City of Brookhaven, Georgia
BMP C-3
Dry Weather Screening Procedure

1.0 Introduction

Illicit discharges are unpermitted non-stormwater flows to the stormwater drainage system that contain pollutants or pathogens. Illicit discharges can be direct discharges or dumping to the stormwater system, or can occur through upstream activities that eventually flow to storm drain or drainage channel. Illegal connections are physical connections such as pipes that allow illicit discharges to the stormwater system on an ongoing basis.

Screening of stormwater outfalls during dry weather is an important tool for investigating potential non-stormwater entries to the storm drainage system. Subsequent identification and elimination of illicit discharges and illegal connections can result in substantial improvements to local water quality.

2.0 Program Description

Dry weather screening is performed on prioritized stormwater outfalls which are selected based on the potential for illicit discharges. The City of Brookhaven is committed to monitor 20% of the inventoried outfalls each year beginning in ~~2012~~ 2014. The City will inspect ~~10~~ 20% of inventoried BMPs in ~~2010 and in 2011~~ 2014, then 20% of inventoried BMPs in ~~2012~~ 2015, 20% of inventoried BMPs in ~~2013~~ 2016, ~~and~~ 20% of inventoried BMPs in ~~2014~~ 2017, and 20% of inventoried BMPs in 2018 and each year after that so that all outfalls will be screened once every five years.

Screening of stormwater outfalls for illicit discharges is performed during periods of dry weather, which is defined as rainfall of less than 0.1 inch per day for at least 72 hours. This criterion avoids the screening of flows that may have resulted from wet weather (stormwater) events.

Each outfall is to be inspected for flow. When a dry weather flow is observed at an outfall, the following are to be performed on the flow:

1. **Field observations and measurements** – Site descriptions and qualitative observations of physical conditions of the outfall and flow, as well as measurement of several in-situ water quality parameters.
2. **Water Quality Sampling** – Collection of water quality samples for field analysis or laboratory analysis when indicated by the field observations and measurements.

In dry weather outfall screening, the field team is looking for indicators that point to or confirm an illicit discharge or illegal connection. Section 3.5 and 3.6 provide guidance on potential sources of pollution based upon the findings of the screening.

The discovery of an illicit discharge will warrant a more detailed pollutant source identification investigation.

An outfall is the point where a municipal separate storm sewer system discharges to waters of the State. The City will identify the outfall that is the lowest downstream point in a storm sewer system to monitor (the final outfall). The City may not maintain the storm sewer system continuously upstream from the point that is monitored, but the lowest point in the system is the best location to identify illicit connections and illegal discharges which is the objective of this procedure.

3.0 Procedure

3.1 Outfall Screening Locations

The City of Brookhaven is in the process of identifying outfalls. In the interim, the city will utilize information collected in the process of cleaning our system. We have currently identified 1,500 catch basins in the right of way and are in the process of cleaning these catch basins. Information on whether flow is found or if an illicit discharge is suspected will be used to prioritize outfall screening.

The City of Brookhaven will select screening locations based on the potential for illicit discharges. The following guidelines are used to prioritize stormwater outfalls within a jurisdiction for dry weather screening of potential illicit connections:

- Utilize an up-to-date inventory of the city or county separate storm sewer system outfalls;
- Review records of previously screened outfalls to identify any subset of outfalls that have previously, and consistently, had illicit dry weather flows;
- Identify any new outfalls, or outfalls not previously screened, or outfalls identified by citizen complaints;
- Identify outfalls that drain into 303(d) listed waters, or have significant industrial

land use, or discharge to streams with water quality concerns without obvious point sources;

- Rank previously screened outfalls by quarter since last screening; and
- Prioritize the set of outfalls for quarterly screening by adding the number of problem outfalls to the number of previously unscreened outfalls.

In order to provide a comprehensive screening of outfalls within the city, sites will be rotated on an annual basis.

3.2 Outfall Screening Preparation

3.2.1 Preliminary Mapping and Land Use Evaluation

To assist in outfall screening, preliminary mapping and land use evaluation will be completed following the prioritization and identification of target outfalls or drainage areas. Mapping information includes:

- Outfall locations;
- Outfall drainage areas;
- Commercial and industrial activities in each drainage area; and
- Locations of septic tanks in each drainage area.

