

# SANITARY SEWER OVERFLOW RESPONSE PLAN (SSO RP)

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# HRSD SANITARY SEWER OVERFLOW RESPONSE PLAN

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## 1. INTRODUCTION

HRSD (Hampton Roads Sanitation District) is a regional wastewater service provider in southeast Virginia serving a geographic area of 4998 square miles and a population of approximately 1.9 million people. It owns and operates approximately 487 miles of pressure sewer mains (and associated valves and appurtenances), approximately 53 miles of gravity sewer mains (and associated manholes, siphons, and vaults), and 86 pumping facilities which include 68 wet well pumping stations and 18 pressure reducing stations. The HRSD sanitary sewer system takes pumped flow and gravity flow from surrounding communities and transports the flows to its sixteen sewage treatment plants (STPs) with a combined treatment capacity of up to 225 million gallons of wastewater per day. Each of the cities, towns, and counties in HRSD's service area (Localities) collects wastewater in their own sanitary sewer collection systems and sends it to HRSD's Interceptor System for conveyance to the wastewater treatment plants.

As with any sanitary sewer system, events occur that sometimes lead to the release of wastewater from the collection system. This plan provides the details on HRSD's protocol for responding to each event, tracking and documenting them, as well as providing for a resolution to minimize future occurrences.

### 1.1 General

This Sanitary Sewer Overflow Response Plan (SSO RP) was developed to reduce or prevent environmental and public health impacts of all collection system releases. It provides structured guidance for release response, including a range of appropriate and effective field activities that HRSD response teams can choose from to meet the needs of each situation. HRSD response officials will use their discretion and best professional judgment to evaluate each event and choose the appropriate minimization/remediation approach and tools. The procedures established in this document are guidance for HRSD to address SSOs and are not considered as the only approach to SSO response, as long as regulatory obligations are met.

### 1.2 SSO Terminology

Definitions in terminology vary across cities, states or regions of the country for the name of the event where wastewater is released from a collection system. The Commonwealth of Virginia indicates that a sanitary sewer overflow (SSO) occurs when a release of wastewater reaches or may reasonably be expected to reach waters of the United States or the Commonwealth of Virginia. This is an event that is reported to the appropriate regulatory agencies and departments, including the Virginia Department of Environmental Quality and the various local health departments.

In addition, HRSD is party to a Consent Decree (effective February 23, 2010, and then amended on April 4, 2013, on August 26, 2014, and again on February 21, 2017) with the Federal and State government that includes two definitions:

- Sanitary Sewer Overflow (SSO) – an overflow, spill, diversion, or release of wastewater from or caused by the Regional Sanitary Sewer (SS) System. This term shall include: (i) discharges to waters of the State or United States from the Regional SS System and (ii) any release of wastewater from the Regional SS System to public or private property that does not reach waters of the United States or the State, including Building/Private Property Backups.
- Sanitary Sewer Discharge (SSD) – any discharge to waters of the State or the United States from the HRSD SS System through a point source not authorized by any Permit.

Comparing the two definitions for SSO from the Commonwealth of Virginia and the Consent Decree, there is a difference to be noted. Per the State Water Control Law, only discharges that reach or may be reasonably expected to reach Federal or State waters are reportable SSOs, while the Consent Decree broadens the definition of SSO to include all discharges.

The definition of SSO contained in the Consent Decree uses the term “Regional SS System” which includes Localities’ systems. Except for limited coordination and notification provisions specifically outlined in this document, where SSO is used in the remainder of the term shall refer to SSOs from the HRSD SS System.

HRSD will use the terminology such that any release of wastewater from the sanitary sewer system will be considered an SSO, but will divide the group into “reportable” and “non-reportable” discharges. In general, the procedures set forth in this document apply to reportable SSOs, while non-reportable SSOs are tracked in call logs and maintenance reports. HRSD does not consider a minor contained release of wastewater during a planned maintenance activity (such as wastewater collected in a bucket during air release valve maintenance) as an SSO requiring documentation. HRSD’s Permits Manager from the Water Quality Department, in consultation with Interceptor Systems staff, is responsible for the decision whether an SSO is reportable.

In addition, this plan is intended to cover wastewater releases from the collection system upstream of the various treatment plant headworks. Any release, discharge, bypass, or plant upset from the treatment plant headworks through the treatment plant outfall is regulated by the Virginia Pollutant Discharge Elimination System (VPDES) permit in place at each facility. These permits have specific requirements for monitoring and reporting this type of event to the appropriate regulatory authorities, and HRSD complies with these rules.

### 1.3 SSO Response Plan Overview

The SSO RP implements the following responsive guiding principles:

1. All SSOs are responded to and halted as rapidly as possible;
2. To the maximum extent practicable, prevent or minimize impacts to the public and environment;
3. Implement corrective actions to prevent and/or minimize any recurrence; and
4. Document and track SSOs for regulatory and system operation purposes.

Responsibility for the procedures of this workflow process is divided among various divisions and groups within HRSD. The HRSD staff involved includes the Operations Department’s Interceptor Operations divisions, the Engineering Department’s Planning and Analysis division, and the Water Quality Department. It is expected that at each hand-off point between divisions or sections, both parties will take responsibility until the hand-off is clearly understood. HRSD uses data management tools and tracking methods to facilitate the management of these hand-offs. HRSD Directors will be responsible for ensuring compliance with these procedures by their staff.

Where outside agencies or organizations are identified (e.g., VDEQ or Localities), those organizations should provide the required information or perform the described tasks.

The following sections provide an outline of the SSO RP, and the actions HRSD will take to reduce any impacts of SSOs. A more detailed Standard Operating Procedure is provided in Section 2 of this Plan.

### 1.3.1 Receipt of Information

HRSD's investigation of an SSO begins when a customer, HRSD employee, internal automated system, or outside party reports a possible SSO. To ensure that HRSD is made aware of each SSO as expeditiously as possible, there are several methods by which SSOs are reported. One common source of notification comes from individuals who witness the event and contact HRSD's Operations Coordinator, who in turn notifies the appropriate supervisor. HRSD employees/field crews, municipal employees, or other agencies may also report SSOs to HRSD. The Supervisory Control and Data Acquisition System (SCADA) and other HRSD remote telemetry systems can provide alerts that an investigation is warranted.

### 1.3.2 Field Staff Response

Once notified, HRSD will make all reasonable efforts to respond quickly to SSOs with a highly qualified first responder. The first responder is responsible for confirming that there is an SSO and notifying the appropriate supervisor, locality, or the private owner, as appropriate. Differing approaches are required for response during business and non-business hours, as detailed in Section 2.

### 1.3.3 SSO Containment, Repair, and Cleanup

Assess the Impacted Area – An assessment of the nature of the area of the SSO will be performed to determine a potential for impact on the public and/or the environment. The sensitivity and potential impact of an SSO location and the magnitude of the SSO event will affect the level of public notification. These sensitive issues may include the proximity of the SSO location to:

1. Streams, reservoirs, wetlands, and other natural waterways;
2. Public use areas – both water-based such as marinas as well as land-based;
3. Special facilities to include schools, public parks, walking trails, etc.; and
4. Other potential factors such as particularly sensitive aquatic community, water intakes, etc.

Establish Control Zone - Control zones are established to help prevent public access around the perimeter of the affected surface area by using appropriate signs, barricading practices, or other measures.

Assess the Cause – Once an SSO is confirmed, interceptor personnel will determine how the SSO can be contained or controlled to minimize the amount of flow discharged. The cause will determine the type of mitigation or remediation that is most appropriate.

Identify Resources and Techniques Required – HRSD will use all necessary response procedures and implement essential methods so that the goals of the SSO RP are met.

The following resources are available as needed, but are not inclusive or limiting:

- Highly skilled and trained personnel
- Excavation equipment
- Pump and haul equipment
- Closed-circuit television equipment
- By-pass pumping equipment
- Repair parts and materials
- Other material, such as sand bags, silt fences, signs, disinfectant, etc.

Contain and Control SSO – Once the cause of a release has been identified and techniques implemented to stop the flow, a recovery/cleanup plan will be implemented in a timely manner.

Mitigation/Remediation Solutions - Common abatement resolution activities and repairs will be used independently or combined based on field conditions and any other relevant considerations.

SSO Clean Up – HRSD will clean up impacted areas from an SSO in a comprehensive manner.

### 1.3.4 Documentation

Using data collected during the assessment process, HRSD will prepare an initial and updated Interceptor System Regulatory Reporting Form (RRF). The Regulatory Reporting Form is the main tool that is used for initially documenting an SSO. The information used to populate the Sanitary Sewer Overflow Reporting System (SSORS) is drawn from the RRF. After HRSD staff confirms that an event is an SSO and they contact Water Quality for regulatory reporting, an RRF is initiated with the available information. This form is typically reviewed by the appropriate Interceptor Systems Chief (North Shore or South Shore) prior to final documentation.

Water Quality staff will review the RRF in conjunction with notes from telephone reports with the response crew in preparation for regulatory reporting. The collection of necessary information by the first responder as described in previous sections is crucial to provide accurate reporting.

### 1.3.5 Regulatory Reporting

In the event that an SSO from the HRSD SS System is determined to be reportable, HRSD will provide an initial notice to the Virginia Department of Environmental Quality (VDEQ) as soon as possible but no more than 24 hours of receipt of information regarding an SSO. A final report is required within five calendar days utilizing the SSORS.

Information on where to find a SSORS user guide is provided in Appendix B. This database is maintained by the Hampton Roads Planning District Commission (HRPDC) and used for regulatory reporting of SSOs to the VDEQ.

SSORS has an SSO Cause List for each event that is useful for sorting SSOs that are caused by operational issues versus third party issues or capacity issues. The following section provides a summary description of each category:

**Capacity, non-weather** – overflow caused by lack of available capacity in the pipe, pump station or downstream infrastructure. There should be no rain either before or during the event and no other cause apparent. The flow in the infrastructure exceeds its capacity. This requires an engineering calculation. This cause should not be used for infrastructure failure.

