



SUMMARY OF THE LISTENING SESSIONS

OBSERVATIONS & RECOMMENDATIONS
FOR GUIDANCE AND TECHNICAL ASSISTANCE
TO FACILITATE WATER QUALITY AND
DESIGNATED USE REVIEWS FOR WATERS
IMPACTED BY COMBINED SEWER OVERFLOW

ACKNOWLEDGMENTS

The Office of Science and Technology and the Office of Wastewater Management in the Office of Water, U.S. Environmental Protection Agency (EPA) very much appreciate the time participants in the listening sessions took to convey their observations and recommendations on how to improve the implementation of the CSO Control Policy. We are also grateful for the assistance of many individuals in EPA Region III, the New England Interstate Water Pollution Control Commission and in EPA Region V for arranging the listening sessions in Philadelphia, PA, Lowell, MA, and Chicago, IL. In addition, we wish to recognize the efforts of the Clean Water Network, the Association of Metropolitan Sewerage Agencies, the CSO Partnership, the Water Environment Federation and personnel in EPA Regional Offices in disseminating information about the listening sessions and for participating in them. Thank you.

DISCLAIMER

The Observations and Recommendations are those of the participants in the listening sessions; they do not necessarily represent Agency policy. *No evaluation of the merits or the feasibility of fulfilling the recommendations is included in this document.* In a separate document, *EPA Actions To Facilitate Implementation Of The Water Quality-Based Provisions Of The CSO Control Policy*, the Agency provides guidance and lists additional guidance that may be developed.

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1. Memorandum from Tudor T. Davies and Michael B. Cook to the Water Management Division Directors, March 12, 1999. Water Quality and Designated Use Review Guidance For CSO-Receiving Waters.	
2. Question/Issues on the Impediments/Solutions to the Implementation of the WQ-Based Requirements of the CSO Policy.	

BACKGROUND

What are combined sewer overflows (CSOs)?

Combined sewer systems carry sanitary sewage (consisting of domestic, commercial, and industrial waste water) and storm water (surface drainage from rainfall or snowmelt) in a single pipe to a treatment facility. In periods of rainfall or snowmelt, total waste water flows can exceed the capacity of the combined sewer system or treatment facility. When this occurs, the combined sewer system is designed to overflow directly to surface waters, including lakes, rivers, estuaries, or coastal waters. These CSOs can be a major source of water pollution.

Because CSOs contain untreated domestic sewage, as well as domestic, commercial, and industrial storm water runoff, many different types of contaminants may be present. Contaminants may include pathogens, oxygen-demanding pollutants, suspended solids, nutrients, toxic pollutants, and floatable material. These contaminants can cause a variety of adverse impacts, including drinking water contamination, shellfish harvest restrictions, aesthetic degradation, beach closures and fish kills.

How many communities have CSOs?

Nationwide, approximately 900 communities have combined sewer systems serving 43 million people. Most of these communities are located in the Northeast and Great Lakes States. Three-fourths of the CSO communities are located in eight states -- Maine, New York, Pennsylvania, West Virginia, Illinois, Indiana, Michigan, and Ohio. Pennsylvania, Illinois, Indiana, and Ohio contain half of the CSO communities.

What is being done to control CSOs?

Historically, the control of CSOs has proven to be extremely complex. This complexity stems, in part, from the difficulty in quantifying CSO impacts on the receiving waters, the site-specific variability in the volume, frequency and characteristics of CSOs, and also from the cost of controls, particularly for small communities. Small communities, with less than 10,000 rate payers in the service area, make up approximately 67 percent of the CSO communities.

In August, 1989, EPA's Office of Water issued a National Combined Sewer Overflow Control Strategy (54 FR 37370, August 10, 1989) to address the challenge of controlling CSOs. The Strategy reaffirmed that CSOs are point source discharges subject to National Pollutant Discharge System (NPDES) and the Clean Water Act (CWA) requirements. The Strategy set forth three objectives:

- P Ensure that if CSOs occur, they are only as a result of wet weather;
- P Bring all wet weather CSO discharge points into compliance with the technology and water quality-based requirements of the CWA;
- P Minimize the impacts of CSOs on water quality, aquatic biota and human health.

