TESTIMONY OF
BENJAMIN H. GRUMBLES
ASSISTANT ADMINISTRATOR FOR WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE
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U.S. HOUSE OF REPRESENTATIVES

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Madam Chair and Members of the Subcommittee, I am Benjamin H. Grumbles, Assistant Administrator for Water at the United States Environmental Protection Agency (EPA). Thank you for the opportunity to testify before you today about EPA's efforts to reduce combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) and increase reporting and public notice as you consider H.R. 2452 – The Raw Sewage Overflow Right-to-Know Act.

CSOs and SSOs contain pathogens and other pollutants that may be harmful to the environment and human health. They can cause or contribute to water quality impairments, beach closures, shellfish bed closures, and contamination of drinking water supplies. Even where they do not reach waters of the United States, overflows may release raw sewage to areas where they present high risks of human exposure, such as streets, residential areas, and basements.

EPA strongly believes that open and transparent reporting and public notification for SSOs and CSOs are critical in our efforts to reduce the health impacts of overflows and ensure the adequate control and elimination of overflows.

Reporting is already required by NPDES permits issued to municipal sewage authorities. EPA distributed a draft fact sheet in April, 2005 that provides permitting authorities with model permit conditions that, when placed in an NPDES permit, would ensure that all SSOs that may endanger human health or the environment are promptly reported to permitting and public health authorities. Reporting on CSOs is also required by our 1994 CSO control policy, which provides the framework for NPDES permitting of combined sewer systems.

In 2001 and 2004, EPA provided Congress with two comprehensive reports on CSOs and SSOs. The 2001 Report to Congress described the implementation and enforcement of the 1994 Combined Sewer Overflow Control Policy. The 2004 Report to Congress described impacts and control of CSOs and SSOs. The 2004 Report determined that CSOs and SSOs are widespread and that improved monitoring and reporting programs would provide better data for decision-makers on CSO and SSO control. The Report indicated that better tracking of environmental impacts and the incidence of waterborne disease would increase national understanding of the environmental and human health impacts associated with CSOs, SSOs and other sources of pollution.

BACKGROUND

Wastewater collection systems collect domestic sewage and other wastewater from homes and other buildings and convey it to wastewater sewage treatment

plants for proper treatment and disposal. The collection and treatment of municipal sewage and wastewater is vital to the public health in our cities and towns. The proper functioning of wastewater systems is among the most important factors responsible for the general level of good health enjoyed in the United States. When these conveyance systems fail and release untreated sewage, however, they can pose risks to public health and the environment.

In the United States, municipalities historically have used two major types of sewer systems. One type, combined sewer systems (CSS), were designed to collect both sanitary sewage and storm water runoff in a single-pipe system. Sewer builders designed this type of sewer system to provide the primary means of surface drainage and drain precipitation flows away from streets, roofs, and other impervious surfaces. State and local authorities generally have not allowed the construction of new combined sewers since the first half of the 20th century. A combined sewer overflow (CSO) is the discharge from a combined sewer system at a point prior to the POTW treatment plant. Some CSO outfalls discharge infrequently, while others discharge every time it rains. Overflow frequency and duration varies from system to system and from outfall to outfall within a single CSS. These outfalls are generally known to sewer operators and authorized in NPDES permits. Combined sewer systems must comply with the regulatory framework established in EPA's 1994 CSO Control Policy, including reporting requirements (see below).

Currently, 828 NPDES permits authorize discharges from 9,348 CSO outfalls in 32 States (including the District of Columbia). Most CSOs are located in the Northeast and Great Lakes regions. EPA estimates the volume of CSO discharged nationwide is 850 billion gallons per year.

The other major type of domestic sewer design is sanitary sewers (also known as separate sanitary sewers). Sanitary sewers are not installed to collect large amounts of runoff from precipitation events or provide widespread drainage, although they typically are built with some allowance for higher flows that occur during storm events as a result of inflow and infiltration that enter the system.

EPA estimates approximately 20,000 municipalities in the U. S. have sanitary sewer collection systems. SSOs are unintended releases of wastewater from a sanitary sewer collection system. EPA estimates that between 23,000 and 75,000 sanitary sewer overflow events occur per year in the United States (excluding basement backups) and that SSOs discharge a total volume of three to ten billion gallons per year. The majority of SSO events are caused by sewer blockages. The majority of SSO volume appears to be related to events caused by wet weather. SSOs can occur at unplanned locations, such as manholes, breaks in a sewer or at pump stations.

Existing Requirements

EPA's CSO Control Policy and the NPDES regulations provide the existing framework for reporting and public notification requirements for sewage overflows.

CSO Control Policy

In 1994 EPA issued the CSO Control Policy to provide guidance on NPDES permit requirements for CSOs. The CSO Control Policy represents a comprehensive national strategy to ensure that municipalities, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated effort to achieve cost effect CSO controls that ultimately meet appropriate health and environmental objectives.

