



# City of Ridgecrest

## Overflow Emergency Response Plan

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Table of Contents

1.0 Introduction ..... 1

    1.1 Purpose ..... 1

    1.2 Goals ..... 1

    1.3 Objectives ..... 1

    1.4 Regulatory Requirements ..... 1

    1.5 Training ..... 2

2.0 Sewer System Overflow Detection and Information Gathering ..... 3

    2.1 Initial Detection of Potential SSO ..... 3

    2.2 Information Gathering ..... 3

3.0 Sewer System Overflow Response ..... 4

    3.1 Initial Response ..... 4

    3.2 Dispatching Crews ..... 4

        3.2.1 Instructions and Work Orders ..... 5

        3.2.2 Preliminary Assessment of Damage to Private and Public Property ..... 5

        3.2.3 Coordination with Hazardous Material Response ..... 5

    3.3 SSO Correction, Containment, and Clean-Up ..... 5

        3.3.1 SSO Correction ..... 6

            3.3.1.1 Additional Measures Under Potentially Prolonged Overflow Conditions ..... 6

        3.3.2 SSO Containment ..... 6

            3.3.2.1 Sampling and Lab Tests ..... 7

        3.3.3 SSO Clean-Up ..... 7

4.0 Sewer System Overflow Reporting ..... 8

    4.1 SSO Reporting ..... 8

    4.2 SSO Categories and Reporting Timeframes ..... 8

**List of Tables**

Table 2-1: SSO Reporting Quick References ..... 3

Table 3-1: Agency Notification Contact Information ..... 4

**List of Figures**

Figure 3-1: Chain of Communication for Responding to a SSO ..... 4

Figure 4-1: SSO Categories and Chain of Communication for Reporting to CIWQS ..... 10

**List of Acronyms**

CDFW	California Department of Fish and Wildlife
CITY	City of Ridgecrest or its Delegate(s)
CIWQS	California Integrated Water Quality System
CPO	Chief Plant Operator
EH	Environmental Health Department
FOG	Fats, Oils, and Grease
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollution Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
PPE	Personal Protective Equipment
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure
SSOR	Sanitary Sewer Overflow Report
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirement
WWTF	Wastewater Treatment Facility

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this Sanitary Sewer Overflow Emergency Response Plan (OERP) is to ensure that City of Ridgecrest (City) staff follow established guidelines to identify, contain, clean, investigate, and report Sanitary Sewer Overflows (SSOs). In the event of a SSO, this OERP will help guide City staff to achieve compliance with the Statewide Waste Discharge Requirements (WDRs) for Wastewater Collection Agencies. This procedures manual complies with the OERP requirements of the WDR. City Public Works Wastewater Division staff are required to know and follow these procedures.

This plan shall not supersede existing emergency plans or Standard Operating Procedures (SOPs) unless directed by the City Public Works Director.

### 1.2 Goals

The primary goals of this OERP are to protect public health and safety, prevent adverse impacts to the environment, and facilitate compliance with all regulatory requirements.

### 1.3 Objectives

This OERP will help the City of Ridgecrest achieve the following objectives:

- Provision of timely and proper notifications of responders, regulatory agencies, and other potentially affected entities.
- Provision of appropriate customer service
- Protection of the wastewater treatment facility, collection system, and all appurtenances
- Protection of collection system personnel
- Protection of private and public property beyond the collection and treatment facilities
- Minimizing adverse impacts of SSOs
- Ensuring corrective action is taken in a timely manner
- Ensuring accurate and consistent identification, investigation, and reporting
- Ensuring appropriate City staff are aware of and follow the OERP, and address emergency operations and other necessary response activities

### 1.4 Regulatory Requirements

On May 2, 2006, The State Water Resources Control Board (SWRCB) adopted Water Quality Order No. 2006-0003, requiring all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General WDR. The SWRCB action mandates the development of a Sewer System Management Plan (SSMP) and the reporting of SSOs using an electronic reporting system. An audit of the plan is required every two years to identify the effectiveness of the SSMP, and an overall update of the SSMP (using the audits to identify the sections and content of the SSMP to update) is required every five years from the date the original document was approved and certified.