**Capacity, weather related** – overflow caused by a lack of available capacity in the pipe, pump station or downstream infrastructure caused by rainfall and/or high tides and flooding. It is critical to note the circumstances surrounding this type of event (i.e., rainfall amount, surface flooding, etc.).

**Infrastructure** - overflow caused by equipment and/or pipe failure. This would include pump/motor failure in pump stations, pipe collapses, etc. Overflows caused by maintenance-related circumstances (see below) should not be reported in this group. Identifying these causes sometimes requires internal inspection.

**Maintenance (maintenance-grease; maintenance-roots; maintenance-debris)** – overflow caused by maintenance related issue including grease, roots and/or debris build up. Identifying these causes sometimes requires internal inspection.

**Power Loss** – overflow caused by loss of grid power not related to storm conditions including third party actions and failure of grid power in non-storm condition.



**Power Loss, storm** – overflow caused by a loss of grid power or lightning strikes to facilities directly attributable to a storm.

**Damage by others** – overflow caused by third parties including boring/excavation contractor hits and vandalism. Information should be referenced regarding the nature of the damage and measures taken prior (i.e., utility locate activities, locks, fences, etc.) to prevent the damage.

**Third party action** – overflow caused by third parties but not falling under the “Damage by others” category. Similar information as the previous category should be referenced in the documentation.

**Other** – overflows caused by circumstances not fitting one of the above. This cause should be used rarely.

SSORS generates a unique event ID number that is tracked on the RRF and in the SSO Database.

This section assumes that the first responder has confirmed that an SSO has occurred and that the regulatory notification procedure is required. Section 2 describes the procedures for handling first communications of a possible SSO and subsequent procedures for the appropriate response.

Reporting procedures differ depending on whether the event takes place during normal business hours (7:00 am to 3:30 pm Monday through Friday) or during non-business hours.

### 1.3.6 SSO Tracking

SSOs will be tracked and documented for regulatory reporting and system operation and planning purposes. HRSD maintains a database of documented SSO events that is used for storing additional information on SSO resolution beyond the basic information recorded on the RRF or SSORS. SSO occurrences are also tracked and documented in the HRSD Geographic Information System (GIS), with links to details in the SSO Database. This is useful in determining situations where problems are recurring, with priority given for additional maintenance or condition assessment to be conducted.

The SSO Database is populated from HRSD’s SSORS information on a regular basis to provide data consistency between the two data storage systems.

### 1.3.7 SSO Resolution

Resolution of an SSO involves a multi-step process to evaluate the incident and determine what follow-up actions are necessary. A business process workflow diagram is provided at the end of Section 2 of this Plan that details the HRSD approach to SSO response, tracking and resolution.

The following materials may be utilized in the resolution of SSOs:

- Regulatory Reporting Forms (RRFs) completed by Interceptor Systems staff;
- SSO Database;
- SSORS database (See Appendix B);
- Non-HRSD System Reporting Form;
- Flow, Pressure, and Rainfall data;
- GIS;
- Closed-circuit television (CCTV) information and other system information records;
- Capital Improvements Program (CIP) project list; and
- Rehabilitation projects list.

SSO resolution can take many different forms. Some SSOs may be evaluated and found to be one-time events with little chance of recurrence, while others may be found to be recurring capacity related SSOs that require a CIP project to address. HRSD will coordinate between its Operations and Engineering Divisions to evaluate the SSOs and determine what action should be taken. This output of this process is Action Plans with specific schedules that are tracked using data management tools to ensure completion. This process is explained in detail in Section 2.

## **1.4 Locality System SSOs**

In some instances, an SSO occurs in a Locality's sanitary sewer system that is attributable to failures or problems in the HRSD SS System, including but not limited to force main failures, pump station outages or failures, or pressure reducing station outages or failures. These events are rare and HRSD will notify affected Localities prior to making changes (e.g., valve changes to divert flow) where system pressures could increase and hinder the Localities' ability to discharge to the system. In the event that an unforeseen situation occurs that creates an SSO in a Locality's system, HRSD will offer assistance to alleviate and mitigate the SSO in the form of pump and haul operations, installation of bypass pumps, and coordinating with the Locality to reroute flow.

## **1.5 Private Property**

Events causing backups into buildings or discharges into a private building, require additional investigations to determine if the problem relates to an issue in the HRSD system, the Locality's system, or is the result of failure on the private customer's side. Very few private connections tie directly to the HRSD system. To determine responsibility for a backup, the first responder typically identifies the cause of the backup in conjunction with the Locality.

If the first responder inspects the HRSD system, and if no evidence of a problem is found, HRSD will advise the Locality to investigate its system or the customer to contact a plumber to resolve the disruption on private property.

If HRSD's system failure contributes to the backup, then HRSD will work with the Locality or private property owner to coordinate cleanup as appropriate.

## **1.6 Public Information**

The Director of Communications is responsible for contacting the media, the public, public affairs personnel of the affected locality/localities and/or other communications outlets as needed. The Director of Communications will answer questions from the public and/or the media about HRSD's response to SSOs, when necessary. See Section 2.5.5 for specifics on Public Notification for SSOs.

# HRSD SANITARY SEWER OVERFLOW RESPONSE PLAN

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## 2. STANDARD OPERATING PROCEDURES

The following Standard Operating Procedures will be followed by HRSD staff in responding to information related to a possible SSO in the HRSD service area. A workflow process diagram is included at the end of this section to help illustrate the lines of responsibility.

### 2.1 Receipt of Information

The first step in the process of responding to a possible SSO is becoming aware of the incident. HRSD, a Locality, or the public may detect an SSO, or report suspicious circumstances (foul odors, unusual flooding, etc.) which indicate the possibility of an SSO. SOP 2.1.1, 2.1.2, or 2.1.4 should be followed depending on the way the incident is identified.

#### 2.1.1 Business Hours Phone Call

During the day, the calls will normally come through the switchboard or customer service and will be forwarded to the appropriate Operations Coordinator (North Shore or South Shore).

Proceed to SOP 2.1.3 for logging the call.

#### 2.1.2 Non-Business Hours Phone Call

During non-business hours, calls are taken by the contract answering service. The answering service then reports any possible SSOs to the Standby Supervisor. The Standby Supervisor shall obtain all relevant information available regarding the incident and record in their log.

Proceed to SOP 2.1.3 for logging the call.

#### 2.1.3 Customer Log

The Operations Coordinator shall obtain all relevant information available regarding the incident and record it in the Customer Log. During non-business hours, the Standby Personnel shall obtain all relevant information available regarding the incident and record in their log. This information should include:

- a. Time and date call was received;
- b. Location of problem;
- c. Description of problem;
- d. Caller's name, address, and phone number;
- e. Observations of the caller (e.g., odor, back or front of property); and
- f. Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess and stop the SSO.

During business hours, the Operations Coordinator will inform the appropriate Supervisor of a possible SSO. The appropriate Supervisor will take appropriate action to investigate and determine the extent of the problem.

Proceed to SOP 2.2 for Field Staff Response.

During non-business hours, the Standby Supervisor will take appropriate action to investigate and determine the extent of the problem.

Proceed to SOP 2.2 for Field Staff Response.

### **2.1.4 Detection by HRSD**

Possible SSOs detected by any personnel in the course of their normal duties shall be reported immediately to the appropriate Supervisor or the Operations Coordinator (North Shore or South Shore). If the Operations Coordinator is contacted, they will contact the appropriate Supervisor to dispatch HRSD personnel.

Proceed to SOP 2.2 for Field Staff Response.

System alarms (including pump station failures) are monitored and received by the SCADA system. During business hours, the Operations Coordinator shall notify the appropriate Supervisor of the alarm so HRSD personnel can be dispatched to the pump station location. During non-business hours, Standby personnel will respond to the alarm location.

Proceed to SOP 2.2 for Field Staff Response.

## **2.2 Field Staff Response**

During business hours, the Operations Coordinator will notify the appropriate Supervisor so HRSD personnel can be dispatched to the site. During non-business hours, Standby personnel will respond to the site. In either case, the following steps should be taken:

1. Appropriate HRSD personnel shall respond to a possible SSO in a timely manner.
2. Appropriate HRSD personnel shall locate the problem and record the arrival time.
3. Appropriate HRSD personnel shall assess the situation and confirm that an SSO exists. The first responder begins to determine the source and cause of the discharge.
4. If no SSO is found, the appropriate HRSD personnel shall document or notify the Operations Coordinator (North Shore or South Shore) immediately, who completes the Customer Log as a non-SSO. This ends the SOP.
5. If an SSO is found, the appropriate HRSD personnel shall make an initial assessment of jurisdiction. If the SSO appears to be discharging from a non-HRSD facility, proceed to SOP 2.2.1. If the SSO appears to be discharging from an HRSD facility, proceed to SOP 2.2.2.

### **2.2.1 Non-HRSD Incident Response**

If the SSO appears to be discharging from a non-HRSD facility, the first responder would contact the Operations Coordinator and have them report a discharge to the appropriate Locality or private system owner. HRSD may assist in the alleviation of the problem by making changes within the HRSD system, if possible. The Locality/private system owner is expected to address the SSO. HRSD can provide equipment, if requested, as well as materials and personnel. HRSD can also assist with operation of pump stations, isolate valves and provide guidance and expertise. If requested, HRSD may also isolate the SSO point from the system and to contain and control the SSO to minimize public impact.

Proceed to SOP 2.4 for Documentation of the incident.

### 2.2.2 HRSD SSO Response

If an HRSD SSO is confirmed, the first responder contacts the appropriate Supervisor. Three actions are taken as follows:

1. The appropriate Supervisor (or Standby Supervisor if during non-business hours) dispatches a crew to immediately address the SSO. Proceed to SOP 2.3 for SSO Containment, Repair, and Clean Up.
2. The appropriate Supervisor notifies the Permits Manager in the Water Quality Department in accordance with Regulatory Reporting procedures as described in SOP 2.5.
3. HRSD's Director of Communications receives immediate notification of an SSO via the SSORS and receives additional follow up details from the appropriate supervisor as required, including the size and scope of the SSO, potential for human contact, and likely service and/or traffic disruptions. See Section 2.5.5 of this Plan for specifics on Public Notification of SSOs. Proceed to SOP 2.3.