Field maps are prepared to guide the screening team when appropriate. These maps, at a minimum, should have labeled streets and hydrologic features so field teams can orient themselves.

3.2.2 Field Sampling and Analysis Equipment

Table 1 lists the recommended equipment for dry weather outfall screening. Before undertaking field work, the field team should ensure that all of the necessary equipment is present and in order. Both the pH meter and the conductivity meter should be calibrated. In addition, field test kits should be inspected to ensure that they have sufficient reagents and test strips/discs.

TABLE 1

List of Equipment and Supplies for Dry Weather Outfall Screening

Field Equipment	Function
Field maps (with outfall locations, drainage areas, and street information)	Locating outfalls for screening
Field measurement equipment (temperature, pH, conductivity meters)	Measuring field temperature, pH and specific conductivity of dry weather flows
Field test kits	Measuring fluoride, surfactants and fecal coliform
Sample bottles with labels	For collection of grab samples
Sealed, sterile sample bottles with labels	For collection of bacteria grab samples
Grab water sampler (dipper on long pole)	For outfalls/flows that are difficult to reach
Waders and walking stick	For reaching outfalls near a stream or waterbody
Hand-operated vacuum pump sampler	For shallow dry weather flows
Clear tape and applicator	To apply over label
Coolers	For transport of grab samples
Ice / ice packs	To keep samples preserved after collection and during transport from the site
Clipboard or notebook with data collection forms and COC forms / Pens	To document field data and activities
List of outfalls, directions, protocols, and Health and Safety Plan	For reference in the field
Field logbook	To record notes
Permanent marker (extra fine)	Label sample bottles
Cell phone	Communication in the field
Handheld GPS receiver (if applicable)	Determining outfall locations
Digital camera	To document dry weather flow and/or conditions
Flashlight	Recording visual conditions
First Aid Kit	Health and Safety Plan
Disposable gloves, safety shoes, and safety glasses	Health and Safety Plan

3.2.3 Weather Considerations

Prior to any screening field work, check local rain gages to ensure that the conditions are appropriate for dry weather outfall screening. Dry weather is defined as rainfall of less than 0.1 inch per day for at least 72 hours.

3.3 Outfall Screening Procedures

Figure 1 is an example Dry Weather Outfall Screening Form which is used to record the observations and analytical results of the dry weather screening procedures. Figure 2 is an example Data Tracking Form to record Outfall Screenings.

3.3.1 Field Observations and Measurements

Outfall screening is initiated by driving or walking to the outfall location. When an outfall is reached, it should be physically marked or labeled, and the coordinates logged using the GPS receiver (if applicable).

Basic descriptive information is recorded at the top part of the Dry Weather Outfall Screening Form:

- Outfall location
- Outfall ID number
- Outfall type, material and size
- Receiving stream and/or watershed name
- Date and time of screening
- Weather observations
- Staff person(s) undertaking the screening

Digital photographs are taken of the outfall and photo numbers recorded on the screening form.

Physical observations of the site are recorded on the screening form under *Field Observations and Measurements*. If no flow is observed during the outfall screening, the "Flow from outfall?" field should be checked "No" and the screening is complete. This result will be counted towards the total number of outfalls screened.

If flow is observed, then "Yes" should be checked and the following physical indicators recorded. Each of these observations associated with flowing outfalls may predict the presence of an illicit discharge or illegal connection:

- **Odor** – Description of any odors that emanate from the outfall and an associated severity score. Since noses have different sensitivities, the entire field team should reach consensus about whether an odor is present and how severe it is. A severity score of one means that it is faint or the team cannot agree on its presence or origin. A score of two indicates a moderate odor within the pipe. A score of three is assigned if the odor is so strong that the field team smells it a considerable distance away from the outfall.
- **Color** – The visual assessment of the discharge color. The intensity of color is ranked from one (slightly tinted) to three (clearly visible in the flow). The best way to measure color is to collect the discharge in a clear sample bottle and hold it up to the light. Field teams should also look for downstream plumes of color that appear to be associated with the outfall.
- **Turbidity** – The visual estimate of the turbidity of the discharge, which is a measure of the cloudiness or opaqueness of the water. Turbidity is ranked from one (slight cloudiness) to three (opaque). Like the color observation, turbidity is best observed using a clear sample bottle. The field team should also look for turbidity in the plunge pool below the outfall, and note any downstream turbidity plumes that appear to be associated with the outfall.
- **Floatables** – The presence of any floatable materials in the discharge or the plunge pool below. Sewage, oil sheen or film, and suds are all examples of floatable indicators. [Note that for dry weather screening, trash and debris are not considered indicators of an illicit discharge or illegal connection.]

Upon completing the physical observations, measure temperature, pH, and specific conductivity of the dry weather flow (either in-situ or using a sample bottle), and record the readings on the screening form.

3.3.2 Water Quality Sampling

Water quality sampling of a dry weather flow is performed to look for chemical indicators which may detect, characterize or confirm the presence of an illicit discharge or illegal connection. Water quality sampling is required for a dry weather flow that meets any of the following criteria:

- Visible sewage or sewage odor
- Physical indicator of potential illicit discharge (color, odor, turbidity or floatables)
- pH lower than 6.5 or higher than 7.5
- Specific conductivity greater than 300 µmho/cm

Sampling may be undertaken either using field test kit equipment or by collecting grab samples for laboratory analysis. Water samples should be tested for following parameters:

- Fluoride
- Surfactants (detergents)
- Fecal coliform – if conductivity reading is consistently greater than 300 µmho/cm,

surfactants are present and a classic sewage order is present and detectable to the screener.

3.3.2.1 Field Sampling and Analysis

Field test kits with appropriate reagents, test strips/discs, and sampling equipment should be used. The test kits must have the ability to detect fluoride within the range 0 to 2.00 g/L and surfactants within the range 0 to 3.0 mg/L.

Follow the kit manufacturer's procedures for obtaining a test sample and completing the field analysis. Record the field analysis results on the screening form.

3.3.2.2 Grab Samples

Grab samples and subsequent laboratory analysis may be performed in lieu of field sampling for one or more of the water quality parameters. Grab samples should be analyzed using EPA-approved laboratory analysis methods.

3.3.2.3 Grab Sample Collection

A manual grab sample for a dry weather flow is accomplished by inserting the sample container (either plastic or glass depending on the parameter) under or down current of a discharge with the container opening facing upstream. In many cases, the sample container itself can be used to collect the sample. Less accessible outfalls will require the use of poles and buckets to collect the grab sample. A pre-measured cut-off milk jug can be used to capture shallow flows from the outfall. To ensure that the manual grab samples are representative, the following procedures should be followed:

- Do not open sample bottle until sample is to be actually collected.
- Use gloves at all times when handling sampling bottles.
- Take the grab from the horizontal and vertical center of the outfall.
- Make sure not to disturb any sediments or benthic growth in the outfall.
- Transfer samples into proper container (e.g., from bucket to sample container). Fecal coliform grab samples must be collected directly into the sterile sample container.

All of the equipment and containers that come into contact with the sample should be cleaned in order to avoid contamination, and be non-reactive to prevent leaching of pollutants.

3.3.2.4 Grab Sample Handling

The grab sample bottle type, preservation requirements, and holding time requirement for those parameters being tested are listed in Table 2. Proper preservation and maintenance of the holding times for each parameter is essential for the integrity of the sampling results. Note that fecal coliform samples have a **short holding time of six hours** and must be returned to the lab for analysis within this time or the results may be unrepresentative of the flow.

