

TOWN OF VINTON
VIRGINIA

STANDARD OPERATING
PROCEDURES

for

Illicit Discharge Detection and Elimination (IDDE)

2017

Illicit Discharge Detection and Elimination (IDDE) – Call-in Inspections

1. Preparation
 - a. Have a system in place to receive phone calls and collect information regarding suspected illicit discharges.
2. Process
 - a. Use the Incident Tracking Sheet to collect the appropriate information from the caller. Then, transfer the Incident Tracking Sheet to the proper authority (i.e. department head, stormwater manager, construction inspector, code enforcement officer, or other assigned personnel).
 - b. Promptly investigate reported incidents.
 - c. If an illicit discharge of unknown source is confirmed, follow the procedure of SOP IDDE - Tracing Illicit Discharges.
 - d. If an illicit discharge known source is confirmed, follow the procedure of SOP IDDE - Removing Illicit Discharges.
3. Clean-up
 - a. Clean catch basin, clean storm drain, or initiate spill response, as applicable. Follow relevant SOPs.
4. Documentation
 - a. File all completed forms (i.e. incident tracking, catch basins cleaning, storm drain cleaning).
 - b. Document any further action taken.
 - c. Review incidents reported by citizens on an annual basis to look for patterns of illicit discharges and to evaluate the call-in inspection program.

IDDE – Opportunistic Illicit Discharge Observation

1. Preparation
 - a. Be alert for potential illicit discharges to the municipal stormwater system while going about normal work activities.
2. Process
 - a. Call the appropriate authority (i.e. department head, stormwater manager, construction inspector, code enforcement officer or a supervisor) if you see evidence of an illicit discharge.
 - b. Assess the general area of the illicit discharge to see if you can identify its source.
 - c. Whenever possible, take photographs of the suspected illicit discharge.
 - d. Responding stormwater department personnel or code enforcement officer will complete the following:
 1. Use the IDDE Incident Tracking Sheet to document observations.
 2. Obtain sample for visual observation and complete an Outfall Inspection Form, if applicable.
 3. Follow the procedure of SOP IDDE - Tracing Illicit Discharges.
3. Clean-up
 - a. Party that caused illicit discharge is responsible to clean catch basin, clean storm drain, and all associated damage resulting from discharge. Spill response may be initiated, as needed. In cases of greater immediacy, Town personnel may need to become involved in clean up activity. Follow relevant SOPs.
4. Documentation
 - a. File all completed forms (i.e. Incident Tracking Form, Outfall Inspection Form, Catch Basin Cleaning Form, and Storm Drain Cleaning Log).
 - b. Document any further action taken.

IDDE – Outfall Inspections

1. Preparation
 - a. Know the past and present weather conditions. Conduct inspections during dry weather periods.
 - b. Gather all necessary equipment including: tape measure, clear container, clipboard with necessary forms, flashlight, and camera (optional).
 - c. Obtain maps showing outfall locations and identifiers.
 - d. Obtain outfall description and observations from previous inspections, so the outfall can be accurately identified and observations compared.
2. Process
 - a. Perform an inspection of each outfall at least once per year. Whenever, possible use the same personnel for consistency in observations.
 - b. Identify each outfall with a consistent and unique identifier. Use maps and previous inspection reports to confirm the outfall identity and location.
 - c. If dry weather flow is present at the outfall, then document and evaluate the discharge by completing the following steps:
 1. Collect field samples for visual observations in a clean, clear container and in a manner that avoids stirring up sediment that might distort the observation.
 2. Characterize and record observations on basic sensory and physical indicators (e.g., outfall condition, flow, odor, color, oil sheen) on the Outfall Inspection Form.
 3. Compare observations to previous inspections.
 4. If the flow does not appear to be an obvious illicit discharge (e.g., flow is clear, odorless, etc.), attempt to identify the source of the flow (groundwater, intermittent stream, etc.)
 - d. If an illicit discharge (such as raw sewage, petroleum products, paint, etc.) is encountered or suspected, follow the procedure of SOP IDDE - Tracing Illicit Discharges.

3. Clean-up – As necessary
4. Documentation
 - a. File completed outfall inspection forms.
 - b. Update maps if new outfalls are observed and inspected.

IDDE – Removing Illicit Discharge

1. Preparation
 - a. Obtain available property ownership information for the source of the illicit discharge.
2. Process
 - a. Determine who is financially responsible; and follow associated procedures as given below.
 1. For Private Property Owner:
Contact Owner,
Issue Notice of Violation for violations of the municipal ordinance, and
Determine schedule for removal.
 2. For Municipal Facility:
Notify appropriate municipal authority or department head,
Schedule removal, and
Remove illicit connection.
 - b. Suspend access to storm drain if threats of serious physical harm to humans or the environment are possible.
 - c. Direct responsible party to initiate repairs/corrections/cleanup. Coordinate with enforcement official for escalating penalties in accordance with the municipal ordinance.
 - d. Repair/correct cause of discharge if municipality is responsible. Schedule the work through the appropriate municipal authority or department head.
 - e. Seek technical assistance from the Vinton/Roanoke County Health Department or Virginia Department of Environmental Quality, if needed.

3. Clean-up
 - a. Confirm illicit discharge is removed or eliminated by follow-up inspection.
4. Documentation
 - a. Maintain records of notice of violation and penalties.
 - b. Document repairs, corrections, and any other actions required.

IDDE – Tracing Illicit Discharges

1. Preparation
 - a. Review / consider information collected when illicit discharge was initially identified and document using Incident Tracking Form or Outfall Inspection Form.
 - b. Obtain storm drain mapping for the area of the reported illicit discharge.
 - c. Gather all necessary equipment including: tape measure, clear container, clipboard with necessary forms, flashlight, and camera (optional).
2. Process
 - a. Survey the general area / surrounding properties to identify potential sources of the illicit discharge as a first step.
 - b. Trace illicit discharges using visual inspections of upstream points as a second step. Use available mapping to identify tributary pipes, catch basins, etc.
 - c. If the source of the illicit discharge cannot be determined by a survey of the area or observation of the storm drain system, then consider the following additional steps:
 1. Use weirs, sandbags, dams, or optical brightener monitoring traps to collect or pool intermittent discharges during dry weather.
 2. Smoke test or televise the storm drain system to trace high priority, difficult to detect illicit discharges.
 3. Dye test individual discharge points within suspected buildings.
 4. Consider collecting bacterial samples of flowing discharges to confirm/refute illicit discharge.

- d. If the source is located, follow SOP IDDE - Removing Illicit Discharges.
 - e. If the source cannot be found, add the location to a future inspection program.
3. Clean-up
- a. Clean catch basin, clean storm drain, or initiate spill response, as applicable. Follow relevant SOPs.
4. Documentation
- a. Document tracing results for future reference.