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- Sanitary Sewer Overflows (SSOs) are any overflow, spill, release, discharge or diversion of untreated and/or partially treated sewage or treated wastewater from a sanitary sewer system into the environment.
- The following acts & the causing thereof are prohibited:
 - The release or disposal of excreta, sewage, or other wastewater or residuals without providing proper treatment approved by the department (Chapter 62-604. 130 Prohibitions)





Because SSOs contain partially treated (or untreated) domestic wastewater, ingestion or similar contact may cause illness. People can be exposed through:

- Direct contact in areas of high public access
- Food which has been contaminated
- Inhalation & skin absorption

The Florida Department of Health (DOH) issues health advisories when bacteria levels present a risk to human health & may also post warning signs when bacteria affect public beaches or other areas where there is the risk of human exposure.

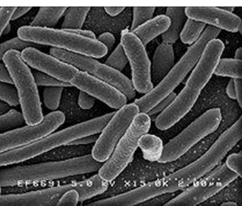


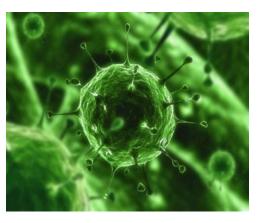
SSO Impacts

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



- Bacteria
 - Cholera
 - Typhoid Fever
 - Bacillary Dysentery
- Viruses
 - Hepatitis
 - Meningitis
 - Paralysis
- Protozoa
 - Acute Enteritis
 - Giardiasis







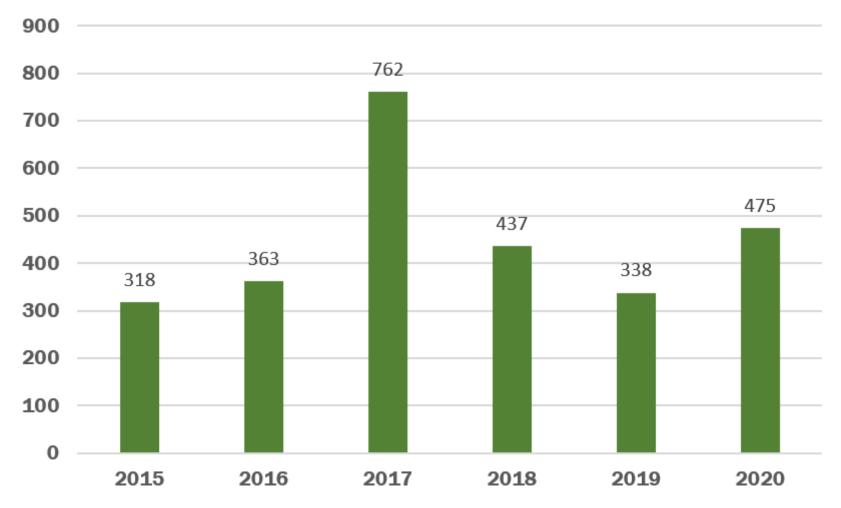
- Aging Systems
- Lack of Capacity
- Illicit Connections
- System Breakdowns
- Human Error







