



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

NOV 18 1996

MEMORANDUM

SUBJECT: January 1, 1997, Deadline for Nine Minimum Controls in Combined Sewer Overflow Control Policy

FROM: Robert Perciasepe  
Assistant Administrator  
Office of Water *Bob Perciasepe*

Steven A. Herman  
Assistant Administrator  
Office of Enforcement and Compliance Assurance

TO: Water Management Division Directors, Regions I-X  
Regional Counsels, Regions I-X  
State Directors

The purpose of this memorandum is to call your attention to the January 1, 1997, deadline for implementation of the nine minimum controls by National Pollutant Discharge Elimination System (NPDES) permittees that have combined sewer systems. Implementation of the nine minimum controls is the first key milestone identified in the Combined Sewer Overflow Control Policy (CSO Policy) and is a top Agency priority. We emphasize the importance of meeting this deadline, and we urge you to take the steps necessary to achieve it.

On April 19, 1994, EPA published its Combined Sewer Overflow (CSO) Control Policy in the Federal Register (59 FR 18688). The CSO Policy was developed during a negotiated policy dialogue which included representatives from States, environmental groups, and municipal organizations. CSOs consist of mixtures of sanitary sewage, industrial wastewater and storm water runoff. During storm events, a major portion of the combined flow may be discharged untreated into the receiving water. As noted in the CSO Policy (59 FR at 18689):

CSOs can cause exceedances of water quality standards (WQS). Such exceedances may pose risks to human health, threaten aquatic life and its habitat, and impair the use and enjoyment of the Nation's waterways.

The CSO Policy describes a phased process for achieving control of CSOs and compliance with the technology-based and water quality-based requirements of the Clean Water Act. The



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

first phase involves prompt implementation of best available technology economically achievable (BAT)/best conventional pollutant control technology (BCT). At a minimum, BAT/BCT includes the nine minimum controls, as determined on a best professional judgment (BPJ) basis by the permitting authority. The first phase also includes development of a long-term CSO control plan that will provide for attainment of water quality standards (WQS).

The nine minimum controls are measures that can reduce CSOs and their effects on receiving water quality and that should not require significant engineering studies or major construction. They are as follows:

- \* Proper operation and maintenance;
- \* Maximum use of the collection system for storage;
- \* Review and modification of pretreatment requirements;
- \* Maximization of flow to the publicly owned treatment works (POTW) for treatment;
- \* Prohibition of CSOs during dry weather;
- \* Control of solid and floatable materials in CSOs;
- \* Pollution prevention;
- \* Public notification of CSO occurrences and impacts;
- \* Monitoring of CSO impacts and the efficacy of CSO controls. See 59 FR at 18691.

The nine minimum controls are to be implemented, with appropriate documentation, "as soon as practicable but no later than January 1, 1997." 59 FR at 18691.

EPA's guidance Combined Sewer Overflows: Guidance for Nine Minimum Controls (EPA-832-B-95-003, May 1995) discusses how to implement the nine minimum controls and to document their implementation. This document may be obtained through EPA's Water Resource Center (Tel. 202-260-7786) (E-mail [waterpubs@epamail.epa.gov](mailto:waterpubs@epamail.epa.gov)) or through the National Small Flows Clearinghouse (Tel. 1-800-624-8301).

As already noted, implementation of the nine minimum controls is a top Agency priority, and we believe it is an essential component of a municipality's CSO control program. We intend to track the status of implementation closely during FY 1997 through a CSO program performance plan developed under the Government Performance and Results Act. Under the performance plan, EPA Regional and State permitting authorities will be expected to compile and report data to EPA Headquarters during the second quarter of FY 1997, and periodically thereafter, regarding various aspects of CSO program implementation, including implementation of the nine minimum controls by their CSO communities.

The CSO Policy contemplates that implementation of the nine minimum controls should become an enforceable obligation through inclusion in "an appropriate enforceable mechanism." 59 FR at 18691. For those permits subject to renewal before January 1, 1997, the new permits should include a provision requiring implementation of the nine minimum controls by January 1, 1997. For permits not subject to renewal before January 1, 1997, the permitting authority should reopen the current permit to add a provision requiring implementation of the nine minimum controls by January 1, 1997, if cause exists pursuant to 40 CFR 122.62(a) or (b) or analogous State regulations. An administrative order to require implementation of the nine minimum controls would normally be appropriate in instances where the CSO permittee is in violation of a permit condition, including violation of a permit limit incorporating narrative standards (such as no discharge of floatables, or no discharge of toxics in toxic amounts) or where there is a violation of a permit condition prohibiting exceedance of a numeric State water quality standard.

