

City of Portland Sewer Release Response Plan



Adopted January 1, 2012



SANITARY SEWER RELEASE RESPONSE PLAN

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I. Authority

The City of Portland Bureau of Environmental Services (BES) has developed the Sewer Release Response Plan (SRRP) in order to fulfill its NPDES permit requirements, and to ensure that the protection of the environment and the public's health and safety remains a high priority.

This document will provide the necessary guidelines for the BES staff and the Bureau of Transportation/Maintenance Operations (Maintenance Operations) staff in responding to a sewer release event.

II. General

The SRRP is designed to ensure that every report of a sewage release incident is immediately dispatched to the appropriate crews for confirmation and response. This plan is primarily intended to address response to dry weather sewer overflows (DWO) from any point in either the combined or sanitary sewer system, and to address wet weather sewer overflows (WWO) from any point in either the combined or sanitary sewer system, except at permitted CSO discharge points.

The City of Portland has developed this SRRP as part of the Capacity Management Operation and Maintenance Plan to establish procedures for responding to releases so as to:

1. Minimize the sewage release volume which enters surface waters,
2. Minimize the adverse effects of sewage releases on water quality, the environment, and public health,
3. Satisfy regulatory agencies and discharge permit conditions which address procedures for managing sewage releases,
4. Minimize the risk of enforcement actions against the City of Portland,
5. Protect private and public property,
6. Protect City personnel,
7. Protect all City owned facilities and assets,
8. Provide good customer service,
9. Reduce liability claims against the City.

This document establishes the process for responding to sewage releases from the City's combined and sanitary sewer system, and reporting to Department of Environmental Quality (DEQ) as required by the National Pollutant Discharge Elimination System (NPDES) Permit. BES has had a sewage release and sanitary sewer overflow (SSO) reporting and records retention policy in place since 1994 and managed by the Spill Protection & Citizen Response Section (SPCR). As the Bureau's regulatory arm, SPCR provides oversight of all complaints and ensures that all sewage releases, spills, and illicit discharges are properly and effectively mitigated, managed, and tracked. Regardless of cleanup or programmatic responsibilities, SPCR shall ensure that all illicit discharges receive consistent and appropriate responses.

SPCR maintains a 24 hour complaint referral hotline (503-823-7180). Outside of normal working hours, a designated BES Duty Officer monitors the hotline and is responsible for responding to all calls and pages. SPCR staff and the Duty Officer shall immediately respond to

complainants and dispatch Maintenance Operations, as necessary. This hotline is also the primary method for Maintenance Operations to report completed and ongoing activities to SPCR.

For purposes of this document, the term SPCR, shall refer to Spill Protection & Citizen Response staff during regular business hours and Duty Officers during off hours.

A. The City of Portland NPDES Permits:

BES is the permit holder for two (2) NPDES permits: Columbia Boulevard Wastewater Treatment Plant NPDES Permit #101505 and Tryon Creek Wastewater Treatment Plant NPDES Permit #101614. To maintain permit compliance, BES shall maintain this SRRP in an up-to-date condition and amend as appropriate. This SRRP is written with the intention of meeting the conditions described in the City of Portland NPDES permits.

B. Organizational Elements of the SRRP

The SRRP contains the following elements:

1. Permit Requirements
2. Response Procedures
3. Public Notification Procedures
4. Staff Training Needs

C. Definitions

1. Basement Backup: A dry or wet-weather sewage release from either a sanitary or a combined sewer that backs up into a basement or structure. This is sometimes referred to as “basement flooding”, but that can also refer to drainage and seepage problems.
2. Bypass: A legal EPA term that means sewage is routed around (bypasses) a treatment unit. This term is commonly but improperly used to describe an overflow from a pump station.
3. Combined Sewer Overflow (CSO): A wet-weather sewage release from a combined sewer outfall to a receiving stream.
4. Diversion Structure: A structure that splits the water into “underflow” that goes on to a treatment system and “overflow” that is either captured by a downstream facility or is released to the environment.
5. Dry Weather Overflow (DWO): A dry-weather sewage release from a combined sewer outfall to a receiving stream.
6. Overflow: Any spill, release, or diversion of sewage including:
 - a. An overflow that results in a discharge to waters of the United States; and
 - b. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.
7. Sanitary Sewer Overflow (SSO): A dry or wet-weather sewage release from a separated sanitary sewer to a receiving stream.
8. Sanitary Sewage Release (SSR): A discharge of sanitary sewage out of any structure to the natural or built environment – to anything other than a treatment facility. Sometimes referred to as a “Sewer Overflow.”

9. Sewer Surcharge: Occurs when water in the sewer system rises above the crown of the pipe and begins to pressurize the downstream pipe. This situation can be caused by excessive wet weather flows or a blockage downstream.
10. Street Flooding: A sewage release from either a sanitary or a combined sewer manhole due to surcharging in the sewer up to the ground surface.

D. Civil Monetary Remedies and Penalties:

The City of Portland employs a broad range of enforcement actions suitable for specific types of discharges and violations. Enforcement actions range from public outreach and education to formal notification, penalties, and cost recoveries. City Code 17.34 and associated Administrative Rules describe prohibited discharges and relevant penalties.

III. Sanitary Sewer Release Response Organization

The SRRP is intended to clarify and supplement the City's existing emergency plans and standard operating procedures. Specific procedures provided to Maintenance Operations staff are outlined in the Sewer Emergency Crew Training and Reference Manual.

The BES Sewage Release Response Organization outlined below provides a clear organizational structure designed to facilitate an understanding of the responsibilities of each staff member in BES and Maintenance Operations with regards to sewage release events.

A. Factors Affecting Sewer Releases and Responses

The service area is located on both sides of the Willamette River and south of the Columbia River. The area generally is bounded by low-lying hills paralleling the Willamette River on the west, other service areas outside the city limits to the south, the City of Gresham to the east, and the Columbia River to the north.

The service area covers about 96,000 acres, of which 26,000 are served by a combined sewerage system and 66,000 are served by a separated sanitary sewerage system. Another 8,000 acres outside of the service area are provided with sewage treatment through Intergovernmental Agreements (IGAs). There are approximately 2,336 miles of collection system that include 893 miles of combined sewer, 990 miles of separated sanitary sewer, and 453 miles of storm sewer. The system also includes 97 pump stations, 49 miles of force main, and two wastewater treatment plants.

City responsibility for the wastewater collection system includes all main lines, trunk lines, interceptors, pump stations, force mains, and service laterals from the sewer main up to the curb line. The City maintains responsibility for mainlines and the tee or the wye where easements exist. Service laterals on private property are the responsibility of the property owner.

