Abstract. The United States Environmental Protection Agency recently has undertaken several enforcement initiatives with regard to the collection, conveyance and treatment of wastewater by municipalities. Some of these enforcement initiatives have been adopted by the Georgia Environmental Protection Division. The result has been penalties in the millions of dollars and capital improvements in the billions of dollars. This paper discusses the ongoing enforcement initiatives of the United States Environmental Protection Agency and the options available to local governments both to respond to such actions and, preferably, to avoid such actions.

INTRODUCTION

Beginning in the late 1990s, the United States Environmental Protection Agency (EPA) commenced enforcement actions against numerous municipalities, including several in U.S. EPA Region IV — Birmingham, Alabama; Miami-Dade County, Florida; and Atlanta, Georgia. All of these enforcement actions included the involvement of the state environmental agency and resulted in comprehensive consent decrees. A common element of these consent decrees is that the affected municipality was required to pay civil penalties in the millions of dollars and to undertake substantial capital improvement projects in the billions of dollars to address shortcomings with regard to the handling and disposal of sewage. Although each consent decree addresses the individual characteristics of the municipality’s particular wastewater issues, all of the consent decrees share an identical goal — repairing antiquated systems and improving operation and maintenance procedures to prevent sewage overflows. In addition to the enforcement actions, EPA has undertaken several other initiatives with regard to wastewater conveyance and treatment, including development of a Sanitary Sewer Overflow regulation, publication of a Sanitary Sewer Overflow Enforcement Policy and a self-audit program for addressing municipal wastewater treatment. The Georgia Environmental Protection Division has followed EPA’s lead and has conducted independent enforcement actions in several Georgia municipalities, including Augusta and Rockdale County.

FEDERAL CONSENT DECREES

CASE STUDY: THE CITY OF ATLANTA

A Citizens Group’s Lawsuit Triggers EPA and EPD Scrutiny

The case against the City of Atlanta began in December 1995 when the Upper Chattahoochee Riverkeeper, a citizens’ group, filed a lawsuit against the City of Atlanta challenging the method selected by Atlanta to comply with state phosphorous reduction requirements in the Chattahoochee River. The suit also alleged violations of permits for newly constructed combined sewer overflow (“CSO”) treatment facilities. The U.S. District Court dismissed the phosphorus claim, finding that the City did not violate any state law requirements. In November 1997, however, the Court ruled that the CSO treatment facilities had violated National Pollutant Discharge Elimination System (“NPDES”) permits regarding monitoring, effluent quality and other requirements. The Court stayed proceedings regarding remedy pending negotiation of a Consent Decree.

At the same time that the Riverkeeper case was proceeding, EPA and the Georgia Environmental Protection Division (“EPD”) announced their intention to jointly investigate reported sewage spills and effluent limitation violations of Atlanta’s water pollution
control programs, including the CSO facilities, wastewater treatment plants and the collection system. EPA and EPD conducted a three-month intensive evaluation of Atlanta's programs. They inspected each wastewater treatment plant, CSO facility and walked the rights-of-way of major trunk sewers. They interviewed key city officials regarding programs, policies and procedures. EPA and EPD investigators also followed and interviewed Sewer Operations Division work crews over several days. This was an exhaustive and comprehensive review of every aspect of Atlanta's program.

The Combined Sewer Overflow Consent Decree
Following entry of the Court Order in November 1997, EPA and EPD joined in weekly negotiations with representatives of Atlanta and the Riverkeeper over the terms of a Consent Decree that would resolve allegations involving the CSO facilities. A tentative settlement was announced to the Court in April 1998 and the Consent Decree was entered as a final order of the Court on September 24, 1998. This Consent Decree requires Atlanta to perform a number of actions including payment of a $2.5 million civil penalty; establishment of a $27.5 million supplemental environmental project (which include a $2.5 Million Stream Cleanup Plan and $25 Million Greenway Acquisition Plan); development and implementation of an operations, maintenance and management program with regard to the CSO facilities; a twelve-month study of the impacts of CSO discharges on water quality, and identification, implementation and completion of remedial measures for each of the CSO facilities by March 31, 2007.

The Wastewater Treatment and Collection System Consent Decree
Concurrent with the lodging of the Consent Decree on CSO issues, EPA and EPD filed a complaint that included additional claims regarding the wastewater treatment plants and the collection system. Shortly after entry of the CSO Consent Decree, Atlanta, EPA and EPD commenced settlement negotiations regarding these issues. As Atlanta had already commenced substantial capital improvements of its wastewater treatment plants, the second Consent Decree, which was entered on December 20, 1999, focuses primarily on collection system issues. The Consent Decree does require Atlanta to improve its management, operations and maintenance programs and laboratory information systems for its wastewater treatment plants.

