City of Daly City

Overflow Emergency Response Plan

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Prepared by David Patzer, DKF Solutions Group
(707) 373-9709 dpatzer@dkfsolutions.com

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Sanitary Sewer Overflow Emergency Response Plan (OERP)

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Sanitary Sewer Overflow Emergency Response Plan

1. Purpose

The purpose of the City of Daly City’s Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the City’s service area. This OERP satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

2. Policy

The City’s employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City’s goal is to respond to sewer system overflows as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the San Francisco Regional Water Quality Control Board (SFRWQCB) and the California State Water Resources Control Board (SWRCB).

3. Definitions as Used in This OERP

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

FOG – Fats, Oils, and Grease: Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

LEGALLY RESPONSIBLE OFFICIAL (LRO): Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

MAINLINE SEWER: Refers to City wastewater collection system piping that is not a private lateral connection to a user.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

MAJOR SPILL: A spill of whatever size that, based on a reasonable assessment of the spill size, location, and potential impacts, is deemed to pose an imminent and substantial endangerment to public health or the environment.

NOTIFICATION OF AN SSO: Refers to the time at which the City becomes aware of an SSO event through observation or notification by the public or other source.

NUISANCE - California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

**PREVENTATIVE MAINTENANCE:** Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

**PRIVATE LATERAL SEWAGE DISCHARGES** – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

**SANITARY SEWER OVERFLOW (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

(i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

(ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

**NOTE:** Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.

**SSO Categories:**

**Category 1:** Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

**Category 2:** Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

**Category 3:** All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

**SANITARY SEWER SYSTEM:** Any publicly-owned system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary
piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

**SENSITIVE AREA:** Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.)

**SEWER SERVICE LATERAL:** Refers to the piping that conveys sewage from the building to the City’s wastewater collection system.

**UNTREATED OR PARTIALLY TREATED WASTEWATER:** Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

**WATERS OF THE STATE:** Waters of the State (or waters of the United States) means any surface water, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the wastewater collection system and that portion of the storm drain is cleaned.

### 4. State Regulatory Requirements for Element 6, Overflow Emergency Response Plan

**GWDR Requirement**
The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;

(b) A program to ensure appropriate response to all overflows;

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

(f) A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The Sewer System Management Plan and critical supporting documents are available to the public at www.DalyCity.org.

### 5. Goals

The City’s goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
-Contain the spilled wastewater to the extent feasible;
-Minimize public contact with the spilled wastewater;
-Mitigate the impact of the SSO;
-Meet the regulatory reporting requirements;
-Evaluate the causes of failure related to certain SSOs; and
-Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

6. SSO Detection and Notification
   ref. SWRCB Order No. 2006-0003-DWQ D.13vi(a)

The processes that are employed to notify the City of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by City staff during the normal course of their work.

The City operates five wastewater lift stations in Daly City and three wastewater lift stations in the Westborough District of South San Francisco. In the event of any pump failure, the high-level sensor activates the SCADA alarm system and the City is contacted. To prevent overflow, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole or bypassed around the station into the sanitary sewer system.

6.1 PUBLIC OBSERVATION

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the City’s website: http://www.DalyCity.org. The City’s telephone number for reporting sewer problems is (650) 991-8200 24 hours per day, seven days per week.

When a report of a sewer spill or backup is made, the caller’s information is gathered using the Service Request Form and entered into the Lucity asset management system. The person at the City taking the call will contact an available field crew to respond. After hours, the Standby Employee will be notified.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect the following information:
- Time and date of call
- Specific location of potential problem
- Nature of call
- In case of SSO, estimated start time of overflow
- Caller’s name and telephone number
- Caller’s observation (e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)
- Other relevant information

If the overflow/backup is in the City’s service area, a Field Crew is dispatched and instructed to complete the Sanitary Sewer Overflow/Backup Response Workbook.

6.2 CITY STAFF OBSERVATION

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.
6.3 CONTRACTOR OBSERVATION

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a Sanitary Sewer Overflow. If the contractor/plumber causes or witnesses an SSO they shall:

1. Immediately notify the City.
2. Protect storm drains.
3. Protect the public.
4. Provide Information to the City Field Crew such as start time, appearance point, suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the City Attorney’s Office.

6.4 NO OBSERVATION

If there are no witnesses or no call was received for an SSO, the Field Crew will contact nearby residences or business owners in the vicinity of the SSO, in an attempt to obtain information that brackets a given start time that the SSO began. This information will be collected and placed with records for the specific SSO.

7. SSO Response Procedures

*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(b)*

7.1 Sewer Overflow/Backup Response Summary

The City will respond to SSOs as soon as possible following notification of an overflow/backup or unauthorized discharge.

If it is not possible that the overflow/backup is due to a failure in the City-owned/maintained sewer lines the Field Crew performs the following:

- Checks the mainline for normal flow conditions.
- Follows the instructions in the Sanitary Sewer Overflow/Backup Response Workbook.
- If the customer is not home the Field Crew completes the Door Hanger and leaves it on the customer’s door.
- If the customer is home the Field Crew:
  - Explains that the blockage is in the customer’s lateral and the City is responsible for the City-owned main sewer line only, but can try to clear the lateral blockage if there is access to the 4" stack pipe or a cleanout.
  - Performs the one-time service of clearing blockage, televising and recording lateral completely to the mainline connection and locating and marking problem areas.
  - Issues a Notice to Repair (NTR) to customer explaining the notice is informational and advises customer of needed repairs to their lateral.
  - Gives customer Sewer Lateral Maintenance Policy pamphlet and FOG information.
If it is possible that the overflow/backup is due to a failure in the City-owned/maintained sewer lines the Field Crew:

- Follows the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Notifies the Field Supervisor of the incident.
- Relieves blockage and clean impacted areas.
- Forwards the completed Sanitary Sewer Overflow Workbook to the Field Supervisor.

The Collections System Manager performs required regulatory reporting in accordance with the Sanitary Sewer Overflow/Backup Workbook’s Regulatory Reporting section.

If the overflow has impacted private property, the Field Crew:

- Follows the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Provides the customer with forms and information as indicated in the Sanitary Sewer Overflow/Backup Workbook.
- Forwards the completed Sanitary Sewer Overflow/Backup Workbook to the Field Supervisor.

The Collection System Manager notifies the Director of the Department of Water/Wastewater Resources of the incident. The Director then notifies the City Attorney.

The City Attorney or designee:

- Reviews incident reports, claim form, and other incident information.
- Communicates with claimant as appropriate.
- Administers the claim to closure.

7.2 First Responder Priorities

The first responder’s priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Field Supervisor in event of any SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

7.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards pertaining to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.
7.4 Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder will:
- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Take photos and video of overflowing manhole(s)/cleanout(s).
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Clear the blockage and initiate containment measures.
- Whenever deemed necessary, call for additional assistance.
- Document conditions upon arrival with photographs.
- Take steps to clear the SSO. For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.5 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact Collections System Manager. For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.6 Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:
- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure.

For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.7 Equipment

This section provides a list of specialized equipment that is required to support this Overflow Emergency Response Plan.
• **Closed Circuit Television (CCTV) Inspection Unit** – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.

• **Standby Response Phone** – The standby response phone is used for communications, documentation, and receiving text alerts from lift stations.

• **Emergency Response Trucks** -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.

• **Portable Generators, Portable Pumps, Piping, and Hoses** – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.

• **Combination Sewer Cleaning Trucks** -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.

• **Air plugs, sandbags and plastic mats**

• **SSO Sampling Kits**

• **Portable Lights**

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the Collections Office.

8. **Recovery and Cleanup**  
ref. SWRCB Order No. 2006-0003-DWQ D.13vi(e)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and cleanup procedures are:

8.1 **Estimate the Flow and Volume of Spilled Sewage**

To estimate the flow rate, crew members will use the SSCSC Manhole Overflow Gauge if the same style of manhole cover is observed overflowing. A variety of approaches exist for estimating the volume of a sanitary sewer spill. Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Overflow/Backup Response Workbook which provides three (3) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method

In addition, wherever and whenever possible, document the estimate using photos and/or video of the SSO site before and during the recovery operation.

8.2 **Recovery of Spilled Sewage**

Vacuum up and/or pump the spilled sewage and rinse water and discharge it back into the sanitary sewer system.
8.3 Clean-up and Disinfection

Clean up and disinfection procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of City staff, a cleanup contractor will be used.

Private Property
City crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of City system failure, the City will call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may pick up City claim forms from the City Attorney’s Office.

Hard Surface Areas
Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation
Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways
The Department of Fish and Wildlife will be notified by CalOES for SSOs greater than or equal to 1,000 gallons.

Wet Weather Modifications
Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 Public Notification

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. County Environmental Health instructions and directions regarding placement and language of public warnings will be followed. Additionally, the Field Supervisor will use their best judgment regarding supplemental sign placement in order to protect the public and local environment. Signs will not be removed until directed by County Environmental Health, the Field Supervisor, or their designee.

Creeks, streams and beaches that have been contaminated as a result of an SSO will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs and video of sign placement will be taken.
In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the City Attorney’s Office will provide the media with all relevant information.

9. **Water Quality**  
*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(f)*

9.1 **Waters of the State**

The following waters of the state are in the City of Daly City’s service area:

- San Francisco Bay
- Pacific Ocean

9.2 **Water Quality Sampling and Testing**

Water quality sampling and testing will be performed for Category 1 SSOs whenever there is a major spill to determine the extent and impact of the SSO. The water quality sampling procedures must be implemented within 48 hours and include the following:

- The first responders will consider the need to sample surface waters the SSO may have reached. If preliminary volume estimates of the SSO are 50,000 gallons or greater, the first responders will begin collecting as soon as possible but no later than 48 hours after becoming aware of the SSO.

- The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples will be collected near the point of entry of the spilled sewage.

9.3 **Water Quality Monitoring Plan**

The City Water Quality Monitoring Plan will be implemented immediately upon discovery of any Category 1 SSO whenever there is a major spill in order to assess impacts from SSOs to surface waters. The SSO Water Quality Monitoring Program will:

1. Contain protocols for water quality monitoring.

2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, legal right to access, etc.)

3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.

4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.

5. Within 48 hours of the City becoming aware of the SSO, require water quality sampling for fecal coliform, E. Coli, biochemical oxygen demand (BOD), and ammonia.
6. Observe proper chain of custody procedures.

7. If the City’s current standard operating procedures (SOP’s) cannot fully mitigate an SSO and if it is determined that the SSO may pose an imminent and substantial endangerment to public health or the environment, the City shall consult a qualified biologist, health care specialist or equivalent professional to assist.

9.4 SSO Technical Report

The City will submit an SSO Technical Report to the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any major SSO spilled to surface waters. The Collections System Manager will supervise the preparation of this report and will certify this report. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

Causes and Circumstances of the SSO:
- Complete and detailed explanation of how and when the SSO was discovered.
- Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- Detailed description of the cause(s) of the SSO.
- Copies of original field crew records used to document the SSO.
- Historical maintenance records for the failure location.