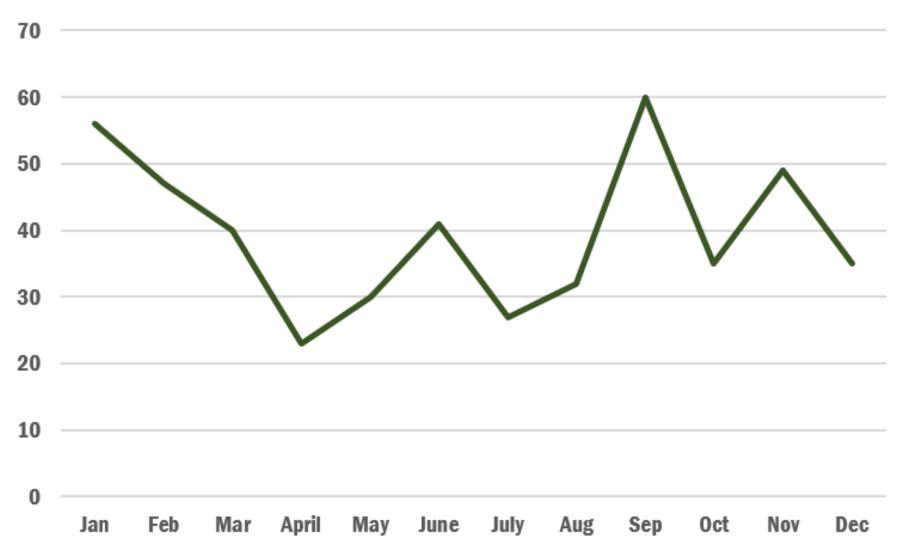
Reported SD Spills







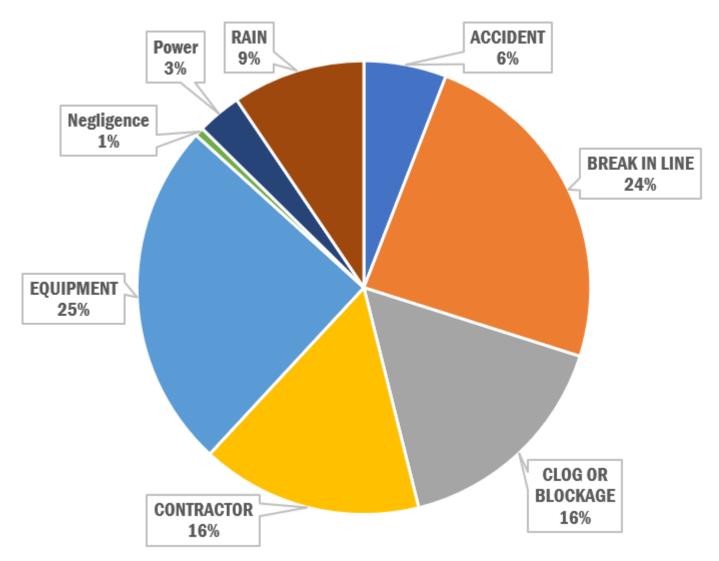
Reported SD Spills by Month







Spill Causes in SD in 2020





- Diversion
- Rerouting
- Vacuum/Pump Trucks
- Lime/HTH
- Surface Water Sampling
 - Sample upstream, downstream & point of entry
 - Lab contact information
- Public Notifications
 - Media (print, radio, TV)
 - Signs
 - Door Hangers



- Permittee shall report to the Department any noncompliance which may endanger health or the environment (Chapter 62-620.610 (20))
 - Unanticipated bypass
 - Upset which causes any reclaimed water/effluent to exceed permit limits
 - Violation of maximum daily discharge
 - Any unauthorized discharge to surface or ground waters

SSO Reporting Requirements

SSOs must be reported in accordance with F.A.C. Rule 62-604.550 & 62-620.610

- Applies to collection/transmission systems and privately owned systems
- SSOs < 1,000 gallons MUST be reported to the Department within 24 hours from the time the owner/operator becomes aware

Oral notification shall be followed by a written submission (Chapter 62-604.550 (2)(c))

Must be submitted within 5 days to <u>SD-AbnormalEvents@floridadep.gov</u>



SSO Reporting Requirements

- SSOs > 1,000 gallons MUST be reported to the State Watch Office no later than 24 hours from the time the owner/operator becomes aware
 - State Watch Office Toll Free # (800) 320 0519
 - Submit a Notification of a Sanitary Sewer Spill or Overflow Incident on the Department's Business Portal at www.fldepportal.com
 - A Public Notice of Pollution (PNP) can be submitted via Business Portal submission, or can be submitted on the PNP webpage, or through email or call to DEP - http://floridadep.gov/pollutionnotice

Oral notification shall be followed by a written submission (Chapter 62-604.550 (2)(c))

