

Water



Supplemental Water Quality Management Program Guidance for FY 80





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Office of Water
Planning and Standards

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TO: Participants in the Water Quality Management (WQM) Program

The Supplemental Water Quality Management (WQM) Program Guidance, attached, is a compilation of EPA's guidance for the overall WQM program under sections 106, 208, and 303(e) of the Clean Water Act. This guidance supplements the EPA Agency Guidance, issued in April 1979. Its purpose is to provide participants in the WQM program with an up-to-date program overview, recommended management procedures, and detailed policy memoranda. Although the potential audience for the guidance is quite broad, it is primarily for the use of State and areawide participants in the WQM program and the EPA Regional Office project officers.

This guidance is an output of the annual policy development process the Water Planning Division has initiated. The annual process also includes a problem assessment, five year strategy, and work plan. This guidance is being issued later than desired, since the ideal time for annual guidance to be published would be April of the preceding year. The Division will issue the supplemental FY 81 guidance in April, 1980.

This transmittal augments the final WQM regulations (40 CFR Part 35 Subpart G) which the Administrator signed on May 16, 1979. All WQM regulatory citations in this package refer to the new regulations. This guidance package supercedes the WQM program guidance memos (SAMs) which EPA has published since February 1976. Those SAMs which are still current become part of this guidance, but they are renumbered and reorganized around subject areas. Two policy memos, FY 80 Funding (A-2) and State Role in Responding to Environmental Emergencies (B-5), are reserved. Explanations can be found in Section VI.

Water Planning Division is currently developing several additional policy memoranda which cover the following topics: WQM plan update policy, the connection between WQM plan implementation and continuing 208 funding, recreation and open space requirements, and water quality/quantity/conervation issues. Upon completion, we will forward these guidance memos, along with additional guidance and corrections developed in the upcoming year, for inclusion in your WQM guidance notebook.

As always, we welcome your comments and suggestions on the content, format, and approach of the guidance package. Please address your comments to Peter L. Wise, Chief, Policy And Evaluation Branch, Water Planning Division (WH-554), 401 M St., S.W., Washington, D.C., 20460.

Sincerely yours,

A handwritten signature in black ink that reads "Albert J. Erikson, Acting". The signature is written in a cursive style with a large, stylized 'A'.

Deputy Assistant Administrator
for Water Planning and Standards

Attachment

SUPPLEMENTAL WQM PROGRAM GUIDANCE
FOR FY 80

OFFICE OF WATER PLANNING AND STANDARDS
WATER PLANNING DIVISION
SEPTEMBER, 1979

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SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

Section A -- Funding

- A-1 Interim Guidance, Minimum Standards for Procurement under Section 208 (Originally SAM-14)
- A-2 FY 80 Funding Policies for 106 and 208 Grants [RESERVED]

Section B -- Program Requirements and Criteria

- B-1 EPA Policy Regarding Interstate Commissions (Originally SAM-24)
- B-2 Regulatory Programs for Nonpoint Source Control (Originally SAM-31)
- B-3 Developing and Implementing Best Management Practices (Originally SAM-32)
- B-4 NEPA Compliance in the State and Areawide Water Quality Management Program (Originally SAM-34)
- B-5 State Role in Responding to Environmental Emergencies [RESERVED]
- B-6 Pretreatment and the Water Quality Management Program (Originally SAM-36)
- B-7 Using 208 Funds to do Water Quality and Municipal Facilities Evaluations for Treatment More Stringent than Secondary (Originally SAM-37)
- B-8 Funding of Waste Load Allocations and Water Quality Analyses for POTW Decisions (Originally SAM-38)

Section C -- Coordination

- C-1 Interagency Coordination (Originally SAM-11)
- C-2 Rural Clean Water Program Relationship to a 208 Plan (Originally SAM-33)

SUPPLEMENTAL WQM GUIDANCE FOR FY 80

I. INTRODUCTION

A. Purpose

The purpose of this supplemental guidance is to consolidate and clarify the national guidance for the water quality management (WQM) program, which EPA administers under sections 106, 208, and 303(e) of the Clean Water Act. This is the first in a series of annual supplemental WQM guidance documents. Prior to the start of FY 81, and each subsequent fiscal year, EPA will issue updated guidance. As policy developments take place during each year, EPA will issue corrections or addenda as appropriate. To facilitate keeping the guidance up-to-date, it is printed in a loose-leaf format.

This guidance coincides with the final WQM regulations which EPA has recently revised [1]. All of the citations in this package refer to the new regulations, 40 CFR 35 Subpart G.

This guidance replaces the WQM program guidance memos ("SAMs") which EPA published between February, 1976, and the present. Current SAMs become part of this guidance, but they have been edited, re-numbered, and re-organized around subject areas. The supplemental guidance also supercedes the November 1976 Guidelines for State and Areawide Water Quality Management Program Development [4].

Two current Water Planning Division (WPD) publications relate to this guidance. The first is the WPD work program [2] which the Division uses to program, monitor, and evaluate activities and to inform and coordinate with other offices. The second is the FY 80 Baseline WQM Five-Year Strategy [3], which sets forth the long-range WQM program.

B. Contents

Sections II and III of the guidance present a discussion of the goals, objectives, priorities, and philosophy of the WQM program for FY 80. Section IV presents an overview of the problem-solving process for water quality--

* This guidance makes frequent references to legislation, EPA regulations, guidance documents, and other related documents. For convenience, a list of references is attached. Where the text refers to one of these documents, the number of the reference appears in brackets. Where the reference is to a WQM policy memorandum in Section VI, the number of the memo is noted, e.g., A-2.

of which the WQM program is a component--and section V presents a management framework for the WQM portion of the process. Section VI contains the new series of WQM policy memoranda.

C. The Problem-Solving Process

The discussion of the problem-solving process for water quality problems, section IV, shows how the various aspects of the water quality program fit together. In the past, persons working in water pollution control programs have often lost sight of the overall problem-solving process because of such factors as administrative burden, fragmented legislation, and professional and organizational specialization.

The description of the problem-solving process touches on many programs for the prevention of water pollution--permits, enforcement, construction grants, planning, nonpoint source control, monitoring, evaluation, and others. The description is broad and simple, and contains over 40 references to other more-detailed documents.

D. The Management Framework

The discussion of management of the WQM program in section V places the program in a management perspective, focusing on State and areawide management procedures, rather than technical or institutional issues. The purpose is to promote active, rather than reactive, management of the program at all levels. It stresses the importance of a strong inter-governmental partnership for the success of the WQM program.

The management framework presents a streamlined management process which should minimize paperwork and duplication of effort, and which identifies all required outputs. Management of the program is a straight-forward process which, under the new regulations [1], dovetails with other environmental efforts under the State/EPA Agreements.

II. GOALS, PRIORITIES, AND OBJECTIVES FOR WATER QUALITY MANAGEMENT

The WQM program is one of the EPA programs contributing to the achievement of the water quality goals of the Clean Water Act [5] including "protection and propagation of fish, shellfish, and wildlife and provision of recreation in and on the water by 1983 wherever attainable" Specifically for the WQM program, the goal is:

To assist in the development and administration of a State and local government decision-making process to control point and nonpoint sources of pollution to meet the water quality goals of the Act.

Management Priorities. Management of the WQM program involves two large grant funds under the Clean Water Act--section 106 State Program Assistance Grants and section 208 Waste Treatment Management Grants. Management priorities are discussed in detail in the WQM FY 80 Baseline Strategy [3].

With respect to 106 grants, EPA does not have firm national priorities at this time. The Water Planning Division (WPD) is coordinating a WQM Needs Assessment which will provide data on 106 needs and assist EPA in setting future 106 priorities.

The entire water program is moving into more areas as EPA, the States, and others begin to address such topics as toxic and nonpoint source controls. In response to the changing demands on State programs, the EPA Agency Guidance for FY 80/81 [11] directs the States to program 106 funds freed up as a result of 205(g) delegations* into new areas such as hazardous and toxics monitoring, spill prevention, and implementation of approved WQM plans.

For management of section 208 grants, EPA has two management priorities. First, in FY 80 and beyond, EPA will initiate a more active, rather than reactive, management stance with increased emphasis on filling gaps in WQM plans, providing technical and fiscal/financial assistance, improving Regional Office program management, and linking continuing funding for 208 agencies to evidence of implementation.

Second, assuming adequate funding levels, EPA anticipates completion of the 208 grant program and expects no 208 grants after FY 83. This will represent the successful completion of a framework for solving water quality problems allowing EPA, the States, and others to make the transition from planning to implementation of controls. After FY 83, EPA will recommend a restructured program focusing on implementation of nonpoint source controls.

* Construction Management Assistance Grant program (205(g))

In FY 80-83, State and areawide WQM agencies will fill in the gaps in their WQM plans, largely through the use of prototype problem-solving projects for more difficult problems. EPA will provide funding, expert technical assistance, and information transfer mechanisms to ensure the success of their efforts and the transferability of their results.

Problem Priorities. EPA has set national priorities for the 208-funded portions of the WQM program--areas of emphasis which EPA encourages the States and areawides to address with 208 grants. The program also supports Regional, State, or local priorities which differ from the national 208 priorities if they are implementation-oriented, are for nonpoint sources, and will have a major impact on water quality.

It is EPA policy that section 208 grants are only for nonpoint source problem-solving activities in FY 80 and beyond. In general, the highest priorities for 208 funding are urban storm runoff, agricultural runoff, and groundwater protection. Other nonpoint sources such as construction, mining, or silviculture runoff are secondary priorities. For a detailed discussion of the section 208 priorities, see the WQM FY 80 Baseline Strategy [3].

Public Participation. Since the start of the WQM program, public participation has been a high priority. All aspects of the program are governed by the recently-revised public participation regulations, 40 CFR Part 25 [8]. In FY 80, EPA will focus public participation activities on specific problem-solving projects and implementation activities that State, areawide, and local agencies undertake. Thus, public participation efforts will be more project- and problem-specific, and will help to assure that technical solutions to nonpoint source problems, for example, are understood and have local support and political acceptance for implementation.

III. WATER QUALITY MANAGEMENT PROGRAM PHILOSOPHY

As the WQM program has evolved since FY 73, its philosophy has changed as a result of external events and experience within the program. Below are three important directions for WQM philosophy in FY 80:

A. Emphasis on Implementation and Problem-Solving

From the start of the WQM program, EPA has emphasized the importance of plan implementation, so that taxpayers would realize their investment in WQM planning in water quality improvements. In FY 80, EPA will place more emphasis on problem-solving through its 106 and 208 grant policies.

As mentioned briefly above, EPA is urging States to use 106 grants to fund WQM plan implementation, since 208 funds can't be used for that purpose. The WQM regulations [1] permit the States to use 106 funds to support regulatory programs for nonpoint source control or other similar programs such as State dredge and fill regulatory programs under 208(b)(4)(B).

At the same time, EPA is directing 208 funds toward problem-solving projects designed to fill gaps in WQM plans and identify cost-effective controls for nonpoint source problems. For example, EPA is funding urban runoff projects in its Nationwide Urban Runoff Program (NURP). When these projects have tested best management practices (BMPs) for urban runoff, States and areawides will use the results to solve similar problems in other urban areas.

For agriculture, EPA is cooperating with USDA on funding and managing several types of pilot projects, including Model Implementation Projects (MIPs) and Agricultural Conservation Program (ACP) special projects, in which States or local agencies test BMPs in different types and sizes of agricultural watersheds. Under section 208(j) of the Act, EPA also participates in an implementation program for nonpoint sources, the Rural Clean Water Program (RCWP). The RCWP will provide cost-sharing for owners/operators of rural lands to implement BMPs contained in certified and approved WQM plans.

For other problems, such as construction runoff, groundwater contamination, failing septic systems, and municipal waste treatment, the Regions, States, and areawide agencies will often use prototype projects to solve problems.

B. Changing Role of State/EPA Agreements

The requirement that the States and EPA Regions prepare annual State/EPA Agreements first appeared in the 1976 WQM regulations [6]. Under those regulations, the Agreements covered the detail, timing, content, and sequence of State WQM planning.

Now, beginning in FY 79, EPA and the States negotiate integrated annual Agreements covering not only water quality programs, but also water supply, solid waste, and other programs the Regions and States agree to include. Areawide agencies, Interstate Basin Commissions, and the public participate in the Agreement process.

The Agreements are management tools to maximize the effectiveness of resources for implementing solutions to environmental problems. They respond to EPA priorities and the States' problem assessments and strategies, and contain or make reference to one-year work programs. To simplify paperwork, the Agreements, with their work programs, can serve as the narrative portions of grant requests for programs covered under the Agreements. For more information, see the State/EPA Agreement Policy and Guidance, February 1979 [9].

C. Roles of State and Areawide Agencies

During the first phase of the WQM program (FY 73-75), the States and designated areawide agencies conducted three separate programs under sections 106, 208, and 303(e) of the Act. With 106 grants, the States managed their water programs and did basin planning under section 303(e). Meanwhile, 149 areawide agencies received 100 percent-Federal-share 208 grants in FY 74-75 for three-year comprehensive areawide planning.

Starting in FY 76, EPA administratively merged the requirements of 208 and 303(e) in a single planning program, the WQM program, with State and areawide components, after the Smith decision [7] opened up 208 funding to the States. In FY 76, 49 States received 75 percent-Federal-share 208 grants to oversee areawide planning and conduct planning in non-designated areas. But although EPA merged 208 and 303(e), there was still a lack of coordination between the management and implementation programs (State--106) and the planning programs (State/areawide--208/303(e)).

Now, with the promulgation of the new WQM regulations [1], EPA has integrated the requirements of 106, 208, and 303(e) into a single State and areawide process. The new regulations set forth a streamlined program, with the State at its focus. Each Federal, State, or local unit of government performs those activities which it is best-suited to handle.

Regarding relationships between States and designated areawide agencies, the regulations call for a strong State management role, but at the same time they maintain a link between EPA and the areawide agencies. The States set the policy framework, and have a major role in the review of areawide priorities and work programs. They must, however, consider areawide priorities in the policy framework. EPA will approve areawide work programs, with consideration of State comments, and generally fund the areawides directly. Any conflicts that arise between States and areawides will be resolved by the conflict-resolution procedures the regulations require.

IV. SUMMARY OF THE WQM PROBLEM-SOLVING PROCESS

This portion of the guidance is a summary of the overall problem-solving process of which the WQM program is a part. In keeping with the Agency's emphasis on program integration, the summary describes a broad program incorporating many authorities and sources of funds. Each section makes reference to other more-detailed documents.

The problem-solving process consists of four elements: defining problems, developing solutions, implementing solutions, and evaluating results. Federal, State, and local funds all support the problem-solving process. Two major sources of Federal funding are section 106 and 208 grants under the WQM program.

A. Defining Problems

The first step in the problem-solving process, problem definition, consists of setting water quality goals and standards, assessing the causes of water quality problems, and setting priorities for action.

1. Water Quality Standards (WQS)

Water quality standards are one major basis for judging the existence of water quality problems. The States set WQS, based on EPA guidance, and EPA approves them. The States must review the standards, and revise them if necessary, at least once every three years. The WQS consist of use designations, a set of numerical criteria to support the use, and a Statewide anti-degradation statement.

Some current concerns in the water quality standards area are (1) application of water quality criteria for toxic pollutants in water quality standards, (2) the appropriate policy regarding State actions to ensure the maintenance of minimum stream flows, (3) intermittent stream and mixing zone policies, (4) implementation of Natural Resource Water designations with the Department of Interior, and (5) requirements to justify State failure to upgrade streams to "fishable/swimmable" levels.

For more guidance on water quality standards and related topics, see references [12] through [15]. The Advance Notice of Proposed Rulemaking of July, 1978, [13] discusses many WQS issues in detail.

2. Problem Assessment

Problem assessment is a process of EPA, States, areawide agencies, and others to identify water quality problems and connect them with the causes of pollution. The assessment process identifies existing water quality problems and future problems by anticipating population, land use, and economic changes.

A major part of the assessment process is water quality monitoring, which is a cooperative effort of EPA and other Federal, State, areawide, and local agencies. Monitoring must meet the specific needs of a State or local area, must be useful, cost-effective, and non-duplicative, and must build on existing information.

The first step in the problem assessment process is to define problems. Are beneficial uses of streams being denied? Are criteria not being met? Are there other indications of problems, such as unsightly conditions, fish kills, severe erosion, or strong odors? The second step is then to identify the pollutant or pollutants causing the problem, usually through new data collection and review of existing data.

Identification of the sources of the pollutants is the third step in the process. Some tools for identifying sources are discharger inventories, self-monitoring reports from NPDES permits, and on-site surveys or inspections. Then, the final step in the assessment process is to determine what is controllable. Pollution from some sources (e.g., benthic deposits) is difficult, if not impossible, to control.

Another aspect of the assessment process is the determination whether base-level technology for point sources and feasible controls on nonpoint sources will allow streams to meet water quality standards in the present and future. If a stream will meet standards, it is classified "effluent limited." If it won't meet standards without additional controls, it is classified "water quality limited." These classifications later affect the calculations of point source effluent limits.

For further guidance on monitoring and the problem assessment process, see references [16] through [23].

3. Identification of Priority Problems

Since resources to solve water quality problems are limited, the agencies involved must set priorities. The priorities should flow logically from the problem assessments.

For construction of municipal facilities, each State has a priority system which governs preparation of a five-year construction priority list. For other problem areas, such as nonpoint sources, urban runoff, wetlands protection, toxics hot spots, or ground water protection, the States, areawide agencies, and EPA negotiate long-term priorities in the process of developing State strategies, work plans, and State/EPA Agreements.

The States, areawides, and EPA may also address priorities for institutional, financial, or other problems delaying specific water quality improvements. Sources of information for such problems include institutional assessments in certified/approved WQM plans and management agency evaluations which the States conduct.

The States should also develop priorities for the development of total maximum daily loads (TMDLs) and waste load allocations (WLAs) for water quality limited segments. These priorities depend in part on where advanced waste treatment decisions are unresolved.

For further guidance on priority determinations, see references [24] through [26].

B. Developing Solutions

The second step in the problem-solving process, developing solutions, is essentially the planning phase. It includes development of permit conditions and planning for both point and nonpoint source controls.

1. Waste Load Allocations (WLAs)

For all water quality limited stream segments, the States must develop waste load allocations in order of priority. WLAs allocate the maximum daily load for particular pollutants among the dischargers on the segments. They serve as the basis of point source permit conditions on these segments.

