

STANDARD OPERATING PROCEDURES FOR ASSESSING AND REPORTING COLLECTION SYSTEM RELEASES (PRE-SSO REGULATIONS)

INTRODUCTION

The following standard operating procedures (SOP) are to be used by all localities within the Hampton Roads area. These procedures are meant to provide for standardized assessments of collection system releases and release reporting practices within the region. Regionally consistent methods allow for more efficient use of resources by HRSD, the localities and DEQ while ensuring the protection of public health and the environment. The SOP provides for collecting and documenting critical information regarding cleaning spills and restoring impacted areas in a consistent manner across the region. As part of the implementation of this SOP, training will be developed and provided for managers and field personnel responsible for identifying and responding to release events. Training sessions will be conducted by _____ and repeated semi-annually.

Commitment to the Community

The localities and the HRSD are committed to make a reasonable effort to minimize and eliminate collection system releases and, thereby, maximize protection of public health and the environment. In the event of a collection system release, the responder personnel are committed to minimize, recover, and restore the environment to the maximum extent both feasible and appropriate in the circumstance.

Definition of Sanitary Sewer Releases

A "release" of sanitary sewerage is any release from the collection system. The collection system includes force mains, gravity mains, clean outs, interceptors, pump stations, manholes, washout boxes, air release valves, and other applicable components. The release could be caused by any number of factors and could occur from any point in the system.

A "controlled release" is spillage that can be contained and does not enter state waters or pose a threat to the public health and safety. In the case of a controlled release, the field personnel will use whatever means necessary to clean the spillage. The release need not be reported to the DEQ.

A "reportable release" is any release of unrecovered wastewater that may:

- reasonably be expected to reach state waters, and/or
- adversely impact the public health and safety

"State waters" include waterways, rivers, canals, creeks, lakes, ponds, and tributaries.

Reportable releases will be reported to DEQ as soon as possible, but in all cases within 24 hours by telephone, facsimile, or e-mail and confirmed in writing within 5 days. Reports will be filed with the managers of affected storm water drainage systems in accordance with local procedures.

RESPONDING TO A RELEASE

Each participating party will maintain specific procedures for responding to a collection system release. Individual assignments, methods of dispatching, and hierarchy of responsibility for responding to a sanitary sewage release may vary in each participating locality as well as HRSD. However, the general activities at the sites will be similar. The six overarching objectives of the responding field personnel are eliminate, contain, recover, disinfect, assess and restore, as appropriate.

Eliminate: The first field personnel arriving will immediately seek to stop the release. After stopping the release, the cause of the release will be investigated and resolved.

Contain: In order to limit the area of impact of a collection system release, field personnel will contain the release. The field personnel are encouraged to be innovative when standard approaches such as straw bale barriers and temporary earthen dams will not contain the release.

Recover: Field personnel will attempt to recover all of the release. Appropriate technologies include vacuum trucks and backhoes for larger spills and shovels and rakes for smaller spills.

Disinfect: Once all of the recoverable contaminated material has been reasonably removed, the field personnel will disinfect the site as appropriate and to the extent feasible. The method for disinfection, if any, will vary according to the magnitude of the release and the specific methods used by the participating agencies.

Assess: The field personnel will assess the potential for unrecovered materials to enter state waters and will estimate the amount of material released both in terms of recovered and unrecovered materials.

Restore: Within a reasonable time, the site will be restored to its original state to the maximum extent appropriate and feasible.

FIELD PROCEDURES AND REPORTING FORMS

From a regulatory compliance standpoint, a critical function of the response team is to consistently and properly determine when to recommend that a spill be reported to the DEQ. It is also important for the utility managers, when planning and prioritizing maintenance and system upgrades, to have accurate and consistent information regarding the frequency and magnitude of releases in a given area. The attached SOPs have been written to provide a regionally consistent guideline for field personnel to use to determine if a release should be reported. The attachments include the Collection System Release Reporting Criteria, recommended field and backup documentation, a reporting form for communicating releases to DEQ, and several equations that could be used to estimate the volume of a release.

REGIONAL COLLECTION SYSTEM CONTACTS AND RESOURCES

Provides a list of collection system managers, storm water managers and emergency contacts for all participating Hampton Roads jurisdictions. In the event your organization may need parts, equipment, or other assistance in preventing or responding to a collection system release, you may wish to contact these individuals.

