

Big Bear Area Regional Wastewater Agency

2025 Sewer System Management Plan

Prepared for:



Prepared by

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LIST OF TERMS, ACRONYMS AND ABBREVIATIONS

Acronym	Definition
BBARWA	Big Bear Area Regional Wastewater Agency
BBCCSD	Big Bear City Community Services District
BMP	Best Management Practices
Cal OES	California Office of Emergency Services
City	City of Big Bear Lake
CCTV	Closed-Circuit Television
CIP	Capital Improvement Program
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CSA 53B	San Bernardino County Service Area 53B
CWEA	California Water Environment Association
DS	Data Submitter
EAP	Emergency Action Plan
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments
GIS	Geographical Information System
GPM	Gallons per Minute
JPA	Joint Powers Agreement
I/I	Inflow and Infiltration
KPI	Key Performance Indicator
LRO	Legally Responsible Official
MGD	Million Gallons per Day
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
SERP	Spill Emergency Response Plan
PLSD	Private Lateral Sewage Discharge
PPE	Personal Protective Equipment
ROW	Right of Way
RPM	Revolutions per Minute
R&R	Rehabilitation and Replacement
Regional Water Board	Regional Water Quality Control Board
SECAP	System Evaluation and Capacity Assurance Plan
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSS WDRs	Sanitary Sewer System Waste Discharge Requirements
State Water Board	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TCSP	Traffic Control Safety Plan
TDH	Total Dynamic Head
WDRs	Waste Discharge Requirements
WQMP	Water Quality Monitoring Program
WOTUS	Waters of the United States
WWTP	Big Bear City Regional Treatment Plant

A INTRODUCTION

A-1 SANITARY SEWER SYSTEM WASTE DISCHARGE REQUIREMENTS

The California State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements (WDRs) for sanitary sewer systems on December 6, 2022, as Order No. WQ 2022-0103-DWQ.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and Amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Control Boards (Regional Boards).

The goal of the SSS WDRs is to provide consistent statewide requirements for quantifying, reporting and reducing the number of wastewater spills and the volume of wastewater spilled in the state of California. The SSS WDRs require all public wastewater collection system agencies in California that own and operate sanitary sewer systems greater than one (1) mile in length, which collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility, to develop, implement, and maintain a Sewer System Management Plan (SSMP) and report sanitary sewer overflows (SSOs) using the State's electronic reporting system, California Integrated Water Quality System (CIWQS). Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States; comply with specifications, notifications, monitoring, reporting and recordkeeping requirements in the General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies; monitor, track, and analyze spills for ongoing system-specific performance improvements; report noncompliance with this General Order per reporting requirements.

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after end of Enrollee's last required audit period. Within six months after the end of the required 3-year audit period, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per requirements in section 3.10 (Sewer System Management Plan Audit Requirements) of attachment E1 of this General Order.

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the enrollee's office and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting, and Recordkeeping Requirements) of this General Order.

A-2 ORDER NO. WQ 2022-0103-DWQ

The State Water Board amended the Monitoring and Reporting Program (MRP). The notification requirements are spill specific monitoring requirements that are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of the General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary System Database.

The updated SSO categories under the amended MRP are summarized below:

- **Category 1:** A spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:
A surface water, including a surface water body that contains no flow or volume of water; or
A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.
Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.
A spill from a BBARWA-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.
- Category 2:** A spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.
- **Category 3:** A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.
- **Category 4:** A spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

A-3 SSMP REQUIREMENTS

The Big Bear Area Regional Wastewater Agency (BBARWA) has developed this SSMP per the requirements of the SSS WDRs. The following SSMP Elements identify how BBARWA complies with the SSS WDRs:

1. Sewer System Management Plan Goal and Introduction
2. Organization
3. Legal Authority
4. Operation and Maintenance Program
5. Design and Performance Provisions
6. Spill Emergency Response Plan (SERP)
7. Sewer Pipe Blockage Control Program
8. System Evaluation, Capacity Assurance and Capital Improvements
9. Monitoring, Measurement, and Program Modifications
10. Internal Audit
11. Communication Program

BBARWA currently implements a variety of programs that meet the SSS WDRs objectives and are consistent with the specific requirements of an SSMP. The sections of this SSMP are organized to correspond with the eleven (11) Elements listed above. The SSMP integrates many ongoing activities by BBARWA into one (1) formal document. Some of these activities are described in greater detail in other documents that include, but are not limited to the following:

- *Title 7 (BBARWA's Sewer Code)*
- *Emergency Action Plan (EAP)*
- *System Evaluation and Capacity Assurance Plan (SECAP).*

The SSMP and referenced documents are available at BBARWA's office and as noted in Appendix A: SSMP Supporting Document History.

The SSMP and supporting documents are living documents, meaning that they will evolve, and modifications will be made as necessary to meet the required regulations and continually improve processes. The SSMP must be updated and reapproved by the Governing Board every six (6) years in accordance with the SSS WDRs. Additionally, the SSMP may be amended at any time within the six-year reapproval intervals based on recommendations from required triennial audits of the SSMP, and when changes to any of the required elements are required to improve processes. If an SSMP update occurs and is approved by the Governing Board in a year prior to the required six-year update cycle, the SSMP shall still be reviewed and re-approved on the scheduled year of the six-year update, as set by the initial approval date of the first SSMP. Revisions to the SSMP document are tracked in Appendix B: Sewer System Management Plan Change Log. Revisions to the SSMP supporting documents are tracked in Appendix A: SSMP Supporting Document History.

A-4 REGIONAL SEWER COLLECTION SYSTEM BACKGROUND

BBARWA was formed by a Joint Exercise of Powers Agreement on March 22, 1974. The primary function of BBARWA is to collect, treat, and dispose of the wastewater generated by each of its three (3) member agencies within its service area in the Big Bear Valley. BBARWA's member agencies include San Bernardino County Service Area 53B (CSA 53B), Big Bear City Community Services District (BBCCSD), and the City of Big Bear Lake (City) as shown in Figure A-1. Each member agency owns and operates their own local sewer collection system. They also act as an agent on behalf of BBARWA to collect fees (user fee, standby fee, and connection fee).

San Bernardino County Service Area 53B

CSA 53B was established in June 1971 under the provision of County Service Area law, which provides fire protection and sanitation services within the Fawnskin communities and North Shore Tract areas of Big Bear Lake. CSA 53B encompasses approximately nine (9) square miles and all flows discharge into the BBARWA North Shore Interceptor.

Big Bear City Community Services District

The Big Bear Community Sanitary District was formed in 1935 and was incorporated into BBCCSD when formed in 1966 to provide water supply, fire protection, street lighting, wastewater collection, and refuse disposal services. BBCCSD encompasses about 11.41 square miles and all flows discharge into the BBARWA Trunk Line.

City of Big Bear Lake

The City Sanitation District was formed in November 1939 to provide sanitation services for the area that is now within the City. The City was incorporated in 1980 and became a Charter City in 1983. The total area encompasses approximately seven (7) square miles and all flows discharge into the BBARWA Lake Pump Station wet well.

Big Bear Area Regional Wastewater Agency

BBARWA's existing collection system includes 10.29 miles of force main and 4.78 miles of gravity sewer along three (3) major alignments which each receive raw wastewater from one (1) of BBARWA's member agencies: the BBARWA Trunk Line, North Shore Interceptor, and Lake Interceptor Force Main (Figure A-1). BBARWA's collection system does not include storm drains.

The BBARWA Trunk Line is an 18-inch and 21-inch diameter sewer interceptor that runs from Division Drive east to the BBARWA Wastewater Treatment Plant (WWTP) and receives flows from BBCCSD at multiple points throughout the alignment.

The North Shore Interceptor serves CSA 53B and terminates at the BBARWA Trunk Line at the intersection of Division Drive and Aeroplane Boulevard (Manhole 75). The wastewater flow from CSA 53B is conveyed through gravity pipelines, Pump Stations Nos. 1, 2, and 3, and force mains, which collectively make up the North Shore Interceptor system. CSA 53B flow is metered on Division Drive prior to discharging into the BBARWA Trunk Line.

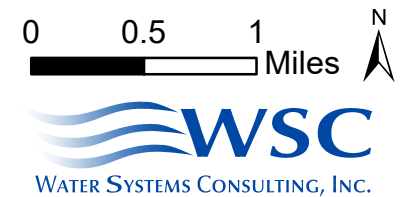
Wastewater from the City collection system discharges into the wet well of the BBARWA Lake Pump Station, which is owned and operated by BBARWA. The Lake Pump Station pumps City flows into the 16-inch Lake Interceptor Force Main, which conveys wastewater northeasterly directly to the BBARWA WWTP. The flows from the City are metered in the segment of the Lake Interceptor Force Main in Division Drive.

The BBARWA WWTP is located in the unincorporated community of Big Bear City and treats all wastewater from BBARWA's member agencies. The treatment processes include headworks, oxidation ditches, and secondary clarifiers. The WWTP is on a 93.5-acre site, with the treatment plant facility occupying 11.2 acres and storage ponds and an evaporation lake occupying the remaining 82.3 acres. All of the secondary effluent from the WWTP is discharged to the Lucerne Valley onto property owned by BBARWA for irrigation of fodder and fiber crops. Sludge is collected, dewatered, and disposed of off-site. Operation of the WWTP is regulated by Santa Ana Regional Water Quality Control Board (Regional Water Board) Order No. R8-2005-0044 and discharge of effluent for irrigation in Lucerne Valley is regulated by Colorado River Regional Water Board Order No. R7-2021-0023.

Figure A-1: Sewer Service Area Map



Big Bear Area Regional Wastewater Agency
Sewer System Management Plan
Figure A-1: Sewer Service Area Map



1 ELEMENT 1 – GOAL

1-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-01030-DWQ Section D.1:

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as contain and mitigate any SSOs that do occur.

1-2 GOALS OF THE SEWER SYSTEM MANAGEMENT PLAN

BBARWA maintains the following goals that guide its collection system management and operation to provide high quality and reliable wastewater collection for Big Bear Valley residents and businesses:

1. Protect public health and the environment.
2. Reduce the frequency of SSOs.
3. Ensure a timely response for any spills/release of untreated or partially treated wastewater.
4. Implement corrective action for preventing SSOs from reaching surface water bodies in a timely manner.
5. Comply with all SSS WDRs.

2 ELEMENT 2 – ORGANIZATION

2-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.2:

The SSMP must identify:

- (a) The name of the Legally Responsible as described in Section 5.1 of this General Order (SSS WDR),*
- (b) The names and telephone numbers of management, administrative and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and*
- (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board, and other agencies as applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (Cal OES)).*

2-2 SSMP PROGRAM IMPLEMENTATION

BBARWA complies with the SSS WDRs by having continuous coverage by a Legally Responsible Official (LRO) and Data Submitter (DS); role descriptions and contact information for personnel responsible for implementing SSMP Elements; lines of authority within BBARWA; and a chain of communication for ensuring SSOs are reported to appropriate agencies and response personnel in a timely manner.

2-2.a Legally Responsible Officials and Data Submitter

The General Manager and Plant Manager are both LROs. The LROs have the shared responsibility to upload and certify SSO information into CIWQS including no-spill reports. The Laboratory Technician serves as a Data Submitter (DS), which has the ability to upload SSO information to CIWQS but cannot certify SSO information or no-spill reports. Changes to the LROs or DS, either by shifting LRO and/or DS responsibility to a different BBARWA position, or by hiring a new General Manager, Plant Manager, or Administrative Assistant, will be both reported to the State Water Board and updated in a hard or electronic copy of this SSMP within 30 days per the SSS WDRs.

2-2.b BBARWA Organization

BBARWA employs 14 staff, including administration, laboratory staff, and eight (8) plant operators (including the Plant Manager and Plant Supervisor). Current contact information for key personnel is provided in Table 2-1.

Table 2-1: Contact Information for Key BBARWA Staff as of Publish Date

Position	Name	Email	Phone	LRO/DS
General Manager	David Lawrence	dlawrence@bbarwa.org	(909) 584-4521	LRO
Plant Manager	John Shimmin	jshimmin@bbarwa.org	(909) 584-4520	LRO
Plant Supervisor	Troy Bemisdarfer	troyb@bbarwa.org	(909) 584-4525	N/A
Senior Lab Analyst	Nikki Crumpler	ncrumpler@bbarwa.org	(909) 584-4527	N/A
Laboratory Technician	Kim Booth	kbooth@bbarwa.org	(909) 584-4533	DS

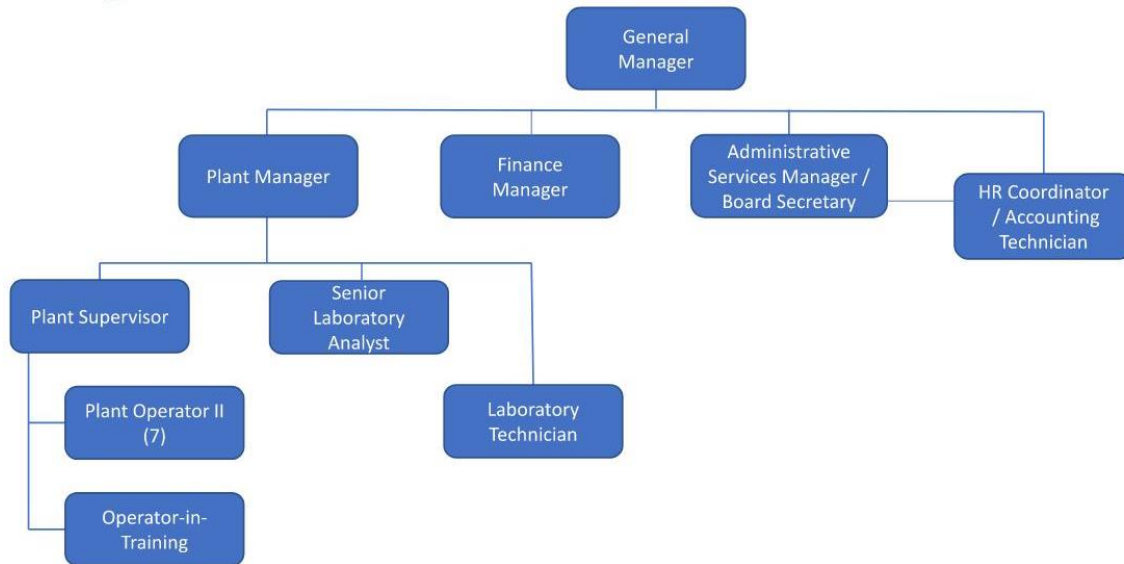


Figure 2-1: Organization Chart and lines of authority within BBARWA staff.

The roles and responsibilities of BBARWA Staff are as follows:

- **General Manager:** Under contract and general direction of the Governing Board, the General Manager is the Chief Executive Officer of BBARWA and is charged with administering and supervising the delivery of safe and efficient services of BBARWA. This is an at-will, exempt salaried position.
- **Finance Manager:** To plan, organize, direct and coordinate the financial activities of BBARWA including accounting, budgeting, financial reporting, debt management, cash management, and internal controls; to direct and oversee risk management; and to provide highly complex staff assistance to the General Manager.
- **HR Coordinator/Accounting Technician:** To perform a variety of professional analytical work in support of human resources programs including benefit administration, recruitment and selection, staff development and training, safety and worker's compensation; to perform technical accounting duties including the processing of BBARWA payroll and accounts payable; and to serve as the point of contact for personnel-related questions.
- **Administrative Services Manager/Board Secretary:** To perform a variety of professional analytical work in support of BBARWA's administrative and program activities including the overall day-to-day management, organization and coordination of administrative functions; grant writing; public outreach and education; legislative monitoring; and to fulfill other administrative assignments as required. To perform a variety of highly responsible administrative support duties for the General Manager; to provide administrative support to the Governing Board, Committees, and other BBARWA management; and to provide general assistance to the public.
- **Plant Manager:** To plan, organize, direct and coordinate wastewater treatment plant operations and maintenance activities; to direct and oversee laboratory analysis activities; and to provide highly complex staff assistance to the General Manager.
- **Senior Laboratory Analyst:** To perform a variety of standardized chemical, biochemical and bacteriological tests on samples of wastewater and solids; to clean, maintain and calibrate laboratory and equipment; to track data and complete required reports.
- **Laboratory Technician:** To perform a variety of standardized chemical, biochemical and bacteriological tests on samples of wastewater and solids; to clean, maintain and calibrate laboratory and equipment; to track data and complete required reports.
- **Plant Supervisor:** To plan, organize, direct and supervise the maintenance of BBARWA's wastewater treatment system within the Operations Department; to supervise and participate in the maintenance of BBARWA's power generation equipment; and to perform a variety of technical tasks relative to assigned area of responsibility.

- **Plant Operator II:** To operate, inspect, maintain, and troubleshoot wastewater treatment plant equipment, lift stations, and interceptor systems; to adjust, service, and maintain equipment at BBARWA facilities; and to perform related work as required.
- **Operator-in-Training:** To learn and assist in the operation, inspection, and maintenance of wastewater treatment plant equipment, lift stations, and interceptor systems; to adjust, service, and maintain equipment at BBARWA facilities; and to perform related work as required.

Table 2-2 provides a list of all SSMP Elements and the personnel responsible for their implementation within the SSMP.

Table 2-2: BBARWA Staff Responsible for SSMP Elements

SSMP Element	Element Manager
Introduction	General Manager
1 – Goal	General Manager
2 – Organization	General Manager
3 – Legal Authority	General Manager/Plant Manager
4 – Operation and Maintenance Program	Plant Manager
5 – Design and Performance Provisions	General Manager
6 – Overflow Emergency Response Plan	Plant Manager
7 – FOG Control Program	Plant Manager
8 – System Evaluation and Capacity Assurance Plan	General Manager
9 – Monitoring, Measurement, and Program Modifications	General Manager
10 – SSMP Program Audits	General Manager
11 – Communication Program	General Manager
Change Log	General Manager
Appendices	General Manager

2-2.c Chain of Communication for Reporting SSOs

BBARWA may be notified of an SSO by phone during business hours at (909) 584-4018, by Owl Exchange answering service for spill reports made after-hours, via their online “Report-a-Spill” webpage, and by BBARWA operators observing SSOs while in the field. Upon any BBARWA staff member becoming aware of an SSO, operators are dispatched to the address to correct the spill, and the Plant Manager or General Manager is notified so they may begin contacting the appropriate regulatory agencies. Section 6-2.a describes BBARWA’s SSO notification procedures in greater detail, and includes a notification flowchart in Figure 6-1. Contact information for all regulatory agencies is provided in Section 6-2.c.

3 ELEMENT 3 – LEGAL AUTHORITY

3-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.3:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);*
- (b) Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;*
- (c) Require that sewer system components and connections be properly designed and constructed;*
- (d) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;*
- (e) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and*
- (f) Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and*
- (g) Obtain easement accessibility agreements for location requiring sewer system operations and maintenance, as applicable.*

3-2 SSMP PROGRAM IMPLEMENTATION

BBARWA possesses relevant legal authority to comply with the SSS WDRs through the following documents:

- 1974 Joint Powers Agreement (JPA) which formed BBARWA and its six (6) amendments
- San Bernardino County Special District Standards for Sanitary Sewers (County Sewer Standards)
- BBARWA Code Title 7 – Sewer Use (Title 7) as established by BBARWA Ordinance No. 69

Title 7 is maintained by BBARWA and was last updated in 1999, when it was adopted to replace the previously existing BBARWA Sewer Code. BBARWA is permitted to apply County Sewer Standards for future design and construction of sewers within BBARWA. The following Chapters from Title 7 and BBARWA's adopted County Sewer Standards provide necessary compliance with the five (5) Legal Authority requirements set forth in Section 3-1. A summary of legal authority documents that correlate to the SSS WDRs is provided in Table 3-1.

3-2.a Prevention of Illicit Discharges – Title 7 Chapter 7.12

Sections 7.12.010 and 7.12.020 of Chapter 7.12 give BBARWA legal authority to prohibit illicit discharges to BBARWA's collection system. Specific illicit discharges are defined in Chapter 7.12, and include but are not limited to: flammable compounds; fats, oils, and grease (FOG); discharges from persons or parties other than member agencies or permitted domestic waste haulers; and uncontaminated water such as rain water, storm water, groundwater, street, sub-surface, roof or yard draining, et cetera. The list of prohibited illicit discharges in Chapter 7.12 is described in Title 7 as a "non-exclusive list" and therefore does not limit BBARWA's ability to prohibit illicit discharges that are not specifically identified in Chapter 7.12.

Section 7.12.020, Sub-Section B, Item 18 prohibits "Any rainwater, storm water, groundwater, street drainage, sub-surface drainage, roof drainage, yard drainage, water from yard fountains, ponds or lawn sprays, or any other contaminated water" from being discharged into BBARWA's collection system by member agencies.

3-2.b Design and Construction Standards – San Bernardino County Special District Standards for Sanitary Sewers

BBARWA is classified as a special district within San Bernardino County and therefore is permitted to use applicable standards developed by San Bernardino County that apply to special districts. BBARWA typically references the San Bernardino County Special District Standards for Sanitary Sewers (Table 3-1).

3-2.c Access to Facilities – Title 7 Chapters 7.28 and 7.32

BBARWA maintains three (3) interceptor systems (North Shore Interceptor, Lake Interceptor Force Main, and Trunk Line) as well as four (4) pump stations and a WWTP. Chapters 7.28 and 7.32 provide BBARWA with continuous access to all portions of its collection system and has the authority to access any facility that may be in violation of Title 7.

If a BBARWA capital improvement effort plans to construct a facility outside of the Public Right of Way (ROW), then such action would require an easement allowing continuous access, amendment to Title 7, or other provisions to ensure BBARWA's access to those facilities.

3-2.d Fats, Oils, and Grease Discharges – Title 7 Chapter 7.12

Section 7.12.020, Sub-Section B, Item 7 prohibits discharges of FOG into the regional collection system in any concentration that causes adverse effects to the collection and treatment system.

3-2.e Enforcement – Title 7 Chapter 7.32

Section 7.32.030 gives BBARWA legal authority to enforce any violation of its Sewer Code listed in Title 7. Further, Section 7.32.010 gives BBARWA legal authority to administer warnings to those in violation or possibly in violation of Title 7. Persons violating Title 7 are guilty of a misdemeanor per Section 7.32.030, upon conviction is punishable by a fine of up to \$1,000 and/or imprisonment not more than six (6) months, or both. Each day in which a violation occurs shall constitute a new and separate violation of this title and shall be subject to the penalties contained herein.

Chapter 7.28 provides BBARWA legal authority to enforce violations of Title 7 using administrative action, including but not limited to inspections, discharge permit suspension and revocation, administrative penalties, and recovery of costs for damage.

Section 7.08.160 defines BBARWA as an “Enforcement Agency,” which grants BBARWA the legal authority to enforce violations of Title 7.

Table 3-1: Relevant Ordinances and Legal Authority Documents

Waste Discharge Requirement		Regulations	Sections
a)	Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.)	BBARWA Code Title 7	7.12.010 – General Limitations on Discharges
			7.12.020 – Prohibited Discharges
b)	Require that sewers and connections be properly designed and constructed	San Bernardino County Special District Standards for Sanitary Sewers (November 2012)	Division C – Design Criteria and Plan Preparation
			Division D – General Conditions and Technical Specifications
			Division E – Standard Drawings
c)	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency	BBARWA Code Title 7	7.28 – Administrative Enforcement 7.32 – Judicial Enforcement
d)	Limit the discharge of fats, oils, and grease and other debris that may cause blockages	BBARWA Code Title 7	7.12.020 – Prohibited Discharges
e)	Enforce any violation of its sewer ordinances	BBARWA Code Title 7	7.32.010 – Injunction
			7.32.030 – Criminal Penalties
			7.28.010 – 7.28.130 – Administrative Enforcement
			7.08.160 – Defines BBARWA as an Enforcement Agency

4 ELEMENT 4 – OPERATION AND MAINTENANCE PROGRAM

4-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.4:

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system

- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.*
- (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.*
- (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.*
- (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance and require contractors to be appropriately trained.*
- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.*

4-2 SSMP PROGRAM IMPLEMENTATION

BBARWA maintains operation and maintenance procedures that are summarized in the following sections to reduce the likelihood and severity of SSOs and comply with the SSS WDRs.

