City of Hampton

Illicit Discharge Detection and Elimination

Procedures Manual

FY22

Table of Contents

Table of Contents

Appendices

Introduction

This document is intended to serve as an illicit discharge detection and elimination (IDDE) guidance manual for the City of Hampton. An illicit discharge is "Any discharge to a municipal separate storm sewer system that is not composed entirely of storm water, except discharges pursuant to a National Pollutant discharge Elimination System (NPDES) permit and discharges resulting from fire-fighting activities."

Regulations and Requirements

Established in 1972 and amended in 1977 and 1987, the Clean Water Act (CWA) is the primary federal law governing water pollution. The Act requires states to set clean water standards to protect uses such as swimming, fishing, and drinking, and for the regulation of pollution discharges. The CWA initially focused on addressing water quality issues caused by point sources of pollution (e.g., wastewater treatment plants and industry) by making it unlawful to discharge any pollutant into navigable waters, unless a permit was obtained under its provisions. These permits, known as National Pollutant Discharge Elimination System (NPDES) permits, prevent the degradation of water quality by limiting pollution discharges to what can be safely assimilated by the environment. In 1987, the CWA was expanded to include non-point sources of urban pollution by requiring municipalities with separate storm sewer systems (referred to as "MS4s") to be permitted. Phase I of these permits, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. Phase II, issued in 1999, requires regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. Generally, Phase I MS4s are covered by individual permits and Phase II MS4s are covered by a general permit. Each regulated MS4 is required to develop and implement a stormwater management program to reduce the contamination of stormwater runoff and prohibit illicit discharges.

What is required?

Recognizing the adverse effects illicit discharges can have on receiving waters, the Phase I Final Rule requires an operator of a regulated large MS4 to develop, implement and enforce an illicit discharge detection and elimination (IDDE) program, which is one of six minimum measures required under the Phase I stormwater program. The IDDE program must include the following:

- A storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- Through an ordinance, or other regulatory mechanism, a prohibition (to the extent allowable under State, Tribal, or local law) on illicit discharges into the MS4, and appropriate enforcement procedures and actions; Stormwater Code 33.2-27 (Appendix A)
- A plan to detect and address illicit discharges, including illegal dumping, into the MS4;
- The education of public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste; and
- The determination of appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

This document provides guidance on procedures for detecting and tracking illicit discharges through a desktop assessment of illicit discharge potential, field screening of outfalls to detect illicit discharges and drainage area investigations to locate and remove the source of the discharge.

Illicit Discharge Assessment Techniques

The City of Hampton monitors for illicit discharges using multiple methods. The primary method of finding an illicit discharge is through the 311 call center. Citizens can report any possible illicit discharge complaint and the Environmental Services division will investigate the claim within 24 business hours. Other methods include a desktop assessment for illicit discharge potential, investigating industrial permitted sites and field screening of outfalls. These techniques combined give the City of Hampton the greatest chance to eliminate illicit discharges from entering the stormwater system, and inevitably Hampton's waters and the Chesapeake Bay. Below is a brief description of each technique:

A. 311 Call Center

The City of Hampton's 311 Call Center can be reached by dialing 311 on any landline phone in Hampton, or by dialing 757-727-8311. Potential illicit discharge complaints will be forwarded to Environmental Services within the Stormwater Division of the Public Works Department. Environmental Services holds a self-imposed 24 business hour response time for all investigations. Emergency situations are forwarded to the Fire Department.

B. Desktop Assessment

A desktop assessment of illicit discharge potential uses mapping and other available data to determine the potential severity of illicit discharges within the City of Hampton. Areas such as permitted and non-permitted industrial or commercial businesses, public and private car wash companies, auto-repair companies, and current construction projects all carry higher risk associated with illicit discharges. Use of aerial photography, GIS mapping of stormwater and wastewater utility lines, historical call center tracking, and other electronic data assist Environmental Services in focusing in on high-priority outfalls to screen for illicit discharges. This assessment may also provide assistance with narrowing down outfalls outside of residential areas that have the best chance to catch potential discharges from a large area.

C. Field Screening of Outfalls

Rapid field screening of stormwater outfalls in priority areas is conducted during dry weather to identify potential transient illicit discharges (i.e., temporary flowing outfalls) and is followed by indicator monitoring to characterize flow types to aid in finding sources. Dry weather has to be present to test unless it is obvious discharge or dumping into the stormwater system. The City of Hampton is required to screen a minimum of 60 outfalls every fiscal year. While industrial and commercial areas are considered high priority, residential areas are also screened for potential dumping of oils, cooking grease, and other illegal discharges to the stormwater system.