<u>Jurisdiction</u>	<u>Contact(s)</u>	<u>Telephone</u>	<u>Afterhours Telephone/Pager</u>
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Collection System Release Reporting Criteria

Lateral Stoppage for Gravity/Vacuum

Cleanout overflow in grassy area (contained)

1. Liquid contained in grassy area.
2. Cleanup any debris left over from stoppage, vacuum or rake, do not place in cleanout.
3. Wash down area with water, if necessary.
4. *No spill report is necessary.*

Cleanout overflow in grassy area (contained)

1. Liquid runs down to curb and is contained in curb and grass.
2. Cleanup any debris left over from stoppage, vacuum or rake, do not place in cleanout.
3. Wash down area with water, if necessary.
4. *No spill report is necessary.*

Cleanout overflow in grassy area (not contained)

1. Liquid runs down curb and gets into storm drainage basin, ditch or waterway.
2. Cleanup all debris left over from stoppage, vacuum liquid out of storm drainage basin, and from around cleanout if possible.
3. Disinfect as needed.
4. Wash down area with water, if necessary.
5. *Spill report is necessary.*

Cleanout overflow in driveway or sidewalk (contained)

1. Liquid runs down to curb and is contained in curb and grass.
2. Cleanup any debris left over from stoppage, vacuum or rake, do not place in cleanout.
3. Wash down area with water.
4. Vacuum to collect debris and water as appropriate.
5. *No spill report is necessary.*

Cleanout overflow in driveway or sidewalk (not contained)

1. Liquid runs down curb and gets into storm drainage basin, ditch or waterway.
2. Cleanup all debris left over from stoppage, vacuum liquid out of storm drainage basin and from around cleanout if possible.
3. Disinfect as needed.
4. Wash down area with water.
5. Vacuum to collect debris and water as appropriate.
6. *Spill report is necessary.*

Mainline Stoppage**Manhole overflow in grassy area (contained)**

1. Liquid is contained in grassy area.
2. Cleanup debris left over from overflow and vacuum up any excess liquid.
3. Wash down area with water, as necessary
4. *No spill report is necessary.*

Manhole overflow in grassy area (not contained)

1. Liquid runs down curb and gets into storm drainage basin, ditch or waterway.
2. Cleanup all debris left over from stoppage, vacuum liquid out of storm drainage basin and from around cleanout if possible.
3. Disinfect as needed.
4. Wash down area with water.
5. *Spill report is necessary.*

Manhole overflow in street (contained)

1. Liquid runs down curb and **does not** get into storm drainage basin, ditch or waterway.
2. Cleanup all debris left over from stoppage vacuum up as much liquid as possible and disinfect as needed.
3. Wash down area with water.
4. *No spill report is necessary.*

Manhole overflow in street (not contained)

1. Liquid runs down curb and **gets into** storm drainage basin, ditch or waterway.
2. Cleanup all debris left over from stoppage, vacuum liquid out of storm drainage basin and from around cleanout if possible.
3. Disinfect as needed.
4. Wash down area with water.
5. *Spill report is necessary.*

Force Main**Breaks (contained)**

1. Liquid is contained and **does not** get into the storm drainage basin, ditch or waterway.
2. Cleanup all debris and vacuum up all liquid.
3. Disinfect as needed.
4. Wash down area.
5. *No Spill report is necessary.*

Breaks (not contained)

1. Liquid is not contained and **gets into** storm drainage basin, ditch or waterway.
2. Cleanup all debris and vacuum up as much liquid as possible.
3. Disinfect as needed.
4. Wash down area.
5. *Spill report is necessary.*

Air Release Valve Breakages (contained)

1. Liquid is contained and does **not get** into storm drainage basin, ditch or waterway.
2. Liquid from the force main should be collected, if possible.
3. Cleanup all debris spilled and vacuum up as much spilled liquid as possible.
4. Disinfect as needed.
5. Wash down area.
6. No spill report is necessary

Air Release Valve Breakages (not contained)

1. Liquid is not contained and **gets into** storm drainage basin, ditch or waterway.
2. Liquid from the force main should be collected, if possible.
3. Cleanup all debris spilled and vacuum up as much spilled liquid as possible.
4. Disinfect as needed.
5. Wash down area.
6. Spill report is necessary

Sewer Pump Station**Overflow at Pump Station** (contained)

1. Liquid is contained and does **not get** into storm drainage basin, ditch or waterway.
2. Cleanup all debris and vacuum up as much liquid as possible.
3. Disinfect as needed.
4. Wash down spill area.
5. *No spill report is necessary.*

Overflow at Pump Station (not contained)

1. Liquid is not contained and **does get** into storm drainage basin, ditch or waterway.
2. Cleanup all debris and vacuum up as much liquid as possible.
3. Disinfect as needed.
4. Wash down spill area.
5. *Spill report is necessary.*

Private Grinder Pumps

Overflow at Pump

1. All cleanup and reporting is the responsibility of private owner.
2. Report to your city's enforcement agency or DEQ; be clear that you are reporting a PRIVATE system release.