4-2.a Sanitary Sewer System Map

BBARWA maintains AutoCAD and paper copies of its collection system map, showing all sewer facilities including gravity mains, force mains, pump stations, manholes, metering stations, and service area boundaries. A map of key features of BBARWA's collection system is provided in Figure A-1. Paper maps and as-builts with greater detail are stored in the Operations and Administration Buildings. BBARWA is planning on developing a geographical information system (GIS) map of the collection system by using existing AutoCAD maps and surveying the collection system. BBARWA's GIS map will be used in the future to develop hydraulic models and identify capacity-constrained areas in the collection system, as well as identify areas where SSOs would likely flow into storm drains.

4-2.b Routine Preventative Operation and Maintenance Activities

BBARWA’s existing collection system consists of force main pipeline (ranging from 6-inch to 16-inch diameter pipe), gravity pipeline (ranging from 8-inch to 21-inch), four (4) pump stations (Pump Station Nos. 1, 2, and 3, and the Lake Pump Station), air injection stations, air release vents, and 98 manholes. Table 4-1 provides information on BBARWA’s pump stations.

Table 4-1: Pump Station Information

Equipment	Manufacturer	Motor HP (KW)	Flowrate (GPM)	TDH (ft)	RPM	Installed (Scheduled Replacement)
Pump Station No. 1						
Pump #1	Fairbank Morse Pump	7.5	400	29	1170	1990 ¹
Pump #2	Fairbank Morse Pump	7.5	400	29	1170	1990 ¹
Diesel Generator	John Deere	35	N/A	N/A	N/A	2019
Pump Station No. 2						
Pump #1	Fairbank Morse Pump	15	700	44	1170	1990 ¹
Pump #2	Fairbank Morse Pump	15	700	44	1170	1990 ¹
Diesel Generator	John Deere	40	N/A	N/A	N/A	2020
Pump Station No. 3						
Pump #1	Fairbank Morse Pump	40	900	86	1800	1990 ¹
Pump #2	Fairbank Morse Pump	40	900	86	1800	1990 ¹
Diesel Generator	John Deere	125	N/A	N/A	N/A	2021
Lake Pump Station						
Pump #1	Flygt	45	2000	41	1170	2021
Pump #2	Flygt	45	2000	41	1170	2021
Pump #3	Flygt	150	2800	120	1185	2013
Diesel Generator	John Deere	275	N/A	N/A	N/A	2024
¹ Estimation of year installed – lift stations acquired from County of San Bernardino						

Error! Not a valid bookmark self-reference. shows the breakdown of the force mains and gravity pipelines within the collection system.

Table 4-2: BBARWA Collection System Force Main and Gravity Pipelines

Diameter (inches)	Length (feet)	Length (miles)
Force Main	54,334	10.29
6	219	0.04
10	7,018	1.33
12	17,347	3.29
16	29,750	5.63
Gravity	25,241	4.78
8	1,999	0.38
15	2,648	0.50
18	5,857	1.11
21	14,737	2.79

Routine preventative maintenance activities for the collection system include CCTV and hydro-cleaning. Due to the small size of the collection system, BBARWA contracts out hydro-cleaning and CCTV services every four (4) years for the entire gravity portion of the collection system. The entire system was last cleaned and inspected in 2021 and is scheduled to be serviced again in 2025 (Table 4-3). The routine preventative maintenance activities for each pump station are performed weekly, monthly, and annually and are provided in detail Appendix C: Pump Station Maintenance Tasks.

BBARWA currently documents work orders and its maintenance activities for the collection system and the WWTP in Microsoft Excel.

Frequent Maintenance Locations

BBARWA does not have any locations in its collection system that require maintenance more frequently than other locations. Areas requiring frequent maintenance in sewer systems are typically located downstream of food service establishments (FSEs) due to grease build-up; where root intrusion is present; or in capacity-constrained areas where any small blockage could lead to an SSO. However, there are no FSEs that connect to BBARWA's collection system, and no areas of severe root intrusion that require more frequent maintenance.

4-2.c Rehabilitation and Replacement Plan

BBARWA maintains its collection system by implementing a Rehabilitation and Replacement (R&R) Plan that includes CCTV, slip-lining gravity lines and force mains, and rehabilitating manholes. A schedule of future R&R tasks is provided in Table 4-3. A brief summary of R&R history is provided in Section 9-2.b.

Slip-Lining in Place

BBARWA maintains its sewer mains primarily by slip-lining pipes in place to extend their useful life. CCTV inspections every four (4) years dictate whether mains require slip-lining, are beyond repair via slip-lining and are in need of replacement or are not in need of R&R until at least the next CCTV inspection. CCTV results from 2016 indicated that both the Trunk Line and sections of the North Shore Interceptor will need slip-lining in place to extend their useful life. Slip-lining is scheduled and budgeted in 2032 for the Trunk Line and 2033 for the North Shore Interceptor. Approximately 2,000 feet of the Lake Interceptor Force Main between Division Drive and the WWTP was slip-lined in 2007, and further R&R activities on the Lake Interceptor Force Main are scheduled for 2025.

Manholes

BBARWA has maintained a program to rehabilitate the manholes in its entire collection system. Rehabilitation activities include cleaning, grouting and sealing any leaks. BBARWA's 2010 Sewer Master Plan identified that infiltration and inflow (I/I) contributes notably to total sewer flows, making BBARWA more prone to wet-weather SSOs. To counter this, the manhole rehabilitation program includes replacing rehabilitated manhole lids with sealing lids to prevent infiltration. BBARWA has rehabilitated five (5) manholes and installed five (5) sealing manhole lids per year since 2007 and has five (5) more manholes scheduled each year until the entire collection system has been rehabilitated.

Table 4-3: Scheduled O&M Tasks

Task	2025	2026	2027	2028	2029	2030	2031	2032	2033
Length to CCTV (ft)	25,421				25,421				25,421
Length to Hydroclean (ft)	25,421				25,421				25,421
Slip-Line in Place (ft)								2,600	2,600
Rehabilitate Manholes (#)	*	5	5	5	5	5	5	5	5

* No sealing due to budget issues.

4-2.d Staff Training

BBARWA holds internal training sessions on 33 different topics which include but are not limited to those associated with safety, Emergency Action Plan (EAP) execution, personal protective equipment (PPE), traffic control, stormwater pollution prevention, and first aid. Training occurs on an annual, biannual, or triannual basis depending on the training subject. A list of all formal training subjects, descriptions, and intervals is provided in Appendix D: Staff Training Program. BBARWA maintains a record of all formal training sessions and documents BBARWA staff attendance. In addition, all BBARWA staff members attend weekly “tailgate” meetings to discuss safety procedures for weather or task-specific situations such as winter driving, tool and ladder safety, and Safety Data Sheets. BBARWA staff will hold annual training on the SSMP and SSO response procedures following certification of the 2025 SSMP.

4-2.e Equipment Inventory

BBARWA has an up-to-date equipment and replacement parts inventory that is managed in Microsoft Excel. BBARWA maintains equipment that is used for emergency operation in the event of a collection system failure, as well as replacement parts for repairing facilities that are failing or on the verge of failure. Emergency operation equipment includes 4-inch and 6-inch portable sewer pumps and a backup standby generator at each pump station. Replacement parts inventory includes a reserve pump and motor assembly for Pump Stations Nos. 1, 2, and 3 (the Lake Pump Station has an additional redundant pump installed already), check and gate valves for pump stations, repair bands and clamps for repairing gravity and force mains, miscellaneous plastic sewer pipe, and sealing manhole lids. A comprehensive list of BBARWA’s emergency spare parts and equipment inventory is provided in Appendix E: Spare Parts and Emergency Inventory.

5 ELEMENT 5 – DESIGN AND PERFORMANCE PROVISIONS

5-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.5:

The Agency is required to have an updated:

- (a) Design criteria and construction standards and specifications for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations and other appurtenances; and*
- (a) Procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances and for rehabilitation and repair projects.*

5-2 SSMP PROGRAM IMPLEMENTATION

BBARWA has used Divisions C, D, and E of the County of San Bernardino Special Districts Department Standards for Sanitary Sewer (County Sewer Standards) on an as-needed basis to design sewer replacement projects, as well as standards from BBCCSD and the City. The County Sewer Standards are available on the County Special District website (<http://www.specialdistricts.org/index.aspx?page=586>).

5-2.a Standards for Design and Construction

The County Sewer Standards provide standards for proper design and construction of new and rehabilitated sewers and provide the legal authority to require those standards for all BBARWA sewer projects. The County Sewer Standards provide requirements for design and construction of sewer facilities that include but are not limited to the following:

- Minimum Pipe Size
- Minimum and Maximum Slope
- Design Flow Criteria
- Separation between Utilities
- Manhole Design Requirements
- Clean-Outs
- Force Mains and Lift Stations
- Peak Flow Rates
- Preparation of Plans
- Standard Location and Alignment
- Minimum Depth
- Sewer Laterals
- Construction Specifications
- Sewer Pipe Material

5-2.b Procedures and Standards for Inspection and Testing

Division D, Section 6 of the County Sewer Standards provide technical specifications for the cleaning and testing of completed sewer pipes and appurtenances. Testing procedures in Division D, Section 6, ensure that all new and rehabilitated sewers are free of leaks to reduce infiltration of water into the sewer system, and leakage of sewage into the ground. Technical Specifications in Section 6 include the following inspection and testing procedures:

- CCTV Inspection
- Water Exfiltration Testing
- Water Infiltration Testing
- Air Pressure Tests
- Water Pressure Tests for Force Mains
- Manhole Leakage Tests

6 ELEMENT 6 – SPILL EMERGENCY RESPONSE PLAN

6-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.6:

WDRs require that at a minimum, the Spill Emergency Response Plan include:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- (b) Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;*
- (c) Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;*
- (d) Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;*
- (e) Address emergency system operations, traffic control and other necessary response activities;*
- (f) Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;*
- (g) Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;*
- (h) Remove sewage from the drainage conveyance system;*
- (i) Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;*
- (j) Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;*
- (k) Implement pre-planned coordinates and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after spill event;*
- (l) Conduct post-spill assessments of spill response activities;*
- (m) Document and report spill events in this General Order; and*
- (n) Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.*

Table 6-1: SSO Spill Category 1

CATEGORY 1		Discharges of untreated or partially untreated wastewater of ANY VOLUME resulting from a sanitary sewer overflow that:		
		<ul style="list-style-type: none"> • Reaches surface water, • Reaches a drainage channel tributary to a surface water, or • Reaches the municipal stormwater system and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. 		
Notification Requirements (MRP Section B)	Reporting Requirements (MRP Section C)	Water Quality Monitoring Requirements (MRP Section D)	Record Keeping Requirements (MRP Section E)	
Within two (2) hours of becoming aware of any Category 1 SSO, of 1,000 gallons or more, notify the California Office of Emergency Services (Cal OES) at (800) 852-7550 and obtain a notification control number.	<p>Submit draft report within three (3) business days of becoming aware of the SSO into CIWQS Online SSO Database.</p> <p>Certify within 15 calendar days of the SSO end date.</p> <p>Submit Technical Report within 45 calendar days after spill end date for a Category 1 spill in which 50,000 gallons or greater discharge to surface water</p> <p>Submit Amended Spill Report within 90 calendar days after the spill end date.</p> <p>Description, photographs, and GPS coordinates of the system location where the spill originated.</p>	<p>Conduct visual monitoring; For spills of 50,000 gallons or greater to surface water:</p> <p>Conduct receiving water sampling within 18 hours of initial knowledge of spill..</p>	<p>SSO records (maintain for a minimum of five (5) years):</p> <ul style="list-style-type: none"> • complaint records, • steps/remedial actions undertaken, • documentation of calculations of discharge volume /volume recovered • electronic monitoring records (SCADA, alarm system, flow monitoring devices). <p>Make records available for review by the Water Boards during an inspection or through an information request.</p>	

Table 6-2: SSO Spill Category 2

CATEGORY 2			
Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from a sanitary sewer system failure or overflow that: <ul style="list-style-type: none"> • Do not reach surface water, • Do not reach a drainage channel, • Reach the storm drain system, but the entire SSO is fully recovered and disposed of properly. 			
Notification Requirements (MRP Section B)	Reporting Requirements (MRP Section C)	Water Quality Monitoring Requirements (MRP Section D)	Record Keeping Requirements (MRP Section E)
<p>Within two (2) hours of the knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services.</p>	<p>Submit draft report within three (3) business days of becoming aware of the SSO.</p> <p>Certify within 15 calendar days of the SSO end date.</p> <p>Submit Amended Spill Report within 90 calendar days after the spill end date</p> <p>Description, photographs, and GPS coordinates of the system location where the spill originated.</p>	<p>Conduct visual monitoring.</p>	<p>SSO records (maintain for a minimum of five (5) years:</p> <ul style="list-style-type: none"> • complaint records, • steps/remedial actions undertaken, • documentation of calculations of discharge volume /volume recovered. <p>Make available for review by the Water Boards during an inspection or through an information request.</p>

Table 6-3: SSO Spill Category 3

CATEGORY 3			
All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or overflow			
Notification Requirements (MRP Section B)	Reporting Requirements (MRP Section C)	Water Quality Monitoring Requirements (MRP Section D)	Record Keeping Requirements (MRP Section E)
N/A	<p>Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 Calendar days after the end of the month in which the spills occurred;</p> <p>Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date.</p> <p>Description, photographs, and GPS coordinates of the system location where the spill originated.</p>	<p>Conduct visual monitoring.</p>	<p>SSO records (maintain for a minimum of five (5) years:</p> <ul style="list-style-type: none"> • complaint records, • steps/remedial actions undertaken, • documentation of calculations of discharge volume /volume recovered. <p>Make it available for review by the Water Boards during an inspection or through an information request.</p>

Table 6-4: SSO Spill Category 4

CATEGORY 4			
All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or overflow			
Notification Requirements (MRP Section B)	Reporting Requirements (MRP Section C)	Water Quality Monitoring Requirements (MRP Section D)	Record Keeping Requirements (MRP Section E)
N/A	<p>Certify monthly, the estimated total spill volume and the total number of all Category 4 spills into CIWQS, within 30 days after the end of the calendar month in which the spills occurred.</p> <p>•Upload and certify a report of all Category 4 spills to CIWQS, by February 1st after the end of the calendar year in which the spills occurred.</p>	Conduct visual monitoring.	<p>SSO records (maintain for a minimum of five (5) years:</p> <ul style="list-style-type: none"> • complaint records, • steps/remedial actions undertaken, • documentation of calculations of discharge volume /volume recovered. <p>Make it available for review by the Water Boards during an inspection or through an information request.</p>

Table 6-5: No Spill Certification

NO SPILL CERTIFICATION			
No SSOs during the calendar month.			
Notification Requirements (MRP Section B)	Reporting Requirements (MRP Section C)	Water Quality Monitoring Requirements (MRP Section D)	Record Keeping Requirements (MRP Section E)
N/A	Certify that no SSOs occurred within 30 calendar days of the end of month in which the SSO occurred.	N/A	<p>Keep for a minimum of five (5) years.</p> <p>Make it available for review by the Water Boards during an inspection or through an information request.</p>

Table 6-6: Private Lateral Sewage Discharge

PRIVATE LATERAL SEWAGE DISCHARGE		Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately-owned sewer lateral connected to the City's sanitary sewer system or from other private sewer assets.	
Notification Requirements (MRP Section 5.15)	Reporting Requirements (MRP Section 5.15)	Water Quality Monitoring Requirements N/A	Record Keeping Requirements N/A
N/A	<p>Within 24 hours of becoming aware of a spill from a private lateral or private sanitary sewer system that is not owned/operated by the Enrollee.</p> <ul style="list-style-type: none"> • A spill of equal or greater than 1,000 gallons that discharges (or has potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; or • Any volume of sewage that discharges (or has potential to discharge) to surface waters. <p>In the CIWQS module, the Enrollee is encouraged to identify:</p> <ul style="list-style-type: none"> • Time of observation; • Description of general spill location; • Estimated volume of spill; • if known, general description of spill destination; and • if known, name of private system owner/operator. 	N/A	<p>SSO records (maintain for a minimum of five (5) years:</p> <ul style="list-style-type: none"> • complaint records, • steps/remedial actions undertaken, • documentation of calculations of discharge volume /volume recovered <p>Make it available for review by the Water Boards during an inspection or through an information request.</p>

The amended MRP and accompanying changes to the CIWQS online SSO Database allow for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.

6-2 SSMP PROGRAM IMPLEMENTATION

BBARWA maintains a separate Emergency Action Plan (EAP) which provides procedures for responding to incidents at the WWTP or in the collection system (Appendix F: Emergency Action Plan). BBARWA continues to revise its EAP and completed its most recent update in October 2019. The EAP includes detailed procedures to respond to an SSO, including procedures for high-flow operations at the WWTP or in the collection system to prevent SSOs from occurring. This Element of the SSMP, in combination with the EAP, meet the Spill Emergency Response Plan requirements of the SSS WDRs.

6-2.a Initial Notification Procedures

An SSO may be detected by BBARWA employees or by others. The public can report a spill 24 hours a day, seven days a week by calling BBARWA's office at (909) 584-4018 or via BBARWA's website which includes a "Report-a-Spill" webpage (www.bbarwa.org/report-a-spill/#). Online spill notifications from the public immediately notify the Plant Manager and Plant Supervisor by email. There are four (4) sanitary sewer agencies in the area, so it is possible that the notifier will contact the wrong agency regarding a spill. In this case, it is likely that the other agency would investigate the SSO and then contact BBARWA if it determines the SSO is from a BBARWA facility. For all SSO notifications, BBARWA shall record the name, phone number, and time of call. For SSO notifications received by member agencies, BBARWA shall record the name of the member agency employee, the time of the call, as well as the name, phone number, and time of the individual who first reported the SSO. If the call is made after hours, a voice message provides the on-duty operator's phone number to the caller, and directs the caller to contact the on-duty operator if the situation is an emergency.

Upon receiving notification of an SSO, BBARWA will notify the appropriate health and first responder agencies in accordance with the SSS WDRs and as provided in Section 6-2.c. The BBARWA employee first notified of the SSO shall immediately notify the Plant Manager or General Manager of the possibility of an SSO, and operators shall be dispatched to confirm the spill and take corrective action as outlined in the EAP and discussed later in this Element. If the Plant Manager or General Manager is unavailable, the next highest ranked available employee (established by lines of authority in

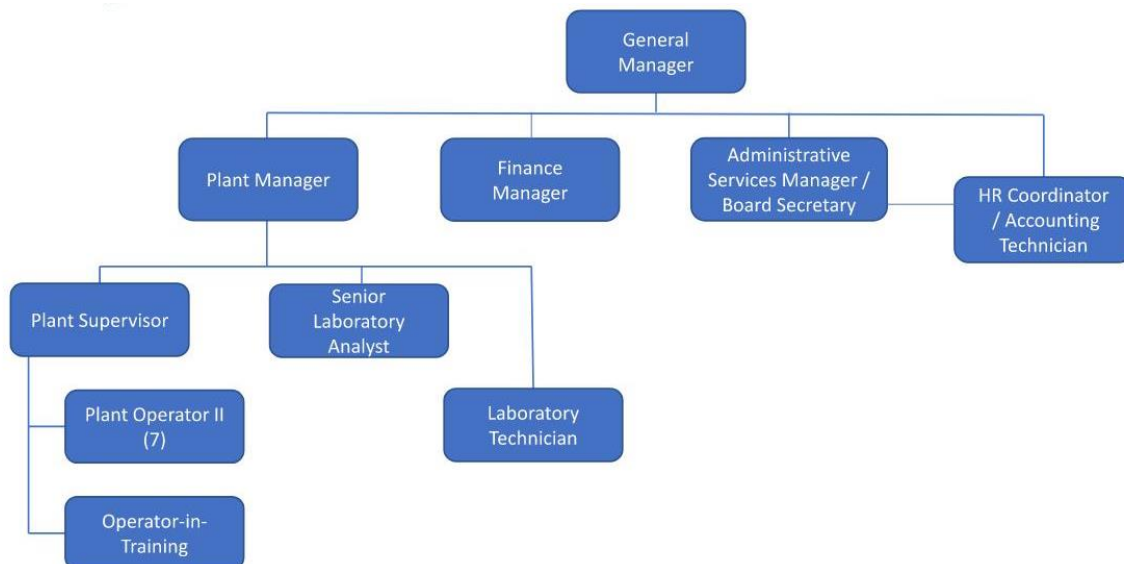
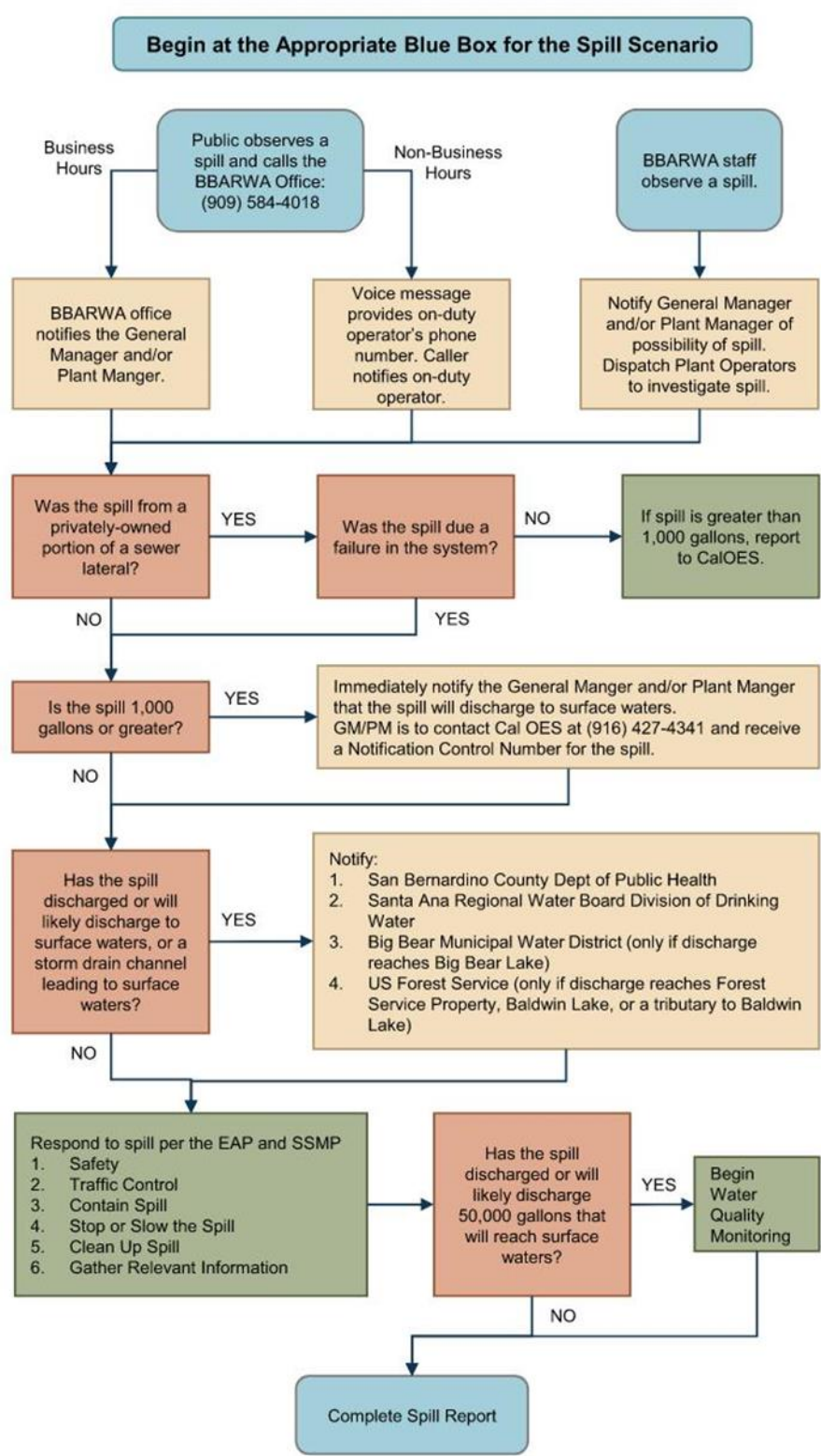


Figure 2-1) shall be contacted and will take responsibility for the notification responsibilities.

