

Sunnyslope County Water District

Sanitary Sewer Spill Contingency Plan SSMP Overflow Emergency Response Plan (OERP)

Standard Procedures for Responding, Containing, and Cleaning up Sewage Spills

A. General

In the event of a sanitary sewer overflow (SSO), IMMEDIATE action should be taken to contain the spill. Staff must respond onsite to a SSO within **1 hour** of initial notification.

B. Collection System

1. When first notified of the wastewater spill, take out this OERP and to use as a guide.
2. Notify the Water/Wastewater Superintendent by phone. If the Superintendent cannot be reached, call the Crew Chief, General Manager, or Associate Engineer.
3. Put on appropriate PPE and go immediately to the site of the SSO.
4. Analyze the situation to determine the proper course of action, equipment needed, number of staff required, and other key response information below:
 - i. Containment strategy (berms, pit, temporary dam, sand bags, etc.)
 - ii. Protect properties and minimize damage
 - iii. Pumps & hoses to direct to downstream manhole
 - iv. Traffic control
 - v. Portable lighting
 - vi. Repair equipment (hydro, vactor truck, repair clamps, etc.)
 - vii. Reduce public exposure
5. Communicate all this to the Water/Wastewater Supervisor who will dispatch an emergency crew to assist and gather equipment.
6. Try to contain any spilled wastewater by blocking gutters and storm drains with sandbags and/or constructing earthen berms. Plastic sheeting can also be used to as an aid in building barriers.
7. Pump flow around trouble area utilizing portable pumps and quick coupling pipe or hose.
8. Be prepared to cope with sewage backup into nearby buildings, especially if they have a basement.

9. Unclog the sewer main as quickly as possible. Refer to the Sanitary Sewer Hydro Cleaner Operation Procedure.
10. Flush out any debris upstream or downstream of the clog.
11. Make sure that the wastewater is flowing properly.
12. Following containment, clean the spill by pumping wastewater into a sewer main or tanker truck followed by flushing the area with potable water and pumping all flushing water into a sewer main or tanker truck.
13. Contaminated dirt must be removed and trucked to a sanitary landfill for disposal if public contact is a concern.
14. Decontaminate the affected area using an application of a disinfecting agent such as a chlorine solution or lime.
15. Use the Spill Report Form as a guideline in determining what authorities to notify. Begin telephone notification as soon as possible.
16. Fill out the Spill Report Form during this initial response visit.
17. Critique the response plan after the spill has been abated.

C. Sewer Lift Stations

1. When first notified of the wastewater spill, take out this OERP and to use as a guide.
2. Notify the Water/Wastewater Superintendent by phone. If the Superintendent cannot be reached, call the Crew Chief, General Manager, or Associate Engineer.
3. Put on appropriate PPE and go immediately to the site of the SSO.
4. Analyze the situation to determine the proper course of action, equipment needed, number of staff required, and other key response information below:
 - i. Containment strategy (berms, pit, temporary dam, sand bags, etc.)
 - ii. Protect properties and minimize damage
 - iii. Traffic control
 - iv. Portable lighting
 - v. Repair equipment (pump, motor, generator, repair clamps, etc.)
 - vi. Reduce public exposure
5. Determine the cause of the lift station problem.
 - (1) Power Failure
 - (a) If the pump station has an emergency generator, determine if it is operating.
 - (b) If the lift station requires a generator follow the procedures regarding the Lift Station Emergency Generator Operation.
 - (c) Determine if the power loss is only onsite or area-wide.

- (d) If loss is only onsite, check out all electrical circuits for tripped breakers, shorts, or system overloads.
 - (e) If loss is area-wide, contact the power company and coordinate repair and start-up operations with them.
- (2) Equipment Failure
- (a) Always use appropriate lifting and hoist equipment following confined space safety rules.
 - (b) Check impellers for blockage due to rags and trash.
 - (c) Check the pump motor for electrical failure.
 - (d) Check for bearing seizure due to overheating or insufficient lubrication.
 - (e) Check spare parts inventory.
 - (f) Use original equipment quality replacement parts
6. Communicate all this to the Water/Wastewater Supervisor who will dispatch an emergency crew to assist and gather equipment.
 7. Water/Wastewater Supervisor to call for a septic pump truck to pump down lift station wet well.
 - i. Al's Septic Tank Service (831) 637-3700
 - ii. Green Line (831) 422-2298
 - iii. Morton Septic Service (408) 779-9553 or (408) 842-2942
 8. At RM II, direct overflow to old Treatment Pond 1. At Main Lift, direct overflow to retention pond to the southwest.
 9. Implement any corrective measures needed to resolve the problem.
 10. Make sure that the lift station is working and wastewater is pumping properly out of the wet well.
 11. Following containment, clean the spill by pumping wastewater into the lift station wet well or pump truck followed by flushing the area with potable water and pumping that water as well into the lift station wet well or truck.
 12. Contaminated dirt must be removed and trucked to a sanitary landfill for disposal if public contact is a concern.
 13. Decontaminate the affected area an application of a disinfecting agent as a chlorine solution or lime.
 14. Use the Spill Report Form as a guideline in determining what authorities to notify. Begin telephone notification as soon as possible.
 15. Fill out the Spill Report Form during this initial response visit.
 16. Critique the response plan after the spill has been abated.