## 2.3 SSO Containment, Repair, and Clean Up

### 2.3.1 Assess the Impacted Area

After locating the SSO, the next step is to identify the total impacted area. The first responder will canvass the area to determine what potential impacts are present to the environment and/or the public and will identify the appropriate steps to minimize/mitigate those potential impacts. This process is assisted by the appropriate Interceptor Systems personnel using maps of the service area to determine possible impacted areas.

The Virginia Department of Health operates through a network of Local Health Districts, including Virginia Beach, Hampton, Chesapeake, Peninsula, Norfolk, Portsmouth, and Western Tidewater. HRSD reports SSOs to the Local Health Districts in addition to the VDEQ, and it is the responsibility of the Local Health Districts to determine the public health impact, closure of shellfish harvesting and/or recreational activity, or other precautions following an SSO.

For SSOs that have potential for direct human contact or public health impact, the appropriate Supervisor shall immediately notify the Technical Services Division and the Chief of Interceptor Systems who shall, in turn, contact the Director of Operations, the General Manager, and Director of Communication.

Proceed to SOP 2.3.2.

### 2.3.2 Establish Control Zone

When the area impacted by the SSO has been identified, the next step is to develop and implement a control zone around the impacted area. The control zone will help limit public access to the affected surface area using appropriate barricading practices. If the control zone includes roadways, then appropriate traffic control measures are taken to protect the public and HRSD personnel.

Where warranted, HRSD may use a pre-printed door hanger which can be completed in the field and left for customers. The door hanger identifies the date and locations of the SSO and provides ways which customers can contact HRSD for more information. See Appendix D for an example. The decision to use door hangers is made on a case-by-case basis and depends on the extent of the problem area, the expected duration of the incident and other factors. Written public notifications are also used. See Section 2.5.5 for details on Public Notification for SSOs.

Proceed to SOP 2.3.3.

### 2.3.3 Assess the Cause

After the initial control zone is established, the next step is for the Interceptor Systems personnel to assess the site and determine the most appropriate response plan.

HRSD personnel will employ all reasonable means to mitigate the site and promptly restore service to customers. The appropriate Supervisor will determine what resources should be used and request guidance from the Interceptor Systems Chief in the event of any unusual situations or should a consultation be warranted regarding the response plan.

Proceed to SOP 2.3.4.

### 2.3.4 Identify Resources and Technique Requirements

The appropriate Supervisor will identify the necessary resources and techniques based on site accessibility, location of the disruption of service, size of impacted area, the opportunities to minimize any impacts to the environment and the public.

Proceed to SOP 2.3.5.

In an emergency situation, HRSD can initiate special procurement or contractual processes to access additional resources from outside contractors or other nearby utilities, as needed. If this situation arises, the appropriate Supervisor will review the SSO with the Interceptor Systems Chief, who will take the appropriate action.

### 2.3.5 Contain and Control SSO

A physical barrier to control further dispersal of wastewater will be established to help reduce adverse impacts, when feasible. Containment procedures will vary on a case-by-case basis. An appropriately developed and established containment plan will consolidate the wastewater into a defined area. Sand-bagging or other constricting methods may be used when site and weather conditions allow, entry points into the storm water system may be obstructed using various methods that may include sand bags, inflatable plugs, or simply redirecting the flow using construction equipment to “dam up” areas or dig a temporary sump area. The impounded wastewater can then be vacuumed or pumped back into another portion of the system. This collected volume along with the uncollected volume will be estimated and documented for notification to the regulatory agencies.

When possible, flow retrieval and diversion techniques provide an effective means of controlling the SSO and returning it back into the sewer system. It reduces potential impact on the immediate area and the possibility of impacts downstream. The flow retrieval and diversion techniques employed by HRSD when practicable include, but are not limited to, the following:

Bypassing measures – In certain situations, portable bypass pumps can be used to collect pooled/captured wastewater and convey it back to the sanitary sewer system, at a point outside of the influence of the SSO location. This method is most effective with a single identified problem area and when the discharge can be directed to the closest available wastewater system that does not contribute to the location where the SSO is present. This bypassing approach can be used in conjunction with other containment measures or independently.

Pump and haul procedures – Pump and haul equipment provides an additional resource for the collection of discharged wastewater and its conveyance back to the sanitary sewer system, beyond the location experiencing the service disruption. This equipment can be used in conjunction with other containment measures or independently. Typical equipment includes vacuum and septic tanker trucks.

Temporary diversion – In some cases, flow may be diverted away from the point of service disruption by the use of valves to redirect flow to another portion of the system.

Once the SSO is controlled and contained, proceed to SOP 2.3.6.

### **2.3.6 Mitigation / Remediation Solutions**

HRSD will mitigate and remediate the SSO depending on the cause of the SSO, as follows.

#### **2.3.6.1 Wet Weather SSOs**

Wet weather SSOs are usually caused by significant amounts of inflow and infiltration (I/I) and/or force main system pressures. Mitigation is difficult until the weather event which triggered the SSO subsides. Additional pumping capacity (either bypass pump or pump-and-haul) is the primary solution if other problems are not created downstream or elsewhere in the system.

HRSD will utilize an appropriate type of mitigation technique based on the situation and proceed to SSO Clean Up in SOP 2.3.7.

#### **2.3.6.2 Dry Weather SSOs**

Dry weather events are addressed using several methods. Field personnel will identify the most effective method or combination of methods to return service to the system. Field crews may use Closed Circuit Television (CCTV) inspection to identify the cause and location of the problem and help determine the necessary techniques needed to eliminate it.

The following common mitigation techniques can be used independently or in combination depending on field conditions:

Pipeline Failure – An emergency pipe repair is required to replace the defective or collapsed pipe. Necessary containment and diversion procedures will be in place until the appropriate repairs are completed.

Pump Station Failure – Bypass pumping or pump and haul will be used until the mechanical, electrical, instrumentation, or other needed repairs are completed at the pump station. In the event of lost electrical power service to a pump station, HRSD has permanent (at some sites) and portable generators available to provide temporary power to the station until service is restored.

HRSD will utilize an appropriate type of mitigation technique based on the situation and proceed to SOP 2.3.7.

### **2.3.7 SSO Cleanup**

The goal of the cleanup practice is to restore the site to pre-event conditions using a variety of practices. Methods used in the cleanup of impacted areas include vacuuming, disinfecting and other mechanical and manual measures. Each SSO is unique and the cleanup required varies from minor to extensive efforts.

HRSD responders employ common practices as appropriate to an individual cleanup situation, including but not limited to:

Manual Practices – Manual cleanup techniques include the use of hand tools, such as rakes, shovels, brooms, etc., to remove and properly dispose of all readily identifiable material (wastewater solids, papers, plastics, etc.) which originate from the sewer system.

Mechanical Practices – Mechanical cleanup techniques utilize vacuum trucks and similar equipment to remove all solids and remaining standing wastewater and properly dispose of them. Flushing trucks may be used to further clean areas, as needed. Flushing water is then vacuumed and removed.

Disinfection Practices – Apply lime or other disinfecting agents, as necessary to disinfect the area.



A follow-up phone call to Water Quality should be made according to SOP 2.5 after stopping the SSO. Documentation of the SSO should be made according to SOP 2.4.

## **2.4 Documentation**

### **2.4.1 HRSD SSO Documentation**

HRSD's first documentation for an SSO typically is through the SSORS entry and follows the initial phone report (See Section 2.5.1). Additionally, an RRF is completed by the appropriate Supervisor for each SSO event and submitted to the Chief of Interceptor Operations, North Shore/South Shore with the information regarding the SSO. A blank copy of this form is provided in Appendix A. The Chief of Interceptor Operations, North Shore/South Shore will review the form and forward it to Water Quality for review and input into SSORS. Proceed to SOP 2.5 for Regulatory Reporting.

### **2.4.2 Non-HRSD System Documentation**

HRSD records information on wastewater problems outside of HRSD's system in a Non-District Spill Reporting Form (see Appendix C). This form is filled out by the appropriate Supervisor and forwarded to the NS or SS Interceptor Systems Chief as well as the Permits Manager for review. Water Quality creates a new record in the separate database for the Non-District Spill Reporting Form. Interceptor Systems will coordinate with Water Quality who will provide a copy of the approved Reporting Form to the Locality where the event has occurred. A list of Locality contacts is included in Appendix C.

If the event is related to a private sewer facility, HRSD will make a good faith attempt to provide a copy of the Reporting Form to the private owner; however, in some instances the owner may not be easily determined. Information regarding the private owner will be collected by Interceptor Operations and documented on the Non-District Spill Reporting Form, if available. Unless action is required by HRSD in SOP 2.3 to protect the public, the environment, or property, this step concludes HRSD's SOP.

## **2.5 Regulatory Reporting**

Data collection for reporting to regulatory agencies is accomplished by transfer of information from Interceptor Systems Field Staff to Water Quality through an initial phone call, change-in-status phone call, final phone call, and written report as follows. The procedures differ depending on if the reporting is during normal business hours or non-business hours.

### **2.5.1 First Telephone Report**

#### **2.5.1.1 First Telephone Report During Normal Business Hours**

Upon confirmation that an HRSD SSO has occurred, the appropriate Supervisor will contact the Permits Manager and provide information (see bulleted list below) to the degree it is available. In this or any subsequent contacts, if the Permits Manager is unavailable, then the reporting Supervisor may leave a voicemail message with information. If the reporting Supervisor has not been responded to within 30 minutes of his/her leaving a voicemail message, he/she will notify the next contact on the Technical Services Division (TSD) Environmental Scientist phone list (see Technical Services Telephone list in Appendix E) until they are able to talk directly to a member of the TSD.