To accelerate implementation of the Strategy, EPA initiated a negotiated process with municipal, State, and environmental representatives during the summer of 1992. After extensive public comment and strong support from key constituency groups, the Administrator signed the CSO Control Policy on April 8, 1994 (59 FR 18688, April, 19, 1994).

What are the purposes of the CSO Control Policy?

The CSO Control Policy was developed to elaborate on EPA's National CSO Control Strategy and to expedite compliance with the requirements of the CWA. The Policy is a comprehensive national strategy to ensure that municipalities, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated planning effort to achieve cost effective CSO controls that ultimately meet health and environmental objectives. EPA believed that coordinating the planning, selection, design and implementation of CSO management practices and controls, and involving the public fully during the decision making process would expedite compliance with the requirements of the Clean Water Act (CWA).

What are the principles of the CSO Control Policy?

The CSO Control Policy lays out four principles --

- P *Provide clear levels of control that are presumed to meet appropriate health and environmental objectives;*
- P *Provide sufficient flexibility to municipalities, especially financially disadvantaged communities, to consider the site-specific nature of CSOs and to determine the most cost effective means of reducing pollutants and meeting CWA objectives and requirements;*
- P *Allow a phased approach to implementation of CSO controls, considering a communities' financial capabilities;*
- P *Review and revise, as appropriate, water quality standards and their implementation procedures when developing CSO control plans to reflect the site-specific wet weather impacts of CSOs.*

Which entities are responsible for implementing the CSO Control Policy?

The CSO Control Policy outlines the implementation responsibilities as follows:

NPDES Authorities

- P Ensure CSO permittees develop their long-term control plan (LTCP).
- P Develop NPDES permits to meet the requirements of the CWA.
- P Coordinate the review of the LTCP and the development of the permit with the State water quality standards authority to determine if revisions to the water quality standards (WQS) are appropriate.
- P Use an appropriate vehicle to ensure that compliance with the CWA is achieved as soon as practicable.

Permittees

- P Undertake a process to accurately characterize their sewer system.
- P Document the implementation of the nine minimum controls (NMC).
- P Develop and implement a long-term CSO control plan.

EPA and States

- P Use a uniform, nationally consistent approach to developing and issuing NPDES permits to permittees with CSOs.
- P Include permit requirements that achieve compliance with the CWA.
- P Enforce schedules that require the earliest practicable compliance date considering physical and financial feasibility.

What were EPA's expectations in publishing the CSO Control Policy?

In implementing the Policy and ensuring that the CSO long-term control plans meet the water quality based requirements of the CWA, EPA recognized that there would need to be:

- P Open dialogue and active participation by all parties in all phases of the process;
- P State Water Quality Standards Authority involvement in the long-term CSO control planning effort to help ensure that development of the CSO permittees' long-term control plans are coordinated with the review and possible revision of water quality standards on CSO-receiving waters.
- P Protection of sensitive areas.
- P Clear levels of control that are presumed to meet appropriate health and environmental objectives with sufficient flexibility to consider the site-specific nature of CSOs and to determine the most cost effective means of meeting CWA objectives and requirements.
- P CSO long-term control plan (LTCP) requirements to meet water quality standards and where appropriate, States' revision of their standards, as necessary.

- P Use of the watershed approach.
- P Special consideration for small communities.

Have communities implemented the CSO Control Policy?

Based on information provided to the Agency, as of February, 1999, the following Table summarizes the status.