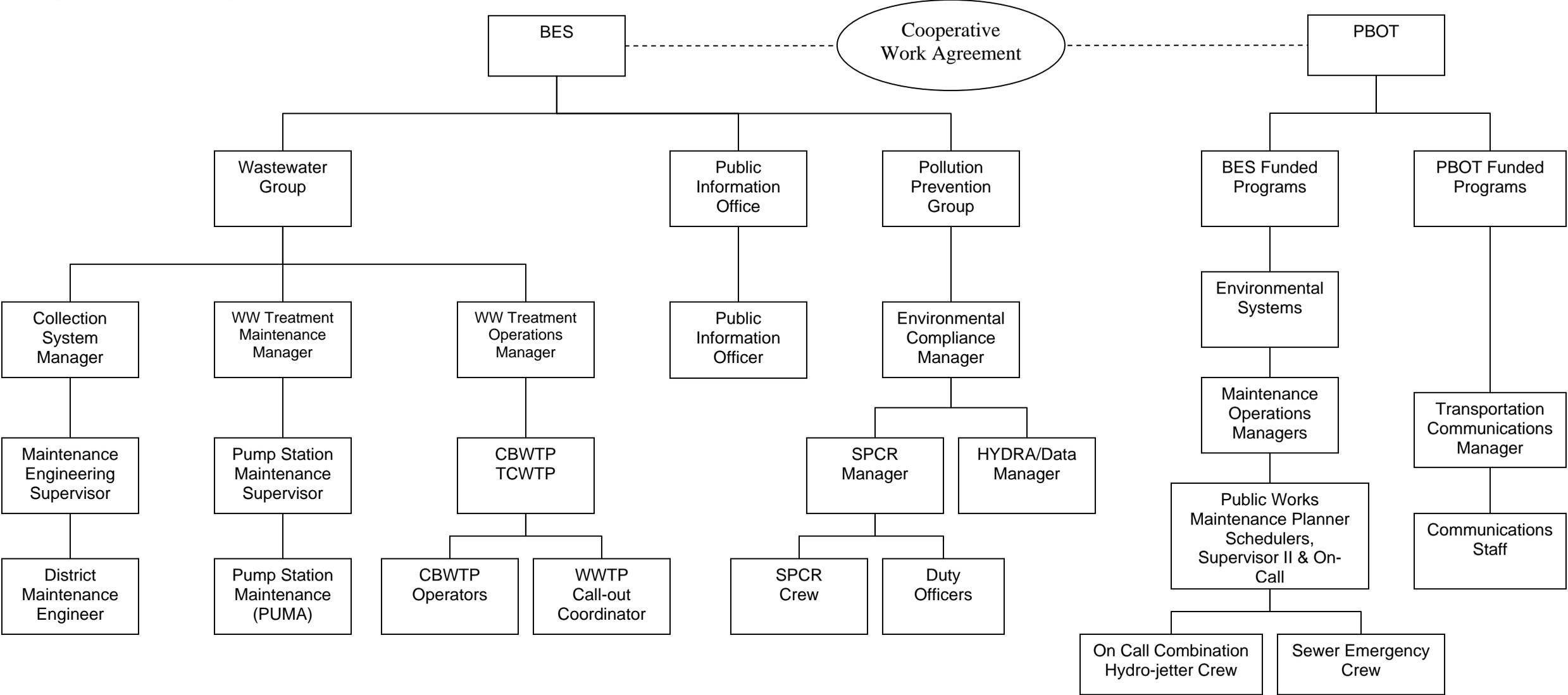
B. Sanitary Sewer Release Response Organization

A Collection System Operations & Maintenance Interagency Agreement was developed in the mid-1980s and has been renewed annually. The interagency agreement, which is formalized in Portland City Code, details the agreement between BES and PBOT related to responsibilities associated with operation and maintenance of the sewer system. BES owns, operates, and

maintains all public sanitary and stormwater collection, conveyance, and treatment systems within the City's corporate limits. BES has partnered with PBOT Maintenance Operations to provide a variety of collection system maintenance and repair tasks, including emergency responses to sewage releases. In the late 1990s, the interagency agreement was supplemented with a Collection System Maintenance Cooperative Work Agreement (CSM CWA) which further delineates roles and responsibilities between the parties. The basic structure of the City's response organization is outlined below in Figure 1.

SPCR, which is part of BES Pollution Prevention Services, is the primary responsible section for ensuring that all sewage releases have been properly responded to and reported on as required. SPCR works directly with Maintenance Operations on 24-hour and 5-day reporting requirements and collaborates with Maintenance Operations to ensure that mitigation and cleanup have been completed per BES standards. SPCR also tracks areas of concern and interacts with Collection Systems Maintenance Engineering and other sections to facilitate a proactive maintenance program to prevent and minimize sewage releases.

Figure 1: SRRP Organizational Chart



C. Roles and Responsibilities of Staff

1. **SPCR Manager:** This position is responsible for effective coordination for overall response to sewage release events. Primary duties and responsibilities include:
 - a. Coordinating with Maintenance Operations to ensure that emergency crews are promptly dispatched and onsite to investigate reported sanitary sewage release events. The City has a goal to be onsite within two hours of initial calls
 - b. Ensuring sewage release notification procedures are completed within the timeline requirements
 - c. Ensuring proper training of BES and Maintenance Operations staff
 - d. Providing direction to SPCR staff and Duty Officers

2. **Senior Public Works Supervisor:** This position sets priorities and provides leadership for Maintenance Operations personnel involved in sewage release response activities. Primary duties and responsibilities include:
 - a. Managing development of communication and documentation processes between Maintenance Operations Supervisors, Planner/Schedulers, Field Crews, Communications Center, and SPCR
 - b. Managing implementation and oversight of documentation and communication processes between Maintenance Operations and SPCR
 - c. Ensuring that all responses are appropriately documented
 - d. Providing direction to Public Works Supervisors for direct oversight and monitoring of sewage release response and mitigation efforts
 - e. Investigating complaints related to Maintenance Operations response and follow up actions

3. **Public Works Supervisor II (Sewer Cleaning and Investigation):** This position provides direct oversight to field crews responding to sewage releases and is responsible for directly monitoring crew activities during the responses. Duties and responsibilities include:
 - a. Assigning follow-up work for investigations, cleaning, and CCTV inspections
 - b. Creating work orders in the Hansen database to document all maintenance response activities assuring all customer service requests related to the response are completed and submitted for immediate data entry
 - c. Coordinating with the plumber and/or property owner to facilitate any follow-up investigations, cleaning, and repairs related to City service laterals
 - d. Submit completed sewage release forms to Data Entry, for SPCR information use within established deadlines
 - e. Coordinating and supervising cleanup and/or mitigation activities
 - f. Coordinating follow-up actions with the BES District Maintenance Engineer

4. **Public Works Supervisor II Duty Supervisor (On-Call):** The duties and responsibilities of this position include:
 - a. Acting after-hours supervisor for sewage release events
 - b. Supervising after-hours Sewer Emergency Response crew and on call combination hydro cleaner crew
 - c. Assembling and supervising sewer repair crew responses to releases that require open excavation to clear the blockage and calling in for underground locates