EPA has encouraged permittees to move forward to implement the nine minimum controls prior to inclusion of such a requirement in a permit or other enforceable mechanism, and we recognize that many communities have made significant progress in implementing the nine minimum controls and in developing or implementing long-term control plans. Permittees should be reminded that EPA's approach, as stated in the CSO Policy, not to seek civil penalties for past CSO violations will not apply unless the nine minimum controls are implemented by January 1, 1997. See 59 FR at 18697.

EPA Regions and States are encouraged to continue compliance assistance efforts to ensure implementation of the nine minimum controls by January 1, 1997.

If you have questions concerning this memorandum, please contact either John Lyon of the Office of Regulatory Enforcement (Tel. 202-564-4051) or Ross Brennan of the Office of Wastewater Management (Tel. 202-260-6928).



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

JAN 14 1999

MEMORANDUM

SUBJECT: Water quality-based and technology-based CSO requirements

FROM: Michael B. Cook, Director  
Office of Wastewater Management

Eric Schaeffer, Director  
Office of Regulatory Enforcement

TO: Water Division Directors, Regions 1-10  
Regional Counsels, Regions 1-10  
Enforcement Division Directors, Regions 1, 2, 6, 8

Since EPA released the Combined Sewer Overflow (CSO) Control Policy in 1994 (59 FR 18688), questions have arisen concerning the relationship between the water quality-based and technology-based requirements of the Clean Water Act to CSOs, particularly where enforcement cases are pending or imminent. This memorandum clarifies that:

1. Because CSOs are subject to the technology-based requirements of the Clean Water Act (CWA), permitting authorities must specifically determine best available technology economically achievable (BAT)/best conventional pollutant control technology (BCT) on a case-by-case basis using best professional judgment (BPJ) during the permitting process. Given the protectiveness of properly-applied water quality standards (WQS), we expect the combination of the nine minimum controls (NMC) and water quality-based controls described in the CSO Policy to be generally at least as stringent as any applicable BAT/BCT requirements. Therefore, evaluation of CSO controls beyond the NMC may appropriately focus primarily on water quality issues.
2. Enforcement, permitting, and water quality programs should coordinate closely to reach agreement on the requirements of a long-term CSO control plan (LTCP). Where there is a pending enforcement case, the enforcement remedy should be consistent with WQS and with both water quality-based and technology-based permit requirements resulting from the CSO planning process.

Our expectation is that NPDES permitting, enforcement, and WQS staff would work on a cooperative basis with the permittee, following the course described below. This process assumes the collaborative participation of the CSO discharger in the approach to CSO planning described in EPA's policy and guidances. In enforcement cases, court-ordered litigation schedules or serious lack of good faith in negotiations by a defendant may influence the process for planning and selecting a CSO remedy.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

### Water quality-based requirements

The CSO Policy encourages a watershed-based approach to CSO planning. The LTCP should include extensive analysis of current water quality conditions, including the impacts of CSOs and other pollution sources on WQS attainment. It should evaluate the cost, performance, and likely water quality improvements associated with a wide range of CSO control alternatives and evaluate control measures based on cost/performance criteria (as described in EPA guidance) as well as CWA requirements.

Data developed during LTCP development can inform decisions about the attainability of designated uses and the appropriateness of any WQS revisions. Data contained in the LTCP can in many cases be used as the basis of a use attainability analysis. State and Federal WQS authorities need to be involved throughout the planning process to ensure that, if the LTCP is based in part on anticipated changes to WQS, those changes are appropriate and satisfy Federal regulatory requirements.

State and Federal NPDES authorities must coordinate throughout the planning process to ensure that the controls in the proposed LTCP will ensure that CSOs do not cause or contribute to any exceedance of WQS, including any applicable revisions to WQS. Stakeholders, especially groups representing environmental interests, should be encouraged to participate actively during the development of the LTCP, including the consideration of potential WQS revisions.

### Technology-based requirements

The CSO Policy calls for all CSO communities to implement the NMC. For each CSO community, the NPDES authority must determine on a best professional judgment (BPJ) basis whether the NMC satisfy the technology-based requirements of the CWA, considering the factors identified at 40 CFR 125.3.<sup>1</sup> The LTCP must include sufficient information concerning these factors to support a BPJ determination by the permitting authority. A BPJ analysis of any potential technology-based controls beyond the NMC would typically be conducted on a system-wide basis, rather than outfall-by-outfall.