One aspect of the allocations is point source/nonpoint source tradeoffs in situations involving nutrient loads and downstream eutrophication. Application of best management practices (BMPs) for nonpoint sources could make possible less-expensive treatment for point sources, while maintaining in-stream beneficial uses.

Recently, EPA has scrutinized, at Congressional request, existing waste load allocations for municipal dischargers and has found, in many instances, that they lack a firm technical and water quality basis. All WLAs for municipal and industrial discharges must accurately represent the maximum loads that the stream can assimilate without impairment of the designated or proposed beneficial uses. The Agency has issued technical guidance pertaining to development of WLAs for publicly-owned treatment works [B-8]. EPA is also developing further guidance which will be issued early in 1980. For more information on modeling and waste load allocations, see the list of publications in reference [27].

2. Permit Conditions

With the information from preceding steps, the next step in the problem-solving process is to set permit conditions. NPDES permits for point sources under section 402 of the Clean Water Act typically include effluent limits for various pollutants, expressed in concentrations or total loads; schedules of compliance for dischargers not already in compliance; and requirements for self-monitoring and reporting. In the case of publicly-owned treatment works, the permit also includes requirements for residuals disposal under section 405 of the Act.

EPA, or the State if it has permit authority, calculates NPDES permit conditions for industry based on EPA's effluent guidelines and any applicable waste load allocations. Permits vary depending on the type of industry,

whether it is a new or existing source, and whether it is on a water quality limited segment. Permits for POTW's are calculated similarly, based on EPA's definition of "best practicable waste treatment technology" (BPWTT). Point sources which don't lend themselves to traditional end-of-pipe treatment, such as discharges from storm sewers, receive general NPDES permits. The permit conditions may include required management practices, general guidelines, or monitoring and reporting requirements.

In addition to the NPDES permits which the States or EPA administer under the CWA, EPA also administers dredge and fill permits under section 404 and is developing permit programs for underground injection (SDWA) and hazardous waste disposal (RCRA). To streamline the permit process, EPA has recently proposed regulations [30] for integration of surface, underground, residual, dredge and fill, and hazardous permits for point sources. For more information, see references [28] through [31].

3. Planning for Municipal Systems

At the project level, owners/operators of publicly-owned municipal treatment works conduct necessary planning with Step 1 construction grants. The Step 1 facility plans--which include public participation--investigate the cost-effectiveness of various engineering alternatives, select the most cost-effective options, and investigate other technical matters such as pretreatment requirements, user chargers, operations and maintenance costs, industrial cost recovery, and infiltration/inflow.

State and areawide WQM planning agencies, also with public participation, look at municipal waste treatment problems from a broader perspective--financially, geographically, technologically, and institutionally. In the initial phases of the 208 grant program, from FY 74-79, many areawide agencies used 208 grants to study areawide treatment issues for municipal point sources. Now, in the continuing planning phase (FY 80 and beyond) 208 grants may not be used for point source planning, but the States and designated area-wide agencies still have an interest in planning for treatment works. Several 208 grants EPA awarded in FY 79 have multi-year periods of performance, and the States may use other-than-208 funds to support areawide planning activities.

Fiscal/financial management analysis is an important part of planning for sewage treatment facilities. Structural controls are expensive, and must be economically feasible in the communities they serve. Recent EPA thrusts in planning for municipal systems--land treatment, water conservation, innovative/alternative technology--are partially intended to mitigate the monetary costs of treatment or to advance technology which will eventually be more economical. Water Planning Division is also providing financial management technical assistance to selected State and areawide agencies through a contract.

For further guidance on planning for municipal systems, see references [32] through [36].

4. Nonpoint Source Control Requirements

In accordance with their problem assessments and nonpoint source control priorities, States and areawide agencies develop best management practices (BMPs) for controlling nonpoint source pollution. BMPs are defined as the most practical means of controlling or reducing pollution from nonpoint sources, considering technological, economic, and institutional factors. They may include structural controls, nonstructural controls, or a combination.

Fiscal/financial and management analysis is also an important part of BMP development, since BMPs will not be accepted, and may be counterproductive, if they are too burdensome on the person or entity required to implement them.

Although cost-effective BMPs exist for some problems, such as construction runoff and failing septic systems, BMPs for such problems as urban storm runoff and agricultural runoff are not fully tested. For this reason, designated State and areawide WQM planning agencies are testing BMPs in prototype or pilot projects. When complete, these prototypes will provide a technological basis for control which EPA can transfer to States and areawides nationwide.

The prototype projects also test the financial, institutional, and political aspects of controls. State, areawide, and local planners work with local elected officials and the public on institutional arrangements, public support, and sources of funding for selected controls.

For more information on BMPs, see references [37] through [42] and WQM Policy Memorandum B-3.

C. Implementing Solutions

This part of the process is the problem-solving step. It involves agreements on duties, incorporation of problem-solving into budget processes, administration of regulatory programs, and other related efforts.

1. Agreements on Institutional Responsibility

The first step for State and areawide agencies in implementing solutions to water quality problems is developing agreements on institutional responsibility. State and areawide WQM plans identify agencies with authority and capability to implement all aspects of the plan, and the Governor designates these agencies as WQM management agencies. The planning agency and the management agency develop a long-term agreement detailing the steps each agency will take to implement the plan, and a schedule for doing so.

Generally, different institutions handle different problems. Cities, counties, special service districts, or interjurisdictional compact agencies normally handle municipal waste treatment problems, while soil conservation districts or county governments are more likely to handle rural nonpoint source problems. For more information on management agencies, see references [43] and [44].

2. State and Local Budget Processes

Incorporating management of water quality in State and local budgets is another basic implementation activity. State and local management agencies must develop systematic approaches to financial management and budgeting. Ad hoc requests for funding, or over-reliance on Federal funding, are not suitable long-term substitutes for effective financial planning.

State and areawide planning agencies incorporate fiscal/financial planning in their WQM plans. They identify cost-effective solutions to problems, determine the costs to local taxpayers, develop sound plans to defray the costs, and attempt to motivate political action to implement the plan.

In response to the need to improve financial planning and analysis for water quality management at all levels of government, the Water Planning Division has instituted a Financial Management Assistance Project (FMAP) to provide State, areawide, and local agencies with tools and techniques to finance implementation. For further information on the FMAP and this subject area, see reference [45].

3. Permit Issuance and Enforcement

As discussed above, EPA issues different types of permits (surface discharge, residuals disposal, dredge and fill, underground injection, and hazardous waste disposal) which may be integrated to streamline the permit process in the near future. Some States and local governments also have permit programs.

Enforcement is generally the responsibility of the permit-issuing agency, and is a critical part of implementation. As with other aspects of the process, it is necessary to set enforcement priorities. As a rule, enforcement aims first at chronic violators, major dischargers, and potential dischargers of toxic substances.

For further information on permit issuance and enforcement, see references [28] through [31].

4. Other Regulatory and Non-regulatory Programs

In addition to permit-based regulatory programs for point sources, there are other regulatory and non-regulatory approaches for nonpoint sources. Such programs are generally State or local initiatives, and many States and local governments are planning such programs through the WQM planning process.

For EPA to approve a nonpoint source regulatory program in a WQM plan, such as a permit, license, or bond program, it must include authority to control the problem, monitor activity, and enforce the program. Also, the designated management agency must have adequate expertise, staff, funding, and authority.

In the absence of regulatory programs, voluntary compliance programs may work to control pollution. Such programs usually depend on education, citizen involvement, and self-monitoring. For EPA to approve a non-regulatory program, the Regional Administrator must determine that it will result in implementation of needed controls and achievement of water quality goals.

For more information on these regulatory and non-regulatory programs see WQM Policy Memorandum B-2 and references [45] and [46].

5. Structural Solutions

Although there are many non-structural solutions to water quality problems, in some instances construction is appropriate. EPA's construction grants program has awarded \$28.8 billion in grants since 1972 for construction of treatment plants, interceptors, sewers, and appurtenances. The 1977 Amendments to the Clean Water Act [5] provided an incentive for innovative and alternative treatment works, by raising the Federal share of the cost of such projects from 75 to 85 percent. Innovative/alternative projects are those which reuse or reclaim wastewater, recover nutrients and other pollutants in wastewater or sludge, or conserve or recover energy.

There are, in addition to treatment plants and sewers, other structural solutions, such as detention basins for urban storm runoff, recharge systems for ground water, irrigation systems which reclaim waste water, and erosion control barriers. In general, States, local agencies, or private concerns must fund these structures themselves, or obtain funds from outside EPA.

If a structural solution involves multiple purposes, one of which is wastewater treatment, it may be eligible for a construction grant under EPA's policy on multi-purpose projects. The purposes most often combined with wastewater treatment are reclamation of effluent and disposal of refuse. EPA's policies on multi-purpose project funding are under review.

For more information on structural solutions to water quality problems, see reference [47].

6. Cost-Sharing for Agriculture

The 1977 Amendments [5] provide an incentive for solving agricultural and other rural pollution problems through the Rural Clean Water Program (section 208 (j)). Under this program, cost-sharing will be available from USDA for implementing agricultural portions of approved State and areawide WQM plans. Some States, such as Wisconsin, Iowa, and Minnesota, also have their own cost-sharing programs.

In the RCWP program, USDA enters into five-to-ten year contracts with land owners in high-priority areas which WQM plans have identified. Land-owners receive technical assistance and cost-sharing to implement BMPs for sediment, pesticides, and nutrient controls consistent with approved WQM plans. The Soil Conservation Service (USDA) administers the RCWP program.

The USDA and EPA issued final regulations for the RCWP program in November, 1978 [49], but the Congress did not fund the program in FY 79. For FY 80, a House-Senate conference committee has agreed upon \$50 million for RCWP funding. The funds are directed to the Agricultural Conservation and Stabilization Service, USDA. At the time of this guidance, further details of the appropriation language are unknown.

For more information on cost-sharing for agriculture, see references [48] through [52].

7. Sanctions and Incentives

Where other attempts to solve water quality problems have failed, EPA or a State may wish to apply sanctions. Sanctions may be against a single discharger, a local or areawide agency, or the State itself.

If a municipal or industrial discharger violates its NPDES permit, the resulting sanction is permit enforcement. Dischargers may be subject to both civil and criminal penalties for polluting. (Note that EPA or the States will not usually impose sanctions against municipalities that are too far down the priority list to receive construction grants to correct their problems.)

If a management agency designated to implement a certified/approved WQM plan fails to carry out its agreed-upon duties, the State may withdraw the management agency designation and transfer the authority to another agency or the State itself. In extreme cases, EPA could rule an agency not deserving of public trust, which would exclude it from all Federal funding.

Finally, if a Regional Administrator feels a State is not implementing its certified and approved WQM plan, he or she may rule that the State's continuing planning process is inadequate and withhold State assistance or revoke its NPDES delegation, if any.

Some incentives exist as possible alternatives to sanctions. One example is the "payment in lieu of a fine," where a discharger/operator faced with a fine may contribute to the solution of an environmental problem in lieu of, or in addition to, a fine. Other examples are Small Business Administration (SBA) loans; accelerated tax write-offs for industrial/commercial pollution control; awards and honors; and grants from discretionary funds as rewards for superior performance. Also, EPA's 75 percent-Federal-share construction grants program is an incentive for implementation of solutions to municipal waste treatment problems.

For more information on sanctions and incentives, see references [53] and [54].

D. Evaluating Progress

Evaluation establishes the feedback loop in the problem-solving process to keep management, planning, and implementation moving in the right direction. Results of various evaluations affect State and areawide budgets,

work plans, and detailed problem-solving activities. Theoretically, evaluation is the comparison of actual performance or status to an idealized system model. Thus, evaluation depends on an understanding of what is required and desirable.

Evaluation activities weave through the problem-solving process, and break down into four general areas: evaluation of outputs, water quality, trends, and institutional aspects.

1. Evaluating Outputs

The States, EPA, and others must evaluate permits, construction grants, WQM plans, facility plans, and other plans (such as State Implementation Plans for air quality) to ensure they are consistent with each other and with all relevant laws and regulations. EPA, the States, and areawide agencies should have procedures for evaluating such outputs, such as formal A-95 review, work groups, and task forces. Outputs must be consistent not only with the Clean Water Act, but also with Presidential directives and other major environmental legislation.* Many laws have built-in consistency requirements, such as the requirements of sections 176(c) and 316 of the Clean Air Act and sections 208(d) and (e) of the Clean Water Act.

Evaluation of construction outputs is an important aspect of the Construction Grants program. EPA has made arrangements with the Corps of Engineers to conduct inspections at construction sites and to evaluate plans and specs to ease the burden on EPA and provide expert evaluation of construction progress.

Also, the EPA Regions meet annually with the States and areawide agencies receiving section 208 grants to determine how all parties have performed against the commitments they made in their work plans and State/EPA Agreements. These reviews focus on completion of quantifiable outputs, and lead to mid-course corrections or adjustments to subsequent years' work plans.

2. Evaluating Water Quality

The ultimate test of any environmental program is whether it meets its overall objectives of environmental protection. For water programs, this means protecting or improving water quality in such a way that problems aren't simply transferred to other media--the air and the land.

Through monitoring and other observations, EPA, the States, areawide agencies, local agencies, and the public continuously evaluate water quality.

* For example: Clean Air Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, Toxic Substances Control Act, National Environmental Policy Act, Wild and Scenic Rivers Act.

Is water quality improving, staying the same, or going downhill? Are numerical criteria being met? Are designated uses being met, or are they denied? Are designated stream uses justified--or are they too optimistic or pessimistic? Is stream biology healthy? Is ground water being protected from overdrafting and contamination? Are residuals properly disposed of, recycled, or reused? And finally, where problems exist, what is causing them?

3. Evaluating Trends

Because pollution is a dynamic problem, trend analysis is a key part of evaluation. The key variable in trend analysis is population and economic growth or decline. It is possible that, in some instances, population and economic growth could cancel out improvements in water quality which the problem-solving process achieved.

Through their planning processes, State, areawide, and local agencies evaluate the impacts of population/economic growth on domestic waste generation, industrial waste generation, sediment production and transfer, pollution from nutrients and pesticides, ground cover, land use, water demand and withdrawals, or other factors. One trend which they monitor is the build-up of toxic pollutants in the environment and in aquatic life, particularly fish and shellfish.

4. Evaluating Institutional Aspects

When assessing the causes of water pollution, it is sometimes impossible to separate the technical problems from the related institutional and political problems. Thus, agencies must evaluate the institutional aspects of their programs. Some mechanisms for doing this are WQM plans, the mid-year reviews of States and areawide agencies, and the management agency evaluations which the States perform. (See State and Areawide Management of the WQM Process, below).

The WQM regulations [1] set up criteria for making institutional evaluations. Some important considerations are:

Do management agencies have adequate authority to control pollution? Do they have adequate fiscal/financial expertise? Are staffing, training, and salary scales adequate? Do the agencies perform adequate monitoring and enforcement? Are activities coordinated? Do the responsible agencies understand the laws and regulations? Is EPA guidance adequate? Is the agency encouraging and providing for public participation, is the public involvement broad-based, and does the public support the agency's actions?

Questions such as these set the tone for institutional evaluations. Depending on the answers, the agencies involved may take corrective action in the areas of management, planning, legislation, and training.

V. STATE AND AREAWIDE MANAGEMENT OF THE WQM PROCESS

The problem-solving process depends on the coordinated efforts of many programs and agencies for its success. This section of the guidance recommends management procedures for the WQM portions of the process, that is, those activities the States and areawide agencies conduct under sections 106, 208, and 303(e) of the Act and the WQM regulations.*

This portion of the guidance augments the regulations with descriptions of management procedures, identification of required outputs, and references to detailed guidance. The thrust of this portion of the guidance is to promote active, rather than reactive, management of the WQM program on the part of all participants.

The State/areawide management process for the WQM program breaks down into seven annual components, discussed in detail immediately below. The seven components are:

- (1) assessing water quality problems
- (2) developing the five-year State strategy
- (3) developing the WQM portion of the draft State/EPA Agreement
- (4) developing detailed State and areawide work programs
- (5) developing the WQM portion of the final State/EPA Agreement
- (6) implementing the work program and the State/EPA Agreement
- (7) evaluating progress

* Although this guidance is geared toward State and areawide agencies and their management of 106 and 208 grants, it also applies generally to Interstate Basin Commissions which receive grants under section 106. The Interstate Commissions participate in problem assessment, develop work programs and implement them, evaluate their progress, and participate in the development of State/EPA Agreements for the States in their basins. For details on the role of the Interstate Basin Commissions, see the WQM regulations (35.1540) and WQM Policy Memorandum B-1. The affected Interstate Commissions are NEIWPCC, ISC, DRBC, INCOPOT, SRBC, and ORSANCO.

EPA is making every effort to manage the WQM program on a rational annual cycle, geared toward obligations of most 106 and 208 grants no later than the end of the second fiscal quarter, with no carry-over of unobligated funds past the fourth quarter.

To promote the concept of a predictable, annual planning cycle for the WQM program, the guidance below contains certain deadlines and recommendations on the timing of various steps. The relationships of the steps appear in the WQM time-line, Figure I.

A. Assessing Water Quality Problems

1. Discussion

The first task in State and areawide management of the WQM program is to establish a process for assessing water quality problems. Agencies must assess both existing conditions and anticipated conditions resulting from changes in land use, population, and the economy. The assessment process includes both point and nonpoint sources.

The WQM regulations [1] require no hard outputs from the assessment process except for the biennial 305(b) report, but the process builds a basis for subsequent work on State/EPA Agreements, State strategies, and work programs. Each State/EPA Agreement should include a brief problem statement [9].

Assessing water quality problems is generally a State responsibility, although EPA also has a role, especially in the monitoring and assessment of toxic pollutants. Areawide agencies also may conduct portions of the assessment with the approval of the Regional Administrator. State monitoring programs provide most of the data. Some States have begun to employ environmental indices to assist with the critical assessment functions of ranking segments and discerning trends.

In keeping with EPA's emphasis on integration, State and areawide agencies should attempt to integrate their various problem assessments and review data from all relevant sources, for example, approved WQM plans and Clean Lakes Assessments (CWA*), the Open Dump Inventory (RCRA*), and the Surface Impoundment Assessment (SDWA*).

