



CITY OF LAKEPORT

PUBLIC WORKS DEPARTMENT

STANDARD OPERATING PROCEDURE

Subject:

Illicit Stormwater Discharge Detection, Response & Reporting

Version Number: 1

SOP Number: SOP-PW01	Page Number: Page 1 of 2
Date Adopted: 3/3/2022	Date Revised:

Scope: Applies to all storm drain conveyances that comprise the City of Lakeport's Municipal Separate Storm Sewer System (MS4) including traditional storm drain inlets, pipes and culverts plus all connected conveyances such as ditches, open channels and seasonal creeks or drainages. In Lakeport, all MS4 outfalls drain into Clear Lake.

Purpose: The purpose of this procedure is to identify and address any illicit discharges detected during MS4 outfall inspections or otherwise reported illicit discharges impacting the storm sewer system, related conveyances or Clear Lake.

An **illicit discharge** is defined as any discharge to the City's MS4, or to natural surface waters, that is not composed entirely of stormwater.

Responsibility: The Compliance Officer, Public Works Superintendent or Utilities Superintendent shall be responsible for any future revisions to this SOP.

References:

1. CASQA BMP WM-4 Spill Prevention and Control (2009)
2. Lake County Clean Water Program Illicit Discharge Investigation and Reporting Procedures Guide (2019)
3. Staff Memo (3/3/2022) re: Identifying Illicit Discharges and Illicit Connections

BACKGROUND:

The City of Lakeport has a permit from the California State Water Resources Control Board to operate a MS4. This permit authorizes the City to discharge stormwater into Clear Lake pursuant to the State's Stormwater Management Program. The City has also adopted regulations that prevent the illicit discharge of non-stormwater materials to the MS4:

Lakeport Municipal Code Section 8.40.110 Prohibited Stormwater Discharges:

A. *It is unlawful for any person to discharge or cause to be discharged any stormwater or material that causes or contributes to causing the city to violate water quality standards, the city's obligations under the municipal stormwater permit, or any state- issued discharge permit. (Ord. 853 §1 (part), 2006)*

Lakeport Municipal Code Section 8.20.050 Dumping in Streams

It is unlawful for any person to dump any junk, refuse, garbage, dirt or any other material in any stream, creek, watercourse or streambed, or within the banks of the same, or in the waters of Clear Lake, in the city, without written permission to do so from the director of public works. (Ord. 392 §7, 1963)



CITY OF LAKEPORT PUBLIC WORKS DEPARTMENT STANDARD OPERATING PROCEDURE

Illicit discharges can contribute high levels of pollutants to waterbodies. Pollutants commonly found in illicit discharges include raw sewage (viruses and bacteria), heavy metals, toxics, oil and grease, solvents, and nutrients. Pollutant levels from these illicit discharges can be high enough to significantly degrade water quality and threaten aquatic, wildlife, and human health.

IDENTIFYING ILLICIT DISCHARGES AND CONNECTIONS:

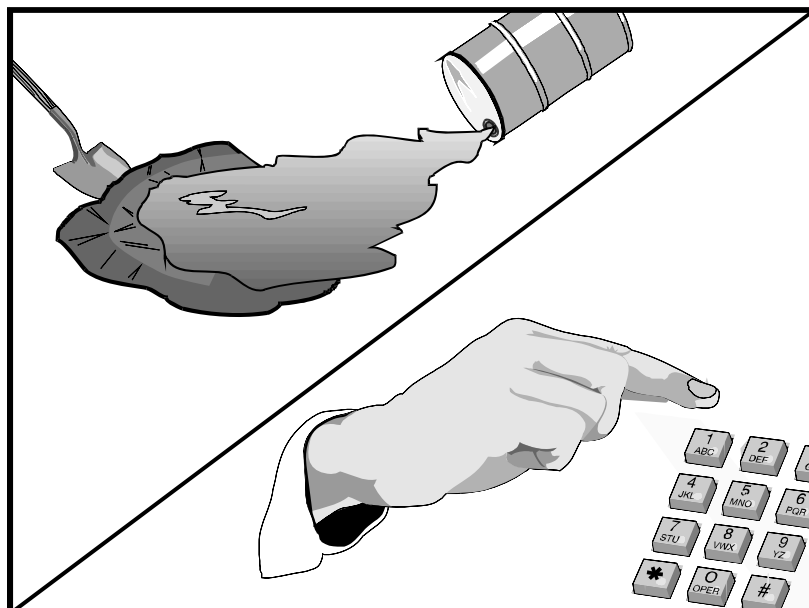
See attached memorandum that provides details for identifying Illicit Discharges and Illicit Connections to the City's MS4.