D. Non-Routine Inspections

Outside of Environmental Services, the Stormwater Division is trained annually to spot potential discharges into the system and report it to their manager. With sections dealing with construction, maintenance, and mapping, this adds the vast majority of the system being looked at throughout the year. If an employee witnesses an illicit discharge taking place, he/she will contact their manager immediately, take notes, pictures, and any other information they deem necessary.

Dry Weather Screening Procedures

Preparation for Daily Screening Activities

Before Dry Weather Sampling can start, there are a few activities that must be done before a field crew collects a sample. Listed are the steps taken in preparation of sampling.

A. Checking Weather Conditions – In order to collect samples, dry weather conditions must exist. The field supervisor will check at least two weather monitoring stations and fill out the weather conditions log (Appendix B). Use the following to determine if dry weather conditions exist:

1. If rainfall was less than (<) 0.1 inches for the previous 48 hours, dry weather conditions exist, and sampling may proceed.
2. If rainfall was more than (>) 0.1 inches for the previous 48 hours, but less than (<) 1 inch for a 24 hour period, a rainfall event has taken place and 48 hours must elapse prior to continuance of sampling.
3. If rainfall was more than (>) 1 inch for a 24 hour period, a storm event has taken place and 72 hours must elapse prior to continuance of sampling.
4. If there has been snowfall with no accumulation within a 24 hour period, a snow event has taken place and 72 hours must elapse prior to continuance of sampling.
5. If there has been snowfall with accumulation, a snow storm event has taken place and 72 hours must elapse from a period of time allowing all snowmelt to occur.

B. pH and Temperature Meter Calibration – If dry weather conditions exist, the next step before field collection is to calibrate the pH and temperature meter. The field supervisor or designated team member must calibrate the meter according to the instructions in the kit, and fill out the appropriate portion of the weather conditions log.

C. Sampling Locations – After the weather conditions log is completed and the pH and temperature meter is calibrated, a list of potential sites is given to the team to evaluate before going into the field. Locations are based on potential discharges from commercial, industrial, or residential locations. Other locations that are sampled may include industrial sites with separate VPDES permits, active construction sites with SWPPP's, as well as any 311 requests that have been forwarded to the Environmental Services office.

D. Equipment Checklist – The final step before you leave for the sampling sites is to ensure all equipment is cleaned and packed for the field. Other than the Illicit Discharge Field Sheet (Appendix C), utilize the equipment checklist (Appendix D) to ensure all equipment needed is available. The IDDE utility belt holds your refractometer, pH and temperature meter, a GPS tracker, measuring tape, and two collection jars. The photometer carrying case allows transport for the photometer and all accompanying testing equipment. A transparent plastic shatter proof case will allow for transport of testing materials, kimwipes, a box of gloves, and safety glasses. Additionally, make sure that you have an appropriate safety vest. For possible illicit discharge sites on or around construction, you may be required to wear a hard hat as well.

E. Vehicle Safety Check – After all equipment is cleaned, calibrated and ready for field sampling, make sure to do a complete safety inspection on the truck that you are utilizing for the day. The "Vehicle Safety Log" should be filled out before leaving the Public Works Yard.

Screening Methods and Procedures

This section will explain methods and procedures when arriving at a potential illicit discharge site.

A. Parking and Notifying Oncoming Traffic – When arriving at a possible illicit discharge site, make sure that an appropriate parking area is available that is conducive for onsite testing, as the Photometer 9500 is designed to be utilized in the field for quick results. The tailgate is an approved site that can be utilized to test for discharges. Parking off the street is preferred if there is a public area to do so, as to reduce any risk of a traffic accident. If off street parking is not available, find an appropriate spot on the side of a non-primary road to park, notifying traffic with your emergency flashers. Do **NOT** park on the side of a busy street and test with your back against traffic.

B. Safety Equipment – Before exiting the vehicle, make sure that you have on all safety equipment needed at the discharge site. This includes, but is not limited to, safety vest, hard hat, safety goggles, rubber gloves and steel toe boots. Due to some locations of potential illicit discharge sites, employees may want to wear insect repellent to eliminate threats of tick and mosquito-borne diseases. Be aware of snakes and other animals that may use outfalls and ditch banks as harborage.