**TABLE 1
SUMMARY CSO CONTROL POLICY IMPLEMENTATION**

IMPLEMENTATION	NUMBER OF PERMITTEES	% PERMITTEES
<u>NINE MINIMUM CONTROLS (NMCs)¹</u>		
P Implementing NMCs	482	53%
P Implementation required at a later date	275	30%
P No current requirement to implement	156	17%
<u>LONG TERM CONTROL PLANS²</u>		
P Long term plan in place	126	14%
P Implementation required or underway	252	28%
P Under a current requirement to develop	294	32%
P No current requirement to develop	242	27%

INTRODUCTION

¹. The CSO Control Policy calls for documentation of the implementation of the nine minimum controls by January 1, 1997.

². As part of the NPDES permit requirements, the CSO Control Policy states that the permittee is to develop and submit a long-term CSO control plan, as soon as practicable, but generally within two years after the effective date of permit issuance or modification. Permit Authorities may establish longer timetables on a case-by-case basis to account for site-specific factors.

Why did EPA develop this document?

EPA initiated an effort to identify actions that the Agency could take to facilitate implementation of the water quality-based provisions of the CSO Control Policy because of the perception that States have failed to review and revise their water quality standards on CSO-receiving waters, as expected. The Conference Committee on EPA's FY 1999 Appropriation included in House Report 105-769, a provision urging EPA to:

- P develop guidance, after public comment, to facilitate the conduct of water quality and designated use reviews for CSO-receiving waters;
- P provide technical and financial assistance to States and EPA Regions to conduct these reviews;
- P report progress to relevant authorizing and appropriations committees by December 1, 1999.

How did EPA gather the observations and recommendations?

On March 12, 1999, Tudor T. Davies, Director, Office of Science and Technology and Michael B. Cook, Director, Office of Wastewater Management, in a memorandum to EPA's Water Management Directors, presented a strategy for fulfilling the Agency's obligation under the House Report (see Attachment 1). In preparation for the listening sessions to obtain individual's perspectives on the impediments to meeting the water quality-based requirements of the CSO Policy, EPA widely distributed questions to States, CSO communities and watershed/environmental interest groups (see Attachment 2).

The Agency held listening sessions in Philadelphia, PA (April 21, 1999), Lowell, MA (May 5-6, 1999), and Chicago, IL (May 13-14, 1999), as well as conducted numerous conference calls to obtain perspectives from a broad range of knowledgeable individuals. The focus of the meetings and conference calls was to obtain participants' views on the:

- P impediments to implementing the water quality-based provisions of the CSO Control Policy; and
- P actions that the Agency should take to overcome any identified impediments.

Approximately 156 individuals participated in the meetings and conference calls, including:

- P 73 communities/consultants,
- P 53 State staff (15 different States),
- P 21 Regional Office/Headquarters personnel,
- P 9 watershed/environmental representatives.

On September 24, 1999, EPA and WEF (Water Environment Federation) held an invited experts workshop. Participants critically reviewed this document, as well as preliminary guidance materials. *A Summary of Participants' Comments At The EPA-WEF Experts Workshop On Implementing The Water Quality-Based Provisions Of The CSO Control Policy* will be submitted to the applicable Congressional Committees, as part of the Agency's progress report.

SUMMARY OF PARTICIPANT OBSERVATIONS & RECOMMENDATIONS

This Summary is organized according to EPA's expectations for the implementation of the CSO Control Policy. As identified above, these expectations include:

1. Open dialogue and active participation by all parties in all phases of the process;
2. State water quality standards authority involvement in the long-term CSO control planning effort to help ensure that development of the CSO permittees' long-term control plans are coordinated with the review and possible revision of water quality standards on CSO-receiving waters.
3. Protection of sensitive areas;
4. Clear levels of control that are presumed to meet appropriate health and environmental objectives with sufficient flexibility to consider the site-specific nature of CSOs and to determine the most cost effective means of meeting CWA objectives and requirements;
5. CSO long-term control plan (LTCP) requirements to meet water quality standards and where appropriate, States' revision of their standards, as necessary;
6. Use of the watershed approach;
7. Special consideration for small communities.