Based on the information from the reporting Supervisor, the Permits Manager (in consultation with Interceptor Systems) will determine if the incident is reportable as a Sanitary Sewer Overflow (SSO). See Section 1 for distinction in the difference between "reportable" and "non-reportable." If the SSO is determined to not meet the criteria for reporting, proceed to SOP 2.6 for SSO Tracking. Otherwise, the SSO is reported to VDEQ as follows.



The Permits Manager or other TSD Environmental Scientist contacts VDEQ either by telephone or SSORS initial notification (see SOP 2.5.4) and relays the following information, if available, to them as soon as possible but not later than 24 hours of HRSD becoming aware of the SSO:

- Site Name and Type (i.e., force main, gravity main, manhole, pump station, pressure reducing station, etc.)
- Location: Street Address, City
- Date and Time SSO was discovered
- Description of SSO
- SSO Cause (See Section 1.3.5)
- Planned Action to Stop and/or Contain SSO
- Estimated Flow Rate (gph or gpm)
- Where is the SSO going? (i.e., storm sewer, stream, ground, etc.)
- Is it reaching or does it have the potential to reach State waters? If so, name receiving waters.

The Permits Manager will record who was notified at VDEQ (or if SSORS was used) along with the time for documentation in the RRF. If the Permits Manager determines that it is necessary, they will continue to call in an effort to reach a responsible VDEQ official. General criteria for this determination include the size and scope of the SSO, potential for human contact, and likely traffic disruptions. The Permits Manager will record and act on, as appropriate, any instructions from the VDEQ official notified. VDEQ is typically responsible for notifying the Virginia Department of Health (VDH) of any SSO. VDH is also notified via email as a part of SSORS.

Following the initial report to the VDEQ, the Permits Manager should proceed with follow-up reporting to VDEQ in SOP 2.5.2, 2.5.3, and 2.5.4.

### **2.5.1.2 First Telephone Report During Non-Business Hours**

During non-business hours, the first responder is responsible for making the first telephone report to VDEQ as soon as possible, but in no event later than 24 hours of the initial SSO confirmation. The Standby Supervisor is responsible for making the initial judgment whether the SSO is a reportable SSO. If the decision is not clear, the Standby Supervisor should proceed with the initial report to the VDEQ.

If the SSO is clearly not a reportable event, the Standby Supervisor should provide the details of the SSO to the Interceptor Systems Supervisor and proceed with SOP 2.6 for SSO Tracking.

The information to be relayed to the VDEQ during non-business hours is the same as the information lists in SOP 2.5.1.1. The first responder also contacts a supervisor in Interceptor Systems and the Permits Manager. After normal business hours, the Standby Supervisor may leave a voicemail with the Permits Manager. HRSD should continue the reporting process with SOPs 2.5.2, 2.5.3, and 2.5.4.

### 2.5.2 Change in Status Telephone Report

A supervisor in Interceptor Systems shall report to the Permits Manager any significant changes in status from the information previously reported. During non-business hours, the Standby Supervisor shall report directly to the VDEQ any significant changes in status of the information previously reported.

If the SSO becomes a reportable SSO, the Permits Manager (or Standby Supervisor) should follow SOP 2.5.1 for VDEQ notification.

The Permits Manager may contact VDEQ and relay information that has changed significantly from the first telephone report. HRSD should continue the reporting process with SOPs 2.5.3 and 2.5.4.

### 2.5.3 Final Telephone Report

After the SSO has been stopped, a supervisor in Interceptor Systems will report the updated information to the Permits Manager, including:

- SSO Location: Street Address, City
- Date and Time SSO was Discovered
- Description of SSO (force main leak, air vent, etc.)
- Cause of SSO, if known (See Section 1.3.5)
- Action Taken to Stop and/or Contain SSO
- Time SSO was Stopped
- Estimated Quantity of SSO
- Did the SSO enter the storm drain or State waters? If so, name receiving waters.

If the SSO is stopped during non-business hours, the Permits Manager should be notified the following morning. HRSD will continue the reporting process with SOP 2.5.4.

### 2.5.4 SSORS

The Permits Manager will enter the information on HRSD system SSOs into the Sanitary Sewer Overflow Reporting System (SSORS) database. This online web-based computer application electronically submits the required reporting information to VDEQ and VDH Local Health Districts. In addition, the system automatically generates an email sent to select HRSD staff. This email includes the details of the SSO entered by the Permits Manager as well as the system-generated SSORS ID number. Appendix B includes information on the SSORS computer application. The Permits Manager may enter an initial report into the SSORS database shortly after the initial telephone notification to VDEQ or as the initial notification if sufficient information is available. The SSORS database entry for an SSO is expected to be finalized in most cases by a final report within five calendar days of the initial identification of the SSO, as well as any update to the final report as described below. Information for the SSO is provided on the RRF as described in SOP 2.6.

#### 2.5.4.1 The 5-Day SSORS Report

The final SSORS report is completed within five calendar days of the initial confirmation of the SSO. This update to the SSORS record is supplemented by the completed RRF provided to Water Quality by the Interceptor Systems Division. Interceptors staff will record the SSORS ID automatically generated by the system and enter it onto the RRF. Unless all SSO Tracking and Resolution has been completed in SOP 2.6 and 2.7, proceed to SOP 2.6.

### 2.5.4.2 Update to the SSORS Report

If information on the SSO is gathered following completion of the final report in SSORS as well as any immediate resolution of the SSO, the entry in the SSORS database may be updated (See Appendix B). Long-term resolution information will not be provided in SSORS. Unless follow up tracking and resolution is required in SOP 2.6 and 2.7, this concludes the SOP for an SSO.

### 2.5.5 Public Notification of SSOs

Determining the severity of an SSO is a complex matter that is not taken lightly by HRSD staff. All SSOs demand the attention and dedicated response of HRSD. It is clear though that some SSOs have the potential of greater public exposure than others and the determination of this potential must be left to the judgment of the experienced wastewater system operators. With the relative infrequency of SSOs from HRSD's system, these decisions are made at the management level in the organization. HRSD has a number of methods as discussed in earlier sections for notifying the public in the event of an SSO that may impact them. The potential for direct human contact, impact to environmentally sensitive areas, and traffic disruption are general criteria that are used in the determination of public notification of an SSO.

HRSD has an internal form called the Communications Spill Reporting Form that is used to document and determine the needs for external communications. This form is used as a basis to document the relative impact of an SSO and the need and extent for external communication and notification. (Appendix A attached). Additionally, HRSD also has a Communications and Public Response Policy it uses to help ensure the smooth flow of information during emergency situations to maintain public confidence.

The following scenarios provide examples of where HRSD has and will provide various levels of public notification for an SSO:

1. A small-volume SSO in a remote area of the system with little chance for direct human contact required no extra public notification other than the regulatory reporting which includes the Local Health Districts (this regulatory notification is required and performed for all examples).
2. An SSO adjacent to a single property owner was addressed by direct face-to-face notification by HRSD staff to discuss the situation and provide details on clean-up and schedule for mitigation.
3. An SSO that may lead to traffic disruption on major roads is handled with a traffic advisory. The HRSD Traffic Advisor provides details on the impacted area, specifics on the work being performed, and the timetable to complete the work. Each advisory is distributed to the local radio and print media outlets.
4. An SSO in a neighborhood with discharge to a local pond was addressed with a media news release, a written notice distributed to all affected residences, and personal follow-up discussions with the most affected neighbors.
5. An SSO from a 42-inch force main in a neighborhood with a discharge to a nearby waterway precipitated a news release (picked up by the local daily newspaper and TV station), a written notice distributed to all affected residences, a partial road closure, and personal follow-up discussions with the most affected neighbors. The Local Health District made the determination whether swimming or other recreational uses of the waterway was affected and made their public notification.
6. An SSO occurred in a marsh area from an 18-inch force main that was in a difficult point to access for repair. Although the discharge of wastewater was contained quickly after discovery, a long-term repair required more than 6 months of public interaction and notifications. Upon discovery, a joint news release was issued with the affected locality which was covered by the local daily newspaper. A written notice was distributed to all affected residences, with follow-up notices issued every two weeks until a public meeting was held. Local community liaisons were identified and communication on the SSO repair was provided through email routinely until the repair and restoration was complete. Many personal meetings were held with the affected residents to provide information concerning the SSO response.

## 2.6 SSO Tracking

The Interceptors System Division will forward the RRF to the Permits Manager within three calendar days of the event. The Permits Manager will review the Interceptor System Regulatory Reporting Form (see Appendix A) for accuracy and completeness. This form will include documentation of diversion techniques, mitigation techniques, and clean-up practices that were used. If any additional information is needed, the Permits Manager will contact a supervisor in Interceptor Systems to obtain it. A copy of the RRF for each SSO is maintained by the Permits Manager for a period of at least five years with the information also stored in the SSO Database described below.

Planning and Analysis Division will periodically import the SSORS information into the SSO Database. The data fields in the SSO Database and SSORS regarding cause, duration, and volumes must match. There may be additional information tracked in the HRSD SSO database which is not necessary to include in SSORS. This information is reviewed by the Permits Manager.

Proceed to SOP 2.7.

## 2.7 SSO Resolution

Each confirmed SSO is subject to an evaluation process shown in the workflow diagram (see the figure following this section). The SSO evaluation process will consider at each step the magnitude of any related wet weather event or if the timeframe between SSOs was sufficiently long enough to be considered unrelated. The following tasks will be completed in accordance with the workflow diagram:

1. The SSO point is loaded by the Planning and Analysis Division into the GIS system which assists with determination if the SSO is a recurring event. If the SSO is in the same location and has a similar cause of a previous SSO, Planning and Analysis will convene an Ad hoc Action Committee (AAC) to meet regarding this specific SSO. See Section 2.7.1 for information regarding the AAC.
2. System pressures, flows, rainfall, groundwater conditions, and modeling results are evaluated by the Data Analysis Manager (DAM), Interceptor Operations and the Hydraulic Analysis Manager (HAM). If the team determines that a potential capacity issue exists, Planning and Analysis will convene an Ad hoc Action Committee (AAC) to meet regarding this specific SSO.
3. Planning and Analysis will review system data (including CCTV records, if available) and facility data with Interceptor Operations to determine if recurrence of the SSO is likely. If the team determines that recurrence of the SSO is likely, Planning and Analysis will convene an Ad hoc Action Committee (AAC) to meet regarding this specific SSO.
4. Planning and Analysis shall update the SSO Database with the information gathered in the evaluation process and coordinate with Water Quality if any significant changes have been determined that would require updating SSORS after the 5-day period.