Element 6 of the SSMP states the City shall implement an OERP that identifies measures to protect public health and the environment. At a minimum, the plan shall include:

1. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
2. A program to ensure appropriate response to all overflows;

3. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (i.e., 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 WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
4. Procedures to ensure that appropriate Staff and contractor personnel are aware of and follow the OERP and are appropriately trained;
5. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
6. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge

## **1.5 Training**

The City sees the value in proper training of staff for emergency purposes and intends to continue staff training. The role of each person during an emergency has been established and is clear and concise. The City staff that may be called upon to respond are required to have been properly trained.

**2.0 SEWER SYSTEM OVERFLOW DETECTION AND INFORMATION GATHERING**

**2.1 Initial Detection of Potential SSO**

SSOs may be detected by system employees or the public. The City Wastewater Treatment Facility (WWTF) is primarily responsible for receiving phone calls from the public of potential SSOs, and for forwarding work orders to the Wastewater Division. The Public Works Department can also receive telephone calls from the public regarding potential SSO situations. The WWTF and Public Works Department can receive phone calls Monday through Friday from 8:00 am to 5:00 pm. If an SSO occurs during non-office hours, the City of Ridgecrest Police Department receives after-hour emergency sewer calls and notifies the appropriate standby personnel for immediate response. **Table 2-1** below lists the appropriate contact information for the public to initially report SSO events. In addition, the City of Ridgecrest publishes the telephone numbers on its website at [www.ridgecrest-ca.gov](http://www.ridgecrest-ca.gov).

<b>Table 2-1: SSO Reporting Quick References</b>	
<u>During Office Hours:</u>	
Wastewater Treatment Facility	760-446-4631
Public Works Department	760-499-5080
<u>Emergency Afterhours:</u>	
Ridgecrest Police Department	760-499-5100

When City staff members notice an SSO during their regular activities, they shall call in, notify the Chief Plant Operator (CPO) and begin responding to the situation immediately. Dispatching personnel should record all relevant overflow information and dispatch additional response crews, as necessary. The CPO or the delegated wastewater staff are on standby during non-office hours and are aware of low manholes and prone SSO areas that may have the highest risk of overflow.

**2.2 Information Gathering**

The office assistant, police dispatcher, or whoever receives the initial call regarding a potential SSO, should obtain all relevant information available regarding the overflow, including:

- Time and date call was received
- Specific location
- Description of problem
- Time potential SSO was noticed by caller
- Caller’s name and contact information
- Observations of the caller (e.g., odor, duration, location, etc.)
- Other relevant information that will enable the responding investigator and crews to quickly locate, assess, and stop the overflow

