



SANITARY SEWER OVERFLOWS

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SANITARY SEWER OVERFLOW ENVIRONMENTAL IMPACTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Sanitary Sewer Overflows (SSOs) are releases of untreated sewage into the environment.
- FAC 62-604.200 clarifies that SSO "... means any overflow, spill, release, discharge, or diversion of wastewater from a domestic wastewater collection/transmission system."



SSO ENVIRONMENTAL IMPACTS

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Pollutant	Impact
Bacteria	Public Health, Beach/Shellfish Closures
BOD	Reduced Oxygen Levels – Fish Kills
Solids	Deposition, Habitat Impairment
Nutrients	Algal Blooms, Aesthetic Impairment



POTENTIAL HEALTH IMPACTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pathogens in Sewage:

- **Bacteria:** Diarrhea and abdominal pain, Cholera, salmonellosis (food poisoning), typhoid fever, bacillary dysentery and gastroenteritis.
- **Viruses:** Hepatitis, meningitis, pneumonia, fever, common colds, paralysis, encephalitis, gastroenteritis, diarrhea and respiratory infection
- **Protozoa:** Gastroenteritis, acute enteritis, giardiasis, dysentery, toxoplasmosis and cryptosporidiosis.



WHY DO SSOS OCCUR?

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- Human Error.
- Corrosion.
- Illicit connections.
- Lack of capacity.
- System breakdowns.

Source: Alan Cressler, United States Geological Survey



SPILL PREVENTION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Repair → Report → Prevent

Repair whatever is causing the spill → Report it to the department (and other agencies if necessary) → Prevent future spills by conducting regular maintenance and testing!



SEWER OVERFLOW RESPONSE PLAN

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Do you have a separate domestic wastewater Sewer Overflow Response Plan (SORP)?
- Does it contain a map of your collection system?
- Does it contain an agency notification checklist with contact information to ensure that you can notify state and local agencies within 24 hours of the spill?



RESPONSE AND CLEAN-UP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- **Having a plan of action in case of a SSO event is crucial to mitigating spill events as quickly and easily as possible.**
 - Do you have a method of diversion for the overflowing water?
 - Do you have a way to reroute the water?
 - Do you have contact information for vacuum/pump trucks?
 - Do you have Lime readily available to apply to the contaminated area?



INTERNAL CONTACTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Do you have a list of contacts to allow for a quick response to an SSO event?

For example, someone who:

- Can conduct lift station control and maintenance?
- Can quickly repair pipes?
- Someone who will work on public and/or agency notifications?



REPORTING ABNORMAL EVENTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



**FLORIDA DEPARTMENT OF
Environmental Protection**

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

Wastewater Abnormal Event 5 Day Report

This form is provided for your convenience only, in order to report the required information to Florida DEP. You may complete this form and email to the appropriate District office, as listed below.

Northwest District - NWD_WastewaterCompliance@floridadep.gov Southeast District - SED.Wastewater@dep.state.fl.us
Northeast District - DEP_NED@floridadep.gov South District - SD-AbnormalEvents@floridadep.gov
Southwest District - SWD_DW@floridadep.gov Central District - DEP_CD@floridadep.gov

These incidents, and the corresponding Public Notice of Pollution, may also be reported through the [DEP Business Portal](#). If it is preferred to submit these separately, the PNP may be submitted [here](#). If the spill is greater than 1000 gallons, it **MUST** be reported to the State Watch Office at 1-800-320-0519 and a PNP **MUST** be submitted. All fields with an asterisk (*) must be completed as they are required by rule 62-620.610, F.A.C.

Responsible Party Information

*Facility Name:

*Permit Number:

*Facility Type:

*County:

*Reporter Name:

*Reporter Phone:

*Reporter Email:

*Reporter Address:

*Responsible Party Name:

*Responsible Party Address:

*Responsible Party Phone:

*Responsible Party Email:

Who was contacted?