### **2.7.1 Ad hoc Action Committee**

The AAC will review the data, existing CIP, and existing rehabilitation projects, and generate an Action Plan (and schedule) for resolution of any SSO that meets the criteria in SOP 2.7. Each Action Plan will include a list of stakeholders within HRSD that are either responsible for implementing or tracking the SSO resolution. The Action Plan will be distributed to the stakeholders by Planning and Analysis for implementation. Summary information on the Action Plan will be entered into the SSO Database along with a planned completion date.

Planning and Analysis will track completion of the Action Plan using periodic reports generated from the SSO Database that shows outstanding Action Plans, and convene the AAC on a periodic basis (annually at a minimum) to review the status of the outstanding Action Plans. If an Action Plan identifies that long-term rehabilitation, a major repair or replacement is the appropriate solution, the project will be included in the Capital Improvement Program (CIP). The CIP is developed on an annual basis and is reviewed and prioritized using the most recent operations and maintenance data. During the periodic CIP reviews, existing project status is reviewed, compared to the outstanding Action Plans, and potential new CIP needs are identified.

## **2.8 System Pressure Monitoring and Record Keeping**

As part of the Consent Decree, HRSD has developed and implemented a wide-scale Flow, Pressure, and Rainfall Monitoring Program. System pressure is monitored at more than one hundred locations throughout the HRSD service area and the data is continuously uploaded to a centralized data server. The details on this program are provided in the Flow, Pressure, and Rainfall Monitoring Plan submitted in April 2009 and approved by the VDEQ and EPA on February 23, 2010.

All Localities in the HRSD service area have been provided access to the data server and therefore have complete access to monitor pressures in HRSD's system within their Locality. This information will be maintained as required by the Consent Decree for a period no shorter than 5 years.

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HRSD  
SANITARY SEWER OVERFLOW RESPONSE PLAN

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### 3. TRAINING AND MAINTENANCE OF PLAN

This section of the document describes the plan review, approval and update process, and the training program.

#### **3.1 Plan Review, Approval, and Update**

The SSO RP document will be reviewed as people, processes and systems change. Review of the plan will typically be on an annual basis, unless a significant change in wastewater system staff, internal and external contacts, or roles and responsibilities occurs. The plan revision will be dated for a specific publishing date with an increasing revision number. Minor revisions are indicated with an increase in the decimal place (e.g., 1.1, 1.2, and 1.3) and major revisions are indicated with an increase in the integer place (e.g., 1.0, 2.0, and 3.0).

#### **3.2 Safety Training for all Interceptor System Personnel**

Equally important as the creation of the plan, is training of personnel on its content and how to use it. The safety hazards in the collection systems are many and varied. HRSD personnel that have occasion to respond to an SSO receive the following training:

##### **3.2.1 Confined Space Entry Safety Training**

This training is supplied by the Safety Division and is designed to instruct employees on proper procedures as defined in OSHA 29 CFR 1910.146. The training includes:

- Identifying permit and non-permit required confined spaces
- The roles of the confined space supervisor, attendant, and entrant
- Gas detection systems
- Ventilation systems
- Personal Protective Equipment (PPE)
- Non-entry rescue equipment and procedures

##### **3.2.2 Excavation and Trenching Safety Training**

This training is supplied by the Safety Division and trains employees on methods and standards as defined in OSHA 29 CFR 1926.650. The training includes:

- Competent person responsibilities
- Protective systems
- Sloping and benching
- Soil classification
- PPE

### 3.2.3 Hazard Communication Training (Hazcom)

Hazcom training is supplied to all HRSD employees when first hired. Refresher training is supplied to all employees that may encounter hazardous chemicals.

### 3.2.4 AED/CPR/First Aid Training

AED/CPR/First Aid certification training is given to all Operations employees. Retraining is performed every two years.

The Safety Division performs supplemental safety trainings throughout the year on various topics such as:

- Back Safety
- Heat Stress
- PPE
- Work Zone Design and Awareness
- Fire Training
- Asbestos

Safety training sessions are performed each month by Operations supervisors covering safety issues pertaining to their job activities. Regular safety briefs are also done by supervisors and crew leaders.

## 3.3 HRSD Apprenticeship Program

In addition to safety training, HRSD has also established an Apprenticeship Program. HRSD created the nation's first wastewater industry related apprenticeship program to maintain excellence in the workforce. The Apprenticeship Program is recognized and approved by the Virginia Department of Education and the Virginia Department of Labor & Industry and is administered under the auspices of the Virginia Department of Labor & Industry's Office of Apprenticeship. The Apprenticeship Program offers eight trades to qualified applicants to allow them to gain the education and experience necessary for a successful career within the field of wastewater treatment. HRSD currently offers apprenticeships in the following trades: Plant Operator, Maintenance Operator, Small Communities Operator, Interceptor Technician, Electrical/Instrumentation Specialist, Machinist, Carpenter, and Auto Technician.

These apprenticeships provide formal training through academic and practical instruction in the various aspects of each skilled trade. Apprentices are educated in the theory and practices of wastewater collection and treatment and acquire the skills and knowledge necessary to become fully qualified in their respective trades. Apprentices in the Plant and Small Communities Operator trades obtain the skills and training credits needed to earn their Wastewater Works Operator licenses. As incentive to successfully complete the program, participants in the program are eligible to receive training increases upon completion of specific program requirements. All apprentice positions require successful completion of the apprenticeship program or approved equivalent program as a condition of continued employment.

## 3.4 Training

Training to implement the SSO Response Plan is separated into two distinct pieces: how to address an SSO in the field, and what are the reporting and record keeping requirements.

### 3.4.1 SSO Field Response Training

To ensure that the HRSD's personnel are effective and prepared in managing an emergency situation, HRSD provides ongoing training. This training provides the means for those involved in response to SSOs to acquire skills that fulfill their roles. Ongoing formalized operational training is provided by HRSD's

apprenticeship program. This four-year accredited program is a combination of formal educational classroom instruction combined with a significant amount of on-the-job training (OJT). Interceptor Technicians graduate from this program with a Virginia Department of Professional and Occupational Regulation (VADPOR) licensed Journeyman's card and gain the experience and knowledge needed to react and respond to the various SSO issues that may arise from a multitude of operational scenarios.

Implementing the SSO RP also helps to determine where enhancements are necessary, so that revisions to the plan can be made accordingly.

### **3.4.2 Reporting and Record Keeping Training**

HRSD has identified personnel that receive training in SSO reporting and record keeping, primarily individuals that are first responders to an incident, and the personnel involved in reporting an SSO to the regulatory agencies. When a new employee engages with the work covered in this document, they will be immediately trained by their supervisor to follow the included procedures. In addition, annual training will be conducted by the Permits Manager and/or Supervisors to include clarification of responsibility for reporting spills in the system, review of the reporting requirements and timeframes, reporting procedures for both business and non-business hours, required information needed in reporting.

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## APPENDIX A: HRSD INTERCEPTOR SYSTEMS REGULATORY REPORTING FORM

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SSORS NUMBER \_\_\_\_\_

**HRSD INTERCEPTOR REGULATORY REPORTING FORM**

SITE NAME (manhole, fm, PS, etc.): \_\_\_\_\_

FACILITY ID: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: Choose an item.

PERSON REPORTING: \_\_\_\_\_

DATE &amp; TIME PROBLEM DISCOVERED: \_\_\_\_\_

PERSON/ORGANIZATION WHO DISCOVERED PROBLEM: \_\_\_\_\_

DATE &amp; TIME HRSD STAFF ONSITE OF PROBLEM: \_\_\_\_\_

DESCRIPTION/CAUSE OF PROBLEM: \_\_\_\_\_

ACTION TAKEN TO RESOLVE PROBLEM: \_\_\_\_\_

DATE/TIME RELEASE ENDED: \_\_\_\_\_

TOTAL QUANTITY RELEASED (gallons): \_\_\_\_\_

TOTAL QUANTITY RECOVERED (gallons): \_\_\_\_\_

TOTAL QUANTITY NOT RECOVERED (gallons): \_\_\_\_\_

PATH OF RELEASE (storm drain, ditch, ground, etc.): \_\_\_\_\_

NAME OF RECEIVING WATERS: \_\_\_\_\_

## DISCHARGE CALCULATION (if needed)

INITIAL FLOW RATE (gpm)		FINAL FLOW RATE (gpm)	
START TIME		START TIME	
END TIME		END TIME	
ELAPSED TIME (minutes)		ELAPSED TIME (minutes)	
TIME x GPM		TIME x GPM	

COMMENTS: \_\_\_\_\_

TECHNICAL SERVICES DIVISION NOTIFIED:

NAME: [Choose an item.](#)

DATE: \_\_\_\_\_

TIME: \_\_\_\_\_

PROVIDE THE FOLLOWING INFORMATION IF INTERCEPTOR STAFF CALLED THE  
REGULATORY AGENCY DIRECTLY (DEM 1-800-468-8892 DEQ-TRO 518-2077)**INITIAL NOTIFICATION:** DEQ ☐ DEM ☐

NAME: \_\_\_\_\_

DATE/TIME NOTIFIED: \_\_\_\_\_

**UPDATE NOTIFICATION:** DEQ ☐ DEM ☐

NAME: \_\_\_\_\_

DATE/TIME NOTIFIED: \_\_\_\_\_

**FINAL NOTIFICATION:** DEQ ☐ DEM ☐

NAME: \_\_\_\_\_

DATE/TIME NOTIFIED: \_\_\_\_\_

TECHNICAL SERVICES DIVISION COMMENTS: \_\_\_\_\_



SSORS NUMBER \_\_\_\_\_

DATE: \_\_\_\_\_

**COMMUNICATIONS SPILL REPORTING FORM**

Are there significant traffic management impacts?