- d. Contacting property and business owners/managers who are affected by releases to determine if a callout is required
 - e. Ensuring all related documents are accurately completed and that SPCR is properly notified; ensuring that the appropriate district supervisor is briefed on activities to ensure appropriate follow-up
5. **Sewer Emergency Crew:** This crew is generally the first responder to any sewage release-related emergency that occurs. Duties and responsibilities include:
- a. Providing initial response to reported events and clearing the blockage, if possible
 - b. Notifying the appropriate Sewer Cleaning Supervisor of the problem, if excavation is required. Locating and marking the blockage location, completing a Dig Sketch, and related work for emergency underground utility locates
 - c. Documenting all findings from the investigation on the Daily Crew sheet, Sewage Complaint Form, and Track It
 - d. Calling the SPCR Hotline (503-823-7180) from the site to report the results of the initial investigation
 - e. Updating Supervisor of findings and progress
 - f. Responding to HYDRA overflow alarms
6. **On-Call Hydro-Jetter Crew:** This crew is on a weekly on-call rotation to respond to sewage releases that may occur after hours. Duties and responsibilities include:
- a. Responding to site, clearing the blockage, and relieving the release
 - b. Documenting all response activities
 - c. Responding to HYDRA overflow alarms, if Emergency Crew is not on duty
 - d. Calling the SPCR Hotline (503-823-7180) from the site to report the results of the initial investigation, and the time the release was stopped
7. **Communications Center (24 hour):** The Communications Center is a 24/7 operation which has been designated as the primary intake center for sewage release and maintenance-related calls. The staff is responsible for intake, documentation, and initial reporting of SSRs to SPCR. Duties and responsibilities include:
- a. Documenting all calls from citizens, plumbers, and others of suspected sewage release complaint events
 - b. Entering information in Track IT for email delivery to SPCR
 - c. Immediately notifying SPCR of discharges to waterways, storm sewers, or possible public exposure
 - d. Dispatching field crews for site response
8. **Maintenance Planner/Scheduler (Sewer Cleaning and Investigation):** This position is the liaison between SPCR staff and PBOT/MO staff. Duties include:
- a. Working with SPCR to develop efficient release reporting processes between SPCR and PBOT/MO staff
 - b. Performing QA/QC of PBOT/MO documentation
 - c. Liaising with SPCR for questions related to 24 hour or 5 day reporting deadlines. (ex. - Field Crew documentation, Track IT or Hansen database entries.)

- d. Managing and create crew forms for release response documentation, with SPCR collaboration
 - e. Collaborating on SRRP training presentations with SPCR staff
9. **SPCR staff:** The SPCR staff is available during regular business hours and carries out all necessary reporting within required timelines. Duties and responsibilities include:
- a. Ensuring appropriate release response and coordinating all notifications within timeline requirements during regular business hours
 - b. Reading Communications call intake information on Track It
 - c. Responding to sewage releases that have the potential to impact waterways
 - d. Receiving site release information from Emergency Crew on voice-mail system.
 - e. Calling Emergency Crew or Communications as needed for additional information
 - f. Contacting DEQ/OERS within 24 hours of sewage release notification
 - g. Notifying BES Public Information Officer of overflows, significant releases, and releases that have the potential for public exposure
 - h. Contacting other relevant federal, state, and local agencies regarding releases and potential impacts to their systems and/or residents
 - i. Requesting extension to the 5-day reporting deadline from DEQ as needed per event
10. **Duty Officers:** Duty Officers are on-call during all non-regular business hours and monitor a 24-hour citizen complaint hotline. This hotline is also the primary method of communication between PBOT/MO staff & the Communications Center and Duty Officers. Duties and responsibilities include:
- a. Ensuring appropriate release response after regular hours, including weekends and holidays
 - b. Receive site release information from Emergency Crew on the Hotline voice-mail system
 - c. Conducting site visits during sewage releases and/or circumstances that have the potential to impact waterways
 - d. Call Emergency Crew, Communications or On Call Supervisor as needed for additional information
 - e. Contacting DEQ/OERS within 24 hours of sewage release notification
 - f. Notifying BES Public Information Officer of overflows, significant releases, and releases that have the potential for public exposure
 - g. Contacting other relevant federal, state, and local agencies regarding sewage releases and potential impacts to their systems and/or residents
11. **Public Information Officer (PIO):** This individual is responsible for public notification of significant sewage releases that impact waterways. The PIO Duties and responsibilities include:
- a. Communicating with SPCR to ensure timely public notification for relevant sewage releases
 - b. Providing news releases and other public information if releases reach waterways or a serious health hazard is imminent
12. **BES Collection System District Maintenance Engineer:** This individual is called upon to respond to system failures that require emergency contracts to stabilize the situation and/or involve a larger project to rectify the situation. Duties and responsibilities include:

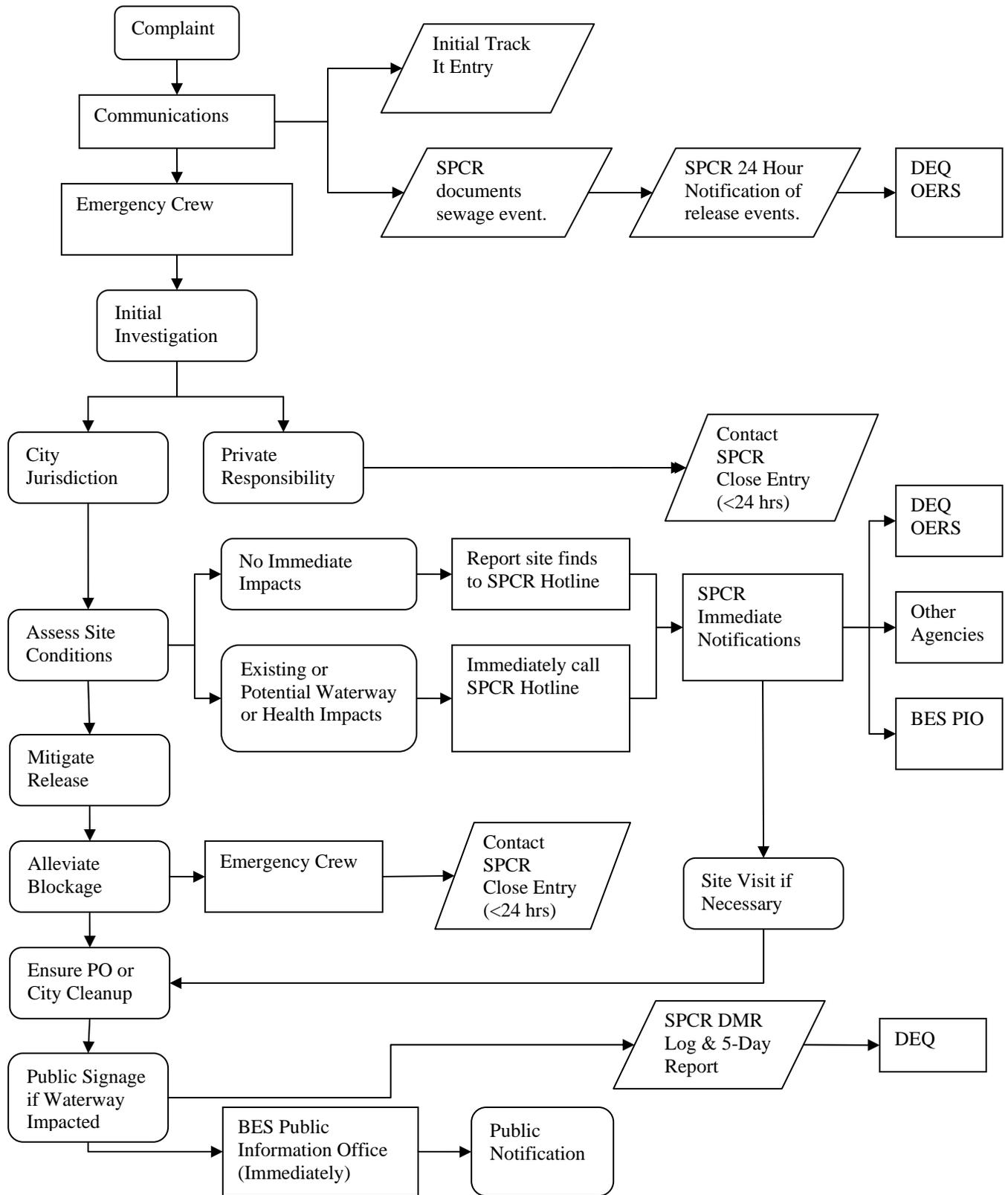
- a. Providing technical direction to PBOT for events occurring on weekends
 - b. Providing technical assistance to Maintenance Operations on-call supervisor
 - c. Providing technical assistance to SPCR within the 5-day written reporting period
13. **Columbia Boulevard Wastewater Treatment Plant Operations Center Operator:** The CBWTP Operations Center is staffed 24/7. The Console Operator operates the treatment plant and monitors portions of the collection system via two independent systems, HYDRA and Poller. Duties and responsibilities of the Console Operator include:
- a. Monitoring the alarm systems for new active alarms
 - b. Investigating alarms and determining if further action is required
 - c. Facilitating field response to alarms
14. **Columbia Boulevard Wastewater Treatment Plant Call-Out Coordinator:** This individual is responsible for coordinating responses to alarms and other emergency situations during non-business hours. Duties and responsibilities include:
- a. Responding to off-hour calls from the CBWTP Operations Center as well as from other responders within the City
 - b. Responding to requests for assistance from SPCR and Maintenance Operations
 - c. Dispatching crews to restore service to a pump station
15. **Pump Station Crews (PUMA):** These crews maintain all pump stations and respond to emergency situations as necessary. Duties and responsibilities include:
- a. Maintaining pump stations
 - b. Responding to alarms and emergency calls 24 hours/day
 - c. Notifying SPCR of sewage releases
 - d. Preparing Weekly Call-Out Sheets; the Call-Out Sheets include contact information of all on-call emergency response personnel for that week