City’s Response to SSO:
- Chronological narrative description of all actions taken by the City to terminate the spill.
- Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

Water Quality Monitoring:
- Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- Detailed location map illustrating all water quality sampling points.

10. Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the City that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- City staff will offer a City claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault.

- It is the responsibility of the Field Crew to gather information regarding the incident and notify the Field Supervisor, who will notify the Collection System Manager, who will notify the Director, who ultimately notifies the City Attorney’s Office.

- It is the responsibility of the City Attorney’s Office to review all claims and to oversee the adjustment and administration of the claim to closure.
11. Notification, Reporting, Monitoring and Recordkeeping Requirements
ref. SWRCB Order No. 2006-0003-DWQ D.13vi(c)

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the City of Daly City maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic/video evidence to document the extent of the SSO, field crew response operations, and site conditions after field crew SSO response operations have been completed. The date, time, location, and direction of photographs/video taken will be documented.
- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.
- Regulator required notifications are outlined in Section 11.1 on the following page.
## 11.1 Regulator Required Notifications

| ELEMENT                        | REQUIREMENT                                                                                                                                                                                                                                                                                                                                 | METHOD                                                                                     |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **NOTIFICATION**              | Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.       | Call Cal OES at: (800) 852-7550                                                                                                                    |
| **REPORTING**                 | • Category 1 SSO: The City will submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.  
• Category 2 SSO: The City will submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.  
• Category 3 SSO: The City will submit certified report within 30 calendar days of the end of month in which SSO occurred.  
• SSO Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.  
• “No Spill” Certification: The City will certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred.  
• Collection System Questionnaire: The City will update and certify every 12 months | Enter data into the CIWQS Online SSO Database\(^1\) (http://ciwqs.waterboards.ca.gov/) certified by the Legally Responsible Official(s)\(^2\).  
All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report.  
Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date.  
After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days. |
| **WATER QUALITY MONITORING**  | The City will conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.                                                                                                                  | Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. |
| **RECORD KEEPING**            | The City will maintain the following records:  
• SSO event records.  
• Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP.  
• Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters.  
• Collection system telemetry records if relied upon to document and/or estimate SSO Volume. | Self-maintained records shall be available during inspections or upon request.                                                              |

---

\(^1\) In the event that the CIWQS online SSO database is not available, the Collections System Manager will notify SWRCB by phone and will fax or e-mail all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the City will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO file.

\(^2\) The City always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing help@ciwqs.waterboards.ca.gov.
For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS that includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that cause the SSO, and descriptions of the locations of all other discharge points associated with the single SSO event.

11.2 Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant first noticed the SSO or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant, if they know, of whether or not the potential SSO may have reached waters of the state
- Name, address, and contact telephone number of the complainant reporting the potential SSO (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work service request information used to document all feasible and remedial actions taken

All complaint records will be maintained for a minimum of five years whether or not they result in an SSO. SSO records are kept under the direction and control of the Collections System Manager.

12. Post SSO Event Debriefing  
ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

Every SSO event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 SSO events all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future SSO events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

13. Failure Analysis Investigation  
ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

The objective of the failure analysis investigation is to determine the “root cause” of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur or for other SSOs to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:
• Reviewing and completing the Sanitary Sewer Overflow Report and any other documents related to the incident
• Reviewing the incident timeline and other documentation regarding the incident
• Reviewing communications with the reporting party and witness
• Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
• Reviewing available photographs
• Interviewing staff that responded to the spill
• Reviewing past maintenance records
• Reviewing past CCTV records,
• Conducting a CCTV inspection to determine the condition of all line segments immediately following the SSO and reviewing the video and logs,
• Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
• Post SSO debrief records
• Interviews with the public at the SSO location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Overflow/Backup Response Workbook) will be used to document the investigation.

14. **SSO Response Training**  
*ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)*

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

**14.1 Initial and Annual Refresher Training**

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City’s Overflow Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Overflow Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Overflow Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations
- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through interviews and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.
3. Please expand on your current position duties and role in responding in the field to any SSO complaints.
4. Please describe your SOPs used to respond/mitigate SSOs when they occur.
5. Describe any training your agency provides or sends you to pertaining to SSOs.
6. We are interested in learning more about how your historical SSO response activities have worked in the field. We understand from discussions with management earlier that you use the OERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any SSO complaints in the field?
8. Can you tell us who is responsible for estimating SSO volumes discharged? If it is you, please describe how you go about estimating the SSO volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in SSOs (either onsite or via telephone) to further check out when the SSO might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures/video of some sewer spills/backups into structures. Other than these SSOs, when else would you typically take any pictures/video of an SSO?
12. Please walk us through anything else you’d like to add to help us better understand how your field crews respond and mitigate SSO complaints.

14.2 SSO Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

14.3 SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), and names and titles of attendees.

14.4 Contractors Working on City Sewer Facilities

All construction contractors working on City sewer facilities will be required to develop a project-specific OERP, will provide project personnel with training regarding the content of the contractor’s OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors will be provided, and required to observe contractor procedures.
15. Authority

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
APPENDIX A

Service Request Form
### City of Daly City Service Request form

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**Description of Request:**

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**Problem Location Description**

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**Resolution Description:**

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**Status:**

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APPENDIX B

Water Quality Monitoring Plan
Sanitary Sewer Overflow

Water Quality Monitoring

Program Plan

April 2014
Revision Record
TABLE OF CONTENTS

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Attachment B1 Reference Sheet for Estimating Sewage Spills from Overflowing Manholes.. 9
Attachment C1 Water Quality Monitoring Program Checksheet .............................. 11
Attachment J Chains of Custody (COCs)............................................................... separate file

REFERENCES

R1 Monitoring and Reporting Program Order NO. WQ 2013-0058-EXEC
R2 Chapter 3 Water Quality Objectives (Basin Plan)
R3 Water Quality Objectives for Bacteria Non-Contact Water Quality Objective
R4 U.S. EPA Bacteriological Criteria for Water Contact Recreation
I. **INTRODUCTION:**

The overflow emergency response plan is a stand-alone document that contains all of the key elements necessary for an appropriate SSO response: notification, actions to be taken, reporting, and impact mitigation. The Water Quality Monitoring program was created to outline the steps that the City takes to monitor the water quality after a SSO in order to assess impacts to surface waters in which 50,000 gallons or greater were spilled to surface waters. **Water Quality Monitoring plan has to be implemented within 48 hours after initial notification for spills where 50,000 gallons or more reach surface.** In the event of spill water quality sampling is required. The results shall be uploaded into CIWQS. This program is reviewed on annual bases and amended as necessary.

II. **STATE REGULATORY REQUIREMENTS FOR THE WATER QUALITY MONITORING PROGRAM:**

To comply with subsection D.7 (v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
   a. Ammonia
   b. Appropriate Bacterial indicator(s) per the applicable Ocean Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

III. **MONITORING EQUIPMENT:**

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<th>Equipment</th>
<th>Calibration Frequency</th>
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</thead>
<tbody>
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<td>3</td>
<td>HI 9828 Multi-parameter, Hanna instruments (for pH, DO and Conductivity analysis)</td>
<td>As needed</td>
</tr>
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</table>

The monitoring equipment listed above is maintained on a regular basis and is available in the wastewater laboratory at all times. These devices may be used and or deployed for monitoring purposes. All equipment is maintained per the manufactures specifications and records of all maintenance data will be stored electronically or by written record.

IV. **SAFETY CONCERNS:**

Water quality sampling should only be performed if it is safe to do so and access to the surface water is not restricted. In the event of heavy rain/storm events where access points have been compromised, there is a flooding around low level areas, raging water or there is any concern for employees safety contact supervisor on duty prior to proceeding. If supervisor is not available to
assess the conditions, postpone sampling and/or travel time/flow estimation until conditions improve. When sampling is not possible, details of the situation will be recorded in the certified Category 1 SSO Report and the SSO Technical Report submitted to the CIWQS Online SSO Database.

Use “buddy” system at all times during sampling and/or estimating spill volume/travel time. A buddy system is a procedure whereby two people operate together as one in order to monitor and help each other. Buddies shall take care of each other thus preventing casualties and improving safety.

V. **SAMPLE COLLECTION PROCEDURE:**

a. **WITHIN TWO (2) HOURS OF CATEGORY 1 SSO NOTIFY THE CAL OES AND OBTAIN A NOTIFICATION CONTROL NUMBER (ATTACHMENT A).**

b. **ESTIMATE SSO TRAVEL TIME BY VISUAL METHOD OR BY DATA FROM AVAILABLE MONITORING EQUIPMENT (SCADA).**

Visual method: by observing or dropping floatable debris in the surface water and timing how long it takes to travel over a measured distance (e.g., 100 feet). Include sections in the surface water where there are bends, bottlenecks, or other characteristics that may slow down the flow. If the first measurement is uncertain, this time estimate may be performed three to five times, and the values averaged to determine the estimated travel time. The velocity in the upper portion of the water body can then be calculated by dividing the measured distance by the average time.

Record SSO travel time in Water Quality Monitoring Program Check sheet (ATTACHMENT C1).

**WITHIN 48 HOURS OF BECOMING AWARE OF A SSO GETTING TO SURFACE WATERS, WATER QUALITY SAMPLING IS REQUIRED FOR THE FOLLOWING CONSTITUENTS:**

1. Ammonia - SM 4500NH3-C
2. Total coliform - SM 9221
3. Fecal coliform - SM 9221
4. Enterococcus - EPA 1600
5. E.Coli - SM 9223.

**SSO SAMPLE COLLECTION KIT INVENTORY:**

- Cooler
- Ice Pack (stored in the wastewater laboratory freezer)
- 3 or 4 sample bottles labeled for un-ionized Ammonia
- 3 or 4 sample bottles labeled for Total Coliform
- 3 or 4 sample bottles labeled for Fecal coliform
- 3 or 4 sample bottles labeled for Enterococcus
- 3 or 4 sample bottles labeled for E.Coli
- Safety gloves
- Safety glasses
- HI 9828 Multi-parameter, Hanna instruments
- Pen

The number of sample bottles below depends on the number of sample parameters and the number of sampling locations identified (see next section and subsequent section). Edit as appropriate.
SAMPLING POINTS:

There are only three likely sources of an SSO reaching ocean/bay waters:

1. SSO at Skyline lift Station. If sewage goes into the storm system and is not recovered, it would daylight on the beach at the bottom of the cliff, West of Skyline Dr.

2. The Avalon Canyon Area (Grid B-7), West of Avalon Dr. This would be as a result of a mainline blockage or pipe failure resulting in an SSO, entering the storm system. This would daylight at the bottom of the Canyon which is accessible by a descending, windy road that is subject to ground movement and erosion. Passage to the bottom of this road by vehicle may not be available.