☐ Yes ☐ No

(If yes, please provide street names, direction of travel lanes affected, number of lanes affected, expected duration, etc.)

What is the closest crossroad or intersection for this incident?

Comments:

Will a Pump and Haul process be utilized?

☐ Unsure ☐ Yes ☐ No

(If yes, please provide a summary of operations, if discharge locations are determined, neighborhoods affected, and expected duration)

Comments:

Will Residents/Community/Businesses be 'affected'?

☐ Unsure ☐ Yes ☐ No

Will a Spill Incident Door Hanger be distributed to affected residents/businesses

☐ Yes ☐ No

(Example: odors, property damage, spill or cleanup efforts visible, inability to access homes, neighborhoods, property, etc.)

Comments:

Have we previously experienced issues in this area or are you aware of infrastructure failures here in the past?

☐ Yes ☐ No

Comments:

Are there any disruptions to utility service(s)?

☐ Yes☐ No

(Will our SSO/work affect our service or any utilities/services other than ours?)

Comments:

WQ Preliminary Assessment

Should WQ sampling begin in the waters affected by this incident? At this time, do you foresee a recreational (swimming, fishing) water advisory to be released?

☐ Unsure ☐ Yes ☐ No

Comments:

Point of contact in the field or reporting the incident: Name \_\_\_\_\_ Cell \_\_\_\_\_

**If you have answered yes to any of the questions above, please have the field staff contact Leila Rice, Director of Communications immediately at 757 642-1321(cell).**

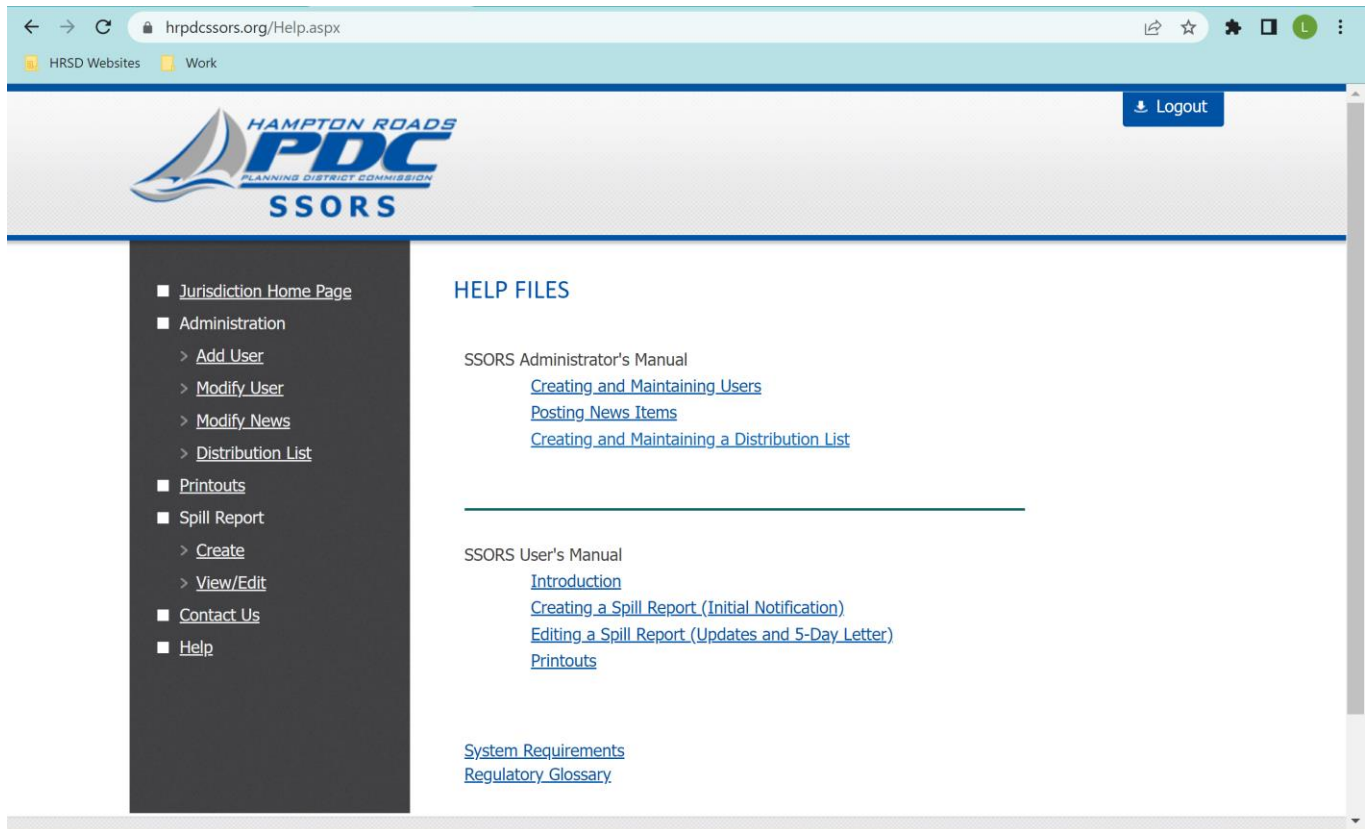
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## APPENDIX B: SSORS HELP FILES

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A SSORS user guide is located on the HRPDC website under [hrpdcssors.org/HELP.aspx](http://hrpdcssors.org/HELP.aspx)



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## APPENDIX C: NON-HRSD SSO REPORTING PROCEDURES

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## Reporting Procedures for Non-HRSD SSOs

When an HRSD employee observes a possible SSO that does not involve the HRSD system, the following must be done:

- HRSD's Responsible Person shall contact the appropriate Operations Center and report.
- The Interceptors Operations Center shall make every reasonable attempt to contact the owner of the sewer facility where the event is occurring.
- When an HRSD employee observes a possible SSO that does not involve the HRSD system, the following must be recorded:
  - Location of Release: Street Address, City, Map page and Grid number
  - Type of Problem (manhole overflow, air vent, etc.)
  - Date and Time Potential SSO was discovered
  - Owner of the sewer facility, if known.
- If the event occurs during business hours, contact the Permits Manager to report the incident. If it occurs outside of business hours, contact the Permits Manager the following business day.
- Complete the Non-District Spill Reporting form and send it to the Permits Manager within three calendar days of the problem regardless if the information has been gathered on the owner.

**HRSD INTERCEPTOR NON-DISTRICT SPILL REPORTING FORM**

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

PERSON REPORTING \_\_\_\_\_

TYPE OF PROBLEM \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DATE AND TIME PROBLEM DISCOVERED \_\_\_\_\_

WAS OWNER OF LINE NOTIFIED? \_\_\_\_\_

IF YES, GIVE DATE &amp; TIME OF NOTIFICATION \_\_\_\_\_

PERSON CONTACTED \_\_\_\_\_

OWNER EMAIL ADDRESS \_\_\_\_\_

COMMENTS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LOCALITY CONTACT LIST FOR NON-DISTRICT SSOs****CHESAPEAKE**

Name	Title	Email Address	Phone Number
Chris Scheible	Sewer Operations Manager	cscheible@cityofchesapeake.net	757-644-7499
Erin Trimyer (acting)	Water/Wastewater Administrator	etrimyer@cityofchesapeake.net	757-382-6529 (c)757-439-6052
David Jurgens	Director	djurgens@cityofchesapeake.net	757-382-6401 (c)479-841-3677
Erin Trimyer	Deputy Director of Public Utilities	etrimyer@cityofchesapeake.net	757-382-6529 (c)757-439-6052
Dan Johnson	Wastewater Pump Superintendent	dhjohnson@cityofchesapeake.net	757-382-3404 (c)757-644-7499
Milan Patel	Engineering Tech III	mpatel@cityofchesapeake.net	757-382-3417 (c)757-439-6052
Carrie L. Watlington	Office Coordinator	cwatlington@cityofchesapeake.net	757-382-3400

**HAMPTON**

Name	Title	Email Address	Phone Number
Rodney Keifert	Superintendent		757-876-4328
Angel Perez	Collection Systems Supervisor		757-375-8944

**JAMES CITY SERVICE AUTHORITY (JCSA)**

Name	Title	Email Address	Phone Number
James Canning	Civil Engineer III	james.canning@jamescitycountyva.com	757-259-5452/757-259-4158
Doug Lang	Wastewater Collections Superintendent	doug.lang@jamescitycountyva.com	

**NEWPORT NEWS**

Name	Title	Email Address	Phone Number
Bud Curtis	Project Director	lwcurtis@nnva.gov	757-926-3530
James Young	Administrator	youngjj@nnva.gov	757-592-3966
Jaimey Pease	Assistant Administrator	peasejr@nnva.gov	757-608-1386
Eric Warren		warrenel@nnva.gov	757-592-4920
Warren Landis		landiswe@nnva.gov	757-570-0804
Kate Bernatitus		bernatitusk@nnva.gov	757-375-9570
James Thorton		thorntonje@nnva.gov	757-592-5101
Wayne Campbell		campbellwf@nnva.gov	757-327-6690
Randy White		whiters@nnva.gov	757-985-5651
311	N/A	311@nnva.gov	757-933-2311

**NORFOLK**

Name	Title	Email Address	Phone Number
Mary Keough	Utilities Operation Manager	mary.keough@norfolk.gov	757-823-1000
David Speer	Wastewater Superintendent	david.speer@norfolk.gov	757-823-1023

**POQUOSON**

Name	Title	Email Address	Phone Number
Chad Krejcarek	Superintendent		757-817-8848