* CWA--Clean Water Act

RCRA--Resource Conservation and Recovery Act

SDWA--Safe Drinking Water Act

FIGURE I
RECOMMENDED WQM MANAGEMENT TIME-LINE

MANAGEMENT ACTIVITY	FY 80				FY 81			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
assessing water quality problems								
developing the five-year State strategy								
developing WQM portion of draft State/EPA Agreement								
developing detailed State and areawide work programs								
developing WQM portion of final State/EPA Agreement								
implementing work program and State/EPA Agreement								
evaluating progress								

2. Recommended Management Procedures

The States and areawide agencies should manage the problem assessment process in accordance with the regulations and appropriate guidance. Each State should review EPA assessment guidance, work with the Regional Office to agree on review procedures and assistance, analyze the data and develop the State position on where problems exist, and review the State's position with the Region. Recommended steps for the process are:

- o The States should review EPA Headquarters guidance on assessments [16 - 23] and additional guidance the Regional Offices provide for the particular Region or State.
- o The States should work with the Regional Office to agree on assessment process review procedures, including format, timing, and annual v. biennial requirements. They should also agree on necessary technical assistance the Regions will provide.
- o States should analyze available data and develop information on attainability of beneficial uses; appropriateness of existing standards and stream classifications; sources of pollution; projected loads; and current and projected abatement. Based on these findings, the States may make recommendations for further assessment work in upcoming work programs.
- o The States should review the results of their assessments with the Regions and agree upon desired changes in methods, procedures, or content.
- o Areawide agencies should, after negotiations with the States and EPA, conduct assessment activities crucial to their area.

3. Required Outputs

STATE OUTPUT -- biennial 305(b) report in even-numbered years

B. Developing the Five-Year State Strategy

1. Discussion

According to the WQM regulations [1], each State must prepare and update annually a strategy for controlling pollution from point and nonpoint sources. Long-term strategies are an essential component of the State WQM programs, where they drive subsequent efforts on work programs and State/EPA Agreements.

The strategies include environmental goals for a five-year period, priority water quality problems, estimated costs of activities to control the problems, identification of responsible entities, and a summary of anticipated funding. They should address the problems and priorities which certified/approved WQM plans have identified, other problems the State has identified in its problem assessment process, and any needs related to problems with management agency performance.

A major emphasis of the strategy should be on solving specific environmental problems in specific locations, consistent with EPA guidance and current EPA policy expressed in the WQM FY 80 Baseline Strategy [3]. The strategies should also discuss long-range objectives for those areas the States fund with their 106 grants--such as monitoring, enforcement, permitting, and management--and explain how these activities contribute to the solutions of priority problems.

The States must involve areawide agencies and interested publics in the development of the strategies, and the Regional Administrators will use the State strategies in their reviews of areawide work programs. Also, in accordance with EPA's emphasis on integration, the Regional Administrator has flexibility to allow a State to develop an integrated water quality/drinking water/solid waste strategy or more comprehensive integrated strategy.

2. Recommended Management Procedures

The State strategy, like the problem assessment process, is primarily a State responsibility, although the areawide agencies and others have important inputs. The recommended process for developing the State strategies is for the States to review EPA criteria and guidance with the Regions to agree on expectations, analyze alternative strategies, select a State strategy, and--throughout the process--involve areawide agencies and the public.

The specific recommended management steps are:

- o The States should review the WQM regulations and additional guidance the Regions provide for the particular Region or State. The States should work with the Regional Offices to agree on review procedures, timing, the roles of the various parties, and what constitutes approval.

- o Public participation: The States must inform the public about the proposed goals and scope of the State strategy early in the process of its development and schedule opportunities to consult with the public and the State WQM advisory committee. Consultation with the public could occur simultaneously with advisory committee consultation, or it could be accomplished by a separate meeting or other less-formal means.
- o The States should identify possible alternative strategies and--to the extent time and resources allow--analyze them for cost-effectiveness, funding needs, consistency with national strategies, and other factors. The States should then select strategies and submit them to the Regions.

3. Required Outputs

STATE OUTPUT -- annual five-year State strategy with public responsiveness summary

-- summary of areawide involvement and comments

C. Developing the WQM Portion of the Draft State/EPA Agreement

1. Discussion

With consideration for the problem assessment process, and based on their five-year strategies, each State should begin to develop draft State/EPA Agreements and WQM work programs at least six months prior to the start of each fiscal year. Development of draft State/EPA Agreements and WQM work programs is simultaneous, with much interaction between the two efforts. The final State/EPA Agreement eventually incorporates the State's WQM work program, either directly or by reference.

In keeping with EPA's policy of conducting the 106 and 208 grant programs on a rational annual cycle with grant awards early in the fiscal year and no carry-over, State/EPA Agreements must address the use of funds for the same fiscal year the Agreements cover. For example, FY 81 Agreements must include plans and priorities for the use of FY 81 208 grants.

The States must involve the areawide agencies and interested members of the public in the preparation of the draft Agreements and submit summaries of their participation with the drafts. The areawide agencies may also comment directly to EPA. The draft Agreement usually sets forth high-priority problems, goals, and objectives for the upcoming year and serves as a basis for negotiation.

It is important to note that the WQM program is just one of many programs covered by the Agreements. States, areawide agencies, and EPA Regional

Offices should consider opportunities for integration involving the WQM program, as well as possibilities for conflicts, during this stage of their management process.

2. Recommended Management Procedures

Through the State's designated contact person, the State WQM staff should work with the EPA Region to establish ground rules on the development of the draft Agreement. Along with other covered programs, they should develop internal review procedures for the draft, develop a framework of State priorities based on the State strategy, involve the areawide agencies and the public, and provide WQM input to the draft Agreement. The specific steps in the recommended process are:

- o State water quality management staff, working with other covered programs, should review EPA national guidance on State/EPA Agreements [9]. Through the State's Agreement contact, they should agree with the Region on reporting, accounting, consistency, timing, submission, public participation, and other details.
- o Each State should develop internal review procedures among covered programs and coordinate them with the Region. State water quality staff should understand what solid waste and drinking water staff will contribute and how the draft Agreement relates to the problem assessment process and strategy. They should also consider EPA's national WQM strategy [3], prior performance evaluations, and other factors.
- o The States should develop and implement procedures for obtaining areawide agency input into the draft Agreements in accordance with the regulations and EPA guidance [9].
- o Public Participation: The States must inform the public of proposed goals and scope of the Agreement early in the process of its development and schedule opportunities to consult with the State WQM advisory committee and the public on the contents of the draft.
- o Finally, the State should develop a position based on the State strategy (i.e., a framework of priorities for a one-year period) and prepare a draft State/EPA Agreement.

3. Required Outputs

- STATE OUTPUTS -- information to assist public participation in State/EPA Agreement development
- summary of areawide involvement, comments, and State responses with the draft Agreement
 - public responsiveness summary
 - draft State/EPA Agreement

D. Developing Detailed State and Areawide Work Programs

1. Discussion

General. States and areawide agencies develop their detailed work programs on approximately the same schedule as their State/EPA Agreements. The WQM regulations [1] call for draft WQM work programs on June 1, and final work programs September 1. Conceptually, the WQM work program has close ties to both the State/EPA Agreement and the State Five-Year Strategy. Although these documents have different purposes and audiences, together they represent the whole WQM program within a State.

State and areawide work programs should stress quantifiable objectives and outputs so that EPA, the public, and the grantees themselves can accurately assess their progress. The work programs should also reflect the problem-solving emphasis of the WQM program, especially for section 208 grants. It is EPA policy, starting in FY 80, that 106 and 208 grants will be based on actual needs, rather than arbitrary formulas. (For more details on funding policies, see the WQM Strategy [3] and WQM Policy Memo A-2.)

With respect to section 208 grants, Water Planning Division has recently adopted a policy of reviewing each Region's needs for 208 funds prior to allocating funds to the Region. For FY 80 grants, this review is taking place in September, 1979. For FY 81 grants, the review may be earlier in the year to allow the Regions and States more time to finalize their work programs. The Headquarters 208 needs review, however, is based only on brief project proposals, not on work programs.

The work programs should not be overly long. In the past, the tendency of many grantees has been to provide too much detail, obscuring the important objectives and outputs. The revised WQM regulations [1] represent a significant simplification over the old regulations [6] in terms of the number of documents they require each year and the detail they must contain.

Scope. State work programs cover the 16 program elements found in 40 CFR 1513-5(c), although they need not necessarily be organized along the same lines. The State work program covers all activities the State will fund with 106 and 208 grants, as well as Clean Lakes grants (section 314) and permitting actions they are funding with 205(g) grants. To give the State and areawide agencies an idea how much 106 and 208 funds are available, the WQM FY 80 Baseline Strategy [3] provides funding targets which they should use to determine the scope of their work programs.

Areawide work programs, which are separate from State work programs, cover only water quality management planning activities under section 208, unless the State desires to pass through 106, 205(g), or other funds to the areawide agency to perform specific tasks.

Contents. According to the regulations [1], work programs must contain a summary of the current year's program including the status of outputs planned for the year, and an identification of outputs the agency will produce in the upcoming year. For each output, the work program must show the cost, the sources of funds, important milestones, the name of the responsible agency or department, and certain other information the regulations require.

The Regions and States have flexibility in deciding on work program formats and on how much detail they need to manage the WQM program effectively. For example, although the regulations do not require it, many Regions will continue to require separate work programs for each problem-solving project they support with 208 grants. However, State and areawide work programs should assume more of a problem orientation than a program orientation in keeping with the WQM problem-solving strategy.

Public participation activities must be integrated into WQM planning activities and reflected in the work program for each activity. However, a separate public participation work program must also be included. This work program must provide for an advisory committee which meets the requirements of 40 CFR 25.7 and 35.1507 and must contain all of the information required in 40 CFR 25.11 [8]. The public participation work program has four major objectives:

- to assure the development of a program for involving the public in substantive and technical policy decisions
- to assure that the program is ready to begin at the onset of the grant-supported activity
- to assist EPA and the public to determine whether the total public participation effort is adequate
- to inform the public of their specific opportunities to be involved in decision making

The public participation work program should state, in clear language, the decisions which will be made in the course of the planning process, with a schedule which indicates, at least approximately, when the decisions will be made. The schedule should indicate the types of opportunities the public will have to contribute their views, e.g., public hearings, opportunities to make written comments, and public meetings.

In general, public participation programs should not focus on general education, but should be directed toward informing and involving the public in specific decisions.

Approval. By regulation, EPA may not award a 106, 208, or 314 grant to any agency without an approved work program including a public participation work program. Conditional work program approvals are allowed, however.

2. Recommended Management Procedures

The management procedures for work program development involve coordination of State and areawide work programs, comparison of past performance and proposed actions, and involvement of technical experts in work program formulation. The recommended steps in the management process are:

- o Each State should notify the areawide agencies of the elements of the State's proposed program early in the process of work program development, generally by April 1. Likewise, the areawide agencies should inform the States of the proposed elements of their work programs to give the States an opportunity to review and comment.
- o The States and areawides should consider Regional Office comments concerning problems, priorities, activities, and funding. They should also factor in the results of the Water Planning Division (HQ) review of 208 funding needs before finalizing their work programs.
- o The States and areawides should develop internal work program review procedures and work with each other and the EPA Region to agree on expectations for review, updating, approval, and timing.
- o The States and areawides should consider variation between the previous year's work program commitments and actual progress and address these variations during work program development.
- o Public Participation: The States and areawides must provide the public with information about the proposed goals and scope of the work program early in the process of its development, consult with the public and the agency's advisory group, hold a public meeting on the draft work program, prepare a responsiveness summary describing the agency's action with respect to public comments, and distribute the responsiveness summary to the public.
- o The States and areawides should identify alternative outputs, in keeping with the State strategy and State/EPA Agreement and--to the extent that time and resources allow--analyze the alternatives for cost-effectiveness, resource commitments, conflict potential, relationship to national priorities, and other factors. Based on this analysis, the agencies should select the most appropriate outputs
- o States and areawides should request the assistance of national technical assistance contractors for work program development as appropriate.
- o States and areawides should submit their draft work programs to the Regions by June 1, or another date the Regional Administrator agrees to. See required outputs, below.

3. Required Outputs

- STATE OUTPUTS
- policy framework for areawides, approximately April 1
 - comments on draft areawide work programs to EPA and areawide agencies within 45 days of receipt
 - draft work program to Regional Administrator by June 1 (or other date suitable to RA) with responsiveness summaries
 - modified work programs, as necessary, after conditional approval
 - conflict resolution procedures for FY 80 work program per 35.1517(b)
 - final work program, September 1
 - distribute public participation work program to the public
- AREAWIDE OUTPUTS
- proposed work program elements to State early in the process of work program development
 - draft work programs to State and Region by June 1 (or other date suitable to RA) with responsiveness summaries
 - modified work programs, as necessary, after conditional approval
 - final work program, September 1
 - distribute public participation work program to the public

E. Developing the WQM Portions of the Final State/EPA Agreements

1. Discussion

The final State/EPA Agreements represent commitments of the States and EPA to perform environmental management activities, including the WQM program and other programs. According to EPA guidance [9], the final Agreements contain (1) a brief statement of problems, goals, and objectives, (2) a detailed work program or reference thereto, (3) a summary of major integrated work elements, (4) any other information which the Regional Administrator requires, and (5) a signature page.

After the final Agreement is signed, the Regions and States cooperate on preparing grant applications. The Agreements may constitute the narrative portions of the State's WQM grant applications (i.e., for 106, 208, and 314 grants) to save paperwork and repetitious applications.

The areawide agencies generally apply directly to EPA for grants after the State/EPA Agreements are signed. In some States, however, the States pass funds through to the areawides, eliminating the need for them to apply to EPA.

2. Recommended Management Procedures

The management procedures for developing final State/EPA Agreements are straightforward. The States and areawides review EPA comments on draft Agreements and work programs, negotiate changes, finalize the Agreements, and work with the Regions on grant applications. Recommended management steps are:

- o State and areawide agencies should review EPA Regional Office comments on the draft State/EPA Agreements and work programs and negotiate changes from the drafts. *
- o Public Participation: States and areawide agencies should consult with their advisory groups and the public if changes envisioned in the final Agreements will depart substantially from public comments on the draft.
- o Based on negotiations and public participation, the States and EPA should finalize the Agreements and sign them.
- o States and areawides then work with the Regional Office to develop procedures for grant application, administration, and evaluation to the extent these topics are not covered in the Agreements themselves.
- o States and areawides prepare grant applications in accordance with the agreed-upon procedures.

3. Required Outputs

STATE OUTPUTS -- final State/EPA Agreement

 -- grant applications based on signed Agreements

AREAWIDE OUTPUTS -- grant applications based on signed Agreements

F. Implementing the Work Programs and State/EPA Agreements

1. Discussion

Once State/EPA Agreements are signed, program participants implement the Agreements and the work programs they include. EPA, as well as the States and areawides, is responsible for carrying out its commitments under the Agreements.

Implementing the work programs and Agreements amounts to implementing the problem-solving process described in section IV, above. States, areawide agencies, and local units of government participate in planning, permitting and enforcement, construction grants, water quality standards, waste load allocations, nonpoint source management, wetlands protection, monitoring, training, lake restoration, and other efforts.

The specific priorities of the 208-funded portions of the WQM program are solving the problems identified in the initial WQM plans, particularly urban runoff, nonpoint sources, and groundwater pollution. The overall program goal is to help States and local governments manage the decision-making process to meet the water quality goals of the Act.

To assist State and areawide agencies, the Water Planning Division has contracted with expert consultant consortia in the areas of urban runoff, advanced waste treatment, groundwater protection, and fiscal/financial management. These contractors assist EPA in the areas of work program development, project management, and evaluation of results.

EPA is placing increasing emphasis on the use of site-specific nonpoint source prototype projects to develop a data base which all the States and areawides can use to solve their nonpoint source problems. (For further discussion of this topic, see the WQM FY 80 Baseline Strategy [3].) Thus, the State and areawide agencies both manage prototype projects in such areas as urban runoff and agricultural nonpoint source control, and use the results of other prototype projects, which EPA provides, to solve problems.

2. Recommended Management Procedures

Management of this phase of the WQM program involves managing the flow of information and resources to and from the State and areawide agencies and the public. The States and areawides receive assistance from EPA and tap into EPA information exchange mechanisms. They also provide information useful to other agencies on control techniques and institutional aspects. The public participates in the various activities of the State and areawide agencies, providing feedback and participating in the decision-making process.

The recommended management procedures for implementing the work programs and State/EPA Agreements are:

- o The States and areawide should identify assistance requirements, if they did not already do so in the State/EPA Agreements; review Regional operations manuals; and attend technical workshops which EPA organizes--to the extent that time and resources allow.
- o The States and areawides should tap EPA's information exchange mechanisms. They should use the information EPA provides to plan controls in their own areas, and provide EPA with information on their own projects which may be of use to others.
- o Public participation in carrying out work programs and Agreements must be in accord with the public participation work program and any requirements in the Agreement. A public hearing must be held on draft WQM plans which are ready to enter the certification/approval process. A responsiveness summary must be prepared following the hearing and made available to the public.
- o The States and areawides should take advantage of Regional Office and Headquarter technical assistance, especially the national experts under contract with Water Planning Division to provide assistance on urban runoff, groundwater, waste treatment facilities, and fiscal/financial management.
- o The States, with assistance from the Regional Offices, should manage a cost-effective monitoring program. The program should serve as a "floor" for all other actions, and is essential to the execution of State and areawide work programs.

3. Required Outputs

STATE OUTPUTS -- public hearings on draft WQM plan revisions*

* NOTE: This is not an annual requirement; this output is required only as plan revisions occur, as agreed upon in State and areawide work programs and State/EPA Agreements.

- draft plan revisions and public responsiveness summaries to EPA within 60 days of public hearings*
- certification letter to Regional Administrator within 120 days of receipt of plan*
- waste water treatment facility needs inventory and construction grant priority list; draft May 1, final July 15, each year
- water quality standards review and revision, at least every three years
- proposed RCWP projects, in priority order, to USDA
- management agency letters of commitment, with WQM plan revisions as appropriate

AREAWIDE OUTPUTS -- public hearings on draft WQM plan revisions*

- draft plan revisions and public responsiveness summaries to EPA within 60 days of public hearings*

G. Evaluating Progress

1. Discussion

Evaluation is a key part of the management of the WQM program. State and areawide agencies must evaluate the consistency of their actions with WQM plans, the adequacy of the State Continuing Planning Process, progress against work programs, performance of designated management agencies, and their own internal performance.

States and areawides should have a process to evaluate draft permits, construction grant applications, water quality standards revisions, and other plans for consistency with WQM plans. Consistency with State Implementation Plans (SIPs) for air pollution control is important, since section 316 of the Clean Air Act mandates consistency.