IV. Sanitary Sewer Release Response Procedures

A. Sanitary Sewer Release Response Flowchart

Figure 2 below, City of Portland Sanitary Sewer Release Response Flowchart, displays the process for responding to all sewer release complaints in the City. This process includes receiving the initial complaint call receipt, mobilizing crews, mitigating the problem, cleanup, public notification, and reporting and tracking. Actions and responsibilities for each step in the process are clearly defined.

Figure 2: City of Portland Sanitary Sewer Release Response Flowchart



B. Receiving Complaints/Referrals

Upon receiving a complaint or referral of a sewage release, SPCR or Communications Center gathers as much information as possible from the complainant (Sewage Release Complaint Form). This information is also beneficial when notifying the public, reporting to DEQ, and following up with affected parties after the event is complete.

1. Incoming Calls

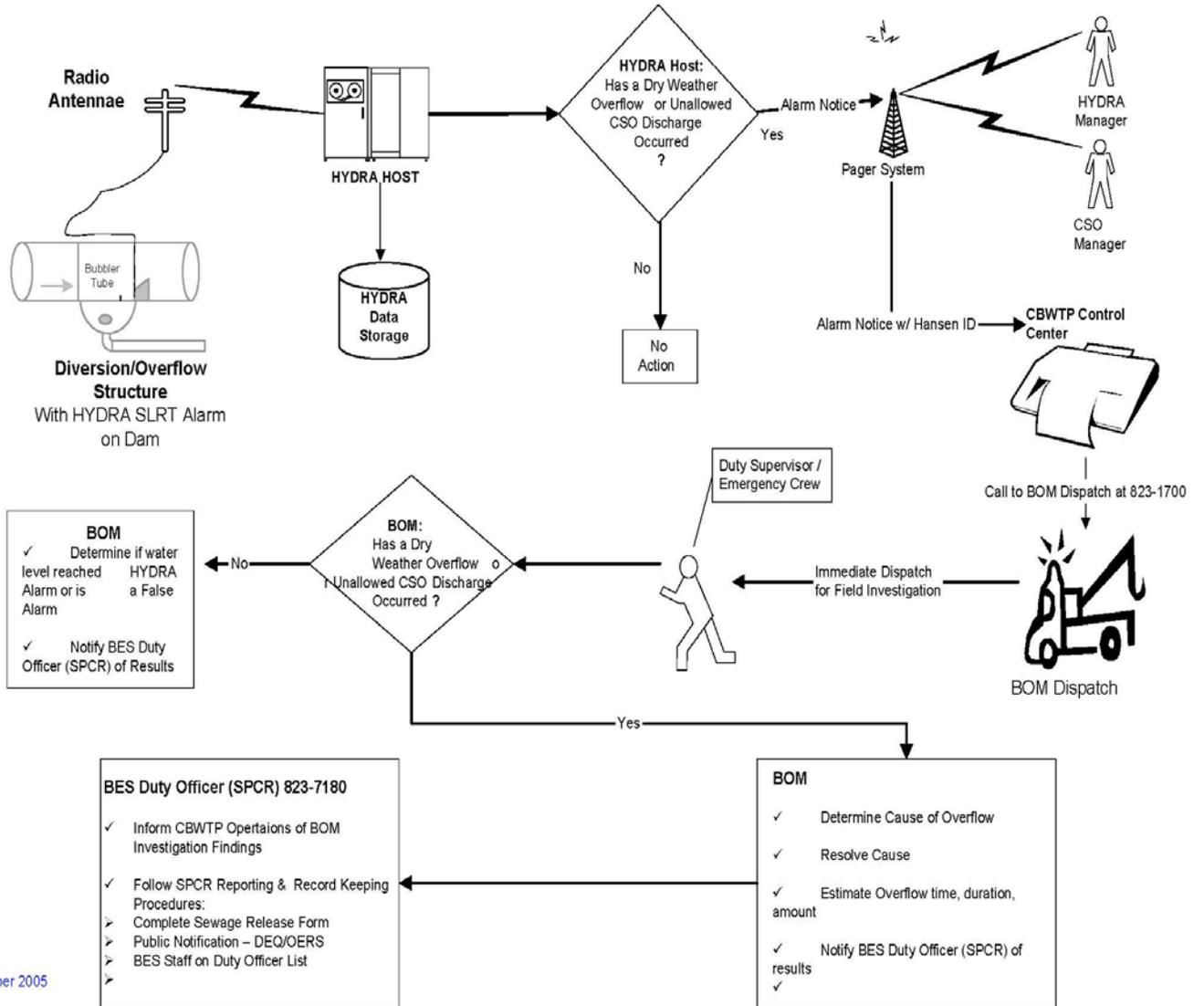
- a. The Communications Center usually receives calls directly from complainants. The Communications Center shall ask questions to characterize the situation and enter caller data into the Track It database.
- b. Maintenance Operations emergency crews are dispatched to the site to investigate reported releases.
- c. The crew reports findings to SPCR at the 503-823-7180 24-hour hotline while on site. During emergencies that require immediate action, field crews report back to their Supervisor and SPCR as soon as possible or immediately upon completion of mitigation and cleanup activities.
- d. SPCR maintains a 24-hour hotline and may receive citizen complaints directly. SPCR responds to calls within 30 minutes of receiving a complaint or referral and immediately contacts the Communications Center at a 24-hour hotline.
- e. Regardless of who receives the complaint, all calls are immediately routed through the Communications Center.
- f. If Maintenance Operations Emergency Crews are not available, SPCR responds to the site to verify a release and then contacts and mobilizes the City contractor.