The Observations and Recommendations are those of the participants in the listening sessions; they do not necessarily represent Agency policy. *No evaluation of the merits or the feasibility of fulfilling the recommendations is included in this document.*

1. OPEN DIALOGUE AND ACTIVE PARTICIPATION BY ALL PARTIES IN ALL PHASES OF THE PROCESS

The CSO Control Policy recognizes that --

- ! State WQS authorities, NPDES authorities, EPA Regional Offices, permittees and the public should meet early and frequently throughout the long-term CSO control planning process.³***
- ! Development of the long-term plan (LTCP) should be coordinated with the review and appropriate revision of WQS and implementation procedures on CSO-impacted waters to ensure that the long-term controls will be sufficient to meet WQS.⁴***

OBSERVATIONS

- !** Coordination of activities and cooperation among permit, water quality standards, and enforcement staff vary in Regional Offices and States:
 - P** in some instances, coordination is non-existent; in other instances, there is good coordination and communication;
 - P** EPA involvement in the dialogue with communities on long term control plans and water quality standards questions varies, depending on whether the State or EPA is the NPDES authority;
 - P** EPA tends to focus on larger CSO communities;
 - P** Where EPA issues permits, the Region is more actively involved;
 - P** Several State permitting staff indicated that they did not want EPA interference.
- !** Management of wet weather discharges do not involve water quality standards and enforcement programs.
- !** Meetings with communities do not always involve State or EPA water quality standards staff --
 - P** some water quality standards staff indicated that it is premature to meet with communities prior to the development of the long term control plan;
 - P** some interest groups expressed frustration that water quality standards staff are not available at meetings with communities to articulate State or EPA policy on issues such as standards modifications.
- !** Some communities find it difficult to ask the State to review their water quality standards.
- !** Communities and States were often uncertain as to whether EPA would accept changes or modifications in uses.

³ 59 FR 18694 (middle column)

⁴ 59 FR 18694 (middle column)

- ! Many believe the lack of understanding of water quality standards inhibits public involvement and interest in setting water quality standards, including considerations of the local character of waters, community standards, affordability, environmental justice; others noted that when high bacteriological counts are publicized, the publicity generates public interest in the standards.

RECOMMENDATIONS

- ! Assist States and community-based organizations develop clear, readily understood information on water quality standards.
- ! Promote national consistency among Regions, and EPA Headquarters program offices on the implementation of the CSO Control Policy.
- ! Intervene when there are differences in State standards on common bodies of water.
- ! Provide consistent internal management of the CSO and water quality standards programs in all Regions.
- ! Foster better coordination and cooperation among permit, enforcement and water quality standards staff.
- ! Provide assistance to further citizen involvement/understanding of water quality standards.
- ! Develop public notification procedures to let the public know when it is safe to use the water.
- ! Develop indicators that would show if the CSO Program is making progress in improving public health.

2. STATE WATER QUALITY STANDARD AUTHORITY INVOLVEMENT IN CSO CONTROL PLANNING

The CSO Control Policy anticipated that:

- ! *State water quality standards authorities will be involved in the long-term CSO control planning effort as well. The water quality standards authorities will help ensure that development of the CSO permittees' long-term control plans are coordinated with the review and possible revision of water quality standards on CSO-impacted waters.*⁵
- ! *Many opportunities exist for permittees and States to share information as control programs are developed and as WQS are reviewed...Coordinating the development of the long-term CSO control plan and the review of the WQS and implementation procedures provides greater assurance that the long-term control plan selected and the limits and requirements included in the NPDES permit will be sufficient to meet WQS and to comply with sections 301(b)(1)(C) and 402(a)(2) of the CWA.*⁶
- ! *Coordinating the development of the review of the long-term CSO control plan and the review of the WQS and implementation procedures provides assurance that the long-term control plan selected and the limits and requirements included in the NPDES permit will be sufficient to meet WQS and to comply with sections 301(b)(1)(C) and 402(a)(2) of the CWA.*⁷