We expect that, given the protectiveness of properly-applied WQS, the NMC, combined with water quality-based controls, will generally provide a level of CSO control that meets CWA requirements and is at least as stringent as technology-based controls identified on a BPJ basis. Although the permitting authority must still perform an analysis of technology-based requirements, the evaluation of potential CSO controls beyond the NMC may appropriately focus primarily on water quality issues, as described in EPA guidance.<sup>2</sup>

---

<sup>1</sup> EPA, 1995. *Combined Sewer Overflows — Guidance for Permit Writers* (EPA 832-B-95-008), p. 3-8.

<sup>2</sup> EPA, 1995. *Combined Sewer Overflows — Guidance for Long-Term Control Plan* (EPA 832-B-95-002).

Coordination of enforcement, permitting, and water quality programs in enforcement cases

When an enforcement action is pending, enforcement, permitting, and WQS staff (both State and Federal) should coordinate closely throughout the CSO planning process, with the goal of reaching consensus on a LTCP that will meet all expected water quality-based and technology-based permit requirements and is consistent with the CSO Policy.

During the planning process, enforcement staff should clearly articulate its views concerning the appropriateness of any proposed WQS revisions, proposed water quality-based and technology-based permit requirements, and the adequacy of CSO control alternatives. Issues of concern between enforcement, permitting, and WQS staff should be elevated early in the planning process to ensure agreement on the LTCP when it is completed.

Assuming that there is agreement that the LTCP will meet the expected requirements of a Phase 2 permit, the enforcement program would then negotiate a schedule in an enforceable mechanism for implementation of the LTCP. If a LTCP assumes future revisions to WQS, the implementation schedule may account for such revisions if there is reasonable confidence that these revisions will become effective in the near future (i.e., that the WQS authority will in fact proceed with such revisions expeditiously, and that EPA will approve them). In such a case the schedule should include a reopener provision in the event that the anticipated revisions do not in fact occur. Such a reopener should require the implementation of specific controls, rather than a return to the planning phase.

If EPA concludes that it will disapprove the anticipated revisions to WQS and promulgate Federal WQS, then the enforcement remedy should provide for attainment of the expected Federal WQS. Similarly, if EPA concludes that it will object to an anticipated State-issued permit and issue a Federal permit if necessary, the enforcement remedy should be consistent with the expected conditions of the Federal permit.

If there is disagreement among EPA programs as to whether anticipated revisions to WQS should be disapproved, or as to whether EPA should object to an anticipated Phase 2 permit, the relevant programs should attempt to resolve the issue, and elevate it if necessary. The enforcement program should seek a remedy consistent with the resolution of the WQS and permitting issues, in order to ensure that the enforcement remedy is consistent with the expected WQS and permit requirements.

If you have questions concerning this memorandum, please contact one of us, or have your staff call John Lyon of the Office of Regulatory Enforcement at (202) 564-4051 or Ross Brennan of the Office of Wastewater Management at (202) 260-6928.



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

MAY 19 1998

MEMORANDUM

SUBJECT: Implementation of the CSO Control Policy

FROM: Robert Perciasepe  
Assistant Administrator  
Office of Water

Steven A. Herman  
Assistant Administrator  
Office of Enforcement and Compliance Assurance

TO: Water Management Division Directors, Regions 1-10  
Regional Counsels, Regions 1-10  
State Directors

The purpose of this memorandum is to discuss implementation of the Combined Sewer Overflow Control Policy (CSO Policy) and identify areas where heightened efforts are necessary.

The Environmental Protection Agency (EPA) published the CSO Policy on April 19, 1994 (59 FR 18688), following a negotiated policy dialogue among representatives from States, environmental groups, municipal organizations, and EPA. The CSO Policy provides for a phased process to bring communities with combined sewer systems into compliance with the technology-based and water quality-based requirements of the Clean Water Act. To date, EPA has released six guidance documents and continues to work with stakeholders to foster implementation of the Policy.

The CSO Policy is now four years old and continues to be recognized as an example of innovation and good government. In principle, EPA and its stakeholders continue to affirm the Policy's key themes, such as permitting flexibility, stakeholder coordination and public participation, financial capability as a factor affecting implementation schedules, and examination of water quality standards as appropriate. In practice, however, many challenges remain, and implementation of the Policy has not met some initial expectations.