3. Area around the Wastewater Treatment plant where storm water is conveyed through the Vista Grande canal & bar screen and flows to the ocean via the structure box and outfall line. This would occur if there was a mainline blockage, pipe failure, or problem with El Portal Lift Station resulting in an SSO.

4. Any SSO that flows to Colma Creek. Take samples at the location where it daylights (from subterranean to open channel).

Sampling for each area shall be performed following requisite Standard Operating Procedures (SOP). Samples have to be taken for at least three consecutive days for all five tests for all areas, and those are:

1. The point where the overflow entered the water source;
2. 50 feet upstream of entry point;
3. 50 feet downstream of entry point.

Five different samples will be collected for each area using sample bottles obtained from the DWWR wastewater laboratory. Laboratory is fully staffed seven days a week 8 AM-5 PM. For after-hours assistance contact Laboratory Supervisor Tharanga Abeysekera (650) 797-6647.

Sample containers for bacteriological sampling are plastic 120 ml size bottles containing a tablet of sodium thiosulfate (Na$_2$(SO$_4$)$_3$) and for ammonia is 1000 ml poly bottle preserved with sulfuric acid (H$_2$SO$_4$).

**PLEASE NOTIFY CONTRACTING LAB PRIOR TO SAMPLING!**

For contracting laboratory contact information see ATTACHMENT A1.

1) **AMMONIA SAMPLING:**

   Ammonia-Nitrogen (hold Time 28 days) - picked up by Alpha Lab
   
   Sample bottles: one 1000 ml poly bottle
   
   Preservative: sulfuric acid (H$_2$SO$_4$)
2) **BACTERIOLOGICAL SAMPLING:**

- Total coliform (hold Time 8 hours) contact Lab Supervisor Tharanga Abeysekera
- Fecal coliform (hold Time 8 hours) to arrange for sampling
- E.Coli (hold Time 8 hours)
- Enterococcus (hold time 8 hours) - delivered to the CEL labs
  a. Sample bottles: one 120 ml plastic bottle for each test (four total per site)
  b. Preservative: sodium thiosulfate (Na$_2$(SO$_4$)$_3$) tablet.

3) **ADDITIONAL TESTS:**

In certain situations the additional testing may need to be performed. There will be further instruction from the Manager or the Field Supervisor regarding additional testing. The initials and numbers in parenthesis refer to either Environmental Protection Agency (EPA) or Standard Method (SM) identifiers. These include but are not limited to:

**Note: pH and temperature are mandatory while sampling for Ammonia!**

1. pH – (EPA #150.1) – hold time 15 minutes;
2. Dissolved Oxygen, DO (SM 4500 O G) - hold time 15 minutes;
3. Temperature – (EPA #170.1);
4. Salinity – (SM #2520) – hold time 28 days.

The equipment necessary to perform mentioned tests is maintained and available in City of Daly City Wastewater Laboratory (look “Monitoring Equipment” section).

4) **STANDARD OPERATING PROCEDURES (SOPs) - SAMPLING:**

Sample should be taken directly from the source. To correctly take a sample, follow these simple steps:

a) Retrieve SSO Sample Collection Kit (cooler) from the wastewater laboratory.
b) Obtain ice pack from freezer & place in cooler.
c) Determine the point that the SSO entered waterway and photograph this location (include a reference point in the photo).
d) Using HI 9828 Multi-parameter, Hanna instruments check pH and Temperature. Record the results (use Water Quality Monitoring Checklist – ATTACHMENT C1).
e) By leaning over or squatting down, take the sampling bottle down as close to the source as possible.
f) Twist and break the seal on the cap. Remove the cap and hold it so that the underside of the cap faces down. Hold it a few inches from the bottle.
g) Lower the bottle into the source flow, against the direction of the flow. Collect samples well away from the bank, preferably at a point where water is visibly flowing. Avoid sampling debris or scum layer from the surface. Fill the bottle exactly to the 100 ml line (bacterial samples) or to the bottle neck (ammonia). Secure the cap onto the bottle.
h) Dry the bottle, fill out the sample label and stick it on the bottle.
i) Place the completed sample in the cooler.
Attachment C - Water Quality Monitoring Program

j) Fill out COCs- ATTACHMENT J.

k) Notify lab staff upon samples arrival.

l) Store in the lab sample refrigerator (or between 0°C and 6°C) until delivered to the designated contracting laboratory.

All of the samples should be taken directly to the treatment plant laboratory for storage (lab refrigerator). Lab personnel will guide you through storage and chain of custody documentation (if needed).

Avoid Contamination! Be careful. Make every effort not to touch the sample contents, because the sample containers may contain hazardous chemicals and the sample results may be easily affected by human contamination.

Deliver Sample to the Lab! All samples need to be delivered to the laboratory expeditiously due to the limited hold time required for maintaining sample integrity.

Restock the SSO Sample Collection Kit with the items listed on page 4.

After the analyses have been performed and the results have been reviewed and finalized, check if both the ammonia and bacteria levels downstream are approximately equal to or less than the upstream levels. As soon as this condition is satisfied, monitoring for this SSO may stop. Otherwise repeat the Sample Collection Procedure steps until either or both of the conditions are satisfied or other information is available to suggest the SSO is no longer causing a potentially adverse effect on the water body.

5) UPLOAD WATER QUALITY RESULTS INTO CIWQS.
Attachment A1

LABORATORY CONTACT INFORMATION:

City of Daly City Wastewater Laboratory (650) 991 8200 or internally x8633;
For after-hours assistance contact Laboratory Supervisor Tharanga Abeysekera at (650) 797-6647.

Contact Lab Supervisor Tharanga Abeysekera for all sample pickup arrangements with outside laboratories.
Attachment B1

REFERENCE SHEET FOR ESTIMATING SEWAGE SPILLS FROM OVERFLOWING MANHOLES
Attachment C1

WATER QUALITY MONITORING PROGRAM CHECKSHEET:

1. Notification Control Number obtained from CAL OES: …………………………………………………

2. Spill travel time: ………………………………………………………………………………………………………

3. Volume of the SSO ………………………………………………………………………………………………………

4. SSO incident location (address, city, state, and zip code)…………………………………………………………

5. SSO incident description ………………………………………………………………………………………………..

6. Name of surface water impacted by the SSO …………………………………………………………………………

7. Was drinking water supply impacted by the SSO? …………………………………………………………………

8. Description of conducted water quality sampling activities:

9. Detailed location map illustrating all water quality sampling points included? …………………………

10. Test results:

    SAMPLING DAY ONE:

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<td>SALINITY</td>
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11. Evaluation of the results/additional information:

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APPENDIX C

Bypass Diagrams
Enter canal via gate on South side of Orange Ave above canal. Key to gate is inside storage box on 6" Paco pump.

Set up pump by canal, by second canal bridge. Use sandbags across canal to make a dam. Discharge to either SSF manholes. 100 ft. of 4 ½ discharge hose needed. (2 rolls). Notify James Hardie, Program Manager, South San Francisco, of any bypass to SSF. (650) 877-8550.

Tab 15.1
Use Force main pump bypass valve located next to generator above force main in the event of pump / station failure. Use 6" Paco pump from wetwell to valve to utilize force main.

In case of force main failure, set up pump at wetwell inside station. 830 ft. of 4 ½ discharge hose needed (17 rolls). Run hose in gutter down Avalon Dr. across Junipero Serra Blvd. to MH at intersection of Avalon and Valverde.

Contact James Hardie, Program Manager, South San Francisco, for any bypass to SSF – (650) 877-8550

Use traffic control equipment.
Set up 6" Paco pump at station wetwell.

1000 ft of 4 ½ inch discharge hose needed (20 rolls).

Run hose from wetwell thru fence, to West side of Westline Dr. up street to Pacifica MH on Palmetto Ave.

Advise Brian Martinez, Collections System Superintendent for Pacifica, of duration of bypass. (650) 922-4072.

Use traffic control equipment.
Set up 6" Paco pump at MH # 88, (E-7), inside lift station grounds.

1,315 ft. of 4 1/2 inch discharge hose needed (27 rolls).

Run hose from MH thru fence, up F St to Hill St. Discharge into MH # 38, (D-7).

Hoses should be set up on South side of F St, crossover F St onto Hill St.

Use traffic control equipment.
Set up Paco pump at MH#32, (C-3), outside El Portal Lift Station.

1,350 ft. of 4 3/4 inch discharge hose needed (27 rolls).

Lay hose from station, up El Portal to Cliffside. Run along curb and gutter to MH#79, in front of 42 Cliffside. Use traffic control equipment.
Set up 6" Paco pump at MH#23, C-3 (West). Lay out hose to MH#39, F-13 ( Daly City).

47 ft. of 4½ discharge hose needed. (10 rolls)

Use traffic control equipment.

Notify James Hardie Program Manager, South San Francisco, for any bypass to SSF. (650) 877-8550.

Notify Louis Cusi.
1. **Hickey Lift Station**

   No bypass equipment is needed at this station. Overflow line to South San Francisco is in place in the event of a power outage, force main break, or other station failure.

2. **Westborough Area**

   Any time a bypass situation occurs that would involve a pumping operation setup at the Orange Park canal, please contact the following person and advise him of steps being taken:

   1. Louis Langi– Public Works Supervisor  
      Office: (650) 877-8550
APPENDIX D

COC Lateral Sewage Maintenance Policy
District Code Requirement

The North San Mateo County Sanitation District (A subsidiary of the City of Daly City) Code Section 1.16.080 states that all sewer laterals shall be maintained by the owner of the property.
What is a Sewer Lateral?
Is it my responsibility to maintain and repair it?

District Codes

What is a sewer lateral?
Your sanitary sewer lateral is a pipe designed solely to transport wastewater from your toilets, tubs, sinks and floor drains from inside your house to the larger, sanitary sewer main.

Is it my responsibility to maintain and repair my lateral in the street?
Yes! The homeowner owns and is responsible for the maintenance and repair of their sewer lateral from the house to the sewer main in the street. By law, the City of Daly City owns and is responsible for the maintenance and repair of the sewer main only.

Applicable District Codes

1.16 Sewers, Laterals & Connections
1.32 Permits & Fees
1.52 Fees & Charges

Copies of the sections are available upon request

I have a sewer back-up, what do I do?
Call the Water and Wastewater Department at (650) 991-8200. As a courtesy, DWWR staff will try to unplug the backup to restore normal flow and if possible, identify and locate the problem for the homeowner so it can be repaired.

What causes a sewer back-up?
Sewer back-ups are caused by many different things. A partial or complete blockage of the sewer lateral may be caused by:

- Grease Accumulation
- Tree Root Intrusion
- Broken pipe or offset joints
- Illegal connection from roof downspouts

When Do I Call A Plumber?

