers less than 5 years.

2. 208 Planning

Section 208 of the Federal Water Pollution Control Act Amendments of 1972 allows the state or local governments to designate certain areas which have substantial water quality control problems for areawide waste

treatment management planning. The states are responsible for developing plans in areas not designated. The plans developed under 208 must, among other things, identify the facilities necessary for meeting and maintaining water quality standards for the next 20 years and regulate their location, modification, and construction. The plans must also include procedures designed to control nonpoint sources of pollution, pretreatment of industrial wastes, and the disposal of wastewater residues. The management agency or agencies necessary for implementing the plan must also be identified.

One large difference between the two programs is that monies have been appropriated especially for 208 areawide planning while AQMA planning is part of the SIP and is funded out of existing grants. The money allocated to the state through Program Support Grants (Section 105 of the Clean Air Act), together with the matched state or local funds, must be apportioned among a number of other air quality programs which are part of the SIP (e.g. Stationary Source Review, New Source Performance Standards, Transportation Control Measures), along with other general functions (enforcement, engineering, technical services, and management).

B. Interrelationships

208 planning and AQMA planning are interrelated, both in terms of their impact on one another and in terms of their similarities of approach. Both are concerned with maintaining environmental quality; both utilize an areawide approach in which areas of potential or existing problems are identified and a unified plan is developed for the entire area. However, when a program is designed to control pollution in just one medium, it can result in environmental deterioration in another. While the goal of both AQM and 208 is to improve the quality of the environment, the single medium focus of separate programs may result in conflict with the attainment and maintenance of standards in the other medium. At the same time, if care is taken to coordinate their development, the plans produced through these two programs can be mutually supportive.

1. Intermedia Tradeoffs

An obvious example of the intermedia conflict is the use of control technologies and equipment which are employed to reduce emissions to one medium while transferring the pollution problem to another medium. Lime/limestone scrubbers, one means for reducing SO_2 emissions, produce a liquid sludge which must be disposed of. Conversely, sewage treatment plants may try to dispose of sludge through incineration, thus increasing air quality problems. Such problems can also affect energy production considerations. A fossil-fueled electric generator may be undesirable because of air quality limitations, but an alternative nuclear generating plant may be unable to meet thermal pollution standards.

2. Community Growth

Potential conflicts are also apparent when examining the issue of community growth -- where should it occur, how should it be distributed and how much should be allowed? The two programs will view these questions from different perspectives, which in some cases may result in different answers. For example, the location of waste treatment plants and sewer interceptors can act as an inducement to growth and guide growth toward the serviced areas. These areas planned for expanded sewerage service may have existing air quality problems which increased growth would simply exacerbate. In Ocean County, New Jersey, for instance, the combination of the expansion of the Garden State Parkway and a proposed new large treatment plant would have permitted a rapidly accelerating growth rate and resulting air pollution problems from increased commuting. Citizen objections finally resulted in a reduction in the scale of the plant. In the Washington, D.C. Metropolitan Area, a large interceptor was run out to serve the Dulles International Airport through land which was largely undeveloped. The combined attraction of both the airport and the available sewer service has put severe pressure on the local communities to accommodate greater development and thus more pollution.

In addition to conflicts over the amount of growth, the two programs may consciously attempt to guide growth toward different distributions. In designing an AQMA plan, for example, the planning agency may want to utilize the option of emission density zoning to establish emission limits for different areas. An industrial zone might have a limit of 3 tons of total suspended particulates per square mile while the limit for a commercial zone would be considerably less. However, wasteload allocations consistent with maintaining water quality may necessitate a different land use configuration which would not correspond to the air quality zones. For example, the location of additional heavy industry within a particular area may lower the quality of the receiving water below standards, though due to favorable meteorological conditions, it is a desirable location in terms of air quality maintenance.

On a larger scale, the two programs may favor different general growth patterns. In one area, for example, substantial in-migration and a concommitant demand for housing may result from increasing job opportunities. New housing construction to meet the increased demand might occur primarily in the urban fringe where excess treatment capacity exists. Indirect sources, such as shopping centers, would accompany the residential construction and, as a result, air quality standards might not be attained or maintained. In addition, adequate mass transit may not be available, and the inevitable increase of motor vehicle use could cause substantial air quality problems. Thus the development pattern

best suited to meet the requirements of a water quality plan may conflict with the needs for Air Quality Maintenance Planning.