C. Equipment Needed at Discharge Point – Not all equipment is needed at the point of discharge, so make sure you only carry the equipment that is needed at the specific site. Everything in the utility belt is necessary, your Illicit Discharge Field Sheet, sample pole and camera are all items that are needed onsite.

D. Site Check – When approaching a possible illicit discharge testing site, be conscious of your surroundings, smells, hazards, or other items that may cause injury. Once you are at the site, you are ready to collect data and fill the Illicit Discharge Field Sheet out. Location, date, time, and inspection team are all essential information that can be filled out prior to leaving the vehicle.

   Once at the site, fill out the worksheet and note any details that could later be used. Smells, amount and density of vegetation, any biological features, and presence of trash are all important when filling out the paperwork. If there are multiple outlets or potential sources of discharge at the location you are at, make sure to check each one for flow. While you may be at the location for one outlet, you may find a small pipe leading into the same ditch further down the bank. Fill out the worksheet for the pipe location you were given, and another for the pipe that may have the potential discharge. Whether flow was observed or not, the Illicit Discharge Field Sheet must be completed. All sites discharging must be tested with the refractometer to do determine if the site has tidal effects.

E. Collection of Sample – If flow is observed at the discharge site, a sample needs to be taken for testing. Sites can vary greatly depending on the location, so sampling methods are sometimes site specific. There are, however, certain general methods that need to be observed across all collections.

   Collection of Samples using the Extendable Sampling Rod – If a location is not within reach of the collector, a sampling rod must be utilized. A separate collection jar is attached to the end of the rod and dipped into the site at an angle with the opening of the collection jar against flow. The sampling jar rinsed with the discharge and then the sample collected again before bringing the sample up to the collector. The glass sampling jar is then filled, and the rest of the sample is emptied. Note color, clarity, odor, and floatables at this time and fill out the appropriate section of the worksheet. If the sampling rod and collection jar is used, the collection jar must be rinsed with de-ionized water upon returning to the truck to reduce the possibility of cross contamination.

   Collection of Samples directly from the site – If a sample can be safely collected without using the extendable sampling rod; the inspector can acquire the sample by hand. Ensure that both safety googles and rubber gloves are worn during the sampling procedure. Thoroughly survey the site to ensure there are no slip or fall hazards around the site. Protocol dictates that when sampling with the extendable rod, every sampling jar must be rinsed with the potential illicit discharge flow. Dip the glass sampling jar into the discharge with the mouth of the sampling jar against the flow. Note color, clarity, odor, and floatables at this time and fill out the appropriate section of the worksheet.

F. Field Testing – If there is sufficient time and a safe space for testing in the field, it is recommended to do so. Make sure there are no traffic hazards before utilizing the tailgate of the vehicle. Gather all testing equipment, testing supplies, and deionized water from the truck and place them in the rear of the vehicle. Each test has specific instructions, directing how each sample is prepped before placing the reagent mix into the photometer. All personnel must receive specific training through the Environmental Services Biologist and be comfortable with performing the tests before utilizing the equipment. See Appendix F for Photometer Instructions.

** Note - To reduce test time, protocol indicates initiating the tests that require longer stand times (10 minutes +) and then move onto the tests that can be checked immediately.

G. Laboratory Testing – If there is no appropriate testing site out in the field, or if there are time constraints, inclement weather approaching, or anything that prevents you from testing after the collection of the sample, laboratory testing can be done. When transporting a sample to the laboratory, place in a cool shaded area of the truck, do not put the sample in direct sunlight or leave the sample in a heated truck for any length of time if possible. When arriving at the Environmental Services office, place the sample in the refrigerator located in the lab and notify the field supervisor or Environmental Services manager. If a sample is collected and returned to the Environmental Services office, be sure to label the sample and leave the Illicit Discharge Field Sheet in the lab.

Testing Instructions

The City of Hampton's Environmental Services Division is responsible for all IDDE Testing. This includes testing for E. coli and Fecal Coliform bacteria, Dissolved Oxygen, Detergents, as well as Ammonia, Bromine, Chlorine, Copper, Phenols and Phosphates. This last group of testing utilizes the Photometer 9500 Field Screening Kit. Instructions on all of the testing procedures are as follows:

A. Photometer 9500

The Photometer 9500 is field testing kit designed to streamline on-site and laboratory testing to increase safety and productivity. Current parameters the City of Hampton may test include Ammonia, Bromine, Chlorine, Copper, Phenols and Phosphates. Each test has individual packages with specific instructions, and should be followed without deviation.