OBSERVATIONS

- ! More effective use of water quality standards program flexibilities is needed; the flexibilities in the CSO Control Policy depend on use of the water quality standards program flexibilities.
- ! Refinements in uses are not uniformly being considered by Regions or States.
- ! State policy management drive State water quality standards use determinations rather than technical staff recommendations.
- ! Triennial review of water quality standards does not coincide with the timing of decisions on long term control plans (LTCPs).
- ! Different views on the interrelationship of the long term control plan and the water quality standards processes included:
 - P revise water quality standards then develop long term control plan based on the revised standards;

⁵ 59 F.R. 18688 (left column)

⁶ 59 FR 18694 (right column)

⁷ 59 FR18694 (right column)

- P revise water quality standards based on the Presumptive Approach;
- P revise water quality standards while developing the long term control plan;
- P before refining uses, go through the entire process (long term control plan development and implementation processes) to determine if the controls result in discharges from the combined sewer system that no longer interfere with the attainment of the designated uses.
- ! The view of some was that those participating in the CSO Control Policy development dialogue believed that some number of overflows would be acceptable in an urban setting (the Presumptive Approach) and many water quality standards would have to be revised to allow for the overflows.
- ! Some States do not want to adjust uses because --
 - P the goals drive restoration of uses;
 - P changes may not be politically acceptable, including issues related to environmental justice;
 - P hard to overcome perceptions that changes in water quality standards are not “downgrades” and that the State is not advocating a “dirty water policy.”
- ! Some questioned the applicability of goal uses in urban areas where designations occurred without adequate analyses (e.g., why be concerned with CSOs in already degraded waters).
- ! Several questioned having a “swimming use” in urban waters where there are physical barriers or dangers if swimming were to occur.
- ! States are overwhelmed; they do not have the technical expertise to challenge consultants nor the time to do a UAA and review water quality standards on every CSO-receiving water body.
- ! Need to recognize and accept the diversity in State implementation of water quality standards programs.
- ! Existing UAA guidance is too complicated for State staff; the UAA guidance can only be used by consultants.
- ! Variance requirements are too stringent for short-term, temporary adjustments in water quality standards; the same requirements apply to the removal of a goal use.

RECOMMENDATIONS

General

- ! Provide guidance rather than a policy statement; guidance should show how to do rather than what must be done.
- ! Provide a strong policy statement on the review and revision of water quality standards on CSO-receiving waters, including the roles and responsibilities of all parties.
- ! Develop a paper with a flow chart showing the interrelationship of various processes, e.g., long term control plan development and implementation, permit and enforcement, variances, water quality standards review, and how and when the public can become involved in the processes.

- ! Clearly articulate and provide to State managers a consistent expectation on the water quality-based requirements for the CSO policy and revisions to water quality standards.
- ! Explain the Agency's position on CSO impacts on already degraded urban waters.

Water Quality Standards

- ! Provide a state-by-state listing of how States address water quality standards impacts from CSOs;
- ! Support the long term control plan/water quality standards processes by--
 - P clarifying the resources required and funding needs, e.g., make a plea for additional State resources and grant funding for communities;
 - P providing technical assistance and detailed guidance to States on reviewing and revising water quality standards on CSO-receiving waters, e.g., a formal water quality standards review and revision process as part of the long term control plan process;
 - P defining acceptable adjustments in water quality standards that the public can understand;
 - P discussing with States the financial impacts of their failure to make adjustments in their water quality standards.
- ! Clearly advocate the review and revision of water quality standards, based on the Presumptive Approach in support of the CSO Control Policy.
- ! Develop a hammer to force States to review water quality standards on CSO-receiving waters and a tracking system to monitor compliance (e.g., performance partnership agreements or memoranda of agreements).
- ! Reach internal agreement on use of compliance schedules (procedure 9 of Great Lakes Water Quality Guidance).
- ! Issue guidance and develop case studies on water quality standards and the CSO program that clearly define the flexibilities in the water quality standards program, including refinements in uses to recognize a wet weather use category, use of mixing zones for bacteriological indicators, segmentation of water bodies, use of variances, temporary standards and ambient-based criteria.
- ! Use magnitude, frequency and duration factors as the basis for developing wet weather water quality criteria.
- ! Revise the Water Quality Standards Regulation to recognize wet weather related designated uses and allow for the suspension of criteria during wet weather events.
- ! Develop guidance on developing an acceptable urban aquatic life use.
- ! Revise the Water Quality Standards Regulation to provide a mechanism to remove recreational uses when it is unsafe or there is insufficient water to swim.
- ! Modify Interim Economic Guidance for Water Quality Standards to address:
 - P issues of defining substantial and widespread economic and social impact for municipalities in terms of the benefits of additional spending rather than just the affordability of doing so;