Must be submitted within 5 days to <u>SD-AbnormalEvents@floridadep.gov</u>





Abnormal Event Report

*FACILITY NAME:				FACILITY TYPE:	
*PERMIT NUMBER:				*COUNTY:	
*REPORTER NAME:				ONSIBLE PARTY:	
*REPORTER ADDRESS:				PARTY ADDRESS:	
*REPORTER PHONE:			*RESPONSIBLE	E PARTY PHONE:	
*DEP:		*TIME:		*PERSON CON	
*STATE WATCH OFFICE:	*Date:	*TIME:		INCIDENT N	UMBER:
*OTHER:	*DATE:	*TIME:		PERSON CON	TACTED:
		SPILL INFORMA	TION		
*SPILL CHARACTERISTIC		*Source			*AREA AFFECTED
RAW WASTEWATER	LIFT STATION #		SURGE TANK		STORM WATER
PARTIALLY TREATED	MANHOLE		AERATION TANK		SURFACE WATER/
TREATED	FORCE MAIN/GRAVIT	TY LINE	CLARIFIER		GROUND
REUSE/RECLAIMED	DISPOSAL SYSTEM		DIGESTER		CONTAINMENT AREA
OTHER_	OTHER		CHLORINE CONT	ACT TANK	OTHER/
	· _		•		,
*DATE / TIME DISCHARGE OCCU	RRED:				
*AMOUNT OF DISCHARGE:	GALLONS				





Abnormal Event Report

	* MALFUNCTION/CAUSE	
PUMP FAILURE	LINE BREAK	WEATHER
BLOWER FAILURE	☐ FATS/OILS/GREASE BLOCKAGE	LIGHTNING
SWITCH/TIMER FAILURE	OTHER CLOG OR BLOCKAGE	HEAVY RAINFALL
CLARIFIER FAILURE	POWER OUTAGE/FAILURE	HIGH WINDS
FILTER BYPASS/FAILURE	ACCIDENT	TROPICAL STORM:
■ DISINFECTION SYSTEM FAILURE	UNKNOWN	HURRICANE:
Orher On/Off float	OUTSIDE CONTRACTOR	OTHER: N/A
EXPLAIN:	,	
TSSMG/L	NO ₃ MG/L	CBOD ₅ MG/L
OTHER		
OTHER	* CORRECTIVE / REMEDIAL ACTION BEING T.	ABNORMAL FLOW MGD
OTHER LINE REPAIRED	FECAL COLIFORMS CFU/100ML	ABNORMAL FLOW MGD
	* CORRECTIVE / REMEDIAL ACTION BEING T.	ABNORMAL FLOW MGD
LINE REPAIRED	* CORRECTIVE / REMEDIAL ACTION BEING T. SAMPLES TAKEN (IF SURFACE WATERS IMPA	AKEN CTED) NOTIFIED LOCAL AUTHORITIES
LINE REPAIRED DISINFECTED WITH	* CORRECTIVE / REMEDIAL ACTION BEING T. SAMPLES TAKEN (IF SURFACE WATERS IMPAGE) SIGNS POSTED NEAR AFFECTED WATERS)	AKEN CTED) NOTIFIED LOCAL AUTHORITIES NOTIFIED STATE WATCH OFFICE
LINE REPAIRED DISINFECTED WITH WASHED DOWN CONTAINED ON-SITE VAC TRUCK/DESTINATION	* CORRECTIVE / REMEDIAL ACTION BEING T. SAMPLES TAKEN (IF SURFACE WATERS IMPA SIGNS POSTED NEAR AFFECTED WATERS) RESTORED POWER AUXILIARY POWER SYSTEM ON-LINE BACK-UP ON-LINE	AKEN CTED) NOTIFIED LOCAL AUTHORITIES NOTIFIED STATE WATCH OFFICE NOTIFIED PERMITTEE/OWNER
LINE REPAIRED DISINFECTED WITH WASHED DOWN CONTAINED ON-SITE	* CORRECTIVE / REMEDIAL ACTION BEING T. SAMPLES TAKEN (IF SURFACE WATERS IMPA SIGNS POSTED NEAR AFFECTED WATERS) RESTORED POWER AUXILIARY POWER SYSTEM ON-LINE BACK-UP ON-LINE	ABNORMAL FLOWMGD AKEN CTED)
LINE REPAIRED DISINFECTED WITH WASHED DOWN CONTAINED ON-SITE VAC TRUCK/DESTINATION	* CORRECTIVE / REMEDIAL ACTION BEING T. SAMPLES TAKEN (IF SURFACE WATERS IMPA SIGNS POSTED NEAR AFFECTED WATERS) RESTORED POWER AUXILIARY POWER SYSTEM ON-LINE BACK-UP ON-LINE	ABNORMAL FLOWMGD AKEN CTED)





