



Combined Sewer Overflow Control Policy: A Consensus Solution to Improve Water Quality

Overview

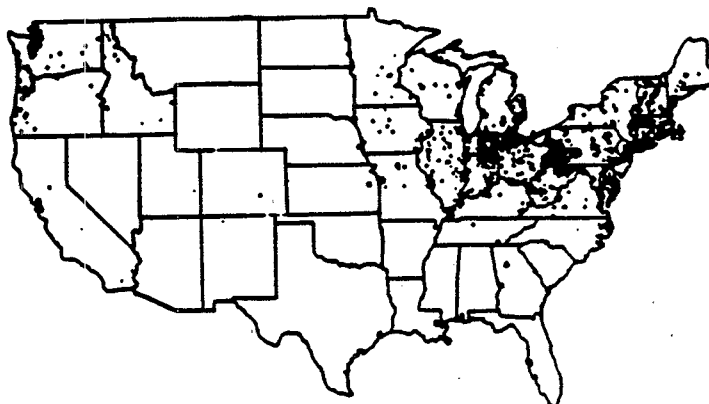
The U.S. Environmental Protection Agency (EPA) is issuing a "Combined Sewer Overflow Control Policy" which establishes a national framework and provides guidance to communities and State/Federal officials for controlling **combined sewer overflows (CSOs)**. The Policy calls for communities with CSOs to take immediate and long-term actions to address their CSOs. Rather than a one-size-fits-all mandate, the Policy provides communities with the flexibility to develop a workable, cost-effective solution to a major environmental problem.

Given the high control cost and serious nature of CSOs, EPA decided to pursue a negotiated dialogue with all interested stakeholders in developing the Policy. Representatives of communities with CSOs, State officials, plus environmental and other interest groups joined EPA at the table and helped develop the consensus Policy. Endorsements have come from municipal and environmental groups alike.

President Clinton's Clean Water Initiative recommends that the 1994 amendments to the Clean Water Act (CWA) endorse the final CSO Policy.

What are CSOs?

CSOs are a remnant of the country's early infrastructure. In the past, cities built sewer systems to collect both storm water and sanitary wastewater in the same sewer. These are called "**combined sewers.**"



CSOs are discharges of raw sewage, industrial and commercial wastes, and storm water. About 1100 communities, mostly in the Northeast and Great Lakes, have CSOs that serve a population of about 43 million.

During dry weather, combined sewers carry wastewater to treatment facilities. However, when it rains, combined sewers may not have the capacity to carry all the storm water and wastewater, or the treatment plant may not be large enough to treat all of the combined flow. In these situations, some of the combined wastewater overflows untreated into the nearest body of water -- streams, lakes, rivers, or estuaries -- creating a **combined sewer overflow (CSO)**. These CSOs may pose risks to your health and environment.

Why are CSOs a problem?

Since CSOs are comprised of raw sewage, commercial and industrial wastes, and storm water runoff, many different types of pollutants may be present. The main constituents of CSOs are untreated human and industrial wastes, toxic materials like oil and pesticides, and floating debris washed into the sewer system from streets and their drainage area. These pollutants can affect your health when you swim in CSO-polluted water or eat fish or shellfish contaminated by CSOs. CSO impacts on water quality are unique to each location and may be responsible for beach closures, shellfish bed closures, fish kills, and other water quality degradation in your community.

How are CSOs regulated?

CSOs are considered to be "point sources" of pollution under the Clean Water Act (CWA). The CWA requires EPA and States to issue permits for controlling point sources, including discharges from CSOs. National Pollutant Discharge Elimination System (NPDES) permits must be issued to address CSOs.

Permits are written to meet the **water quality standards** for a particular waterbody. Water quality standards are State-adopted or Federally-promulgated rules that serve as the goals for the waterbody and the legal basis for NPDES permit requirements under the CWA.

For example, a waterbody may be designated for a variety of recreational activities (e.g., swimming, boating, fishing, etc.), and standards are developed accordingly.

What are the key components of the Policy?

EPA's CSO Policy ensures that municipalities, permitting and water quality standards authorities, and the public engage in a comprehensive and coordinated planning effort to achieve cost-effective CSO controls and ultimately comply with the Clean Water Act. The Policy recognizes the site-specific nature of CSOs and their impacts, and provides the necessary flexibility to tailor controls to local situations. Key components include:

- **Municipalities should immediately implement the nine minimum controls** (see box on next page);
- **Municipalities should use a targeted approach**, giving the highest priority to environmentally sensitive receiving waters;
- **Municipalities, in cooperation with EPA, States, environmental agencies, and water quality groups, must develop long-term CSO control plans.** These plans should identify and evaluate various control strategies, and lead to selection of an approach that is sufficient to meet water quality standards.
- **States may decide to review and revise, as appropriate, State water quality standards** during the CSO long-term planning process.
- **The financial capability of municipalities may be considered** when developing schedules for implementation of CSO controls.
- **Public participation** is essential throughout all CSO planning and implementation efforts.

The Policy also provides flexibility to accommodate ongoing or completed CSO projects, the special needs of small communities, and watershed planning.

How expensive are CSO control measures?

Past CSO proposals have carried national price tags as high as \$160 billion or more. The negotiated Policy has reduced that cost to \$41 billion, a substantial savings. CSO costs may be high in some communities, but low in others. The severity and frequency of CSOs, plus the local water quality standards, will determine the types of controls that are needed and their costs.

EPA recognizes that financial considerations are often a major factor affecting the implementation of CSO controls. For that reason, the Policy allows consideration of a community's financial capability in connection with the long-term CSO control planning effort, water quality standards review, and enforcement actions. However, communities are ultimately responsible for aggressively pursuing financial arrangements for implementation of the minimum controls and the long-term CSO control plan.

EPA and State agencies will work with CSO communities to find economically achievable solutions that will improve public health and create a safer environment for everyone.

How will the Policy be enforced?

Elements of the Policy will be incorporated into National Pollutant Discharge Elimination System (NPDES) permits or other appropriate enforceable mechanisms.

The enforcement portion of the Policy indicates EPA's intent to commence an enforcement initiative immediately against municipalities that have CSOs that occur during dry weather. It also provides guidance on the enforcement of the wet-weather elements of the Policy.

Nine Minimum Controls

Communities should immediately implement the following minimum controls:

1. Proper operation and regular maintenance programs for the sewer system and CSOs;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
4. Maximization of flow to the municipal sewage treatment plant for treatment;
5. Prohibition of CSOs during dry weather;
6. Control of solid and floatable materials in CSOs;
7. Pollution prevention;
8. Public notice to ensure that the public receives adequate notification of CSO occurrences and impacts; and
9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

For more information

For copies of the **CSO Control Policy**, please contact the Office of Water Resource Center in Washington, DC, at (202) 260-7786. Or write:

Office of Water Resource Center
US EPA, Mailcode RC-4100
Washington, DC 20460

Diagram of a Combined Sewer System During Wet Weather

This diagram shows how domestic wastewater (sewage), industrial and commercial wastes and storm water are collected in the same sewer pipes in a **combined sewer system**. During dry weather, all of this wastewater should be carried to the wastewater treatment plant for treatment. But when it rains, some of the combined wastewater overflows untreated into the nearest receiving water, causing a **combined sewer overflow**.