3. Reinforcement

Thus far, only possible conflicts between the two programs have been mentioned. However, they should be designed to be consistent with one another so that their policies can be reinforcing, thus providing further inducement for communities to take regulatory action. Wastewater treatment and collection facilities, for example, can be designed to serve those areas lacking significant air quality attainment and maintenance problems, thus directing growth away from problem areas. In doing so, however, consideration must be given to preventing deterioration of air and water quality. If land use policies and controls are consistent, growth can be regulated so that it does not result in violations of either water or air quality standards. Therefore, it is important that agencies developing plans under the two programs coordinate closely with each other to assure that their plans will achieve national objectives for both media and that they are compatible and complementary. The plans will thus more likely reinforce each other as they are implemented.

II. Designation and Timing

A. Designation of Planning Agencies

Under the 208 regulations, an agency must be designated to do the planning at the same time the 208 area is designated. There can only be one agency responsible for planning in each 208 area, and often the designated agency is a regional planning council or a COG. If there is no existing regional planning organization, one must be created, and it must include representation from all the jurisdictions within the 208 areas. As part of the planning process, an implementation program must be developed and the implementing agency or agencies must be identified.

The situation in AQMAs is somewhat different. The state has the initial responsibility for developing the AQMA analysis and plans, although it may delegate this responsibility to a lower level of government. For example, the state might decide to do the planning itself, or it might decide to do it in conjunction with local or regional agenices. If this is the case, more than one local or regional agency might be involved for each AQMA. It is recommended that one agency have lead responsibility, but this is not a requirement. Implementation can be the responsibility of one or more agencies as in 208. Because many air pollution control agencies may not have adequate expertise in developing and implementing the kinds of measures that may be needed for air quality maintenance such as land use and transportation measures, they are required by the regulations to consult with other agencies, such

as the EPA 208 agencies, HUD 701 agencies, DOT 3-C agencies, Coastal Zone Management agencies and OMB A-95 clearinghouses, if they develop the AQMA plan. Furthermore, the State would have tofforward the AQMA plan to the appropriate A-95 clearinghouse for comment prior to submission to EPA.

B. Geographic Boundaries

Most AQMAs consist of urban and urbanizing areas, and many overlay Standard Metropolitan Statistical Areas. Because of this, the initial boundaries are often defined as coincident with county boundaries, though in some cases boundaries divide counties. Other AQMAs cover areas where resource exploitation or industrial development, create, or may potentially create, an air quality problem. Designations are pollutant specific; that is, an AQMA may be designated for a potential violation of any one or several of the pollutants for which standards exist.

Following the initial designation, states or EPA must do an in-depth analysis of the problems posed by each pollutant for which an area is designated. This would include an assessment of growth factors and development patterns and a projection of future air quality for at least 10 years. It is possible that based on this analysis, the boundaries would be revised to correspond more closely to the air shed within which the objectionable pollutants are a problem.

208 areawide planning is not pollutant specific. It is performed whenever the governor of the state (or in some cases, local officials) determines that an area will have substantial problems in controlling water quality due to high concentrations of population and industry or other conditions. The state is responsible for planning in all other areas through the State Water Quality Management Plan. Boundaries for 208 areas are coincident with governmental boundaries in most cases, though hydrological boundaries also may influence boundary determination. The designations are proposed either by the state (or states if it is an interstate area), or by the local jurisdictions themselves. They are reviewed at the regional level and approved at the national level by EPA. Once a designation has been approved, it cannot be changed without formal procedures. 149 designations were approved in FY 74 and FY 75 with 100 percent federal funding. Additional 208 designations will be approved in FY 76.

C. Timing of Designation and Plan Preparation

Under the Air Quality Maintenance Program, the States are responsible for analyzing their AQMAs to determine the extent of their problem and to evaluate whether an AQMA plan is actually needed as a revision to the SIP. In some areas, a plan may not be needed in the near future.

In other areas, the first problem may be to attain air quality standards before considering maintenance measures. In any case, by July 1, 1976 the Regional Administrators must identify all attainment and maintenance SIP revisions that will be necessary as well as just maintenance revisions. It is the RA's responsibility to set a submittal date for the AQMA plan which will be contingent upon the lead time needed for effective maintenance. For example, if the first 10 year air quality analysis reveals maintenance problems, and to solve the problem requires an action 7 years in advance, then the necessary action must be in the first maintenance revision. It does not matter how many years the revision covers, the necessary lead time from action to prevention of air quality standards violation must be considered. The shortest time period a revision could cover, however, would probably be three years since less would be impractical.