Public Notification of Pollution



NOTICE TYPE *

☐ Initial Notice of Pollution
☐ Updated Notice of Pollution

Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

Pollution Notice

You are submitting a Public Notice of Pollution in accordance with <u>Section 403.077, F.S.</u> 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 required. 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.





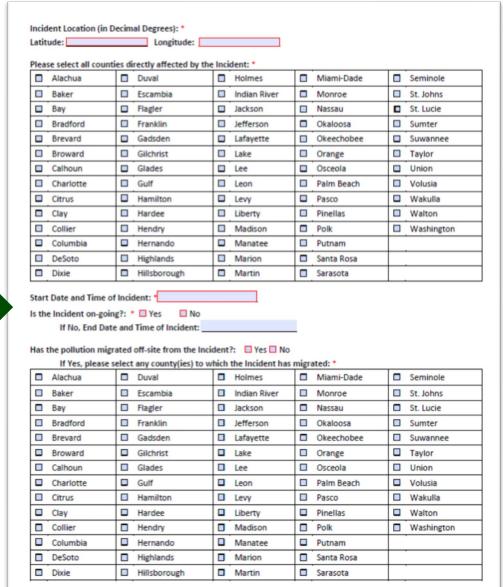
If this is an updated Notice, DEP Incident ID:	
NCIDENT INFORMATION	
Please enter a name for the Incident:	State

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Public Notification of Pollution











Public Notification of Pollution

F	acility/Installation Name: *
A	Address Line 1:
A	Address Line 2:
0	Directions:
0	City:
S	itate: *FL
Z	tip Code:
R	REPORTER DETAILS
N	Name: *
1	Title: •
P	Phone: • Ext:
E	E-mail Address: *
R	Relationship: * 🔲 Operator of the Facility/Installation 🚨 Owner of the Facility/Installation
	Other (Please specify relationship):
C	CONTACT DETAILS
I	Name: *
P	Phone: • Ext:



- Providing maintenance & cleaning the sewer system
- Implementing a FOG (Fats, Oils, & Grease) control program by educating residential & commercial customers of the important of not pouring fats, oils & grease down the drain
- Reducing infiltration & inflow through system rehabilitation & repairing broken or leaking lines
- Construction of wet weather storage & treatment facilities to treat excess flows
- Enlarging or upgrading sewer, pump station or sewage treatment plant capacity &/or reliability



Does the facility have an Operation & Maintenance (0 & M) manual for the collection system?

- If so, does the facility revise the 0 & M manual
 - How often?
- Does the 0 & M manual characterize the collection system in detail?
 - Does it describe the length in pipeline in the collection systems, number of pump stations, number of manholes, etc.?
- Does the 0 & M manual describe how each component that compromises the collection is maintained?



How many spills has the facility had within a year?

- Does the facility track these spills?
 - If so, how?
- How does the facility document the amount & type of spills?
- Does the facility document frequently known SSOs area(s)?

Does the facility have a Sewer Overflow Response Plan (SORP)?

Does it include an agency notification checklist with contact information?

Does the facility have accurate drawing of pipelines & valves?



How does the facility document maintenance of the sewer system?

- How often are pump/lift stations inspected, including the electrical panel & pumps
- Does the facility have an annual operating budget for the collection system
- Does the facility conduct CCTV inspections?
 - If so, what percentage is inspected each year?
- Does the facility have a schedule for cleaning sewer lines?
- Does the facility have an I & I program?
- Has the facility identified compromised areas within the collection system?
 - Does the facility describe the time-frame in which these areas will be rectified?
- How many full-time staff does the facility employ that are dedicated to inspecting the sewer system?