The State Continuing Planning Process description (CPP) is a relatively static document each State is required to have. The State should evaluate the CPP description to determine whether it needs to be changed to reflect changes in State or Federal laws, State organization, or State procedures for the WQM program.

* See footnote, previous page

State and areawide agencies participate in periodic evaluations with the Regional Offices of their progress against commitments in work programs. The regulations [1] call for a mid-year evaluation meeting to consider the need for mid-course corrections in current work programs or for adjustments to upcoming work programs. The mid-year evaluation must include a review of the agency's compliance with its public participation work program and the requirements of 40 CFR Part 25 [8], especially 25.12(a)(2).

Given the WQM program's emphasis on implementation of controls for specific problems, evaluation of designated management agencies is a key component of a State's evaluation system. Management agency evaluation is a State responsibility, and should be included in work programs. Management agency evaluation should focus on certified and approved WQM plans and management agency letters of commitment. Where the Regional Office feels it necessary, it may also evaluate the performance of management agencies.

Finally, although the regulations do not require it, each State and areawide agency should conduct an internal evaluation to determine where to raise skills, improve efficiency, or change the distribution of resources. State or areawide advisory committees should play a key role in such internal evaluations.

2. Recommended Management Procedures

The recommended management procedures which the States and areawides should use in the evaluation area are:

- o The State and areawide agencies should establish procedures in cooperation with the Regional Offices for evaluating draft permits, construction grant applications, water quality standards revisions, and other plans which affect them for consistency with certified/approved WQM plans.
- o The States should from time to time assess the need for CPP revisions, identify the necessary changes, review them with the Regional Office, modify the CPP description as required, and obtain EPA approval.
- o The States and areawide agencies should prepare for mid-year reviews by working with the Regions on timing and procedures for evaluation and by identifying schedule slippage and the reasons for it prior to the meetings. During the meetings, they should discuss recommendations for work plan revisions.
- o With the EPA Regions, the States should formulate evaluation plans for designated management agencies and incorporate the plans into their work programs. The State should delegate activities as appropriate. When evaluations are made, the State should provide feedback to the management agencies and/or make recommendations to the Governor and the Regional Office to change a management agency designation, impose sanctions, or take other corrective action.

- o The States and areawides should review internal performance, possibly through the use of individual performance contracts and similar management tools. The agencies should make internal recommendations for improvement through training, additional resources, or redefinition of duties. Advisory committees should have a major role in internal evaluations.

3. Required Outputs

- STATE OUTPUTS -- participation in mid-year evaluations with EPA Regional Office; modifications to work programs as appropriate
- CPP revisions, as appropriate
- management agency evaluations, as appropriate
- AREAWIDE OUTPUTS -- participation in mid-year evaluations with EPA Regional Office; modifications to work programs as appropriate

SUPPLEMENTAL WQM PROGRAM GUIDANCE

FOR FY 80

APPENDIX

WQM REFERENCE LIST

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2. US-EPA, Water Planning Division, "FY 79 Work Programs." December, 1978.
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6. 40 CFR, Subchapter D, Part 130, "Policies and Procedures for the State Continuing Planning Process." November, 1975.

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7. NRDC v. Train 396 F Supp 1386 (D.D.C. 1975), aff'd subnom NRDC v. Costle 564 F2 573 (D.C. circ 1977).
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9. US-EPA, Office of Water and Waste Management, "Programs Under Clean Water, Safe Drinking Water and Resource Conservation and Recovery Acts, Guidance for FY 1980 State/EPA Agreements." 40 FR 17294, March 21, 1979.
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11. US-EPA, Office of Planning and Management. "EPA Agency Guidance Fiscal Year 1980/81." April, 1979.

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13. US-EPA, Office of Water Planning and Standards, "Statement of Current Policy and Advance Notice of Proposed Rulemaking," 43 FR 29588, July 10, 1978.
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Identification of Priority Problems and Sources

24. US-EPA, Office of Water Planning and Standards, "Total Maximum Daily Loads Under Clean Water Act." 43 FR 60662, December 28, 1978.
25. US-EPA, Office of Water Program Operations, "Priority List Guidance for the Development and Management of FY 1980 State Project Priority Lists." (PRM76-6) January 8, 1979.

26. 40 CFR Part 35, Subpart E, "Grants for Construction of Treatment Works--Clean Water Act." September 27, 1978.

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27. US-EPA, Water Planning and Monitoring and Data Support Divisions, "Existing Policy and Technical Guidance on Wasteload Allocations for Advanced Treatment Planning." (INFO 79-98) August 14, 1979.

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45. US-EPA, Water Planning Division. "Section 208 Financial Management Assistance Project." (INFO 79-31) December, 1978.

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See References 28 through 31.

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45. CONSAD Research Corporation, "Evaluation of Cost-Effectiveness of Nonstructural Pollution Controls: A Manual for Water Quality Management Planning." April 30, 1976.
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49. Title 7--Agriculture, Chapter VI--Soil Conservation Service, Department of Agriculture, Subchapter D--Long Term Contracting, Part 634-- "Rural Clean Water Program." November 1, 1978.
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SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION A -- FUNDING

WQM Policy Memorandum A-1

INTERIM GUIDANCE, MINIMUM STANDARDS FOR PROCUREMENT UNDER SECTION 208*

Purpose

The purpose of this memorandum is to reiterate EPA policies and procedures concerning minimum standards for general procurement under section 208 grants pending final promulgation of 40 CFR Part 33 Subagreements; Grants regulations.

Background

The minimum standards for procurement contained in this memorandum were prepared to assist section 208 grantees in the procurement of services, supplies, and equipment necessary to complete approved work plans prior to the development of 40 CFR Part 33 Subagreements; grants regulations. This regulation was published as proposed on February 8, 1977, and stipulated that all procurement actions executed by section 208 grantees under grant awards and amendments after that date were to be governed by the proposed Part 33 regulations.

Policy

Procurement actions executed under grant awards and amendments prior to February 8, 1977, continue to be governed by the procedures outlined in this memorandum. For procurement actions executed under grant awards and amendments after February 8, 1977, the provisions of 40 CFR Part 33 Subagreement regulations, as proposed, continue to apply.

*Originally issued as SAM-14 (April 21, 1976) under signature of the Deputy Assistant Administrator for Water Planning and Standards and the Deputy Assistant Administrator for Resources Management; minor editorial changes have been made by the Water Planning Division.

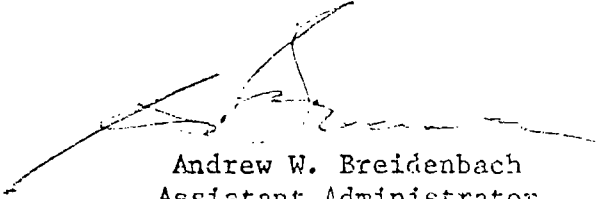
ENVIRONMENTAL PROTECTION AGENCY
GRANTS FOR STATE AND DESIGNATED AREAWIDE WATER
QUALITY MANAGEMENT

Minimum Standards for Procurement

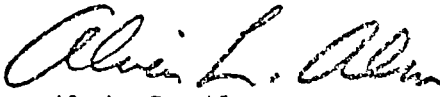
Interim Guidance

The following program guidance memorandum, distributed to Environmental Protection Agency Regional Offices, shall serve as interim guidance for Section 208 grantees in their procurement pending promulgation of final EPA regulations regarding minimum standards for procurement and other subagreement provisions under EPA grants. Proposed regulations were published on May 9, 1975, at FR 20296. It is anticipated that final regulations concerning the subject of the May 9, 1975, proposed regulations will be published in the near future.

Dated: APR 21 1976



Andrew W. Breidenbach
Assistant Administrator
for Water and Hazardous Materials



Alvin L. Alm
Assistant Administrator
for Planning and Management

CC: ALL REGIONAL ADMINISTRATORS

INTERIM GUIDANCE
MINIMUM STANDARDS FOR PROCUREMENT
UNDER SECTION 208 GRANTS

I. PURPOSE.

This interim guidance has been prepared to assist State and Areawide Planning agencies, funded under Section 208 grants, in their procurement, pending the promulgation of EPA's final rules setting minimum standards for procurement under grants (40 CFR Part 33, published in the Federal Register as proposed rules on May 9, 1975).

Section 208 grants are awarded and administered under 40 CFR Part 30. Subagreement regulations have been issued for EPA's construction grants program in Part 35. As an aid to 208 grantees wishing to supplement this interim guidance with more detailed information, it is recommended that the amendments to 40 CFR Part 35 (§§35.936, 35.937, 35.938, and 35.939), published in the Federal Register on December 17, 1975, be referred to for their appropriate use as guidance in general procurement. It should be noted that where there are substantive differences between this interim guidance and the subagreement regulations contained in Part 35, the provisions set forth in this interim guidance shall apply.

II. APPLICABILITY.

This interim guidance applies to all contracts solicited and executed after the effective date of this interim guidance.

In some cases, a subagreement may have been executed under a Section 208 grant prior to the effective date of this interim guidance. Such contracts are not affected by the requirements of this interim guidance. In other cases where 208 grantees have received proposals (but have not yet executed contracts), the selection and negotiation provisions contained herein need not apply. However, contract provisions, such as required provisions applicable to all procurement, shall apply to all pending contracts and any amendments to existing contracts.

III. GENERAL EPA POLICIES & PROCEDURES REGARDING PROCUREMENT.

A. Definition.

A subagreement is a written agreement between an EPA grantee and another party (other than a public agency) and any tier of agreement thereunder for the furnishing of services, supplies, or equipment necessary to complete the project for which a grant was awarded, including contracts and subcontracts for personal and professional services and purchase orders.

B. General Subagreement Requirements.

Subagreements must comply with the following general requirements:

- (1) Must be necessary for and directly related to the accomplishment of the project work (grantees are to avoid purchasing unnecessary or duplicative work);
- (2) Must be in the form of a bilaterally executed written agreement (except for small purchases);
- (3) Must be for monetary or in-kind consideration; and
- (4) May not be in the nature of a grant or gift.

C. Interagency Agreements and contracts with non-profit organizations.

Interagency agreements among and between public agencies are not treated as subagreements. However, interagency agreements must contain binding requirements and responsibilities mutually established and executed by the public agencies involved and must include an itemized breakdown of costs in the statement of work. State and local practices associated with interagency agreements shall be used as the prevailing policy in determining if such work under a Section 208 grant shall be conducted under an agreement or contract with another public agency.

Contracts with non-profit organizations (such as universities) need not be subject to the solicitation and selection procedures applicable to all other procurement. They are, however, subject to the same cost/price analysis requirements and procedures contained in this interim guidance.

D. Grantee Responsibility.

Section 208 grantees are responsible for the administration and successful accomplishment of the project and for the proper administration and settlement of contractual and administrative issues related to subagreements made under the grant.

E. Grantee Procurement Systems.

Grantees are free to use their own procurement systems provided that procurements made under an EPA grant adhere to the interim minimum standards set forth in this guidance. In some cases, 208 grantees may choose to contract with other governmental units on the State and local levels for procurement services. Such services may, for example, permit another governmental unit to act as the procurement agent for the 208 grantee or may be in the form of advice and consultation with the

grantee in establishing a sound procurement system. Procurement services obtained from other governmental units, however, must comply with the minimum standards set forth in this interim guidance.

Applicable requirements of State and local laws and ordinances apply to the extent that such requirements do not conflict with Federal laws and meet these interim minimum standards for procurement.

F. Competition.

It is the policy of the Environmental Protection Agency to encourage free and open competition appropriate to the type of work to be performed.

G. Type of Contract (Subagreement).

The requirements of §§35.937-1 and 35.938-3, governing the type of contract permitted under EPA grants, shall apply. The cost-plus-percentage-of-cost and the percentage-of-construction-cost types of contracts are prohibited. It is anticipated that the most appropriate type of subagreement in most instances for 208 will be a cost-reimbursement type of contract.

H. Profit.

Only fair and reasonable profits may be earned by contractors in subagreements under a 208 planning grant. (EPA, in its own procurement, uses a set of profit evaluation guidelines--see 41 CFR 15-3.808-50--which grantees may utilize, as appropriate, if they desire a formal system of determining profit. Similar guidelines will shortly be included in the EPA Grants Administration Manual.)

I. Small and Minority Business.

Section 208 grantees must show positive efforts to utilize small business and minority-owned business sources of supplies and services. Such efforts should allow these sources the maximum feasible opportunity to obtain contracts or subcontracts for work to be performed under the grant.

J. Small Purchases.

A small purchase is the procurement of materials, supplies, and services when the aggregate amount involved in any one transaction does not exceed \$10,000. The small purchase limitation of \$10,000 applies to

the aggregate total of an order, including all estimated handling and freight charges, overhead, and profit to be paid under the order. In arriving at the aggregate amount involved in any one transaction, there must be included all items which should properly be grouped together. Reasonable competition shall be obtained.

Subagreements for small purchases need not be in the form of a bilaterally executed written agreement. Where appropriate, unilateral purchase orders, sales slips, memoranda or oral price quotations and the like may be utilized in the interest of minimizing paperwork. Retention in the purchase files of these documents and of written quotations received, or references to catalogs or printed price lists used, will suffice as the record supporting the price paid.

K. Documentation.

Procurement records and files for purchases in excess of \$10,000 shall include the following:

- (1) Basis for contractor selection;
- (2) Justification for the lack of competition if competition appropriate to the type of project work to be performed is required but is not obtained; and
- (3) Basis for the cost or price for an award (including EPA Form 5700-41, Cost or Price Summary Format for Subagreements under U.S. EPA Grants, where required.)

Procurement documentation required by §30.805 (Records) of the EPA general grant regulations must be retained by the grantee or contractors of the grantee for the period of time so specified and is subject to all the requirements of that section. A copy of each sub-agreement must be furnished to the Project Officer upon request.

L. Required Approvals.

The grantee must secure prior written approval of the Project Officer for the following procurement actions:

- (1) All subagreements in excess of \$100,000;
- (2) Each amendment to a subagreement in excess of \$100,000 (See M(1) below); and
- (3) Cost/Price analysis of subagreements in excess of \$100,000.

M. Cost/Price Analysis.

EPA Form 5700-41, Cost or Price Summary Format for Subagreements under U.S. EPA Grants, will be required for all negotiated contracts awarded in excess of \$10,000 under a Section 208 grant. The selected contractor shall be responsible for the preparation and submission of this form to the grantee. (See attached EPA Form 5700-41.)

It is the policy of EPA that the cost or price of all subagreements and amendments thereto made under Section 208 grants be considered as follows:

(1) Subagreements Over \$100,000. A formal cost/price analysis will be required for each subagreement expected to exceed \$100,000 under a 208 grant. A cost/price analysis shall also be performed in cases where an amendment to a subagreement will result in a contract price in excess of \$100,000, or where the amendment itself is in excess of \$100,000.

(2) Subagreements \$100,000 or Less. A cost review will be required of the grantee for each subagreement under \$100,000. As a minimum, proposed subagreement costs shall be presented to the grantee and shall be supported by a certification executed by the selected contractor that proposed costs reflect current, complete and accurate cost and pricing data applicable to the date of anticipated subagreement award.

(3) Grantee Responsibility. The 208 grantee is responsible for the conduct of all cost/price analyses of all subagreements, and amendments thereto, in excess of \$100,000, and for the cost review of all subagreements, and amendments thereto, under \$100,000. The grantee, at his own discretion, however, may cost analyze any contract awarded under a Section 208 grant. Guidelines discussed in the Cost Analysis Handbook for Section 208 Areawide Waste Treatment Management Planning, May 1975 are applicable to all grantees.

(4) EPA Responsibility. It is the responsibility of EPA to assure that an adequate cost/price analysis has been performed and, as such, may perform a pre-award cost analysis on any subagreement although the primary responsibility rests with the 208 grantee.

(5) Federal Cost Principles. Section 30.710 of the EPA general grant regulations and §35.936-20 of the Construction Grants regulations contain cost principles which must be used for the determination of the allowability of costs under EPA grants.

(6) Acceptable Accounting Systems. Section 208 grantees and their contractors shall have accounting systems which account for costs in accordance with generally accepted accounting principles. Such systems shall provide for the identification, accumulation, and segregation of allowable and unallowable project costs under a Section 208 grant. Allowable costs shall be determined in accordance with §30.705 of the EPA general grant regulations.

N. Fraud and Other Unlawful or Corrupt Practices.

All procurement made under Section 208 grants are covered by the provisions set forth in §30.245 of the EPA general grant regulations.

O. Disclosure of Information.

Section 208 grantees and their contractors should be aware that information provided to EPA is subject to disclosure to others unless otherwise noted exempt or considered confidential pursuant to §30.235 of the EPA general grant regulations.

IV. PROCUREMENT BY NEGOTIATION.

Authorization: Section 208 grantees may utilize procurement by negotiation (i.e., award of contracts by any method other than procurement by formal advertising) if it is deemed necessary to accomplish sound procurement and if any of the following conditions are applicable:

- (1) Public exigency will not permit the delay incident for formally advertised procurement (e.g., an emergency procurement).
- (2) The aggregate amount involved does not exceed \$10,000.
- (3) The material or service to be procured is available from only one person or entity. If the procurement is expected to aggregate more than \$10,000, the grantee must document its file with a justification of the need for noncompetitive procurement, and provide such documentation to the Project Officer on request.
- (4) The procurement is for personal or professional services (including architectural or engineering services) or for any services to be rendered by a university or other educational institution.
- (5) No responsive, responsible bids at acceptable price levels have been received after formal advertising.

- (6) The procurement is for materials or services where the prices are established by law.
- (7) The procurement is for technical items or equipment requiring standardization and interchangeability of parts with existing equipment.
- (8) The procurement is for experimental, developmental or research services.

Procurement by negotiation shall be conducted in accordance with the following procedures and requirements:

A. Grantee Responsibility. Section 208 grantees are responsible for the negotiation of their contracts.

B. Type of Contract. The requirements of §35.937-1 (Type of Contract) in the Construction Grants regulations shall apply.

C. Adequate Public Notice. To meet adequate public requirements, 203 grantees have the option to either:

- (1) publish the notice of request for proposal (as described in (D) below) in professional journals, newspapers, or publications of general circulation over a reasonable area similar to those provisions established in §35.937-2(b); or
- (2) employ the two-step process as prescribed in §§35.937-2 and 35.937-3, whereby a notice of request for qualifications is published similar to the first option. After the evaluation of qualifications of firms and/or individuals responding to the notice is completed, the request for proposal is sent to qualified candidates pursuant to §35.937-4.