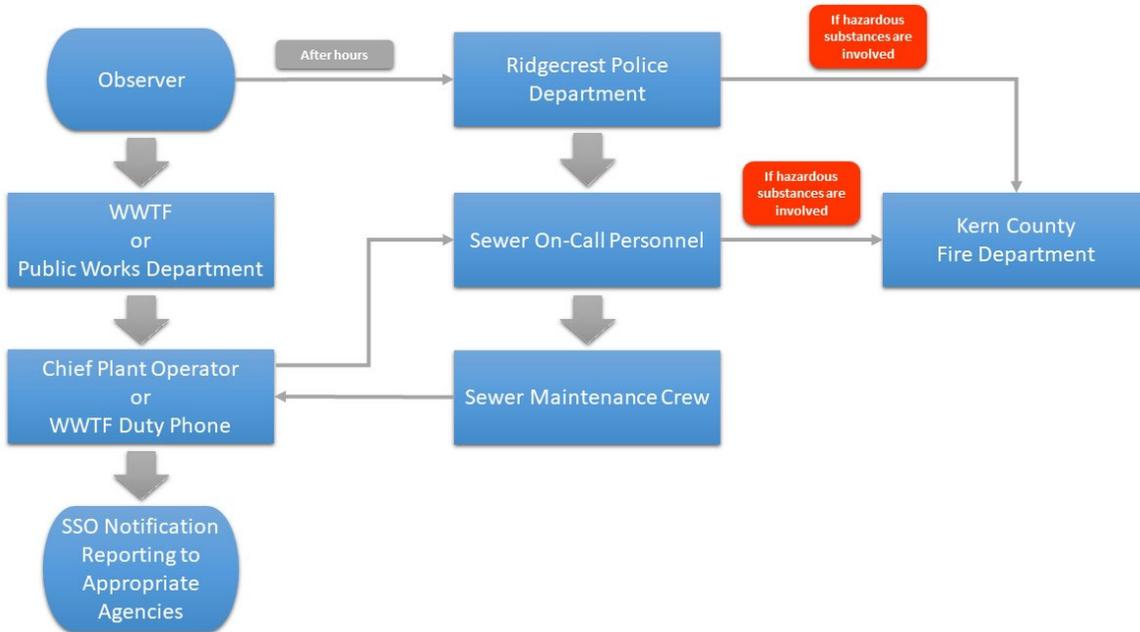
The operator that receives the initial SSO notification shall record the overflow information and create a work order for assignment to the Wastewater Division.

### 3.0 SEWER SYSTEM OVERFLOW RESPONSE

#### 3.1 Initial Response

Once a potential SSO has been reported, the CPO (760-590-0886) or the WWTF Duty phone (760-608-7660) should be contacted and a field verification of the potential SSO shall be performed. **Figure 3-1** depicts the chain of communications for responding to a SSO. Until verified, the report of a potential sewer spill shall not be referred to as a “SSO.”

**Figure 3-1:** Chain of Communication for Responding to a SSO



The First Responder is responsible for assessing the spill and filling out the Sanitary Sewer Overflow Report (SSOR). The First Responder is responsible for contacting the appropriate agencies impacted as soon as the spill is under control or assistance has arrived. **Table 3-1** lists the applicable agencies that are to be contacted.

Table 3-1: Agency Notification Contact Information		
Agency	Department	Phone Number
Kern County Health Department	Environmental Health Division	661-862-8740
	Emergency Response	661-549-9927
CRWQCB Lahontan Region	Victorville Office	760-241-6583
Kern County Office of Emergency Services	Emergency Operations Center	661-873-2602
	Emergency Communication Center	661-324-6551
California Office of Emergency Services (Cal OES)	Warning Center	916-845-8911
California Department of Fish & Wildlife	Central Region	559-243-4005

#### 3.2 Dispatching Crews

Crews and equipment shall be available to immediately respond to any reported SSO locations within the City of Ridgecrest’s service area. Additional maintenance personnel shall be “on call” in the event extra crews are needed. All

personnel being dispatched to an SSO should proceed immediately to the site. Any delays or conflicts in assignments must be immediately reported to the CPO for resolution. The CPO will visit the site of the SSO, if possible, to ensure provisions of this OERP and other directives are met.

### **3.2.1 Instructions and Work Orders**

Wastewater Division personnel should receive instructions from the first responder or CPO regarding appropriate crews, materials, supplies, and equipment needed. Dispatchers shall ensure that the entire message has been received and acknowledged by the crews who were dispatched. All standard communications procedures should be followed.

### **3.2.2 Preliminary Assessment of Damage to Private and Public Property**

Responsible crews should report their findings, including possible damage to private and public property, to the CPO immediately upon completing their investigation. If the CPO has not received findings from the field crew within one hour, the CPO will contact the response crew to determine the status of the investigation.

The dispatched crews should use discretion in assisting the property owner/occupant as reasonably as they can to avoid inflicting further damage to private property. Crews should be aware that the Division could face increased liability for any further damages to private property during assistance. The response crews shall enter private property for purposes of assessing damages. Photographs and/or video footage should be taken of the outdoor area of the SSO to thoroughly document the nature and extent of impacts and shall be forwarded to the CPO.