Once an SSO event is confirmed, the BBARWA operator that confirmed the event shall contact the Plant Manager or General Manager by phone immediately or as soon as it is safe to do so. The operator is to inform the Plant Manager or General Manager whether the SSO has reached or will reach surface Waters of the United States (WOTUS) or a Municipal Separate Storm Sewer System (MS4), and provide an estimate of volume spilled using Appendix G: Spill Volume Worksheet. If the spill is estimated to be over 1,000 gallons and will reach WOTUS or an MS4, the Plant Manager, General Manager or Laboratory Technician contacts the California Office of Emergency Services (Cal OES) and obtains a notification control number within two (2) hours of BBARWA first being notified of the SSO. The Sewage Spill Reporting section of the EAP provides notification procedures and up-to-date contact information for Cal OES and other agencies to be notified in the event of an SSO. Figure 6-1 illustrates a flowchart of how the appropriate agencies are notified of SSOs from when they are first detected.

Figure 6-1: SSO notification and response procedures.



6-2.b SSO Response

The Spill Prevention and Contingency Plan section of BBARWA’s EAP provides sewer overflow response procedures for SSOs due to lift station failure, gravity interceptor failure, force main failure, and high flows due to heavy rainfall. The EAP includes general SSO response procedures that are applicable to SSOs in any area of the collection system, as well as specific procedures for failures at Pump Station #2, the Lake Pump Station, the Lake Interceptor Force Main, and the manhole at the intersection of Teal Drive and Fairway Boulevard (Manhole 21) which experiences capacity issues in heavy rainfall. The EAP summarizes the following SSO response procedures: Containment; Correction; Documentation; Reporting; Emergency Response; and Post-Response.

In addition to the procedures outlined in the EAP, BBARWA operators that respond to the SSO are also to obtain the following information during the response as stated in Section 8.i.a of the MRP (

- | | |
|---|---|
| ➤ SSO Location Name and Description | ➤ SSO Reached Surface Water or Drainage Channel? |
| ➤ Discharged from Drainage Channel to Surface Water? | ➤ SSO Reached MS4? |
| ➤ Volume Recovered from MS4 | ➤ Total Estimated SSO Volume Discharged ¹ |
| ➤ Total Estimated SSO Volume that Reached Surface Water, a Drainage Channel, or not Recovered | ➤ Total Estimated Volume Recovered |
| ➤ Number of Appearance Points | ➤ Description of All SSO Appearance Points in Collection System |
| ➤ SSO Start Date and Time | ➤ Date and Time BBARWA was Notified of SSO |
| ➤ Estimated Operator Arrival Time | ➤ Description of SSO Destination |
| ➤ SSO End Time and Date | ➤ SSO Causes |
| ➤ SSO Failure Point | ➤ SSO Associated with Storm Event? |
| ➤ Description of Corrective Action | ➤ Spill Response Completion Time |

6-2.c Notifying the Appropriate Regulatory Agencies

For all public SSOs, the General Manager, Plant Manager or Designee is to notify the Santa Ana Regional Water Board, the San Bernardino Office of California State Health Services, and the Department of Environmental Health Services of San Bernardino County. Additionally, the Big Bear Municipal Water District is to be notified if an SSO discharges into Big Bear Lake, and the local U.S. Forest office is to be notified if an SSO discharges into Baldwin Lake, a tributary of Baldwin Lake, or U.S. Forest Service property. Table 6-4 provides contact information as of the approval date of this SSMP for the regulatory agencies to be notified of SSOs.

¹ Volume estimated by operators using Appendix G: Spill Volume Worksheet

Table 6-4: Contact Information for SSO Notifications

State Office of Emergency Services 2800 Meadowview Road Sacramento, CA 95832 (916) 427-4341 (800) 852-7550 (Emergencies Only)	California Regional Water Quality Control Board Santa Ana Region 2010 Iowa Ave., Suite 100 Riverside, CA 92506 Phone (909) 782-4130
Department of Environmental Health Services 385 N. Arrowhead Avenue San Bernardino, CA 92415-0160 (909) 387-3041, prop 65 report 24-hour # (909) 387-3044	California State Water Resources Control Board Division of Drinking Water and Field Operations 464 W. 4 th Street, Room 437 San Bernardino, CA 92401 (909) 383-4328
Big Bear Municipal Water District P.O. Box 2863 Big Bear Lake, CA 92315 (909) 866-5796	U. S. Forest Service, Big Bear Ranger District P.O. Box 290 Fawnskin, CA 92333 (909) 866-3437
California Regional Water Quality Control Board ¹ Colorado River Basin, Region VII 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260 (760) 776-8967	
¹ Only required to be notified if SSO discharges North of Nelson Ridge, which is the southern border of the Colorado River Basin Regional Water Board	

BBARWA is responsible for preparing and submitting reports for Category 1 and Category 2 SSOs, and reporting all public SSOs to the California Integrated Water Quality System (CIWQS) website (<http://ciwqs.waterboards.ca.gov/>), where they are automatically added to the Statewide Sanitary Sewer Overflow Database. BBARWA's LRO is responsible for certifying reports submitted to CIWQS in accordance with the timelines detailed in the MRP. To comply with the MRP, the LRO will certify draft SSO reports on CIWQS for all Category 1 and Category 2 SSOs within three (3) business days after the end of an SSO and certify final reports on CIWQS within 15 days after the end of the SSO. The LRO will certify all Category 3 and Category 4 SSOs within 30 days after the end of the calendar month in which the SSO occurred and will also submit No-Spill Certifications within 30 days of the calendar month in which there were no SSOs.

BBARWA maintains SSO records for each SSO event for a minimum of five (5) years. SSO records include electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged.

6-2.d Training

BBARWA holds mandatory EAP training annually for all BBARWA employees to ensure that all operators and staff are prepared to properly respond to SSOs and other possible emergencies. The EAP training includes emergency support procedures, high-flow operations and spill prevention measures, sewage

spill response, and sewage spill reporting. BBARWA also holds annual training for its operators on safety while working near water, traffic control procedures, and BBARWA's Storm Water Pollution Prevention Plan (SWPPP), which assists in SSO response activities and water quality monitoring. A list of BBARWA training activities is provided in Appendix D: Staff Training Program.

BBARWA has relied on its comprehensive EAP for training of SSO response procedures. Following the approval of this SSMP Update, BBARWA plans to hold a training on the updated SSMP and complimentary Water Quality Monitoring Program (Appendix H: Water Quality Monitoring Program) to provide staff with additional spill response, notification, and monitoring procedures.

6-2.e SSO Emergency Response Procedures

The EAP provides procedures for responding to SSOs including bypass operations, emergency storage solutions, berm and containment procedures, and notification of regulatory agencies. In addition, BBARWA maintains separate documents for procedures on traffic control and SSO clean-up.

Traffic Control

BBARWA maintains a Traffic Control Safety Plan (TCSP) based on the California Temporary Traffic Control Handbook and California Manual of Uniform Traffic Control Devices. BBARWA operators receive initial TCSP training and use those procedures when controlling traffic around an SSO discharge site. Traffic control procedures protect the public by restricting access to contaminated and unsafe areas.

SSO Clean-Up

For SSO cleanup on roads or hard surfaces, operators use potable water and push brooms to clean the area. Wash water is diverted to a vacuor truck or a nearby manhole if available. Granular pool grade chlorine is applied to wash water to disinfect the surface. SSOs on dirt surfaces are cleaned by using rakes and shovels to manually remove all debris and contaminated material from the site and disposed of in waste facilities.

6-2.f Prevention of Discharge Wastewaters to Surface Waters and Impact on Environment

The EAP and this SSMP include procedures to prevent wastewater discharges to WOTUS, and to minimize the severity of SSOs when they occur. In the event that 50,000 gallons of untreated sewage reach WOTUS, BBARWA will implement monitoring procedures in accordance with its Water Quality Monitoring Program (WQMP) to determine impacts to the surface water. The MRP requires that the WQMP include at a minimum the following:

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 18 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 Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

BBARWA's WQMP complies with the requirements set forth in the MRP and is provided in Appendix H: Water Quality Monitoring Program. The WQMP outlines procedures for taking water quality samples including where samples need to be taken on WOTUS affected by SSOs, and what samples need to be taken to evaluate the SSOs impact on the waterway. The WQMP also identifies key WOTUS within the watershed that could possibly receive SSOs and identifies their beneficial uses and key bacteriological indicators used for water quality monitoring as provided in the Santa Ana Regional Water Board Basin Plan (Basin Plan). According to the Basin Plan, E. coli is the appropriate bacteriological indicator for all waters in the Big Bear Valley that are impacted by an SSO. BBARWA may also voluntarily choose to implement the WQMP for SSOs that are less than 50,000 gallons if they wish to monitor the effects of an SSO for their own records, or at the request of a health agency.

7 ELEMENT 7 – SEWER PIPE BLOCKAGE CONTROL PROGRAM

7-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.7:

Each Enrollee shall evaluate its service area to determine whether a FOG (Fats, Oils, and Grease) control program is needed. If the Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of pipe-blocking substance;*
- (b) A plan and a schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements;*
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance;*
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and*
- (g) Implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in above.*

7-2 SSMP PROGRAM IMPLEMENTATION

BBARWA does not have any direct connections to commercial businesses or FSEs. CSA 53B, BBCCSD, and the City each maintain a FOG outreach program for their service areas which educate FSEs and residential ratepayers on the adverse effects from dumping FOG down drains. BBARWA does not require a FOG Program to comply with the SSS WDRs, as member agencies implement these programs.

FOG occasionally builds up in Pump Station Nos. 1, 2, and 3, but does not cause significant operations issues and is removed approximately two (2) times per year by vactor trucks. FOG was once observed at Maple Lane and Big Bear Boulevard in the Trunk Line but has not been observed again since operators cleaned the line. BBARWA has not had a FOG-related SSO since the approval of its original SSMP in 2009. Table 9-1 provides a comprehensive list of SSOs since the SSMP was first approved in 2009.

Though BBARWA does not have its own comprehensive FOG Program, requirements set forth in the SSS WDRs are consistent with BBARWA's efforts to avoid FOG buildup through public outreach and maintaining legal authority to prohibit FOG discharges.

7-2.a Public Outreach

BBCCSD, CSA 53B, and the City maintain public outreach programs to reduce FOG discharge and BBARWA provides information on their website FAQs page (<https://bbarwa.org/faqs/>) about items that are prohibited from entering the sanitary sewer system.

7-2.b Prohibition of Illicit Discharge

BBARWA Code Title 7, Section 7.12.020, Sub-Section B, Item 7 prohibits discharges of FOG into the regional collection system in any concentration that causes adverse effects to the collection and treatment system. BBARWA possesses the legal authority to enforce the prohibition of FOG discharges through the enforcement clauses identified in Legal Authority Table 3-1.

8 ELEMENT 8 – SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

8-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.8:

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- (a) Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;*
- (b) Identify and justify the amount (percentage) of its condition to be assessed each year;*
- (c) Prioritize the condition assessment of system area that:*
 - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;*
 - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;*
 - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;*
- (d) Assess the system conditions using visual observation, video surveillance and/or other comparable system inspection methods;*
- (e) Utilize observations/evidence of system conditions that may contribute to existing of sewage from the system which can reasonably be expected to discharge into a water of the State;*
- (f) Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and*
- (g) Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.*

8-2 SSMP PROGRAM IMPLEMENTATION

BBARWA's 2010 Sewer Master Plan identified segments of capacity-constrained pipe, evaluated lift station condition and capacity, evaluated WWTP condition and capacity, and provided a 20-year Capital Improvement Plan (CIP) for both the WWTP and the regional sewer collection system to guide BBARWA's future capital improvement efforts. This Element discusses the portion of the CIP related to the regional sewer collection system.

8-2.a Evaluation

The 2010 Sewer Master Plan evaluated the capacity of the collection system using a Microsoft Excel spreadsheet model. The model was calibrated with historical flow data from 1990 to 2010 and uses projected increases in population to project future flows. The capacity evaluation considered three (3) separate components of sewer flows, which were scaled independently of each other:

- Wastewater from full-time residential homes

2025 Sewer System Management Plan

- Wastewater from tourism, commercial activities, and part time residential homes
- I/I

Analysis of the capacity of the collection system was based on projected Future (2030) Maximum Hour Flow with historical Maximum Hour I/I.

8-2.b Design Criteria

The depth to diameter ratio (d/D) is a widely accepted criteria for evaluating the capacity of gravity sewer mains. The 2010 Sewer Master Plan considers all gravity sewer pipes twelve (12) inches in diameter and smaller over capacity if their d/D is greater than 50%, and all gravity pipes larger than twelve (12) inches over capacity if their d/D is greater than 75%. This d/D criteria was used as the basis for identifying over capacity gravity pipes under the Future Maximum Hour Flow with historical Maximum Hour with I/I flow condition.

8-2.c Capacity Enhancement Measures and Schedule for Completion

Due to the relatively small size of BBARWA's collection system, only two (2) major capacity issues were identified in the 2010 Sewer Master Plan.

- Capacity at the Lake Pump Station
- Capacity in the Trunk Line

As a result of BBARWA's CIP, the Lake Pump Station was upgraded in 2021 with two (2) new pumps to meet average day demand, and a third pump with capacity for the Maximum Hour with I/I flow condition.

The Trunk Line has experienced two (2) SSOs since 2010: December 2010 and February 2019. Both events were located at Manhole (MH) 21 on the Trunk Line at the intersection of Teal Drive and Fairway Boulevard.

2025 Sewer System Management Plan

The 2010 Sewer Master Plan identified a wet weather capacity constraint in this area and recommended installing 5,600 feet of 15-inch and 18-inch sewer main parallel to the Trunk Line to alleviate the capacity problem. Following the 2010 SSO, BBARWA staff cleaned the line and removed accumulated grease in 2012, which was thought to have contributed to the 2010 SSO. With that blockage removed, BBARWA staff decided to defer the installation of the parallel pipelines recommended by the 2010 Sewer Master Plan until further evaluation could be performed to verify whether a Trunk Line upgrade was still necessary. No capacity problems were observed on the Trunk Line between 2011 and 2018; however, another SSO was observed at MH 21 in February 2019 during a severe storm that resulted in extreme wet weather flows. At the time of the 2019 SSO, BBARWA had already engaged Water Systems Consulting, Inc. (WSC) to perform a Trunk Line Capacity Analysis to evaluate capacity constraints in the Trunk Line and identify an appropriate resolution to any constraints (parallel line installation, upsize existing pipe, reduce I/I, etc.). Data from the 2019 SSO event was incorporated into the analysis. WSC developed a hydraulic model of the Trunk Line to evaluate the capacity under various scenarios and data from the 2019 SSO was used to determine the Peak Instantaneous Wet Weather Flow (PIWWF) used for the hydraulic analysis. The hydraulic model analysis of the Trunk Line showed that under PIWWF, capacity constraints in the Trunk Line resulted in an SSO at MH 21, which aligned with the observations in the field. To alleviate the surcharges, during wet weather events, a portable pump in BBARWA's emergency supply inventory be used to pump 600 GPM (approximately 15% of PIWWF through the Trunk Line) out of the Trunk Line and into the Lake Interceptor Force Main near MH 21. The Lake Interceptor Force Main is parallel to the Trunk Line in Fairway Boulevard, so this solution was achieved by constructing a new connection to the force main with a vault, piping, and appurtenances within Fairway Boulevard. In addition, BBARWA installed a new lid on MH 21 equipped with a level sensor and satellite communication device to monitor levels and alert BBARWA staff when the manhole begins to surcharge so they can mobilize the portable pump and prevent an SSO from occurring. This solution provides BBARWA with an early warning system and a physical solution to divert flows into a different line with sufficient capacity. This project was completed at the end of 2020.

9 ELEMENT 9 – MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

9-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.9:

The Enrollee shall:

- (a) Maintain relevant information, including audit findings, to establish and prioritize appropriate SSMP activities;*
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- (c) Assess the success of the preventative operation and maintenance program;*
- (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and*
- (e) Identify and illustrate SSO trends including: frequency, location, and volume.*

9-2 SSMP PROGRAM IMPLEMENTATION

9-2.a Relevant Data

BBARWA maintains records of all sewer-related activities including, but not limited to, the following:

- Collection System Maps
- CCTV Records
- Hydrocleaning Records
- Pump Station Maintenance Logs
- Capital Improvements
- SSOs
- Staff Training Logs
- Flow and Water Quality Data

Sanitary Sewer Overflows

A file is maintained for each SSO that occurs in BBARWA's collection system which includes the following: time, location, and duration of the spill; the notifier's information and chain of communication from initial notification to notification of regulatory agencies; Cal OES Control Number (if applicable); time when BBARWA response personnel arrived at the spill; correction, containment, and/or clean-up methods used; total volume spilled and recovered; discharge point of non-recovered sewage; water quality monitoring data (if applicable), and any draft and final reports submitted to CIWQS. BBARWA maintains this information in its office, and it is also available on the SSO database in CIWQS. Photographs of the system location where spill originated and GPS coordinates, drainage conveyance system entry location, the location(s) of discharge into surface water, as applicable, extent of spill spread, and the location(s) of clean up. Conduct the water quality sampling (Total Coliform Bacteria, Fecal Coliform Bacteria, E-coli, and Enterococcus) no later than 18 hours after knowledge of potential discharge to a surface water. SSO data is used to evaluate the effectiveness of BBARWA's R&R efforts, maintenance efforts, and capacity assurance plan. Table 9-1 provides a summary of SSOs in the BBARWA collection system since the SSMP's approval in 2009.

Table 9-1: Summary of SSO History

Date	Location	Volume (gal)	Recovered (gal)	Category	Cause
2/19/2007	North Shore Interceptor Force Main	11,250	0	Cat 1	Force main broke underneath a driveway
12/22/2010	Manhole 21 – Fairway Blvd and Teal Dr	81,400 ²	0	Cat 1	Storm event – pipe hydraulic capacity was exceeded
8/1/2013	Pump Station #2	8,400	5,200	Cat 2	Utility work crew drilled through line
2/12/2017	Lake Pump Station Storage Ponds	5,100	0	Cat 2	Blockage in emergency ponds due to piled snow and asphalt grindings causing ponds to overflow
2/14/2019¹	Pump Station #2	5,300	0	Cat 1	Flood at pump station caused pump motor to safety shutdown
2/14/2019¹	Manhole 21 – Fairway Blvd and Teal Dr	24,300	0	Cat 1	Storm event – pipe hydraulic capacity exceeded
12/31/2021	42825 Big Bear Blvd. (Big Bear Snow Play)	4,950	0	Cat 2	Air Release/Blowoff Valve Failure
3/11/2023	42825 Big Bear Blvd. (Big Bear Snow Play)	6,500	0	Cat 2	Pipe failure
4/14/2023	42825 Big Bear Blvd. (Big Bear Snow Play)	3,500	0	Cat 1	Pipe failure
2/22/2024	42825 Big Bear Blvd. (Big Bear Snow Play)	1,144	0	Cat 2	Pipe failure
¹ Entered in CIWQS as one (1) SSO event					
² Originally entered in CIWQS as 171,500 gallons, later revised to 81,400 gallons					

Collection System Maps

BBARWA maintains maps of its collection system in AutoCAD form and paper copies located in the Operations and Administration Buildings to assist in operations and SSO response.

CCTV Records

BBARWA has the entire gravity portion of the collection system CCTV'd every four (4) years and maintains possession of the videos in digital format.

Hydro-cleaning Records

BBARWA maintains records of hydro-cleaning activities digitally in Microsoft Excel. BBARWA typically has the entire gravity portion of the collection system hydro-cleaned by a contractor every four (4) years, but still maintains their own records of the cleaning. Hydro-cleaning records can be correlated with SSO frequency and volume and CCTV records to determine the effectiveness of hydro-cleaning lines.

Pump Station Maintenance Logs

Pump station maintenance activities are performed on a weekly, monthly, and/or annual basis. BBARWA holds a list of maintenance activities to be performed on those intervals (Appendix C: Pump Station Maintenance Tasks). BBARWA records each maintenance activity performed to ensure intervals are never missed, and to document reasons why a failure occurred, or a premature replacement may be required.

Capital Improvements

BBARWA keeps record of all capital improvement projects that are planned and have been executed, including slip-lining in place, manhole rehabilitation and lid replacement, pipeline installation and replacement projects, and pump station replacements and improvements. This information can be used in correlation with I/I data and SSO frequency and volume to determine the effectiveness of capital improvement projects.

Staff Training

BBARWA maintains attendance records of all formal trainings to ensure employees are trained according to the training list provided in Appendix D: Staff Training Program.

WWTP Flow Volumes and Water Quality Data

BBARWA keeps records of flows through its Division Drive metering station, and plant influent flows and water quality data in an effort to determine sources of I/I from its member agencies and its own collection system. BBARWA also maintains records of the water quality of its effluent being discharged to Lucerne Valley in accordance with Order No. R7-2021-0023.

9-2.b SSMP Monitoring

BBARWA assigns key performance indicators to SSMP Elements to monitor their implementation and effectiveness.

Table 9-2 shows these indicators for each Element as well as when SSMP Elements are to be reviewed.

Table 9-2: Sewer Management Key Performance Indicators and Review Timelines

Management Element	Key Performance Indicators	Review Period/Triggers
Operation and Maintenance	<ul style="list-style-type: none"> ➤ Length of pipe/segments hydro-cleaned ➤ Length of pipe/segments CCTV inspected ➤ Percentage of on-schedule lift station maintenance ➤ Manhole and sewer line rehabilitations ➤ SSOs due to maintenance-related lift station or line failure ➤ I/I in collection system ➤ Trainings attended per year ➤ Number of CWEA certified collection system operators 	<ul style="list-style-type: none"> ➤ Biannual review with audit ➤ Review after maintenance related SSO
Sanitary Sewer Overflows	<ul style="list-style-type: none"> ➤ Number, duration, and volume of SSOs ➤ SSO response time ➤ Volume of SSOs contained vs. volume released to surface waters or an MS4 ➤ Percentage of on-time external agency notifications ➤ Percentage of on-time CIWQS spill report submissions 	<ul style="list-style-type: none"> ➤ Biannual review with audit ➤ Review after each SSO
FOG Control	<ul style="list-style-type: none"> ➤ Length of pipe/segments of FOG hotspots requiring frequent cleaning ➤ SSOs due to FOG blockages 	<ul style="list-style-type: none"> ➤ Biannual review with audit ➤ Review after FOG related SSO
Capital Improvements and Capacity Assurance	<ul style="list-style-type: none"> ➤ SSOs due to deficient hydraulic capacity ➤ Length of pipe replaced ➤ CIP projects completed 	<ul style="list-style-type: none"> ➤ Biannual review with audit ➤ Review after capacity related SSO

9-2.c Success of Preventative Maintenance Program

The success of a preventative maintenance program is most easily identified by a reduction in SSO frequency beginning around the time when maintenance efforts increased. There is no direct correlation between SSO frequency reduction and maintenance changes, however the lack of maintenance-related SSOs in Table 9-1 since 2007 suggests that BBARWA's preventative maintenance program is effective in preventing SSOs.