Plans that provide for the maintenance of the NAAQS for less than 10 years must provide a discussion of problems in maintaining the NAAQS for the remainder of the 10-year period. In addition, AQMA analyses and plans must address the same periods as other federally-sponsored plans in AQMAs where such plans account for periods of longer than 10 years. These plans include the Department of Transportation's 3-C plans, the Department of Housing and Urban Development's 701 comprehensive plans, and EPA's Section 208 areawide waste treatment management plans. If the AQMA plan does not maintain standards over the full period covered by other federally-sponsored plans, then the AQMA plan would have to discuss the maintenance problems expected over the remainder of the period. The Administrator, at his discretion, could permit the States to perform a less detailed AQMA analysis for the period beyond the initial 10-year period than for the initial 10-year period.

From the date of designation, according to the Act, 208 planning agencies have one year to develop a work plan and two years to develop a plan. However, in order to qualify for 100% federal funding, the work plan had to be submitted to EPA before the end of FY 75. Thus, for most designated areas the deadline for the completed plan will be around June 1977, but the exact date for each 208 area depends on when it received its grant. Proposed changes in the grant regulations would allow the RAs some discretion in determining when 208 plans would be due from those agencies receiving grants in FY 74 and FY 75. The RA would be allowed to grant the planning agencies more time based on his determination of when they had sufficient staff to begin plan development and had initiated major work elements. Under the proposed changes new grantees would have two years to develop the plan from the date the detailed work plan was approved by EPA. The agencies could receive

up to 5 percent of their grant award to prepare the work plan.

Because the regulations for AQM do not specify due dates for the submittal of maintenance plans, but leave this to the discretion of the RA, it is difficult to generalize on the timing of coordination between 208 and AQMA planning. Some EPA Regions will keep their AQMAs to the time schedule developed earlier, which overlaps greatly with the schedule for 208 plans. Where this is not possible, it is important to remember that the plans which are developed are not one time efforts but must be periodically updated in order to maintain them as effective management tools. Section 208 requires an annual certification of the plan by the governor or his designee as being consistent with applicable basin plans. The 208 grant regulations state that if in the judgment of the Regional Administrator, State Governor(s) or 208 agency, substantial changes have occurred which warrant revision or amendment of the approved plan, the plan shall be revised or amended and submitted for review in the same way as the original plan.

For the AQMAs the states must review and update the plan at least every five years. If the period covered by the plan is less than 5 years (for example 3 years), this update must be performed more frequently.

III. Procedures for Coordination

There are a number of procedures, which if implemented, would facilitate coordination between 208 and AQM during the planning period. The purpose of this section is to outline these and to describe how they would be integrated into the planning process.

It should also be noted that the state is responsible for water quality management planning in those areas of the state not designated for 208 areawide planning. Thus it is only logical that the state agency responsible for water quality management coordinate with the agency responsible for the State Implementation Plan. Many of the procedures discussed herein pertain to state planning efforts and should be carried out when applicable. The State Water Quality Management Plans include many of the same elements that 208 plans in designated areas will contain. The State is already responsible for the SIP of which AQMA plans are a part. The agencies responsible for 208 or AQMA planning in areas where there is no corresponding areawide planning effort for the other medium should coordinate with the state agencies responsible for air or water quality management.

A. Planning Agency Designation

In most cases, the 208 planning agencies will have been designated prior to the AQMA designations, and often the designated agency will be a COG or regional planning council. Given this fact, coordination would

be facilitated if the states delegated responsibility for AQM planning to the same agency designated for 208 planning, provided that agency has responsibility for comprehensive planning and is capable of preparing such a plan. The development of AQMA plans in many areas involve measures, such as land use controls, which many air pollution control agencies have neither the expertise to develop nor the authority to implement. Thus; in addition to facilitating coordination, it may be more politically acceptable to have an agency responsible for general comprehensive planning develop the AQMA plan. Of course, the feasibility of having the same agency develop both plans would depend on the boundaries of the two areas. If there is little overlap, the designated 208 agency may not have the authority to conduct planning in the AQMA.