DWWR staff will often assist the homeowner in identifying and locating the problem area(s) of your sewer lateral. Call the Department of Water/Wastewater Resources at (650) 991-8200 for assistance.

A licensed, bonded and insured plumber of your choice should be contacted if repair work is needed.

A permit is required for any sewer lateral repair. For more information on obtaining a permit, call the Engineering Division at (650) 991-8064

City of Daly City

Department of Water and Wastewater Resources
153 Lake Merced Blvd.
Daly City, CA 94015
APPENDIX E

Door Hanger
On (date) ____________________, at (location) _______________________________________, we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:
- The sanitary sewer main and cleared the line
- Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for “Sewer Contractors” or “Plumbing Drains & Sewer Cleaning”. If you plan to hire a contractor, we recommend getting estimates from more than one company.

City representative notes: ________________________________

______________________________

City representative: ________________________________

For questions or comments, please call

City of Daly City
(650) 991-8200
Appendix F:  
Sanitary Sewer Overflow/Backup Response Workbook
City of Daly City

Overflow Emergency Response Plan

Sanitary Sewer Overflow and Backup Response Workbook
INSERT TAB:
Start Here
If this is a Category 1 SSO greater than or equal to 1,000 gallons, immediately contact the Field Supervisor or Collections System Manager at (650) 991-8211 ext.8654 or (650) 515-0263 to make the 2-hour notification to CALOES at (800) 852-7550.

Refer to the Regulatory Reporting Guide for additional reporting requirements.

If there is a backup into a residence or business: City Attorney’s Office (650) 991-8122

For any media inquiries/requests: City Attorney’s Office (650) 991-8122

For Restoration/Remediation:

<table>
<thead>
<tr>
<th>Servicemaster</th>
<th>Ideal Restoration</th>
<th>Faragon Restoration</th>
</tr>
</thead>
<tbody>
<tr>
<td>(800) Respond (800-737-7663)</td>
<td>(800) 379-6881</td>
<td>(415) 999-5446</td>
</tr>
<tr>
<td>Coit/Olympia Restoration</td>
<td>Restoration 9-1-1</td>
<td></td>
</tr>
<tr>
<td>(800) 367-2648 or (800) 606-4110 Extension # 146</td>
<td>(650) 8-Restore (650 873-7867)</td>
<td>Don’t forget to take photos!</td>
</tr>
</tbody>
</table>

Field Crew:

- Follow the instructions on the Overflow/Backup Response Flowchart and complete forms in this workbook as indicated.
- Complete the chain of custody record (to the right) and deliver this workbook to the Collections System Manager.

Collections System Manager:

- Review the SSO Event Checklist and the forms in this booklet. Contact the Field Crew for additional information if necessary.
- Confirm that all required regulatory notifications have been made.
- If this was a Sewer Backup, complete the Backup Forms Checklist (E-1).
- Complete the Collection System Failure Analysis Form.
- Enter data into CIWQS.
- Complete the Chain of Custody record (right) and file this booklet.

Print Name: ____________________________
Initial: ____________________________
Date: ____________________________
Time: ____________________________

Print Name: ____________________________
Initial: ____________________________
Date: ____________________________
Time: ____________________________
## SSO Event Checklist

<table>
<thead>
<tr>
<th>Date of SSO:</th>
<th>SSO Location/Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIWQS Event ID #:</td>
<td>Category: □ 1 □ 2 □ 3</td>
</tr>
<tr>
<td>Property Damage? □ Yes □ No</td>
<td>Service Request #:</td>
</tr>
</tbody>
</table>

- □ Effort made to contain and return a portion/all to the sanitary sewer
- □ Pictures/video taken of overflow
- □ Pictures taken of affected/unaffected area
- □ If property damage, start that process
- □ Pictures taken of containment efforts
- □ If Cat 1 > 1000 gals: OES Control #
- □ Impacted waters identified?
- □ No impacted waters?
- □ SSO Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of SSO)
- □ Volume Estimation Worksheet(s) done
- □ Start Time Determination Form done
- □ Initial review of forms is complete (ensure consistency with dates, times, volumes, and other data)
- □ Review of photos and videos (label/date)
- □ Start Folder for all documentation for this SSO event. Put everything in it (SR, Field Reports, Worksheets/Forms, follow-up work orders, notes, pics, drawings, etc. CIWQS print outs and emails)
- □ Failure Analysis
  - □ TV to determine cause
  - □ Review Asset History
- □ Determine next steps to prevent recurrence
- □ Document findings and next steps on SSO Report
- □ Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- □ Print CIWQS Draft hard copy and email
- □ Review CIWQS, SSO Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.
- □ Attach photos, forms etc. to CIWQS
- □ Submit Ready to Certify in CIWQS (with sufficient time for LRO review)
- □ Print CIWQS Ready to Certify and email
- □ Hand folder to LRO
- □ LRO review folder and CIWQS verify accurate and consistent data
- □ Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3)
- □ Print Certified CIWQS and email
- □ Any changes? Change in CIWQS and hard copies and explain changes, print our current version
- □ Move completed folder to SSO Binder
- □ For 50,000 gallons or larger
- □ Follow Water Quality Monitoring and Sampling procedures
- □ Map of where samples were taken
- □ Sampling results
- □ Write Technical Report
- □ Attach to CIWQS
- □ Add to SSO Folder/Binder
- □ If any changes are made to SSMP
- □ Update SSMP and link on CIWQS to SSMP
- □ Add change to SSMP Change Log
- □ If change is substantive, re-certify SSMP

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INSERT TAB:
Regulatory Reporting
### City of Daly City Overflow Emergency Response Plan

#### Regulatory Reporting Guide

<table>
<thead>
<tr>
<th>Deadline</th>
<th>Category 1 SSO</th>
<th>Category 2 SSO</th>
<th>Category 3 SSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours after awareness of SSO</td>
<td>If the spill is greater than or equal to 1,000 gallons, call CalOES.</td>
<td></td>
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<tr>
<td>As soon as possible</td>
<td>If SSO impacts private property that may be a failure of the sewer main and/or if a claim for damages may be submitted against the city, notify the City Attorney’s Office.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 Hours after awareness of SSO</td>
<td>If 50,000 gal or more were not recovered, begin water quality sampling.</td>
<td></td>
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</tr>
<tr>
<td>15 Days after response conclusion</td>
<td>Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.</td>
<td>Certify Spill Report in the CIWQS database. Update as needed until 120 days after SSO end time.</td>
<td></td>
</tr>
<tr>
<td>30 Days after end of calendar month in which SSO occurred</td>
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<td>Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.</td>
</tr>
<tr>
<td>45 days after SSO end date</td>
<td>If 50,000 gal or more were not recovered, submit SSO Technical Report in CIWQS.</td>
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</table>

**Note:** For reporting purposes, if one SSO event results in multiple appearance points, complete one SSO report in the CIWQS SSO Online Database, and report the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, including all the discharge points associated with the SSO event.

### Category Definitions

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1</td>
<td>Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:</td>
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<td>• Reach surface water and/or reach a drainage channel tributary to a surface water; or</td>
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<td></td>
<td>• Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly.</td>
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<td>Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).</td>
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<tr>
<td>2</td>
<td>Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee’s sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.</td>
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<tr>
<td>3</td>
<td>All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition.</td>
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<td></td>
<td><strong>Private Lateral Sewage Discharge (PLSD)</strong></td>
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<td>Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately-owned sewer lateral connected to the enrollee’s sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.</td>
</tr>
</tbody>
</table>
Authorized Personnel:
The following are authorized to perform regulatory reporting of SSOs:

<table>
<thead>
<tr>
<th>Title</th>
<th>Contact</th>
<th>✓ if LRO*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Supervisors or Managers</td>
<td>(650) 991-8200</td>
<td></td>
</tr>
<tr>
<td>Collections System Manager</td>
<td>(650) 991-8654</td>
<td>✓</td>
</tr>
<tr>
<td>Director of Water and Wastewater Resources</td>
<td>(650) 991-8204</td>
<td>✓</td>
</tr>
</tbody>
</table>

*The City’s Legally Responsible Officials (LROs) are authorized to electronically sign and certify SSO reports in CIWQS. The LRO is the Collection System Manager.

Contact |
---|---|
CalOES | (800) 852-7550 |
City Attorney’s Office | (650) 991-8122 |
Regional Water Quality Control Board | Phone: (510) 622-2300, Fax: (510) 622-2460 |
State Water Resources Control Board Armando Martinez | 916) 341-5586, Armando.Martinez@waterboards.ca.gov |

Notification requirements for each applicable SSO requested by CalOES include:

- Name of person notifying CalOES and direct return phone number.
- Estimated SSO volume discharged (gallons).
- If ongoing, estimated SSO discharge rate (gallons per minute).
- SSO Incident Description:
  - Brief narrative.
  - On-scene point of contact for additional information (name and cell phone number).
  - Date and time enrollee became aware of the SSO.
  - Name of sanitary sewer system agency causing the SSO.
  - SSO cause (if known).
- Indication of whether the SSO has been contained.
- Indication of whether surface water is impacted.
- Name of surface water impacted by the SSO, if applicable.
- Indication of whether a drinking water supply is or may be impacted by the SSO.
- Any other known SSO impacts.
- SSO incident location (address, city, state, and zip code).
### NOTIFICATIONS

**CAL OES:**
(800) 852-7550

- **Notification Date/Time:**
- **Name of Who You Spoke To:**
- **OES Control Number:**

**San Mateo County Health Department, if applicable:**
(650) 573-2764

- **Notification Date/Time:**
- **Name of Who You Spoke To:**
- **Left Message:**

**City Attorney’s Office (Regarding claims if applicable):**
(650) 991-8122

- **Notification Date/Time:**
- **Name of Who You Spoke To:**
- **Left Message:**
INSERT TAB:
Flowchart
Start Here

Does the SSO/backup appear to be due to a problem in the City-owned/maintained sewer line?

NO

YES

1. Document arrival time.
2. Consider the need to call out additional staff, contractor or mutual aid assistance.
3. If it is possible that this is a Category 1 SSO greater than or equal to 1,000 gallons, immediately make the 2-hour notification to CalOES.

This is a Private Lateral Sewage Discharge (PLSD)

1. Explain that the blockage is in the customer’s lateral and the City is responsible for the City-owned main sewer line only, but can try to clear the lateral blockage if there is access to the 4” stack pipe or a cleanout.
2. Perform the one-time service of clearing blockage, televising and recording lateral completely to the mainline connection and locating and marking problem areas.
3. Issue a Notice to Repair (NTR) to customer explaining the notice is informational and advises customer of needed repairs to their lateral.
5. If customer is not home:
   • Complete Door Hanger and leave on customer’s door.
   • Leave a message on the customer’s voicemail.
   • If the property owner is unable or unwilling to address the cause of the overflow, immediately contact your supervisor and discuss whether Code Enforcement, the County Department of Environmental Health or Regional Water Quality Control Board should be notified.
6. If you are directed to to break the stoppage and clean up the PLSD, be sure to document City staff time and equipment used for potential billing purposes, and take pictures.