LAKEPORT STAFF PROCEDURE:

1. Upon verification of an Illicit Discharge, either during a routine MS4 inspection or the result of the investigation of a complaint or report of a potential discharge, immediately report the violation to your supervisor who will evaluate the situation and initiate cleanup procedures if deemed necessary.
2. Take photos of Illicit Discharge and impacted areas prior to initiating clean-up activities.
3. Refer to the attached CASQA Spill Prevention and Control BMP for spill control procedures. Members of the Public Works Department have received advanced HAZWOPER training including specialized water-based HazMat Spill Response training.
4. If deemed necessary, City staff shall use spill mitigation materials stored in the City's Spill Response Trailer to control the Illicit Discharge. All mitigation materials used in a spill response shall be logged/tracked by City staff and replaced ASAP to maintain adequate stock in the trailer.
5. Supervisors:
 - a) Contact Compliance Officer ASAP who will initiate all required Illicit Discharge reporting tasks.
 - b) Contact Utilities Superintendent if Compliance Officer is unavailable.
 - c) Refer to the attached Lake County Clean Water Program Illicit Discharge Investigation and Reporting Procedures Guide for reporting protocols, including requirement to contact Lake County Environmental Health and the CalOES Warning Center and prepare and submit a written follow up report.

Ron Ladd
Public Works Superintendent

Attachments: All Referenced Materials on Page 1



Categories

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	<input checked="" type="checkbox"/>

Legend:

- ☒ Primary Objective
- ☒ Secondary Objective

Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>
Trash	<input checked="" type="checkbox"/>
Metals	<input checked="" type="checkbox"/>
Bacteria	
Oil and Grease	<input checked="" type="checkbox"/>
Organics	<input checked="" type="checkbox"/>

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, WM-1, Materials Delivery and Storage, and WM-2, Material Use, also contain useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

This BMP is suitable for all construction projects. Spill control procedures are implemented anytime chemicals or hazardous substances are stored on the construction site, including the following materials:

- Soil stabilizers/binders
- Dust palliatives
- Herbicides
- Growth inhibitors
- Fertilizers
- Deicing/anti-icing chemicals



- Fuels
- Lubricants
- Other petroleum distillates

Limitations

- In some cases it may be necessary to use a private spill cleanup company.
- This BMP applies to spills caused by the contractor and subcontractors.
- Procedures and practices presented in this BMP are general. Contractor should identify appropriate practices for the specific materials used or stored onsite

Implementation

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a “significant spill” is for each material they use, and what is the appropriate response for “significant” and “insignificant” spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Have contractor’s superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn’t compromise clean up activities.
- Do not bury or wash spills with water.

- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with WM-10, Liquid Waste Management.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
 - Contain the spread of the spill.
 - Recover spilled materials.
 - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

- Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

- Spills should be cleaned up immediately:
 - Contain spread of the spill.
 - Notify the project foreman immediately.
 - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
 - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
 - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
 - Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
 - Notify the Governor's Office of Emergency Services Warning Center, (916) 845-8911.
 - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
 - Notification should first be made by telephone and followed up with a written report.
 - The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
 - Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Public Works Department, the Coast Guard, the Highway Patrol, the City/County Police Department, Department of Toxic Substances, California Division of Oil and Gas, Cal/OSHA, etc.

Reporting

- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- Federal regulations require that any significant oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hours).

Use the following measures related to specific activities:

Vehicle and Equipment Maintenance

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Place drip pans or absorbent materials under paving equipment when not in use.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- If fueling must occur onsite, use designate areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Discourage "topping off" of fuel tanks.
- Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Costs

Prevention of leaks and spills is inexpensive. Treatment and/ or disposal of contaminated soil or water can be quite expensive.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

- Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas.
- Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.



Lake County Clean Water Program

Illicit Discharge Investigation & Reporting Procedures



As part of the MS4 Storm Water Phase II Section E.9.d permit requirements, Lake County Clean Water Program (Lake County Watershed Protection District and the Cities of Lakeport and Clearlake) needs to maintain the Illicit Discharge Detection and Elimination Program to detect, investigate, and eliminate illicit discharges.

Section E.9.d describes the specific investigative and reporting requirements that are needed to comply with all State MS4 regulations. These include written procedures for conducting investigations, reporting, and follow-up investigations of all non-storm water discharges suspected to be illicit. These procedures should also include corrective action procedures that are warranted, have been taken, or are being conducted.

Procedures for investigating, reporting, and conducting follow-up on an illicit discharge in Lake County.