Private Force Main Break

1. All cleanup and reporting is the responsibility of private owner.
2. Report to your city's enforcement agency or DEQ; be clear that you are reporting a PRIVATE release.

INITIAL FIELD REPORT FOR COLLECTION SYSTEM RELEASES

DATE/TIME REPORTED: _____ Service Req. # _____
 DATE/ TIME ARRIVED: _____
 TYPE OF STRUCTURE/ASSET: SCO, PCO, SMH, FM, OTHER _____
 DATE/TIME STOPPED: _____
 CAUSE : GREASE, DEBRIS, STRUCTURAL COLLAPSE, PS, OTHER _____
 WAS IT RAINING OR RECENTLY RAINED? Y OR N _____
 WAS THE AREA FLOODED BY STORM OR TIDE? Y OR N _____
 GROUND COVER – ASPHALT, GRASS, EARTH, GRAVEL, OTHER _____
 MEASURES USED TO CONTAIN SEWAGE IF WARRANTED _____

 MEASURES USED TO CLEAN UP AREA: _____

<p align="center">INFORMATION NEEDED TO CALCULATE VOLUME IF PONDING</p> <p align="center">DIMENSIONS OF WETTED AREA _____ LENGTH, _____ WIDTH, _____ DEPTH X-SECT, OF POND _____</p>	<p align="center">INFORMATION NEEDED TO CALCULATE VOLUME IF FLOWING</p> <p align="center">DIMENSIONS OF WETTED AREA _____ LENGTH, _____ WIDTH _____ DEPTH, _____ TIME (FPS) X-SECT OF TRENCH _____</p>
<p>RESIDENTS REPORTED USAGE</p> <p>DATE/TIME RESIDENT FIRST NOTICED PROBLEM _____ WHAT RESIDENT FIRST NOTICED; SLOW DRAIN, GRAY WATER AT CURB, GRAY WATER IN ROAD, ODOR, TOILET NOT FLUSHING, OTHER _____ SINCE THE RES. NOTICED THE PROBLEM, HOW MANY; WASHER LOADS _____, DISHWASHER LOADS _____, SHOWERS _____, BATHS _____, OTHER(GAL.) _____</p>	
<p>VACTOR</p> <p>BEGINNING GAUGE READING _____ ENDING GAUGE READING _____ GALLONS _____ TRUCK NUMBER _____</p>	
<p align="center">INFORMATION NEEDED TO DETERMINE THE EXTENT OR SEVERITY</p> <p>Y or N DID IT ENTER A BODY OF WATER (LAKE, RIVER, STREAM)? NAME/LOC. _____</p> <p>Y or N DID IT ENTER A DRAINAGE STRUCTURE(CATCH BASIN, DITCH)? DESC./LOC. _____</p> <p>Y or N DID IT PRESENT A SIGNIFICANT HEALTH RISK? DESC./LOC. _____</p> <p>Y or N WAS A PUMP STATION INVOLVED? STATION # _____</p> <p>Y or N WAS A FM INVOLVED _____</p> <p>If you answered yes (Y) to any of the previous questions contact the SSO Coordinator immediately, _____ at _____. If you fail to reach him contact your immediate supervisor.</p> <p>REPORTED TO: _____ DATE/TIME _____</p>	

Comments: _____

To the best of my knowledge all the above information is true and accurate.

SIGNED _____ DATE _____

**THE FORM IN THE SPACE INSTRUCTIONS FOR
INITIAL FIELD REPORT FOR OVERFLOW DETERMINATION**

ADDRESS – Address of property at or nearest to the incident.

DATE/TIME REPORTED – Time of call or circumstances that made us aware of the incident. Enter the Service Request number if applicable.

TYPE OF STRUCTURE/ASSET: SCO, PCO, SMH, FM, OTHER – CIRCLE OR LIST ALL THAT APPLY.

DATE/TIME STOPPED – Date/Time you were able to stop sewage from escaping into the environment.