1. Document the service call according to City procedures.
2. STOP. Do not continue to PAGE 2

ADDRESS CAUSE OF SSO/BACKUP ASAP

1. For pump station related SSO/Backups refer to that station’s Emergency Response Plan (See Overflow Emergency Response Plan Appendix D: Bypass Diagrams
2. For SSO/Backups not related to a pump station, relieve the stoppage. Note the distance from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly.
3. Photograph staff activities while clearing the blockage, as appropriate.

BEGIN DIVERSION AND CONTAINMENT, AS NECESSARY

1. DIVERT AWAY FROM SENSITIVE AREAS:
   a. Cover unplugged storm drains w/mats, or use dirt/other material to divert sewage away from sensitive areas (e.g., schools, playgrounds, intersections, etc.)
   b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades to isolate area.
2. CONTAIN SSO & RETURN TO SYSTEM, IF POSSIBLE:
   a. Plug storm drain catch basins or use rubber mats to cover basin inlet and divert flow to catch basin
   b. Build/excavate a berm to channel flow to downstream sanitary sewer manhole (barricade manhole if left open)
   c. Use bypass pumps to pump around blockage until it can be removed
   d. Divert to low area of ground where it can be collected later
3. PHOTOGRAPH HOW THE SSO WAS DIVERTED/CONTAINED, AS APPROPRIATE

Go to PAGE 2
1. Consider the need to sample surface waters the SSO may have reached:
   - If preliminary volume estimates of the SSO are 50,000 gallons or greater, begin collecting as soon as possible but no later than 48 hours after becoming aware of the SSO.
   - If people are fishing or swimming in the waters, collect samples regardless of the volume of the SSO.
2. Refer to the WQMP for sampling procedures.

Is it feasible/practical to contain/recover any of the SSO from the surface waters?

NO

Has the SSO reached surface waters?

YES

STORM DRAIN CLEANING SOP
1. Seal or berm the storm drain immediately downstream of point the SSO reached
2. Photograph impacted storm drain catch basins before cleaning
3. Vacuum any visible sewage – Record the volume of sewage recovered
4. Using dechlorinated water, flush impacted sections of storm drain with 3X amount of SSO, if possible – Record volume of flush water
5. Ensure all visible signs of sewage have been removed
6. Return flush water to sanitary sewer – Record volume of flush water recovered
7. Photograph storm drain catch basins after cleaning is completed

Were storm drains impacted?

YES

IMPACTED AREA CLEANUP, AS NECESSARY
1. Assign staff to begin cleanup. If you might use the are measured volume method to estimate the volume, draw a sketch of the SSO footprint and capture dimensions before washing it down.
2. Remove all signs of gross pollution with a shovel, broom, and bucket. (toilet paper, solids, grease, etc.)
3. Flush area w/dechlorinated water – Unless raining. (3X amount of SSO, if possible)
   a. Setup berm/other means to contain all water so it can be returned to sewer
   b. Don’t use disinfectants if they may enter storm drain system and not be fully recovered or if they may enter a water body
4. Address saturated soil with removal and/or in-place treatment, depending on the extent of the contamination, the location, and land use. Take measures to prevent accidental contact by the public. NOTE: addressing saturated soil may involve returning to the site one or more days after the SSO event.
5. Photograph the area when cleanup operations are complete

Go to PAGE 3
Continue from PAGE 2

Did this SSO cause a sewer backup impacting private property?

YES

Complete the First Responder Form.

NO

Does the customer want cleaning service?

YES

1. Complete the Cleaning Declination form.
2. Ask for permission to photograph the affected area, or ask the customer to take photos. If they decline, note on the First Responder form.
3. Take a photo of the form to document what was given to the customer.
4. Give the form to the Customer.

NO

1. Contact the Field Supervisor or Collections System Manager to report circumstances. They will call for a restoration/remediation team if applicable.
2. Wait for restoration team to arrive, if possible.
3. Clean/disinfect any overflow outside of the building. **Note:** DO NOT allow any disinfectants to escape to storm drains.

DOCUMENTATION AND VOLUME ESTIMATION

1. Complete the SSO Report
2. In the Start Time Determination section for the SSO Report remember that the SSO was probably occurring for a period of time before it was reported.
3. Estimate and document SSO volume using two or more of the worksheets provided in the SSO/Backup Response Workbook.

REGULATORY REPORTING:
Make notifications indicated in the Regulatory Guide.

1. Follow the routing instructions indicated on the front of this workbook.
2. Include any photos and/or notes related to this event.
3. Document the service call according to City procedures.

1. If the Livability Assessment on the First Responder form indicates a need for temporary relocation, advise the resident to make alternate living arrangements and submit a claim form to the City Clerk’s office for review and payment if approved.
2. Take a photo of the Information for the Customer letter for documentation and give the letter to the customer along with the claim form and Your Responsibilities as a Private Property Owner guide.
3. Call City Attorney’s Office and relay the information from the First Responder form.

Photograph the backwater prevention device or cleanout if you can locate one on the affected building.

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**PHYSICAL LOCATION DETAILS**

<table>
<thead>
<tr>
<th>Spill location name</th>
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<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Latitude of spill location</th>
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<table>
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<th>Longitude of spill location</th>
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<table>
<thead>
<tr>
<th>County</th>
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<thead>
<tr>
<th>Regional Water Quality Control Board</th>
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</tbody>
</table>

### VOLUMES BY DESTINATION

<table>
<thead>
<tr>
<th>Volume Spilled (Gallons)</th>
<th>Volume Recovered (Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.a/2.b Estimated spill volume that reached a separate storm drain that flows to a surface body of water? (If not all recovered, this is a Category 1)

2.c/2d Estimated spill volume that directly reached a drainage channel that flows to a surface water body? (Any volume spilled is a Category 1)

2.e/2.f Estimated spill volume discharged directly to a surface water body? (Any volume spilled is a Category 1)

2.g/2.h Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures).

<table>
<thead>
<tr>
<th>Volume Spilled</th>
<th>Volume Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Volume Spilled

(Verify this matches the table in between 2.h and 3 in CIWQS)
### DATE/TIME DETERMINATIONS

<table>
<thead>
<tr>
<th>Event</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of SSO (Use Start Time Determination/Notes Below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Notified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection System Operator Dispatched</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection System Operator Arrived</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of SSO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of Spill Response</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Start Time Determination/Notes

**Caller Interview:** Where did you see sewage spill from?

- [ ] Manhole
- [ ] Inside Building
- [ ] Vent/Clean Out
- [ ] Catch Basin
- [ ] Wet Well/Lift Station
- [ ] Other: ____________________________

Comments: __________________________________________

Last Time Caller Observed **NO Spill** occurring: _________ AM / PM Date ______ / ______ / ______

Comments: __________________________________________

If the volume of the SSO and rate of flow are known, divide volume by rate of flow to get duration of SSO event.

\[
\text{Gallons ÷ GPM} = \text{Minutes (SSO Duration)}
\]

Subtract the Duration from the SSO End Date/Time to establish the SSO Start Date/Time.

Other Efforts to Determine Start Time: __________________________________________

Other Comments Regarding Spill Start Time: __________________________________________

Estimated SSO Start Time: _________ AM / PM Date: ______ / ______ / ______

SSO End Time: _________ AM / PM Date: ______ / ______ / ______
## SSO FIELD REPORT

### Spill location description:

<table>
<thead>
<tr>
<th>Number of appearance points:</th>
</tr>
</thead>
</table>

### Spill appearance points: (Circle all that apply)
- Backflow Prevention Device
- Force Main
- Gravity Mainline
- Inside Building/Structure
- Lateral Clean Out (Private / Public)
- Lower Lateral (Private / Public)
- Manhole
- Pump Station
- Upper Lateral (Private / Public)
- Other Sewer System Structure

### Spill appearance point explanation. (Enter information here if “Other” or multiple appearance points were selected):

### Final spill destination: (Circle all that apply) Final spill destination. (Circle all that apply)
- Beach
- Building/Structure
- Combined Storm Drain
- Drainage Channel
- Other (Specify Below)
- Paved Surface
- Separate Storm Drain
- Street/Curb and Gutter
- Surface Water
- Unpaved Surface

### Explanation of final spill destination. (Enter information if “Other” was selected)
### SSO FIELD REPORT

**Spill cause: (Circle One)**

- Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure
- Construction Diversion Failure
- CS Maintenance Caused Spill/Damage
- Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
- Debris from Construction
- Debris from Lateral
- Debris-General
- Debris-Rags
- Debris Wipes/Non-Dispersible
- Flow Exceeded Capacity (Separate CS Only)
- Grease Deposition (FOG)
- Inappropriate Discharge to CS
- Natural Disaster
- Operator Error
- Other (Specify Below)
- Pipe Structural Problem/Failure
- Pipe Structural Problem/Failure – Installation
- Pump Station Failure – Controls
- Pump Station Failure – Mechanical
- Pump Station Failure – Power
- Rainfall Exceeded Design, I and I (Separate CS Only)
- Root Intrusion
- Siphon Failure
- Surcharged Pipe (Combined CS Only)
- Vandalism

**Spill cause explanation: (Required if Spill Cause is “Other”)**
# SSO FIELD REPORT

**Where did failure occur?**

Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure  Force Main  Gravity Mainline  Lower Lateral (Public)  Manhole  Other (Specify Below)  Pump Station Failure – Controls  Pump Station Failure – Mechanical  Pump Station Failure – Power  Siphon  Upper Lateral (Public)

**Explanation of where failure occurred:** (Required if Where Failure Occurred is “Other”)

**Was spill associated with a storm event?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Diameter of sewer pipe at the point of blockage or failure:**  inches

**Material of sewer pipe at the point of blockage or failure:**

**Estimated age of sewer asset at the point of blockage or failure (if applicable):**  years

**Spill Response Activities. (Circle all that apply)**  Cleaned-Up  Mitigated Effects of Spill  Contained All or Portion of Spill  Other (Specify Below)  Returned All Spoil to Sanitary Sewer System  Property Owner Notified  Other Enforcement Agency Notified

**Explanation of spill response activities:** (Required if spill response activities is “Other”):
## SSO FIELD REPORT

<table>
<thead>
<tr>
<th>Spill corrective action taken: (Circle all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added Sewer to Preventive Maintenance Program</td>
</tr>
<tr>
<td>Adjusted Schedule/Method of Preventive Maintenance</td>
</tr>
<tr>
<td>Enforcement Action Against FOG Source</td>
</tr>
<tr>
<td>Inspected Sewer Using CCTV to Determine Cause</td>
</tr>
<tr>
<td>Other (Specify Below)</td>
</tr>
<tr>
<td>Plan Rehabilitation or Replacement of Sewer</td>
</tr>
<tr>
<td>Repaired Facilities or Replaced Defect</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explanation of corrective action taken: (Required if spill corrective action is “Other”)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Is there an ongoing investigation?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health warnings posted?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Did spill result in beach closure?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