### **3.2.3 Coordination with Hazardous Material Response**

Upon arrival at the scene of a SSO, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g., gasoline) not common to the sewer system be detected, the sewer investigator or response crew should immediately contact the CPO for guidance before taking further action.

Should the supervisor determine the need to alert the hazardous material response team, the sewer investigator or crew shall await the arrival of the Kern County Fire Department to take over the scene. Any vehicle engine, portable pump, or open flame can provide the ignition for an explosion or fire should flammable fluids or vapors be present. All personnel should keep a safe distance and observe caution until assistance arrives.

Only when that authority determines it is safe and appropriate for the sewer investigator and crew to proceed can they then proceed under this OERP with the correction, containment, and clean-up activities.

## **3.3 SSO Correction, Containment, and Clean-Up**

SSOs can occur despite preventative maintenance and sewer rehabilitation efforts. Spills may result from blockages, failures, and other natural or man-made causes. The City is constantly on alert and ready to respond to any potential sewer overflow situations.

Under most circumstances, the City will handle all response actions with its own maintenance crews. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system. Circumstances may arise when the City could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring shoring and dewatering, should excavation be required. The City of Ridgecrest may also choose to use private contractors for open excavation operations that might exceed one day.

### 3.3.1 SSO Correction

It is the responsibility of the first personnel who arrive at the SSO site to protect the health and safety of the public by mitigating the impact of the overflow to the highest extent possible. Should the overflow not be the responsibility of the City of Ridgecrest but there is imminent danger to public health, public or private property, or to the quality of waters of the United States, then emergency action should be taken until the responsible party assumes responsibility and provides actions. Upon arrival at an SSO, the response crew should do the following:

- Determine the cause of the overflow
  - Stoppage/Blockage: Caused by debris; fats, oils, and grease (FOG); roots; or vandalism
  - Under Capacity SSO: Caused when the flow entering a pipeline is more than it can carry (e.g., rainfall event exceeds the performance storm)
  - Operator Error: Caused by a sewer system backup resulting from a treatment plant operator error
  - Structural Problem or Failure: Caused by structural pipe defects (e.g., fracture, break, collapse, etc.)
- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in determining the cause
- Determine if private property is impacted
  - Contact the Kern County Department of Environmental Health if private property is impacted
- Take immediate steps to stop the overflow
  - Relieve pipeline stoppage/blockage
  - Repair defective pipeline
- Request additional personnel, materials, supplies, or equipment, if necessary, that will expedite and minimize the impact of the overflow.

#### 3.3.1.1 Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, a determination should be made to set up a portable by-pass pumping operation around the obstruction. Appropriate measures shall be taken to determine the proper size and number of pumps required to effectively handle the sewage flow. Continuous or periodic monitoring of the by-pass pumping operation shall be implemented as required. Regulatory agency issues shall be addressed in conjunction with emergency repairs.

### 3.3.2 SSO Containment

The City's goal for SSO containment is to initiate measures to contain the overflowing sewage and recover, where possible, sewage which has already been discharged, minimizing the impact to public health and the environment. To successfully contain the SSO, the response crew should do the following:

- Determine the immediate destination of the overflow
  - Storm drain
  - Curb gutter
  - Desert, creek bed, etc.
  - Private property
- Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain the overflow
  - Block or bag storm drains
  - Recover through vacuum truck
  - Divert into downstream manhole
- Isolate the SSO to ensure there is no public contact. The area is to be cordoned off with tape, barricades, warning signs, or traffic/crowd control setups as necessary.

### 3.3.2.1 Sampling and Lab Tests

If necessary, samples should be collected as soon as possible. The response crew shall call the CPO and request that samples be taken at the spill location. Samples will be taken approximately 500 feet upstream of the spill, and 500 and 1,000 feet downstream. The lab should be instructed to test for Total Coliform. If unacceptable levels are observed, continued composite sampling will be done until coliform/BOD levels are within permitted limits.