The collection system provisions of the Consent Decree impose significant obligations on the City of Atlanta with the central goal of eliminating sanitary sewer overflows. These include:

- Payment of a $700,000 penalty;
- Implementation of a number of programs and plans including: Contingency and Emergency Response Plan; Short-Term and Long-Term Operations Plan; Management, Operations and Maintenance Program; Grease Management Program; Sewer Mapping Program; Safety Program, Training Program, and Private Lateral Program;
- Schedule for completion of ongoing Capital Improvement Projects;
- Negotiation of Interjurisdictional Agreements with satellite jurisdictions;
- Comprehensive study program to evaluate the current condition of the entire collection system and remedy of deficiencies through Capital Improvement Projects;
- Modeling and mapping of the entire collection system;
- Implementation of a "Capacity Certification Program," which requires Atlanta to assure adequate capacity at its wastewater treatment plants, pump stations and collection system for any sewer hookup to the system prior to issuance of a certificate of occupancy. As compared to the imposition of civil penalties for failure to comply with other provisions of the Consent Decree, failure to comply with this program could result in a sewer moratorium in the City of Atlanta.

In response to the requirements of these Consent Decrees, the City of Atlanta has committed to spend over $4.6 billion to maintain and replace aging pipes, increase capacity and upgrade sewage treatment plants. This is in addition to the $1.1 billion Capital Improvement Projects that were underway prior to the enforcement action.

The City of Atlanta's Consent Decrees represent EPA's "wish list" for how they want wastewater systems to operate. Prior to initiation of the enforcement actions, the City's system was probably no better nor no worse than other Georgia systems of a similar age. Thus, smaller municipalities cannot assume that they could not be subject to a similar enforcement action. In fact, the requirements developed in the City of Atlanta Consent Decrees are showing up in Georgia Environmental Protection Division Orders against smaller municipalities. Thus, even though Atlanta is a large city, smaller
municipalities can expect to encounter similar requirements as those imposed on the City of Atlanta.

EPA'S ENFORCEMENT INITIATIVES

Some of the most stringent requirements of Atlanta's and other municipalities' Consent Decrees have focused on the problem of "Sanitary Sewer Overflows." A "Sanitary Sewer Overflow" or "SSO" occurs when untreated wastewater is released from a sewer system before undergoing full secondary treatment. EPA identifies many causes for SSOs, including inadequate management, operation and maintenance of the sewer system resulting in broken or leaking pipes and grease or debris accumulation. Insufficient capacity (because of excessive infiltration and inflow) also is a cause of SSOs. EPA estimates that there are at least 40,000 overflows of sanitary sewers each year in the United States.

EPA has determined that SSOs pose a substantial health and environmental challenge in some parts of the United States. The response to this challenge has been found to vary widely from state to state, with no national consistency in preventing and enforcing the law prohibiting SSOs. In response to issues presented by SSOs, EPA convened the SSO Federal Advisory Subcommittee in 1995, made up of representatives of municipalities, health agencies, and environmental advocacy groups, to advise EPA on how to best meet the challenges presented by SSOs. One goal of the Subcommittee was to develop an SSO regulation.

Proposed Sanitary Sewer Overflow Regulation

The Clinton administration established an informal deadline of October 2000 to adopt final regulations designed to regulate Sanitary Sewer Overflows. The announcement of the proposed regulation was delayed until nearly the end of Clinton's presidency, being issued on January 5, 2001. The main elements of the proposed SSO rule are:

- **Capacity Assurance, Management and Operations and Maintenance Program.** EPA will require municipalities to ensure that they have adequate capacity prior to allowing connections to a sewer system. EPA will also impose more stringent standard operation and maintenance procedures.
- **Notification of Public and Health Authorities.** This program will require municipalities to establish a program for public notification of sewer overflows based on the risk associated with the overflow. EPA also proposes that annual summaries of sewer overflow be made available to the public.
- **Prohibition of Overflows.** SSOs to surface waters are prohibited except where such SSOs are beyond a municipalities' reasonable control or severe natural conditions.
- **Expanding Permit Coverage to Satellite Systems.** Satellite municipal collection systems will be required to obtain NPDES permit coverage.

Although the future of this rule under the Bush administration is unclear, if finalized, this major initiative is anticipated to prompt considerable investment in infrastructure improvements by municipalities throughout the United States. EPA estimates that this rule would impose an additional total cost for municipalities of $93.5 to $126.5 million each year. It is also anticipated that this initiative will prompt additional EPA scrutiny and investigation of municipalities that have a significant number of overflows. For instance, the week after the proposed rule was issued, federal and local authorities announced plans to join a citizen lawsuit filed against the City of Los Angeles over alleged inadequate maintenance of its sewage system. In its January 8, 2001 press release, the U.S. Department of Justice noted that more than 2000 sewage spills have been linked to problems with Los Angeles' collection system, with an average of 50 spills per month. Interestingly, like Atlanta, Los Angeles had already earmarked significant funds to upgrade the system, but the regulators stated that they wanted "legal assurances" that the plans would be implemented along an enforceable timeline.