These provisions shall apply to negotiated procurements expected to exceed \$10,000, except where rates or prices are fixed by law or regulation or where a single source has been justified.

D. Requests for Proposals. Requests for proposals must be in writing and must contain the information necessary to enable a prospective offeror to prepare a proposal properly. The request for proposals must inform offerors of all evaluation factors and of the relative importance attached to each criterion (a numerical weighted formula need not be utilized). The request for proposal must also clearly state the time and place for submission of proposals. Sources which request an opportunity to submit proposals, and which are not otherwise barred by law or regulations, shall be promptly furnished a copy of the request for proposal and shall be permitted to submit a proposal in response thereto.

Requests for qualifications or proposals must include the following statement, as well as the proposed terms of the subagreement:

Any contract awarded under this request for (qualifications/professional proposals) is expected to be funded in part by a grant from the United States Environmental Protection Agency. This procurement will be subject to regulations contained in 40 CFR Subchapter B. Neither the United States nor the United States Environmental Protection Agency is nor will be a party to this request for (qualifications/professional proposals) or any resulting contract.

E. Evaluation Factors.

Qualifications: Section 208 grantees shall uniformly evaluate, by an objective process, the qualifications of firms or individuals responding to the announcement. Criteria which should be considered in the evaluation of candidates for submission of proposals shall include, as a minimum:

- (1) Specialized experience and technical competence of the candidate or firm and its personnel (including a joint venture, association, or professional subcontract) in connection with the type of services required and the complexity of the project;
- (2) Past record of performance on contracts with the grantee, other government agencies, or public bodies, and with private industry, including such factors as control of costs, quality of work, and ability to meet schedules;
- (3) Capacity of the candidate to perform the work (including any specialized services) within the time limitations, taking into consideration the current and planned workload of the firm or individual;
- (4) The familiarity of the candidate with types of problems applicable to the project; and
- (5) Avoidance of personal and organizational conflicts of interest prohibited under State and local law and §30.340-2 of the EPA general grant regulations.

Proposals: Section 208 grantees shall uniformly evaluate, by an objective process, all proposals submitted in response to a request for personal or professional services. The request for proposal must inform offerors of the evaluation criteria and the relative importance attached to each criterion (a numerical weighted formula need not be utilized). Evaluation criteria shall include:

- (1) All criteria stated above regarding the qualifications of candidates; and
- (2) The candidate's proposed method to accomplish the work required, including, where appropriate, demonstrated capability to explore and develop innovative or advanced techniques and methods.

F. Negotiations. Written or oral interviews should be conducted with all responsible offerors who submit proposals within a competitive range, price and other factors considered. Each proposer with whom negotiations are conducted shall be given reasonable opportunity (with a common cutoff date) to support, clarify, correct, improve, or revise its proposal. Information shall not be conveyed to one or more proposers which would give them a competitive advantage.

The object of negotiation with any candidate shall be to reach agreement on the provisions of the proposed contract. The grantee and the candidate shall discuss, as a minimum:

- (1) The scope and extent of work and other essential requirements;
- (2) Identification of the personnel and facilities necessary to accomplish the required work within the required time, including, where needed, employment of additional personnel, subcontractors, joint ventures, etc.;
- (3) Provisions of the required technical services in accordance with regulations and criteria established for the project; and
- (4) A fair and reasonable price for the required work to be determined in accordance with the profit and cost/price analysis provisions set forth in this interim guidance. 2.

G. Award of Contract. After the close of negotiations, the grantee shall award the contract to the proposer whose proposal offers the greatest advantage for the project--technical, economic, and other factors considered.

An unsuccessful offeror shall be notified at the earliest practicable time that its offer has not been selected for award. Upon written request of an unsuccessful offeror, the grantee shall disclose the reason(s) for rejection.

The grantee must develop and retain adequate records of the basis for selection for negotiation and award.

V. PROCUREMENT BY FORMAL ADVERTISING.

Section 208 grantees may utilize procurement by formal advertising if it is deemed appropriate for the particular procurement. Formal advertising shall be conducted in accordance with the following procedures and requirements:

A. Types of Contract. Each formally advertised subagreement must be a fixed price (lump sum or unit price or a combination of the two) contract. The requirements of §35.938-3 (Type of Contract) in the Construction Grants regulations shall apply.

B. Adequate Public Notice and Solicitation of Bids. The grantee will cause adequate notice to be given of the solicitation by publication in newspapers or journals of general circulation beyond the grantee's locality (Statewide, generally), inviting bids on the project work, and stating the method by which bidding documents may be obtained and/or examined.

C. Adequate Time for Preparing Bids. Adequate time, generally not less than 30 days, must be allowed between the date when public notice is first published and the date by which bids must be submitted. Bidding documents must be available to prospective bidders from the date when such notice is first published.

D. Adequate Bidding Documents. A reasonable number of bidding documents (Invitations for Bids) shall be prepared by the grantee and shall be furnished upon request on a first-come, first-served basis. A complete set of bidding documents shall be maintained by the grantee and shall be available for inspection and copying by any party. Such bidding documents shall include:

- (1) A complete statement of the work to be performed and the required completion schedule;

- (2) The terms and conditions of the contract to be awarded;
- (3) A clear explanation of the method of bidding and the method of evaluation of bid prices, and the basis and method for award of the contract;
- (4) Responsibility requirements or criteria which will be employed in evaluating bids; and
- (5) The following statement:

Any contract or contracts awarded under this Invitation for Bids are expected to be funded in part by a grant from the United States Environmental Protection Agency. Neither the United States nor any of its departments, agencies, or employees is or will be a party to this Invitation for Bids or any resulting contract. This procurement will be subject to regulations contained in 40 CFR Subchapter B.

E. Sealed Bids. The 208 grantee will provide for bidding by sealed bids and for the safeguarding of bids received until public opening.

F. Addenda to Bidding Documents. If a grantee desires to amend any part of the bidding documents during the period when bids are being prepared, the addenda shall be communicated in writing to all firms or individuals in receipt of bidding documents in time to be considered prior to the bid opening time.

G. Bid Notifications. A firm or individual having submitted a bid shall be allowed to modify or withdraw the bid prior to the time of bid opening.

H. Public Opening of Bids. Section 208 grantees shall provide for a public opening of bids at the place, date and time announced in the bidding documents.

I. Award to the Low, Responsive, Responsible Bidder. After bids are opened, they shall be evaluated by the grantee in accordance with the methods and criteria set forth in the bidding documents. The grantee may reserve the right to reject all bids. Unless all bids are rejected, award shall be made to the low, responsive, responsible bidder.

If the award is intended to be made to a firm or individual which did not submit the lowest bid, a written statement shall be prepared prior to any award and retained by the grantee explaining why each lower bidder was deemed nonresponsive or not responsive.

State or local laws, ordinances, regulations or procedures which are designed or which operate to give local or in-State bidders preference over other bidders shall not be employed in evaluating bids.

VI. REQUIRED PROVISIONS APPLICABLE TO ALL PROCUREMENT.

Each subagreement awarded under a Section 208 grant must adequately define the scope of project work to be performed by the contractor for the grantee and must include adequate provisions to define a sound and complete agreement. Such general provisions would include, as a minimum:

A. Content of Subagreement

Each subagreement must adequately define:

- (1) The scope and extent of project work;
- (2) The time for performance and completion of the contract work, including where appropriate, dates for completion of significant project tasks;
- (3) Personnel and facilities necessary to accomplish the work within the required time;
- (4) The extent of subcontracting and consultant agreements; and
- (5) Payment provisions in accordance with this interim guidance.

If any of these elements cannot be defined adequately for later tasks at the time of contract execution, the subsequent tasks shall not be included in the contract at that time.

B. Termination; Suspension.

Each subagreement in excess of \$10,000 must contain adequate provisions for termination of all or any part of contract performance for default or for convenience by the grantee, or for suspension of all or any part of contract performance by agreement or by the grantee, including the manner by which the termination or suspension will be effected and the basis for settlement.

C. Remedies.

Each subagreement in excess of \$10,000 must contain adequate contractual provisions or conditions to allow for administrative, contractual, or legal remedies in instances where grantees or contractors violate or breach contract terms or conditions, and must provide for such damages, sanctions, and penalties as may be appropriate.

D Records Retention.

Each subagreement in excess of \$10,000 must contain a provision requiring the contractor to maintain records of contract performance as defined in §30.805 of the EPA general grant regulations, and make these records available for inspection, audit, and copying by the grantee, EPA, the Comptroller General of the United States, the Department of Labor, or any authorized representative, to the extent and for the same length of time as is set forth with respect to grantee records in §30.805 of the EPA general grant regulations.

E. Access.

Each subagreement in excess of \$10,000 must contain a provision to ensure that the Project Officer and any authorized representative of EPA, the Comptroller General of the United States or the Department of Labor, shall at all reasonable times during the period of EPA grant support and until three years following final settlement have access to the facilities, premises, and records (as defined in §30.805) of the contractor related to the project.

F. Audit.

Each subagreement in excess of \$10,000 must contain adequate contractual provisions or conditions to allow for an audit or audits of the contractor in accordance with generally accepted auditing principles and established procedures and guidelines of the reviewing or audit agency(ies) and 40 CFR 30.805 and 30.820. (See attached sample audit clause, Appendix C-1, Construction Grants Regulations.)

G. Payments.

The provisions defined in §35.937-10 concerning subagreement payments for architectural or engineering services apply to all procurement conducted under Section 208 grants.

H. Price Reduction for Defective Cost or Pricing Data.

The provisions of the following clause are required by EPA only if the amount of the contract exceeds \$100,000. The grantee may elect to utilize this clause if the contract amount is \$100,000 or less.

If the Project Officer determines that any price, including profit negotiated in connection with this contract or any cost reimbursable under this contract was increased by any significant sums because the contractor, or any subcontractor, furnished incomplete or inaccurate cost or pricing data not current as certified, then such price or cost or profit shall be reduced accordingly and the contract shall be modified in writing to reflect such reduction. Failure to agree on a reduction shall be subject to the "Remedies" clause of this contract.

I. Other Applicable Federal Requirements.

Where construction activity may be undertaken, other Federal statutes and requirements, such as the Contract Work Hours and Safety Standards Act, the Davis-Bacon Act and related statutes, the Copeland Act, or such other statutory provisions, Executive Orders or regulations as may be applicable to contractors under grants, shall apply to each subagreement in excess of \$10,000.

Attachment:
EPA Form 5700-41

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION A -- FUNDING

WQM Policy Memorandum A-2

FY 80 FUNDING POLICIES FOR 106 AND 208 GRANTS

[RESERVED]

Note on Policy

The FY 80 funding policies for 106 and 208 grants are, at the time of this guidance, being reviewed in draft by Water Planning Division, the Regional Offices, and others. The policy statement is essentially a compilation of the policies in the WQM FY 80 Baseline Strategy and the FY 80 aspects of the following memoranda:

- (1) INFO 79-80 (June 4, 1979), "208 Fund Obligations--FY 78, 79 and 80"
- (2) INFO 79-100 (August 16, 1979), "Funding Policy and Procedures for FY 80 Section 208 Grants"
- (3) INFO 79-105 (August 25, 1979), "Procedures for Implementing FY 80 Funding Policies for 208 Grants"

The Water Planning Division will distribute the final policy memorandum (A-2) as soon as it is finalized. This is estimated to be in October, 1979.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-1

EPA POLICY REGARDING INTERSTATE COMMISSIONS *

Purpose

This memorandum sets forth EPA's policy regarding existing and prospective interstate water pollution control commissions, including EPA policy for funding these commissions under Section 106 of the Federal Water Pollution Control Act. This statement of policy is accompanied by a discussion of the background and rationale upon which the policy is based.

Background

The traditional issue of whether water pollution control programs are to be administered primarily on the basis of watershed or political boundaries has been resolved by the passage of P.L. 92-500 and by the subsequent issuance of EPA regulations governing the national water pollution control effort. The net effect of this Act and set of regulations is to establish a joint Federal-State program, which relies on the State as the basic administrative unit. With regard to the specific role of the interstate commissions, the Act is silent, but it does state that: "The Administrator shall encourage compacts between the States for the prevention of pollution." Thus some future role for interstate compacts is envisioned by the Act, although the specific role is not defined.

Because EPA has the responsibility to provide the direction for the national water pollution control program, and because EPA partially funds six interstate commissions from monies provided by Section 106 of the Act, the Agency has recognized the necessity of reassessing its policy toward the interstate commissions, particularly with regard to those functions of the commission for which EPA provides funds. A study entitled "Roles of Interstate Water Pollution Control Commissions Pursuant to P.L. 92-500" was conducted for EPA by a private contractor during the winter of 1974-75. This study, plus the experience of EPA in working with

*Originally issued as SAM-24 (December 23, 1976) under the signature of the Deputy Assistant Administrator for Water Planning and Standards.

the interstate commissions, provides the information base for the policy review and decisions contained in this paper.

There are two major questions which EPA must address with regard to the interstate commissions. These are:

- (1) Which activities of interstate commissions should EPA encourage by providing funding?
- (2) What should be the division of Section 106 funds between the States as a group and the interstates as a group?

To determine the answers to these questions, several criteria were used. The first of these was the desirability of defining and establishing coordinated functions -- for EPA, the interstate and the States -- which do not conflict and which are not unnecessarily redundant. Related to this concern is the desire to establish the most cost-effective relationships. Another consideration was the need to allocate Section 106 funds in a manner that was fair to all States and interstates.

An important additional factor which was considered was the timing of implementation of the policy. Since this policy sets forth a definitive role for interstate agencies, which may be a significant departure from existing practice, a transitional period, not to extend beyond fiscal year 1979, is provided if a regional administrator determines that such a transitional period is necessary. During this interim period, the regional administrators will encourage each interstate to gradually shift its performed functions to those which EPA will fund in fiscal year 1979 and beyond or to those which the compact States are willing to fund.

POLICY

Prior to examining the related questions of (1) division of Section 106 funds between the States and the interstates or (2) division of these funds between the individual interstate commissions, EPA first had to determine its attitude toward the future role of all interstates receiving EPA funds. Both the provisions of P.L. 92-500 and the policy of EPA since October 1972 stress the primary role of the States in administering the water pollution control program. Although EPA continues to issue and enforce permits and to process grant applications for municipal wastewater treatment facilities, the Agency is firmly committed

to a goal of delegating virtually all functions to the States. Within the foreseeable future, EPA's role will be one of setting national objectives and policy, funding State agencies to perform the operational role and monitoring State performance. Given the prospect of this set of relationships between EPA and the States, what role will the interstate commissions play?

EPA can provide only a partial answer to this question. From the EPA perspective, it is the State agency, working with interstate and local agencies, which should plan and manage the spectrum of activities which constitute an integrated water pollution control program. The interstate commissions can play a valuable role in coordinating the programs of several States as they relate to a specific river basin or other body of water. This coordination is particularly valuable in the areas of standard setting, monitoring and water quality management planning - but may extend to other program areas as the need arises. Included in the coordination function is the facilitating of information exchange between States, for example, by arranging meetings focused on functional areas of concern to all States in a river basin.

In addition to the coordination role, there are several functions which are particularly suited to interstate agencies. One of these is the determination of wasteload allocations between States on a stream but not within those portions of a stream inside one State's boundaries. Another is the preparation or supervision of preparation of mathematical models of a stream. Additionally, an interstate agency is in the position to review monitoring data on a river, to point out major problem areas and to assist in holding an individual compact State accountable to the other States regarding a particular problem. Also, interstate agencies are able to fund and supervise contracts for special studies or projects which affect an entire stream or an interstate portion thereof which are of benefit to compact States.

These are the functions which appear particularly appropriate for interstates and which complement the EPA and State roles defined in P.L. 92-500 and in EPA's national water strategy and annual operating guidance. Additional functions may be assigned to the interstate agencies by EPA and the States according to changing needs and priorities consistent with EPA's national strategy. If a regional administrator wishes to provide funding in FY 79 and beyond for activities, which appear to be contrary to this guidance, he should refer the matter to Headquarters for an exception to the policy stated below. Beginning in FY 77, EPA will encourage a shift of function to those discussed above. Starting with FY 79, EPA will provide grant funding to interstates to carry out only these functions. At that time, EPA will pay the actual cost of these activities (up to the total funding allocation for each interstate), together with a proportional share of overhead costs.

In stating this policy, EPA is in no way precluding other activities by interstates. States are now funding and presumably will continue to fund interstate activities. State funding may include a pass through of a portion of a State's 106 funds to an interstate.

With regard to the question of the division of Section 106 funds between the State and interstate agencies, EPA's policy will be to determine in the annual operating guidance the level for interstate funding. Except in extraordinary situations, the funding level will be no less than the allocation in the previous fiscal year. The only exception to this policy will be in instances beginning in FY 79 where interstates propose to perform functions (to be funded by EPA) which are contrary to the functions specified in this memorandum and are not recommended by the regional administrator. In such cases, the regional administrator shall deny funds for these proposed functions and shall distribute the funds to other States and interstates in the region as he sees fit.

With regard to the application of the foregoing policy to future interstate commissions or to current commissions, which have not yet applied for EPA funding, the policy is in effect upon issuance of this guidance.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-2

REGULATORY PROGRAMS FOR NONPOINT SOURCE CONTROL*

Statement of Policy

Regulatory programs are required for nonpoint source control where they are determined to be the most practicable method of assuring that an effective nonpoint source control program is implemented. Determinations of practicability shall be based on economic, technical, social and environmental factors. Non-regulatory programs may be approved only where such programs will result in implementation of a nonpoint source program which will result in the achievement of desired water quality goals. If, after a period of implementation, a non-regulatory program is determined by EPA not to be effective, the appropriate planning agency will be responsible for developing a regulatory program to assure program implementation.

Purpose

This memorandum sets forth the requirements, under section 208 of the Clean Water Act, for the development of regulatory and other programs at the State and local level to control nonpoint sources of water pollution. It complements WQM Policy Memorandum B-3 "Developing and Implementing Best Management Practices". It defines the regulatory and other program requirements; establishes criteria for approval of the nonpoint source elements of a water quality management plan; and addresses the role of the State and EPA in ensuring development and implementation of effective nonpoint source control programs. It should be forwarded to Water Quality Management (208) agencies, to the Office of Regional Counsel, to the Regional Nonpoint Source Coordinator and to the Regional 208 Coordinator.