If the same agency is not designated, coordination would still have to occur, and to assure that it does, the responsible planning agencies should draw up letters of agreement between them to cover such items as integration of work plans, and consistency of data and control strategies.

3. Geographic Boundaries

From the earlier discussion, it should be apparent that in many cases 208 and AQMA designations will not coincide. Some metropolitan areas may be designated in part for 208, while another part is included in an AQMA. However, if there is a considerable overlap between the two boundaries, it would be preferable if they could be the same. During the AQMA analysis, when the boundaries are refined, the states or those delegated by them should consider incorporating existing 208 areas into the AQMA when this appears to be a practical alternative. Conversely, if designations for 208 areas are made after FY 75, consideration should be given to refining the boundaries prior to designation to increase consistency with AQMA.

C. Work Programs

The 208 and AQMA plans have a slightly different planning sequence but essentially follow a similar process.

The following generalized planning tasks apply to either AQMA or 208 planning:

1. Inventory of existing and potential emissions or discharges and characterization of possible problems.
2. Data collection and projection of population, employment, and land use over the planning period.
3. Projection of waste loads or emissions over the planning period.
4. Determination of effects on air or water quality.
5. Determination of necessary emission or waste load reductions.
6. Development of alternative strategies of waste load or emission reduction to achieve and maintain standards.
7. Evaluation of strategies and selection of preferred alternative.

Although they may be on somewhat different time schedules, it is important that whenever possible, 208 and AQMA agencies coordinate on the development of their work programs to better integrate the tasks to be accomplished. In fact, it should be possible where there is no great discrepancy in timing, to use a common format for the two work programs. Since the AQMA planning effort will have limited funding, the 208 agency could gather the data and develop projections of population, employment and land use which could then be utilized by the AQMA agency. Some tasks, such as the citizen participation effort, could be done jointly, perhaps reducing the staff requirements and the time-consuming nature of such programs. In any case, the work program must specify how coordination will occur throughout the planning process. The following sections deal with procedures for coordination in the development of projections, evaluation of alternative strategies, environmental analysis, reporting, and representation. The exact means of implementing these procedures must be developed in the work plan.

D. Grant Conditioning

Grant conditions can be used to specify and give assurance that sufficient attention will be given to coordination needs. Those responsible for administering the AQM program within the Regional Offices can make use of conditions on Section 105 program grants. If grants have already been given out, the refinement of work programs may provide an additional means of ensuring coordination. Similarly, conditions can be included in the 208 grant. An example of 208 grant conditions is included on the following page. In addition, contracts or agreements between the 208 and AQM planning agencies can be used to clarify responsibilities for coordination.

Air and Water Quality Planning Coordination

The Project Control Program shall, at a minimum, establish procedures to integrate the air quality maintenance planing (AQMP) and Areawide Waste Treatment Management Planning (AWWTMP) activities for the designated area by written agreement(s). These agreements shall insure that:

A. The designated air quality maintenance planning agency(s) has reviewed and commented on the project control program prior to its submittal to EPA.

B. Periodic reporting and output review procedures for both the AQMP and AWWTMP programs are established between the designated air quality maintenance planning agency(s) and the areawide waste treatment management planning agency.

C. The designated air quality maintenance planning agency(s) participate as member(s) of the Areawide Planning Advisory Committee, established pursuant to 40 CFR 35.1054-2(d).

D. There is an equivalent degree of participation (as B. above) by the areawide waste treatment management planning agency (grantee) in the air quality maintenance planning activities for the area.

E. A coordinated search (involving the responsible air quality planning agencies) of the existing economic, demographic, land use, and other baseline data and data formats is accomplished prior to the development of the data base for the AWWTMP and AQMP programs.

F. Development of new economic, demographic, land use and other baseline data is applicable with respect to content, format, and timing of both the AWWTMP and AQMP programs.

G. Consistent economic, demographic, and land use projections are utilized in both the AWWTMP and AQMP programs.

H. Development of the air quality portions of the environmental assessment required by 40 CFR 6.512(a) and the air quality analyses in response to requirements of Section 208(b)(2)(E) of the Federal Water Pollution Control Act is in a format appropriate for direct input into the air quality maintenance planning process.

I. Where possible, the coordinated scheduling of intermediate AWWTMP program outputs and information requirements with the outputs and information requirements of the AQMP program.