Region IV EPA Self Audit Program

Not fully satisfied by either the pace or the direction of the Federal Advisory Committee discussions and issuance of the proposed SSO regulations, Region IV of EPA implemented a self-audit program. This program "encourages" municipalities to audit their management, operations and maintenance programs and capital improvement needs and then submit their findings to EPA, together with a schedule for implementing corrective action. Region IV has stated that a participant in this self-audit program will be eligible for a "substantial reduction or elimination of any applicable civil penalties." Region IV started this audit program by sending out "invitations" to various municipalities in the Region IV area. Several municipalities from Alabama, Georgia, North Carolina, Kentucky, Mississippi, Florida, South Carolina and Tennessee elected to participate in the process.
Sanitary Sewer Overflow Guidance Memorandum

As a follow-up to enforcement actions, EPA is turning up the heat against municipalities with its release on April 27, 2000 of a guidance memorandum, *EPA Compliance and Enforcement Strategy Addressing Combined Sewer Overflows and Sanitary Sewer Overflows*. This guidance requires EPA regional offices to develop enforcement plans that include schedules for inspections of municipal combined sewer overflow facilities and separate collection systems and identification of tools for achieving compliance, including self audits or consent decrees.

AVOIDING ENFORCEMENT ACTIONS
(OR AT LEAST REDUCING THE IMPACT OF AN ENFORCEMENT ACTION)

A municipality should anticipate that, at some point, it will be the subject of an enforcement action by either the state or federal regulators, or both. The item that appears to attract the most attention from the regulators is a large sewage overflow from either the collection system or a wastewater treatment plant. A series of overflows also will turn the regulators' attention to the municipality. Investments in proactive system management, a main theme in both the proposed SSO Rule and the Self-Audit Program, and investments in infrastructure are the best ways to avoid enforcement actions.

Of course, these investments are costly and often take significant time to construct or come "on line." In addition, despite best efforts, the regulators may initiate an enforcement action anyway. Some tips for reducing the bad effects of an enforcement action, such as large penalties, costly capital improvements, and heavy-handed oversight of management programs, are:

- Cooperate with the regulators. Resistance does not win friends. EPA and EPD have broad rights of inspection and they are going to get the information they want one way or another.
- Public Relations/News Media. Have a person on standby that can prepare a press statement quickly. It is important that the news media and the public have accurate, rather than inflammatory, information. Be assured that the regulator will issue a press statement with its own "spin" on the enforcement action and the municipality should be prepared to respond.
- Records. Maintain all required records in a central location and in an organized fashion. Regulators may ask to review discharge monitoring reports (DMRs) and other records required to be maintained under the permit. Regulators are also interested in spill reports. It is important that such spill reports contain as accurate of information as possible. For example, a spill report should indicate the quantity, the duration, whether the spill was from a private lateral or mainline; and the response time and corrective actions taken. If a report is missing information, it will be construed against the municipality.
- Management, Operations and Maintenance Programs. Regulators like to see established and readily available written management, operations and maintenance programs ("MOM programs"), as well as evidence that such plans have, in fact, been implemented. The MOM programs that should be in place include preventative and corrective maintenance, emergency response, grease management, private laterals, operating plans, and worker training/safety.
- Budget/Finances. Information should be readily available regarding a utility's current rates, budgets, and operating costs. The regulators will use this information to confirm appropriate spending and allocation of funds for wastewater expenses. For example, regulators will ask whether the utility receives full funding from its revenues or whether revenues are used to fund other non-sewer government activities. Does the utility budget for annual operating costs? Does the utility maintain a fund for equipment and infrastructure replacement?
- Equipment and Tools/Inventory of Spare Parts. Regulators like to confirm that the municipality has the proper equipment, tools and spare parts inventory to make quick repairs.
- Design of System. Regulators will ask to review as-built drawings and will request information regarding how decision-makers confirm adequate "capacity" of the system to accept new flows.
- Ordinances. The municipality should confirm that there are adequate pretreatment, sewer use and grease management ordinances in place and enforced.
- Performance Indicators. EPA is interested in "indicators" to measure performance of a system. Some performance indicators include the ratio of maximum wet weather flow to average dry weather flow; annual number of overflows; annual number of sewer cave-ins; percentage of sanitary sewer evaluation survey and
rehabilitation performed per linear foot of sewer pipeline per year; and number of manholes inspected per year.

An EPA inspection will likely be quite detailed and intensive. The municipality will benefit from a proactive approach addressing these items prior to an inspection. Additional guidance regarding the types of items that federal and state regulators will review can be found on EPA Region 4's "MOM" website, including a Checklist for Conducting Evaluations of Municipal Wastewater Collection System Operation and Maintenance Management Programs and Guidance for Conducting evaluations of Municipal Wastewater Collection System Operation and Maintenance Management Programs. Both of these documents provide excellent insight into the detail of inspection that can be expected in an enforcement action.

CONCLUSION

Federal and state enforcement actions can cost a municipality millions of dollars of penalties and billions of dollars of capital improvements. Proactive system management, as described in EPA's proposed SSO rule and Regions IV EPA's Audit program, is one of the best tools to avoid enforcement actions.

SELECTED REFERENCES