Background

Section 201(c) of the Clean Water Act requires that, to the extent practicable waste treatment management shall provide control or treatment

*Originally issued as SAM-31 (November 14, 1978) under signature of the Deputy Assistant Administrator for Water Planning and Standards; minor editorial changes have been made by the Water Planning Division.

of all point and nonpoint sources of pollution. Section 208(b)(2)(C) requires that regulatory programs be established to implement the waste treatment management requirements of section 201(c). Section 208(b)(2)(F) - (K) requires that plans developed pursuant to that section set forth procedures and methods to control identified nonpoint sources of pollution. These sections of the Act provide the legal basis for requiring that regulatory and other programs be established to control water pollution problems from nonpoint sources.

Further authority is found in EPA's general authority to require that plans developed pursuant to section 208 be effective. Requirements are set forth in 40 CFR Part 35.1521. This guidance memorandum further defines those requirements.

The following materials are available to assist the States and EPA in implementing the policy established in this memorandum: "Compilation of Federal, State and Local Laws Controlling Nonpoint Pollutants" (EPA-440/9-75-011), SCAMP (Sediment Control and Manpower Project) issued under TECH MEMO No. 3, 5, 6, 7, 11, 12 and 16, and "Legal and Institutional Approaches to Water Quality Management Planning and Implementation" (EPA Contract No. 68-01-3564, March 1977).

Policy Guidance

(1) General

A regulatory program is required and shall be submitted for approval as part of a 208 plan in those cases where the 208 agency, in consultation with the affected State agencies and the Governor, has determined that such a program is the most practicable method of assuring that an effective nonpoint source control program is implemented. Such a determination shall be based on economic, technical, social, and environmental factors.

Regulatory programs should be designed to attain the 1983 water quality goals set forth in section 101(a) of the Act. The programs must be enforceable and administered by agencies with adequate legal authority and resources to ensure their implementation.

Regulatory programs are not required where the plan prepared under section 208 certifies that substantial water quality problems resulting from nonpoint sources do not exist or are not likely to develop in the foreseeable future.

There is a great deal of flexibility as to the particular regulatory program which is most appropriate to control a particular nonpoint source. The program may address a particular category of activity, such as construction or mining; a particular pollutant, such as sediment; or particular geographical areas which are determined to be sensitive or

critical. Choice of a regulatory program and the appropriate level of government (State, local or regional) to administer the program will depend on the type and extent of the nonpoint source problem, legal authorities, existing programs and existing intergovernmental relationships. However, where necessary to ensure an effective program, new relationships should be developed.

The type of control tools to be utilized, such as permits, licenses, contracts, notification, bonding, leases, plans, and various management techniques, will depend upon the intensity, scope and type of nonpoint source problem to be controlled, land ownership patterns, and such physical factors as rainfall, soil characteristics, geological conditions and topography.

(2) Regulatory Program -- EPA Approval

EPA will approve a regulatory program which includes the following:

- (a) Authority to control the problem which the program addresses (i.e., an activity, pollutant, or geographical area).
- (b) Authority to require the application of Best Management Practices* and their periodic revision.
- (c) Monitoring and/or inspection authority.
- (d) Authority to implement the chosen control tool(s) (i.e., permits, licenses, contracts, etc.)
- (e) Enforcement authority.
- (f) A designated management agency or agencies responsible for implementing the regulatory program with:
 - expertise in the subject matter area to be controlled
 - adequate staff
 - adequate funding
 - the relevant authorities pursuant to section 208(c)(2) and 40 CFR 35.1521-3(c)(1) and (3).
 - a letter of commitment pursuant to 40 CFR 35.1521-3(c)(1) and (2).

To be approved by EPA, a regulatory program must have the necessary implementing regulations in effect and sufficient resources available to carry out the required activities.

*Best Management Practices are defined in 40 CFR 35.1521-4(c)(1).
See also WQM Policy Memorandum B-3.

The adequacy of a particular program to achieve compliance with water quality goals should be evaluated in light of the stage of development of the program. Where a program is fully established and has been in place for a period of time, it should be possible to determine its effectiveness and evaluate where changes need to be made. Approval shall be withdrawn if the program is not being adequately implemented or does not prove to be effective. (See section (7) Evaluation of Implementation)

(3) Regulatory Program -- Approval with Conditions

EPA will attach conditions to approval under the following circumstances:

- (a) Where the legislative authority exists but means of implementation are not available or are not satisfactory, such as insufficient resources, lack of regulations, questions regarding designated agency capability, etc.; or
- (b) Where the authorizing legislation has been introduced, but not enacted; or
- (c) Where a specific legislative proposal has been developed and the plan contains a reasonable schedule for introduction to the legislative body.

In any of the above situations, EPA approval comments must specify the conditions for full approval. The planning agency and the State, in consultation with EPA, must agree on a schedule for meeting such conditions.

Periodic (at least annual) reporting to the Regional Administrator on progress being made in meeting the schedule shall be required. This reporting may be submitted under the States responsibility for monitoring implementation. Approval with conditions shall be withdrawn if the Regional Administrator finds the agreed to progress is not being made.

(4) Regulatory Program -- Disapproval

The Regional Administrator shall disapprove any regulatory program which does not meet the conditions set forth in this memorandum for approval with or without conditions.

(5) Other Program Approval (Non-Regulatory Programs)

Other approaches to nonpoint source control may be approved by the Regional Administrator as fulfilling the nonpoint source control requirements in section 208(b)(2)(F-K) only where, in his judgment, the program will result in implementation of nonpoint source controls which will result in achievement of the desired water quality goals. EPA will give full approval of

non-regulatory programs only when implementation efforts, such as hiring of personnel or budget allocations, have commenced. If implementation will occur in stages (i.e. only a portion of the total additional personnel or funding required will be in place in year one), and stage one has been implemented, and a definite schedule for implementing future stages has been agreed upon, full approval may be granted.

Approval with conditions may be granted where the conditions noted below have been met, and a schedule for implementation has been agreed upon; but actual implementation has not commenced. Approval with or without conditions shall be given only when the following requirements are met:

- Identification of Best Management Practices.
- Agreement on schedule of milestones for implementation.
- Provision of an effective educational program to inform and involve the affected public.
- Provision of adequate technical assistance and financial assistance, if needed.
- Agreement to reporting system (at least annual) to the Regional Administrator on progress made in implementation.

The Regional Administrator can require such information in these reports as is necessary to evaluate milestone progress. Milestone progress can be shown in terms of implementation measures, resource commitment, and water quality improvement.

Approval of non-regulatory approaches shall be withdrawn if the Regional Administrator determines that implementation milestones are not being met. Non-regulatory programs will retain approval only when continuing and substantial progress, including the application of Best Management Practices, is being made toward attaining water quality goals. Where such progress is not being made, approval of these approaches shall be revoked, the appropriate agency will be responsible for developing a regulatory program to ensure attainment of water quality goals.

(6) Other Programs -- Disapproval

The Regional Administrator shall disapprove a proposed non-regulatory program as being inadequate when he has reason to believe it will not be effective and will not lead to the application of Best Management Practices. Factors to consider in making that determination include: the severity of the nonpoint source problem; past experience of the involved governmental unit with the proposed approach; and the type of program that is proposed.

Specific and realistic funding sources must be identified to implement at least a significant portion of the proposed non-regulatory program, or the program will be disapproved. When a feasible funding source is only identified for a portion of the program, the WQM agency must include milestones for securing adequate funding to implement the entire program. Progress in meeting milestones will be reviewed through evaluation of implementation.

Where substantial water quality problems continue to exist, those programs which are merely a continuation of an existing program which has not proven to be effective, will not qualify as acceptable.

Where regulatory programs already exist (e.g., construction, mining), proposed new programs will be expected to be at least as stringent as existing regulatory programs, and more stringent if necessary, to achieve water quality goals.

(7) Evaluation of Implementation

The State has primary responsibility for evaluating implementation of point and nonpoint source control programs. The State may delegate some evaluation tasks to areawide agencies. Monitoring progress in actually carrying out a control program or in meeting an implementation schedule may be carried out through this evaluation responsibility.

Development and refinement of BMPs and control programs for nonpoint sources is an iterative process, which is based in part on the findings of the periodic evaluation of implementation. When the findings indicate that specific management practices or control programs are not effective or adequate, the appropriate WQM planning agency must modify the BMPs and/or control program. Such refinements will be developed during continuing WQM planning.

(8) Assistance in Development and Implementation of Nonpoint Source Control Programs

EPA Regional Offices have the responsibility for providing necessary technical assistance to State and local planning agencies to assure that effective programs are developed and implemented.

It is especially important that the planning agency work closely with both legislative and executive decision-makers at the State and local level in development of regulatory programs. Development of regulatory programs shall be addressed in the water quality management plan by writing milestones into the 208 grant agreements and work programs. EPA recognizes that it will ordinarily only be possible to identify regulatory needs after nonpoint source assessment and problem identification have been completed.

The milestones which will actually be included in the grant agreements and work programs must obviously reflect the knowledge existing at the time the schedule is agreed upon. Where it seems to be a strong possibility that regulatory programs will be required, that possibility can be identified in the schedule as such. Specific program milestones might include the following, as appropriate:

- (a) completion of phases in water quality assessment of nonpoint source pollution impacts.
- (b) identification of nonpoint source problems.
- (c) identification of legislative needs.
- (d) development and implementation of public participation programs.
- (e) certification from State Attorney-General or local legal office that adequate legal authority exists.
- (f) proposal of legislation.
- (g) enactment of legislation.
- (h) proposal of new or upgraded rules and regulations including BMPs.
- (i) promulgation of rules and regulations including BMPs.
- (j) establishment or identification of institutions necessary to administer the program.
- (k) establishment of interagency and intergovernmental coordination mechanisms.
- (l) establishment of monitoring, inspection and enforcement procedures.....
- (m) provisions of funds, personnel, facilities and equipment for regulatory objectives.
- (n) development and implementation of educational programs in support of regulatory objectives.
- (o) evaluation of adequacy of Best Management Practices and management agency performance.

The actual milestones should be agreed upon by EPA and the planning agency. Such an agreement will lead to an orderly development of nonpoint source controls, early resolution of any EPA objections to the proposed program and will expedite approval of that portion of the plan. While it is hoped that such actions will be unnecessary, the Regional Administrator will have authority under such an agreement to withhold 208 planning funds if milestones are not being met.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-3

DEVELOPING AND IMPLEMENTING BEST MANAGEMENT PRACTICES*

STATEMENT OF POLICY

Feasible Best Management Practices (BMPs) which reduce nonpoint source pollution and achieve the water quality goals must be developed and implemented for all categories of nonpoint sources. The BMPs will be developed in a continuing process of identifying problems, devising control measures, assessing BMP adequacy, and modifying BMPs when necessary to attain water quality goals. State priorities for developing nonpoint source control programs will be established in accordance with general EPA guidance and will be contained in the State/EPA Agreement.

Water quality goals are broadly defined to include: Water Quality Standards; the 1983 goal as set forth in §101(a)(2) of the Clean Water Act; the reduction of pollutants from all sources, to the extent feasible; the prohibition of toxic pollutants in toxic amounts; protection of public health and welfare; and other goals and objectives of the Act. To attain the goals of the Act, it is the policy of EPA to minimize if not eliminate toxic pollution in recognition of the uncertainties inherent in establishing "safe levels" for toxic pollutants.

PURPOSE

The purpose of this memorandum is to describe the Agency's policy on developing BMPs to meet water quality goals under existing time, resource, and information constraints. It discusses the relationship between BMPs and Water Quality Standards (WQS), and complements WQM Policy Memorandum B-2.

* Originally issued as SAM-32 (November 14, 1978) under the signature of the Deputy Assistant Administrator for Water Planning and Standards. Minor editorial changes have been made by Water Planning Division.

Discussion

(1) Program Overview

The attainment of national and State water quality goals serves as the basis of the planning process described in 40 CFR Part 35, §§35.1500 to 35.1542 (see Problem Assessment for further discussion). Under that process, WQM agencies must establish nonpoint source control programs to achieve the water quality goals including water quality standards (35.1521-4(c)). The programs will be concerned with prevention of future problems and mitigation of existing problems. WQM agencies will identify priorities for addressing particular source control and water quality problems and will develop the necessary programs in a long-term iterative process.

(2) Problem Assessment

A water quality assessment is necessary under the Clean Water Act and the regulations to identify nonpoint water quality and source control problems. Precise quantification of these problems is not expected or required to define priorities and develop BMPs.

Numerical WQS criteria will be used to assess nonpoint source water quality problems whenever the criteria are reasonably applicable to the particular nonpoint sources and pollutants under study. As water quality standards criteria are revised to reflect nonpoint source needs, they will be applied in the assessment. The remaining elements of WQS (i.e., narrative criteria, antidegradation policy, and designated uses) will be generally applicable in the assessment and will be particularly useful where appropriate numerical criteria are not available.

The use of State WQS must be supplemented by additional water quality goal considerations in assessing water quality because WQS do not fully reflect the water quality goals and objectives of the Clean Water Act at this time. Safe levels and transport paths for many toxic pollutants are unknown; effects of future growth must be considered; impacts from wet weather and natural background conditions are not fully understood; and downstream impacts are difficult to determine and take into account.

(3) BMP Development

Feasible BMPs which reduce nonpoint source pollution must be developed in accordance with priorities for developing control programs for all nonpoint sources identified in areawide and State planning areas. Site specific conditions should be taken into account during BMP design and implementation. BMPs must be designed to make maximum feasible contributions toward attainment of water quality goals including minimization of toxic pollutants. BMPs identified in the planning process will be implemented through regulatory programs where those programs are determined to be the most practicable method of assuring effective implementation (WQM Policy Memorandum B-2).

BMPs may not completely achieve water quality goals in the first stages of the planning process and an iterative process may be necessary to achieve this objective. BMP development with regard to water quality goals may be hampered by: water quality goals which have not been fully quantified; water quality standards criteria which, in some cases, have not yet been developed sufficiently to identify nonpoint source pollution problems and to develop control programs; difficulties in identifying cause-effect relationships; and resource constraints.

WQS, particularly designated uses, will be used primarily as a bench mark of progress in BMP development. In those instances where WQS numerical criteria have reasonable application to nonpoint sources, the criteria may serve as an interim goal in the continuing effort to achieve water quality goals. Once BMPs have been applied, WQS and other water quality goals will be used to assess BMP effectiveness in the same manner as these goals are used to assess the water quality.

(4) BMP Modification

Once BMPs are being applied to control a particular nonpoint source, the State has primary responsibility for evaluating their effectiveness (40 CFR 35.1521). Where nonpoint sources continue to impede the achievement of the water quality goals after application of BMPs, the appropriate water quality management agency must modify the BMPs or the strategy for applying BMPs as necessary to improve BMP effectiveness. Existing BMPs will continue to apply to nonpoint sources while those practices are assessed and modified in the planning process. As the modifications are implemented, water quality goals must again be used to assess BMP effectiveness. Where appropriate, further refinements in BMPs and revisions of criteria in water quality standards may be needed in this iterative process of developing, implementing, and evaluating BMPs.

(5) Plan Outputs

BMPs identified in the planning process must make maximum feasible progress towards the achievement of the water quality goals and minimization of toxic pollutant loads. The rationale for the BMPs selected must be included in the plan output. A schedule for assessing BMP effectiveness and identifying all appropriate BMPs must be established in the State/EPA Agreement.

BMPs are not required for nonpoint sources in planning areas where the State certifies that:

- existing management practices are regarded as sufficient to meet water quality goals for that particular source activity and location; and
- BMPs to achieve water quality goals will not be necessary to accommodate anticipated impacts of future activities including new sources.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-4

NEPA COMPLIANCE IN THE STATE AND AREAWIDE
WATER QUALITY MANAGEMENT PROGRAM*

Purpose

This memorandum explains EPA's amendment of 40 CFR Part 6, which exempts the Water Quality Management (WQM) program from the Environmental Impact Statement (EIS) requirement of the National Environmental Policy Act (NEPA) as provided by Section 511(c)(1) of the Clean Water Act.

Background

Section 511(c)(1) of the Clean Water Act affords an exemption from the NEPA requirement for most water programs, including the WQM program under Sections 106, 208, and 303. However, except for the EIS requirement of Section 102(2)(c) of NEPA, it is EPA policy that the spirit and intent of NEPA will continue to be served by the WQM program. The environmental implications and impacts of alternative WQM planning programs and actions shall be considered and evaluated in a manner which is consistent with the spirit and intent of NEPA.

Supporting our decision not to require an EIS are the WQM program requirements for procedures which are at least equivalent to those required for the NEPA process:

- o The WQM public participation process requires that sufficient information and opportunities for involvement in the decision-making process be provided the public. These must be early and continue through the WQM process so that the public can both come to understand and have an impact on the WQM plan and its implementation. This includes full public disclosure of potential adverse impacts throughout the plan development, continuing planning, and implementation phases.

* Originally issued as SAM-34 (August 21, 1978) under the signatures of the Assistant Administrator for Water and Hazardous Materials and the Acting Director of the Office of Federal Activities. Minor editorial changes have been made by the Water Planning Division.

- o The WQM process requires assessment and presentation of the social, economic, and environmental impacts of alternative WQM programs and actions. This assessment includes an analysis of primary and secondary impacts of alternative WQM programs and actions. It also requires consideration of the environmental tradeoffs among these alternative WQM actions. Further, this assessment must comply with Executive Orders 11988 for floodplain management and 11990 for wetlands protection and EPA's Statement of Procedures* implementing these two orders, and satisfy the spirit and intent of NEPA.

These requirements for active public as well as interagency involvement and environmental assessment in the WQM process are necessary for approval of a WQM plan by the Regional Administrator. They are also consistent with the spirit and intent of NEPA.

Policy

1. An EIS will not be required as part of EPA approval of a WQM plan.
2. Regional Administrators are responsible for assuring that the public participation procedures and environmental assessments required in the WQM planning process are conducted in a manner consistent with the spirit and intent of NEPA as well as the Clean Water Act. In addition, Regional Administrators are responsible for ensuring that other appropriate agencies participate in WQM plan review.
3. Regions which are developing detailed environmental impact statements on specific WQM plans in compliance with previous policy are encouraged to complete them. EPA will continue to support and assist such programs.
4. Regional Administrators' actions on the provision of Federal construction grants and the issuance of new source permits are not exempt from the EIS requirement of NEPA.