E. Data

Both programs require the projection of future pollution levels. To do this, they must correlate predictions of the concentrations and components of growth to the resulting emissions. 208 covers a 20 year planning period. AQMA plans must address the same time period as other Federally-sponsored plans in the AQMA, so in areas where 208 planning is being done, AQMA plans must discuss at least a 20 year period. If the two plans are to be consistent, they must develop consistent projections for demographic factors such as population and household type, and for economic growth and land use. To insure such consistency, a common classification system is needed for land use and economic factors so that data will be compiled using a similar format. The planning agencies should integrate their data requirements before gathering data, so that the information obtained for the one plan is transferable to the other. AQMA plans can use the data already collected by 208 in areas where 208 planning is already underway. In other areas, the two programs should divide the effort of obtaining data, which, when collected, can be integrated into a common data base.

Since most AQMA planning agencies have limited resources, primary reliance should be placed on 208 agencies for population, land use, economic and water quality data when this is compatible with the time schedule for AQMA planning. The inventory and projection of air quality emissions remains the responsibility of the AQMA agency.

The viability of coordinating data collection and projection depends of course on the timing of the two planning effort. If one is done much earlier than the other, more recent or comprehensive data may become available by the time the second planning effort is underway. If this is the case, there may be adequate reason for modifying projections. However, if it cannot be demonstrated that the difference in projections is due to the availability of more complete data, projections for the two plans should be the same. This test should also be used for plan revision so that consistency is maintained.

Another problem develops when the two planning areas overlap but are not identical. In this case the projections in the overlapping area should be the same and those for the adjacent areas should not conflict. That is, the growth rates for the entire area should be consistent.

Predictions of pollution levels will be based in part on population projections. These predictions will affect the selection of alternative implementation strategies, which could in turn, necessitate modification of the projections. This iterative process of revising projections must also be coordinated so that potential growth areas are not conflicting.

F. Representation

Periodic consultation between AQM and 208 planning agencies will help ensure that both plans are consistent. It is important, therefore, that representatives of the planning agencies reponsible for each program should be included in any advisory group which might be created, to ensure periodic consultation between the two agencies. AQMA planning guidelines discuss the necessary involvement and interrelationship of various governmental organizations in the development of an AQMA plan. They assume that, in most cases, a number of agencies will be intimately involved in the plan's development, and several possible modes of coordination are discussed. Whatever method is chosen, a representative of the 208 planning agency should be included in such efforts. 208 guidelines similarly provide for coordination by means of an Areawide Planning Advisory Committee and representatives of an AQMA agency should be included in its membership. In addition, the staffs of the two planning agencies should develop a close working relationship. For example, each planning agency could designate one person to serve as liaison between them, to help ensure that necessary coordination is carried out in a timely fashion. This would also help in identifying possible conflicts and resolving them informally as they arise.

G. Evaluation of Alternative Strategies

Many of the control strategies available for use in either an AQMA or a 208 plan have a potential impact on the other medium. This is especially true for control strategies relating to land use. In the case of Air Quality Maintenance, nine of the 18 measures discussed in Control Strategies (Volume III of the AQMA guideline series), are categorized as land use measures. Emission allocation procedures, for instance, would limit the emission of pollutants based on the regional land use/transportation plan. The maximum emissions allowable, consistent with standards, would be allocated to planning subareas, and land use and transportation plans would be revised so that these prescribed emissions limits would not be exceeded. Emission density zoning limits emissions of a pollutant to prescribed levels within defined spatial areas. The limit is established in terms of an amount of emissions per area, per time period, such as pounds of particulates per acre, per year. The allocation can correspond to the type of land use so that, for example, heavy industrial zones are allowed higher limits than residential zones. Transportation controls help reduce emissions from motor vehicles by either reducing the pollutant emission rate per vehicle mile of travel (VMT) or by reducing the total number of VMT. Measures to reduce VMT have the greatest impact on land use, and can include such things as street closings or traffic free zones, parking bans, parking supply management, restricted road building, improved mass transit, and control of urban development. Other control

strategies which affect land use include transfer of emisson source location, indirect source review, emission charges, and regional development planning.