- 1) If you or your department is the first response on the scene of an illicit discharge and/or spill, make sure there are no immediate threats or dangers to human health. If an emergency situation exists call 911 and if there are potential health hazards or exposures to human health and/or wildlife, call Environmental Health at (707)263-1164.
- 2) Report the incidence to CalOES using the yellow pocket guide shown in Figure 1. The CalOES Warning Center Phone # is (800)852-7550 or (916)845-8911
- 3) The CalOES report will require the following information:
 - a. Identity of caller
 - b. Exact location, date and time of spill, release or threatened release
 - c. Location of threatened or involved waterway or storm drains
 - d. Substance, quantity involved, and isotope if necessary
 - e. Chemical name (if known, it should be reported if the chemical is extremely hazardous)
 - f. Description of what happened
- 4) Using the same information as provided in the CalOES report, complete a Lake County CWP IDDE Investigation Report.
- 5) If a CWP representative is not the first response to the Illicit Discharge / Spill, a "Lake County CWP IDDE Investigation Report" form must be filled out within 72 hours.



*Figure 1. CalOES
Spill Response
Pocket Guide Book*

- 6) File a hard copy of the report in the labeled draw in Water Resource Department and if possible, staple a copy of the CalOES report to the IDDE Investigation Report.
- 7) If necessary, conduct a Follow-Up report on the incident using the "Lake County CWP IDDE Follow-Up" Form.
- 8) Send all reports and follow up documents to the appropriate parties. These might include the following:

Lake County Clean Water Program Illicit Discharge Detection and Elimination
Program Reporting Contacts (as of Feb 2019)

Department	Name	Email
Environmental Health	Jasjit Kang, Director	Jasjit.Kang@lakecountyca.gov
Public Health	Denise Pomeroy, Health Services Director	Denise.Pomeroy@lakecountyca.gov
Public Health	Erin Gustafson, Public Health Officer	Erin.Gustafson@lakecountyca.gov
Special Districts	Jan Coppinger	Janet.Coppinger@lakecountyca.gov
Emergency Services	Dale Carnathan	Dale.Carnathan@lakecountyca.gov
Central Valley Regional Water Quality Control Board, Municipal Storm Water Unit	Elizabeth Lee, Storm Water Resource Control Engineer	Elizabeth.Lee@waterboards.ca.gov

December 2021: Updated Contact Info pending per County of Lake Water Resources staff.

Phone #'s (2021):

LC Environmental Health: 707-263-1164

LC Public Health: 707-263-1090

LC Special Districts: 707- 263-0119

LC OES: 707-262-4090

CVRWQCB: 916-464-3291 (Rancho Cordova office)



Lake County Clean Water Program

Illicit Discharge Investigation Reporting Form



CalOES incident ID: _____		Original incident date: _____	
Investigation date: _____		Incident time: _____ AM/PM	
Investigation by (name & dept): _____			
Location of discharge: _____			
Municipality: <input type="checkbox"/> Lake County <input type="checkbox"/> Lakeport <input type="checkbox"/> Clearlake <input type="checkbox"/> Oaks <input type="checkbox"/> Kelseyville <input type="checkbox"/> Other _____			
Responsible party: _____			
(Name)		(Company)	
_____		_____	
(Address)		(Phone)	
Category: <input type="checkbox"/> Food Service <input type="checkbox"/> CUPA <input type="checkbox"/> Commercial - Other <input type="checkbox"/> Development <input type="checkbox"/> Agriculture <input type="checkbox"/> General Public <input type="checkbox"/> Municipal Operations <input type="checkbox"/> Other _____			
Activity: <input type="checkbox"/> Construction/Grading <input type="checkbox"/> Automotive <input type="checkbox"/> Surface Cleaning <input type="checkbox"/> Food Service <input type="checkbox"/> Landscaping <input type="checkbox"/> Agriculture <input type="checkbox"/> Illegal Dumping <input type="checkbox"/> Illicit Connection <input type="checkbox"/> Creek Work <input type="checkbox"/> Regular Operations <input type="checkbox"/> Other _____			
Pollutant: <input type="checkbox"/> None <input type="checkbox"/> Hazardous <input type="checkbox"/> Sediment <input type="checkbox"/> Soap <input type="checkbox"/> Oil/Grease <input type="checkbox"/> Concrete <input type="checkbox"/> Organic Matter <input type="checkbox"/> Trash/Litter <input type="checkbox"/> Sewage <input type="checkbox"/> Paint <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____			
Quantity: _____		Notified to Environmental Health: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Entered waterbody: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Name of waterbody: _____	
Observations: _____ _____ _____ _____ _____			
Pictures: <input type="checkbox"/> Yes <input type="checkbox"/> No File #s _____			
Enforcement action: <input type="checkbox"/> None <input type="checkbox"/> Verbal Warning <input type="checkbox"/> Citation <input type="checkbox"/> Admin. Order <input type="checkbox"/> Stop Work Order			
Date: _____			
Corrective actions required: _____ _____ _____ _____			
Compliance date: _____			
Abated: <input type="checkbox"/> Yes <input type="checkbox"/> No		Date abated: _____	
		Complainant advised: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Education materials provided: <input type="checkbox"/> Yes <input type="checkbox"/> No Description: _____			
Sample: <input type="checkbox"/> Yes <input type="checkbox"/> No Analytes measured: _____			
Referred to: _____			
Name		Dept.	Date
Referred to: _____			
Name		Dept.	Date