D. Treatment Plant

1. When first notified of the wastewater spill, take out this OERP and to use as a guide.
2. Notify the Water/Wastewater Superintendent by phone. If the Superintendent cannot be reached, call the Crew Chief, General Manager, or Associate Engineer.
3. Put on appropriate PPE and go immediately to the site of the leak/spill.
4. Analyze the situation to determine the proper course of action, equipment needed, number of staff required, and other key response information below:
 - vii. Containment strategy (berms, pit, temporary dam, sand bags, etc.)
 - viii. Protect equipment and minimize damage
 - ix. Portable lighting
 - x. Repair equipment (repair clamps, vactor truck, etc.)
 - xi. Reduce staff exposure
5. Communicate all this to the Water/Wastewater Supervisor who will dispatch an emergency crew to assist and gather equipment.
6. Determine the source of the spill and extent of damage.
7. If possible, isolate or bypass spill.
8. Pump overflow wastewater into a treatment basin. If that is not possible, then pump overflow wastewater to old Treatment Pond 1.
9. Implement any corrective measures needed to resolve the problem.
10. Make sure that the lift station is working and wastewater is pumping properly out of the wet well.
11. Following containment, clean the spill by pumping wastewater into a treatment basin or pump truck followed by flushing the area with potable water and pumping that water as well into a treatment train or truck.
12. Contaminated dirt must be removed and trucked to a sanitary landfill for disposal if public contact is a concern.
13. Decontaminate the affected area an application of a disinfecting agent as a chlorine solution or lime.
14. Use the Spill Report Form as a guideline in determining what authorities to notify. Begin telephone notification as soon as possible.
15. Fill out the Spill Report Form during this initial response visit.
16. Critique the response plan after the spill has been abated.

Reporting Procedures Class 1 Spills

Class 1 Spills – Any Spill of GREATER than 1,000 gallons and/or all sewage spills that enter a waterbody of the State, or occur where public contact is likely

A. Telephone Notification

- (1) In the event of a Class 1-spill emergency, plant personnel must have a list of people to contact by phone. The Field Spill Report Form provides this phone list and is generally organized from top to bottom in the order that people should be notified in the event of a spill emergency. The Field Spill report Form also identifies whom to notify depending upon the unique characteristics of the spill such as the Health Department if there is risk to the public exposure to the spill or State Fish and Game if a surface water body is impacted.
- (2) RWQCB must be notified by phone within 24 hours of a Class 1-spill incident.

B. Written Report

- (1) Once telephone notification has been completed and the spill is under control, a written field report should be prepared. This document is to be prepared by the on-site person responsible for the containment and cleanup of the spill using the Field Spill Report Form. This form details how the spill occurred, what was done to stop it, who responded to the spill and an estimate of how large the spill was. Once completed this constitutes the required report. It must be completed within 24 hours of the spill and will be used as the basis for the written report to the RWQCB, which is due within 5 days of the spill.
- (2) As required by state law, a written spill report must be submitted to the RWQCB within 5 days of a Class 1 spill. It must include all information required in the spill reporting form provided by the RWQCB Sewage Spill Report.
- (3) The Sewage Spill Report can be submitted online at:
<http://ciwqs.waterboards.ca.gov>

Reporting Procedures Class 2 Spills

Class 2 Spills – All other spills of LESS than 1,000 gallons that did NOT enter a waterbody of the State and public contact is NOT likely.

A. Telephone Notification

- (1) In the event of a Class 2-spill emergency, plant personnel must have a list of people to contact by phone. The Field Spill Report Form provides this phone list and is generally organized from top to bottom in the order that contacts should be notified in the event of a spill emergency. The Field Spill report Form also identifies who to notify depending upon the unique characteristics of the spill.
- (2) RWQCB does not need to be notified by phone of a Class 2-spill incident.

B. Written Report

- (1) Once telephone notification has been completed and the spill is under control, a written field report should be prepared. This document is to be prepared by the on-site person responsible for the containment and cleanup of the spill using the Field Spill Report Form. This form details how the spill occurred, what was done to stop it, who responded to the spill and an estimate of how large the spill was. Once completed this constitutes the required report. It must be completed within 24 hours of the spill and will be used as the basis for the written report to the RWQCB, which is due within 30 days of the spill.
- (2) As required by state law, a written spill report must be submitted to the RWQCB within 30 days of a Class 2 spill. It must include all information required in the spill reporting form provided by the RWQCB Sewage Spill Report.
- (3) The Sewage Spill Report can be submitted online at:
<http://ciwqs.waterboards.ca.gov>

Evaluation and Critique

It is vital that every SSO event and the response to it is seen as a chance to learn from and use to improve future responses. To accomplish this, after all aspects of a SSO have been completed from initial response through the final investigation and reporting, all those involved are to conduct thorough evaluation of the overall response and all actions taken. Every step and decision of the event should be critiqued to determine what was or was not effective. The goal is to learn from the real-world experience and situation to improve future responses to similar emergencies. By determining what strategies were or were not helpful and effective, appropriate changes or revisions to the OERP can be proposed and implemented to improve the response.

General categories for the critique include:

1. Initial notification and communication
2. Response time and preparedness
3. Initial determination of SSO scope and damage potential
4. Coordination and dispatching of emergency crew
5. Determination and gathering of parts & equipment
6. Containment and bypassing of SSO wastewater
7. Safety of public and employees (traffic, PPE, lights, unsanitary exposure, etc.)
8. Clearing of the plug or issue to restore normal flow
9. Site cleanup and restoration/mitigation
10. Notification of other agencies and following of Chain of Communication
11. Investigation of SSO cause and actions taken to address the determined cause
12. Writing and submitting of the required reports