* 44 Federal Register 1445 (January 5, 1979)

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-5

STATE ROLE IN RESPONDING TO ENVIRONMENTAL EMERGENCIES

[RESERVED]

Note on Policy

The State role in responding to environmental emergencies was substantially revised by the 1977 Clean Water Act Amendments. The Amendments provided EPA with increased responsibility and authority to respond to environmental emergencies and the States with additional responsibilities to be eligible for a section 106 grant. These responsibilities were outlined in SAM 35, issued September 14, 1978.

Subsequent to the issuance of SAM 35, the Administration introduced proposed Superfund legislation which would substantially impact State environmental emergency response programs. It would be inappropriate for EPA to require State appropriation actions, or other substantial efforts, when State responsibilities may be altered by passage of the pending Superfund legislation. Therefore, pending further Headquarters guidance, State efforts to comply with sections 106(e)(2) and 504(b) of the Act for FY 80 will be deemed adequate if: (1) the State is studying, or has studied, to the satisfaction of the Regional Administrator, how best to respond to environmental emergencies, and (2) the State has developed, or is developing, legislation to obtain the legal authority in section 504(a).

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-6

PRETREATMENT AND THE WATER QUALITY MANAGEMENT (WQM) PROGRAM*

Purpose

This memorandum presents policy on using 208 grant funds to assist State and local agencies in complying with 40 CFR 403, "Pretreatment Standards for Existing and New Sources of Pollution," promulgated in the June 26, 1978 Federal Register, which became effective August 25, 1978. References are made to 106, 201, and 205(g) funding where necessary to explain the use of 208 funds for pretreatment. Note: This policy applies only to 208 grants awarded before October 1, 1979.

Background

40 CFR 403 establishes Federal, State and local pretreatment program responsibilities. EPA remains responsible if State and local authorities do not implement 40 CFR 403 requirements. Regions must effectively utilize all available incentives, including 201 and 208 funding to encourage State and local pretreatment program development. Administration of approved State programs is eligible for assistance under 106 and by those 205(g) funds transferred to the 106 grant for 402 activities.

States with an approved NPDES permit program must submit a request for pretreatment program approval by March 27, 1979. Where legislation is required an additional year is allowable. If a POTW has a design flow of greater than 5 mgd or otherwise qualifies as discussed in §403.8, an approved local pretreatment program is required in the shortest possible time, not to exceed July 1, 1983. Compliance schedules and general requirements or a permit modification clause must be added to NPDES permits during the regular permit revision cycle. Compliance schedules may allow up to three years from the date of revision for the needed program.

201 grants will provide most of the incentives to develop approvable municipal pretreatment programs. 201 regulations authorize amendments of existing or pending 201 step 1, step 2 or step 3 grants to provide for funding assistance for municipal pretreatment program development. 201 regulations do not allow grants for the sole purpose of developing a pretreatment program. 201 grant eligible pretreatment development costs are detailed in 40 CFR 35.907.

* Originally issued as SAM-36 (October 10, 1978) under the signature of the Deputy Assistant Administrator for Water Planning and Standards. Minor editorial changes have been made by the Water Planning Division.

Policy

1. General

208 monies from the FY 1979 appropriations may be used to provide 75-percent funding for the development of State or local pretreatment programs in accordance with the conditions detailed below. As 208 grant funds are limited when compared to total WQM program needs, Regional Administrators must determine pretreatment program development funding priorities in the context of total State and local WQM requirements.

2. Development of NPDES State Pretreatment Programs

All NPDES States must submit to EPA by October 9, 1978, a statement indicating whether the State has adequate authority, procedures, and funding to carry out a State Pretreatment Program.¹ After this statement is submitted by an NPDES State and reviewed by EPA, the Regional Administrator may provide 208 funds to assist this State in developing any additional legal authorities, procedures, or funding/personnel descriptions which the Regional Administrator determines are required to obtain EPA approval.² (Note: as non-NPDES States are not required to develop a State Pretreatment Program, non-NPDES States are not eligible for 208 funds for pretreatment.)

After an NPDES State Pretreatment Program is approved, this State is no longer eligible for 208 funding for pretreatment. After approval, State pretreatment program costs are for administration; such costs are eligible for 106 and those 205(g) funds transferred to the 106 grant for 402 activities.³

3. Development of Local Pretreatment Programs

To the maximum extent possible, 201 funds will be used to assist the development of local pretreatment programs. 208 funds may only be used to assist in development of pretreatment programs for those POTW's greater than 5 mgd that are not eligible for 201 funding for pretreatment program development.

The following local pretreatment program development costs are eligible for 208 funding assistance from FY 79 funds:

- ° Development of an inventory of industrial and commercial wastes being introduced into the treatment works;
- ° Evaluation of legal authority, including the adequacy of enabling legislation and the selection of mechanisms to be used for control and enforcement;

1. See 40 CFR 403.10(b)(1).

2. See 40 CFR 403.10(f) and (g).

3. Actual 106 and 205(g) funding arrangements to assist States in administering their Pretreatment Program should be delineated in State/EPA 205(g) Delegation Agreements (see 40 CFR 35, Subpart F section 35.1030) and in State/EPA Agreements (see 40 CFR Subpart G section 35.1515).

- ° Evaluation of financial programs and revenue sources to ensure adequate funding to carry out the pretreatment program;
- ° Determination of technical information necessary to develop an industrial waste ordinance or other means of enforcing pretreatment standards; and,
- ° Design of a monitoring enforcement program, including determining both the required monitoring equipment for the municipal treatment works and the municipal facilities to be constructed for monitoring or analysis of industrial waste.

The following items are 208 grant eligible if necessary for the proper design or operation of the municipal treatment works but are not 208 grant eligible when performed solely for the purpose of seeking an allowance for removal of pollutants under 40 CFR 403.7:

- ° Determination of pollutant removals in existing treatment works; and,
- ° Determination of the treatment works tolerance to pollutants which interfere with its operation, sludge use, or disposal.

No 208 funds will be used for actual operation of a local pretreatment program. 208 grants for performing the eligible tasks listed above may be used to fund through subagreements designated POTW management agencies. Regional Administrators may amend an existing or pending 208 grant to provide for development of an approvable local pretreatment program.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-7

USING 208 FUNDS TO DO WATER QUALITY AND MUNICIPAL FACILITIES
EVALUATIONS FOR TREATMENT MORE STRINGENT THAN SECONDARY*

Purpose

This memorandum sets forth eligibility criteria for selecting the particular situations and grantees to meet the national WQM priority on 208-funded water quality/municipal facilities analyses and provides guidance on developing their work programs which become part of their grant agreements. Note: This policy applies only to 208 grants awarded before October 1, 1979.

Background

Starting with FY 78 funds, Regional allocation of 208 funds to State and areawide agencies must be based on priority of needs, not on a funding formula. WQM programs developed must ensure that national priorities and objectives are met. The national WQM priority on facility planning requires that each Region, working with the States, select a limited number of agencies to perform analyses related to critical municipal facilities decisions, including:

- o evaluating water quality analyses that have been used as the basis for justifying treatment beyond secondary
- o evaluating the costs and effectiveness of proposed municipal facilities relative to alternative methods for achieving water quality goals, and
- o establishing appropriate water quality related effluent limitations for proposed facilities being considered for treatment beyond secondary and developing either a sound and well-documented justification for such treatment levels, or a sound and well-documented plan for meeting water quality goals without municipal treatment beyond secondary.

* Originally issued as SAM-37 (November 2, 1978) under the signature of the Deputy Assistant Administrator for Water Planning and Standards. Minor editorial changes have been made by the Water Planning Division.

EPA is requiring a rigorous review for all municipal projects designed for treatment more stringent than secondary. Regions must evaluate all such projects using the checklist procedure contained in the June 8, 1978, joint Rhett/Davis memo. If a project is identified as having to meet AWT treatment standards (BOD less than 10 mg/l and/or nitrogen removal, defined as TKN plus nitrite/nitrate removal greater than 50 percent); an independent justification is required.² If the Regional evaluation of a project does not demonstrate that the treatment levels proposed are necessary, or that other alternatives were sufficiently evaluated, the Region can elect to negotiate to have all or part of the project postponed until additional analyses are completed and other solutions are proposed. The Region could require that the State, working with the 201 grantee, perform these analyses by evaluating water quality and cost-effectiveness data that was not adequately considered in the original justification. In selected situations where new extensive data collection and technical analyses are required and the WQM process is the most appropriate way to accomplish these analyses, the Region should consider initiating a 208-funded evaluation of treatment more stringent than secondary.

POLICY

1. General

Each Region must determine those selected situations for which FY 79 208 funds will be allocated to perform water quality-municipal facilities analyses consistent with the national WQM priority on facility planning. In making their selections, the Regions will use the criteria presented below.

WQM arrangements in a State and the analyses required in any particular situation must be considered in determining the specific WQM agency, State or areawide, that will have the lead role in accomplishing the needed evaluation. Some of the tasks required, particularly water quality monitoring and waste load allocations, have traditionally been performed by States using 106 funds. 106 funds may continue to be used, supplemented as necessary for any particular evaluation with FY 79 208 funds. If an areawide WQM agency is given the lead role on developing waste load allocations, this responsibility must have been or be delegated by the State to the areawide agency.

The State/EPA Agreement should generally discuss how each State will use the WQM process to make AWT decisions. In FY 79 the States and EPA should use the Agreement process to determine specific responsibilities, tasks, and funding sources for each water quality-municipal facility evaluation assisted with FY 79 208 funding.

2. See WQM Policy Memorandum B-8, PRM 79-11, "Funding of Waste Load Allocations and Water Quality Analyses for POTW Decisions." This policy discusses the use of 201 and 205(g) funds on a case-by-case basis for the development of POTW-related waste load allocations and supporting water quality analyses.

2. Selection Process

In preparing for the July 1978 Congressional Oversight Hearings, each Region completed Project Review Checklists for projects proposing treatment beyond secondary identified in the 1976 Needs Survey. Since that time, Regions should have completed additional checklists in accordance with the June 8 policy. The data in these checklists and any other questionable municipal facilities situations known to the Region together with the selection criteria below should be used to identify those likely situations where the WQM process should provide new technical analyses in order to confidently make decisions on what treatment levels are needed to meet water quality goals. Selecting final candidates should be a closely coordinated effort between the Regions, the States, areawide WQM agencies, and 201 agencies.

FY 79 208 funds for water quality-municipal facilities evaluations can be used where:

1. the proposed project involves stringent effluent limitations. As a starting point, Regions should use EPA's definition of AWT (BOD less than 10 mg/l or nitrogen removal, defined as TKN plus nitrite/nitrate removal greater than 50 percent) as a screening criteria. Other projects more stringent than secondary may be considered if the Region and States cannot identify qualified candidates satisfying this AWT definition which involve greater potential cost savings and/or environmental impacts;
2. EPA and the States believe that the existing technical justification for treatment more stringent than secondary is questionable and that the decision on whether to design and build a facility with treatment more stringent than secondary will be dependent primarily on additional technical analyses;
3. the proposed project has not already proceeded to construction;
4. the WQM agency to receive funding has demonstrated a high level of technical and management competence during the initial planning process;
5. the water quality standards designate beneficial uses and define water quality criteria to protect these uses, in accordance with the Clean Water Act, and both the State and EPA have approved these WQS.

As FY 79 208 funds are limited, Regions must carefully select a small number of situations for evaluation which offer the greatest potential for cost savings and/or significant environmental impacts when compared to other candidates. Thus, for those candidates which meet the above criteria, the Region should consider the following when selecting the actual situations which will be evaluated through the WQM process using FY 79 208 funds:

- ° several municipal facilities serving a large number of people and operated by several municipalities are involved. In some cases, this may involve evaluating a blanket effluent requirement or policy being applied to all municipal dischargers in an area or basin,
- ° there is reason to believe that tradeoffs between constructing stringent municipal treatment and other abatement alternatives have not received adequate consideration. (For example, alternatives to constructing stringent municipal treatment could include implementable best management practices for non-point sources, land treatment, staged construction of facilities, or seasonal treatment requirements.)

3. Work Program

The grantee, whether a State or areawide WQM agency, is responsible for developing a work program, which will become part of their grant agreement. The grantee should re-examine the steps in the water quality planning process that led to the treatment level justification and develop a work program for completing any of the following tasks that have not already been satisfactorily completed:

1. identify the water quality standards, uses and criteria, for the affected segments. The affected segments include the segment which receives the treatment plant's discharge as well as the segment(s) immediately downstream (the receiving waters);
2. evaluate existing water quality data and problem assessments. Determine the specific water quality problems and constituents which require additional analyses. Determine additional water quality data collection needs;
3. for the constituents identified in Task No. 2, estimate the natural background, nonpoint source, combined sewer, and point source loadings to the affected segments (receiving waters), over the twenty-year planning period;
4. establish the load reductions which can be realized by implementing point sources control and, where appropriate to the water quality issues and specific water bodies involved, readily implementable BMPs for nonpoint sources;
5. estimate the total maximum daily loads for the flow conditions and discharge locations in question that these segments can assimilate without violating their water quality standards. This task should include examining the establishment of seasonal effluent limits;

6. develop alternative sets of load allocations for the constituents identified in Task No. 2, which would not violate the water quality standards in the affected segments. Each set of load allocations should correspond to a set of point source control technologies and, where appropriate, readily implementable BMPs for controlling nonpoint sources. Several levels of municipal waste treatment technology should be considered, as well as alternative or innovative technologies. Phasing AWT construction in concert with implementing BMPs should also be considered;
7. estimate the cost of the point source control facilities and, where appropriate, BMPs, and the effectiveness of each set of load allocations, including to the extent feasible, their impact on the beneficial uses in the Federally approved water quality standards;
8. assess the economic, technical, and administrative feasibility of implementing each set of load allocations;
9. identify the "best" set of load allocations, based on cost-effectiveness and feasibility of implementation;
10. revise the existing WQM plan, with the full process of public participation, to incorporate the "best" set of load allocations and their corresponding point and nonpoint source controls.

The above steps should provide the water quality related effluent limitations for the segments affected by the proposed municipal facility. This planning process will either show that treatment beyond secondary is not necessary and document how water quality standards can be met with secondary treatment, or it will provide a documented justification of what treatment levels are necessary to meet the water quality standards.

In performing these tasks, the WQM agency should carefully review existing data and analyses, undertaking new data collection and analyses only as required. Data collection and water quality analysis should be restricted to that which is required to provide the necessary water quality management information. Where technically sound and defensible WQM information can only be obtained by new data collection or water quality modeling, this should be done and the models should be calibrated and verified.

Specific outputs that the grantee will provide from WQM analyses already completed or analyses done under this grant are listed in Appendix A.

If the justification for AWT is based on a need to meet State-imposed effluent limitations for specific physical conditions (e.g., intermittent streams, critical dilution ratios, public drinking water supply, etc.) and these effluent limitations are part of the State's water quality standards or a State policy or regulation, the State with assistance from

the Region should develop a work program for justifying these effluent limitations in addition to the above tasks. Particular attention should be given to effluent requirements imposed by a State under Section 510 of the Clean Water Act.

The work program schedule should be coordinated with the establishment of NPDES compliance schedules and construction grants schedules. The work program should include specific output commitments at key points throughout the grant period.

Enclosure
Appendix A

REQUIRED WATER QUALITY MANAGEMENT OUTPUTS

1. Identification of the affected segments and their water quality standards (uses and criteria) and a discussion of how these WQS were applied in the municipal facility evaluation. If appropriate, recommendations concerning revisions to WQS.
2. List of water quality problems and constituents analyzed, including the rationale for selecting these problems and constituents.
3. Natural background, nonpoint source, and point source loading estimates to the affected segments, over the twenty-year planning period.
4. Total maximum daily load estimates for the affected segments.
5. Alternative sets of load allocations for the affected segments and corresponding water quality related effluent limitations.
6. Description and cost estimates of the point and nonpoint source controls for meeting these load allocations.
7. Effectiveness of each set of load allocations.
8. Assessment of the feasibility of implementing each set of load allocations.
9. Identification of the "best" set of load allocations for the affected segments.
10. Revised WQM plan, incorporating the "best" set of load allocations.
11. Documentation on water quality modeling and analysis and on pollution control tradeoffs that would render them reproducible.

In addition to these required outputs, the final reports will answer the following questions:

1. What effluent limits are necessary to meet the applicable water quality standards (WQS)?
2. Can the WQS be met, if (a) the treatment facility under consideration has AWT and (b) one or more of the other point sources and/or the nonpoint sources implement some combination of water quality related effluent limitations and best management practices and (c) the remaining point sources comply with their effluent limitations?
3. Is AWT necessary to meet effluent limitations for protecting the public health and welfare and/or for specific physical conditions (e.g., intermittent streams, critical dilution ratios, public drinking water supply, etc.) which are incorporated into the State's WQS or a State policy or regulation? And if so, what is the justification for these special effluent limitations?

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION B -- PROGRAM REQUIREMENTS AND CRITERIA

WQM Policy Memorandum B-8

FUNDING OF WASTE LOAD ALLOCATIONS AND WATER QUALITY ANALYSES FOR POTW DECISIONS*

Purpose

This memorandum establishes policy and procedures for the funding of waste load allocations and water quality analyses required for publicly-owned treatment works (POTWs) decisions.

Background

EPA, recognizing the costs and energy requirements of publicly-owned treatment works (POTWs) providing treatment greater than secondary (AST/AWT), has taken several steps to insure that such facilities are only Federally funded when based upon technically adequate effluent limitations. In June 1978 a joint OWPS/OWPO guidance memorandum was issued which contained a checklist to be completed before a project providing AST/AWT could receive construction grant funding. On November 2, 1978, SAM 37 was issued by OWPS which established policy and procedures for the use of Section 208 funds to review and revise waste load allocations for POTWs subject to permit limitations requiring AST/AWT. On March 9, 1979, PRM 79-7 was issued by OWPO which established policy and procedures for the review and funding of proposed AST/AWT projects.

Reduced Section 106 and 208 FY 80 appropriations coupled with increasing demands on Section 106 funds to support the issuance of second round NPDES permits and expanded monitoring programs may result in some States being unable to provide adequate funding for the timely review and revision of waste load allocations. It is therefore necessary to provide additional

* Originally issued as SAM 38/PRM 79-11 (September 5, 1979) under the signatures of the Deputy Assistant Administrators for Water Planning and Standards and Water Program Operations.

policy and procedures for FY'80 on the use of Section 201 and 205(g) funding to augment Section 106 funds to support these tasks.