Table 9-1 suggests that wet weather events are typically the cause of SSOs in BBARWA's collection system due to hydraulic deficiency and I/I. BBARWA is making an effort to reduce I/I in its collection system through slip-lining pipes and rehabilitating manholes to prevent infiltration, and replacing manhole lids with sealing lids to prevent inflow. Two (2) similar SSOs occurred in 2010 and 2019 during heavy rainfall events. From December 19-22, 2010, the Big Bear Valley received 4.91-inches of rainfall, which resulted in an SSO of 81,400 gallons. BBARWA rehabilitated approximately 40 manholes and replaced them with Pamrex sealing lids from 2010 to February 2019. The Big Bear Valley received 3.43-inches of rain on February 14, 2019 which resulted in an SSO of only 24,300 gallons. The reduced spill volume during similar rainfall events could indicate reduced I/I in the collection system due to manhole rehabilitation efforts.

9-2.d Update Program Elements

At a minimum, the SSMP will be reviewed in accordance with

Table 9-2, updated every three (3) years, and re-approved every six (6) years by the Governing Board. The SSMP is also a living document and therefore will be continuously updated by each Element Manager (listed in Table 2-2) as necessary. Changes to the SSMP will be made to an electronic and/or hard copy of the most recently approved SSMP, and will also be documented in Appendix B: Sewer System Management Plan Change Log.

9-2.e Identify SSO Trends

BBARWA maintains hard copy files for each SSO that occurs, as well as their SSO history in an electronic Microsoft Excel database (dating back to 2009). A summary of SSOs in the BBARWA collection system is provided in Table 9-1, including their volumes and cause. Table 9-1 identifies hydraulic deficiency during wet weather events and I/I as the primary causes of SSOs, and Sections 8-2.c, 9-2.b, and 0 document BBARWA's efforts to reduce I/I and assure adequate hydraulic capacity through collection system rehabilitation and a capacity analysis.

10 ELEMENT 10 – INTERNAL AUDITS

10-1 WASTE DISCHARGE REQUIREMENTS

Order WQ 2022-0103-DWQ Section D.10:

As part of the SSMP, the Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database by six (6) months after end of 3-year audit period.

Order WQ 2022-0103-DWQ Section E.3.10:

Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

The SSMP must be updated every six (6) years and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with E.3 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)

10-2 SSMP PROGRAM IMPLEMENTATION

BBARWA first certified their SSMP in 2009 in accordance with deadlines set forth in the Statewide General WDRs and is therefore required to conduct an audit every three (3) years starting in 2023. Audits are required every (3) years, including those that align with the required six-year SSMP Update. BBARWA most recently completed an audit in 2024.

BBARWA conducted internal audit in 2024 to align with the new General Order For Sanitary Sewer Systems: Order WQ 2022-0103-DWQ

Following the completion of this 2024 SSMP Audit, BBARWA is scheduled to complete its next SSMP audit in 2027. Appendix A: SSMP Supporting Document History includes a list of previous and anticipated SSMP audits.

Audit Execution

SSMP Audits are guided by the BBARWA Element Managers for each SSMP Element as identified in Table 2-2. To conduct audits, Element Managers review the SSMP and any applicable supporting documents for compliance with the SSS WDRs, as well as review performance indicators in

11 ELEMENT 11 – COMMUNICATION PROGRAM

11-1 WASTE DISCHARGE REQUIREMENTS

Order 2022-0103-DWQ Section D.11:

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11-2 SSMP PROGRAM IMPLEMENTATION

11-2.a Public Outreach

BBARWA communicates regularly with the public regarding implementation and performance of its SSMP via the following methods:

- BBARWA website (www.bbarwa.org) – BBARWA's website makes the following content easily accessible to all interested parties:
 - Contact Information – Contact information to report emergencies during business hours and after hours. Contact information for BBARWA personnel is also available.
 - Collection System Information – General information describing BBARWA's collection system, including a map of the regional sewer system.
 - FAQs – Includes a description of what is and is not allowed to be flushed down a toilet.
 - JPA agreements
 - BBARWA's SSMP – SSMP supporting documents including the Emergency Action Plan, County Sewer Standards, and Title 7 are available to the public through a Public Records Request.
- Governing Board Meetings
 - BBARWA's Governing Board Meetings occur on the 4th Wednesday of each month. The public has the opportunity to review agenda items posted on BBARWA's website prior to meetings and participate in BBARWA discussions.

11-2.b Tributary System Outreach

The BBCCSD, the City, and CSA 53B collection systems are all tributaries of BBARWA's regional collection system. BBARWA's Governing Board is composed of two (2) members representing BBCCSD, two (2) members representing the City, and one (1) member representing CSA 53B to ensure communication between the agencies and adequate representation of BBARWA's member agencies. BBARWA maintains a primary point of contact with each member agency for coordination on inter-agency matters and emergencies (Table 11-1: Member Agency Points of Contact Table 11-1).

Table 11-1: Member Agency Points of Contact

Agency	Contact Information	
Big Bear City Community Services District Sewer Department	Nathan Zamorano nzamorano@bbccsd.org (909) 584-4007	
City of Big Bear Lake Public Works – Sanitation	Jason Watterson (909) 633-2565	Main Office (909) 866-7521
County Service Area 53B	Albert Hatzenbuler (909) 269-1059	

APPENDIX A: SSMP SUPPORTING DOCUMENT HISTORY

A record of required SSMP Updates, Audits, and supporting documents is provided below along with when these documents were last updated.

Document	Description of Change/Revision	Date	Change Authorized By
Title 7	Adopted as the new BBARWA Sewer Code by Ordinance 69	1999	Adopted by Governing Board through Ordinance 69
Internal SSMP Audits	Audits led to changes in SSMP Elements 4 and 6 during 2014 SSMP Re-approval	Between 2009 and 2014	N/A
2014 SSMP Audit of Element 4 and Element 8	No changes recommended by audit	September 11, 2014	Audit Executed by BBARWA General Manager (Steve Schindler)
Emergency Action Plan	EAP Update	2014	General Manager
Emergency Action Plan	EAP Update	October 2018	General Manager
Emergency Action Plan	EAP Update	October 2, 2019	General Manager
Traffic Control Safety Plan	TCSP Update	November 16, 2018	General Manager
San Bernardino County Special District Sewer Standards	Reviewed by BBARWA Staff to ensure they are sufficient and up to date	June 2019	General Manager
Capital Improvement Program	List of CIP projects updated annually	2024	CIP updated by plant operators and Administrative staff
2019 SSMP Audit	Changes to each SSMP element, development of a WQMP. See SSMP Change Log for additional details	May 7, 2020	General Manager
2021 SSMP Audit	Minor changes to Elements 2, 4, and 8. See SSMP Change Log for additional details	February 17, 2021	General Manager
2024 SSMP Audit	Audit for new General Order WQ 2022-0103-DWQ, Updated all Elements for new General Order	February 2, 2025	General Manger

APPENDIX B: SEWER SYSTEM MANAGEMENT PLAN CHANGE LOG

BBARWA's Certified 2009 SSMP has undergone the following revisions:

SSMP Element	Description of Change/Revision	Date	Change Authorized By
Complete 2009 SSMP	Original approval date	August 26, 2009	Approved by Board of Directors
Element 4: Operation and Maintenance Program	Untracked revisions	Between 2009 and 2014	General Manager (Steve Schindler)
Element 6: Overflow Emergency Response Plan	Added language to summarize Facilities Emergency Action Plan	Between 2009 and 2014	General Manager (Steve Schindler)
Complete 2014 SSMP Update	SSMP re-approved	September 24, 2014	Approved by Board of Directors
Introduction	Updated language for the new General Order	October 15, 2024	General Manager
Element 1: Goals	Updated language for the new General Order, no revisions made to actual goals	October 15, 2024	General Manager
Element 2: Organization	Updated org chart, roles and responsibilities, contact info, defined roles for reporting SSOs	October 15, 2024	General Manager
Element: 3 Legal Authority	Updated language for the new General Order	October 15, 2024	General Manager
Element 4: Operation and Maintenance Program	Updated and revised language to describe BBARWA's existing and ongoing maintenance efforts	October 15, 2024	Plant Manager
Element 5: Design and Performance Provisions	Updated language for the new General Order	October 15, 2024	General Manager
Element 6: Overflow Emergency Response Plan	Updated language for the new General Order, added language for Spill Categories and Flow Chart	October 15, 2024	Plant Manager
Element 7: FOG Program	BBARWA does not require a FOG Program due to so few FOG occurrences and the presence of FOG Programs on BBARWA's tributary systems	October 15, 2024	Plant Manager
Element 8: System Evaluation and Capacity Assurance Plan	Updated language for completed project for bypass at Teal and Fairway, replaced 2 new pumps at LPS in 2021	October 15, 2024	General Manager

SSMP Element	Description of Change/Revision	Date	Change Authorized By
Element 9: Monitoring, Measurement, and Program Modifications	Updated table of previous SSOs and analysis of SSO causes, added KPIs to evaluate the effectiveness of the SSMP	October 15, 2024	General Manager
Element 10: Audits	Updated language for internal audits to include audits every 3 years and SSMP update every 6 years	October 15, 2024	General Manager
Element 11: Communication	Documented BBARWA's existing communication efforts with the public and provided points of contact for all member agencies	October 15, 2024	General Manager
SSMP Appendices	Updated appendices to have supporting documents attached to SSMP	October 15, 2024	General Manager
SSMP Change Log	Updated to reflect changes in 2024 Audit for new General Order	October 15, 2024	General Manager
Water Quality Monitoring Program	Updated for SSMP Audit due in 2025	October 15, 2024	General Manager
EAP	Updated EAP	June 18, 2025	General Manager
<p>* Operators input for SSMP Audit on October 15, 2024, was completed with staff there was no input on the Audit findings.</p>			

APPENDIX C: PUMP STATION MAINTENANCE TASKS

All Pump Stations Periodic Maintenance Tasks

Location	Maintenance Task	Equipment Name	Frequency
LPS	Monthly inspection	Fire Extinguisher	Monthly
LPS	Change oil & filters Fuel 3341 Oil NAPA 1133	Generator	Annual
LPS	Check all cable connections and wiring	Generator	Annual
LPS	Check fan belt tension & condition	Generator	Annual
LPS	Check turbo charger piping for loose nuts	Generator	Annual
LPS	Check air filters (C12233-9 P-40)	Generator	Annual
LPS	Clean crankcase breather	Generator	Annual
LPS	Replace 6-volt battery	Chatter box	Annual
LPS	Grease fan drive pulley hub bearing	Generator	Annual
LPS	Grease governor throttle stop control swivel	Generator	Annual
LPS	Grease rear bearing	Generator	Annual
LPS	Grease water pump tightener idler pulley	Generator	Annual
LPS	Inspect windings, contacts and lugs	Generator	Annual
LPS	Inspect belts (4390516 & 4338768)	Generator	Annual
LPS	Inspect fuel lines & coolant hoses & block heater	Generator	Annual
LPS	Replace fuel filters	Generator	Annual
LPS	Tighten engine mounting bolts	Generator	Annual
LPS	Tighten exhaust intake manifold	Generator	Annual
LPS	Load test	Generator Batteries	Monthly
LPS	Inspect & replace as needed	Lighting	Monthly
LPS	Amp, volt check and meager, log data in RASCAL	Pump 1	Annual
LPS	Annual inspection (Mark Burnett 951-751-0546)	Motor Control Centers	Monthly
LPS	Check temps and contacts in MCC-log data in RASCAL	Pump 1	Annual
LPS	Inspect for proper operation	Radiator Ventilation	Monthly
LPS	Check temps and contacts in MCC-log data in RASCAL	Pump 2	Annual
LPS	Amp, volt check and meager, log data in RASCAL	Pump 2	Annual
LPS	Amp, volt check and meager, log data in RASCAL	Pump 3	Annual
Sta 1	Monthly inspection	Fire Extinguisher	Monthly
Sta 1	Change oil & filters (NAPA 1411)	Generator	Annual
Sta 1	Check all cable connections and wiring	Generator	Annual
Sta 1	Check fan belt tension & condition	Generator	Annual
Sta 1	Check air filter (Fram CA-151PL)	Generator	Annual
Sta 1	Clean crankcase breather	Generator	Annual
Sta 1	Inspect windings, contacts and lugs	Generator	Annual

Location	Maintenance Task	Equipment Name	Frequency
Sta 1	Inspect belts (Gates 9450)	Generator	Annual
Sta 1	Inspect fuel lines & coolant hoses & block heater	Generator	Annual
Sta 1	Replace fuel filters (Napa 3351)	Generator	Annual
Sta 1	Tighten engine mounting bolts	Generator	Annual
Sta 1	Tighten exhaust intake manifold	Generator	Annual
Sta 1	Load test	Generator Batteries	Monthly
Sta 1	Inspect & replace as needed	Lighting	Monthly
Sta 1	Amp, volt check and meager, log data in RASCAL	Pump 2	Annual
Sta 1	Annual inspection (Mark Burnett 951-751-0546)	Motor Control Centers	Annual
Sta 1	Amp, volt check and meager, log data in RASCAL	Pump 1	Annual
Sta 1	Check temps and contacts in MCC-log data in RASCAL	Pump 1	Annual
Sta 1	Check temps and contacts in MCC-log data in RASCAL	Pump 2	Annual
Sta 1	Inspect for proper operation	Radiator Ventilation	Monthly
Sta 1	Monthly inspection (JHA 0036/0037)	Fall Protection	Monthly
Sta 1	Replace 6-volt battery	Chatter Box	Annual
Sta 2	Replace 6-volt battery	Chatter Box	Annual
Sta 2	Monthly inspection	Fire Extinguisher	Monthly
Sta 2	Change oil & filters (Napa 1411)	Generator	Annual
Sta 2	Check all cable connections and wiring	Generator	Annual
Sta 2	Check fan belt tension & condition	Generator	Annual
Sta 2	Check air filter (Fram CA-151PL)	Generator	Annual
Sta 2	Clean crankcase breather	Generator	Annual
LPS	Inventory spare parts	Generator	Annual
Sta 2	Inspect windings, contacts and lugs	Generator	Annual
Sta 2	Inspect belts 9450	Generator	Annual
Sta 2	Inspect fuel lines & coolant hoses & block heater	Generator	Annual
Sta 2	Replace fuel filters (Napa 3351)	Generator	Annual
Sta 2	Tighten engine mounting bolts	Generator	Annual
Sta 2	Tighten exhaust intake manifold	Generator	Annual
Sta 2	Load test	Generator Batteries	Monthly
Sta 2	Inspect & replace as needed	Lighting	Monthly
Sta 2	Amp, volt check and meager, log data in RASCAL	Pump 2	Annual
Sta 2	Amp, volt check and meager, log data in RASCAL	Pump 1	Annual
Sta 2	Check temps and contacts in MCC-log data in RASCAL	Pump 1	Annual

Location	Maintenance Task	Equipment Name	Frequency
Sta 2	Check temps and contacts in MCC-log data in RASCAL	Pump 2	Annual
Sta 2	Inspect for proper operation	Radiator Ventilation	Monthly
Sta 2	Monthly inspection (JHA 0036/0037)	Fall Protection	Monthly
Sta 3	Replace 6-volt battery	Chatter Box	Annual
Sta 3	Monthly inspection	Fire Extinguisher	Monthly
Sta 3	Change oil & filters 1758	Generator	Annual
Sta 3	Check all cable connections and wiring	Generator	Annual
Sta 3	Check fan belt tension & condition	Generator	Annual
Sta 3	Check air filter (Napa 2652)	Generator	Annual
Sta 3	Clean crankcase breather	Generator	Annual
Sta 3	Inspect windings, contacts and lugs	Generator	Annual
Sta 3	Inspect belts	Generator	Annual
Sta 3	Inspect fuel lines & coolant hoses & block heater	Generator	Annual
Sta 3	Replace fuel filters Car Quest 86370 (2)	Generator	Annual
Sta 3	Tighten engine mounting bolts	Generator	Annual
Sta 3	Tighten exhaust intake manifold	Generator	Annual
Sta 3	Load test	Generator Batteries	Monthly
Sta 3	Inspect & replace as needed	Lighting	Monthly
Sta 3	Amp, volt check and meager, log data in RASCAL	Pump 2	Annual
Sta 3	Annual inspection (Mark Burnett 951-751-0546)	Motor Control Centers	Annual
Sta 3	Amp, volt check and meager, log data in RASCAL	Pump 1	Annual
Sta 3	Check temps and contacts in MCC-log data in RASCAL	Pump 1	Annual
Sta 3	Check temps and contacts in MCC-log data in RASCAL	Pump 2	Annual
Sta 3	Inspect for proper operation	Radiator Ventilation	Monthly
Sta 3	Monthly inspection (JHA 0036/0037)	Fall Protection	Monthly
Sta 3	Inventory spare parts	Generator	Annual
LPS	Check temps and contacts in MCC-log data in RASCAL	Pump 3	Annual
LPS	Check temps and contacts in MCC-log data in RASCAL	Pump 4	Annual
LPS	Amp, volt check and meager, log data in RASCAL	Pump 4	Annual
LPS	Check for excess slack in wetwell	Pump wiring	Monthly
LPS	Check for expiration date and signs of tampering	Eyewash bottles	Monthly
Sta 1	Check for expiration date and signs of tampering	Eyewash bottles	Monthly
Sta 2	Check for expiration date and signs of tampering	Eyewash bottles	Monthly

Location	Maintenance Task	Equipment Name	Frequency
Sta 3	Check for expiration date and signs of tampering	Eyewash bottles	Monthly
LPS	Test by opening main breaker	Transfer switch	Monthly
Sta 1	Test by opening main breaker	Transfer switch	Monthly
Sta 2	Test by opening main breaker	Transfer switch	Monthly
Sta 3	Test by opening main breaker	Transfer switch	Monthly
LPS	Test by opening main breaker	Transfer switch	Monthly

North Shore Stations Weekly Maintenance

Location	Maintenance Task	Description of task	Frequency
Generators	Fuel Levels	Check and Log	Weekly
Generators	Oil Levels	Check and Log	Weekly
Generators	Anti-freeze Levels	Check and Log	Weekly
Generators	Block Heater Operation	Check	Weekly
Generators	Battery Terminals	Check	Weekly
Generators	Hours: Pre-Run	Log	Weekly
Generators	Hours: Post Run	Log	Weekly
Generators	Water Temp.	Check and Log	Weekly
Generators	Oil Pressure	Check and Log	Weekly
Generators	Charging Amps	Check and Log	Weekly
Generators	Volts A	Check and Log	Weekly
Generators	Volts B	Check and Log	Weekly
Generators	Volts C	Check and Log	Weekly
Generators	Amps A	Check and Log	Weekly
Generators	Amps B	Check and Log	Weekly
Generators	Amps C	Check and Log	Weekly
Generators	Hz	Check and Log	Weekly
Generators	Leaks & Vibration	Check	Weekly
Pumps	Discharge Pressure 1	Check and Log	Weekly
Pumps	Discharge Pressure 2	Check and Log	Weekly
Pumps	Backflush 1	Check and Log	Weekly
Pumps	Backflush 2	Check and Log	Weekly
Pumps	Check Valve Operation	Check	Weekly
Pumps	Leaks & Vibration	Check	Weekly
Wet Well	Low Wet Well	Pull Pressure Transducer	Weekly
Wet Well	High Wet Well Float	Pull Float and Confirm alarm	Weekly
Wet Well	Pump Start Float	Pull Float and Confirm Pump Start	Weekly
Wet Well	Drywell Flood	Pull Float and Confirm Pump Start	Weekly
Station	Smoke Alarm	Test for operation	Weekly
Station	Ground Fault Monitor	Check for alarms	Weekly

Lake Pump Station Weekly Maintenance

Location	Maintenance Task	Description of task	Frequency
Generator	Fuel Level	Check and Log	Weekly
Generator	Oil Level	Check and Log	Weekly
Generator	Anti-Freeze	Check and Log	Weekly
Generator	Block Heater	Check	Weekly
Generator	Battery Level	Check and Log	Weekly
Generator	Battery Terminal	Check	Weekly
Generator	Hours: Pre-Run	Log	Weekly
Generator	Hours: Post Run	Log	Weekly
Generator	Water Temp	Check and Log	Weekly
Generator	Oil Pressure	Check and Log	Weekly
Generator	Charging Amps	Check and Log	Weekly
Generator	Volts A	Check and Log	Weekly
Generator	Volts B	Check and Log	Weekly
Generator	Volts C	Check and Log	Weekly
Generator	Amps A	Check and Log	Weekly
Generator	Amps B	Check and Log	Weekly
Generator	Amps C	Check and Log	Weekly
Generator	Hz	Check and Log	Weekly
Generator	Leaks & Vibrations	Check and Log	Weekly
Pumps	Check Valves Closing Properly (Pump 1)	Check	Weekly
Pumps	Check Valves Closing Properly (Pump 2)	Check	Weekly
Pumps	Check Valves Closing Properly (Pump 3)	Check	Weekly
Wet Well	Low Wet Well	Pull Pressure Transducer	Weekly
Wet Well	High Wet Well Float	Pull Float and Confirm alarm	Weekly
VFD	Log Hours	Log	Weekly
Pump 2	Log Hours	Log	Weekly
Pump 3	Log Hours	Log	Weekly
Station	Carbon Scrubber Fan	Check	Weekly

APPENDIX D: STAFF TRAINING PROGRAM

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
National Incident Management System (NIMS)	Initial Only	Training to provide guidance on working together with other governmental and non-governmental agencies to prevent, protect against, mitigate, respond to and recover from incidents.
Hearing Conservation Plan	Initial ¹ All Employees	The purpose of this program is to establish procedures for hearing conservation. This program applies to all employees with noise exposure to or in excess of 85 dBA (decibels, A-weighting), as an 8-hour time-weighted average (TWA). Material covered: purpose, responsibilities, determination of sound levels, audiometric testing, hearing protection, testing frequency, training, recordkeeping, and employee notifications.
Hazard Communication Plan	Initial ¹ All Employees	This program covers all work operations where employees may be exposed to hazardous chemicals under normal working conditions or during an emergency. Material covered includes plan administration, labeling SDS's, employee training, non-routine tasks involving hazardous chemicals, notifications for multi-employer worksites, hazardous chemicals transported in pipes, recordkeeping, and a list of Prop 65 chemicals.
Bloodborne Pathogen Exposure Control Plan	Initial & Annually All Employees	This Plan is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens" and Section 5193, Title 8, CCR. Material covered includes purpose, responsibility, definitions, exposure determination, methods of compliance, exposure control plan, engineering and work control practices, PPE, housekeeping, Hep B vaccination, post exposure evaluation and follow up, communication of hazards to employees, training and recordkeeping.
Emergency Action Plan	Initial ¹ All Employees	This program describes procedures during an emergency. Material covered includes facility description and site plans, contact information, emergency protocols, evacuation plan, earthquake plan, emergency support procedures, fire prevention plan, active shooter plan, pandemic outbreak contingency plan, spill prevention and contingency plan, high flow operations and spill prevention, and sewage spill reporting.
Injury & Illness Prevention Plan (IIPP)	Initial & Every 3 Years All Employees	Procedures for injury and illness prevention. Material covered includes compliance, responsibility, communication, safety rules and regulations, hazard assessment, incident/accident/exposure investigation, health and safety training, record keeping, and role of the safety committee.