### 3.3.3 SSO Clean-Up

Upon successfully correcting and containing the SSO, the dispatched crew shall thoroughly clean-up the affected site. During clean-up, the crew shall ensure:

- Sanitary habits are utilized while working in the affected area, and prior to returning to normal work duties. Personnel utilize proper Personal Protective Equipment (PPE) during clean-up activities.
- No readily identified residue (e.g., sewage solids, papers, rags, plastics, rubber products) remains. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- The overflow site is disinfected and deodorized. Disinfection shall be achieved with diluted bleach (10:1 dilution) or other approved solution. Additionally, equipment used should be disinfected.
- Where sewage has resulted in ponding, the pond should be pumped dry, and the residue properly disposed. If a ponded area contains sewage that cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, bleach or other appropriate disinfectants should not be applied. The California Department of Fish & Wildlife (CDFW) should be contacted for specific instructions.
- Use of portable aerators where complete recovery of sewage is not practical and severe oxygen depletion in existing surface water is expected.
- The overflow site is to remain secured to prevent contact by the public until the site has been thoroughly cleaned.

## 4.0 SEWER SYSTEM OVERFLOW REPORTING

### 4.1 SSO Reporting

Upon completion of SSO correction, containment, and clean-up, the CPO will use the SSOR to complete the final spill reports and submit them to the SWRCB California Integrated Water Quality System (CIWQS) database, the Lahontan Regional Water Quality Control Board (RWQCB), California Office of Emergency Services (Cal OES), the Kern County Office of Emergency Services (Kern County OES), California Department of Fish & Wildlife (CDFW), and the Kern County Environmental Health Department (Kern County EH), as needed.

The City of Ridgecrest is registered with the SWRCB CIWQS electronic sewage spill reporting system. A SSOR will be completed for all reportable spills. The information recorded on the SSOR is entered into CIWQS in accordance with the mandated reporting timelines. Copies of the SSOR will be in the City of Ridgecrest WWTF office.

Additionally, public notification measures will be implemented, as necessary. Notification may include temporary signage to indicate pollution of surface water or ground water due to an SSO and/or notification through media outlets. The Public Works Director will be the contact person for media notification.

### 4.2 SSO Categories and Reporting Timeframes

There are three main categories for defining SSOs. It is important that all City staff are familiar with and able to define each type, in the event of being dispatched to a potential SSO site. Categorizing a SSO accurately is essential for correctly following reporting and notification protocol. The categories and reporting instructions of each SSO are:

#### Category 1 SSO

- **Definition:** 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 municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (i.e., infiltration pit, percolation pond).
- **Reporting:** Must be reported to Cal OES within two (2) hours. Reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSO must be made to the Online SSO System as soon as possible but no later than three (3) business days after the City is made aware of the SSO. Additional information may be added to the certified report, in the form of an attachment, at any time within the three-day period.

#### Category 2 SSO

- **Definition:** 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 municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- **Reporting:** Submit draft report within three (3) business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.