TABLE 2

Modified Handling Requirements for Samples

Parameter	Container Type[1]	Sample Volume (g)	Sample Preservation	Maximum Holding Time
Fluoride	P,G	500ml	Cool, 4ºC	28 days
Surfactants (detergents)	P	500ml	Cool, 4ºC	48 hours
Fecal Coliform[2]	PP,G	100 ml	Cool, 4ºC	6 hours

[1] Polyethylene (P), Polypropylene (PP), Glass (G) – EPA-approved sample containers (40 CFR 136)

[2] In chlorinated waters, dechlorinate the sample with sodium thiosulfate by adding 1 ml of 10% $Na_2S_2O_3$ to the 100 ml sample

3.3.2.5 Grab Sample Identification and Labeling

A sample numbering system should be used to ensure that each sample is uniquely identified in the field and tracked on field data collection forms. The sample numbering should be as follows: ###-MMDDYY-HH:MM

Where:

- ### = A unique number for each sample location
- MMDDYY = Month, day, year
- HH:MM = Time in military units

All of the samples collected at the site should be placed in the appropriate sample containers for preservation and shipment to the designated laboratory. Each sample should be identified with a separate identification label. A waterproof, gummed label should be attached to each sampling container. Information to be recorded on the label should include:

- Site name;
- Sample number;
- Analysis to be performed;
- Date and time of collection;
- Preservation used and any other field preparation of the sample; and
- Initials of field crew collecting the sample.

3.3.2.6 Grab Sample Documentation

A chain-of-custody (COC) form should accompany all samples. See Figure 3 for a sample COC form. The COC form shall include all of the information provided on the sample label discussed in the preceding section.

The purpose of the COC form is to provide a mechanism for tracking each sample submitted for laboratory analysis. The information on the COC form must be identical to the information of the sample label. A COC form should be prepared by the sample collector for each set of samples submitted for laboratory analysis. The form should be placed in a re-sealable plastic bag (to keep the form dry) and sealed inside each sample cooler. When transferring possession of the samples, the individual relinquishing and receiving samples should sign, date, and note the time on the COC form. This record documents the transfer of custody from the sampler to another person, to/from a secure storage area, and to the laboratory. Copies of the COC forms should be kept for future reference.

3.3.2.7 Analytical Laboratory Coordination and Sample Delivery

The samples should be packed in coolers with ice (or ice packs) to ensure they maintain the required temperature of less than or equal to 4°C during transport to the designated laboratory. Contact the laboratory prior to sampling to assure that the samples will be analyzed within their holding time. Samples may be placed in individual one-gallon resealable bags as a precaution to avoid spilling the sample. All glass bottles should be individually bagged and bubble-wrapped to prevent breakage on the way to the lab. Samples may be placed in a large trash bag inside a cooler (to ensure against the sample leaking) with ice completely covering the samples.

3.4 Quality Assurance/Quality Control

This section describes the elements of the field quality assurance/quality control (QA/QC) program. The overall QA/QC objective for the monitoring program is to ensure that the data collected are of good quality.

3.4.1 Field QA/QC

Field quality control procedures include calibration procedures, field blanks and field duplicates. The field equipment should be calibrated appropriately prior to leaving for the sampling site to ensure proper performance of the equipment. This includes the pH meter, conductivity meter, and the thermometer. The pH meter should be calibrated using two buffers that bracket the expected pH range (typically 4 and 7). The conductivity meter is calibrated by rotating the probe below the surface in a standard Potassium Chloride solution in a circular motion. The readings must be within 10 percent to be acceptable. The thermometers used should be accurate to + 5°C.

Quality control blanks should be used in the field to determine potential sample contamination during sample collection, handling, shipment, storage, or laboratory handling and analysis. Reagent grade water should be used for the quality control blanks. A minimum of one field blank for surfactants (detergents) and fecal coliform is required each day with scheduled field screening. For fluoride, a field blank should be used with approximately 10 percent of samples (or as required by the lab).

Field duplicates should be collected on approximately 10 percent of the samples to assess the representativeness of sampling procedures in addition to the normal uncertainty associated with the analysis.

3.4.2 Laboratory QA/QC

The laboratories should follow Georgia EPD- approved methods and routinely perform quality control checks during laboratory analysis, including calibration standards, blanks, laboratory control samples, laboratory control duplicate samples, matrix spikes, and

matrix spike duplicates. Spikes and duplicates should be performed on a minimum of 10 percent of the samples and should meet data quality objectives established by the client.

3.5 Evaluating Dry Weather Screening Results

3.5.1 Background

Dry weather screening of stormwater outfalls is an important tool used to evaluate non-stormwater flows in the storm drainage system. Effectively evaluating and interpreting dry weather screening results and data is the first step in identifying and tracing a potential illicit discharge or illegal connection.