2. If a HYDRA alarm initiates the call, the HYDRA Alarm Response Procedures shall be followed. See Figure 3 below.

- a. Dry weather overflow (DWO) alarms occur when the Sewer Level Remote Telemetry (SLRT) devices monitor measures water on the dam at the alarm trigger level but no measurable rainfall was recorded by the HYDRA rain gages in the CSO area for the past 8 hours.
- b. Response personnel shall interpret an alarm during dry weather as a DWO.
 - i. HYDRA software initiates an alarm that is sent to the Columbia Boulevard Wastewater Treatment Plant (CBWTP) Operations Control Center, CSO Program Manager, and the HYDRA Manager
 - ii. When the CBWTP Operator on duty receives a HYDRA overflow alarm the following actions are taken:
 1. If the alarm is for a CSCC Overflow Location:
 - a. CBWTP Operators should examine the Influent Pump Station wet well level in the Consolidation Conduit to determine if the water depth in the conduit is close to the overflow level (CSCC Diversion Overflows).
 - b. If the depth is close to the overflow level and in agreement with the HYDRA alarm, then standard operating procedures should be followed.
 2. If the depth is not close to overflow and contradicts the HYDRA alarm, then HYDRA on-call personnel should be notified that there is a malfunction with the specific alarm.

- a. If the alarm is for a North Portland or Willamette River Location:
 - i. CBWTP Operators should contact Communications Center (823-1700) to request an investigation of the alarm.
 - ii. The alarm message will contain the Hansen ID for the diversion/overflow structure to be investigated.
 - iii. If Maintenance Operations staff finds that an overflow has indeed occurred, they should follow standard procedures.
- c. Standard Procedures For An Identified Overflow
 - i. Determine the cause of the overflow
 - ii. Resolve problem by removing obstruction, clearing blockage, or providing temporary flow diversion around the problem
 - iii. Notify BES Duty Officer of overflow, cause, resolution, and name of original source of notification from CBWTP
 - iv. If an overflow did occur, the Duty Officer will follow standard reporting and record keeping procedures. These procedures include informing CBWTP Operations of the results of the Maintenance Operations inspection, completing the Sewage Release Complaint Form, initiating the public notification process, and notifying relevant BES staff.
- d. Standard Procedures if Maintenance Operations finds that an overflow has NOT occurred:
 - i. Maintenance Operations shall, while they are on site, determine if water level rose up close to the dam overflow level such that the HYDRA alarm trigger might have been properly activated.
 - ii. Notify BES Duty Officer of findings regarding no overflow and the findings of the Maintenance Operations investigation.
- e. If it is determined that overflows have occurred, CSO Program staff will assess and describe the characteristics of the overflow for compliance reporting purposes. The information will include the statistics of the overflow event and appropriate rainfall data.

Figure 3: Diversion/Overflow Structure Alarm Response Process



December 2005

C. Managing the Response

SPCR shall contact Maintenance Operations as the primary responder for all release events. Upon arrival at site, Maintenance Operations determines the location of the release, mitigates and resolves the problem, employs appropriate public signage procedures, assesses the impact, and contacts SPCR. If Maintenance Operations is unavailable or unable to respond, the BES private contractor shall be mobilized. SPCR shall conduct the investigation and direct contractor activities.

1. Confirm Sewage Release:
 - a. Maintenance Operations shall investigate all calls
 - b. If no release is found, the Emergency Crew contacts SPCR with the response information
 - c. If a property owner or affected party indicates that a release occurred, but a release cannot be verified, SPCR is notified of the discrepancy for further investigation
 - d. Once a release is identified, a Maintenance Operations Crew investigates the event and determines how best to stop the release. The Crew contacts SPCR to report information on the release
 - e. The crew response information and site findings are entered into Track It and Hansen by PBOT/MO the next working day
 - f. Sewage releases that occur as a result of maintenance activities when positive control was not maintained shall be deemed a sewage release and shall be reported to SPCR
 - g. If the event is within the DEQ specifications of being under positive control, SPCR staff document the event as a Positive Control situation
2. Initial site assessment: SPCR and/or Maintenance Operations identify the impact or potential impact to City assets and waterways
 - a. Crews on site shall determine if storm drains and/or waterways have been impacted. If a sewage release is draining to a waterway, storm sewer, or UIC, attempts will be made to divert the sewage away from these assets
 - b. Attempts shall be made to return the sewage to the sewer line or combined sewer system as soon as possible
 - c. The District Maintenance Engineer or On-Call Maintenance Engineer shall be contacted if there is a structural failure in the system that requires reconstruction or the circumstances are beyond Maintenance Operations response capabilities or a construction contractor is required due to the extent of the structural deficiency in the sewer
3. Minimize public exposure
 - a. If immediate hazards or public exposure are occurring or imminent, SPCR shall immediately begin the public notification process and initiate internal (BES Public Information Office) and external (DEQ/OERS) reporting measures.
4. Assess Impacts to Public Areas and Private Property: SPCR and/or Maintenance Operations shall identify immediate hazards and the potential for public exposure.
 - a. Responders shall determine if sewage has entered a publicly accessible area, including waterways, parks, sidewalks, and streets. In the event that a sewage release enters a waterway, park, or other publicly accessible area, mitigation efforts will begin immediately to alleviate any impact to these areas. SPCR shall be notified and Public Notification procedures shall be completed in accordance with the severity and location of the release.
 - b. If the event is determined to be private responsibility, advisory information regarding cleanup and safety procedures may be provided to the property owner. If immediate

- hazards exist, Maintenance Operations may relieve the blockage and refer the property owner to private plumbers or contractors.
- c. Private property impacts shall be investigated by Maintenance Operations as possible for the situation, particularly those where the public may be exposed to the release. The site findings are reported to SPCR. These may include, but are not limited to, food service establishments, businesses, and multifamily residences.
 - d. If food service establishments are impacted, SPCR shall immediately contact the Multnomah County Health Department, Environmental Health Section and provide the following information.
 - i. Location of release
 - ii. Name of food service establishment
 - iii. Contact person, if known
 - iv. Time release began, or time aware of release
 - v. Estimated flow rate and/or total volume of release
 - vi. Current status of release
 - vii. Cause of release, if known
 - viii. Other sites currently being impacted by the back-up, if known
5. Determine Location of Blockage with one or more of the following:
- a. Visual inspection of system and assets: Determine if main sewer is plugged by checking upstream and downstream sewer manholes.
 - b. Cleanouts: Some properties have cleanouts outside the building. If these exist, Maintenance Operations may use a cleanout to determine the location of the blockage.
 - c. Dye Test: This is generally used for cavities and sinkholes.
 - d. Closed Circuit Television (CCTV) inspection of sewer lines if visual inspection is not possible.
6. Determine Jurisdiction:
- a. When a sewage release occurs, the event is characterized as either a City jurisdiction release or a private responsibility release. This determination is critical in determining City cleanup responsibilities, reporting requirements, and City liability.
 - b. Sewage releases are determined to be City jurisdiction or private responsibility according to the location of the obstruction. The City has jurisdiction from curb to curb. Private responsibility includes the private lateral that runs from the house or business or from tee/wye to building in easement areas to the City connection.
 - c. Private plumbers may make an initial determination of jurisdiction. However, this will be verified by Maintenance Operations or the BES District Engineer. This process is documented in the Maintenance Operations Sewer Emergency Crew Training and Reference Manual.
 - d. If the property owner contests jurisdiction or there is uncertainty regarding jurisdiction, Maintenance Operations notes that on the Sewage Release Complaint Form provided to SPCR for further investigation.
7. Conduct mitigation activities:
- a. Determine Source and Cause of Release. The source and cause of the release of the release is critical in determining the type of mitigation and to determine if additional maintenance or enforcement actions will be necessary. The categories of release causations are:

- i. Grease: If a grease source is responsible for the cause, the SPCR grease management team will conduct a follow-up investigation.
 - ii. Roots: If tree roots caused the blockage, the line will be placed on an appropriate treatment program.
 - iii. Rocks/gravel: Identify sources if possible and increase line cleaning frequency.
 - iv. Multiple Types of Debris: Identify sources if possible and increase line cleaning.
 - v. Cross Connection: Identify responsible party and repair the lines.
 - vi. Line Sag/Failure: The District Maintenance Engineer or On-Call Maintenance Engineer will be notified and long term solutions will be developed including excavating and replacing the line.
- b. Clear blockage with appropriate method, including hand rod, jet rod, Vactor®, excavation, or other technique as appropriate.
 - c. Any material causing the blockage is extricated.
 - d. If the line must be excavated, an emergency work order is placed or temporary relief is provided until appropriate permanent mitigation measures can be completed.
8. Perform remediation activities
- a. BES shall provide printed customer service advisory information for Maintenance Operations to provide regarding cleanup and safety procedures to property owners to clean up sewage and associated material released into a building.
 - b. When major sewage releases occur in public areas, every effort shall be made to return the sewage to the collection system. Per the City's NPDES permit, all *“solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.”* Depending on conditions, SPCR may mobilize a contractor and immediately begin site remediation, including removal of sewage, washing the area, and applying a solution of lime and water.
 - c. In the event that the sewage release is within 50 feet of a waterbody, every effort will be made to remove as much material as possible. Lime will not be used within this buffered area.
9. Disinfection
- a. The City uses granular lime for disinfection on residential sites, grassy areas, pavement, and other non-water locations.
 - b. Granular lime shall not be used at a location, such as stream banks, where it may reach a water body.
 - c. Where lime is not used, the area will be barricaded and surrounded with caution tape. The site will be manually cleaned and, if necessary, mulch will be applied to further prevent exposure.

V. Public Notification and Sign Posting

A. Temporary Signage

The 2009 Sewage Release Public Notification Procedure Manual, the Dry Weather Overflow Notification Policy and the 2005 Combined Sewer Overflow Notification Policy reviewed by EPA, shall be implemented and followed for overflow events. If a DWO enters any waterbody, the following procedures shall be followed:

1. If SPCR is not on-site, the first responders shall immediately contact SPCR.
2. SPCR shall mobilize to the site and ensure that all necessary temporary public signage is posted as appropriate.
 - a. Dry Weather Overflow Signs
 - i. Signs are placed at public access points near the overflowing outfall pipe
 - ii. Sandwich board signs are placed at potentially impacted public recreation areas near the discharging outfall immediately.
 - iii. Signs shall remain in place for 48 hours after the overflow is stopped.
 - iv. Internet Notification: Internet users can log on to the Environmental Services website at www.portlandonline.com/bes/overflow to see if a DWO has occurred.
 - b. For the Willamette River, the Public Information Office contacts the Environmental Services River Alert contractor, West Coast Marine Cleaning at 503-285-2485, to deploy three warning buoys to mark the area affected by the DWO. Within 4 hours, the warning sewage buoys shall be deployed to mark the outfall location where the overflow enters the river. The buoys are marked with the message, “Warning: Sewage” and the international “No Swimming” symbol. Buoys are placed:
 - i. 100 feet in front of the outfall pipe that is overflowing,
 - ii. 300 feet downstream of the overflowing outfall pipe, and
 - iii. 150 feet upstream of the overflowing outfall pipe
 - iv. The Division notifies West Coast Marine Cleaning to retrieve the buoys 48 hours after the DWO is stopped.

B. Media Response:

1. SPCR shall contact the BES Public Information Officer or designee as soon as possible for any overflow that meets notification criteria to expedite public notification and media advisories.
2. BES will use the following criteria in determining if public notification is necessary:
 - a. An overflow to surface water that is greater than 40 gallons, or suspected to be greater than 40 gallons
 - b. Any overflow that is greater than 400 gallons, or suspected to be greater than 400 gallons
 - c. Other SSOs requiring public notification to minimize public exposure:
 - i. Site has a high potential for public access, exposure, and visibility
 - ii. Is less than 40 gallons to surface water, but occurs at a time when public access is probable and a potential health risk exists
 - iii. Is less than 400 gallons, but overflows to an area at a time when public access is probable and a potential health risk exists (e.g. school, park, high traffic public building)
3. SPCR shall provide the Public Information Officer with as much of the following information as available:

- a. Location of the release
 - b. Date and time release was verified
 - c. Date and time release was stopped
 - d. Waterway, if any, the release entered
 - e. Action taken to stop the release
 - f. Cause of the release, if known
 - g. Estimated volume of the release
4. The BES Public Information Officer will respond to media questions, as necessary
 5. The public notification may include fax and email media advisories to local newspapers, radio and television stations, and to the City of Portland Office of Neighborhood Involvement email notification network.
 - a. The advisory information will include:
 - i. Nature and time of the release
 - ii. Amount of release (estimated gallons per minute)
 - iii. Location of release (landmarks and addresses)
 - iv. Notification procedure used to inform the public of the event
 - v. Who the media should call for additional information
 - b. Notifications are sent to the following:
 - i. Newspapers: Oregonian, Associated Press, Daily Journal of Commerce, Portland Tribune
 - ii. TV and Radio: KATU, KGW, KOIN, KPTV, KXL, KPAM, KEX, KINK, KOPB
 - iii. River Alert Email Notification List: Oregonian, Associated Press, 4 Portland TV stations, 6 Portland radio stations, ONI Notification, BES Duty Officer, BES Bureau Leadership Team, City Council members, and Public Health offices (Multnomah, Washington and Clackamas Counties).

C. Other Notifications:

Notifications to neighboring jurisdictions, neighborhood associations, and homeowner associations are made as appropriate to affected parties. See section IX for specific third party notifications.

VI. Sanitary Sewer Release Sampling and Monitoring

A. Surface Water Sampling

1. At the direction of the SPCR Manager and whenever a release reaches surface water, sampling of waterbodies impacted by the sewage release shall be completed.
2. If a waterbody may have been impacted, water quality sampling shall occur upstream, downstream, and at the projected point of discharge.
3. Conducting sampling at the appropriate locations will allow staff to establish and monitor the levels of contamination as well as to establish or compare with the natural background levels of bacteria in the receiving waters.
4. The sampling regimen is to be continued until a determination is made that contamination resulting from the sewage release event no longer exists and no longer poses a danger to the public.