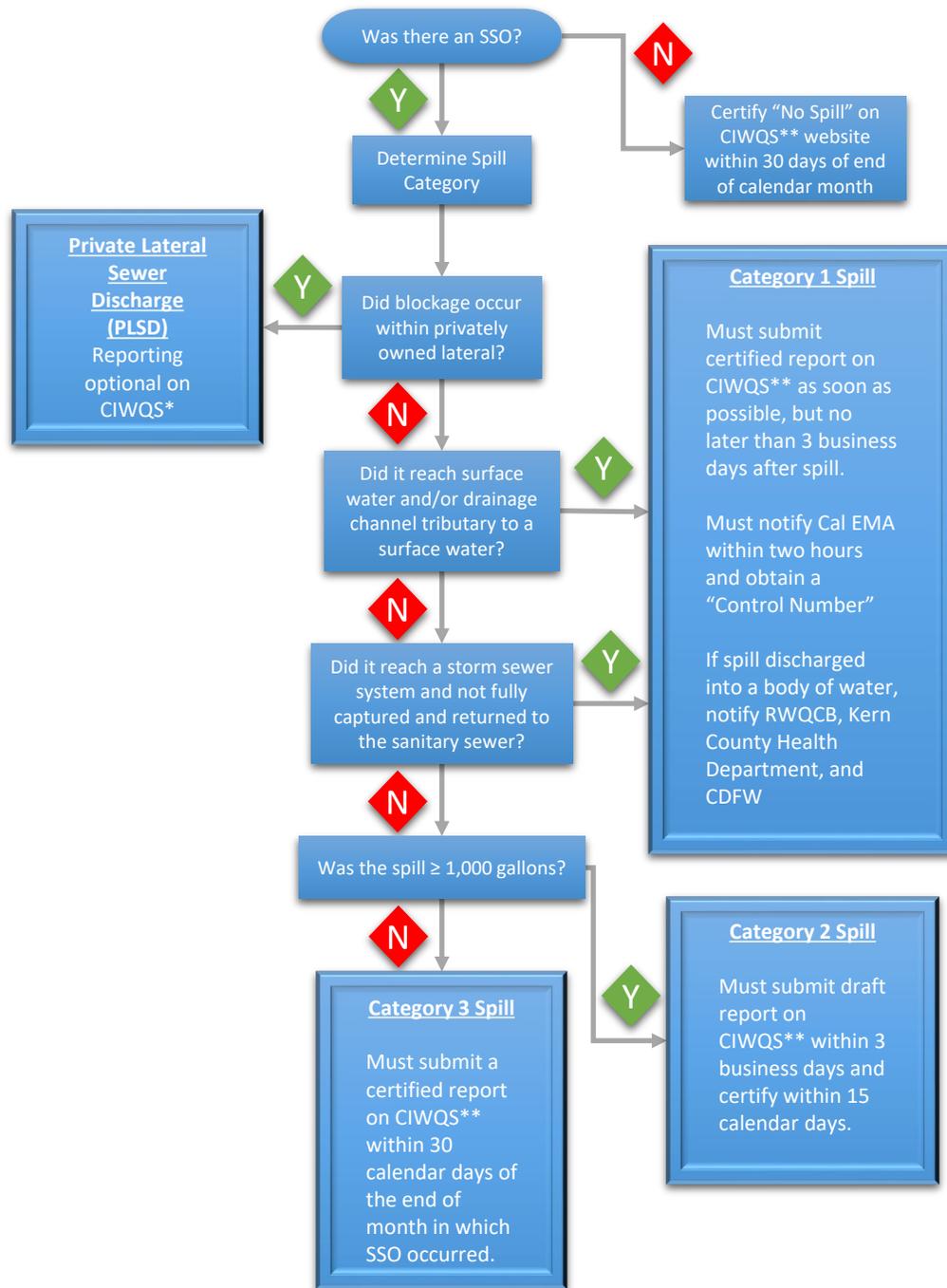
**Category 3 SSO**

- **Definition:** All other discharges of untreated or partially treated wastewater resulting from an enrollees sanitary sewer system failure or flow condition.
- **Reporting:** Submit a certified report within 30 calendar days of the end of month in which the SSO occurred.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies or State law. The Kern County EH will be notified on an as needed basis. In the event that the CIWQS database is not available, the City must fax all required information to the appropriate RWQCB offices in accordance with the time schedules identified above. In such event, The City must also enter all required information into the CIWQS electronic database as soon as practical. A flowchart for determining a SSO's category type and how to properly report it, can be seen in **Figure 4-1** below.

If there are no SSOs during a calendar month, the City will provide, within 30 days after the end of each calendar month, a statement through the CIWQS database certifying that there were no SSOs for the designated month.

Figure 4-1: SSO Categories and Chain of Communication for Reporting to CIWQS



\* These reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies.  
 \*\* If CIWQS website is not available, you must email or fax all required information to RWQCB and reattempt as soon as possible.