Policy

Nothing in this memorandum is to affect the responsibility and right established by Sections 303 and 510 of the Clean Water Act for each State to develop water quality standards and waste load allocations. The State water quality management program will continue to exercise overall management responsibility for assuring that water quality analyses and waste load allocations are conducted in a satisfactory manner. The primary sources of funding for these activities are program grants and State funds. The amount of Section 106 and State funds currently expended for POTW-related waste load allocations should not be reduced because Section 201 and 205(g) funds may be used, on a case-by-case basis and subject to requirements in this memorandum, to augment State and Section 106 funds to provide for the development of POTW-related waste load allocations and supporting water quality analyses. Except where EPA and the State have determined that existing limitations should be revised, Section 201 and 205(g) funds may not be used to review effluent limitations or to develop alternative effluent limitations; e.g., costs associated with the development of data in support of Section 301(h) permit modification request are solely the responsibility of the requesting municipality and are not grant eligible. Where Section 201 or 205(g) funds are used, the areal extent of waste load allocation and water quality data collection activities must relate directly to needed waste load allocations for projects that are on the State 5-year construction grant priority list.

The priority for use of Section 201 and 205(g) funds to conduct waste load allocations and water quality analyses is:

1. POTWs which have been determined by EPA and the State, as a result of a PRM 79-7 review, to require a revised waste load allocation.
2. POTWs on the State 5-year construction grant priority list for which the State and Regional Administrator have determined, through the State/EPA agreement process, that existing waste load allocations are probably insufficient to support AST/AWT requirements.

SAM 37 continues to apply to the use of FY'78 and 79 Section 208 funds for waste load allocations and water quality analyses. FY'80 Section 208 funds may not be used to initiate POTW-related waste load allocations.

Procedures

1. FY 80 State/EPA Agreement: If Section 201 or 205(g) funds are to be used for waste load allocations, the FY 80 State/EPA Agreement (SEA) must contain or provide for the development of a detailed State review of the 5year construction grant priority list. Specific provision for the review may be contained in the SEA itself or in the Section 106 program plan or the 205(g) delegation agreement. Wherever a POTW has effluent limitations potentially requiring AST/AWT and Section 201 and 205(g) funds may be used, the SEA, Section 106 program plan or 205(g) delegation agreement shall provide for:

- ° an informal review of applicable water quality standards to determine whether they contain unsupported requirements or criteria; e.g., blanket discharge prohibitions or criteria substantially more stringent than contained in Quality Criteria for Water or any subsequent criteria documents published by EPA.
- ° the review of existing waste load allocations, if any, to determine whether they are technically valid and sufficient to support AST/AWT effluent limitations.
- ° the review of any other water-quality based permit limitations not derived from water quality standards or waste load allocations to determine whether they are valid.

Wherever the State and EPA determine that an effluent limitation is not valid or supportable, the State shall provide a program to rectify the inadequacy. One component of this program shall be a list of projects for which it is necessary to substantiate inadequate AST/AWT effluent limitations. This list should subdivide these projects into those requiring new or revised waste load allocations and those requiring other work. Projects requiring new or revised waste load allocations should be subdivided into the two priority classes described above. Until this listing is complete, Section 201 and 205(g) funds may not be used to fund waste load allocations.

For all cases where the State has determined that effluent limitations are unsupported for reasons unrelated to waste load allocations, the priority of resolution shall be determined by the State and Regional Administrator.

2. Funding: The SEA shall allocate costs to produce valid effluent limitations as follows:

- ° Section 106 funds may be used in any situation.
- ° where tasks relate to the basin-wide revision of waste load allocations, or to waste load allocations/water quality analyses not directly related to a POTW on the SEA needs list, only Section 106 or State funds may be used.

Section 201 and 205(g) funds may be used to augment Section 106 funds for priority one projects upon issuance of this memorandum. Section 201 and 205(g) funds may be used to augment Section 106 funds for priority two projects upon EPA approval of the State waste load allocation program.

3. Headquarters Assistance: PRM 79-7 provides for OWPO and OWPS review of the adequacy of effluent limitations and facility planning for certain proposed AWT facilities. Upon request, OWPS will provide technical assistance and advice on the review of existing water quality standards and waste load allocations, the development of work programs, and on draft work products.

4. Relationships: The use of Section 201 and 205(g) funds for waste load allocations and the involvement of 201 grantees is new so that additional guidance is necessary:

- ° responsibility for the validity of waste load allocations lies with each State in accordance with Section 303(d)(1)(C) and 303(e)(3) of the Clean Water Act.
- ° accountability for Section 201 funds used for waste load allocations and supporting water quality analyses will rest with the Section 201 grantee even though the grantee may execute a contract or intergovernmental agreement with the State or the State and an areawide 208 agency to perform the work.
- ° in order to prevent a conflict of interest, it is recommended that waste load allocations and supporting water quality analyses not be conducted directly by the Section 201 grantee. It is recommended that the Section 201 grantee instead execute a contract or intergovernmental agreement with either the State or the State and an areawide 208 agency, which may subcontract the work, if necessary.
- ° wherever Section 201 funds are to be used for waste load allocations/ and water quality analyses, the scope and schedule of work and the consultant contract shall be approved by the State and EPA. The terms of this approval shall be made a condition of the grant and shall be contained in a memorandum of understanding entered into by EPA, the State, the 201 grantee, and, when appropriate, the areawide 208 agency. EPA and the State should be intimately involved in all phases of the work as discussed in the attached management guidance.
- ° the conduct of joint waste load allocations is encouraged.

Some previous waste load allocations funded by EPA ultimately failed to be valid because of inadequate data, inexperienced personnel and improper use of mathematical models. Consultant contracts should include specific performance standards and a quality assurance program covering, where

applicable, model calibration and verification, sampling and analytical methodologies, statistical adequacy of data, and personnel requirements (see the attached management and technical guidance).

5. Municipal Enforcement Strategy: The "Final National Municipal Policy and Strategy for Construction Grants, NPDES Permits, and Enforcement Under the Clean Water Act" (August 1979) provides that for projects undergoing an AWT review, NPDES permits should not generally be reissued until this review is completed. Procedures for modifying or reissuing permits for these projects are detailed in this document.

Attachments:

PRM 79-7

Management Guidance

Technical Guidance

Municipal Enforcement Strategy, AWT Section

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION C -- COORDINATION

WQM Policy Memorandum C-1

INTERAGENCY COORDINATION*

Purpose

This memorandum provides the interagency coordination policy and guidance for State and areawide Water Quality Management planning. All interagency agreements already in existence and sent to the Regions are referenced. As new agreements are finalized, they will be forwarded to the Regions.

Background

Successful implementation of the Water Quality Management program will require the continuing involvement and support of other Federal agencies, particularly at the planning agency level. Many of these agencies have significant responsibilities in matters relating to water quality management, considerable technical expertise and a great deal of useful data and information. At the Headquarters level, coordination is being established on a continuing basis with a number of selected Federal agencies and programs which have nationwide applicability to water quality management.

Policy

Regional Offices should take action necessary to implement the provisions of interagency agreements and/or policy statements at the State and local levels.

The Regions should also encourage and assist State and local planning agencies to establish working relationships with other Federal agencies operating within their areas of jurisdiction which have responsibilities, activities or information which are related or potentially useful to effective water quality planning or management.

Following is a list of interagency agreements which EPA has signed. Copies can be obtained by contacting Patti Morris, Water Planning Division, Operations Branch (202-755-6026).

* Originally issued as SAM-11 (January 23, 1976) under the signature of the Deputy Assistant Administrator for Water Planning and Standards. Certain editorial changes have been made by the Water Planning Division.

1. Hud 701 Planning, May 2, 1975
Attachment A, Performance Criteria, March 1976
Attachment B, Memorandum to HUD Regional Offices, March 1976
2. CZM, September 29, 1975
Attachment A, Memo, Guidance on Coordination Between the CZM Program and the EPA State and Areawide WQM Program, Aug 1976
3. NACO, December 8, 1975
4. BLM, January 5, 1976
5. Corps of Engineers, March 25, 1976
6. Fish and Wildlife Service, March 12, 1976
7. ASCS, March 31, 1976
8. U.S. Forest Service/EPA Joint Policy Statement, May 3, 1976
9. U.S. Dept. of the Interior Geological Survey, May 7, 1976
10. Coordination Memorandum Between the Appalachian Regional Commission and EPA, June 21, 1976 (Regs. 2, 3, 4, & 5)
11. Joint Memo of Planning and Program Coordination between DOT and EPA. July 12, 1976
12. Relationship Between the WQM Program and the National Flood Insurance Program. February 17, 1977
13. Memorandum of Understanding Between the U.S. Small Business Administration and the U.S. Dept. of Agriculture's Farmer's Home Administration. September 20, 1976
14. Interagency Agreements with the Departments of Agriculture, Army, and the Interior, Required Under Section 304(j) of P.L. 92.500. March 1, 1977
15. Memorandum of Understanding with Department of the Interior. December 8, 1978.
16. EPA-FS Forestry WQM Statement of Intent. March 2, 1979.

SUPPLEMENTAL WQM PROGRAM GUIDANCE FOR FY 80

VI. WQM POLICY MEMORANDA

SECTION C -- COORDINATION

WQM Policy Memorandum C-2

RURAL CLEAN WATER PROGRAM RELATIONSHIP TO A 208 PLAN*

POLICY

Potential Rural Clean Water Program (RCWP) project areas must have been identified as priority agricultural nonpoint source problem areas in an agricultural portion of a State or areawide 208 plan that has been certified and approved. The planning agency must, as a minimum, have completed an adequate problem assessment and developed priorities for its problem areas or sources of agricultural nonpoint source water quality problems in the entire planning area. In potential RCWP project areas all of the following requirements must be completed in the plan:

- o Identification and assessment of agricultural nonpoint source problems.
- o Identification of the best management practices to control the problems.
- o Designation of a management agency(s) capable of implementing the agricultural portion of the 208 plan.
- o Provision for program implementation including a work program, a schedule of implementation and provision of adequate resources to manage the program.

PURPOSE

This memorandum sets forth the relationship between the State or areawide agricultural portion of 208 plans and potential RCWP project areas. In doing so, it clarifies the requirements for both the agricultural portion of the 208 plan and RCWP projects.

* Originally issued as SAM-33 (November 14, 1978) under the signature of the Deputy Assistant Administrator for Water Planning and Standards. Minor editorial changes have been made by Water Planning Division.

BACKGROUND

Section 208(b)(F) of the Clean Water Act provides for the development of water quality management plans to include (1) identification, if appropriate, of agricultural and silvicultural (related to farms and ranches) nonpoint sources of pollution and (2) procedures and methods (including best management practices) to control, to the extent feasible, such sources. The regulations defining the requirements of such plans are included in 40 CFR 35.1521.

Section 208(j) of the Act authorizes the Secretary of Agriculture with the concurrence of the Administrator, Environmental Protection Agency, to establish and administer a program to enter into long-term contracts (of five years to ten years) with rural landowners and operators for the purposes of installing and maintaining best management practices to control nonpoint source pollution. The relationship between the RCWP and the 208 plan is described under 40 CFR 35.1533-4(c).

POLICY GUIDANCE

(1) General

A State or areawide agency may choose to concentrate on specific areas or sources and apply for RCWP project assistance before completing all planning requirements set forth in 40 CFR 35.1521. However, it must, as a minimum, identify and assess the agricultural nonpoint source problems of the entire State or area, develop priorities for controlling the agricultural nonpoint source water quality problems, and schedule the completion of the remaining requirements (2(c)(d)(e) below). In RCWP application areas, the agency must complete and have approved the remaining requirements of an agriculture portion of a 208 plan (identification of BMPs, designation of a management agency, preparation of a work program and schedule of implementation, and provision of adequate resources to manage the program).

(2) Elements Required of an Agricultural Portion of a 208 Plan

(a) Identification and Assessment of Agricultural Nonpoint Source Problems

(Note: For RCWP project eligibility an area must have significant water quality problems which are caused by agricultural activities.)

The identification of agricultural nonpoint source pollutants is to include, as relevant, one or more of the following:

- sediment
- nutrients
- toxics (pesticides)
- pathogens (animal wastes)
- salinity (from return flows of irrigated agriculture, saline seeps, etc.)
- other pollutants from rural nonpoint sources

A water quality assessment is necessary to identify the extent, magnitude, and source(s) of the water quality problems. The assessment shall identify those water quality problems which are a result of nonpoint source pollution occurring from agricultural activities.

The pollutants for which State water quality standards have been established and the numerical or narrative water quality standards criteria vary. Numerical criteria should be used in the assessment whenever numerical criteria exist which are applicable to agricultural nonpoint source pollutants i.e. a number of States have established numerical criteria on various pesticides, phosphorous and fecal coliform. Generally, criteria based upon wet weather flow conditions (which are more relevant to identify nonpoint pollution than low flow conditions) have not been developed. Therefore, precise quantification of the cause and effect relationship between agricultural activities and water quality impacts will be difficult. As additional numerical or narrative criteria are developed to reflect nonpoint source pollutants, they should be applied in the assessment. The other elements of water quality standards such as antidegradation policy and designated uses will be applicable in the assessment and will be particularly useful where appropriate numerical or narrative criteria are not available.

Narrative criteria may be expressed in terms of uses impaired, e.g., areas closed to swimming because of fecal coliform levels or the closing of fishing areas because of pesticides. The data used to quantify the pollutants and to establish a cause and effect relationship are flexible. For example, stream monitoring may indicate pesticide and nutrient problems, the probable cause of which may be the intensity and type of crops grown, soil type, improper usage of chemicals (amount, and/or timing of application) or other farm management practices. Or based on the soil loss formula and an analyses of sediment delivery ratio, the probable cause of the turbidity in the stream is a high erosion rate.

(b) Identify priority agricultural nonpoint source problem areas or sources

(Note: The governor or his designee is to recommend to the Secretary of Agriculture or his designee, RCWP project areas for cost-share assistance in order of priority.)

The State or areawide agricultural portion of a 208 plan shall identify the areas or stream segments with water quality problems, originating from agricultural nonpoint sources. Water quality degradation may be indicated by maps, for example, which show areas with annual sediment yields of 10 tons or more per acre or where monitoring programs have identified pesticide or nutrient problems.

An entire State or areawide planning unit is not to be proposed as a RCWP project. Project areas should be limited to hydrologic units or drainage basins where there is evidence that streams are being degraded by agricultural

nonpoint source pollutants within the basin. The size of the area will depend on the type of agricultural activities and pollutants involved. A project area must be of a manageable size to enable substantial application of required BMP's in five years or less. Generally, a project area will be less than 200,000 acres.

(c) Identify the best management practices to control the problem(s)

Best Management Practices are the most practical (including technological, economical or institutional considerations) means of reducing nonpoint source pollution to achieve water quality goals. The selection of BMPs is to be made in the 208 planning process after problem assessment, examination of alternative practices and appropriate public participation. A BMP may be a single practice or a combination of practices which acting as a system either prevents or significantly reduces nonpoint source pollution.

A system of practices only for erosion and sediment control when pesticides and nutrients are also contributing to water quality problems must be expanded where necessary, to include practices to prevent or control the pesticides and nutrients problems. Local climatic conditions; soils, vegetation, topographic and other site specific conditions are to be taken into consideration in determining eligible BMPs. Where timing of installation or application of BMPs is critical to reduction of pollutants reaching the receiving waters, the agricultural portion of the 208 plan should specify appropriate periods for installation or application.

The BMPs identified should be the most cost-effective method of controlling the agricultural nonpoint source water quality problems. It is recognized that nonpoint source pollution control is an iterative process and BMPs may not completely achieve water quality goals in the first stages of the implementation process. The effectiveness of the BMPs on water quality should be evaluated through continuing planning. BMPs can be modified, deleted or additional BMPs can be added to the 208 plan through continuing planning as set forth in 40 CFR 35.1509.

Not all best management practices are structural; many BMPs are "cultural" in that they require changes in how operations are performed. Integrated Pest management programs and nutrient control programs are examples of BMPs that are non-structural.

(d) Designate a management agency capable of implementing the agricultural portion of the 208 plan

The regulations (40 CFR 1521-3(c)) and WQM Policy Memorandum B-2 set forth requirements and guidance to ensure (1) that management agencies designated to implement the plans have adequate authority and expertise to carry out applicable portions of the 208 plans, (2) that plans identify the responsibilities assigned to the designated management agencies and (3) that plans include indications of the management agencies' willingness to carry out such responsibilities.

Where more than one agency is designated to implement a part of the agricultural portion of a 208 plan, the plan must clearly articulate the division of responsibilities among agencies. This may be accomplished through a memorandum of agreement. No one agency need have all of the authorities listed in the Clean Water Act and regulations as long as in the aggregate the management agencies have all of the authorities.

The designated management agency(s) must have or prepare an acceptable plan to achieve:

- expertise in the relevant subject matter area (i.e., pesticide, nutrient, and erosion control, irrigation management services, water scheduling and salinity control, animal grazing and dairy operations and woodland management depending on the type of agricultural operations causing pollution problems. Related expertise in such areas as water quality monitoring, fish and wildlife, water quality/water quantity monitoring and instream flow requirements if not available in the designated management agency should be available to it).
- adequate staff (i.e., sufficient capability to provide technical and administrative personnel to carry out the program approved in the agricultural portion of the 208 plan. If the program is regulatory, monitoring and/or inspection personnel must be available to enforce the program. If a non-regulatory approach is used, adequate staff must be provided to monitor and/or evaluate the effectiveness of a non-regulatory approach in attaining water quality goals).
- adequate funding (i.e., access to a source of funds for staff and for such educational, technical and financial assistance programs approved in the plan).

(Note: 208(j) funds are to be used to supplement ongoing programs and not to replace them).

- demonstrated capability to implement the program (i.e., some assurance that the practices proposed in the 208 plan will be applied).

(Note: An administering agency will be selected for each approved RCWP area. A potential RCWP administering agency to be eligible to administer all or part of the RCW program, must show, based on past experience, that it has the capability to efficiently administer a RCWP).

(e) Program Implementation

All of the following elements must be completed in areas proposed as RCWP projects in the 208 plan:

- o Preparation of a work program to implement the plan in the proposed RCWP area including provision of an effective educational program to inform the affected public of the requirements;
- o Agreement on a reporting system (at least annual) to the Regional Administrator on progress made on implementation; and
- o Provision for adequate financial and technical assistance.

(3) Preparation of a work program to complete the agriculture portion of a 208 plan

Where the agricultural plan for the entire planning area has not been approved, the State or areawide planning agency must submit, during the continuing planning phase, a work program and a schedule of outputs to complete the remaining portion of the 208 agricultural NPS plan.