- P how to evaluate the “other information” that may affect a community’s ability to fully control CSOs, particularly for large communities where water quality programs compete for resources;
- P evaluate the validity of the 2% rule for median household income as an indicator of affordability.
- ! Scale UAA guidance, based on the value of the resource -- high quality waters versus channelized culvert streams.
- ! Develop guidance and case studies on use of the long term control plan as an acceptable UAA.
- ! Develop UAA guidance for recreational uses.
- ! Define an acceptable application of a water quality standards during wet weather events.
- ! Develop guidance on demonstrating compliance with water quality standards.
- ! Revise variance procedures to be less rigorous to reflect that a use is not being removed, but rather studies are needed to determine the attainability of the use or time is needed to construct controls. The variance should be for life of permit rather than three years.

Bacteriological Indicators

- ! Provide guidance on how to address transient high bacterial counts without removing recreation as a use.
- ! Conduct research and prepare guidance on modeling the viability of bacteria at variable distances from out falls.
- ! Define the acceptable level of risk/illness using the 1986 bacteriological indicators.
- ! Develop models for accessing bacteriological exceedences.
- ! Develop viral indicators.

3. ***PROTECTION OF SENSITIVE AREAS***

The CSO Control Policy states that EPA expects

- ! LTCPs are to give the highest priority to sensitive areas by not allowing new or increased overflows and eliminating or relocating overflows or where elimination or relocation is technically or economically infeasible, provide treatment deemed necessary to meet WQS for the full protection of existing and designated uses.⁸***

OBSERVATIONS

- !** Generally communities take sensitive areas into consideration or already placed overflow points away from beaches.
- !** There was recognition that in site-specific areas, communities may not have the ability to re-locate overflows.

RECOMMENDATIONS

- !** Define what “eliminate” discharges to sensitive areas means.

⁸ 59 FR 18692 (middle column)

4. CLEAR LEVELS OF CONTROL

The CSO Control Policy recognizes the site-specific nature of CSOs and their impacts and provides the necessary flexibility to tailor controls to situations. In doing so the Policy provides --

- ! *..[C]lear levels of control that are presumed to meet appropriate health and environmental objectives with sufficient flexibility to municipalities, especially financially disadvantaged communities, to consider the site-specific nature of CSOs and to determine the most cost effective means of reducing pollutants and meeting CWA objectives and requirements.⁹*
- ! *“Presumption Approach” -- programs that meet criteria (e.g., 4-6 overflows, 85% capture, etc.) would be presumed to meet the water quality based provisions of the CWA, provided the permitting authority determines that such presumption is reasonable in light of the data and analyses conducted and the consideration of sensitive areas.¹⁰*
- ! *“Demonstration Approach” -- programs demonstrated to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs in which case a TMDL or other means should be used to apportion pollutant loads. Such control programs are to be designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS.¹¹*

OBSERVATIONS

- ! CSO control is a moving target -- collection system versus maximizing flow to the waste water treatment plant - which comes first?
- ! Recognize that for lakes, nutrient controls are needed for recreational uses in addition to bacteriological controls.
- ! The flexibility in the policy to address site-specific issues (CSO controls, water quality standards, State implementation of water quality standards, community resources) with the Presumption Approach or the Demonstration Approach is not consistently applied; there is confusion as to the end point for the controls.
- ! The Presumptive Approach misleads communities into thinking that 4-6 overflows or 85% capture, is all that is required, irrespective of the effect on the receiving water.