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
Ergonomics	Initial ¹	Employers have the responsibility of providing safe workplaces for employees. Occupational Safety and Health Administration, or OSHA, has created ergonomics program guidelines for various industries. Ergonomics is defined as fitting a job to a person. It is concerned with posture and movement of the body and environmental factors present when a task is being performed.
Confined Space Program	Initial ¹ Operations	The purpose of the Confined Space Entry Program is to identify all confined spaces within the Agency, and ensure all authorized employees will enter, perform work in, and exit confined spaces safely. Material covered includes purpose, definitions, responsibilities, classification and identification, entry permits, duties of personnel, confined space entry procedures, atmospheric monitoring, ventilation, instruction and training requirements, rescue and emergency services, annual review and records retention.
Lockout/Tagout Program	Initial ¹ Operations	The Lockout/Tagout Program was developed in accordance with the Cal/OSHA Control of Hazardous Energy Source and Electrical Hazards Lockout and Tagout. This program follows the requirements outlined in the California Code of Regulations, Title 8, Sections 3314, 4413 and 5157. Material covered includes purpose, general information, responsibilities, preparation for LOTO procedure, electrical LOTO, removal of LOTO devices by person other than authorized employee, informing outside contractors, periodic inspections, training, and accident concerning LOTO.
Personal Protective Equipment Program with Assessment	Initial ¹ Operators	The information, methods, and procedures in this program are based on the Occupational Safety and Health Administration (OSHA) requirements for personal protective equipment (PPE) as set forth in the Code of Federal Regulations (CFR) at 29 CFR 1910.132 (General requirements); 29 CFR 1910.133 (Eye and face protection); 29 CFR 1910.135 (Head protection); 29 CFR 1910.136 (Foot protection); 29 CFR 1910.137 (Electrical protective equipment); and 29 CFR 1910.138 (Hand protection). Material covered includes the purpose, role of PPE, hazard assessment, and employee training on eye, face, hand, arm, foot, leg, head, and hearing protection.
Heat Illness Prevention Program	Initial ¹ Operators	The Heat Illness Prevention Program has been developed to comply with the California Code of Regulations Title 8, Section 3395, Heat Illness Prevention. The Heat Illness Prevention standard is applicable to any outdoor workplace, whenever environmental or personal risk factors for heat illness are present. Material covered includes responsibilities, personal risk factors, environmental risk factors, identifying heat illness, prevention procedures, responding to emergencies, and training.

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
Sewer System Management Plan & Water Quality Management Plan	Initial ¹ Operators	This training program reviews the Sewer System Management and Water Quality Management Plans.
Fall Protection	Initial ¹ Operators	Understanding how to prevent injuries in a fall hazard situation, identifying safety equipment required in fall hazard situations, and recognizing the different types of fall prevention systems.
Traffic Control Program	Initial ¹ Operators (Flaggers Only)	The purpose of the Traffic Control Safety Plan is to communicate and establish safe work standards and practices for employees and contractors in accordance to the California Temporary Traffic Control Handbook and the California Manual of Uniform Traffic Control Devices (MUTCD). Material covered includes purpose, scope, responsibilities, fundamental principles, safety apparel, work areas, and local encroachment permits.
RCRA Hazardous Waste Generator	Initial Operators	Provides training as a handler of hazardous waste for large or small quantity generators of hazardous waste in the state of California according to the California Department of Toxic Substances regulations found in Title 22 CCR 66262.34 and Title 22 CCR 66265.16.
Fire Extinguisher Training	Every 2 Years All Employees	How to use a fire extinguisher.
Stormwater Pollution Prevention Plan (SWPPP)	Annually Operators	This site-specific Storm Water Pollution Prevention Plan (SWPPP) and associated Monitoring Implementation Plan (MIP, Section 2.0) have been prepared to comply with the requirements of the State (California) Water Resources Control Board NPDES General Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities (General Permit) adopted on April 1, 2014. Material covered includes performance standards, planning and organization, site map and facility description, list of industrial material, description and assessment of industrial activities and potential pollutant sources, best management practices, identification of monitoring team, discharge locations, visual observation procedures, and the annual comprehensive facility compliance evaluation.

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
Working on or Near Water Safety Program	Annually Operators	The purpose of this program is to provide general safety guidelines for those employees who perform their job duties over or near water. Those employees shall follow the minimum operation requirements designed to prevent injury or fatality from falling into the water (as required by OSHA 1926.106). Material covered includes purpose, responsibilities, life-saving equipment, pre-task plan, procedures, and training.
Hot Work Permit Program	Annually Operators	This program applies to all employees (permanent, temporary, and contractors) who complete hot work or work in areas where hot work is taking place. Material covered includes purpose, responsibilities, authorized personnel, fire watch personnel, other personnel, designated areas, non-designated area procedure, outside contractors, PPE, permit system, training, periodic review, and record retention.
Powered Industrial Truck Program	Annually Operators	This standard practice instruction is intended to address comprehensively the issues of employee training, authorization, safety requirements, fire protection, new purchase designs, maintenance, and general operation of fork trucks and other specialized industrial trucks used within our facility.
Forklift Certification & Industrial Truck Operator Evaluation	Every 3 Years Operators	In conjunction with the Powered Industrial Truck Program.
Electrical & ARC Flash Safety Program	Every 3 Years Operators	Electricity is a serious workplace hazard, capable of causing both personal injury and property damage. It is the policy of the Big Bear Area Regional Wastewater Agency (Agency) to protect all persons from potential electrical hazards. This will be accomplished through compliance with the work practices described in this program along with the effective application of engineering controls, administrative controls, and the use of personal protective equipment (PPE). This program is based on principles and procedures contained in the 2018 edition of the National Fire Protection Association (NFPA) 70E standard. Material covered includes purpose, responsibilities, definitions, training, working on or near energized electrical conductor or circuit parts, PPE, alerting techniques, standard operating procedures, and arc flash hazard analysis.

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
Lab Chemical Hygiene Plan	Every 3 Years Operators	The objective of the Lab Chemical Hygiene Plan is to set forth procedures, equipment, personal equipment and work practice that are capable of protecting employees from the health hazards presented by hazardous chemicals used in the laboratory and to meet the requirement of Cal OSHA GISO 5191 "Occupational Exposure to Hazardous Chemicals in Laboratories". Material covered includes chemical hygiene procedures, specific safety procedures, control measures and equipment, employee information and training, exposure assessments, and medical consultations and examinations.
Multi-Employer Worksite Plan	Every 3 Years All Employees	A multi-employer worksite is any worksite, permanent or temporary, where more than one employer (and his or her employees) work, usually but not necessarily at the same time. They can be temporary worksites at which construction activities take place or permanent worksites where contractors perform activities at that worksite, including, but not necessarily limited to, construction, environmental or janitorial services, repairs, or deliveries. Material covered includes purpose, responsibilities, OSHA regulations, and types of citable employers.
Drug Free Workplace	Odd Years All Employees	Drug abuse can have dangerous and costly effects in the workplace. This course highlights these impacts and provides useful information about the different types of drugs that are commonly abused and how to evaluate each element and subsidiary component of a safety and health program.
Hazardous Waste Operations & Emergency Response (HAZWOPER)	Annually Operators	A hazardous materials incident is defined as the release, or suspected release, of a hazardous material into the environment. Even with the best prevention methods in place, hazardous materials incidents are bound to happen. Understanding the nature of the hazardous materials you work with, and how to respond to an incident or potential incident will help you quickly manage a dangerous situation and minimize damage done to persons, the environment, and facilities. Being able to recognize and quickly request the appropriate aid is the main responsibility of first responders at the awareness level. This is the 8-hour refresher course.
Crystalline Silica	Before Assignment Operators	Hazards of silica in construction.

Name of Training	Frequency of Training and Type of Employees	Description of training and material covered
DOT Hazmat Spill Prevention and Control Training	Initial and Every 3 Years Operators	The training covers hazardous material requirements for general handling, storage, and disposal of hazardous materials. It covers Safety Data Sheets (SDS) and how to recognize the information in an SDS. Response procedures necessary to handle hazardous materials spills, covers personal protective equipment (PPE) and why you use it. Identifies the procedures for cleaning up hazardous material spills.
Workplace Violence	Every 3 Years All Employees	Workplace violence has emerged as an important safety and health issue in today's workplace. Its most extreme form, homicide, is the second-leading cause of fatal occupational injury in the United States.
Respiratory Protection Plan	Initial & Annually Operators	The Agency recognizes that respirators have limitations and their successful use is dependent on an effective Respiratory Protection Program. The Respiratory Protection Program is designed to identify, evaluate, and control exposure to respiratory hazards as well as select and provide use, care, and maintenance of the equipment. Material covered includes respirator selection, medical evaluations, fit testing, use of respirators, maintenance and care of respirators, breathing air quality and use, training and information, and program evaluation.
First Aid/CPR	Odd Years All Employees	Required training in the procedures for first aid and CPR.
Alcohol-Free Workplace	Even Years All Employees	The Alcohol-Free Workplace program is one way the Agency can begin to mitigate the impact of alcohol abuse in the workplace. The purpose of the Alcohol-Free Workplace program is not to interfere in anyone's personal life, but to improve safety in the workplace. When alcohol enters the workplace, risk and liability both rise, particularly in high-risk work environments.
¹ This is only required during the initial training for new employees; however, additional training on these topics can occur when applicable federal or state regulations change, when operations at the Agency change that require a revision to the program, or when an accident investigation or safety audit warrant a plan revision.		

APPENDIX E: SPARE PARTS AND EMERGENCY INVENTORY

Part Name	Part Description (Spare, In-service)	Quantity	Part Group (Lift Station, Force Main/Sewer Lines, Manhole, etc.)
Emergency Mobile Generator	Standby generator for all lift stations	1	Lift stations
Godwin Pumps 4 inch	Portable sewer pumps	2	Bypass pumps for emergency operations
Godwin Pump 6 inch	Portable sewer pumps	1	Bypass pumps for emergency operations
7.5 HP	Station 1 pump and motor assembly	1	Lift stations
15 HP	Station 2 pump and motor assembly	1	Lift stations
40 HP	Station 3 pump and motor assembly	1	Lift stations
Pamrex Manholes	Spare manhole lids on hand	5	Manhole
Repair Clamps	Repair clamps for pipe breakage		Sewer Lines and Force Main
	2"	2	
	3"	1	
	4"	1	
	6"	2	
	8"	1	
	10"	2	
	12"	9	
Repair Bands			Sewer Lines and Force Main
	6"	2	
	8"	1	
	9"	3	
	12"	2	
	15"	2	
	18"	5	
Misc. Pipe for Line Repair	Plastic sewer pipe		Sewer Lines and Force Main
	8"		
	6"		
	4"		
Station 1 Check Valve	Mueller 4x6		Lift Stations
Station 2 Check Valve	Mueller 4x8		Lift stations
Station 3 Check Valve	Mueller 4x8		Lift Stations
Station 1 Gate Valve	Mueller 6 inch		Lift Stations
Station 2 Gate Valve	Mueller 8 inch		Lift Stations
Station 3 Gate Valve	Mueller 10 inch		Lift Stations

APPENDIX F: EMERGENCY ACTION PLAN

Emergency Action Plan



October 15, 2024

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Agency Master Phone List

Primary Employee Emergency Contacts

David Lawrence – General Manager

Daytime: (909) 584-4018

Cellular: (818) 581-1561

John Shimmin – Plant Manager & Health and Safety Coordinator

Daytime: (909) 584-4520

Cellular: (760) 808-1256

Troy Bemisdarfer – Plant Supervisor

Daytime: (909) 584-4525

Cellular: (909) 520-2835

Duty Operator (7-day rotating schedule)

Cellular: (909) 261-6645

Alternate Employee Emergency Contacts

Brent Berg – Plant Operator II

Cell: (951) 390-1354

Ryan Connelly – Plant Operator II

Cell: (909) 261-6876

Nikki Crumpler – Senior Lab Analyst

Cell: (858) 361-2564

Sam Essex – Plant Operator II

Cell: (909) 856-8051

Chris Santillan – Plant Operator II

Cell: (909) 240-7329

Tyler Westplat – Plant Operator II

Cell: (909) 727-4328

Ralph Curiel – Plant Operator II

Cell: (909) 437-5573

Christine Bennett – Finance Manager

Cell: (909) 744-4296

Sonja Kawa – HR/Accounting Tech

Cell: (909) 815-7870

Bridgette Burton – Admin. Services Manager/Board Secretary

Cell: (909) 744-4843

Kimberly Booth – Laboratory Technician

Cell: (909) 573-4148

Outside Agency Contacts

Regulatory Agencies

California Regional Water Quality Control Board
Colorado River Basin - Region VII (760) 776-8940

California Regional Water Quality Control Board
Santa Ana Region (909) 782-4130

Department of Environmental Health Services (888) 818-8988

State Department of Health
Division of Drinking Water and Field Operations (909) 383-4328

State Office of Emergency Services
Emergencies Only (800) 852-7550

U.S. Forestry Service
Big Bear Ranger Station (909) 866-3437

Public Safety

San Bernardino County Sheriff (909) 866-0100
Big Bear Fire Authority (909) 866-7566

Local Utilities

Big Bear City Community Services District (909) 585-2565
Emergency After-Hours (909) 585-2567

Sewer Department
Nathan Zamorano (909) 584-4007
Cell: (909) 936-4428

Water Department
Jerry Griffith (909) 584-4008
Cell: (909) 936-3372

City of Big Bear Lake Department of Water and Power
Business and Emergency (909) 866-5050

Water Department
Jason Hall (909) 866-5050 x 203

City of Big Bear Lake
Public Works Main Office: (909) 866-7521

Sewer Department

Jason Watterson

(909) 633-2565

Streets Department

Ryan Dorsett

(909) 866-5831

San Bernardino County Water and Sanitation

24-Hour Emergency

(760) 955-9885 or

(800) 554-0565

Big Bear Municipal Water District

Business

(909) 866-5796

After-Hours Emergency

(909) 838-2967

General Manager

Jared Cheek

(909) 712-6019

West Ramp

(909) 866-2917

East Ramp

(909) 866-5200

Bear Valley Electric

(909) 866-4678

Southwest Gas

Emergency

(909) 366-4868

(877) 860-6020

Verizon

(800) 483-2000

Contractor and Vendor Contacts

Local Contractors

S. Porter Inc.	(909) 585-0530
Ludecke Electrical Service	(909) 866-1900
Roman's Construction	(909) 866-4270
Ken Willis Construction, Inc.	(909) 641-3644
Bear Valley Paving	(909) 866-4746
Mile High Equipment	(909) 866-6642

Non-B Hazardous Pumpers

Connelly Pumping Services	(909) 584-9365 or (909) 556-1120 or (909) 709-5091
Big Bear Disposal, Inc.	(909) 866-3942
Roman's Construction	(909) 866-4270 or
Ken Willis Construction, Inc.	(909) 641-3644

Hazardous Waste Haulers (EPA Number CA 100006264508245)

Asbury Environmental	(800) 322-8882
HazMat Trans (Dave Johnson)	(909) 493-9290

Generator Repair/Rental

Generators:

Quinn Company - Generator Division	(951) 683-5960
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Generator Repair/Trouble:

Johnson Power Systems, Generator Division	(909) 683-5960
Harbor Diesel and Equipment, Inc.	(562) 591-5665
Valley Power Systems	(661) 979-7956
Energy Link	(661) 765-4444
	Cell: (626) 826-4320

Electrical Motor Repair:

Sulzer	(909) 825-7971 x 118
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Pump Sales and Repairs:

John Lisee	(562) 927-2623
Evans Hydro	(310) 608-5801
Energy Link	(661) 765-4444
	Cell: (626) 826-4320

Storage Tanks:

Rain for Rent	(800)-742-7246
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Vehicle/Equipment Rental:

Twin Bear Equipment Rentals	(909) 585-2888
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Electrician:

Skyview Electric (Ryan Abeln)

(909) 556-7322

Specialty Pipe and Manhole Repair:

Sancon

(714) 891-2323

Mechanical Repair:

Bear Valley Paving (JP)

(909) 866-4746

S. Porter Inc.

(909) 585-0530

Welding/Fabrication:

Justin Ploense

(909) 855-4982

(909) 725-2366 Myles Westplat Construction

Hydro and TV:

Houston & Harris PCS, Inc.

(909) 686-4241

Introduction

An Emergency Action Plan (EAP) covers designated actions that the Big Bear Area Regional Wastewater Agency (Agency) and employees must take to ensure employee safety from emergencies. Cal-OSHA regulations require employers to establish, implement, and maintain an EAP. The program must be in writing and include the following elements:

- the preferred means of reporting fires and other emergencies;
- a system to alert and notify employees of an emergency;
- evacuation types, procedures, and emergency escape routes;
- procedures for employees who remain to operate critical plant operations before they evacuate;
- a procedure to account for all employees after an emergency evacuation is completed;
- rescue and medical duties for those employees who are able to perform them; and
- names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.

Responsibilities of the Health and Safety Coordinator

The health and safety coordinator is responsible for implementing essential elements, including planning, evaluating, and implementing the EAP. The following duties must be performed to maintain an effective EAP:

- Review and update the EAP annually or as needed.
- Train employees on the EAP, location of emergency exits, fire extinguishers, manual pull stations, first aid kits, and AEDs.
- Ensure evacuation routes are posted and walkways remain clear at all times.
- Exercise the EAP annually by either:
 - conducting a tabletop exercise; or
 - scheduling an evacuation or fire drill.

Any questions regarding the information included in this plan shall be directed to the health and safety coordinator.

Responsibilities of Agency Personnel

When responding to unusual circumstances, use good judgment and common sense. It is important to remain calm and ensure that actions taken during an emergency are safe, for both employees and visitors.

All employees are required to be familiar with the procedures contained in this plan. Employees with emergency response duties must rely upon each other to perform necessary procedures for continuity of operation, as well as account for the location and safety of all personnel. Employees are encouraged to review this plan as often as they feel necessary to fully understand the emergency procedures.

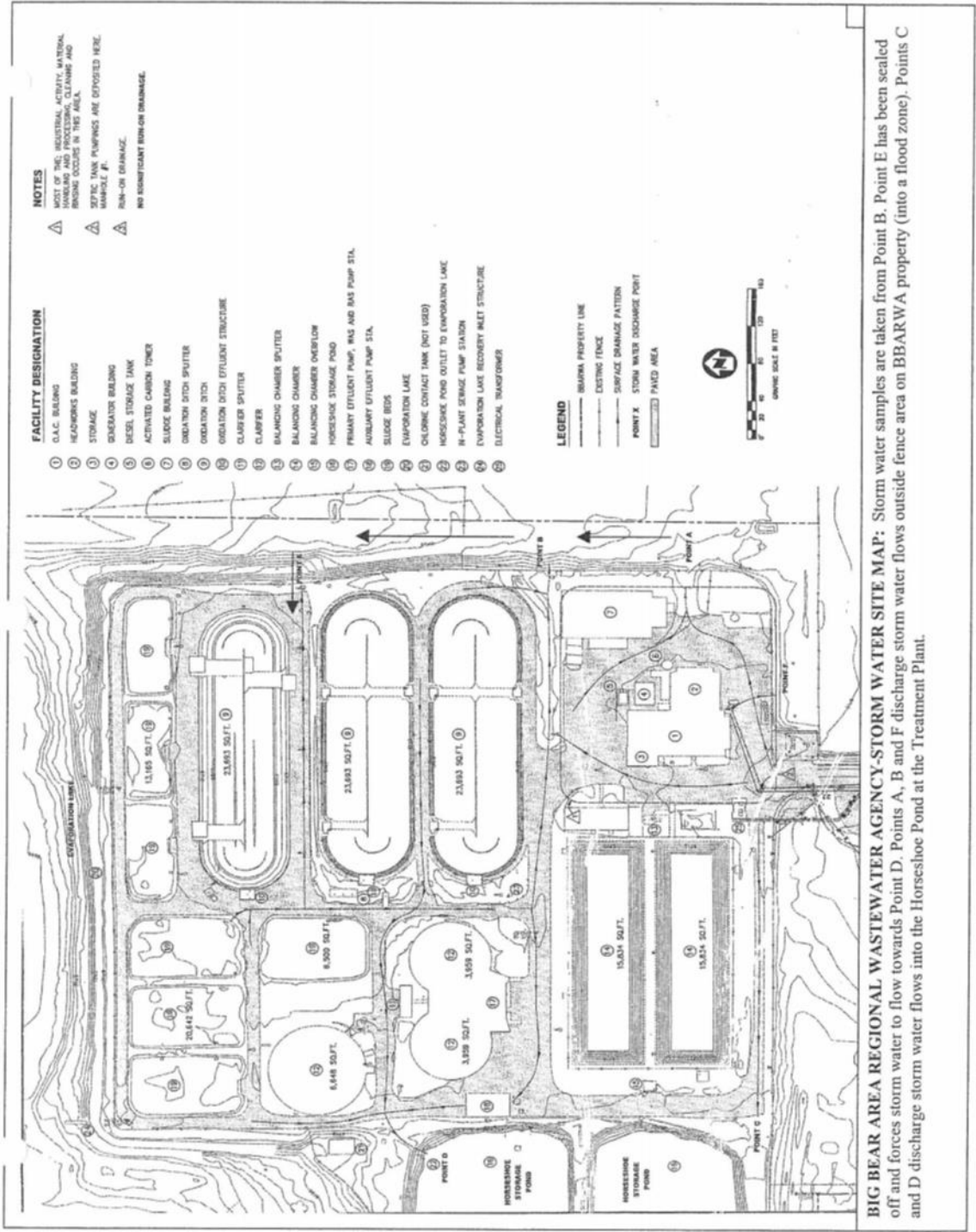
All employees are trained in CPR and the use of an AED; however, employees shall not practice outside their scope of training and are not expected or required to assist in any emergency or medical situation. The Agency relies upon the Big Bear Fire Authority and partnering agencies to provide rescue and medical assistance.

Facility Overview

The Big Bear Area Regional Wastewater Agency (Agency) is located at 121 Palomino Drive, Big Bear City. The Agency is a Joint Powers Authority between the Big Bear City Community Services District (BBCCSD), the County of San Bernardino Special Districts (CSA 53-B), and the City of Big Bear Lake (City). The wastewater treatment and water reuse facility is owned and operated by the Agency. Additionally, the Agency owns and operates a portion of the collection system; Pump Stations 1 – 3 and the Big Bear Lake Pump Station.

The treatment system consists of preliminary treatment, secondary treatment, and sludge dewatering. The treated wastewater is discharged into storage ponds in the Lucerne Valley for use in irrigation of fodder, fiber, and seed crops.

Facility Site Map



Emergency Protocols – Alert and Notification

Reporting Emergencies

In the event of an emergency, Agency employees shall either dial 911 or contact their direct supervisor immediately. Employees are periodically confronted with situations that could be classified as incidents or emergencies. The series of activities triggered by the discovery of such incidents can be divided into three phases:

1. discovery,
2. assessment, and
3. response.

When discovering an unusual incident, the priority of the observing personnel must be to determine if the situation is life-threatening.

You should call 9-1-1:

- in the event of a medical emergency;
- to report all fire incidents, **even if the fire is extinguished**;
- to report criminal or suspicious behavior; or
- if you are in doubt about the seriousness of a situation, such as any possible situation that you believe may be serious and that may result in injury, death, loss of property, apprehension of a suspected criminal, or prevention of a crime that is about to occur.

Provide the following information to dispatch upon calling:

- where you are; and
- the address or location of the event.

If the situation is not life-threatening (i.e., sewage spill), the observing personnel shall notify their immediate supervisor of the situation. The immediate supervisor shall assess the situation and notify the plant manager. The plant manager, or designee, will determine if the situation constitutes an emergency or reportable incident. The plant manager, or designee, will direct the appropriate response. Following evaluation of the incident, the plant manager, or designee, will report the findings to the general manager prior to declaring a reportable incident. If deemed appropriate, at any time during this process, the emergency response plan can and will be activated.

Alert and Notification of Employees

The Agency has a variety of ways to alert employees to recognize emergencies and provide direction. These include:

- audible alarms,
- visual alarms/signals, or
- verbal notification.

Emergency Protocols – Evacuation

Evacuation Procedures and Routes

Many incidents could require the evacuation of all or part of the Agency facilities. All employees must evacuate the facilities when notified to do so. The type of evacuation or protective measure may be specified as part of the notification.