DEP	State Watch Office	Other
*Date and Time: <input type="text"/>	*Date and Time: <input type="text"/>	*Date and Time: <input type="text"/>
*Person contacted: <input type="text"/>	*Incident Number: <input type="text"/>	*Person contacted: <input type="text"/>

Spill Information

*Spill Characteristic / Wastewater:

*Type Source:

*Area affected:

*Date / Time Discharge Began:

*Amount Discharged (in gallons):

*Amount Recovered (in gallons):

*Date / Time Discharge Ceased:

*Physical Address:

*Latitude/Longitude:

*Malfunction/Cause:

Effluent Limit Violations

<input type="checkbox"/> CL ₂ (mg/L)	<input type="text"/>	<input type="checkbox"/> Fecal Coliforms (CFU/100 mL)	<input type="text"/>
<input type="checkbox"/> TSS (mg/L)	<input type="text"/>	<input type="checkbox"/> pH (SU)	<input type="text"/>
<input type="checkbox"/> Turbidity (NTU)	<input type="text"/>	<input type="checkbox"/> CBOD5 (mg/L)	<input type="text"/>
<input type="checkbox"/> NO ₃ (mg/L)	<input type="text"/>	<input type="checkbox"/> Abnormal Flow (MGD)	<input type="text"/>
<input type="checkbox"/> Other	<input type="text"/>		

*Clean Up Status:

*Clean Up Actions:

<input type="checkbox"/> Vacuumed/Pump Truck	<input type="checkbox"/> Washed down area
<input type="checkbox"/> Applied Disinfectant	<input type="checkbox"/> Water samples/field measurements taken
<input type="checkbox"/> Applied Lime	<input type="checkbox"/> Raked and disposed of debris
<input type="checkbox"/> Applied HTH/chlorine	<input type="checkbox"/> Signs posted
<input type="checkbox"/> Applied absorbents	<input type="checkbox"/> Other <input type="text"/>

Sampling results / Field readings:

*Incident Description and Remedial Action Being Taken (Include estimated time for completion):

*Future Preventative Measures:

- The owner/operator of the collection/transmission system shall report to the department all unauthorized releases or spills of wastewater to surface or ground waters from its collection/transmission system or any other abnormal events within 24 hours of the event.
- Please use the department's form to submit a 5-day Written Abnormal Event Report (AER).
- Make sure to include **ALL** relevant information on the report, including the estimated volume of the spill.



PUBLIC NOTICE OF POLLUTION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Unauthorized releases or spills more than 1,000 gallons per incident, or other abnormal events where information indicates that public health or the environment will be endangered, or the spill has reached surface waters, needs to be reported to the State Watch Office as soon as practical, but no later than 24 hours from the time that the owner/operator becomes aware of the circumstances.
- For spills above 1,000 gallons, a public notice of pollution must be published.
- The following link leads to the DEP's pollution notice portal:
<https://floridadep.gov/pollutionnotice>.



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Pollution Notice

You are submitting a Public Notice of Pollution in accordance with [Section 403.077, F.S.](#), which is intended to prevent harm to human health, welfare, or property by assisting the control of pollution. This rule specifies that "reportable releases" are required to be reported to the Department.

Please be aware that while submission of a Notice through this form complies with the requirements of Section 403.077, F.S., it does not relieve you of any obligation to report to the State Watch Office or other authority required by your permit or state law.

Fields marked with * are necessary to implement the Subscription service required by statute. After completion, please e-mail the form to pollution.notice@dep.state.fl.us.

If you are reporting a new release, please select "Initial Notice" below.

If you have previously reported this incident, have obtained a DEP Incident ID, and wish to update your Notice, please select "Updated Notice of Pollution" and enter the DEP Incident ID.