⁹ 59 FR 18689 (right column)

¹⁰ 59 FR 18692 (right column)

¹¹ 59 FR 18693 (left column)

RECOMMENDATIONS

- ! Provide more timely guidance and case studies on the use of the Presumptive or Demonstration Approach.
- ! Disseminate information on 104(b)(3) grants and lessons learned.
- ! Provide guidance on the effectiveness of nine minimum controls (NMCs).
- ! Clarify the relationship of NMCs (no major capital investments) and floatables controls. Floatable controls are expensive and are really part of the long term control plan. Recognize that floatable control may not be possible everywhere.
- ! Clarify whether the Presumptive Approach meets the water quality-based requirements of the CSO Control Policy and is available as an end point for CSO controls.
- ! Use the Presumptive Approach as the technology floor (rather than the NMCs) and then evaluate how much more is needed to meet water quality standards.
- ! Provide an evaluation of the effectiveness of CSO controls.

5. LONG TERM CONTROL PLAN (LTCP) DEVELOPMENT

The CSO Control Policy reflects EPA's expectation that --

- ! *The LTCP should include all pertinent information necessary to develop the construction and financing schedules for implementation which may be phased based on the relative importance of adverse impacts on WQS, priority projects identified in the LTCP and the permittee's financial capability.*¹²
- ! *Permittees and permitting authorities are to consider innovative and alternative approaches and technologies.*¹³
- ! *Appropriate cost/performance curves (knee of the curve analyses) should be among the considerations used to guide the selection of the controls.*¹⁴
- ! *EPA expects the long-term CSO control plan to consider a reasonable range of alternatives.*¹⁵
- ! *Because the final long-term control plan will become the basis for the NPDES permit limits and requirements, the selected controls should be sufficient to meet CWA requirements.*¹⁶
- ! *Development of the long-term plan should be coordinated with the review and appropriate revision of WQS and implementation procedures on CSO-impacted waters to ensure that the long-term controls will be sufficient to meet water quality standards.*¹⁷
- ! *The planned control program is designed to allow cost-effective expansion or cost-effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses.*¹⁸
- ! *The selected controls should include a post-construction water quality monitoring program adequate to verify compliance with WQS.*¹⁹

OBSERVATIONS

¹² 59 FR 18691 (middle column)

¹³ 59 FR 18690 (right column)

¹⁴ 59 FR 18618693 (left column)

¹⁵ 59 FR 18692 (right column)

¹⁶ 59 FR 18692 (right column)

¹⁷ 59 FR 18694 (middle column)

¹⁸ 59 FR 18693 (left column)

¹⁹ 59 FR 18688 (left column)

- ! The CSO Control Policy is not mandatory; it is an unfunded mandate.
- ! Fixing and/or eliminating CSOs won't necessarily ensure attainment of water quality standards.
- ! CSO controls are technology driven. There are no incentives for innovation, or other than concrete structural solutions. Expensive structural controls drive some communities to think that changes in standards are the only solution.
- ! In some cases, the costs of controls do not justify the water quality benefits.
- ! Combined sewer system and ambient monitoring/modeling is expensive and viewed as a way to assist litigants.
- ! Some questioned the need for ambient monitoring; there is greater emphasis on combined sewer system monitoring and modeling.
- ! Two years is an unrealistic time frame to develop a long term control plan.

RECOMMENDATIONS

Long Term Control Plan

- ! Develop innovative less expensive technologies.
- ! Define the expected type and the level of long term control plan alternatives analyses.
- ! Clarify the approval process for long term control plans.
- ! Include a water quality standards review as part of the long term control plan approval process.
- ! Provide guidance and case examples of segmenting the long term control plan into an iterative process with reevaluation after each phase of long term control plan control implementation.
- ! Explain use of enforcement actions.
- ! Provide guidance on use of supplementary environmental projects and the type of projects that are acceptable.
- ! Define expectation for continuous O&M programs and potential for CSO reductions.
- ! Revise permit regulations to allow discussions with a CSO permittee after the comment period on draft permit closes.