All of these control stratgies affect water quality and planning for areawide waste treatment management. Emission limits set for various subareas would effectively control certain types of development producing those emissions, while possibly encouraging them to locate elsewhere. An optimum location decision in terms of maintaining air quality may not be desirable in terms of handling water pollution discharges. Restricting the development of road networks in one area may lead to development where the transportation infrastructure was already in existence - thus causing higher pollution loads in already developed areas.

As pointed out earlier, it is not only the control strategies which directly affect land use and thus water quality, but also the technologically and operationally oriented strategies, that is, emission control measures. These include such things as new source performance standards, fuel conversion, combination of emisson sources, stack height regulations and control of fugitive dust sources. Combination of emission sources may cause a concentration of water pollution discharges. The use of tall stacks may reduce ground level concentrations but could result in contaminated precipitation such as the "acid rains" observed in Sweden. One control strategy for fugitive dust consists of watering which could cause runoff problems.

Intermedia problems may also arise from water quality management strategies. Many of the measures incorporated into a 208 plan to control point and nonpoint sources affect land use which could affect AQMA plans. Sewer interceptor and facilities location, restricting the location of industrial development to areas where the receiving waters have assimilative capacity, and restricting development in areas where significant nonpoint pollution would result, are decisions which could affect air quality. However, not all interaction between 208 and AQM need result in conflict. Both plans should favor better management of construction activities. For example, measures such as minimal exposure periods for active construction areas, or utilization of staged grading, seeding and sodding procedures would reduce both runoff and fugitive dust problems. More generally, the objectives of both programs would be served by limited urban development in certain areas or controlled density. Transportation control plans which restrict road construction to such areas, and facility planning which avoids routing an interceptor to undeveloped areas could both be used as reinforcing strategies.

It is thus critical for the successful implementation of the 208 and AQMA plans to take advantage of complementary strategies by evaluating the effectiveness of various alternatives to determine their impact on

each medium.

The planning agencies responsible for the two programs must make sure that they inform one another about alternatives being considered and offer one another an opportunity to review and comment on alternatives. Such comments should be considered during the evaluation process so that alternatives for one medium could not be selected that would conflict with implementation of the plans for the other medium. This review and comment should be undertaken by the planning staffs and the advisory groups to the planning agencies.

208 agencies will have an additional opportunity in preparing the environmental assessment to assure that no conflict exists with AQMA strategies. Each alternative 208 plan will be evaluated to assess its impact on air quality. Not only the direct impact on air quality should be assessed but also the indirect effects on growth inducement or distribution.

H. Reporting

In order to keep the planning agencies posted on the current development of both plans, there should be some type of periodic or milepost reporting between them. The state should be responsible for ensuring that the reporting is carried out. This could take place quarterly or at the beginning and completion of some subtask (e.g., data collection, projections, analysis of water and air quality, etc.). Informal contacts would, of course, be more frequent. Periodic or milepost reporting, however, would provide formal documentation of the communication which had taken place.

In addition, a report should be periodically sent to the EPA regional office. The report should describe how respresentatives of each program are involved in an advisory capacity, any meetings which have been held between the two programs, what information has been provided to each program, how consistency in data and projections is being achieved, and any potential conflicts which may be developed. This should be done at a minimum of every 6 months in the format of the semi-annual reports required of both the AQM and 208 planning agencies.

I. Program Approval

After completion, the planning agency for each program should review the other's plan to ensure there are no conflicts, and as a final check, the plans should also be reviewed at the state level by those responsible for administering the two programs, and by the EPA regional office.

If potential conflicts develop during the planning stage, it is expected that the planning agencies responsible will attempt to resolve them informally. If this is not possible, the conflict should be referred up to the state level where the agencies responsible for administering these two programs would resolve it. As a final resort, it would be referred to the Regional Administrator for mediation.

In the case that other federal agencies were involved in a dispute, then EPA should meet with representatives of the affected agency to review the situation and whenever possible to formulate recommendations for resolving the dispute.

As a final "encouragement" to resolve conflicts, EPA will not approve 208 and AQM plans which are in conflict. Language to this effect is being proposed for the AQM and final 208 regulations. Specifically, plans will not be approved which have conflicting projections, or conflicting control strategies or allow for construction of infrastructure (roads, interceptors, treatment facilities) which would result in standards violations in either medium. Thus, 208 and AQM agencies are encouraged to resolve conflicts early and not wait until the plans are so far along that changes would be costly.