VII. Reporting to Oregon Department of Environmental Quality or Oregon Emergency Response Services (OERS)

A. 24 Hour Notification:

1. SPCR is responsible for reporting and monitoring all sewage releases according to the requirements of its NPDES permits.
 - a. Per the NPDES permit, the City of Portland is required to report to DEQ any noncompliance that may endanger health or the environment within 24 hours of the City receiving the complaint.
 - b. Within 24 hours the City shall notify OERS, or OERS and DEQ, via telephone after the discharger has knowledge of the event, and can make that notification without substantially impeding mitigation, containment, cleanup or other emergency measures.
 - c. All events that the City becomes aware of, including private and City jurisdiction, shall be reported to DEQ or OERS, as necessary. This shall also include basement back-ups and releases to the environment.
2. Sewage Releases/Overflows
 - a. Oral Reporting within 24 hours: For overflows other than basement backups, the following information must be reported to OERS at 1-800-452-0311. For basement back-ups, this information should be reported directly to DEQ and not to OERS.
 - i. The location of the overflow
 - ii. The receiving water, if there is one
 - iii. An estimate of the volume of the overflow
 - iv. A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe)
 - v. The estimated date and time when the overflow began and stopped or will be stopped
 - b. The following information must be reported to the DEQ Regional office, at 503-229-5295, within 24 hours, or during normal business hours, whichever is first:
 1. The OERS incident number along with a brief description of the event

- ii. The DEQ offices are open Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. with the exception of holidays. Calls made to the DEQ offices after hours will be forwarded to a voice mail answering system.

B. 5 Day Reporting

SPCR facilitates submittal of written reports to DEQ within the five-day time requirement of the NPDES Permit.

1. Written reports are produced by SPCR for BES management review and submittal.
2. SPCR shall attempt to obtain a written reporting waiver from DEQ for all basement back-ups and minor events attributable to the City that have little potential impact to health or the environment.
3. All sewage releases and overflows that are attributable to the City shall be tabulated on a monthly log, attached to the CBWPT DMR, and submitted to DEQ by the 15th of each month.
4. For all events that a waiver is not requested and/or granted, SPCR shall provide a written report to DEQ within 5 days of becoming aware of a release using the DEQ electronic reporting form, which includes the following information:
 - a. The OERS incident number
 - b. A description of the noncompliance and its cause
 - c. The period of noncompliance, including exact dates and times
 - d. The estimated time noncompliance is expected to continue if it has not been corrected
 - e. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps
 - f. (for storm-related overflows) The rainfall intensity (inches/hour) and duration of the storm associated with the overflow
 - g. Public notification steps taken

VIII. Sanitary Sewer Release Documentation

In addition to the DEQ SSO Reporting Form, which is the official report sent to the regulatory agencies and the local recipients, SPCR may compile monthly, quarterly, and annual POTW Sewage Release Reports. These reports are provided to the Sanitary Sewer Release Reduction Team, which assists in identifying trends and areas in need of enhanced inspections and maintenance.

IX. Third Party Notifications

Other Reporting Contacts: Based on the type of sewage release, the Duty Officer may need to contact other affected parties. These may include, but are not limited to the following:

A. Notification to Collection Systems Maintenance Engineering

1. Notifications are made to the On-Call Collection System Maintenance Engineer when specific technical information is needed to remedy system failures.

B. Notification to Relevant City Programs: Notifications to the groups below occur for any discharge that has the potential to impact their program.

1. BES program managers (e.g. UIC, MS4, etc...)
2. BES watershed managers (e.g. specific to that stream)
3. Superfund managers (e.g. generally related to cleanup of any discharge)
4. Grease Management staff (e.g. if release is related to grease blockage)
5. BES Maintenance Engineering (long-term maintenance, operations, and planning)
6. Water Bureau (e.g. if there is a potential impact to drinking water supplies)

C. Notifications to Other Parties

1. County Health Departments (e.g. exposure at a food service establishment)
2. Neighboring jurisdictions (e.g. sewage release that flows to another jurisdiction)
3. Adjacent properties (e.g. schools)

X. City Databases

The following databases are used by Maintenance Operations and BES to track sewage releases, assets, maintenance engineering, and future sewer line work orders.

- A. TRACS:** The TRACS database includes individual property parcels in the City of Portland and contains a wide variety of data including the recording of building permits, code violations, and nuisance actions.
- B. HANSEN:** Hansen is the BES Collection System maintenance management system. It includes data of system assets, work orders requested and completed, and other maintenance operations, such as CCTV and liner installations.
- C. Track It:** Track It is a citizen complaint call intake recording system at PBOT. The phone call information is recorded in the Track It system. Field response data and site findings by the responding crew are noted with the caller information in Track It.
- D. Aquarius:** Aquarius is the BES Pretreatment database, which is designed to facilitate production of the Pretreatment Annual Report by being a repository of data on permitted and non-permitted industrial users of the collection system.
- E. Synergen:** Synergen is the work and asset management software used by the Wastewater Group for treatment plants and pump station facilities. Many aspects of the Wastewater Group maintenance program involve Synergen, including asset inventory, work requests, work orders, preventive maintenance and work assignments. BES Synergen is also used for timekeeping, requesting leave and is fully integrated with the CBWTP warehouse and purchasing programs.
- F. HYDRA:** The **HY**drological **D**ata **R**etrieval and **A**larm system collects and stores data from a citywide system of rain gauges, flow monitors, and pump stations. Collected data is used for operation, maintenance, repair, and design of the City's wastewater and stormwater collection system, and for notification and compliance with Federal and State regulations. As a critical system it is under 24/7 operation and emergency response.
- G. IFIX:** IFIX is the brand name for the City of Portland's SCADA (Supervisory Control and Data Acquisition) system. IFIX is used primarily at the treatment plants. While HYDRA is the primary monitoring and data collection system for the pump stations, IFIX provides a backup to HYDRA for about 70 percent of the pump stations.

XI. Report Forms

PBOT/MO sewage release reporting information is recorded on the TrackIt system Sewer Cleaning- Reported Sewage Release electronic form.

SPCR documents additional reporting and tracking data on the BES Sewage Complaint Response form (see Appendix B).

XII. Retaining Records

All sewage release reporting records, including the BES Sewage Complaint Response Form, will be retained for a period of five (5) years from the date of the final report in the Administrative Office files. The records shall be filed in the “TRACS electronic tracking system and a hard copy shall be filed with SPCR Records” file.

XIII. SRRP Maintenance and Revisions

A. SRRP Revisions:

1. The Sewage Release Response Plan shall be kept at the following locations:
 - a. Environmental Compliance Division
 - b. SPCR & Duty Officer
 - c. PBOT Maintenance Operations
 - d. PBOT Communications Center
 - e. Maintenance Engineering (On Call Coordinator)
 - f. Public Information Office
 - g. CBWTP Operations Manager
 - h. PUMA Operations
2. The Sewage Release Response Plan shall be reviewed and revised on an annual basis and as necessary, by the SPCR Manager.

B. Essential Resource Preparedness Oversight

The following items will be reviewed by BES and PBOT/MO on an annual basis to ensure that both agencies are prepared and able to respond to all overflows and that equipment is well maintained and up to date.

1. Ensure that cleaning and response equipment is standardized and functional
2. Ensure that emergency equipment is maintained
3. Ensure that all staff are trained and that stand-by personnel are clearly designated
4. Ensure contracts are in order to acquire cleanup and construction services on an emergency basis (on-call emergency contracts)
5. Ensure that technology, maps, and technical support is quick, accurate, and updated
6. Ensure that mutual aid agreements with neighboring agencies are reviewed, clear, and effective

XIV. Employee Training

A. Responsibility:

1. The SPCR Manager schedules training designed to identify resource shortcomings, clarify roles and responsibilities, improve response performance, and reveal any response weaknesses.

B. Training Modules: New employees will receive relevant training as outlined below, while existing staff will be expected to complete all relevant training on an annual basis.