**PORTSMOUTH**

Name	Title	Email Address	Phone Number
Shelton Morton	Sewer Superintendent	mortons@portsmouthva.gov	757-273-8473
Markyio Staton	Pump Station Superintendent	statonm@portsmouthva.gov	757-737-5161
Rotating	Emergency Dispatch		757-393-8561
Richard Underhill	Assistant Director for P.U.	underhillr@portsmouthva.gov	757-393-8691 Ext 2192

**SMITHFIELD**

Name	Title	Email Address	Phone Number
Jessie Snead	Superintendent		757-634-2869
Jeff Smith	Senior Maintenance Supervisor		757-449-4871

**SUFFOLK**

Name	Title	Email Address	Phone Number
Paul Retel	Director	pretel@suffolkva.us	757-504-8179
Gene Weaver	Assistant Director-Operations	jweaver@suffolkva.us	757-284-5100
Adam James	Assistant Director-Administration	ajames@suffolkva.us	757-409-6770
Vidal Wilkins	Line Maintenance Manager	vwilkins@suffolkva.us	757-618-9416

**VIRGINIA BEACH**

Name	Title	Email Address	Phone Number
Jim Cherry	Operations Manager	jcherry@vb.gov	757-650-5058
Chris Johnson	Operations Engineer	cjohnson@vb.gov	757-613-1901
Barron McPherson	Sewer Collection Superintendent	bmcphers@vb.gov	757-510-8128
Michael Vieira	Regulatory Compliance Manager	mvieira@vb.gov	757-385-4682
Curtis Blunt	Assistant Superintendent Sewer Collections	cblunt@vb.gov	757-617-5346
Antwan Young	Assistant Superintendent Sewer Collections	ayoung@vb.gov	757-681-6130
Robert Wheeler	Utility Operations Supervisor	rwheeler@vb.gov	757-621-6072

**WILLIAMSBURG**

Name	Title	Email Address	Phone Number
Paul Reeser	Water/Sewer Superintendent	preeser@williamsburgva.gov	757-220-6233

**YORK COUNTY**

Name	Title	Email Address	Phone Number
Tim Warthan	Utility Maintenance Supervisor		757-869-7003

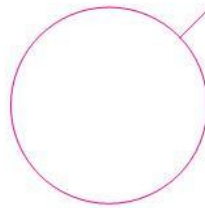
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## APPENDIX D: DOOR HANGERS

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**HRSD**

Cleaning wastewater every day for a better Bay.

Our HRSD professionals have responded to a failure in the sewer system which resulted in a release of wastewater on or near your property. They have removed as much of the release as possible and cleaned the area.

Normal household activities such as laundry and bathing may continue uninterrupted. Wastewater is not corrosive and will not cause damage to property such as cars, buildings, fences, shrubs or lawns.

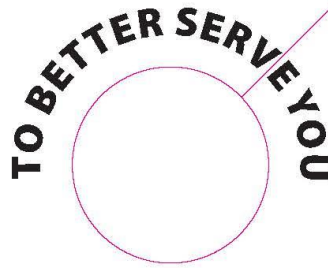
A small amount of lime, a natural soil conditioner, has been placed on the soil to reduce odors.

We offer the following general guidelines:

- Children and pets should avoid the spill area until it has dried.
- Wash your hands with clean water and soap after playing or working in your yard.
- If you have a garden, thoroughly wash any fruits or vegetables you pick before eating them.
- If your home uses a well for drinking water, please call the number below so we can determine whether precautions are necessary.

If you have questions, please call:

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Date \_\_\_\_\_

HRSD representatives will be working in your neighborhood within the next few days. They may need to enter your property to:

- ☐ Inspect sewer lines
- ☐ Clean sewer lines
- ☐ Repair sewer lines
- ☐ Other

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This work should be accomplished quickly and with as little disruption as possible. If you have questions or concerns, please call:

_____
_____
_____

## APPENDIX E: COMPREHENSIVE PHONE DIRECTORY

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The following phone directories are included in this Appendix:

HRSD's Emergency Notification

Locality Emergency Notification

DEQ Emergency Notification

#### PUBLIC INFORMATION TELEPHONE LIST

Name	Title	Contact Information	
Leila Rice	Director of Communications	Office	757-460-7056
		Cell Phone	757-642-1321
Lisa Bolen	Public Information Specialist	Office	757-460-7000
		Cell Phone	757-449-2982

#### INTERCEPTOR SYSTEMS TELEPHONE LIST

Name	Title	Contact Information	
Eddie Abisaab	Director of Operations	Office	757-833-7432
		Cell Phone	757-353-0515
Shawn Heselton	Chief of South Shore Interceptor Operations	Office	757-460-7016
		Cell Phone	757-353-5464
Chris Stephan	Chief of North Shore Interceptor Operations	Office	757-833-1739
		Cell Phone	757-777-7511
Mike Hess	System Manager, South Shore	Office	757-460-7093
		Cell Phone	757-354-7383
Ryan Brewster	System Manager, North Shore	Office	757-833-1729
		Cell Phone	757-284-5771
Sam McAdoo	Chief of Small Communities	Office	757-234-7446
		Cell Phone	757-284-6315

#### NORTH SHORE INTERCEPTORS TELEPHONE LIST

Name	Title	Contact Information	
Eric Jackson	Superintendent	Office	757-833-1723
		Cell phone	757-613-6597
Jon Shepherd	Chief System Operator	Office	757-833-1724
		Cell phone	757-613-6596
Mark Garrison	Chief of Maintenance Management	Office	757-833-1718
		Cell phone	757-618-0260
Jeremy Fox	Interceptor Systems Supervisor	Office	757-833-1726
		Cell phone	757-633-2100
Sean Hypes	Pump Station Supervisor	Office	757-833-1725
		Cell phone	757-613-1357
Lynette Saylor	Operations Coordinator	Office	757-833-1720
John Thomas	Chief Foreman	Office	757-833-1727
		Cell phone	757-618-7515
Rotates	Standby Supervisor	Office	757-613-6600
	Miss Utility	Office	757-833-1721

**SOUTH SHORE INTERCEPTORS TELEPHONE LIST**

Name	Title	Contact Information	
TBD	Interceptor Engineer	Office	
		Cell phone	
Buddy Beaman	Superintendent	Office	757-460-7091
		Cell phone	757-642-5883
Robert Davis	Chief Foreman	Office	757-460-7088
		Cell phone	757-613-8031
Bruce Lamm	Chief Maintenance Management	Office	757-460-7022
		Cell phone	757-284-8110
Matt Tribble	Interceptor Systems Supervisor	Office	757-460-7074
		Cell phone	757-284-8112
Travis Stevens	Chief System Operator	Office	757-460-7066
		Cell phone	757-274-7078
David Anderson	Pump Station Supervisor	Office	757-460-7066
		Cell phone	757-274-7078
Rotates	Standby Supervisor	Cell phone	757-284-8118
Michelle Martin	Operations Coordinator	Office	757-460-7072

**TECHNICAL SERVICES AND P3 TELEPHONE LIST**

Name	Title	Contact Information	
Lauren Grimmer	Permits Manager/Environmental Scientist	Office	757-460-4245
		After-hours	757-419-8577
Kevin Parker	Environmental Scientist	Office	757-460-4244
		After-hours	757-376-0886
Jenny Reitz	Environmental Scientist	Office	757-460-4284
		After-hours	757-319-9764
Mark Feltner	Environmental Scientist	Office	757-460-4254
		After-hours	757-359-8531
Kyle Curtis	Environmental Scientist	Office	757-460-4252
		After-hours	757-510-5880
Chris Burbage	Environmental Scientist	Office	757-355-5013
		After-hours	706-614-2184
Raul Gonzalez	Environmental Scientist	Office	757-460-7078
		After-hours	757-613-4956
Jamie Mitchell	Chief of Technical Services	Office	757-460-4220
		After-hours	757-510-4153
South Shore P3 Daytime Emergency		Office	757-318-4336
North Shore P3 Daytime Emergency		Office	757--833-1707

**During business hours**, call office numbers in order listed.

**During non-business hours**, call after-hours phone numbers in order listed. If no one answers, leave a message on answering machine (if available). If you are not contacted within 30 minutes, then call the next number on the list. Continue procedure until your call is returned.

**REGULATORY AGENCY TELEPHONE LIST**

DEQ-Virginia Beach Office (8:00 am – 5:00 pm) .....757-518-2000 or 757-518-2077.  
Please note you may only leave a voicemail message when calling 757-518-2077.

Department of Emergency Services  
Use for reporting during non-business hours.....1-800-468-8892

**NORTH SHORE LOCALITIES EMERGENCY TELEPHONE LIST**

LOCALITY/ORGANIZATION	DURING BUSINESS HOURS	AFTER BUSINESS HOURS
York County	757-890-3750	757-890-3773
Gloucester County	804-693-4044	804-693-3890
City of Poquoson	757-868-3590	757-868-3501
City of Newport News	757-933-2311	757-933-2311
City of Hampton	757-726-2994	757-727-8311
College of William & Mary	757-221-2270	757-221-2270
VIMS Gloucester	804-684-7013 (Mike Kershner)	804-694-7300 or 804-684-7300
City of Williamsburg	757-220-6140	757-220-2331
James City Service Authority	757-229-7421	757-566-0112
Langley AFB	757-764-3987 or 757-764-3906 or 757-764-1046 (Carmichael Patton)	757-764-4222 (Fire Dept.)
Naval Weapons Station Yorktown	757-341-1700	757-341-1700
Joint Base Langley-Eustis (formerly Fort Eustis)	757-878-4123 or 757-878-1008 (24/7 – Fire & Emergency Dispatch)	757-878-1008 (24/7 – Fire & Emergency Dispatch for Fort Eustis)
Camp Peary	757-258-4300	757-229-2121 or 757-897-7142 (Gary Thompson Cell)
NWS Yorktown - Cheatham Annex	757-636-4180 (Billy Pridgeon, Utilities Supervisor)	757-341-1700 or 757-636-4180 (Billy Pridgeon, Utilities Supervisor)
York River Coast Guard Base	Office: 757-856-2243 or Cell: 757- 592-3920 (Lt. Kalmbacher)	757-856-3500 (Dial 4 for Security)
Dominion Virginia Power	866-366-4357 - remember to give station acct # when reporting power outage	866-366-4357 - remember to give station acct # when reporting power outage
Verizon	757-875-2710 or 804-644-3139 (Duty Supervisor) or 757-869-7398 (William Toler)	757-274-2363 (Carl Moeser) or 804-644- 3139 (Duty Supervisor)
Anheuser Busch Inc.	757-253-3691 (Jeff Osterloh) or 757-253-3607 (Jared Markwald)	757-603-5250 (Jeff Osterloh) or 757-342-9636 (Jared Markwald)
Busch Gardens	757-253-3888 (Security)	757-253-3330 (Dispatch 24/7)
Patrick Henry Market Shopping Center	757-249-2338	757-249-9107
Great Wolf Lodge	757-229-9700 Ext 739 or Ext 732 (Patti Banks, Monday – Friday)	757-284-2570 or 757-784-6582 (Rick Stewart, Director of Engineering)