Nine Minimum Controls. The CSO Policy's first key milestone was implementation of the nine minimum controls by January 1, 1997. The nine minimum controls are measures that can reduce CSOs and their effects on receiving water quality without requiring significant engineering studies, construction activity, or financial investment. In a November 18, 1996, memorandum to the Regional and State Directors, we communicated the importance of meeting this deadline.



Recycled/Recyclable  
Printed with Soy/Canola ink on paper that  
contains at least 50% recycled fiber

Under the CSO Policy, implementation of the nine minimum controls should become an enforceable obligation through inclusion in an appropriate enforceable mechanism. The Policy describes how the nine minimum controls and other CSO requirements are to be included in National Pollutant Discharge Elimination System (NPDES) permits (renewed permits or reopened and reissued permits) or administrative orders. The November 18, 1996, memorandum reminded NPDES authorities that the approach identified in the CSO Policy — not to seek civil penalties for past CSO violations — would not apply unless the permittee has no discharges during dry weather and meets the objectives and schedules of the CSO Policy, including the January 1, 1997, deadline for implementing the nine minimum controls. By now, every CSO community should be implementing the nine minimum controls, and most NPDES permits should contain measurable, enforceable, and specific conditions requiring implementation of the nine minimum controls, including submittal of appropriate documentation.

Although the January 1, 1997, implementation deadline has passed, our best information from EPA Regions and States indicates that only about 52 percent of CSO communities are currently implementing the nine minimum controls. Approximately another 25 percent have not yet implemented the nine minimum controls but are under an enforceable requirement to do so in the future.

There are several reasons for this. Many communities' permits have not yet been reissued to include the nine minimum controls, and permittees are reluctant to implement the nine minimum controls in the absence of an enforceable requirement. Some States have focused their efforts on requiring long-term control plans or have resisted using enforcement mechanisms as implementation tools. We believe, however, that the nine minimum controls are an essential element of any community's CSO program and that full implementation of the nine minimum controls is crucial to the success of the CSO Policy. The goal of 100 percent implementation remains a high Agency priority. We will continue to track implementation of the nine minimum controls and coordinate with EPA and State enforcement authorities as necessary to foster compliance.

We also stress the need for communities to provide appropriate documentation that they have implemented the nine minimum controls and for NPDES authorities to review this information thoughtfully. To date, although 52 percent of CSO communities have implemented the nine minimum controls, approximately 42 percent have submitted documentation. The Agency does not believe documentation is simply a "paperwork" exercise. Rather, documentation describes the community's comprehensive effort to use the nine minimum controls to reduce the frequency, volume, and impacts of CSOs. Without strong documentation, a CSO community and its permitting authority cannot meaningfully assess the effectiveness of the nine minimum controls and the extent to which additional controls, if any, may be needed.

Long-Term Control Plans. The CSO Policy calls for initial ("Phase I") NPDES permits to require development of a long-term CSO control plan as soon as practicable, but generally within two years after issuance of the permit, Section 308 information request, or enforcement action requiring a plan. The long-term control plan should include measures that provide for compliance with the technology-based and water quality-based requirements of the Clean Water Act, including attainment of water quality standards under either the "presumption approach" or the "demonstration approach." The subsequent ("Phase II") permit should require immediate implementation of the control measures in the long-term control plan. The long-term control plan should include a fixed-date implementation schedule. Requirements for expeditious



implementation of the long-term control plan should be placed in an appropriate enforceable mechanism.

Regions and States indicate that approximately 33 percent of CSO communities are moving ahead to implement long-term CSO controls. Approximately another 28 percent are subject to an enforceable requirement to develop a long-term CSO control plan. We do not have adequate information to determine how much of the current CSO planning and control activity is being undertaken consistent with the CSO Policy.

Long-term planning consistent with the CSO Policy is key to the success of local CSO control efforts. We urge Regional and State authorities to work actively with permittees to ensure that long-term control plans address important elements of the CSO Policy such as characterization, monitoring, and modeling of the combined sewer system and receiving water; public participation; evaluation of the cost and performance of alternatives; and coordination with State water quality standards authorities and NPDES authorities. EPA Headquarters will continue to track progress in the development of long-term control plans consistent with the CSO Policy.

