

South Carolina Sewer System Overflow Compliance and Enforcement Document

Background

This document addresses compliance and enforcement efforts by the South Carolina Department of Health and Environmental Control (Department) to ensure compliance by publicly/privately owned waste water utilities with the requirements of the statutes and their National Pollutant Discharge Elimination System (NPDES) and state no-discharge (ND) permits.

Although sewer system overflows (SSOs) have existed since separate sanitary sewers were first introduced, there is an increased national emphasis to continue to address SSOs. Separate sanitary sewers are designed to collect municipal and industrial wastewater, with the allowance for some acceptable level of infiltration and inflow, and transport these flows to a treatment facility. When the sewer system is unable to carry these flows, the system becomes surcharged and an overflow may occur. A number of factors may contribute to SSOs including insufficient capacity, bottlenecks, grease buildup, and most important, excessive infiltration and inflow. SSOs result in a discharge into the environment of untreated or partially treated sewage that may contain pathogens and toxic pollutants.

Statement of Problem

For many years, neglect of collection systems has become more problematic as the number of SSOs reported to regulatory agencies continues to grow. In many cases, municipalities and, especially satellite collection systems, are not aware of their obligations concerning sanitary sewer overflows. The lack of adequate preventative maintenance programs and insufficient planned system rehabilitation and replacement programs have contributed to the deterioration of infrastructure.

A satellite collection system is any device or system used to convey sewage to a treatment facility that has a NPDES permit and the satellite collection system owner is not the owner or operator of the treatment facility with the NPDES permit.

Purpose

The intent of this document is to inform and provide guidance to wastewater utilities and to establish a standard approach to addressing SSOs throughout the State of South Carolina. While any case must be decided on the specific facts related to it by applying the law and regulations, a program providing flexibility for local situations and enforcement consistency is vital to its success.

Wet weather overflows are usually the result of excessive infiltration or inflow entering the system through defective sewer joints, cracked lines and manholes, missing manhole covers, roof and basement drains, or cross connections with storm sewers. Controlling wet weather overflows requires a comprehensive evaluation of the sewer system and an aggressive rehabilitation program. Many

utilities have begun implementing a remedial action program in an effort to control wet weather flows without adequately evaluating the collection system to assess the extent of overflows as well as the integrity and capacity of their system. While their actions addressed the obvious SSOs, they often created new problems downstream or compounded unknown SSO problems. The results were significant capital investments with unsatisfactory results. Any comprehensive evaluation and rehabilitation program must be followed by a preventative maintenance and planned rehabilitation and replacement program to prevent infrastructure deterioration and maintain the quality of the system.

Regulatory Requirements

Federal Clean Water Act

An overflow is defined as any untreated sewage that leaves the collection system before the head works of the wastewater treatment plant. An unpermitted discharge occurs when the overflow has the potential to reach or has reached waters of the United States. The majority of overflows are caused by inadequate operation, maintenance, and management of the collection system. Section 301 (a) of the Clean Water Act (CWA) declares the discharge of any pollutant not in compliance with an NPDES permit issued pursuant to Section 402 of the CWA to be unlawful. NPDES and state permits (issued under SC Regulation 61-9) state that:

A Publicly Owned Treatment Works (POTW) is defined in SC Regulation 61-9.122.2 as any device or system used in the storage, treatment, recycling, reclamation of municipal sewage or industrial waste of a liquid nature which is owned by a 'state', a 'municipality', or 'regional entity'. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

A Privately Owned Treatment Works is defined in SC Regulation 61-9.122.2 as any device or system, which is both used to treat wastes from any facility whose operator is not the operator of the treatment works and is not a POTW.

A Satellite Sewer System means a sewer system that is owned or operated by one person that discharges to a system that is owned or operated by a different person. Satellite Sewer Systems depend on a separate person for final treatment and discharge and include systems approved under R.61-9.505.8.

For the purposes of this document, privately owned treatment works treating domestic sewage and satellite sewer systems have been grouped with POTWs and are referred to simply as wastewater utilities.

South Carolina Pollution Control Act

In June 2012, Section 48-1-95 of the South Carolina Pollution Control Act was amended to include, in part, the following regarding SSOs from a wastewater utility:

“Significant Spill” means a net discharge from a wastewater utility of at least 5000 gallons of untreated or partially treated domestic sewage that could cause a serious adverse impact on the environment or public health. “Significant Spill” does not include spills caused by a natural disaster, direct act of a third party, or other act of God.

Wastewater utilities must verbally notify the department of any significant spill within twenty-four hours and by written submission within five days. The twenty-four hour notification should be made to the Environmental Affairs Area office located in the area of the state where the spill occurs. The five-day notification should be made to the Bureau of Water in Columbia.

Upon receiving notice of a significant spill from a wastewater utility, the department must determine whether the responsible wastewater utility has had more than two significant spills per one hundred miles of its sewage collection system, in the aggregate and excluding private service laterals, during the twelve-month period up to and including the date of the significant spill.

If the wastewater utility has had more than two significant spills per one hundred miles of its aggregate collection system during a twelve-month period, the department **shall** issue an order directing the utility to complete a comprehensive review of the sewage system and treatment works facility identified pursuant to subsection (C), or if the wastewater utility has a Capacity, Management, Operations, and Maintenance plan in place directing the utility to update this plan, the order must include, but not be limited to:

- a. the submission of the findings of the comprehensive review of CMOM update; and
- b. the required implementation of any plans to minimize the recurrence of significant spills.

The comprehensive review must be performed by a licensed South Carolina professional engineer.

Unless the Department’s order is being appealed, the comprehensive review or CMOM must be initiated by the wastewater utility’s owner with two months of receiving an order from the department or, in the case of an appeal, within two months from the date the order becomes final or unappealable.

The department shall require that all wastewater utilities provide public notice of any significant spill of five thousand gallons or more within twenty-four hours of the discovery. Where

the responsible wastewater utility does not provide this notice, in addition to any enforcement response, the department shall provide notice of the significant spill.

Public Notification

The public frequently submits inquiries about SSOs to the Department. Public notification is required for overflows of 5000 gallons or more or any overflow that has the potential to affect public health. However, a notification program can include notification s for smaller overflows. For example, an overflow occurring in a public park should be public-noticed to ensure people are made aware to stay clear of the area until appropriate clean-up has been completed.

Types of Notification

The type of notification is not specified in statute or regulation; however, the notification should be sufficient to adequately inform the affected public and may include:

Social Media Posts

Phone Alerts

Press Release (Web Site and Local Press)

Signs (Posting in the area of release and downstream)

Door to Door Notification and Door Hangers

Notification to the Department

Sewer systems that experience SSOs are required to file a written report to the Department within five days. Historically, this report has been filed on paper using DHEC Form 3685 – sent in by mail, e-mail or fax. On January 1, 2020, the Bureau of Water began using the ePermitting database for all permitting, compliance and enforcement functions. All regulated wastewater systems are required to register for this system and begin all required reporting electronically. Although the five-day SSO reports are not required to be reported electronically until December 22, 2025, regulated entities are strongly encouraged to begin reporting SSOs electronically as soon as possible.

Enforcement

Due to the growing number of SSOs being reported, the Bureau of Water has implemented a routine review of significant SSOs from wastewater utilities and other sewer systems. As previously stated, the Department is mandated by statute to review Department records for “Significant Spills” that meet the requirement for mandatory enforcement actions and implementation of corrective action. The Bureau of Water will continue to conduct these periodic reviews and will take appropriate enforcement action with regard to SSOs.