**SOUTH SHORE LOCALITIES EMERGENCY TELEPHONE LIST**

Locality	Phone	Hours/Comments
<b>Chesapeake</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-382-6352	Normal working hours 8:00 a.m. through 5 p.m. <b>After-hours: 757-382-3550</b>
Traffic	757-382-6101	Normal working hours 8:00 a.m. through 5 p.m. <b>After-hours: 757-641-6196</b>
<b>Isle of Wight</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-365-6284	Normal working hours 8:30 a.m. through 5 p.m. <b>After-hours: 757-357-2151</b>
Traffic	757-357-2151	<b>24-hour#</b>
<b>Norfolk</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 3:30 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-823-1000	Normal working hours 7:00 a.m. through 3:30 p.m. <b>24-hour # 757-823-1000</b>
Traffic/Engineering	757-636-3774	Normal working hours 8 a.m. through 5 p.m. <b>After-hours: 757-823-1000</b>
<b>Portsmouth</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-393-8561	Normal working hours 7:30 a.m. through 4 p.m. <b>24-hour #</b>
Traffic/Engineering	757-393-8594	Normal working hours 8 a.m. through 5 p.m. <b>After-hours: 757-393-5300</b>
<b>Smithfield</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-365-4200	Normal working hours 8:00 a.m. through 5 p.m. <b>After-hours: 757-357-2151</b>
Traffic	757-357-3247	Normal working hours 9:00 a.m. through 5 p.m. <b>After-hours: 757-357-2151</b>
<b>Suffolk</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-514-7000	Normal working hours 8:30 a.m. through 5 p.m. <b>24-hour # 757-514-7034</b>
Traffic	757-514-7603	Normal working hours 8:30 a.m. through 5 p.m./ Signals (On-call 24/7) 757-514-7600
<b>Virginia Beach</b>		
Miss Utility	811 in VA or 1-800-552-7001	Normal working hours 7:00 a.m. through 5 p.m., Monday – Friday. Emergency requests are 24/7.
Public Utilities - Sewer/Water	757-385-1400	Normal working hours 7:30 a.m. through 5 p.m.; <b>24-hour #: 311 or 757-385-3111</b>
Traffic	757-385-4131	Normal working hours 8 a.m. through 5 p.m. <b>After-hours: 311 or 757-385-3111</b>

**SOUTH SHORE MISCELLANEOUS EMERGENCY TELEPHONE LIST**

Locality	Phone	Hours/Comments
Joint Expeditionary Base Little Creek-Fort Story	757-341-1700 (24/7) 757-462-5427 (O) 757-240-0954 (C)	Keith Clinchot, Utilities Supervisor
Dominion Virginia Power	866-366-4357	Remember to give station acct # when reporting power outage
Colonial Pipeline	800-275-3004	
Columbia Gas	800-544-5606	
Virginia Natural Gas	877-572-3342	
Cox Communications	757-224-1111	24-hour #

## APPENDIX F: DEFINITIONS

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This section includes basic definitions of a sanitary sewer system and sanitary sewer overflow, which gives readers an overview to help understand the sections of this document.

**Ad hoc Action Committee (AAC)** shall mean a selection of HRSD staff identified by the HRSD Directors to address SSOs and generate action plans. Representatives on the AAC will likely be from Interceptor Systems (Operations and Interceptor Engineers), Engineering (Planning and Analysis), and Water Quality.

**Building/Private Property Backups** shall mean any release of wastewater from HRSD's sanitary sewer system into buildings or onto private property, except a release that: (1) is the result of blockages, flow conditions, or malfunctions of a building lateral or other piping/conveyance system that is not owned or operated by HRSD, or (2) is the result of overland, surface flooding not emanating from HRSD's Sanitary Sewer System.

**Capacity-related overflow** shall mean an SSO that occurs when the actual wastewater flow exceeds the hydraulic capacity of the collection system. Capacity-related overflows cannot be resolved through modified maintenance activities. Capacity-related overflows are SSOs not caused by grease, roots, structural defects (i.e., sags, off-set joints, loss of round, etc.), debris, and equipment or power failures.

**CCTV** shall mean closed-circuit television.

**Collection System** shall mean the sewage collection and transmission system (including all pipes, force mains, gravity sewer lines, lift stations, pumping stations, manholes, and appurtenances thereto) owned or operated by HRSD and designed to convey wastewater to any treatment plant (TP).

**Force Main** shall mean any pipe that receives and conveys, under pressure, wastewater from the discharge side of a pump. A Force Main is intended to convey wastewater under pressure.

**GIS** shall mean Geographic Information System.

**Gravity Sewer Line** shall mean a pipe that receives, contains and conveys wastewater not normally under pressure, but is intended to flow under the influence of gravity.

**Locality or Localities** is typically defined in the ongoing regulatory actions as the cities of Chesapeake, Hampton, Newport News, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg; the counties of Gloucester, Isle of Wight, James City, and York; and the town of Smithfield. For the purposes of this document, the term shall include any city, county, town, or other municipal wastewater service provider in the HRSD service area.

**HRSD** shall mean Hampton Roads Sanitation District, a political subdivision created by a 1940 Act of the General Assembly of Virginia and charged with the responsibility to provide sewage collection, conveyance, and treatment services for the communities in the Hampton Roads metropolitan area.

**Infiltration** shall mean water other than wastewater that enters a sewer system (including sewer service connections) from the ground through such means as defective pipes, pipe joints, connections, or manhole walls. Infiltration does not include, and is distinguished from, inflow.

**Inflow** shall mean water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cleanouts, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

**Inflow/Infiltration (I/I)** shall mean the total quantity of water from Inflow, Infiltration, and Rainfall-Induced Infiltration without distinguishing the source.

**Interceptor Sewer** shall mean a sewer, typically without individual sewer customer connections, that is used to collect and carry flows from main and trunk sewers to a central point for treatment and discharge.

**Non-District SSO** is defined as an SSO which the discharge is from facilities privately owned or owned by a Locality.

**Private Property** shall mean land that is owned by a private entity.

**Private Service Connection/Lateral** shall mean that portion of the collection system used to convey wastewater from a building or buildings to that portion of the sanitary sewer system owned by the Locality or HRSD.

**Pumping Station** shall mean facilities comprised of pumps that lift wastewater to a point physically higher than the wastewater elevation in the wet well or into a pressurized force main, including all related electrical, mechanical, and structural systems necessary to the operation of that pumping station.

**Recurring SSO** shall mean an SSO that occurs more than once within the previous 5 years at the same location caused by the same problem.

**Regional Sanitary Sewer System** shall mean the collective sanitary sewer systems owned and operated by the localities, as well as the HRSD sanitary sewer system including gravity sewer lines, manholes, pump stations, lift stations, pressure reducing stations, force mains, wastewater treatment plants, and all associated appurtenances.

**Regulatory Reporting Form (RRF)** shall mean the initial document used by HRSD to record information related to SSOs. This information is largely stored in HRSD's SSO Database.

**Reportable Sanitary Sewer Overflow (SSO)** shall mean the unauthorized intentional or unintentional spill, release, or discharge to waters of the State or United States of untreated wastewater from any portion of a sanitary sewer system before the headworks of a wastewater treatment facility.

**Resolved SSO** shall mean an SSO that has a distinct solution which has been implemented, so as to limit the possibility of a Recurring SSO.

**Sanitary Sewer Overflow (SSO)** shall mean an overflow, spill, diversion, or release of wastewater from or caused by the Regional Sanitary Sewer (SS) System. This term shall include: (i) discharges to waters of the State or United States from the Regional SS System and (ii) any release of wastewater from the Regional SS System to public or private property that does not reach waters of the United States or the State, including Building/Private Property Backups.

**Sanitary Sewer Discharge (SSD)** shall mean any discharge to waters of the State or the United States from the HRSD Sanitary Sewer System through a point source not authorized in any Permit.

**SSORS** shall mean the Sanitary Sewer Overflow Reporting System administered by the Hampton Roads Planning District Commission for SSOs in the Tidewater Region. This is an online database system accessible through the Internet.

**Sanitary Sewer System** shall mean the wastewater collection and transmission system that is comprised of all portions of the individual Hampton Roads locality or HRSD collection systems, including manholes, gravity sewers and force mains, lift stations, pump stations, and associated appurtenances. Building sewer laterals are not considered part of the Locality's sanitary sewer system.

**Sewer Basin** shall mean all portions of the sanitary sewer system tributary to an interceptor sewer or pump station (also referred to as a pump station service area). Generally, the sewers within a sewer basin are hydraulically linked.

**Supervisory Control and Data Acquisition (SCADA)** shall mean a computer system for gathering and analyzing real-time data.

**Surface Water** shall mean waters of the State and United States as defined in 40 CFR 122.2.

**VADPOR** shall mean the Virginia Department of Professional and Occupational Regulation, an agency of the Commonwealth of Virginia as described in Code § 54.1-113.

**VDEQ** shall mean the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Code § 10.1-1183.

**VDH** shall mean the Virginia Department of Health, an agency of the Commonwealth of Virginia.

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