Water Quality Standards (WQS). Long-term CSO control plans must ensure that both the technology-based and water quality-based requirements of the CWA are met. With respect to water quality-based requirements, the CSO Policy provides that “[d]evelopment of the long-term plan should be coordinated with the review and appropriate revision of WQS and implementation procedures on CSO-impacted receiving waters to ensure that the long-term controls will be sufficient to meet water quality standards” (59 FR 18694). The CSO Policy places a high priority on eliminating or redirecting CSOs that discharge to sensitive areas such as beach areas and shellfish beds. Remaining overflows must neither cause nor contribute to a violation of WQS.

In locations where uses have been designated without consideration for the wet weather conditions of urban streams, it is appropriate to evaluate the attainability of WQS. The CSO Policy recognizes the States’ flexibility to review their WQS and encourages them to define recreational and aquatic life uses more explicitly where appropriate. Such refinements could define, for example, seasonal conditions or a particular size storm event when primary contact recreation would not occur. In making such adjustments to uses, however, States must ensure that downstream uses are protected and that the use is fully protected during other seasons or after the storm event has passed. Furthermore, a use attainability analysis would be required in such cases, since use attainability analyses are required prior to the removal of a designated use or the modification of a use to one requiring less stringent criteria. Such a structured scientific analysis is an appropriate mechanism for determining the attainability of a use. In any case, if a State has a reasonable basis to determine that the current designated use could be attained after implementation of the technology-based controls of the CWA, then the use could not be removed.

We strongly encourage Regions and States to work with permittees to ensure that long-term plans are developed consistent with WQS. We also encourage greater coordination among EPA, States, and permittees in refining designated uses as appropriate in CSO-impacted receiving waters. In many cases the permittee’s development of a long-term control plan, and the State’s review and revision of WQS, will occur concurrently and interdependently. Site-specific data collected as part of the development of the long-term control plan and data from watershed analyses should assist States in evaluating the adequacy of the long-term control plan to

contribute to the attainment of WQS. Such data will also provide important information necessary for determining whether a use is attainable and, where the designated use is not attainable, the appropriateness of a variance or other revision to the applicable WQS. Variances may be appropriate, in limited circumstances on CSO-impacted waters, where the State is uncertain as to whether the WQS can be attained and time is needed for the State to conduct additional analyses on the attainability of the WQS.

Measuring Program Performance. The CSO Policy continues to have a high level of support within EPA and among stakeholder groups. With visibility, of course, comes scrutiny. Understandably, the Policy continues to provoke questions about how well a flexible approach can address a costly and complex environmental issue. In addition, implementation of the CSO Policy is occurring amid public demands that investments in pollution control yield tangible environmental benefits.

Under the Government Performance and Results Act (GPRA), EPA developed a pilot performance plan to track the implementation status of the CSO Policy. Program indicators developed under the performance plan include progress in implementation of the nine minimum controls, development of long-term plans, and reduction in the frequency, volume, and adverse water quality impacts of CSOs. The data base developed to implement the performance plan will continue to provide useful insights into the status of CSO Policy implementation and will be a useful program management tool.

Accountability for the CSO Program is also embodied in the Agency's Strategic Plan under GPRA for the water program. Objectives to be attained by 2005 currently include a 30 percent reduction from 1992 levels in annual point source loadings from CSOs, publicly owned treatment works, and industrial sources. EPA's FY 1998 goal is for 80 percent of CSO communities' permits to be issued consistent with the CSO Policy; for FY 1999, the goal is 100 percent consistency.

We also encourage you to support efforts by CSO communities to develop other, locally defined, indicators of progress in controlling CSOs. Locally defined measures of success can provide meaningful incentives to select and implement CSO controls that not only meet CWA requirements but are cost-effective, tailored to local water quality objectives, and likely to yield results that the public, and specifically rate-payers, will support.

In closing, we urge you to help make the CSO Policy a success. We remind you that implementation of the CSO Policy continues to be a high priority for the Water Program and is among the top program priorities for the Office of Regulatory Enforcement in FY 1998. It is essential that all CSO communities be moving aggressively toward two important goals: full implementation of the nine minimum controls and coordination with NPDES and WQS authorities in the development and implementation of long-term control plans. We welcome continued dialogue among EPA Headquarters, Regional, and State permitting and enforcement authorities on removing any identified impediments to achieving these goals.

If you have questions concerning this memorandum, please contact either Ross Brennan of the Office of Wastewater Management at (202) 260-6928, or John Lyon of the Office of Regulatory Enforcement at (202) 564-4051.