



U.S. Environmental Protection Agency - October 2007 FY08 – FY10 Compliance and Enforcement National Priority: Clean Water Act, Wet Weather, Combined Sewer Overflows

What is the Environmental Problem?

Combined sewer systems (CSSs) are designed to collect storm water runoff, domestic sewage, and industrial wastewater in the same pipe and transport it to a sewage treatment plant, where it is treated and then discharged to a water body. During periods of rainfall or snowmelt, however, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. When the capacity of the system or the treatment plant is exceeded, the excess wastewater overflows directly into nearby streams, rivers, or other water bodies, typically causing the receiving water not to meet water quality standards. Combined Sewer Overflows (CSOs) are primarily caused by wet weather events, when the combined volume of wastewater and storm water entering the system exceeds the capacity of the CSS or treatment plant. Overflow frequency and volume varies from system to system and from outfall to outfall within a single CSS. Discharges from a CSS during dry weather, referred to as dry weather overflows, are prohibited under the NPDES program.

Annual untreated discharges from CSOs are estimated to be 850 billion gallons. When full implementation of the measures described in EPA's 1994 Combined Sewer Overflow Control Policy is achieved, the Office of Water estimates that approximately 160 billion gallons of untreated CSOs would be discharged annually from CSSs. This is a volume reduction of approximately 80%. Typical pollutants found in CSOs include total suspended solids (TSS), metals, bacteria, viruses, nutrients, oxygen-demanding compounds and other pollutants washed from city streets and parking lots. CSO impacts include adverse human health effects often due to recreational exposure, (e.g., gastrointestinal illness), beach closures, shellfish bed closures, toxicity for aquatic life, and aesthetic impairment.

There are approximately 836 permits for an estimated 772 CSS communities. Affected communities are located in 32 states (including the District of Columbia), primarily concentrated in the Northeast and Midwest, and serve approximately 46 million people. Of these systems, 181 are located in population centers greater than or equal to 50,000 (representing approximately 22% of the total number of CSO permits).

Why Are We Addressing this Problem?

EPA's 1994 *Combined Sewer Overflow Control Policy* (59 FR 18688) (CSO Policy) provides a comprehensive national strategy to ensure that CSO communities, NPDES permit authorities, water quality standards authorities, EPA and the public engage in a coordinated planning effort to achieve cost-effective CSO controls that ultimately meet the requirements of the CWA. The CSO Policy establishes objectives for CSO communities: (1) to implement the nine minimum controls (NMCs) and submit documentation on NMC implementation; and (2) to develop and implement a long-term control plan (LTCP). CSS operators were expected to implement the NMCs and to submit appropriate documentation no later than January 1, 1997. *The 2004 Report to Congress on the Impacts and Control of CSOs and SSOs (2004 RTC)* stated that 94% of the active CSO permits required implementation of the NMCs. In addition to implementing the NMCs, CSO communities are expected to develop and implement an LTCP that includes measures to provide for attainment of water quality standards. LTCP implementation schedules are expected to include project milestones and a financing plan for design and construction of necessary controls as soon as practicable. The 2004 RTC indicates that implementation of enforceable LTCPs has not been achieved for the vast majority of combined sewer systems nationally. Thus, OECA's focus is to increase the universe of CSO communities implementing enforceable LTCPs.

How is OECA Addressing the Problem?

OECA's primary focus for the *FY08-FY10 CSO Performance-based Strategy* is to ensure that communities representing significant population centers are making appropriate progress towards addressing their CSO problems and violations. In addition, CSO communities in non-compliance and causing environmental or human health risks warranting Federal attention need to be addressed. Appropriate EPA actions to achieve compliance with the CSO Policy include taking appropriate, enforceable steps to address combined sewer overflow problems and violations through implementation of enforceable LTCPs. Critical steps to achieving these goals include: (1) targeting violators posing significant risks and conducting effective compliance monitoring activities and investigations; (2) using the appropriate administrative or judicial enforcement forum to achieve compliance and associated environmental improvements; and, (3) effectively providing compliance assistance.

Because enforcement actions involving CSO violations are often highly complex and resource-intensive for EPA and authorized states, this strategy also emphasizes the need for effective coordination of Federal and state resources. In 2005, EPA and a group of interested states formed a joint workgroup to provide clarity on when the federal government would pursue enforcement actions in CSO and SSO cases. These guidelines for Federal involvement include situations where: (1) significant environmental impact is occurring due to noncompliance and has not been addressed adequately; (2) CSO violations have occurred which may impact watersheds that cross state or international boundaries; (3) violations of EPA orders or consent decrees exist; and (4) a state requests that EPA take an enforcement action.

Highlights from the FY 2005-2007 Planning Cycle

Since EPA issued its Combined Sewer Overflow (CSO) Control Policy on April 19, 1994, it has focused its attention on bringing communities with combined sewer systems designed to collect storm water runoff, domestic sewage, and industrial wastewater into compliance with the Clean Water Act, through judicial and administrative enforcement, and through compliance assistance. As a result of EPA's actions during FY 2005 and FY 2006, an estimated 51.6 million pounds of pollutants have been reduced, treated or eliminated, and 50 sewage outfalls within 1 mile proximity of a drinking water intake have been addressed so that drinking water is protected from waterborne pathogens known to spread serious diseases, including gastroenteritis, cholera, and typhoid. In the judicial arena, States have often participated as co-plaintiffs, and EPA intends to continue to work closely with States in bringing enforcement actions. The more significant of the six federal judicial settlements (Judicial Consent Decrees) concluded in FY 2005 and FY 2006 include decrees in the District of Columbia, (District of Columbia Water and Sewer Authority), (entered in March 2005), and Louisville, Kentucky, (entered August 2006). In FY 2007, the settlements in CSO cases include decrees in the following cases: Indianapolis, Indiana, (entered December 2006), Greater Lawrence Sanitary District (GLSD), Massachusetts, (entered January 2007), and Sanitation District of Northern Kentucky, (entered April 2007).