3.5.2 Field Observations

Field observations of a dry weather flow include odor, color, turbidity and floatables. These parameters are qualitative indicators detected by visual inspection and smell, and require no measurement equipment. They are important in evaluating a dry weather flow for a potential illicit discharge, and may confirm the most severe or obvious discharges.

Table 3 lists the field observation parameters, along with potential sources for a number of observed conditions.

3.5.3 Field Measurements and Water Quality Sampling Results

Field measurements and water quality sampling provide additional information which may detect, characterize or confirm an illicit discharge or illegal connection. Temperature, pH and conductivity measurements are completed in-situ using probes or other equipment that is calibrated prior to field work. Water quality sampling for the presence of fluoride, surfactants and fecal coliform is performed either in-field using test kit equipment or by collecting grab samples for laboratory analysis.

Table 4 lists the various parameters included in the dry weather screening protocol along with benchmarks and guidance on evaluating results. *Figure 4* provides a flow chart which can be used to identify illicit discharges based upon findings.

3.5.4 Ranking the Potential for an Illicit Discharge

Based upon the screening results, all outfalls should be ranked for their potential for an illicit discharge:

- Those outfalls without flow or that appear to be from an uncontaminated source would be ranked “Unlikely or No Flow.”

- Any flow that shows two or more suspect field observation or chemical indicator that falls outside of the range of normal stormwater or groundwater should be marked as “Possible” for an illicit discharge.

- The presence of one or more field observations with a rank of two or three, or chemical indicators far outside of the range of normal stormwater or groundwater should be ranked “Suspect.”

- Any flow that is clearly an illicit discharge should be listing as “Obvious or Confirmed.”

TABLE 3

Physical Observations and Potential Sources

Parameter	Observations	Potential Source(s)
Odor	Sewage	Sanitary sewer; septic tank discharges
	Sulfur (rotten eggs)	Industrial discharge (sulfides and/or organics); sanitary sewer; septic tank discharges
	Oil / gasoline	Facilities associated with vehicle maintenance and operation; petroleum product manufacturing or storage; industrial discharge
	Rancid / sour	Food preparation facilities (restaurants, hotels, etc.)
Color	Orange / rust	Construction site or unstabilized soil (eroded soil and clay)
	White / milky	Sanitary sewer; septic tank discharges; residential or commercial washwater; concrete or stone operations; fertilizer
	Grey	Residential or commercial washwater; dairies
	Red	Meat packers
	Yellow	Industrial discharge
	Green	Industrial discharge; Facilities associated with vehicle maintenance and operation (antifreeze)
	Brown / black	Industrial discharge
Turbidity	Cloudy	Sanitary sewer; septic tank discharges; residential or commercial washwater; concrete or stone operations; fertilizer; industrial discharge
	Opaque	Food preparation facilities (restaurants, hotels, etc.); industrial discharge
	Silty / Muddy	Construction site or unstabilized soil (eroded soil and clay)
Floatables	Sewage	Sanitary sewer; septic tank discharges
	Petroleum (oil sheen)	Facilities associated with vehicle maintenance and operation; petroleum product manufacturing or storage; industrial discharge
	Suds	Sanitary sewer; septic tank discharges; residential or commercial washwater