Instructions Prior to Testing

Before testing begins, insure all equipment is clean and functional. Glass sampling jars and testing vials must be washed prior to leaving the office. Washing is conducted using de-ionized water and the appropriate cleaning agent found in the Environmental Services laboratory. The photometer kit should contain the Photometer 9500, testing vials and caps, safety glasses, spare testing sticks, and light cap for the photometer.

Testing Instructions

After a sample is collected, set your testing material out so that there is ample room to work. Personal protective equipment must be worn while testing is conducted by all personnel in the immediate area. There are six tests performed with the photometer 9500, each with individual instructions that are kept with the individual tests. A copy of each test and instructions are found in Appendix F.

** Note – To reduce test time, protocol indicates initiating the tests that require longer stand times (10 minutes +) and then move onto the tests that can be checked immediately.

Record Keeping

While test results will be noted on the Illicit Discharge Form with the site information, the photometer 9500 is capable of transferring results electronically to your PC. FY17 will be the first year that this strategy will be put in place as a secondary electronic record. Results will be kept on a city network.

B. Coliscan MF

Environmental Services is capable of testing for E. coli and fecal coliform bacteria in case of a wastewater leak or other negative environmental impact. Step by step instructions for the coliform testing can be found in the test box, as well as in Appendix G. These instructions are very important to read or have nearby every time the test is being performed. Bottles of the solution required to perform the tests must be kept in a freezer, and thawed prior to testing. After preparation and setup have been completed, specimens must be kept in a warm to hot area (not in direct sunlight or over a direct heating source) or in an incubator for 24-48 hours for incubation time. Once the specimens have begun to incubate, another 24 hours is needed for complete growth to take place. Only once the incubation period is complete, can a count of the colonies is conducted.

QA/QC Procedures

The quality control procedures are listed below.

If testing results in any values that are cause for concern, a retest of that constituent will be conducted immediately. If the second test shows substantially different results, a third test will be done. All results will be recorded.

A sample is required for laboratory verification and if the second test verifies the first test, or, if the third test still indicates values identified as cause for concern. Collect a sample in the specially marked containers, place the container on ice, and call HRSD's Technical Services Division (Danny Barker 460-4247 or Jamie Heisig-Mitchell 460-4258) for further direction. These samples must be transported to the District Lab before the end of the work day (3:30 pm) so that analysis can be conducted on the sample within the prescribed holding time for the intended parameters.

At least 10 percent of sample collected by each crew will be split and one part will be analyzed in the field and the other will be sent to the lab for analysis. Included in this 10% calculation are verification for causes of concern. The Chain of Custody Record for the laboratory samples can be found in Appendix H. The samples for the laboratory must be kept in a cooler on ice.

The field supervisor will check the field logs each day to ensure this documentation is completed daily and that resampling and duplicate analysis is occurring as required.

Follow up and Tracking Procedures

All outfalls with a confirmed discharge will require testing and a drainage area investigation. If a sample comes back under threshold levels, a follow up is required, and if found positive for any quantities tested, tracking procedures should be followed.

A. Follow up Procedures - If the outfall is determined to have a potential illicit discharge based on physical indicators, but samples do not exceed established water quality thresholds, the outfall should be revisited two additional times during the permit cycle to determine if an intermittent discharge may be present. It is recommended that one re-visit will occur on a different day of the week than the original visit and/or at a different time of day.

B. Tracking Procedures - If the outfall is determined to have a confirmed illicit discharge based on exceeded threshold levels or physical indicators, a drainage area investigation should be immediately performed. Tracking an illicit discharge should be performed by a minimum of two employees, and may consist of the Environmental Services Manager, Stormwater Operations Manager or Stormwater Engineer. A map should be obtained, prior to tracking, of the surrounding stormwater drainage area to ensure proper tracking. To track, follow the nearest connected stormwater structure connected to the outfall and inspect to see if flow is present, and continue until you reach either the source or a split. For multiple outlets, the stormwater map should show direction of flow, however; visible evidence takes precedence.

   If it is unclear which direction the flow is coming from, both paths should be inspected. If your tracking leads to private property in which entrance cannot be obtained, refer to the stormwater GIS map to see if any other stormwater structures that are past the point of private property may be connected and inspect those for flow. If no flow is present prior to the private property, an onsite investigation should occur. If the property is inaccessible, refer to the enforcement section.