Evacuation Types

- **Evacuation:** Evacuation is a partial or total facility evacuation due to conditions making it no longer safe to remain inside a building or specific area in a building. This level of evacuation requires occupants to move out and away from the facility being evacuated.
- **Controlled Evacuation:** Controlled evacuation is a partial or total facility evacuation due to safety conditions or an armed intruder making it no longer safe to remain inside the facility or a specific area of the facility. This level of evacuation requires occupants to move out and away from the facility once notified.
- **Shelter-in-Place:** Shelter-in-place means selecting a small interior room, with no or few windows, and taking refuge there; it does not mean sealing off your entire office. Shelter-in-place is used in emergency situations where hazardous materials have been released into the atmosphere or in emergencies related to civil unrest or violent demonstrations.
- **Lockdown:** Lockdown is a temporary sheltering technique utilized to limit exposure to an armed intruder or similar incidents. When alerted, occupants of a building within the area of concern will lock all doors and windows, not allowing entry or exit to anyone until the all clear has been sounded. If you are in a ground-floor office or common area, take precautions and move away from glass windows and doors and seek shelter in a locked room or office.

Prior to Exiting

After being notified to evacuate, stop all work activities, and evacuate immediately. Securely close departmental and office doors behind you. Laboratory personnel, if feasible, should attempt to close the laboratory door as they exit to assist with the containment of chemical reactions and fumes.

Evacuation Routes/Exiting the Building

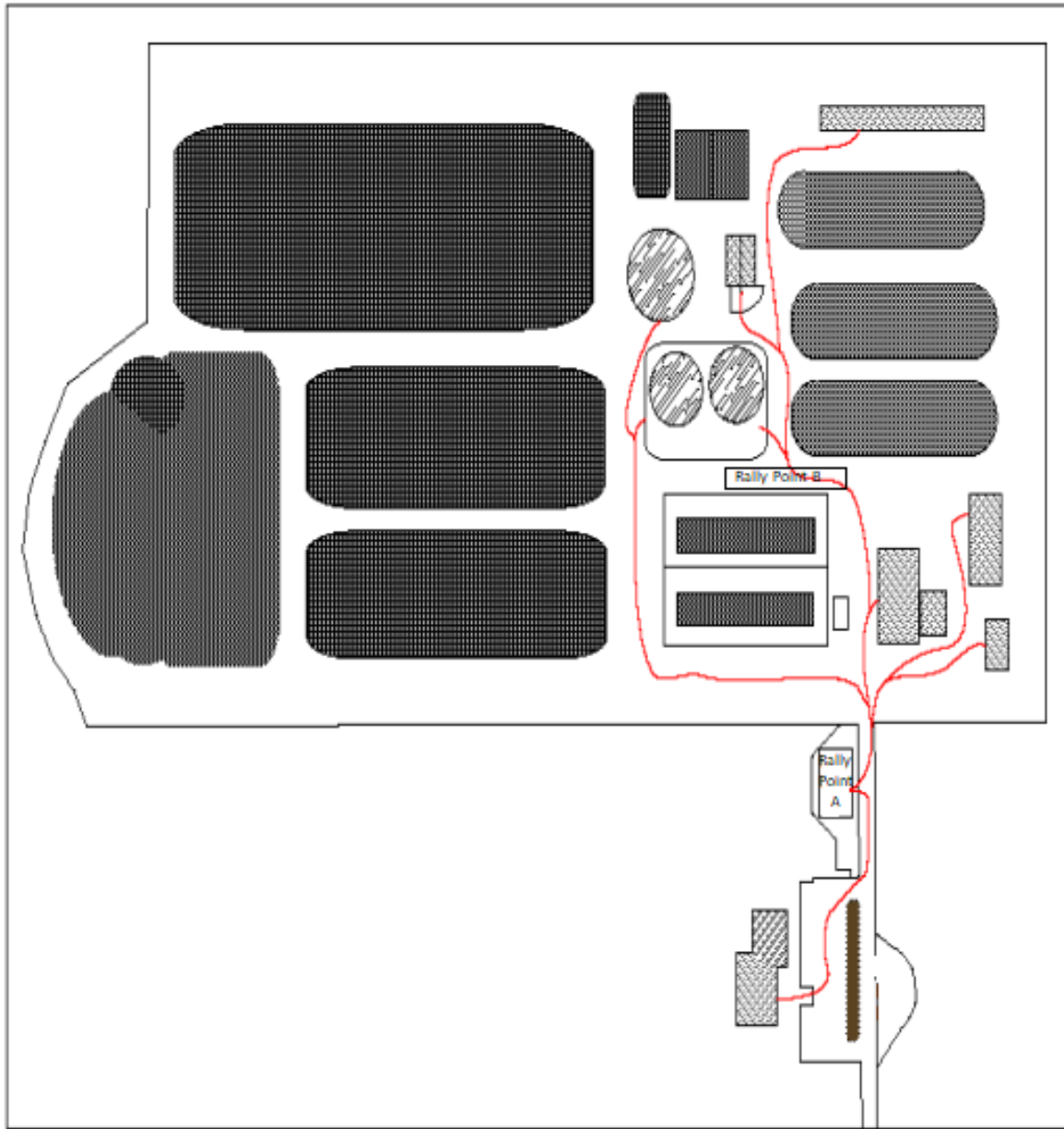
Each building has evacuation maps located at its entrances with arrows indicating proper routes to be used during an evacuation. During an emergency evacuation, use the nearest door available. Each employee needs to be aware of at least two (2) exit routes in their main building in the event one is compromised. Employees need to know how to evacuate other employees or visitors with special needs who are unable to evacuate on their own.

The health and safety coordinator is responsible for contacting outside vendors and contractors to ensure they have safely evacuated in accordance with the Multi-Employer Worksite Plan.

Rally Point

After exiting the building, all employees and visitors should follow the evacuation route to Rally Point A. If Rally Point A is not a viable option, then employers and visitors should proceed to Rally Point B. No one should leave the area until notified by first responders, the Incident Commander (IC), the general manager, plant manager, or supervisor. This is to avoid search and rescue efforts when time is crucial and better utilize resources on other emergency response duties.

Evacuation Map



Headcount Procedure

The headcount will commence at the Rally Point. The laboratory technician is responsible for bringing the EAP Binder and Visitor Log to the Rally Point. If the laboratory technician is not able to retrieve the EAP Binder and Visitor Log, then any employee in the general area may retrieve it, so long as they do not put themselves or others in danger by doing so. The laboratory technician, or another administrative staff member, will proceed with the headcount procedure, ensuring all employees and visitors are accounted for. Assigned staff will bring

the laminated employee information sheets to the Rally Point. The IC will initiate search and rescue teams to locate unaccounted for employees and visitors, in accordance with the procedures outlined in this plan.

Assigned Job Responsibilities of the Agency Emergency Support Team

Incident Commander (IC)

The first employee on the scene will assume the role of IC until relieved by the plant manager, their designee, or an appropriate official. Once on scene, the plant manager, or their designee, shall assume the role of IC and shall have authority over all employees responding to the emergency. Instructions will be communicated to the general plant personnel verbally, by radio, or by cellular phone. If a release, fire, or explosion does occur that could immediately threaten human health or the environment outside of the Agency facilities, the IC shall dial 911, declare an emergency, and notify the general manager. The IC will activate emergency personnel as needed, delegate responsibilities, and maintain the flow of communication to the general manager.

During an emergency, the IC shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous materials at the facility. These measures include, where applicable, stopping processes and operations, collecting, and containing released waste, and removing or isolating containers. The IC will proceed to establish a field command post.

During the emergency response, the IC will manage and direct all activities from the established field command post. Responding to outside agencies will be requested and directed to check in at the command post prior to being directed to the site of the incident. The IC will establish work teams (minimum of two employees), ensure that the communication protocol is established via radio, and all personnel are equipped with the proper PPE.

General Manager

The general manager will be in direct contact with the IC and the Governing Board. He/she will coordinate the development of all public statements, provide technical assistance to the IC, coordinate internal and external remediation efforts when necessary, notify and coordinate with all appropriate local and regulatory agencies, and notify or coordinate with general counsel. If activated, he/she will report to the Big Bear Valley Mutual Aid Emergency Operations Center and provide coordination as needed.

If the plant manager is unavailable, the general manager will assume the role of IC.

Plant Supervisor

The plant supervisor is responsible for providing technical assistance to the IC, conducting an initial environmental assessment of the situation, and aiding or performing duties of the IC or operators as needed.

Laboratory Staff

Laboratory staff is responsible for identifying, evaluating, and assessing any suspected hazardous materials release, providing technical assistance to the IC, and recommending safe hazard techniques, and assisting the IC with PPE for personnel. Laboratory staff will maintain critical laboratory functions and assist in the preparation and submission of required reports.

Operators

Operators are responsible for assessing any suspected hazardous materials release, safely applying control and clean-up procedures, and aiding the IC as needed. The assessment shall consider both direct and indirect effects of the release, fire, or explosion, including the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface runoff from water or chemical agents used to control fire and heat-induced explosions.

Operators will be assigned to work teams as needed and will be required to check in with the IC every 15 minutes. Operators will fulfill daily operational functions and assist with the operation of the interceptor, disposal, and septage receiving systems.

Administrative Staff

The administrative staff is responsible for fulfilling critical financial, telephone and postal functions, preparing and submitting required reports, accounting for the status of employees, assisting the IC as incident secretary, and transporting employee family members to the treatment plant if necessary. Administrative staff will ensure payment of employees and continuation of vendor compensation and uninterrupted supplies and services.

The incident secretary is responsible for checking personnel in and out of the incident area, keeping track of incident timesheets, and providing any other administrative support the emergency support team needs.

If the general manager is unavailable, the administrative staff will assume the responsibilities of the general manager.

Governing Board

The Governing Board includes all appointed Governing Board members who will provide leadership, support, and resources as necessary.

Continuity of Operations

Depending on the severity of the emergency situation, it is likely the Agency will experience a significant increase in absenteeism. To aid in the continuity of operations, Agency staff has preliminarily identified critical and noncritical functions. By focusing on critical functions, the agency can continue providing uninterrupted wastewater collection, transport, treatment, and disposal service for member agencies and the community while protecting the health and safety of Agency employees.

Critical	Less than Critical
Accounts Payable	Group Employee Meetings
Financial Checks and Balances	Safety Training
Check Signing and Distribution	Routine Maintenance
Payroll	Reclaimed Water
Daily Operations	Board Meetings
Alarm Response	Solids Handling
Laboratory Functions	Generator Operations
Interceptor and Disposal Site Operations	Board Room Rentals
Required Reports	Routine Reports and Paperwork
Septage Receiving Station	Account Receivables
Postal Efforts	
Account Transfers	
Telephone Operations	
Modified Budgets	

External Reporting Procedures

The general manager, or designee, is responsible for verbal and written notification to all federal, state, and local agencies of an emergency. Using the Agency Master Phone List and the Checklist for Reporting Discharge Violations, if necessary, the general manager shall:

1. Determine if the evacuation of local areas may be advisable, immediately notify local authorities, and be available to assist appropriate officials in the decision to evacuate local areas.
2. When notifying outside agencies the report shall include:
 - a. name and telephone number of reporting employee;
 - b. name and address of facility affected;
 - c. name and type of incident (release, fire, etc.);
 - d. name and quantity of material(s) involved, to the extent known;
 - e. the extent of injuries and damage, if any; and
 - f. possible hazards to human health or the environment.
3. Ensure that a written record of each required notification is made that includes the following:
 - a. agency called;
 - b. name of the person making and receiving the notification;
 - c. date and time of the call;
 - d. identifying incident or report number, if available; and
 - e. any comments or instructions received from the outside agency.

All notification records must be maintained at the command post during the incident and included in the incident file upon the conclusion of the incident.

Training

Employees will be trained on the information contained in this plan on an annual basis. Employees will be retrained when the plan changes due to a change in the layout or design of the facility; when new equipment, hazardous materials, or processes are introduced that affect evacuation routes; or when new types of hazards are introduced that require special actions. The EAP will be included in the initial training requirements for new employees. Training will include:

- individual roles and responsibilities;
- threats, hazards, and protective actions;
- notification, warning, and communication procedures;
- emergency response procedures;
- evacuation, shelter, and accountability procedures;
- location and use of common emergency equipment; and
- emergency shut-down procedures.

Annually, the health and safety coordinator will coordinate an evacuation/fire drill (or tabletop exercise) and fire extinguisher training. After each exercise or drill, employees will evaluate the effectiveness, identify the strengths and weaknesses of the plan and work towards improvement.

Earthquake Action Plan

Purpose

The purpose of an Earthquake Action Plan is to ensure employees of the Agency are made aware of the required response in the event of an earthquake emergency or disaster that may occur at Agency facilities.

At any time, an earthquake incident or emergency can occur in or around the Big Bear Valley. An earthquake event requires action by Agency employees to prevent or minimize loss of life or damage to property and or natural resources. These actions shall be conducted in a professional and efficient manner utilizing the EAP, Big Bear Valley Mountain Mutual Aid Standard Operating Procedure (SOP), and an employee's best judgment.

Whenever such a condition of disaster occurs, the Agency's primary concern is the health and safety of the employees, the Governing Board, and their families. Therefore, the following procedures shall be utilized during these periods.

Procedures

During normal work hours:

1. Take cover immediately under a desk, table, or chair. Drop and cover your head for protection from material that might fall from the ceiling, walls, or bookshelves. If you are outdoors, keep away from buildings, poles, or other structures that could collapse or overturn. Be alert for aftershocks.
2. After the shaking stops, carefully evacuate the building, assist special needs individuals in exiting the building and proceed to the Rally Point. **DO NOT RETURN TO AN EVACUATED BUILDING** until and unless told to do so by Agency management, the IC, or an authorized individual. Begin headcount procedures.
3. Non-duty employees may leave to check on family members. Family members may be transported to the treatment plant if needed. Administrative staff may assist with transportation needs.
4. The IC will activate the EAP, if needed, and will establish work teams. Work teams must check-in every 15 minutes with the IC. All employees must be equipped with proper PPE. The IC may assign a work team to:
 - a. search and rescue unaccounted for employees and visitors,
 - b. power down the treatment plant, which includes opening the main feeder breaker, disabling the generators, and closing the main gas valve;
 - c. check the status and condition of the four (4) lift stations and the interceptor system; and
 - d. conduct an initial assessment of the treatment plant structures and equipment, which includes minimizing potential immediate hazards, conditions of structures and equipment, isolating each piece of equipment by opening the corresponding breaker, isolating natural gas lines, inspecting the hazardous waste storage area, and minimizing risks.
5. Work teams will report back to the IC with the status of their assignments. The IC will prioritize corrective actions such as restoring plant electricity, securing facilities, responding to sewer leaks, and initiating repairs to equipment.

Outside normal working hours:

1. Any employee on site will take cover immediately under a desk, table, or chair. Drop and cover your head for protection from material that might fall from the ceiling, walls, or bookshelves. If you are outdoors, keep away from buildings, poles, or other structures that could collapse or overturn. Be alert for aftershocks.
2. After the shaking stops, carefully evacuate the building, assist special needs individuals in exiting the building and proceed to the Rally Point. **DO NOT RETURN TO AN EVACUATED BUILDING** until and unless told to do so by Agency management, the IC, or an authorized individual. If no employee is

on-site during the earthquake, treat all buildings as evacuated buildings. Begin headcount procedures, if applicable.

3. The first employee on the scene will assume the role of IC until relieved by the plant manager, their designee, or another appropriate official. DO NOT ATTEMPT an initial assessment until your immediate supervisor, or designee arrives.
4. Non-duty employees are encouraged to immediately respond to the treatment plant after determining the status of their families. Family members may be transported to the treatment plant if needed. The timely response of non-duty employees will allow the duty operator to respond to his/her family or arrange for administrative staff to transport the family to the treatment plant.
5. The IC will activate the EAP, if needed, and will establish work teams. Work teams must check-in every 15 minutes with the IC. All employees must be equipped with proper PPE. The IC may assign a work team to:
 - a. search and rescue unaccounted for employees and visitors,
 - b. power down the treatment plant, which includes opening the main feeder breaker, disabling the generators, and closing the main gas valve;
 - c. check the status and condition of the four (4) lift stations and the interceptor system; and
 - d. conduct an initial assessment of the treatment plant structures and equipment, which includes minimizing potential immediate hazards, conditions of structures and equipment, isolating each piece of equipment by opening the corresponding breaker, isolating natural gas lines, inspecting the hazardous waste storage area, and minimizing risks.
6. Work teams will report back to the IC with the status of their assignments. The IC will prioritize corrective actions such as restoring plant electricity, securing facilities, responding to sewer leaks, and initiating repairs to equipment.

All employees are authorized to respond to the treatment plant regardless of their ability to contact their immediate supervisor. All responding employees will be compensated in accordance with the Personnel Policies and Procedures Manual.

Fire Prevention Plan

Purpose

The purpose of the Fire Prevention Plan is to establish procedures for identifying fire hazards and preventing fires. All employees are expected to follow the procedures outlined in this plan.

Potential Ignition Sources and Material Storage Location

Wastewater treatment and support operations at the treatment plant pose several potential fire hazards. Wastewater treatment operations use polymer and aromatic odorants, which are flammable. Dry granular hypochlorite is considered an oxidizer and is incompatible with organic materials; however, it is not combustible. Caustic impregnated carbon used in the Headworks carbon odor control unit may react exothermically if exposed to air under static conditions.

The Laboratory uses a variety of flammable chemicals; however, these are used in small quantities under laboratory hoods. They are stored in approved containers or the manufacturer's original containers. Due to the controlled use conditions, the laboratory use, and storage of these chemicals do not present a major hazard.

The Operation, Maintenance Shop, Sludge Dewatering, and Storage Buildings contain the following flammable and combustible materials:

- acetylene gas for oxyacetylene welding operations;
- organic-based paints and thinner;
- lubricating oil;
- used lubricating oils, paint thinner and used oily rags; and
- propane.

Additional information regarding spills can be found in the Spill Prevention and Contingency Plan portion of this document.

Fire Prevention and Control Procedures

Controls are keys to fire prevention, early detection, and prompt notification. Controls at the treatment plant can be grouped into the following categories:

- procedures including general procedures, housekeeping, inspections, notification procedures, and fire suppression equipment maintenance; and
- fire drills and periodic training.

Fire Extinguishers

Fire extinguishers are located throughout the facility in open areas and within buildings. The number, size, and type of portable fire extinguishers needed to protect the facility are selected in accordance with provisions found in applicable local codes. Employees are trained in fire extinguisher use annually.

Portable fire extinguishers are classified for use on certain types of fires. The Agency has classes A, B, and C combined fire extinguishers located in all buildings and agency vehicles.

General Procedures

The following general procedures are used at the treatment plant to reduce the potential for fires and explosions:

- personnel are trained in basic fire protection principles such as the proper use of portable fire extinguishers and emergency notification;
- maintaining good housekeeping prevents unnecessary accumulations of flammable and combustible materials;
- above ground storage containers used to store flammable or combustible liquids/gases are labeled with

- proper easily identifiable labels;
- above ground tanks are protected against vehicular damage;
- storage of combustible materials near ignition sources is prohibited;
- open flame or flame-producing devices are prohibited near any potentially flammable atmosphere;
- flammable liquids are grounded during transfer;
- smoking is prohibited when using flammable liquids or gases;
- personnel are trained in the proper handling of oxidizers such as hypochlorite; and
- personnel are trained in operating and shutdown procedures of the Headworks carbon odor control unit.

Housekeeping

The accumulation of flammable or combustible materials is controlled so that excess quantities do not contribute to a fire emergency. The plant maintenance supervisor is responsible for maintaining good housekeeping practices and limiting quantities of flammable or combustible materials in the work areas. Combustible materials are isolated from sources of ignition.

Fire Extinguisher Inspection

A member of the treatment plant staff verifies the proper placement of fire extinguishers each month. The inspection tag on each fire extinguisher is initialed to note that the extinguisher is in its proper place and is adequately charged. An outside firm is contracted to recharge and maintain the extinguishers annually.

Procedures

During normal work hours:

1. The observing employee shall pull the fire alarm and dial 911. Employees may attempt to extinguish fires that are relatively small and confined to a limited location with a portable fire extinguisher.
2. Employees shall carefully evacuate the building, assisting special needs individuals in exiting the building and proceed to the Rally Point. **DO NOT RETURN TO AN EVACUATED BUILDING** until and unless told to do so by Agency management, the IC, or an authorized individual. Begin headcount procedures.
3. Non-duty employees may leave to check on family members. Family members may be transported to the treatment plant if needed. Administrative staff may assist with transportation needs.
4. The IC will activate the EAP, if needed, and will establish work teams. Work teams must check-in every 15 minutes with the IC. All employees must be equipped with proper PPE. The IC may assign a work team to:
 - a. search and rescue unaccounted for employees and visitors,
 - b. power down the treatment plant, which includes opening the main feeder breaker, disabling the generators, and closing the main gas valve;
 - c. check the status and condition of the four (4) lift stations and the interceptor system; and
 - d. conduct an initial assessment of the treatment plant structures and equipment, which includes minimizing potential immediate hazards, conditions of structures and equipment, isolating each piece of equipment by opening the corresponding breaker, isolating natural gas lines, inspecting the hazardous waste storage area, and minimizing risks.
5. Work teams will report back to the IC with the status of their assignments. The IC will prioritize corrective actions such as restoring plant electricity, securing facilities, responding to sewer leaks, and initiating repairs to equipment.

Outside normal working hours:

1. The observing employee shall pull the fire alarm and dial 911. Employees may attempt to extinguish fires that are relatively small and confined to a limited location with a portable fire extinguisher.
2. Employees shall carefully evacuate the building, assisting special needs individuals in exiting the building and proceed to the Rally Point. **DO NOT RETURN TO AN EVACUATED BUILDING** until

and unless told to do so by Agency management, the IC, or an authorized individual. If no employee is on-site during the outbreak of the fire, treat all buildings as evacuated buildings.

3. DO NOT ENTER ANY BUILDING until and unless told to do so by Agency management, the IC, or an authorized individual. Begin headcount procedures, if applicable.
4. The first employee on the scene will assume the role of IC until relieved by the plant manager, their designee, or another appropriate official. DO NOT ATTEMPT an initial assessment until your immediate supervisor, or designee arrives.
5. Non-duty employees are encouraged to immediately respond to the treatment plant after determining the status of their families. Family members may be transported to the treatment plant if needed. The timely response of non-duty employees will allow the duty operator to respond to his/her family or arrange for administrative staff to transport the family to the treatment plant.
6. The IC will activate the EAP, if needed, and will establish work teams. Work teams must check-in every 15 minutes with the IC. All employees must be equipped with proper PPE. The IC will assign a work team to:
 - a. search and rescue for unaccounted employees and visitors,
 - b. power down the treatment plant, which includes opening the main feeder breaker, disabling the generators, and closing the main gas valve;
 - c. check the status and condition of the four (4) lift stations and the interceptor system; and
 - d. conduct an initial assessment of the treatment plant structures and equipment, which includes minimizing potential immediate hazards, conditions of structures and equipment, isolating each piece of equipment by opening the corresponding breaker, isolating natural gas lines, inspecting the hazardous waste storage area, and minimizing risks.
7. Work teams will report back to the IC with the status of their assignments. The IC will prioritize corrective actions such as restoring plant electricity, securing facilities, responding to sewer leaks, and initiating repairs to equipment.

All employees are authorized to respond to the treatment plant regardless of their ability to contact their immediate supervisor. All responding employees will be compensated in accordance with the Personnel Policies and Procedures Manual.

Active Shooter Plan

An active shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms(s) and there is no pattern or method to their selection of victims.

Active shooter situations are unpredictable and evolve quickly. Typically, the immediate deployment of law enforcement is required to stop the shooting and mitigate harm to victims. Because active shooter situations are often over within 10 to 15 minutes, before law enforcement arrives on the scene, individuals must be prepared both mentally and physically to deal with an active shooter situation.

Good practices for coping with an active shooter situation:

- Be aware of your environment and any possible dangers.
- Take note of the two nearest exits in any facility you visit (evacuation).
- If you are in an office, stay there and secure the door (shelter-in-place).
- If you are in a hallway, get into a room and secure the door.
- As a last resort, attempt to take the active shooter down. When the shooter is at close range and you cannot flee, your chance of survival is much greater if you try to incapacitate him/her.

CALL 911 WHEN IT IS SAFE TO DO SO!