### Name of Impacted Beach(es): (Enter N/A if none)

Name of impacted surface waters:
### SSO FIELD REPORT

Water quality samples analyzed for: (Circle all that apply)

- Dissolved Oxygen
- Other Chemical Indicators(s) – Specify Below
- Biological Indicator(s) – Specify Below
- No Water Quality Samples Taken
- Not Applicable to the Spill
- Other (Specify Below)

Explaination of water quality samples analyzed for: (Required if water quality samples analyzed for is “Other chemical indicator(s)”, "Biological indicator(s)“, or "Other")

Water quality sample results reported to: (Circle all that apply)

- County Health Agency
- Regional Water Quality Control Board
- Other (Specify below)
- No Water Quality Samples Taken
- Not Applicable to this Spill

Explanation of water quality sample results reported to: (Required if water quality sample results reported to is “Other”)

Method and explanation of volume estimation methods used: (Circle all that apply)

- Eyeball Estimate
- Measured Volume
- Duration and Flow Rate
- Other (Explain):
INSERT TAB:
Volume Estimation
## Miscellaneous Computations & Examples

<table>
<thead>
<tr>
<th>To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)</th>
<th>Divide the inches by 12 or use the chart on the right.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example 1:</strong> 27&quot; ÷ 12 = 2.25'</td>
<td></td>
</tr>
<tr>
<td><strong>Example 2:</strong> 1¾&quot; = ?'</td>
<td></td>
</tr>
<tr>
<td>1&quot; (0.08') + ¾&quot; (0.06') = 0.14'</td>
<td></td>
</tr>
</tbody>
</table>

| Volume of one cubic foot | 7.48 gallons of liquid |

<table>
<thead>
<tr>
<th>Area: Two-dimensional measurement represented in square feet (SQ/FT or ft²)</th>
<th>Square/rectangle: Area = Length x Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle: Area = π x r² (where π ≈ 3.14 and r = radius = ½ diameter)</td>
<td></td>
</tr>
<tr>
<td>Triangle: Area = ½ (Base x Height)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft³)</th>
<th>Rectangle/square footprint: Volume = Length x Width x Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle footprint (cylinder): Volume = π x r² x Depth (where π ≈ 3.14 and r = radius = ½ diameter)</td>
<td></td>
</tr>
<tr>
<td>Triangle footprint: Volume = ½ (Base x Height) x Depth</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth: Wet Stain on Concrete or asphalt surface</th>
<th>If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth of a wet stain on asphalt surface: 0.0013' (1/64&quot;)</td>
<td></td>
</tr>
<tr>
<td>These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.</td>
<td></td>
</tr>
</tbody>
</table>

| Depth: Contained or “Ponded” sewage | Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume. |
Miscellaneous Computations & Examples (continued)

**Area/Volume of a Rectangle or Square**
Formula:  \( \text{Length} \times \text{Width} \times \text{Depth} = \text{Volume in cubic feet} \)

\[
\frac{25'}{\text{Length}} \times \frac{12'}{\text{Width}} \times \frac{0.14'}{\text{Depth}} = 42 \text{ Cubic Feet}
\]

Multiply the volume by 7.48 gallons to determine the volume in gallons:

\[
\frac{42 \text{ ft}^3}{\text{Volume}} \times \frac{7.48}{\text{gal/ft}^3} = 314.16 \text{ gallons}
\]

**Area/Volume of a Right Triangle**
Formula:  \( \text{Base} \times \text{Height} \times \text{Depth} = \text{Volume in cubic feet} \)

\[
\frac{45'}{\text{Base}} \times \frac{10'}{\text{Height}} \times \frac{0.05'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = 84.15 \text{ gallons}
\]

**Area/Volume of a Circle**
Formula:  \( \pi \times r^2 \times 0.785 \times \text{Depth} = \text{Volume in cubic feet} \)

The diameter is a straight line passing from side to side through the center of a circle.

\[
\frac{13.5'}{\text{Radius}} \times \frac{13.5'}{\text{Radius}} \times \frac{3.14}{\pi} \times \frac{0.03'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = 128.42 \text{ gallons}
\]
STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

<table>
<thead>
<tr>
<th>Size of bucket(s) or barrel(s)</th>
<th>How many of this size?</th>
<th>Multiplier</th>
<th>Estimated SSO Volume (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 gallon water jug</td>
<td></td>
<td>x 1 gallons</td>
<td></td>
</tr>
<tr>
<td>5 gallon bucket</td>
<td></td>
<td>x 5 gallons</td>
<td></td>
</tr>
<tr>
<td>32 gallon trash can</td>
<td></td>
<td>x 32 gallons</td>
<td></td>
</tr>
<tr>
<td>55 gallon drum</td>
<td></td>
<td>x 55 gallons</td>
<td></td>
</tr>
<tr>
<td>Other: ______ gallons</td>
<td></td>
<td>x _____ gallons</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Total SSO Volume:

STEP 5: Is rainfall a factor in the SSO? ☐ Yes ☐ No

If yes, what volume of the observed spill volume do you estimate is rainfall? __________ gallons

If yes, describe how you determined the amount of rainfall in the observed spill?

STEP 6: Calculate the estimated SSO volume by subtracting the rainfall from the SSO volume:

\[
\text{Estimated SSO Volume} - \text{Rainfall} = \text{Total Estimated SSO Volume}
\]
Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE:** If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:

**SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee Overflow Simulation courtesy of Eastern Municipal Water District**

Flow Rate Based on Photo Comparison: ____________ gallons per minute (gpm)

<table>
<thead>
<tr>
<th>Start Date and Time</th>
<th>1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>End Date and Time</td>
<td>2.</td>
</tr>
<tr>
<td>SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)</td>
<td>3.</td>
</tr>
<tr>
<td>Average Flow Rate GPM (Account for diurnal flow pattern)</td>
<td>4.</td>
</tr>
<tr>
<td>Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)</td>
<td>5.</td>
</tr>
</tbody>
</table>
SSO Date: _____________________  Location: ________________________________

STEP 1: Describe spill area surface:  □ Asphalt  □ Concrete  □ Dirt  □ Landscape  □ Inside Building

□ Other: ________________________________

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. See example below.

1. Sketch the outline of the spill (black line)
2. Break the sketch down into recognizable shapes (circles, squares, etc.) as well as you can.
3. Determine the volume of each shape. (note: in this example, after the volume of the circle is determined, multiply it by approximately 65% so that the overlap area won’t be counted twice.
4. If the spill is of varying depths, take several measurements at different depths and find the average. If the spill affects a dry unimproved area such as a field or dirt parking lot, determine the area of the wetted ground in the same manner as you would on a hard surface. Using a round-point shovel, dig down into the soil until you find dry soil. Do this in several locations within the wetted area and measure the depth of the wet soil. Average the measurement/thickness of the wet soil and determine the average depth of the wet soil.

Example (right): 2” + 1.5” + 1.25” + 3” + 5” + 1.25” = 14.0”
14.0” / 6 measurements = 2.33”
Average Depth = 2.33” (0.194’)

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STEP 3: Calculate the area of the footprint by completing the table below for each shape in Step 2.

If two shapes overlap, select one of the two shapes and estimate the percentage of that shape that does not overlap. Enter that percentage in the % Not Overlapping column. This will ensure that the overlap area is only counted once. Refer to the example on the previous page.

<table>
<thead>
<tr>
<th>Rectangles</th>
<th>Length</th>
<th>X</th>
<th>Width</th>
<th>X</th>
<th>% Not Overlapping*</th>
<th>=</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Triangles</th>
<th>Base</th>
<th>X</th>
<th>Height</th>
<th>Multiplier</th>
<th>X</th>
<th>% Not Overlapping*</th>
<th>=</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>÷ 2</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
</tr>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>÷ 2</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
</tr>
<tr>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>÷ 2</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circles</th>
<th>π</th>
<th>X</th>
<th>Radius</th>
<th>X</th>
<th>Radius</th>
<th>X</th>
<th>% Not Overlapping*</th>
<th>=</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.14</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
<tr>
<td>3.14</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
<tr>
<td>3.14</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>ft</td>
<td>X</td>
<td>%</td>
<td>=</td>
<td>ft^2</td>
<td></td>
</tr>
</tbody>
</table>

Total Spill Area (sum of all three tables above): ____________________________ ft^2

STEP 4: Measure the depth of the spill.

If spill is of varying depths, take several measurements at different depths and find the average.

\[
s = \frac{\text{sum of measurements}}{\text{# of measurements}} \text{ inches} + 12 = \text{average depth in feet of ponded sewage}
\]

STEP 5: Calculate spill volume of ponded sewage in cubic feet by multiplying the Total Spill Area in Step 3 by the average depth calculated in Step 4.

Convert from cubic feet to gallons by multiplying by 7.48.

\[
\text{Total estimated volume} = \frac{\text{spill area (Step 3)}}{\text{average depth (Step 4)}} \times 7.48 \text{ gal} = \text{gallons}
\]
INSERT TAB:
Backup Forms
Complete this form only if there is a backup into a residence or business.

Instructions to the Field Crew:

1. Take photo of each form before giving it to the customer for documentation.

2. Tear forms listed below out of this workbook and hand to customer. Leave the First Responder Form in this workbook, do not give to Customer.

3. Check each item that was provided to the customer.

4. Have customer sign below.

Forms/Documents:

☐ Form E-3: Declination of Cleaning Services

☐ Form E-4: Customer Information Letter and Claim Form

☐ Form E-5: Your Responsibilities as a Private Property Owner

Forms Provided to:

Customer Name

__________________________________________

Customer Signature

__________________________________________

Date

__________________________________________

Check here if customer declines to sign: ☐

Forms Provided by:

Employee Name

__________________________________________

Initial

Instruction to Collections System Superintendent:

Send photos, including the photo of the Declination of Cleaning Services, and a copy of the First Responder form to the City Clerk.
Complete this form only if there is a backup into a residence or business.