The first milestone under the CSO Control Policy was January 1, 1997 for implementing nine minimum technology-based controls identified in the Policy. Two of the nine minimum controls already provide for the types of reporting and public notification envisioned in H.R. 2452. One of the minimum controls provides that permittees are to monitor their CSOs. A second minimum control provides that permittees are to provide public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts. System operators, with the approval of the permitting authority and after opportunity for

public comment, may tailor these requirements to their specific circumstances, but they should provide for prompt reporting to permitting and public health authorities and the public of CSOs that may endanger human health or the environment.

In December 2000, as part of the Consolidated Appropriations Act for Fiscal Year 2001 (P.L. 106-554), Congress amended the Clean Water Act by adding Section 402(q). This amendment is commonly referred to as the Wet Weather Water Quality Act of 2000. Section 402(q) requires that each permit, order, or decree issued pursuant to the CWA after the date of enactment for a discharge from a municipal combined sewer system shall conform to the CSO Control Policy.

Reporting Requirements for SSOs

Regulating SSOs pose different challenges than CSOs. SSOs are typically unplanned, making it more difficult to determine when and where they are occurring. SSOs can occur at almost any location throughout the collection system and may or may not result in a discharge to waters of the United States. In either case, however, they can pose risks to human health and the environment.

Currently, EPA regulations require NPDES permits for municipal wastewater treatment plants to require record-keeping and reporting of non-compliance

events (which includes SSOs). To assure proper implementation, the NPDES regulations provide standard conditions that are to be in NPDES permits for POTWs (see 40 CFR 122.41 and 122.42). Standard conditions in a permit for a POTW apply to portions of the collection system for which the permittee has ownership or has operational control. Of particular relevance for reporting of SSOs is the requirement at 122.41(l)(6) for 24-hour reporting to the permitting authority of any non-compliance (including overflows) which may endanger health or the environment. This initial oral report must be followed up within 5 days by a more detailed written report.

The 2004 Report to Congress found that numerous NPDES authorities were making progress identifying SSO occurrences and their causes, and that NPDES permit requirements establishing clear reporting, record keeping and third party notification of overflows from municipal sewage collection systems are critical to effective program implementation. We are working towards consistency in including requirements for notice to the public and public health officials in NPDES permits.

In April of 2005, EPA distributed a draft fact sheet to NPDES permit writers addressing permit requirements for immediate reporting; written reports; third party notice; record keeping; and capacity, management, operation and maintenance programs. In addition the draft fact sheet discussed permit coverage for municipal satellite collection systems. The draft fact sheet included

model permit conditions, which when included in a permit, would require: 1) immediate (24-hour) reporting of overflows that may endanger health or the environment to the permitting authority; 2) more detailed written reporting within 5 days, including information on location, volume, cause, exposed population, and steps to reduce or eliminate the overflow and mitigate any impacts; 3) reporting of all other overflows on routine discharge monitoring reports; 4) development and implementation of a plan to promptly notify public health agencies and the public of any overflow that may endanger health; 5) appropriate record keeping.

Enforcement

Enforcement of CSO and SSO violations is a priority for EPA. The EPA and States are continuing to address CSO and SSO problems with compliance assistance and enforcement, and they have been retained as a priority for the 2008-2010 implementation of the Performance-based Strategies for CSOs and SSOs. The CSO Performance-based Strategy primarily focuses on ensuring that communities representing significant population centers are making appropriate progress towards addressing their Clean Water Act violations involving CSOs, along with smaller CSO communities in non-compliance causing environmental or human health risks. The SSO Performance-based Strategy primarily focuses on ensuring that large municipal authorities (total treatment capacity >100mgd) and medium municipal authorities (total treatment capacity >10 mgd, but

<100mgd) continue to make progress towards reducing SSOs through adequate capacity, management, operation and maintenance of collection systems (including satellite systems) and wastewater treatment facilities.

In the past eleven years, EPA has entered into over 50 judicial settlement agreements with municipalities to address CSO and SSO violations. States have participated as co-plaintiffs in more than 70% of these actions. When fully implemented, these settlement agreements will result in the reduction of billions of gallons of sewage overflows into the nation's waters. The settlements require comprehensive plans that improve maintenance and operation of systems to reduce/eliminate overflows. Required long-term capital construction projects will expand capacity to ensure proper treatment of sewage.

Infrastructure Management

The sewer overflow challenge highlights our Nation's effort to maintain the pace of environmental progress while infrastructure systems age and communities face varying pressures. The wastewater industry faces a significant challenge to sustain and advance its achievements in protecting public health and the environment.

The Agency has approached the challenge of keeping pace with infrastructure needs of the future by developing a comprehensive strategy built upon what we

call the ”Four Pillars of Sustainable Infrastructure” – better management, full cost pricing, water efficiency, and the watershed approach. It is an effort to help ensure that our nation’s water infrastructure is sustained into the future by fundamentally changing the way the nation views and manages its water infrastructure. It is a collaborative effort involving drinking water and wastewater utility managers, professional and trade associations, local watershed protection organizations, and federal, state, and local officials.