Does the facility have a spill protocol?

- Is the spill protocol located in the 0 & M manual?
- Does it include clean-up action for each possible type of spill?
- Does it discuss the notification protocol?
 - Internal
 - External (within 5-days submit abnormal event written report & Pollution Notice)
- Does it describe sampling procedures for surface water spills?



As of July 2017, EPA approved Chapter 62-302, Florida Administrative Code, bacteriological standards. Under this rule, the affected water body will determine which parameter to sample for and which limits to apply.

Applicable Bacterial standards:

- E. coli is applicable in Class III freshwater
- Enterococci is applicable in Class III marine waters
- Fecal Coliforms & Enterococci are applicable to Class II (shellfish) marine waters

Surface Water Sampling Procedures

Map Direct is a useful tool to determine a Waterbody Classification for an affected surface water.

 Review Waterbody ID Map Direct Layer online (use Chrome): https://ca.dep.state.fl.us/mapdirect/?map=22b2248080bd48248bbd5fb1fd9087a1

Sampling:

- Select a minimum of 3 surface water sampling locations: upstream, point of entry and downstream. Ensure sample locations are noted on a map to submit with sample results to the Department.
- Use DEP SOPs to ensure proper sampling procedures.
- Collect samples at designated locations daily until results return to background levels/meet water quality standards.
- Generally, samples must be taken daily until the results are under the limit listed above at each sampling point. Lab results should be sent to your appropriate District Office. For South District: <u>SD-AbnormalEvents@floridadep.gov</u>





Class	Number	Explanation
Bacteriological Quality (Escherichia coli Bacteria) (Class I Waters)	Number per 100 ml (Most Probable Number MPN or Membrane Filter MF)	MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed the Ten Percent Threshold Value (TPTV) of 410 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 5 samples taken over a 30-day period



Class	Number	Explanation
Bacteriological Quality (Escherichia coli Bacteria) (Class III Predominantly Fresh Waters)	Number per 100 ml (Most Probable Number MPN or Membrane Filter MF)	MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed the TPTV of 410 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period



Class	Number	Explanation
Bacteriological Quality (Fecal Coliform Bacteria & Enterococci Bacteria) (Class II Waters)	Number per 100 ml (Most Probable Number MPN or Membrane Filter MF)	MPN or MF counts shall not exceed a median value of 14 with not more than 10% of the samples exceeding 43 (for MPN) or 31 (for MF) nor exceed 800 on any one day. MPN or MF counts shall not exceed a monthly geometric mean of 35 nor exceed the TPTV of 130 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period.



Class	Number	Explanation
Bacteriological Quality (Enterococci Bacteria) (Class III Predominantly Marine Waters)	Number per 100 ml (Most Probable Number MPN or Membrane Filter MF)	MPN or MF counts shall not exceed a monthly geometric mean of 35 nor exceed the TPTV of 130 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period.



•Enforcement Manual:

https://floridadep.gov/ogc/ogc/content/enforcement-manual

•SSO Evaluation Tool:

https://floridadep.gov/ogc/ogc/documents/sanitary-sewer-overflow-sso-evaluation-tool

•Guidelines for Characterizing Wastewater Violations:

https://floridadep.gov/ogc/ogc/documents/guidelines-characterizing-wastewater-violations



- State Watch Office
 - (800) 320 **-** 0519
- FDEP South District Office
 - (239) 344 5600 or SouthDistrict@floridadep.gov
- Local Regulatory Agency
- Local Health Department
- FlaWARN WATER Tracker Training June 29, 2021
 - WATERTracker@floridadep.gov





Questions & Answers

Q: Septic Systems/Septic tanks and drain field failures causing SSOs need to be mentioned as well.

A: At this time, the department does not handle septic systems, so we are not handling those failures as an SSO. Contact your local Health Department to handle it as a sanitary nuisance. As we learn more about DEP's new oversight of septic systems, we will determine how to incorporate those systems into our future presentations.