Fill out this form as completely as possible.
Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

<table>
<thead>
<tr>
<th>PERSON COMPLETING THIS FORM:</th>
<th>PHONE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>DATE:</td>
</tr>
<tr>
<td>Title:</td>
<td>TIME:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TIME STAFF ARRIVED ON-SITE:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DOES THE CUSTOMER WANT THE CITY TO CALL FOR CLEANING SERVICE?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If no, give the customer the Cleaning Declination Form and have them sign here:</td>
<td>____________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESIDENT NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
</tr>
<tr>
<td>Renter</td>
</tr>
</tbody>
</table>

| IF RENT, |
| PROPERTY MANAGER(S): | OWNER: |
| ADDRESS: | ADDRESS: |

<table>
<thead>
<tr>
<th>PHONE:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th># OF PEOPLE LIVING AT RESIDENCE:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Approximate Age of Home:</th>
<th># of Bathrooms:</th>
<th># of Rooms Affected:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Numbers of Photographs or Videos Taken:</th>
<th>Where are photos/video stored?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photographs</td>
<td>Video</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is nearest upstream manhole visibly higher than the drain/fixture that overflowed?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Does property have a Property Line Cleanout or BPD?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanout</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If yes, was the Property Line Cleanout/BPD operational at the time of the overflow?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have there ever been any previous spills at this location?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Has the resident had any plumbing work done recently?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

If YES, please describe:

GO TO Page 2
LIVABILITY ASSESSMENT

Is there sufficient non-contaminated living space for residents to stay during cleaning including a functioning and non-contaminated bathroom?

- If NO, Recommend to the resident to vacate premises while area is cleaned and disinfected. Advise the resident to make alternate living arrangements and submit claim form to the City Clerk’s office for review and payment if approved.

- If YES, Are there any residents that:
  - Are pregnant?
  - Are children?
  - Have severe allergies/asthma?
  - Have respiratory problems?
  - Have a compromised immune system?

- If NO, Is the food preparation area contaminated?

  - If NO, STOP: Resident can stay in premises.
  - If YES, Is the area a childcare or extended care facility?

    - If NO, Is the food preparation area contaminated?
      - If NO, STOP: Resident can stay in premises.
      - If YES, Are there any residents that:
        - Are pregnant?
        - Are children?
        - Have severe allergies/asthma?
        - Have respiratory problems?
        - Have a compromised immune system?

        - If NO, STOP: Resident can stay in premises.
        - If YES, Is the area a childcare or extended care facility?

          - If NO, Is the food preparation area contaminated?
            - If NO, STOP: Resident can stay in premises.
            - If YES, Are there any residents that:
              - Are pregnant?
              - Are children?
              - Have severe allergies/asthma?
              - Have respiratory problems?
              - Have a compromised immune system?

              - If NO, STOP: Resident can stay in premises.
              - If YES, Is the area a childcare or extended care facility?

                - If NO, Is the food preparation area contaminated?
                  - If NO, STOP: Resident can stay in premises.
                  - If YES, Are there any residents that:
                    - Are pregnant?
                    - Are children?
                    - Have severe allergies/asthma?
                    - Have respiratory problems?
                    - Have a compromised immune system?

                    - If NO, STOP: Resident can stay in premises.
                    - If YES, Is the area a childcare or extended care facility?

                      - If NO, Is the food preparation area contaminated?
                        - If NO, STOP: Resident can stay in premises.
                        - If YES, Are there any residents that:
                          - Are pregnant?
                          - Are children?
                          - Have severe allergies/asthma?
                          - Have respiratory problems?
                          - Have a compromised immune system?

                          - If NO, STOP: Resident can stay in premises.
                          - If YES, Is the area a childcare or extended care facility?

                            - If NO, Is the food preparation area contaminated?
                              - If NO, STOP: Resident can stay in premises.
                              - If YES, Are there any residents that:
                                - Are pregnant?
                                - Are children?
                                - Have severe allergies/asthma?
                                - Have respiratory problems?
                                - Have a compromised immune system?

                                - If NO, STOP: Resident can stay in premises.
                                - If YES, Is the area a childcare or extended care facility?

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                                    - If NO, STOP: Resident can stay in premises.
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                                      - Are pregnant?
                                      - Are children?
                                      - Have severe allergies/asthma?
                                      - Have respiratory problems?
                                      - Have a compromised immune system?

                                      - If NO, STOP: Resident can stay in premises.
                                      - If YES, Is the area a childcare or extended care facility?

                                        - If NO, Is the food preparation area contaminated?
                                          - If NO, STOP: Resident can stay in premises.
                                          - If YES, Are there any residents that:
                                            - Are pregnant?
                                            - Are children?
                                            - Have severe allergies/asthma?
                                            - Have respiratory problems?
                                            - Have a compromised immune system?

                                            - If NO, STOP: Resident can stay in premises.
                                            - If YES, Is the area a childcare or extended care facility?

                                              - If NO, Is the food preparation area contaminated?
                                                - If NO, STOP: Resident can stay in premises.
                                                - If YES, Are there any residents that:
                                                  - Are pregnant?
                                                  - Are children?
                                                  - Have severe allergies/asthma?
                                                  - Have respiratory problems?
                                                  - Have a compromised immune system?

                                                  - If NO, STOP: Resident can stay in premises.
                                                  - If YES, Is the area a childcare or extended care facility?

                                                    - If NO, Is the food preparation area contaminated?
                                                      - If NO, STOP: Resident can stay in premises.
                                                      - If YES, Are there any residents that:
                                                        - Are pregnant?
                                                        - Are children?
                                                        - Have severe allergies/asthma?
                                                        - Have respiratory problems?
                                                        - Have a compromised immune system?

                                                        - If NO, STOP: Resident can stay in premises.
                                                        - If YES, Is the area a childcare or extended care facility?

                                                          - If NO, Is the food preparation area contaminated?
                                                            - If NO, STOP: Resident can stay in premises.
                                                            - If YES, Are there any residents that:
                                                              - Are pregnant?
                                                              - Are children?
                                                              - Have severe allergies/asthma?
                                                              - Have respiratory problems?
                                                              - Have a compromised immune system?

                                                              - If NO, STOP: Resident can stay in premises.
                                                              - If YES, Is the area a childcare or extended care facility?

                                                                - If NO, Is the food preparation area contaminated?
                                                                  - If NO, STOP: Resident can stay in premises.
                                                                  - If YES, Are there any residents that:
                                                                    - Are pregnant?
                                                                    - Are children?
# City of Daly City Overflow Emergency Response Plan

## Declination of Cleaning Services (Backup Only)

### Customer Information

<table>
<thead>
<tr>
<th>NAME:</th>
<th>ADDRESS:</th>
<th>TELEPHONE:</th>
</tr>
</thead>
</table>

### ON (date) AT (time) Approximately (quantity) GALLONS OF:

- □ Sewage
- □ Grey Water
- □ Toilet Bowl Water
- □ Odor
- □ Other (describe):

### Overflowed from (or odor emanating from):

- □ Toilet
- □ Shower/Tub
- □ Washer
- □ Other (describe):

### The overflow affected the following areas (check one):

- □ Bathroom
- □ Bedroom
- □ Hallway
- □ Garage
- □ Kitchen
- □ Crawlspace
- □ Other (specify):

### The overflow affected the following flooring:

- □ Tile
- □ Wood Flooring
- □ Linoleum
- □ Carpet
- □ Other (specify):

### and/or additional materials:

- □ Area Rugs
- □ Towels
- □ Clothing
- □ Other (specify):

### This Form Completed By:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

(Write legibly)

<table>
<thead>
<tr>
<th>Title:</th>
<th>Time:</th>
</tr>
</thead>
</table>

### CUSTOMER, please read the following and sign below.

I/We acknowledge that City of Daly City (City) has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or overflow described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without City assistance, and that the City will not accept responsibility for work performed by persons other than those engaged by the City. The City will also not accept responsibility for any charges related to this incident that are not usual and customary.

### Customer Signature:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

The information above was explained to the customer by the following employee:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Title:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

### Recommendations to customer to clean up the spill:

- Keep pets and children out of the affected area
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Remove and discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow water to cool before washing your hands.) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash all clothes worn during the cleanup in hot water and detergent (wash separately from uncontaminated clothes).
- Wash clothes contaminated with flood or sewage water in hot water and detergent. Use a laundromat for washing large quantities of clothes and linens until your onsite wastewater system has been professionally inspected and services.
- Seek immediate attention if you become injured or ill.
Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the City is investigating the cause of this incident.

If the City is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor provided by the City has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the City does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

To discuss this matter, contact the Collections System Manager at (650) 991-8211 ext.8654. To submit a claim for damages or for alternative living arrangements (if necessary), complete the Claim Form and contact the City Attorney’s Office at (650) 991-8122.

Sincerely,
The City of Daly City

What you need to do now:

• Minimize the impact of the loss by responding promptly to the situation.
• Do not attempt to clean the area yourself, let the cleaning and restoration company handle this.
• Keep people and pets away from the affected area(s) until cleanup has been completed.
• Turn off any appliances that use water.
• Turn off heating/air conditioning systems.
• Do not remove items from the area – the cleaning and restoration company will handle this.
• If you had recent plumbing work done, contact your plumber or contractor and inform them of this incident.
INSTRUCTIONS FOR FILING A CLAIM

Failure to complete all sections of this form could delay the processing of your claim and could result in the return or denial of your claim.

1. **Claimant’s Name, Address, and Telephone Number(s):** State the full name, home address, and telephone numbers of the person claiming personal injury, property damage, or loss.

2. **Send All Correspondence To:** State the full name, mailing address, and telephone number of the person to whom all official notices and other correspondence should be sent, if other than the Claimant in # 1.

3. **Date and Time of Incident:** State the exact month, date, year, and time (including AM or PM), of the incident giving rise to the claim.

4. **Date of Birth (Optional):** State the Claimant’s date of birth, including month, day, and year.

5. **Location of Incident:** Include the exact address or intersection streets, and city where the incident occurred.

6. **Basis of Claim:** State in as much detail as possible, all the facts supporting your claim, including all facts and circumstances of the incident, all alleged injuries, property damage and loss, all persons, entities, property and City departments involved, and why you believe the City is responsible for the alleged injury, property damage, or loss.

7. **Description of Claimant’s injury, property damage, or loss:** Provide in full detail a description of the injury, property damage, or loss related to the incident. If vehicles were involved, provide the make, model, and year of each vehicle, if known.

8. **List the name(s) of any Daly City employee(s) causing the injury, property damage, or loss, if known:** Include the first, last name, and other identifying information.

9. **List the names of any additional witnesses with his/her phone number:** State the names and telephone numbers of any persons who witnessed the incident.

10. **Amount of Claimant’s property damage or loss:** State the total amount of money you are claiming in damages. Provide a breakdown of each item of damages and how that amount was computed. You may include future, anticipated expenses or losses. Whenever possible, please attach copies of all bills, receipts and repair estimates.

   If the claim is for less than $10,000, you must state the total amount claimed, together with the basis of your computation. If the claim is for $10,000 or more, you do not need to provide the specific dollar amount of your claim. However, you must indicate the appropriate court jurisdiction. If your claim is for less than $25,000, mark “Limited Civil.” If your claim is for $25,000 or more, mark “Unlimited Civil.”

11. **Signature of Claimant or Representative:** Please sign and date the form. Print the name of the signatory and his/her relationship to the Claimant. If you have completed this form for yourself and you are the Claimant, write “Self.”