NOTICE TYPE *

Initial Notice of Pollution

Updated Notice of Pollution

If this is an updated Notice, DEP Incident ID: _____

INCIDENT INFORMATION

Please enter a name for the Incident: _____

State Watch Office Incident Number or Case ID: _____

Incident Report (Please enter the information provided to the State Watch Office. If you have a summary e-mail from the State Watch Office, you may copy that and paste it here): *



STATE WATCH OFFICE - INFORMATION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



FloridaDisaster.ORG
DIVISION OF EMERGENCY MANAGEMENT

- 1. Name, address, and telephone number of person reporting
- 2. Name, address, and telephone number of owner/operator of the collection/transmission system or responsible person for the discharge
- 3. Date and time of the discharge and status of discharge (ongoing or ceased)
- 4. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater)
- 5. Estimated amount of the discharge
- 6. Location or address of the discharge
- 7. Source and cause of the discharge
- 8. Whether the discharge was contained on-site, and cleanup actions taken to date
- 9. Description of area affected by the discharge, including name of water body affected, if any
- 10. Other persons or agencies contacted



EXTERNAL CONTACT INFORMATION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- **State Watch Office:**

- Under the Florida Division of Emergency Management.
- Toll Free Number: 800-320-0519.

- **Florida Department of Environmental Protection, South District:**

- Main Line: 239-344-5600.
- Abnormal Event Reporting Email: SD-AbnormalEvents@dep.state.fl.us.



ESTIMATING SPILL VOLUMES

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

- Visual estimates.
- Volume estimates by dimensions.
- Connections served.

A screenshot of the Florida Department of Environmental Protection website. The page title is "Sanitary Sewer Overflow (SSO) Evaluation Tool". The breadcrumb trail is "Home » Divisions » Office of General Counsel » Office of General Counsel (General) » Sanitary Sewer Overflow (SSO) Evaluation Tool". The document is titled "SSO Evaluation Tool.docx" and is a manual, last modified on April 29, 2024 at 9:34am. There are quick links for "Office of General Counsel Quick Links" and "OGC Contacts". The website header includes navigation links for "About DEP", "How Do I", "Divisions", "Air", "Lands", "Parks & Rec", "Waste", and "Water". A search bar is visible in the top right corner.

Florida Department of Environmental Protection

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SEARCH...

Sanitary Sewer Overflow (SSO) Evaluation Tool

Home » Divisions » Office of General Counsel » Office of General Counsel (General) » Sanitary Sewer Overflow (SSO) Evaluation Tool

Document: SSO Evaluation Tool.docx

Document Type: Manual

Last Modified: April 29, 2024 - 9:34am

Office of General Counsel Quick Links

OGC Contacts

<https://floridadep.gov/ogc/ogc/documents/sanitary-sewer-overflow-ss0-evaluation-tool>



VISUAL – OVERFLOWING MANHOLE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



City of San Diego
Metropolitan Wastewater Department



5 gpm



100 gpm



225 gpm

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)



25 gpm



150 gpm



250 gpm

Wastewater Collection Division
(619) 654-4160



50 gpm



200 gpm



275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department

rev. 4/99

Source: City of San Diego



VISUAL – OVERFLOWING MANHOLE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SSSC MANHOLE OVERFLOW GAUGE
 Overflow Simulation courtesy of Eastern Municipal Water District

5 gpm **25 gpm** **50 gpm** **100 gpm**

150 gpm **200 gpm** **300 gpm** **400 gpm**

PROVIDING QUALITY TRAINING FOR COLLECTION SYSTEM PERSONNEL SINCE 1991

Mission Statement: To continuously increase the level of professional of Collection Systems personnel involved in the operation, maintenance, design and construction of Wastewater Collection Systems, by providing education and training, taking an active role in promoting certification, and recognizing proficiency in our field.

DISCLAIMER: This overflow simulation may appear differently from those in other systems because of the manhole lid pick hole configuration. Manhole lids with single or multiple pick holes may appear differently during overflow conditions. However, the volume of exfiltration and the footprint of the wet area should appear relatively the same under similar slope conditions.

Source: Southern Section Collection Systems Committee of the California Water Environment Association



THANK YOU

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