Lake County Clean Water Program

Illicit Discharge Follow-up Form



Follow-up date: _____ Time: _____ CalOES control #: _____

Follow-up by (name, dept.): _____

Follow-up form (phone call, email, text, other): _____

Date of original incident: _____

Location of original discharge: _____

Responsible party: _____

Were pictures taken (if yes, file #s): _____

Observations: _____

Actions recommended: _____

Disposition:

Abated: ☐ Yes ☐ No

Was a sample taken: ☐ Yes ☐ No

Analytes: _____

Sample results if any: _____

Follow up sent to: _____

Name

Dept.

Date



Inter-Office Correspondence

DATE: March 3, 2022

TO: All Public Works Department Field Staff

FROM: Andrew Britton, Compliance Officer II

RE: Identifying Illicit Stormwater Discharges and Illicit Connections to City's MS4

Identifying Illicit Discharges

Lakeport's stormwater conveyance system ("MS4") includes traditional storm drain inlets, pipes and culverts along with other connected conveyances such as ditches, open channels and seasonal creeks or drainages. In Lakeport, all MS4 outfalls drain into Clear Lake.

For a variety of reasons liquids other than stormwater commonly enter the City's MS4. Sometimes there is a misconception that the water or other substance that enters the stormwater conveyance system will be treated and cleaned before it reaches our local waterbodies. However, this is not true. Anything that enters our MS4 will go directly to nearest waterbody and ultimately into Clear Lake which may cause serious environmental damage. State regulations and the City's Municipal Code prohibits Illicit Discharges into the City's stormwater system. Please see the questions and answers below to learn more about illicit discharges and how to identify an illicit discharge.

What is an "illicit discharge" to a stormwater conveyance system?

An illicit discharge is any discharge to a stormwater conveyance system, drainage ditch, seasonal stream or other waterbody that is not composed entirely of stormwater. An illicit discharge could be the result of someone dumping a pollutant (automobile fluids, paint etc.) into the MS4; the result of an illicit connection into the conveyance system, such as a sewer pipe connected to a stormwater pipe; or a pipe that bypasses the sewer connection, producing a direct discharge into open channels or streams.

What is an "illicit connection" to a stormwater conveyance system?

An illicit connection is an improper physical connection of illicit discharges to the stormwater conveyance system. Examples include: a sewer pipe that is connected to the stormwater conveyance system that produces a continuous discharge of raw sewage to the conveyance

system or a shop floor drain connected to the stormwater conveyance system producing a discharge of wash water or other pollution into the City's MS4.

What are the hazards associated with illicit discharges?

Illicit discharges can contribute high levels of pollutants to waterbodies. Pollutants commonly found in illicit discharges include raw sewage (viruses and bacteria), heavy metals, toxics, oil and grease, solvents and nutrients. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade water quality and threaten aquatic, wildlife and human health.

So how can you tell a normal stormwater discharge from an illicit discharge?

Dry weather flow is the best indication that the water coming from an outfall pipe is from an illicit connection. If it has not rained in at least three days and there is water coming from a stormwater outfall pipe, chances are that water is from an illegal source.

Although it is a good indication, dry weather flow is not always from an illicit source. Sometimes groundwater seeps into the stormwater conveyance system and is discharged through the outfall pipe. This is a natural source and is not illicit.

When should I report dry weather flow?

The best way to tell if the dry weather flow is an illicit discharge, and should be reported, is by examining the characteristics of the water being discharged.

1. Does the discharge have a distinct odor?

Some smells coming from an outfall pipe are an immediate indicator of an illicit discharge -- for example, a sewage, gasoline, or chemical smell should be reported.

2. Is the water cloudy or full of sediment?

Gray water that should be treated at a sewage treatment plant may cause a cloudy appearance in the discharged water. A construction site without proper stormwater best management practices could be discharging sediment to a storm drain. These conditions should be reported.

3. Is there anything floating in the discharge?

Soap suds and oil sheens are examples of floatables that may be found in an illicit discharge. These conditions should be reported.

4. What color is the discharge?

An abnormally colored discharge is a good indication that there is an illicit connection to the MS4. However sometimes an abnormal color may have a natural cause. For instance, an orange discharge could be naturally occurring from groundwater that is high in iron. However, if an abnormal color is coupled with another one of the characteristics listed here (odor, floatables, cloudiness, vegetative growth), it should be reported.

5. Is there excessive vegetation around the outfall pipe?

Excessive vegetation around the outfall pipe as opposed to the surrounding area is an indication of increased nutrients in the stormwater discharge. This could be from fertilizers or sewage in the discharge and should be reported.