How to respond when an active shooter is in your vicinity:

Quickly determine the most reasonable way to protect your own life. Remember that visitors are likely to follow the lead of employees and managers during an active shooter situation.

Evacuate:

If there is an accessible escape path, attempt to evacuate the premises. Be sure to:

- have an escape route and plan in mind;
- evacuate regardless of whether others agree to follow;
- leave your belongings behind;
- help others escape, if possible;
- prevent individuals from entering an area where the active shooter may be;
- keep your hands visible;
- follow the instructions of any police officers;
- do not attempt to move wounded people; and
- call 911 when you are safe.

Hideout or Shelter-in-Place:

If evacuation is not possible, find a place to hide where the active shooter is less likely to find you. Your hiding place should:

- be out of the active shooter's view;
- provide protection if shots are fired in your direction (i.e., an office with a closed and locked door);
- do not trap yourself or restrict your options for movement;
- to prevent an active shooter from entering your hiding place, lock the door; and
- blockade the door with heavy furniture.

If the active shooter is nearby:

- lock the door;
- silence your cell phone;
- turn off any source of noise (i.e., radios, televisions);

- hide behind large items (i.e., cabinets, desks); and
- remain quiet.

If an active shooter is in the vicinity of Agency facilities, the general manager or plant manager may initiate a lockdown.

If evacuation and hiding out or sheltering-in-place are not possible:

- remain calm;
- dial 911, if possible, to alert police to the active shooter's location; and
- if you cannot speak, leave the line open and allow the dispatcher to listen.

Information to provide to law enforcement or 911 operator:

- location of the active shooter;
- number of shooters, if more than one;
- physical description of shooter/s;
- number and type of weapons held by the shooter/s, and
- the number of potential victims at the location.

Take action against the active shooter:

As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter by:

- acting as aggressively as possible against him/her,
- throwing items and improvising weapons,
- yelling, and
- committing to your actions.

How to respond when law enforcement arrives:

Law enforcement's purpose is to stop the active shooter as soon as possible. Officers will proceed directly to the area in which the last shots were heard.

- officers may wear regular patrol uniforms or external bulletproof vests, Kevlar helmets, and other tactical equipment;
- officers may be armed with rifles, shotguns, and handguns;
- officers may use pepper spray or tear gas to control the situation;
- officers may shout commands and may push individuals to the ground for their safety;
- remain calm and follow officers' instructions;
- put down any items in your hands (i.e., bags, jackets);
- immediately raise hands and spread fingers;
- keep hands visible at all times;
- avoid making quick movements toward officers, such as holding on to them for safety;
- avoid pointing, screaming, and/or yelling; and
- do not stop to ask officers for help or direction when evacuating, just proceed in the direction from which officers are entering the premises.

The first officers to arrive at the scene will not stop to help injured persons. Expect rescue teams comprised of additional officers and emergency medical personnel to follow the initial officers. These rescue teams will treat and remove any injured persons. They may also call upon able-bodied individuals to assist in removing the wounded from the premises.

Once you have reached a safe location or designated Rally Point (this may be different than the normal Rally Point), you will likely be held in that area by law enforcement until the situation is under control, and all witnesses have been identified and questioned. Do not leave until law enforcement authorities have instructed you to do so.

Pandemic Outbreak Contingency Plan

Purpose

Identify and establish procedures and methods to continue providing uninterrupted wastewater collection, transport, treatment, and disposal service for the Member Agencies and the community while protecting the health and safety of agency employees during a pandemic.

Anticipated Challenges

- continue providing services during the loss of 35-50% of staff,
- illnesses can last up to three weeks,
- depth of employee knowledge and sufficient cross-training,
- essential vendors and suppliers, and
- key personnel and back-ups.

Proactive Planning

Prior to the onset of a pandemic, the Agency will plan for the impacts of a pandemic, review the plan, practice/participate with tabletop exercises and establish work teams of employees responsible for specific duties/tasks to ensure the continuation of operations.

Employee Safety

To aid in protecting the health and safety of Agency employees, during a pandemic, several non-routine procedures will be in effect:

- isolation of Agency facilities;
- mandatory use of accumulated leave time;
- donning of PPE (gloves and masks) upon entering premises;
- prohibition of group meetings;
- avoiding close contact, within six feet of others;
- mandatory telecommuting;
- restricted use of community telephones and computers;
- accumulation limits on leave time waived;
- unlimited participation in “Mutual Aid” programs; and
- modification of pay rates and schedules.

Activation of the Plan

The general manager may implement the plan upon the advice of a state or county health official, or local government official, when any of the preceding declares an emergency, or when the Agency experiences 20% or more unplanned absenteeism.

During an emergency, it is common for emotions to run high, with an increased sense of fear, anxiety, confusion, and dread, ineffective decision making, feelings of hopelessness or helplessness, and for individuals to exhibit fight or flight syndromes. Therefore, it is important that employees process information in a rational and logical manner, stay informed, participate in communication efforts, and be part of the response.

Procedure

1. The general manager will declare an emergency and activate the EAP.
2. Secure all exterior doors and gates to the Administration Building, Operations Building, and treatment plant gates.

3. Signs will be posted at the Administration Building, treatment plant gate, and workstations.
4. PPE will be distributed to employees.
5. The IC will establish work teams based on the Agency's needs to provide continuity of service.
6. Administrative Operating Directives will be distributed:
 - a. availability/unavailability for work,
 - b. leave time accrual waivers,
 - c. pay and timesheet documentation, and
 - d. mandatory PPE usage.

After Action

- return to normal operations,
- identify impacts to coworkers and their family, and
- adjustments, counseling, etc.

Spill Prevention and Contingency Plan

Purpose

The Big Bear Area Regional Wastewater Agency Spill Prevention and Contingency Plan is prepared for the purpose of identifying the Agency's plan for controlling accidental spills and for minimizing the effects of such events.

This plan identifies the possible sources of accidental loss, or the discharge of untreated or partially treated wastewater or other materials used in the wastewater treatment process, and evaluates the effectiveness of the present facilities and procedures.

Treatment Plant Facility

Accidental spillage could occur at the following locations within the treatment plant:

Headworks

Should an obstruction occur between Headworks and the Oxidation Ditch splitter box, untreated wastewater will back up into the Headworks grit chamber and influent channels. High water alarms in the Headworks would alert plant personnel to the impending problem. During non-working hours, the alarm system would activate the auto-dialer to call the duty operator and alert him/her to the impending problem.

If this situation were not corrected, accidental discharge of raw sewage would occur from the overflow of the influent channels in the headworks. Overflow from the Headworks would discharge to the in-plant storm drainage system, which could discharge to Baldwin Lake through drainage point "A" (see Facility Drainage Site Map). To prevent the potential discharge to Baldwin Lake, treatment plant operators would open the total influent flow meter bypass valves and would isolate drainage from point "A" using available emergency dike material. Operators would then set up portable pumps to pump the sewage from the Headworks to the Oxidation Ditches. The Agency maintains four emergency pumps on-site, with additional pumps available from the Big Bear City Community Services District, the City of Big Bear Lake, and the County. Contact information is listed on the Big Bear Area Regional Wastewater Agency Master Phone List.

To prevent accidental obstructions, grates over the Headworks influent channels must be checked and maintained to prevent loose items from falling into the channels. Grating or other items such as 55-gallon drums could plug the main influent line if they fell into one of the influent channels.

Manhole #1

Should an obstruction occur in the trunk line between Manhole #1 (see Facility Drainage Site Map) and the Headworks, the untreated wastewater will back up into Manhole #1. If this situation is not corrected, an accidental release would occur, and spillage would flow to the Horseshoe Pond through the in-plant storm drain system at the west end of the plant. This release would blend with secondary effluent to be disposed of at the Lucerne Valley Disposal Site.

Upon the discovery of a discharge from Manhole #1, treatment plant operators will open the bypass valve which allows flow from the trunk line into the force main before the flow meter and divert the influent flow from Manhole #1 to Oxidation Ditch #2 by using a portable pump, as discussed in paragraph two (2) in the Headworks section above.

Manhole #1 is the unloading point for septic haulers. A spill could occur should a hauler improperly insert the discharge line into the manhole. Septic haulers are monitored to ensure that discharge lines are properly hooked up. This section of the influent line tends to accumulate grit and rocks from the septic and the entire interceptor

system. Hydro-cleaning of this section will be scheduled annually or more frequently as indicated by routine inspection, to prevent grit accumulation and obstructions in the influent line.

Main Plant Flow Valves & Sluice Gates

Critical main plant flow valves that must remain either in an open or closed position to prevent discharge will be locked or tagged. This will prevent accidental discharge due to vandalism or operator error. Operators are trained in the proper operation of valves and sluice gates, where the sequence of opening and closing valves or removing and installing sluice gates is critical.

Oil and Anti-Freeze

Oil and antifreeze are delivered to the treatment plant in 55-gallon drums and stored in the Oil Storage Room on the north side of the Operations Building. Waste oil is stored in the Sludge Building Garage storage area. The 55-gallon drums of oil, waste oil, and antifreeze are stored on secondary containment units. The drums are secured to prevent them from tipping over or falling off the secondary containment units during the earthquake movement. In addition, the secondary containment units are bolted to the floor. Small spills could occur during the transfer of materials to small containers. A spill kit will be maintained at the treatment plant to contain and clean up oil and antifreeze spills.

Sludge Treatment Coagulant

Loss of coagulant inside the Sludge Building would drain into the floor drains, which lead to the in-plant sewer. The polymer would, therefore, be passed through the treatment units without harm to the process equipment and/or biological mass within the plant. The polymer is delivered in plastic tote bins. The spill potential is minimal because there is no transfer from a bulk tank truck through hoses into the Sludge Building. If a polymer spill was to occur outside of the Sludge Building, the spill would be contained by available dike material and cleaned up.

Other System Failures

Failure of any other treatment process unit or equipment would not result in an accidental discharge. All other treatment tanks are at ground level and designed with sufficient freeboard to prevent overflow onto the plant site. Flow through the entire plant is by gravity. The natural gas generators have sufficient capacity to provide the power to pump up to 9.8 MGD through the Auxiliary Pump Building.

Interceptor System

The Agency interceptor system consists of the North Shore Interceptor, Lake Interceptor, and the BBARWA Trunk Line. The North Shore Interceptor has three pump stations and approximately 5.5 miles of interceptor line along the north shore of Big Bear Lake from Manhole #1 to Manhole #75 at Division Street and Aeroplane Boulevard, serving CSA-53B. The Lake Interceptor consists of the Lake Pump Station (LPS) and 6.0 miles of force main from LPS to the Wastewater Treatment Plant, serving the City of Big Bear Lake. The BBARWA Trunk Line (formerly the BBCCSD Trunk Line) runs 5.5 miles from Division Street and Aeroplane Boulevard to the Wastewater treatment plant and serves the BBCCSD and CSA-53B.

Each manhole will be inspected every 4 years during the hydro-cleaning and TVing to locate potential sources of stoppages or spills caused by the accumulation of debris. The gravity section of the interceptor system will be hydro-cleaned and TV'd every four years at a minimum. Cleaning and inspection schedules will be adjusted when visual or TV inspection identifies a problem area.

A failure of any part of the interceptor system could result in an accidental discharge. Potential sources of failure, mitigation, and preventative measures are as follows:

Lift Station Failure

Failure of a lift station could result in an accidental discharge to the lift station site. If not corrected in a timely manner, the discharge would flow to the adjacent property.

Steps that would be taken to mitigate the effects of failure are outlined below.

- Plant staff and member agencies would respond with personnel and equipment to make repairs.
- Local haulers would be dispatched to pump and haul influent flows to another downstream station or manhole.
- The upstream station will be manually operated to control flows to the faulty station,
- A quantity of sand would be delivered by a local contractor and a berm created around the lift station to contain the spillage.
- A portable pump can be used to pump sewage from the wet well at Lift Station #2 to Air Release #1, that approximately 500 ft east of Station #2.

All stations are equipped with backup power systems. These systems are tested weekly and start automatically in the event of a power failure. All lift station equipment is on a preventive maintenance schedule to reduce unexpected equipment downtime.

Each pump station is equipped with a high-water level, low water level, pump fail, A/C out, generator failure, dry well flood, smoke alarm failure, and building intrusion alarms. Pressure sensing transducers are utilized to monitor wet well water levels. Redundant float switches are utilized to indicate a high-water alarm and actuate a pump in case of transducer failure. Operators will also have the ability to control pumps from the office and from remote locations via the SCADA computer. This will reduce the response time to a potential problem to a matter of minutes as opposed to the current time of approximately one hour in traffic.

Line Failure

Failure of an interceptor line could result in an accidental loss. Steps that will be taken to mitigate the effects of failure are outlined below.

- The section of the failed gravity line will be plugged at both the upstream and downstream sides; portable pumps and hoses will be used to transport the sewage around the failed section.
- If the failed section of the line is in a portion of the force main, the upstream lift station will be taken out of service.
- Use sand or dike material to create a berm to contain any spilled sewage.
- Local haulers would be dispatched to pump and haul sewage to a downstream station or a manhole located in a downstream gravity section.
- Local contractors will be engaged to make repairs as soon as possible.

Lake Interceptor Force Main Failure

Additional steps that can be taken to mitigate the effects of a failure of the Lake Interceptor Force Main are outlined below.

- Turn off pumps at the Lake Pump Station.
- Determine needs (Pond No. 1A holds approximately 0.6 million gallons with one foot of freeboard and Pond No. 1 holds approximately 4.2 million gallons with one foot of freeboard).
- Flow can be bypassed to the BBARWA Trunk Line by opening the bypass valve at Division Drive and Aeroplane Boulevard. Manholes should be monitored to ensure that gravity lines are not surcharged during peak flows (contact Big Bear City Community Services District Sewer Department).
- For a line failure between the Lake Pump Station and Division Drive, the bypass can be used to drain the line while pumps are turned off and flow is diverted to Ponds 1 and 1A.
- If a line failure occurs between the Division Drive flow meter and the treatment plant, then the bypass can be used to divert flow to the BBARWA Trunk Line while pumping continues. The valve to the Lake

Interceptor flow meter must be closed to isolate the downstream line.

- Drain Valves: 4" blow-off assemblies are installed at two locations at low points to facilitate draining the force main. The first blow-off assembly is at Paradise Way south of Elysian Boulevard (see Sheet 31 on Lake Interceptor Drawings) and discharges to Trunk Line Manhole #30. The second blow-off assembly is at Country Club Boulevard and Drake Avenue (see Sheet 33 on Lake Interceptor Drawings) and discharges to an 8-inch sewer manhole in the Big Bear City Community Services District (BBCCSD) system.

High Flow Operations and Spill Prevention

Purpose

During the winter months, or when flows exceed treatment plant capacity, follow these procedures to prevent accidental discharge of untreated wastewater.

Trunk Line & Interceptor System

1. Monitor influent flows, when a steady flow from CSA 53B/BBCSD exceeds 2.5 MGD (not peak flow). Contact a supervisor to assist with inspecting the trunk line and North Shore manholes.
 - Teal Drive and Fairway Boulevard is the best indicator of potential high flow issues. Problems can occur when the flow exceeds $\frac{3}{4}$ pipe. Measure the depth of flow; log and continue to monitor for increases in the flow.
2. If at any time a gravity line is surcharged more than what would be expected for the amount of flow, assume the line is plugged. Contact a hydro-vactor unit to clean the affected section of the gravity line.
3. If sewage is backed up in a manhole to a level that could potentially cause an overflow, the use of a portable pump should be installed to divert sewage past the flow restriction or problem area to a downstream manhole. Set up a pump at Manhole #21 and run 497 ft of hose to Manhole #19. If needed, set up an additional pump at Manhole #20 and run 387 ft of hose to Manhole #18. If portable pumps are unavailable, contact a pump truck to help convey the sewage to another location.
4. Maintain 4" and/or 6" discharge hose for the portable pumps, suction lines, fittings, gaskets, and adapter fittings. Ensure pumps are properly maintained and batteries are charged. Block heaters should be plugged in and conditioner added to fuel during winter months. Confirm pumps have adequate fuel and oil. Be sure to grab the necessary tools to assemble discharge lines.

High Flow at Treatment Plant

1. Review Main Plant Flow (MPF) Valving (see Plant Flow Diagram) to ensure maximum flow through the plant with minimum restrictions.
 - a. Open clarifier splitter box gates.
 - b. Open gates to both balancing chambers.
 - c. Open MPF-7 SP.
 - d. Confirm MPF1 is closed.
 - e. Clean the Junction Manhole (JMH) screen frequently.
2. Check the mechanical bar screen for debris and proper operation. Rake the manual bar screen frequently.
3. Place the grit channel in service to reduce head pressure. Placing the grit channel in service will change the total influent flow to an incorrect reading and requires manual calculations of flow.
4. As a last resort, bypass the total influent flow meter and City flow meter. This will require supervisor approval prior to bypassing.
5. To avoid damage to the Oxidation Ditch rotor equipment and/or the power plant, monitor the ditch submergence gauges and do not exceed 11" of submergence. If at any time the rotor submergence is 12" or more, turn off all of the rotors in the Oxidation Ditches until the submergence drops below 11" or less. **Note: Rotors have been known to turn off and on during high flows due to over-temperature trip and can restart automatically.**
6. Other options for reducing head on the plant include opening the ditch splitter gate to Ditch #1 and/or #3 to reduce the submergence on Ditch #2. Change the flow to ditches from series to parallel. **Note: A change to ditch gating may cause immediate clarifier washout.**
7. Place all three (3) clarifiers in service to increase capacity and minimize the washout of solids from the clarifiers. If blankets are close to washing out, confirm plant valving to prevent an effluent violation.

8. Increasing the return activated sludge (RAS) flow will add to the total hydraulic loading on the treatment plant and needs to be considered when adjusting.
9. Polymer can be added when the blankets can no longer be controlled by conventional means. Polymer dosage to the clarifiers shall be done by attaching a hose at the primary bypass and routing it to either Ditch #1 or #3 weirs. Start polymer at 100 SPM and lower as soon as possible, especially overnight.
Note: Exceeding the dosage of polymer can jam the clarifier sweeps and break the clarifier's shear pin. Flush out the polymer line when usage is complete.
10. If the blanket levels reach 9' in Clarifiers #1 and #2 or 10' in Clarifier #3 and high flows are constant, wash out of solids can be avoided by turning off rotors. When the blankets are stable again, turn on one rotor per ditch (Rotors #1, #4, and #7). Closely monitor the clarifiers and attempt to get all the rotors on as soon as possible. **Note: This should only be used as a last resort option.**
11. Monitor Horseshoe Pond storage to maintain maximum storage capacity. Maintain an adequate level in the pond to avoid having to bring unnecessary pumps online. When the Horseshoe Pond level has increased after peak flows, pump the pond level down low to be ready for the next peak flow.
12. Monitor reservoir level, Overflow Structure, and Disposal Site Ponds in Lucerne Valley:
 - a. Open the 14" B.F.V. on the east side of the Overflow Structure to avoid spilling from the Overflow Structure (see attached drawings).
 - b. During normal operations, flow is discharged through the 14" overflow line to the Disposal Site Ponds. Additional flow can be discharged to the Disposal Site Ponds through the 18" line by opening the south 14" B.F.V. valve at the Disposal Site Ponds.
 - c. When running two or three auxiliary effluent pumps for an extended period of time, the reservoir level can back up above the level of the Overflow Structure because of a flow restriction at the 14" line from the reservoir to the Overflow Structure. To avoid this, open the valve to the 12" line to allow part of the flow to bypass the reservoir and flow directly to the overflow structure. This valve may be throttled partially open to avoid excess air and splashing in the overflow structure (see map).
13. All excess effluent flow is to be discharged to the disposal ponds, not to the fields. The maximum flow allowed on the fields is 4.8 MGD.

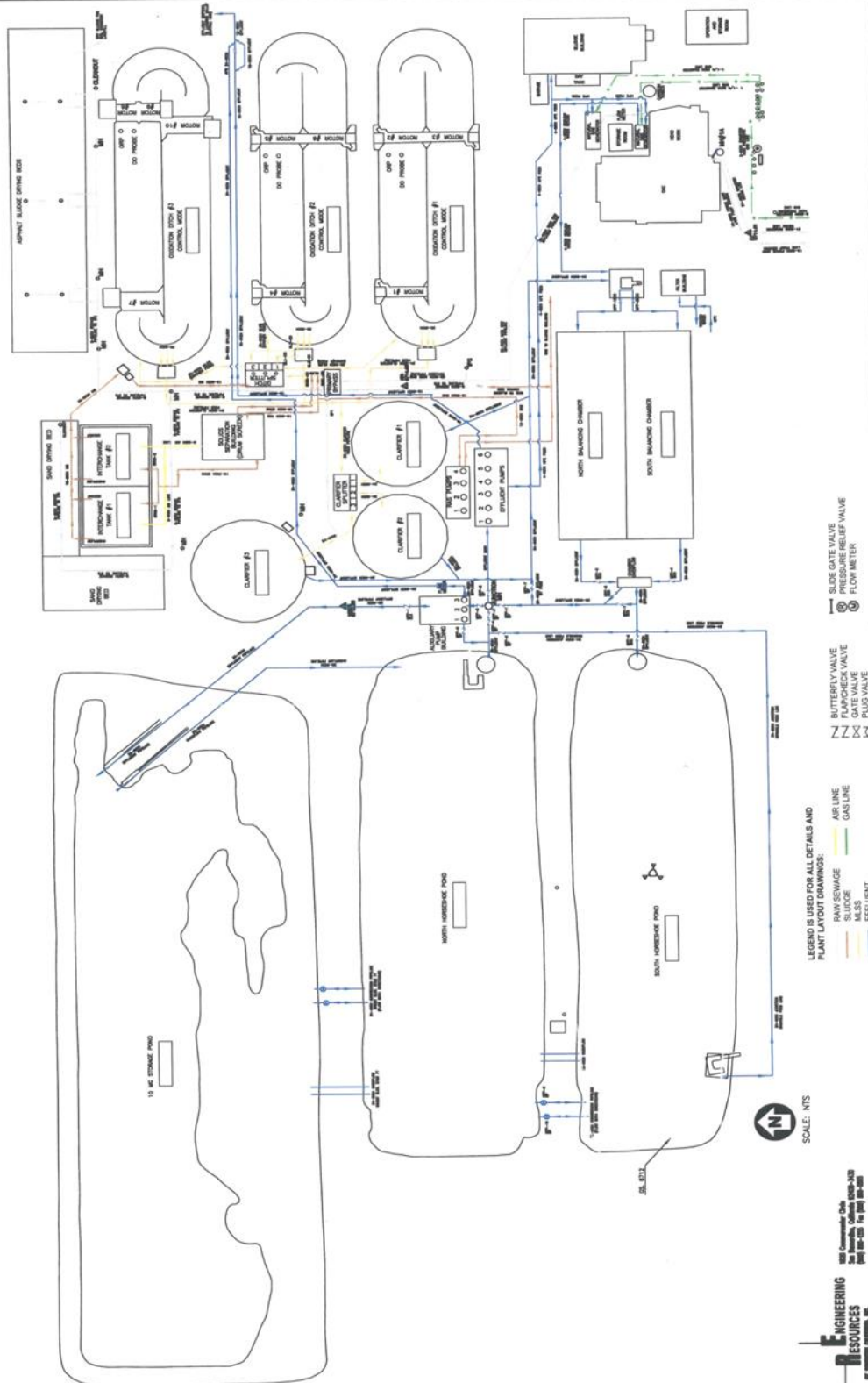
High Flow at Lake Pump Station

1. There are 5 large storage ponds at LPS that can hold excess flow; however, the Agency's property line only includes Ponds 1 and 1A. If capacity at the treatment plant has been exceeded or if LPS pumps cannot keep up with excessive flows, the sewage will be stored in Ponds #1 and #1A. Pond capacities include:

Pond #	Capacity
1	4.61 MG
1A	0.88 MG
2	6.68 MG
3	6.44 MG
4	4.71 MG
5	9.45 MG
Total	32.77 MG

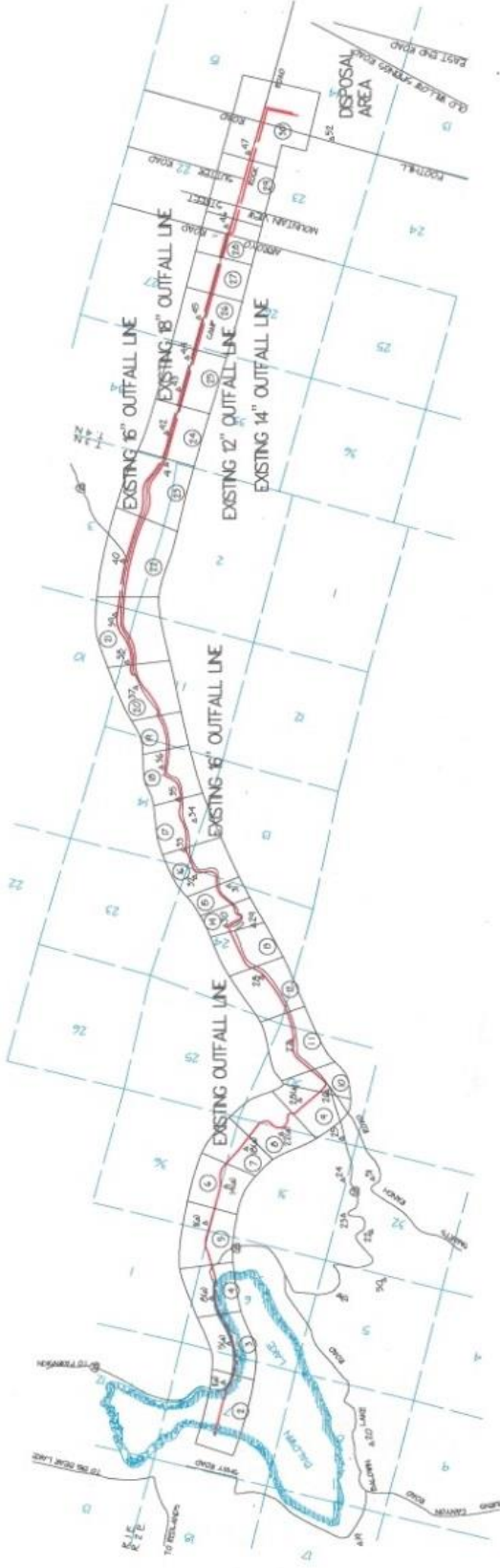
2. Stormwater run-off from Garstin Road should not be allowed to flow into the ponds. Grading at the site needs to be maintained to maximize storage capacity and minimize drainage to the ponds.
3. Confirm the valve between Pond #1 and Pond #1A is open to maximize storage capacity.
4. If flows exceed the capacity of Ponds #1 and #1A, contact the City of Big Bear Lake Public Works to remove any equipment stored in the remaining ponds prior to overflowing into them.