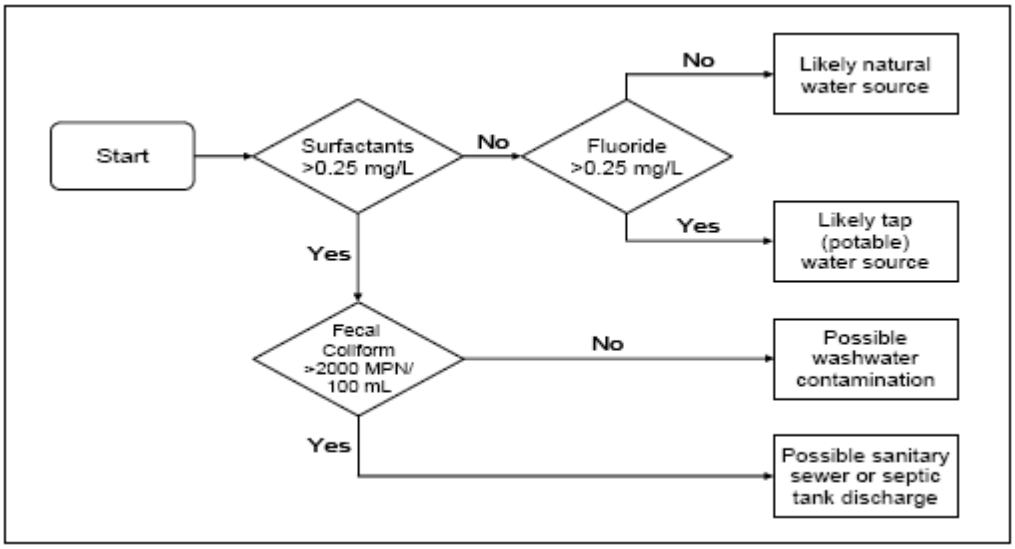
Table 4

Interpretation of Field Measurements and Water Quality Sampling Parameters

Parameter	Benchmarks	Evaluation
Temperature	Temperature should be near or below ambient conditions for groundwater or stormwater runoff.	Higher than ambient temperature may indicate stream condensate or industrial process water.
pH	The normal pH range for stormwater runoff is between 6 and 8, with 7 being neutral.	pH is a relatively good indicator of liquid wastes from industries, which can have very high or low pH values (ranging from 3 to 12). The pH of residential and commercial washwater tends to be in the range of 8 or 9.
Conductivity	Stormwater should have a low conductivity (under 300 µmho/cm).	Conductivity greater than 300 µmho/cm indicates a high dissolved solids content in the flow which may be from an illicit discharge or illegal connection
Fluoride	There should no traces of fluoride in the stormwater.	Presence of fluoride indicates the presence of potable (treated) water. Fluoride can often be used to separate treated potable water from untreated water sources, such as stormwater, groundwater or non-potable industrial waters.
Surfactants (detergents)	There should be no traces of surfactants (detergents) in the stormwater.	This parameter is associated with cleaning/washing operations and may indicate residential or commercial wastewater.
Fecal Coliform	Fecal coliform is an indicator of fecal bacteria from warm-blooded animals.	Its presence in high numbers often indicates contamination with sanitary waste, although high levels of pet waste may also produce similar results.

Figure 4

Flowchart to Identify Illicit Discharges using Outfall Screening Sampling Results



3.6 Following Up on Potential Illicit Discharges

All outfalls ranked as possible, suspect or obvious illicit discharges require follow-up actions and activities to determine the specific source(s) of contamination. There are a variety of methods for illicit discharge source identification, including:

- **Mapping Analysis** – Evaluation of the drainage area, land uses and properties above the outfall including the route of the storm drainage system and locations of storm drains. This enables local staff to predict the likely locations of illicit discharges and illegal connections. Geographic Information Systems (GIS) are a useful tool for identifying illicit discharges through mapping analysis.

- **Drainage Area Investigation –** A windshield survey or more detailed property inspections in the drainage area that has the illicit discharge. These inspections are often performed following a mapping analysis.

- **Piping Schematic Review** – Examination of building plans and plumbing details for potential sites where improper connections to the storm drainage system may have occurred.

- **Smoke Testing** – Testing of pipes to locate connections by injecting a non toxic vapor (smoke) into the system and following its path of travel.

- **Dye Testing** – Addition of colored dye to the drain water in suspect piping and subsequent surveillance to determine if dyed water appears in the storm drain system, thus indicating an illegal connection.

- **Septic System Investigation –** Low density residential watersheds may require special investigation methods when failing septic systems are suspected. Homeowner surveys, surface investigations and infrared photography have all been used successfully to identify problem septic system facilities.

The appropriate method for any given outfall or area will be heavily dependent on the watershed and land use conditions, drainage system characteristics, available resources and the nature of the discharge and screening results.

4.0 References

"Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments." Center for Watershed Protection. 2004.