Q: Does the State have criteria for SSOs caused by Storm Event? That is, is there a storm event (e.g., 25 yr, 72 hr) that the SSO will not be considered a violation?

A: The state does not have criteria for SSOs caused by a storm. The state's position is that a hurricane or tropical storm is a foreseeable event and a utility shall be prepared for it, whether a 25-year storm, 100-year storm, etc. An SSO due to a storm event would be considered a violation.

Q: Does FDEP have any guide for the municipalities to elaborate a Rapid Response Plan? What is the difference between an Emergency response plan and a Rapid Response Plan?

A: The Rapid Response Plan seems to be a request for a Consent Order from a Delegated County. Please refer to the document for contact information for the author of the Consent Order. The office that authored the document would be the best contact to help you satisfy the corrective action. An Emergency Response Plan is akin to an Emergency Operations Plan (EOP) to address larger events such as hurricanes, flooding, or significant power outages. The EOP shall be designed to build on the Sanitary Sewer Overflow Response Plan (SORP). SORP or EOP guidance can be found here: https://floridadep.gov/ogc/ogc/documents/dwsso-model-corrective-actions.

Q: Are reclaim/reuse spills over 1,000 gallons considered an SSO? FDEP's definition states: "A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge or diversion of <u>untreated or partially treated wastewater</u> from a sanitary sewer system." I would assume, that since Reclaim/Reuse water is treated that it should not be considered an SSO per FDEP's definition.

A: A reclaimed spill is not considered an SSO. However, it is considered an unauthorized discharge, which may be assessed a penalty. The DEP's Enforcement Manual, Guidelines for Characterizing Wastewater Violations can be found here: https://floridadep.gov/ogc/ogc/documents/guidelines-characterizing-wastewater-violations

Questions & Answers

Q: What about a reclaim line break after the reclaim has been sold to the customer - customer's own irrigation system?

A: The event is reportable and the utility does retain primary responsibility for reporting the event. A binding agreement should be in place. The rule citation for this is: Rule 62-610.320(1)(b) F.A.C. Where the wastewater treatment plant permittee reuses reclaimed water or disposes of effluent using property owned by another party, a binding agreement between the involved parties is required to ensure that construction, operation, maintenance, and monitoring meet the requirements of Chapters 62-600, 62-620 and 62-610, F.A.C. Such binding agreements are required for all reuse or disposal sites not owned by the permittee. The permittee shall retain primary responsibility for ensuring compliance with all requirements of the Florida Administrative Code.

Q: Just to clarify, the FDEP portal is an option for reporting. The SWO, Local FDEP, and Notice of pollution are the required reporting within 24 hrs, correct?

A: Using the FDEP Portal is optional. You must report to the SWO, local DEP, and Public Notice of Pollution within 24 hours.

Q: If the spill is less than 1,000 gallons, is there a minimum spill amount that is considered appropriate? If you have a 1 gallon spill from a leaking air release valve or fitting, does this need to be reported to the appropriate district office?

A: All spills by rule are required to be reported; there is no threshold. However, if you are able to capture the spill (i.e. in a bucket, on a tarp) and it does not hit the ground, then it is not a spill that is required to be reported.

Q: As of July 1, DEP will be taking over the DOH oversight of septic tanks. Will there be a future webinar topic on this issue? Sharing that the need is there regarding the septic tank issue particularly for GDC cities that have a plethora of septic tanks is much appreciated.

A: Yes, as more information is provided, the department hopes to share the information in a future meeting. At this time, DOH will continue to conduct those inspections. Clients should continue to contact their local DOH for any septic tank permits, issues or concerns.

Questions & Answers

Q: Can you provide an example of the language that the posted sign notifying the public must contain? The language the sign would contain for spills which do reach storm water drains, retention ponds or bodies of water. Are signs not required for storm water drains or retention ponds?

A: The department has no rules that require signage for SSOs. However, there is an obligation for the facility/utility to protect public health and safety. The department would encourage the use of signage for spills that may affect surface waters, or retention ponds where recreational activities may occur. Below is a sign that Collier County Public Utilities uses. Please reach out to other county or city utilities in your area for signage examples.

