

NPDES Permits, Compliance and SSOs

Rick Pinneo, P.E.
Manager, Southern Municipal Unit
Permit Section
Division of Water Pollution Control
April 10, 2008

Regulations/Policies Affecting SSOs

1. Subtitle C: part 306.304
2. 40 CFR 133: Definition of Secondary Treatment
3. 40 CFR 122.41(e): Proper Operation & Maintenance
4. USEPA's Activities
 - a. SSO Task Force
 - b. Wet Weather Flow Policy of 2002

Subtitle C: Part 306.304:
Overflows

“Overflows from Sanitary Sewers
are Expressly Prohibited”.

40 CFR 133: Definition of
Secondary Treatment:
No effluent shall exceed
30/30 mg/l BOD/SS

Exceptions for:

- ¹ treatment plants utilizing
trickling filter and/or lagoon
systems.
- ² discharges from CSOs.

Proper Operation & Maintenance Requirements

- Treatment Systems
- Collection Systems
- Provide Laboratory Controls
- Appropriate Quality Assurance

USEPA's Wet Weather Flow Policy of 2002 prioritized USEPA's (and states) workload for permit and compliance activities. Discharges from CAFOs, stormwater requirements for construction site activities and industrial sites, CSO discharges and LTCP and SSOs.

Current Compliance Activities in 2007

64 VNs sent by Agency
due to SSOs

VN Actions

- Immediate Compliance
- Possible Cease and Desist Order if Definitely correctable
- Possible Compliance Commitment Agreement
 - a. Previous sewer rehabilitation work
 - b. Financial documentation

Conditions in NPDES Permits

1. I/I Study Requirements
2. Overflow Prohibition
3. CMOM – Capacity, Management, Operation and Maintenance

Special Condition

This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

Special Condition

Overflows from sanitary sewers are expressly prohibited by Ill. Adm. Code 306.304. Therefore, the Permittee is prohibited to discharge from the following sanitary sewer overflows (the use of an overflow point is subject to reporting requirements contained in Standard Condition 12(e) of this Permit):

Discharge

Number(s) Name

003 Manhole at 302 N. Jackson Ave.

004 Manhole at N. Side of Russell St. at intersection of State and River Street.

005 Manhole at intersection of State and Viewpoint Street

006 Manhole at State St. Intersection of State and Buena Vista

Special Condition

The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop and submit to the IEPA a Capacity, Management, Operations and Maintenance (CMOM) plan within twelve (12) months of the effective date of this Permit. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents.

The CMOM plan shall include the following elements:

a. Measure and Activities:

1. A complete map of the collection system;
2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment;
3. An assessment of the capacity of the collection and treatment system at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
4. Identification and prioritization of structural deficiencies in the system.

b. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and,
3. Maintain a summary of CMOM activities.

c. Overflow Response Plan:

1. Know where overflows and backups occur; and,
2. Respond to each overflow or backup to determine additional actions such as clean up.

d. System Evaluation Plan.

e. Reporting and Monitoring Requirements.

Other Requirements Considered

- Event Report
- Monthly and Annual Summaries
- Notification of Local Health Departments and/or General Public

Sanitary Sewer Overflow or Bypass Notification Summary Report

- Within 24 hours of the occurrence, notify the Illinois EPA regional wastewater staff by telephone, fax, email or voice mail, if staff are unavailable.
- Within 5 days of the occurrence, provide a written report describing the overflow or bypass, including all information requested on this form. The permittee is required to submit this form or other equivalent written notification to the Illinois EPA at:
BOW/CAS – MC #19
1021 N. Grand Ave. E.
P. O. Box 19276
Springfield, IL 62794

Failure to notify the Illinois EPA as specified may result in fines up to \$10,000 for each day of violation

Instructions: Use this form to report all unscheduled sanitary sewer overflow or bypass occurrences. Attach additional information as necessary to explain or document the overflow or bypass. For the purpose of this report, an overflow or bypass is defined as the discharge of untreated sewage from the sanitary sewer collection system to a surface water and/or ground due to circumstances such as those identified by the check boxes in the overflow or bypass details section of this form.

Use one form per occurrence. A single occurrence may be more than one day if the circumstance causing the overflow or bypass results in a discharge duration of more than 24-hours. If there is a stop and restart of the overflow or bypass within 24-hours, but it's caused by the same circumstances, report it as one occurrence. If the discharges are separated by more than 24 hours, they should be reported as separate occurrences.

24 – Hour Notification Information

Permittee (Municipality or Facility Name)	Permit Number	Overflow or Bypass Reported to IEPA	
Person Representing Permittee Who Contacted IEPA		Date	Time <input type="checkbox"/> am <input type="checkbox"/> pm
		IEPA Office and Person Contacted	

Sanitary Sewer Overflow or Bypass Details

Date and Duration of Overflow or Bypass Occurrence (complete a separate form for each occurrence)		
Start Date	Time <input type="checkbox"/> am <input type="checkbox"/> pm	Duration of the overflow or bypass (hours and minutes)

Estimated Volume of Wastewater Discharged (gallons):

WWTP Flow During **bypass**. Report in MGD. Not applicable for a collection system SSO:

Location of the Overflow or Bypass:

Circumstances Causing the Overflow or Bypass (check all that apply)

- Rain Plugged Sewer Widespread Flooding
 Snow Melt Broken Sewer Other (explain below)
 Power Outage Equipment Failure

Provide a narrative description to further explain why the overflow or bypass occurred. For example, describe what equipment failed. What caused the power outage, or what plugged the sewer. Flooding should only be indicated, as a cause if there is significant flooding that is caused by high river, stream, or lake water levels, not just localized high water in the street.

Sanitary Sewer Overflow or Bypass Notification Summary Report

Wet Weather (if applicable)

Date(s) and Duration of Rainfall			
Start Date	Time <input type="checkbox"/> am <input type="checkbox"/> pm	End Date	Time <input type="checkbox"/> am <input type="checkbox"/> pm
Amount of Rainfall		Amount of Snow Melt (estimated inches melted)	

Contributing Soil Conditions (saturated, frozen, soil type)

Where Did the Discharge from the Overflow or Bypass Go? (check all that apply)

Provide the name of the local receiving water that the wastewater enters, which could be a nearby stream, river, lake, or wetland. If discharge does not enter directly into surface water, but indirectly by way of a ditch or storm sewer, trace the path of the ditch or storm sewer to find the receiving water.

- Runs on ground and absorbs into the soil.
- Ditch. Name of surface water it drains to: _____
- Storm sewer. Name of surface water it drains to: _____
- Surface water direct discharge: _____
- Basement Back-ups (Number & use (i.e.residential, commercial) of buildings affected): _____
- Other, describe: _____

Actions to Correct This Occurrence and Prevent Future Overflows or Bypasses

Describe what actions were taken to minimize the volume of wastewater discharged from the overflow or bypass reported on this form. Also describe what actions are planned to prevent or minimize future overflows or bypasses. Illinois law and NPDES permits prohibit overflows or bypasses, unless certain specified conditions are met. Sanitary sewer overflows and bypasses may be the subject of enforcement action.

Report Completed By

Authorized Representative Name (Print)	Title
Authorized Representative Signature	Date

WEB SITES

❖ Guide for Evaluating Capacity, Management Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems

http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf

❖ Sanitary Sewer Overflows

http://cfpub/epa/gov/npdes/home.cfm?program_id=4