"District-Wide Watershed Management Plan Standards and Methodologies for Surface Water Quality Monitoring." Metropolitan North Georgia Water Planning District, March 2007.

"Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems – A User's Guide. EPA/600/R-92/238," U.S. Environmental Protection Agency, January 1993.

"NPDES Stormwater Sampling Guidance Document. EPA-833-92-001,"
U.S. Environmental Protection Agency, July 1992.

Figure 1 – Sample Dry Weather Outfall Screening Form

Dry Weather Outfall Screening Form	
Name of City or County:	**Data Sheet Number:**
Date of screening (MM/DD/YY):	Time of screening:
Weather conditions:	
Sampling performed by:	

Outfall Description	
Outfall Location:	Outfall I.D. Number:
Outfall Type/Material: ❒ Closed Pipe (circle): RCP CMP PVC HDPE Other: _____ ❒ Open Channel (circle): Concrete Earthen Grassy Other: _____	Outfall Diameter/Dimensions:
Receiving stream and watershed name:	
Land use/industries in drainage area:	
GPS Coordinates:	Photo numbers:

Field Observations and Measurements	
Flow from outfall? ❒ Yes ❒ No	Flow Description: ❒ Trickle ❒ Moderate ❒ Substantial
Odor: ❒ None ❒ Sewage ❒ Sulfide (rotten eggs) ❒ Petroleum/gas ❒ Rancid/sour ❒ Other _____ Relative severity: ❒ 0-None ❒ 1-Faint ❒ 2-Easily Detected ❒ 3-Noticable from a distance	
Color: ❒ Clear ❒ White ❒ Gray ❒ Orange/Rust ❒ Red ❒ Yellow ❒ Green ❒ Brown/Black ❒ Other Relative severity: ❒ 0-None ❒ 1-Faint ❒ 2-Clearly visible in bottle ❒ 3-Clearly visible in flow _____	
Turbidity: ❒ None ❒ Cloudy ❒ Opaque ❒ Silty ❒ Muddy ❒ Other _____ Relative severity: ❒ 0-None ❒ 1-Slight cloudiness ❒ 2-Cloudy ❒ 3-Opaque	
Floatables: ❒ None ❒ Sewage ❒ Petroleum (oil sheen) ❒ Suds ❒ Other _____ Relative severity: ❒ 0-None ❒ 1-Few/slight ❒ 2-Some ❒ 3-Heavy	
Flow Temperature (°C):	
Flow pH:	pH meter calibrated? ❒ Yes ❒ No
Flow Conductivity (µmho/cm):	Conductivity meter calibrated? ❒ Yes ❒ No

Water Quality Sampling			
Field Test Kit Manufacturer:		Model:	
Fluoride (mg/L):		**Fecal Coliform (MPN/100ml):**	
Surfactants (mg/L):		**Analysis Comments:**	
Grab sample for lab? (fluoride/surfactants) ❒ Yes ❒ No		Bacteria Grab sample for lab? (fecal coliform) ❒ Yes ❒ No	
Grab Sample ID:		Bacteria Grab Sample ID:	

Outfall Potential for Illicit Discharge:

❒ **Unlikely - or- No Flow** ❒ **Possible (presence of two or more indicators)**

❒ **Suspect (one or more indicators with severity of 2 or 3)** ❒ **Obvious - or- Confirmed**

NOTE: Water quality sampling (using a field test kit and/or grab samples) is required for a dry weather flow that meets any of the following criteria: Visible sewage or sewage odor; physical indicator of potential illicit discharge (color, odor, turbidity or floatables); pH lower than 6.5 or higher than 7.5; or specific conductivity greater than 300 µmho/cm.

Figure 2 – Sample Dry Weather Outfall Screening Data Tracking Form

Date	Outfall I.D. Number	Flow? (Y/N)	Odor (describe)	Color (describe)	Turbidity (describe)	Floatables (describe)	Temp (ºC)	pH	Conductivity (µmho/cm)	Fluoride (mg/L)	Surfactants (mg/L)	Fecal Coliform (MPN/100ml)	Follow-up Actions

Figure 3 – Sample Chain of Custody Form