Generally, a claim relating to death or injury to a person or to personal property should be filed within six (6) months from the date of occurrence. For exceptions to this rule, please see California Government Code § 911.2.

Please attach additional sheets of paper as necessary to complete your claim submission.

**WARNING:** IT IS A CRIMINAL OFFENSE TO FILE A FALSE CLAIM. CRIMINAL PENALTY FOR PRESENTING A FALSE OR FRAUDULENT CLAIM IS IMPRISONMENT OR FINE OR BOTH. (CALIFORNIA PENAL CODE § 72.)

Rev. 04/12/2017
CLAIM AGAINST THE CITY OF DALY CITY
Before completing this form, please read the instructions.

<table>
<thead>
<tr>
<th>1 Claimant's Name:</th>
<th>For official date stamp only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td>St: Zip:</td>
</tr>
<tr>
<td>Phone:</td>
<td>Alt. Phone:</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>2 Send All Correspondence To:</td>
<td>Check if same as #1</td>
</tr>
<tr>
<td>Attn:</td>
<td></td>
</tr>
<tr>
<td>Street Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td>St: Zip:</td>
</tr>
<tr>
<td>Phone:</td>
<td></td>
</tr>
</tbody>
</table>

3 Date and Time of Incident: 4 Date of Birth (optional):

5 Location of Incident:

6 Basis of Claim:

7 Description of Claimant's injury, property damage, or loss:

8 List the name(s) of any Daly City employee(s) causing the injury, property damage, or loss if known:

9 List the names of any additional witnesses including phone number:

10 Amount of Claimant's property damage or loss: $

   If the amount is for $10,000 or more: Court Jurisdiction:
   Limited Civil (Less than $25,000)  Unlimited Civil ($25,000 or more)

11 Signature of Claimant or Representative:
    Name: Date:
    Relationship to Claimant:
How a Sewer System Works

A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.

Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don’t already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: “Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of **backwater valve**.” The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: “Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover.”
Spill cleanup inside the home:
For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner’s insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Other Tips:
• Keep children and pets out of the affected area.
• Turn off heating/air conditioning systems
• Wear rubber boots, rubber gloves, and goggles during cleanup.
• Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
• Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
• Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
• Help the drying process with fans, air conditioning units, and dehumidifiers.
• After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
• Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
• Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Spill cleanup outside the home:
• Keep children and pets out of the affected area until cleanup has been completed.
• Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
• Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
• On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ¼ cup of bleach to 5 gallons of water, but don’t allow it to reach a storm drain as the bleach can harm the environment.
• After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
• Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
• Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

Seek immediate attention if you become injured or ill during or after the cleanup process.
Failure Analysis
## OFFICE USE ONLY

<table>
<thead>
<tr>
<th>Incident Report #</th>
<th>Prepared By</th>
</tr>
</thead>
</table>

### SSO/Backup Information

<table>
<thead>
<tr>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Summary of Historical SSOs/Backups/Service Calls/Other Problems

<table>
<thead>
<tr>
<th>Date</th>
<th>Cause</th>
<th>Date Last Cleaned</th>
<th>Crew</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Records Reviewed By: |

Record Review Date: 

### Summary of CCTV Information

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<th>Tape Name/Number</th>
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<tr>
<td></td>
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<table>
<thead>
<tr>
<th>CCTV Tape Reviewed By</th>
<th>CCTV Review Date</th>
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<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Observations

Go to Side B
# City of Daly City Overflow Emergency Response Plan

## Collection System Failure Analysis

### Recommendations

<table>
<thead>
<tr>
<th>✓</th>
<th>Type</th>
<th>Specific Actions</th>
<th>Who is Responsible?</th>
<th>Completion Deadline</th>
<th>Who Will Verify Completion?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Changes or Repairs Required</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td></td>
<td>Repair(s)</td>
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<tr>
<td></td>
<td>Construction</td>
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<td></td>
<td>Capital Improvement(s)</td>
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<tr>
<td></td>
<td>Change(s) to Maintenance Procedures</td>
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<td></td>
<td>Change(s) to Overflow Response Procedures</td>
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<td>Training</td>
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<tr>
<td></td>
<td>Misc.</td>
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<td></td>
</tr>
</tbody>
</table>

**Comments/Notes:**

**Reviewed by:**

**Reviewed by:**

**Review Date:**

**Review Date:**

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INSERT TAB:
Field Sampling
Surface Water Sampling Standard Operating Procedure

**Sampling Steps**

- **Get ice pack or ice and place in cooler**
- **Determine point spill entered waterway. Photograph this location (include a reference point in the photo)**
- **Remove and begin completing the Surface Water Sampling Worksheet**
- **Determine direction of water movement from point of discharge.**

- Collect all samples against the direction of the water flow! (face upstream so any sediment disturbed flows behind and away from you.)
- Collect downstream sample first!
- Collect samples well away from the bank (preferably where water is visibly flowing)
- Avoid sampling debris or scum layer from the surface.
- Photograph evidence of dead fish!

**Determine approximate stream velocity, if applicable, and how long it has been since the SSO flow to the surface water stopped, and move downstream the appropriate distance to collect the downstream sample. Move upward to collect the Spill Entry Point sample and keep moving upstream the appropriate distance to collect the Upstream or Reference sample.**

- **Don the PPE from the Sampling Kit.**
- **Label all samples with their location, your name and the date/time collected. Record this on the Surface Water Sampling Worksheet.**

**Sampling Steps**

- Take photo of each sample location (include a reference point in the photo). Remove the seal from the bacteria sample container (100ml) just prior to collecting your sample.
  1. Remove the cap immediately before collecting each sample.
  2. Avoid allowing the inside of the cap to touch anything.
  3. Using the sampling pole, lower the bottle/dipper 6” below the water surface and sweep the bottle/dipper upstream and out of the water. Do not disturb the bottom sediment. Fill the sample bottle to the line. Immediately replace cap.

- Open the ammonia-nitrogen sample container and allow water to gently flow into the bottle just below the neck of the jar. NOTE: The ammonia-nitrogen sample bottle contains sulfuric acid – LEAVE THE ACID IN THE BOTTLE AND DO NOT ALLOW IT TO TOUCH YOUR SKIN.

- **Repeat sampling steps (red boxes) to collect downstream and discharge point samples.**

- **Place samples in cooler on the ice pack.**

- **Take cooler containing samples and complete Chain of Custody to the lab within 6 hours of collection time.**

- **Contact the lab and inform them that the following samples require processing: Ammonia-Nitrogen and total/fecal coliform.**

- **Complete the Chain of Custody form and the Surface Water Sampling Worksheet.**

- **Post warning signs as directed by County Environmental Health or the staff member responsible for signage. Remove warning signs and lift restrictions when authorized.**

- **Repeat sampling daily from the time the spill is known until the results of two consecutive sets of samples indicate the return of the normal level or cessation of monitoring is authorized by County Env. Health.**
## Surface Water Sampling Worksheet

**Sample Date:** 

**Sample Time:**  
☐ AM  ☐ PM

**Sample Location:**  

**Sampler(s)’ Name(s):**  

**Sampler(s)’ Signature(s):**  

### What is being sampled?
- [ ] Stream  
- [ ] Pond  
- [ ] Lake  
- [ ] River  
- [ ] Other:

### If the SSO was not actively entering the surface water during sampling:

A. Stream Velocity: ________________ CFS

B. How Long Has the SSO NOT Been Entering the Surface Water?  
   ______ minutes X 60sec/min = _____ seconds

C. How Far Downstream Did You Travel To Collect The SOURCE Sample?  
   (A X C = Feet): __________ feet

D. Explain why you travelled a different distance, if you did, to collect the source sample:

### Weather at time of sampling:
- [ ] Sunny  
- [ ] Overcast  
- [ ] Sprinkling  
- [ ] Raining  
- [ ] Snowing

### Was the SSO actively entering the surface water during Sampling?  
☐ YES  ☐ NO

If no, complete A-D in the gray box to the right ➔

### Sample Location

<table>
<thead>
<tr>
<th>Sample Location</th>
<th># of Samples*</th>
<th>Photo ID# of Sample Location</th>
<th>Visual Observations and/or Interferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downstream*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Blank*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Collect duplicate bacteria samples at each location

### FINISH CHECKLIST

- [ ] All Samples Labeled with:  
  - Date: a six-digit number indicating the year, month, day of collection  
  - Time: a four-digit number indicating military time of collection. e.g. 0954  
  - Sample Location: Upstream, Source, or Downstream  
  - Samplers: each sampler is identified  
  - Parameter/preservative: analysis to be conducted for sample/sample preservation

- [ ] Chain of Custody Completed
- [ ] Samples on Ice in Cooler
- [ ] Pictures Taken of Each Sample Location and the Photo ID/# Noted Above
- [ ] All Sampling Equipment Collected

### NOTES / OBSERVATIONS
### CONTACT INFORMATION
- **Company/Branch:** City of Daly City  
- **Address:** 153 Lake Merced Blvd Daly City, CA 94015  
- **Contact:** Kevin McCarthy  
- **Phone:** (650) 991-8200 ext. 8654  
- **Email:** kmccarthy@dalycity.org

### PROJECT INFORMATION
- **Project:** City of Daly City  
- **Project ID:** Coliform  
- **Sampling Date and Time:** 
- **PO Number:**  
- **Send Invoice to:** Tom Piccolotti

### REQUESTED SERVICES (Boxes)

### TURN AROUND TIME CODES - (TAT)
- **STD** - Standard (DEFAULT 48-72 Hour)
- **ND** - 24 Hour (+50%)
- **SD** - Same Business Day Rush (+75%)
- **WH** - Weekend/Holiday (+100%)  
- **Fecal Coliform Method:** SM 9221

### SAMPLE INFORMATION

<table>
<thead>
<tr>
<th>SAMPLE ID</th>
<th>DESCRIPTION</th>
<th>Sample Type (Below)</th>
<th>TAT (Above)</th>
<th>Total Volume/Area (as applicable)</th>
<th>NOTES (Time of day, Temp, RH, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coliform</td>
<td>Sampling Location</td>
<td>W</td>
<td>STD</td>
<td>100 ml Time of Sample</td>
</tr>
</tbody>
</table>

### NOTES
- **Time of Sample**
- **Weather**
- **Date**

### SAMPLE TYPE CODES
- **BC** - BioCassette™
- **CP** - Contact Plate
- **T** - Tape
- **D** - Dust
- **A1S** - Andersen 1-stage
- **S** - Surface Air Sampler
- **P** - Pure Culture
- **A2S** - Andersen 2-stage
- **T** - Tape
- **D** - Dust
- **SW** - Swab
- **SW** - Soil
- **B** - Bulk
- **O** - Other

### RELINQUISHED BY

### DATE & TIME

### RECEIVED BY