CAUSE – What caused the incident. CIRCLE OR LIST ALL THAT APPLY.

WAS IT RAINING OR RECENTLY RAINED? Answer Y or N, we will get weather information in the office.

WAS THE AREA FLOODED BY STORM OR TIDE? Y OR N – Was there standing tidal or rain water.

TYPE OF GROUND COVER – ASPHALT, GRASS, EARTH, GRAVEL OR OTHER – CIRCLE OR LIST ALL THAT APPLY.

MEASURES USED TO CONTAIN SEWAGE IF WARRANTED – Write down what you did to prevent the problem from spreading further. For example, sand bags at nearest catch basin.

MEASURES USED TO CLEAN UP AREA – Write down what you did to return the area to it's original condition. Example, Used vacator to remove liquids, disinfected and washed down the area.

INFORMATION NEEDED TO CALCULATE VOLUME IF PONDING –

All measurements shall be in feet and inches.

Length – measurement of the longest side. Width – measurement of shortest side, Depth – measure depth at deepest point.

X-SECTION OF POND – Examples, shaped like a V, Square - like the sides of a pool or round

INFORMATION NEEDED TO CALCULATE VOLUME IF FLOWING – Measurements of wetted area here are taken the same as they were for Ponding above.

TIME (FPS) – One additional piece of information is necessary if there is flow and that is Time. Simply mark off 10 feet adjacent to flow. Put a small piece of paper on surface of flow and using the second hand on your watch time how long it takes to travel the 10 feet.

X-SECTION OF TRENCH – Examples, shaped like a V, Square - like the sides of a pool or round

RESIDENTS REPORTED USAGE

Date/time resident first noticed problem: When did they first realize they had a sewer problem?

What resident first noticed – What brought the problem to their attention? CIRCLE OR LIST ALL THAT APPLY.

Since the resident noticed the problem, how many; washer loads _____, dishwasher loads _____, showers _____, baths _____, other(gal) _____. Enter a count for each of the events that apply.

Y or N Was there any damage to the residence? Was anyone's property harmed by this incident

VACTOR

GAUGE READING START – Collection tank reading when you began collection process

GAUGE READING FINISHED- Collection tank reading when you completed the collection.

GALLONS – How many gallons were collected, based on gauge readings.

TRUCK NUMBER – The number of the vehicle used for the collection.

INFORMATION NEEDED TO DETERMINE THE EXTENT OR SEVERITY

- Y or N DID IT ENTER A BODY OF WATER (LAKE, RIVER, STREAM)? – Did you see sewage or evidence of sewage entering a body of water. If yes give name/describe and give location
- Y or N DID IT ENTER A DRAINAGE STRUCTURE(CATCH BASIN, DITCH)? Did you see sewage or evidence of sewage entering a structure. If yes describe and give location
- Y or N DID IT PRESENT A SIGNIFICANT HEALTH RISK? If yes describe and give location
- Y or N WAS A PUMP STATION INVOLVED? Did a pump station cause or contribute to this incident
- Y or N WAS A FM INVOLVED? - Did a force main cause or contribute to this incident

IF YOU ANSWERED Y (YES) TO ANY OF THE FIVE QUESTIONS IN THIS SECTION

CONTACT THE SSO COORDINATOR IMMEDIATELY, ENRIQUE ESTANISLAO – 823-1022.

IF YOU CANNOT CONTACT HIM CONTACT YOUR IMMEDIATE SUPERVISOR. You must fill in the, Reported to field and time and date you reported to them.

REPORTED TO- Who you contacted to let them know you answered Y to any of the five questions in this section

Time/Date – Time and date you reported the incident to Enrique or Supervisor.

COMMENTS: THIS SECTION IS FOR YOU TO WRITE DOWN ANY INFORMATION ABOUT THIS INCIDENT THAT YOU FEEL WAS NOT COVERED BY THE PREVIOUS QUESTIONS.

SIGN AND DATE ALLOTTED AT THE BOTTOM

Collection System Release Internal Tracking Form

SECTION I BACKGROUND INFORMATION

Source Of Release _____
(Be specific: Force Main, Manhole, etc.)