   Once the illicit discharge source is located, contact the property owner, and an attempt to stop further discharge from happening should be made. If a discharge is presumed hazardous, contact the Fire Department HAZMAT Team immediately. Further actions will be discussed in the enforcement section.

   The use of the Stormwater CCTV Truck may be utilized to assess subterranean when necessary.

Enforcement

Once the source of an illicit discharge has been identified, steps should be taken to remedy or eliminate the discharge. Four questions should be answered for each illicit discharge to determine how to proceed; the answers will usually vary depending on the source of the discharge.

- Who is responsible?
- What methods will be used to repair?
- How long will the repair take?
- How will removal be confirmed?

Financial responsibility for source elimination and removal will typically fall on property owners and/or the MS4 operators. Methods for removing illicit discharges usually involve a combination of education and enforcement. The Hampton City Attorney's office can be contacted for direction insuring proper enforcement measures. The Stormwater Manager should use judgment in exercising the right mix of compliance assistance and enforcement. The authority and responsibility for correction and enforcement is clearly defined in the Hampton City Code, Section 33.2. An escalating enforcement approach is often warranted and is usually a reasonable process to follow. Voluntary compliance should be used for first-time, minor offenders. Often, property owners are not aware of a problem, and are willing to correct when educated. More serious violations or continued non-compliance may warrant a more aggressive, enforcement oriented approach. Please refer to the City of Hampton's MS4 Program Plan manual for any further questions.

Post-Removal Confirmation

After completing the removal of illicit discharges from an area, the area is re-inspected to verify corrections have been completed. Depending on the extent and timing of corrections, verification monitoring can be conducted at the initial junction manhole or outfall, or the closest downstream outfall to each correction. Verification is accomplished by using the same visual inspection and field monitoring as described in previous sections.

Illegal Dumping Investigations

Investigations for Illicit Discharge and Illegal Dumping not pertaining to the Dry Weather Screening section will be investigated on an as needed basis. A separate field sheet will be used, which can be found in Appendix I. This form has three sections; the first section applies to all investigations and has pertinent information to include date, location, inspectors, etc.; the second section is a smaller version of the dry weather screening information, and is only used when there is a sample collected. This section will be completed while in the field, and then a team will be dispatched to the location and will implement dry weather screening procedures. The third section on the field sheet will be completed for the following four sections which discuss illegal dumping situations.

Tire Collection

The City of Hampton currently offers to retrieve up to 5 tires a week, up to 10 tires a year for residents (not businesses or commercial customers) of Hampton who receive weekly trash pickup. More information can be found at the Solid Waste section of the city's website (http://hampton.gov/index.aspx?nid=333).

Environmental Services routinely inspects historic illegal tire dumping sites for recent infractions and works with Codes and Law Enforcement to reduce the number of illegal dumping sites.

Grass Clipping and Leaf Debris

The City of Hampton Solid Waste division currently offers pickup of leaf and yard debris when putting in a request through the 311 Call Center, or filling a form out on the website (http://hampton.gov/index.aspx?nid=333).

Environmental Services receives 311 tickets based on citizen complaints throughout the year for either grass clippings or leaf debris being placed in a stormwater conveyance system (curb and gutter, back ditch, etc.). Clearly defined in the Hampton City Code 33.2-26 (d);

> *It shall be unlawful for any person to throw place, deposit, or cause to be thrown, placed or deposited, in any gutter, ditch, storm drain, or other drainage area in the city anything that impedes or interferes with free flow of stormwater therein.*

Grass clippings and leaf litter should be kept in the yard, and/or bagged for pickup in accordance with rules found on the Solid Waste page. Contractors and residences found to be violating this article will be notified in person, and given a copy of the code to educate about the violation. Repeat offenders can be pursued with enforcement.

Oil Spills

Environmental Services receives 311 tickets based on citizen complaints throughout the year identifying oil waste, antifreeze or other automobile waste being placed in a stormwater conveyance system (curb and gutter, back ditch, etc.). Clearly defined in the Hampton City Code 33.2-26 (b);

> *It shall be unlawful for any person to pour or discharge, or to permit to be poured or discharged, or to deposit, so that the same may be discharged, any gasoline, oil waste, antifreeze, or other automotive, motor, or equipment fluid into any storm sewer system.*

Residents shall dispose of oil and automotive waste appropriately by taking them to automotive repair and sales businesses. Anyone violating this article will be notified in person, and given a copy of the code to educate about the violation. Repeat offenders can be pursued with enforcement.