Part of our strategy includes developing more productive and sustainable utility practices, attributes and tools. A good example of our work in this area is our ongoing collaboration with utilities to ensure that operations and infrastructure are effectively managed.

In May 2007, I signed an agreement between EPA and six major Water Associations. The agreement features a set of Attributes of Effectively Managed Utilities, suggested utility performance measures, and collaboration to promote use of these tools by utilities all around the country. Nationwide, this initiative will allow EPA and the Associations to help utilities manage their operations and infrastructure through a common management framework. Madam Chair, we believe this watershed agreement will lead to fewer leaks, spills, and overflows, as asset management reaches a higher level of understanding and support.

The Statement of Support represents a key milestone that will help utilities' enhance their stewardship efforts with a targeted list of measures to gauge progress over time encompassing infrastructure, overall performance and responsiveness to daily challenges such as overflows and leaks.

Green Infrastructure

In addition to our policy and enforcement efforts, we are promoting a new approach to stormwater, CSO and SSO management that is cost-effective, sustainable, and environmentally friendly. Green infrastructure techniques utilize natural systems, or engineered systems that mimic natural landscapes, to capture, cleanse and reduce stormwater runoff using plants, soils and microbes.

Traditional development practices cover large areas of the ground with impervious surfaces such as roads, driveways, and buildings. Once such development occurs, rainwater cannot infiltrate into the ground, but rather runs offsite at levels that contribute to sewer overflows during wet weather events. Moreover, piped stormwater and combined sewer overflows ("CSO's") may also in some cases have the adverse effects of upsetting the hydrological balance by moving water out of the watershed, thus bypassing local streams and ground water.

Green infrastructure techniques, consisting of site-specific management practices such as rain gardens, porous pavements, and green roofs are designed to maintain natural hydrologic functions by absorbing and infiltrating precipitation where it falls.

On April 19, 2007, Administrator Stephen Johnson signed an agreement with four national groups to promote green infrastructure as an environmentally preferable approach to stormwater management. This agreement is accompanied by an additional statement of support for green infrastructure that has been signed by over 30 national groups. A primary goal of this new partnership is to reduce runoff volumes and sewer overflow events through the wide-spread use of green infrastructure management practices.

EPA and its partner organizations have developed a strategy to promote the benefits of using green infrastructure in mitigating overflows from combined and separate sewers and reducing runoff. The strategy focuses on encouraging the use of green infrastructure as prominent components of combined and separate sewer overflow (CSO & SSO) plans, municipal stormwater (MS4) programs, and nonpoint source and watershed planning efforts. The strategy includes 7 major areas for which objectives and tasks are being developed and implemented: Clean Water Act regulatory support; Research; Implementation tools; Economic viability and funding; Demonstrations and recognition; Outreach and communications; and Partnerships and Promotion.

On August 16, 2007 a joint memo, Use of Green Infrastructure in NPDES Permits and Enforcement, was issued by EPA Water Permits Division and Water Enforcement Division to regional and state NPDES programs. The memo clarifies that green infrastructure technologies are consistent with NPDES permitting and enforcement frameworks, and encourages additional use of these techniques as appropriate.

HR 2452

The Agency supports many of the goals and purposes of HR 2452. We agree with the bill's sponsors that permitting authorities, public health agencies, and the public must be promptly informed of CSOs and SSOs that have the potential to endanger human health or the environment. Further, unauthorized overflows from NPDES permitted facilities, even those in areas where endangerment may not be an immediate issue, represent permit non-compliance and, as such, must be reported to permitting authorities to ensure appropriate oversight and enforcement. EPA has issued regulations, policy, and guidance and provided draft model permit conditions, as described in detail above, to ensure appropriate reporting and public notification of SSOs and CSOs.

EPA opposes any effort to allow the Clean Water State Revolving Fund (SRF) fund to be used for municipalities' administrative reporting requirements. We

believe this violates Title 6 of the Clean Water Act (CWA). The SRF can only be used for capital projects and not for operations and maintenance. To do so would reduce the capital available for water infrastructure construction while providing no additional environmental benefit.

CONCLUSION

In conclusion, Madam Chair, EPA recognizes that effective reporting and public notification for SSOs and CSOs are critical to reduce the health impacts of overflows as well as efforts to ensure the adequate control and elimination of overflows. We have worked with stakeholders for many years to develop a comprehensive, workable and effective framework for reporting and public notice of overflows and will continue that work. This framework is a work in progress, and EPA continues to evaluate its effectiveness and refine it as necessary. We believe our existing authories under the Clean Water Act are adequate for this task. We will continue to work with the members of this committee, our federal and state partners, and the many stakeholders and citizens to ensure appropriate reporting to the public, health officials and the permitting authority. I would be pleased to answer any questions you or your colleagues may have.