Facility Identification: (pump station number, valve number, etc) _____

Date/Time Problem Is Discovered _____

Release Location (Be specific)

Street Address _____

City _____

Map Page _____ Map Grid _____

GPS:
Northing _____
Easting _____

Person/Organization Discovering Problem

Name _____	Affiliation (if any) _____	Telephone _____
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Specifics Of Initial Report _____

Date/Time Notified _____
(if release is not discovered by utility)

Name of Person Notified _____

Date/Time Utility Initiates Response _____

Estimated Quantity Of Release _____ gallons

Was All Of Release Recovered? (Check one) YES _____ NO _____

If "Yes," estimate amount of release recovered _____ gallons

If "No," Telephone Report should be made immediately (in no event later than 24 hours after discovery) by calling DEQ-TRO (518-2077) during business hours. After hour reports should be made to DES (1-800-468-8892). Section II contains a phone log to document the telephone report(s).

ACTION TAKEN TO STOP RELEASE AND MINIMIZE IMPACT: _____

TYPE OF RELEASE (check one) WET WEATHER _____ DRY WEATHER _____

If Wet Weather, complete the following:

Estimated percentage of wastewater _____ % Estimated Gallons of wastewater _____ Gallons

Estimated percentage of storm water _____ % Estimated Gallons of storm water _____ Gallons

INSTREAM IMPACTS (circle one for each. Explain any "yes" answers):

Fish Kill	(yes) (no)	Discoloration	(yes) (no)
Visible solids instream	(yes) (no)	Noticeable Odor	(yes) (no)
Visible solids along Stream banks	(yes) (no)	Public Use Observed	(yes) (no)
		Public Access	(yes) (no)

LIST OF ATTACHMENTS (Check all that apply):

Volume Calculation _____

Memo _____

Map _____

Photo(s) _____

Other _____

SECTION II - TELEPHONE REPORT LOG

1) Telephone Report Made By: _____ Date/Time _____

Title _____ Phone Number _____

Comments: _____

Telephone Report Received By:

Name of Official Notified _____ (Check One) DEQ ___ DES ___ Date/Time Of
Contact _____

DEQ/DES Comments (If any) _____

Any additional telephone reports to DEQ/DES should be recorded below:

2) Telephone Report Made By: _____ Date/Time _____

Title _____ Phone Number _____

Comments: _____

Telephone Report Received By:

Name of Official Notified _____ (Check One) DEQ ___ DES ___
Date/Time Of Contact _____

DEQ/DES Comments (If any) _____

3) Telephone Report Made By: _____ Date/Time _____

Title _____ Phone Number _____

Comments: _____

Telephone Report Received By:

Name of Official Notified _____ (Check One) DEQ ___ DES ___
Date/Time Of Contact _____

DEQ/DES Comments (If any) _____

SEWER COLLECTION SYSTEM RELEASE REPORTING FORM

For all reportable releases, this completed form must be submitted to the Tidewater DEQ Office within five calendar days from discovery of the release

FROM: Department of _____
City of _____,
XXX Service Road, City of _____, Va. 230XX
Phone Number _____
Reference DEQ No _____
VPDES Permit No. _____

TO: Department of Environmental Quality/PREP
Tidewater Regional Office
Attn: Ms. Barbara Jones
5636 Southern Blvd
Virginia Beach VA 23462
Phone 518-2000
Fax: 518-2003.

RESPONDING OFFICIAL: _____
Name Title

TELEPHONE REPORT MADE BY: _____
Name Title

TELEPHONE REPORT RECEIVED BY: _____ DES _____

State Official's Name _____ Date/Time Reported _____ DEQ _____
(Check One)

FACILITY IDENTIFICATION: _____
(pump station number and name, valve number, etc)

Address: _____

Map Attached: yes _____ no _____

CAUSE OF THE OVERFLOW:
(THIS SECTION SHOULD BE COMPLETED BY COLLECTION SYSTEM OWNER MANAGEMENT)

DATE/TIME RELEASE BEGAN: _____

DATE/TIME RELEASE ENDS: _____

ESTIMATED DURATION OF RELEASE (hours, minutes): _____

ESTIMATED AMOUNT OF RELEASE: _____ gallons

CORRECTIVE ACTION TAKEN:

NAME OF RECEIVING WATERS: _____

MIGRATION PATH OF RELEASE _____
(storm drain, ditch, ground, contained, etc.)

IMPROVEMENTS COMPLETED OR UNDER CONSIDERATION TO PREVENT REOCCURENCE:
(THIS SECTION SHOULD BE COMPLETED BY COLLECTION SYSTEM OWNER MANAGEMENT)

For all reportable releases, this completed form must be submitted to the Tidewater DEQ Office within five calendar days from discovery of the release.

CC: _____