1. Sewage Release Response Procedures:
 - a. Training will be conducted with respect to the details of the SRRP and any associated updates.
 - b. Additional training sessions may also be conducted by the Operations and Maintenance Departments to further familiarize their employees with the response procedures.
2. Estimating Sewage Release Flows and Volumes:
 - a. Training will be provided to relevant staff, including Maintenance Operations crews, SPCR staff, BES on-call coordinators, and pump station crews to accurately determine flow rates and volumes.
3. Sewage Complaint Form Completion:
 - a. The SPCR Manager and Maintenance Operations Senior Public Works Supervisor will provide training for relevant SPCR and Maintenance Operations staff to ensure that staff understand and are able to complete the form as required.
4. Water Quality Sampling Protocol and Procedures:
 - a. Training will be provided related to water quality sample collection to determine potential impacts to a waterbody.

XV. Phone Directory

The following phone directory provides SPCR personnel with the current contacts for regulatory agencies and resources:

SPCR Hotline:	503-823-7180
Maintenance Operations Communications Center:	503-823-1700
CBWTP Console:	503-823-2500
Oregon Emergency Response Service:	1-800-452-0311
DEQ NW Regional Office:	503-229-5263
Clean Water Services, Washington County:	
Main Office:	503-681-3600
Field Operations:	503-547-8107
US Coast Guard:	
8am-4pm:	503-240-9379
Command Center:	503-861-6211
Oregon Department of Fish & Wildlife:	
Main Office:	503-947-6000
Washington County:	
Office:	503-846-8722
After hours:	503 846-3594
Contact person: Ms. Toby Harris	503-846-4932
Multnomah County	
Contact person: Jon Kawaguchi	503-988-3400
Clackamas County	
Contact person: Steve Dahl	503-655-8386
Contact person: Paul Lewis	503 309-3482
Oregon Health Department, Environmental Public Health:	
Portland office:	971-673-0400
Port Of Portland:	
PDX Communications Center:	503-460-4747
Non-Aviation:	503-240-2230
Multnomah County Drainage District:	
District #1 (Dave Hendricks):	503-281-5675
Oregon Department of Transportation (ODOT)	
ODOT Dispatch:	503-731-4338

Appendix B: PBOT/MO FIELD CREW SEWAGE RELEASE FORM

FIELD CREW INSTRUCTIONS:

- This form is used for any Sewage Release response. Every Sewage Release form should have a TrackIT created and associated with it. If you find a release, call Dispatch at 503-823-1700 to create a TrackIT.
- Collect information and complete as much of this form as possible. Call SPCR as soon as possible and leave a message with information from the items *starred and in CAPS* below (503-823-3000, pick 3-7180 as the mailbox). If no release, call SPCR and provide with a brief detail of your findings.
- Submit completed form along with corresponding TrackIT to your supervisor at end of shift.
- **SUPERVISORS** - put this form along with corresponding TrackIT in the priority data entry box ASAP after reviewing.

PBOT/MO FIELD CREW SEWAGE RELEASE FORM

1. ADDRESS/LOCATION OF RELEASE: _____

2. BUSINESS - FOOD SERVICE - RESIDENTIAL - MULTI-FAMILY RESIDENTIAL

3. BOM ON SCENE: (Date) _____ (24-HR. TIME) _____ (Crew) _____

4. LOCATION OF PROBLEM. If a MS problem, include node numbers: _____

5. Investigation: Checked MHs – OK Surcharged Not available

Location of Cleanout _____ Cleanout – OK Backed up Not available

6. RESPONSIBILITY: City City Investigating Private

7. WAS THERE EVIDENCE OF A RELEASE? Yes No

8. FLOW RATE: _____ Gpm TOTAL DISCHARGE: _____ (Apx. Gallons)

9. SEWAGE DESTINATION:
 Basement (take photos) - finished or unfinished, First Floor, Ground, Ditch, Stream,
 Waterway Catch Basin to: Storm Sewer, Combined Sewer, Sump, Sediment MH
 If other, describe: _____

10. ACTIONS TAKEN BY PBOT/MO: Hand Rod, Jet Rodder, Dig
 If Other, describe _____

11. RELEASE STOPPED: (Date) _____ (24-HR. TIME) _____

12. Suspected Cause of Release:
 Grease, Roots, Defective Pipe, Soft Plug, Vandalism, Rocks, Gravel, Overloaded System,
 Debris, Unknown If other, describe: _____

13. SIGNS PLACED? WHERE/HOW MANY?: _____

14. Describe Type of Public Exposure: _____

15. Cleanup Actions Taken: _____

16. Private Contractor on Scene? Name: _____ Phone: _____

17. Date / 24 Hour time called to SPCR _____

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Appendix C: BES Sewage Release Form

1. **Location of Release:** _____
Business Name: _____ **or Resident Name:** _____
 Phone: _____ Phone: _____

2. **BES notified:** (date) _____ (time) _____ : _____ by: _____ phone: _____
TrackIt # _____ **Service Request #** _____

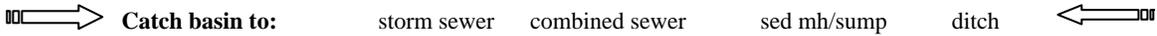
3. **BOM notified:** (date) _____ (time) _____ : _____ **BOM to scene:** (date) _____ (time) _____ : _____

4. **DEQ notified:** (date) _____ (time) _____ : _____ by: _____ DEQ DO name: _____
Waiver request: (date of written request) _____ Waiver granted: _____

5. **OERS notified:** (date) _____ (time) _____ : _____ by: _____
 OERS Dispatcher name: _____ OERS Incident #: _____ - _____

6. **Responsibility:** City Private Unknown but investigating

7. **Rate of overflow:** _____ gpm **Total amount of spill:** _____ gallons

8. **Where does sewage go?** a) Basement ground other: _____
 **Catch basin to:** storm sewer combined sewer sed mh/sump ditch

b) **Receiving water:** N/A Willamette Columbia Columbia Slough Fanno Tryon Johnson Stephens

9. **Watershed:** Willamette Columbia Columbia Slough Fanno Tryon Creek Johnson Balch Ivy Stephens
 other: _____

10. **Actions taken by BOM:** vactor, jet, rodded, check main, emergency dig, other _____
Actions taken by BES: _____

11. **Release stopped:** (date) _____ (time) _____ : _____ **DEQ/OERS updated?** Yes (when) _____ No

12. a) **Cause of release:** grease roots rocks/gravel broken pipe overloaded system vandalism debris
 other: _____
 b) If roots, call Gail Luthy (823-7381) to check root maintenance history and plans – SPCR only.

13. **Public Exposure:** Yes No If yes, describe: _____

14. **Public Notification?** If release to environment, contact **BES Communications**
 (Linc Mann 823-5328, 503-301-2341p, 503-641-1529; or Megan Callaghan 823-4759)
 Person contacted with BES Communications: _____ (date) _____ (time) _____ :

15. **Food Service?** Notify Multnomah County EHI (see weekly update sheet): (date) _____ (time) _____ : _____

16. **Sewage release signs posted?** Yes No Where?: _____

17. **Cleanup activities:** _____

18. Weather conditions: dry / rain / showers 19. Rainfall on day of spill: _” 20. Pipe diameter: _”
 21. Signs removed (if yes, when): _____ 22. Sewer: combined / separated / storm / sump
 23. Work Order and type # _____
 24. Hansen asset numbers: _____ to _____ to _____
 25. Other information (contractor activities, previous spill location, maintenance history, etc.): _____