Swimming Pool Discharge

Environmental Services receives 311 tickets based on citizen complaints throughout the year for swimming pool water being discharged in a stormwater conveyance system (curb and gutter, back ditch, etc.). Clearly defined in the Hampton City Code 33.2-26 (e);

> *It shall be unlawful for any person to discharge chlorinated swimming pool water into the stormwater system.*

The use of chemicals designed to reduce or eliminate chlorine from your swimming pool water, or simply waiting for more than 10 days after the last treatment will naturally dechlorinate water. Residents may discharge their de-chlorinated swimming pool water legally, though the city still recommends that they discharge the pool water into a grassy area before entering the stormwater system to improve chances of infiltration. Anyone violating this article will be notified in person, and given a copy of the code to educate about the violation. Repeat offenders can be pursued with enforcement.

Bulk Trash & Construction Debris

Bulk limbs and construction debris, no larger than 5 inches in diameter and 5 feet in length, may be disposed of legally in the City of Hampton on the same day as your regular garbage when putting in a request through the 311 Call Center, or filling a form out on the website (http://hampton.gov/index.aspx?nid=333).

Environmental Services receives 311 tickets based on citizen complaints throughout the year for bulk trash or construction debris being placed in a stormwater conveyance system (curb and gutter, back ditch, etc.). Clearly defined in the Hampton City Code 33.2-26 (d);

> *It shall be unlawful for any person to throw place, deposit, or cause to be thrown, placed or deposited, in any gutter, ditch, storm drain, or other drainage area in the city anything that impedes or interferes with free flow of stormwater therein.*

Anyone violating this article will be notified in person, and given a copy of the code to educate about the violation. Repeat offenders can be pursued with enforcement.

Record Keeping

Due to evolving regulations set forth by the EPA and DEQ, record keeping is an essential part of our program. Electronic and hard copy forms can be found on the city's public network, and in the Environmental Services office. Each Illicit Discharge visit should include an Illicit Discharge Field Sheet containing pertinent information, a GIS map showing existing stormwater assets, any requested information from the 311 call center (if applicable), and photos from the site visit. A copy of any and all documentation in hard copy form will be available in the Environmental Services office.

Findings are reported annually to the Stormwater Engineer for the Hampton Roads Planning District Committee (HRPDC) and DEQ.

CITY OF HAMPTON
ILLICIT DISCHARGE FIELD SHEET

☐ Dry Weather Screening
☐ 311 Investigation
☐ Routine Stopping
☐ Other _____

Date: _____ Time: _____

Location: _____

Inspection Team: _____

Last Rain: >72 hrs. <72 hrs. >0.1 in. <0.1 in.

Dry Weather Screening

Structure #: _____ Structure Type: Pipe Outlet Catch Basin Other _____

Dominant Watershed Land Use: Industrial Commercial Residential Mixed Use

Visual Observations: Sediment Buildup Oily Sheen Odor: _____ Color: _____

Flow Observed: Yes No **(If Flow is observed, a separate Dry Weather Screening Sheet needs to be filled out)**

---

311 / Routine Investigations

Ticket #: _____

Manager Notified: Yes No

Problem Remediated: Yes No

Literature Given: Yes No

Discharge Type

☐ Oil Spill ☐ Illegal Dumping
☐ Grass Clippings ☐ Pool Water
☐ Car Wash ☐ Other _____

Comments: _____

_____

_____

_____

_____ **Lat:** _____ **Long:** _____

Hampton Illicit Discharge Detection and Elimination Worksheet

Weather Conditions Log

Date _____ Time _____ Field Supervisor _____

I. Weather Conditions:

A. If rainfall was less than 0.1 inch for the previous 48-hour period, ***dry weather conditions*** exist, and sampling may proceed.

B. If rainfall was more than 0.1 inch for the previous 48-hour period but less than 1 inch for a 24-hour period, a ***rainfall event*** has taken place and 48 hours must elapse prior to continuance of sampling.

C. If rainfall was more than 1 inch for a 24-hour period, a ***storm event*** has taken place and 72 hours must elapse prior to sampling.

II. Document current weather conditions and antecedent weather conditions. The previous 24-hour to 48-hour time frame is critical for determining if sampling will be conducted.

	Last Rainfall Date	**Last Rainfall Amount**	**Time Since Rain Event**
Wakefield National Weather Service via Langley Air Force Base			
Weather Channel Online			
WeatherLink Hampton @ Environmental Services			

pH / Temperature meter was calibrated by _____ on _____ at _____ .