Monitoring/modeling

- ! Provide mechanisms to share costs of monitoring; now permittee absorbs costs.
- ! Prepare guidance on dynamic modeling/sediment transport modeling for bacteria that permit writers can use.
- ! Provide guidance on how much and what type of combined sewer system and ambient monitoring/modeling is expected.
- P Develop guidance, with case studies, on how to differentiate CSOs from other wet weather impacts.

- P** Develop compliance monitoring strategies that detect water body improvements as well as monitor individual sources.

6. USE OF THE WATERSHED APPROACH

The CSO Control Policy provides that

- ! Permitting authorities are to evaluate water pollution control needs on a watershed management basis and coordinate CSO control efforts with other point and nonpoint source control activities.²⁰***

OBSERVATIONS

- !** The watershed approach is not advocated by the CSO program. CSO load reductions should be developed only after looking at all sources and apportioning shares appropriately.
- !** EPA compartmentalizes its water programs impeding holistic management of wet weather water quality problems in a coordinated manner.
- !** CSO control options are considered in isolation of other wet weather water quality discharges and impacts (e.g. if separate the combined sewers, have storm water problems).
- !** Combined sewer overflows, storm water discharges, sanitary sewer overflows, and unregulated polluted runoff have different requirements and different implementation time frames.
- !** Small communities lack resources to participate in the watershed approach.
- !** Watershed approach only delays implementation. CSOs are a particular public health problem that requires immediate attention -- it is raw sewage.

RECOMMENDATIONS

- !** Provide guidance on the relationship of CSO Control Policy implementation and TMDLs and the watershed approach.
- !** Strengthen the Policy and provide a clear framework and guidance on using the watershed approach for CSOs.
- !** Mandate use of the watershed approach as a way to integrate wet weather water quality program implementation, allowing effective tradeoffs among sources and ensuring cost-effective solutions.
- !** Show how water quality standards fit into the watershed approach, particularly incorporation of ecosystem status as an important end point for source control decisions through use of biocriteria.
- !** Develop guidance with case studies showing how to move ahead on CSO controls rather than waiting until the percentage share is defined.
- !** Provide guidance on use of supplementary environmental projects in a watershed context.

7. SPECIAL CONSIDERATION FOR SMALL COMMUNITIES

²⁰ 59 FR 18690 (left column)

The CSO Control Policy recognized that the scope of the long-term control plan, including the characterization, monitoring and modeling, and evaluation of alternatives may be difficult for some small CSO communities and provides that --

- ! *At the discretion of the NPDES Authority, jurisdictions with populations under 75,000 may not need to complete each of the formal steps, but should be required to comply with the NMCs, public participation and consideration of sensitive areas.²¹***
- ! *Following approval of the proposed plan, small communities should construct the control projects and propose a monitoring program sufficient to determine whether WQS are attained and designated uses are protected.***
- ! *Small community permittees are encouraged to discuss the scope of their long-term control plan with the WQS authority and the NPDES authority to ensure that the plan includes sufficient information to enable the permitting authority to identify the appropriate CSO controls.***

OBSERVATIONS

- ! The CSO Control Policy is unrealistic for small communities (67% of the CSO communities are under 10,000).**
- ! Small communities have limited technical and financial resources;**
- ! Small communities need models and other applicable guidance that fit their needs.**

RECOMMENDATIONS

- ! Prepare standardized assumptions, e.g., data generally show overflows cause bacteriological exceedances. Generalize the data for different sizes of streams to address bacterial contamination. There is no need for small communities to monitor what has already been monitored. Prepare a framework for small communities to use in carrying out their public participation responsibilities.**
- ! Scale the processes for small communities (monitoring, long term control plan development, water quality standards consideration, land uses impacting CSO controls).**
- ! Allow variances statewide for small communities, as was done in Ohio for mercury.**

²¹ 59 FR 18690 (middle column)

ATTACHMENTS