BBARWA PLANT FLOW DIAGRAM LAYOUT



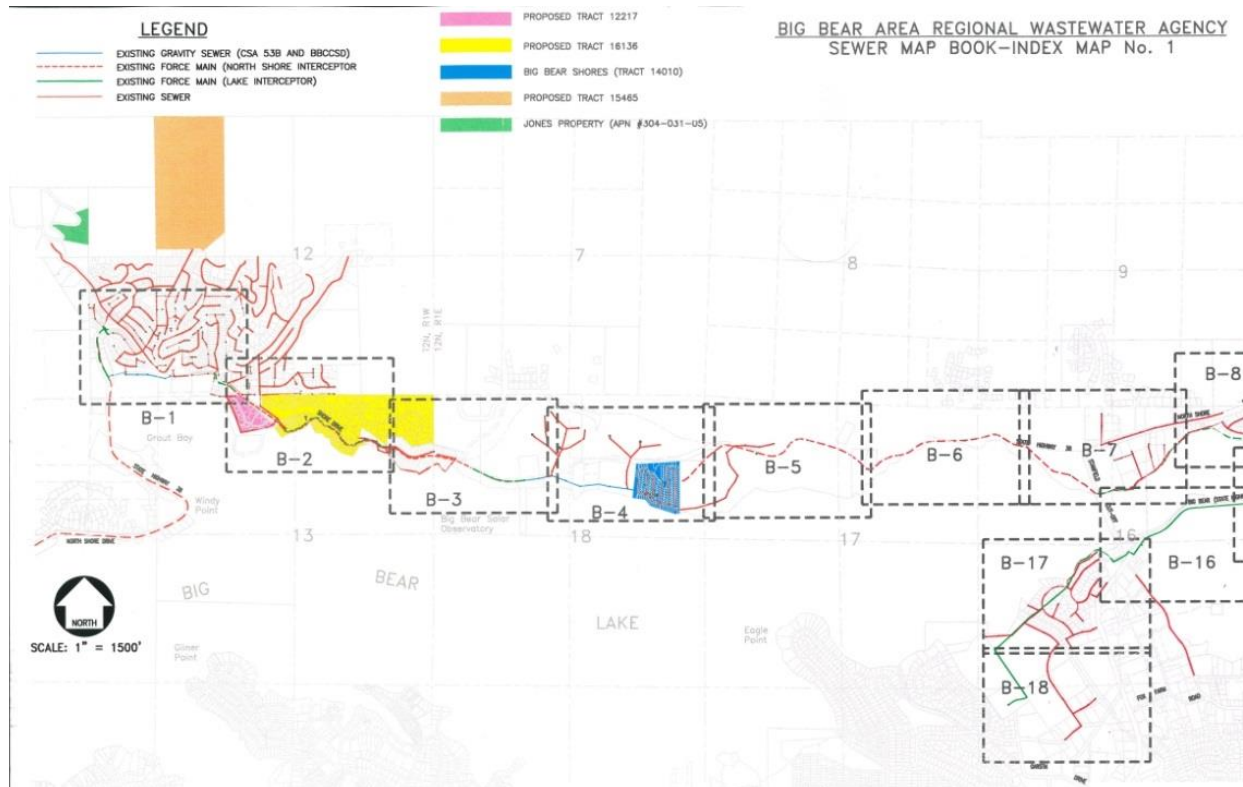
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BBARWA Outfall Line

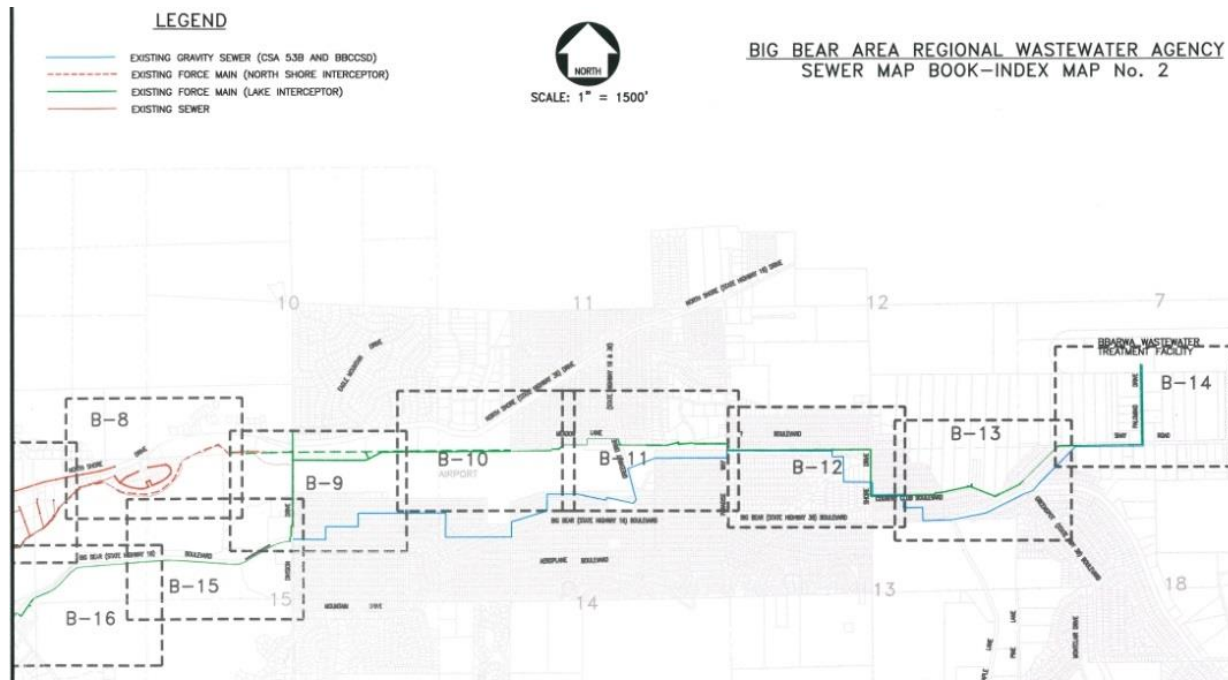


LEGEND OUTFALL LINE BENCHMARK SHEET NUMBER	 	TOM OWENS ENGINEERING 1000 S. 10TH AVE. SUITE 100 DENVER, CO 80202 303.733.1000	PREPARED FOR BIG BEAR AREA REGIONAL WASTEWATER AGENCY BIG BEAR CITY, CALIFORNIA	OUTFALL LINE
				INDEX MAP
				1
				2000

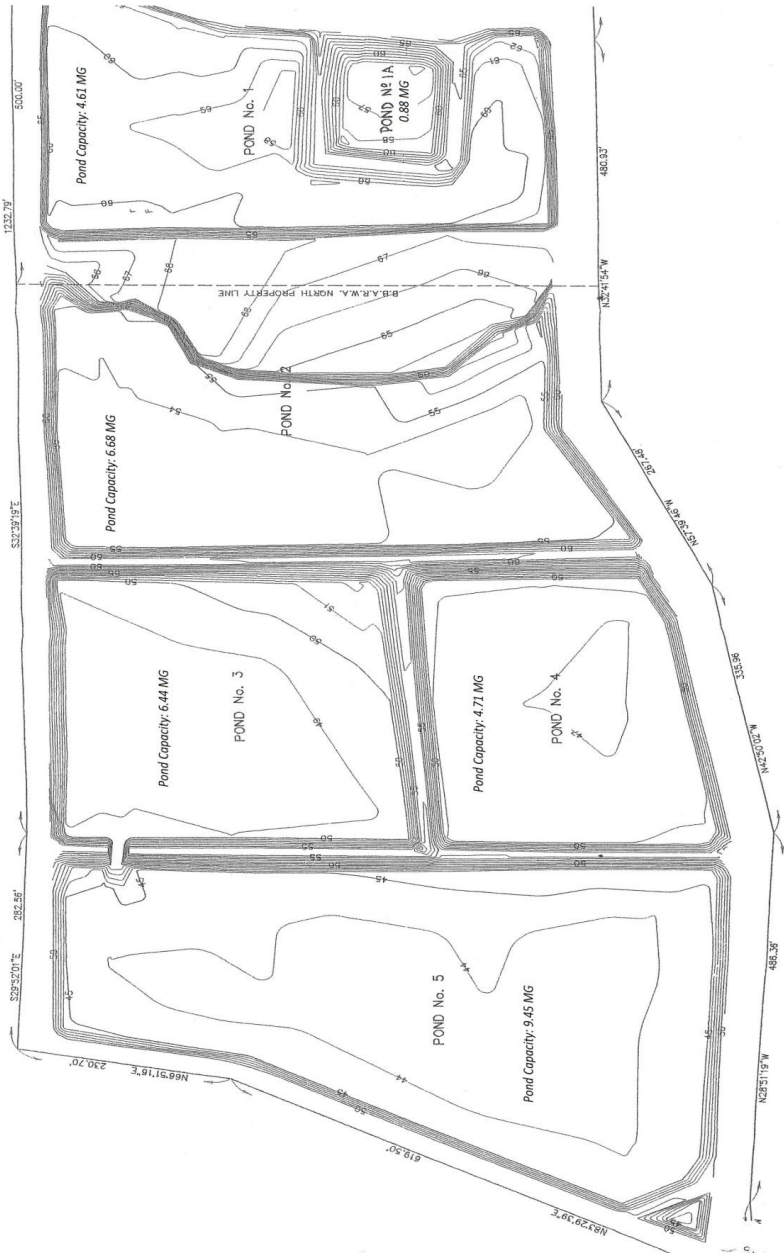
BBARWA Sewer Trunk Line Plans



BBARWA Sewer Lines



BBARWA Capacity Diagram (LPS, Ponds 1-5, and China Gardens)



Sewage Spill Reporting

A Sanitary Sewer Overflow (SSO) is an overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. SSOs pollute surface and ground waters, threaten public health, and adversely affect aquatic life.

Sanitary Sewer Overflow (SSO)

SSOs fall into one of four categories: Category 1, Category 2, Category 3, and Category 4. The definitions for each category are listed below.

Category 1:

A spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to: A surface water, including a surface water body that contains no flow or volume of water; or A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly. Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from a BBARWA-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

Category 2

A spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

Category 3

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

Category 4

A spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

Reporting SSO

On adoption in 2022, This order went into effect June 5, 2023, the SSO WDRs required enrollees to begin reporting all SSOs to the SSO Database. The reporting deadline for the submittal of an SSO report depends on the classification of the spill. For Category 1 and 2 SSOs, the enrollee must submit an initial, draft report of the SSO as soon as possible, but no later than 3 business days after becoming aware of the SSO. The final, certified report for Category 1 and 2 SSOs must be submitted within 15 calendar days of the SSO end date.

Notification to Cal OES is required within two hours of becoming aware of a Category 1 or Category 2 SSO greater than or equal to 1,000 gallons that results or may result in a discharge to surface waters. Specifically, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the

discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notifying the California Office of Emergency Services (Cal OES) and obtain a notification control number.

All SSO data is entered into the California Integrated Water Quality System (CIWQS) Online SSO Database (<http://ciwqs.waterboards.ca.gov/>), certified by the enrollee's Legally Responsible Official(s).

Report 1,000-gallon sewage releases to California Emergency Management Agency Warning Center – (800) 852-7550.

The following procedure is to be used when a discharge or threat of discharge occurs:

1. Verify discharge, damage, and course of action.
2. Immediately notify work crews to begin taking corrective action and begin clean-up procedures.
3. Notify the plant manager and general manager.
4. Make a complete report of the incident. Include date, time, names, addresses, damage, and cause (if known), the approximate area exposed, gallons discharged, and affected downstream areas.

The following is the policy of the Agency for reporting discharge or a threat of discharge violations to the proper authorities. It is arranged in the proper sequence of events. All addresses, contact people, and phone numbers are listed at the end. Notification of a discharge violation must be reported immediately after the discovery of the violation.

1. Notify the California Office of Emergency Services (Cal OES) – (916) 845-8911.
2. Notify the Regional Water Quality Control Board of the region where the violation occurred. The Colorado River Basin is north of Nelson Ridge – (760) 346-7491 and the Santa Ana Region is south of Nelson Ridge – (909) 782-4130. Both Boards have a recorder on their phones so the call can be made at any time.
3. Notify the California State Health Services office in San Bernardino – (909) 383-4328 and advise them of the violation.
4. Notify the San Bernardino County Department of Environmental Health Services – (800) 442-2283.
5. Notify the following agencies when a discharge violation occurs at the following locations.
 - a. Discharge into Big Bear Lake: notify Big Bear Municipal Water District – (909) 866-5796.
 - b. Discharge into Baldwin Lake, into a creek (even if dry): notify the local office of the U.S. Forest Service – (909) 866-3437.
 - c. Discharge on any Forest Service Property: notify the local office of the U.S. Forest Service – (909) 866-3437.

The plant manager will ensure all notifications and reports are completed in accordance with the required timelines.

Spill Report

A. SPILL LOCATION (ALL SPILLS)

Spill Location Name:

Latitude Coordinates:

Longitude Coordinates:

If multiple appearance points, use the GPS coordinates for the location of the spill appearance point closest to the failure point/blockage.

Street Name and Number:

Nearest Cross Street:

County:

City:

Zip Code:

Spill Location Description:

System Location Where Spill Originated:

B. SPILL OCCURING TIME (ALL SPILLS)

Was spill reported to or discovered by BBARWA?

Spill Reported to/Discovered by BBARWA

Date:

Time:

Sewer Crew/Operator Arrived

Date:

Time:

Estimated Spill Start

Date:

Time:

Estimated Spill End

Date:

Time:

Describe how the spill was reported to / discovered by the BBARWA:

Please list name and contact information for person who discovered spill:

Attach documentation including assumptions and type of data used for estimation of spill start and end times.

C. SPILL CATEGORIZATION (ALL SPILLS)

Answer the questions below to determine spill Category then, find appropriate forms to fill out for that Category of spill.

Did the spill reach surface water and/or a drainage channel?	<input type="checkbox"/> YES (<i>Category 1</i>)	<input type="checkbox"/> NO
Did the spill reach a drainage conveyance system?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
If the spill reached a drainage conveyance system, was it fully captured and returned to the Sanitary Sewer?	<input type="checkbox"/> YES	<input type="checkbox"/> NO (<i>Category 1</i>)
Was this spill from a private lateral?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
If from a private lateral, was the spill likely due to failure in the system?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Use the spill estimation worksheet to estimate the following:

Total Spill Volume (gal):

Spill Category (based on information above, select a spill category):

- ☐ **Category 1:** A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:
- A surface water, including a surface water body that contains no flow or volume of water; or
 - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.
- Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from an Enrollee owned and/or operated lateral that discharges to a surface water is a Category 1 spill
- ☐ **Category 2:** A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.
- ☐ **Category 3:** A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.
- ☐ **Category 4:** A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.
- ☐ **Non-Category 1-4 Private Lateral Spill**

D. SPILL RECORD (CATEGORY 4 OR LATERAL SPILL)

If this was a spill from a private lateral, provide the following information:

Property Owner/Resident Name:

Property Owner/Resident Contact Information:

Spill Appearance Point (check one or more):

- ☐ Building/Structure ☐ Force Main ☐ Gravity Sewer ☐ Pump Station ☐ Lateral
☐ AirVac or Blow-Off ☐ Other Sewer System Structure (i.e. cleanout):
☐ Manhole – ID#: ☐ Other:

Location of Failure:

- ☐ Main ☐ Lateral ☐ Private Lateral ☐ MH or Vault ☐ AirVac or Blow-Off
☐ Other:

Spill Cause(s) (check all that apply):

- ☐ Debris/Blockage ☐ Flow Exceeded Capacity ☐ Grease ☐ Operator Error ☐ Roots
☐ Pipe problem/failure ☐ Pump station failure ☐ Rainfall Exceeded Design ☐ Vandalism
☐ Inflow/Infiltration ☐ Animal Carcass ☐ Electrical Power Failure ☐ Bypass
☐ Pressure Bypass ☐ Debris From Laterals ☐ Construction Debris ☐ Contractor Error
☐ Flow-Through Bypass (MH) ☐ Other:

Use the spill estimation worksheet to estimate the following:

Spill Rate when Discovered (gallons/minute):

Total Spill Volume:	Spilled: gal	Recovered: gal
Volume Reached Drainage Conveyance System	Spilled: gal	Recovered: gal
Volume Discharge to Land	Spilled: gal	Recovered: gal

Calculation Methods (check one or more):

- ☐ Eyeball ☐ Photo Comparison ☐ Upstream Connections ☐ Area/Volume
☐ Lower Lateral ☐ Other:

Attach documentation including assumptions, types of data (such as SCADA records, flow monitoring, telemetry information), calculations, and photos used to determine spill volume and volume recovered.

Spill Response Activities (check all that apply):

- ☐ Cleaned Up ☐ Contained All/Portion of Spill ☐ CCTV Inspection ☐ Restored Flow
☐ Returned All/Portion of Spill to Sanitary Sewer ☐ Other:

D. SPILL RECORD (CATEGORY 4 OR LATERAL SPILL)

Spill Corrective Actions:

- ☐ Local regulatory enforcement action taken against the sewer lateral owner
- ☐ System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location

Describe Corrective Actions:

Inventory (:
Take inventory, pictures, and notes of all property damaged by spill. Pictures should show the extent of the spill. (Get occupant’s signature on the list).

Item	Description of Damage

E. SPILL DESCRIPTION (CATEGORY 1, 2, OR 3)

Take photos of the spill including (as applicable): Spill source, extent of the spill spread, locations of clean up, drainage conveyance system entry locations, location(s) of discharge into surface waters

Spill Appearance Point (check one or more):

- ☐ Building/Structure ☐ Force Main ☐ Gravity Sewer ☐ Pump Station ☐ Lateral
☐ AirVac or Blow-Off ☐ Other Sewer System Structure (i.e. cleanout):
☐ Manhole – ID#: ☐ Other:

If this was a spill from a lateral, provide the following information:

Property Owner/Resident Name:

Property Owner/Resident Contact Information:

Spill Discharged To (check one or more):

- ☐ Surface Water ☐ Waters of the State ☐ Drainage Channel ☐ Pond ☐ Stream ☐ River
☐ Catch/Infiltration Basin ☐ Lined Channel ☐ Unlined Channel ☐ Separate Storm Drain
☐ Paved Surface ☐ Unpaved Surface ☐ Street/Curb/Gutter ☐ Building/Structure
☐ Other:

Provide name(s) of affected surface waters, drainage channel, and/or drainage conveyance system if applicable:

Use the spill estimation worksheet to estimate the following:

Spill Rate when Discovered (gallons/minute):

Total Spill Volume:	Spilled: gal	Recovered: gal
Volume Discharged Directly to a Surface Water	Spilled: gal	Recovered: gal
Volume Reached Drainage Channel	Spilled: gal	Recovered: gal
Volume Reached Storm Drain	Spilled: gal	Recovered: gal
Volume Discharge to Land	Spilled: gal	Recovered: gal

Calculation Methods (check one or more):

- ☐ Eyeball ☐ Photo Comparison ☐ Upstream Connections ☐ Area/Volume
☐ Lower Lateral ☐ Other:

Attach documentation including assumptions, types of data (such as SCADA records, flow monitoring, telemetry information), calculations, and photos used to determine spill volume and volume recovered.

F. CAUSE OF SPILL (CATEGORY 1, 2, OR 3)

Location of Failure:

- ☐ Main ☐ Lateral ☐ Private Lateral ☐ MH or Vault ☐ AirVac or Blow-Off
☐ Other:

Spill Cause(s) (*check all that apply*):

- ☐ Debris/Blockage ☐ Flow Exceeded Capacity ☐ Grease ☐ Operator Error ☐ Roots
☐ Pipe problem/failure ☐ Pump station failure ☐ Rainfall Exceeded Design ☐ Vandalism
☐ Inflow/Infiltration ☐ Animal Carcass ☐ Electrical Power Failure ☐ Bypass
☐ Pressure Bypass ☐ Debris From Laterals ☐ Construction Debris ☐ Contractor Error
☐ Flow-Through Bypass (MH) ☐ Other:

Was this spill event associated with a storm event?

☐ YES ☐ NO

Diameter (inches) of pipe at point of blockage/spill cause (IA):

Sewer pipe material at point of blockage/spill cause (IA):

Estimated age of sewer asset at the point of blockage or failure (IA):

Description of terrain surrounding point of blockage/spill cause:

- ☐ Flat ☐ Mixed ☐ Steep ☐ Under Body of Water

Describe the impact of the spill:

G. SPILL RESPONSE (CATEGORY 1, 2, 3)**Spill Response Activities (check all that apply):**

- ☐ Cleaned Up ☐ Contained All/Portion of Spill ☐ CCTV Inspection ☐ Restored Flow
☐ Returned All/Portion of Spill to Sanitary Sewer ☐ Other:

Spill Response Completed:**Date:****Time:**

Any ongoing investigation?☐ YES ☐ NO

Were health warnings posted?☐ YES ☐ NO

If yes, provide health warning/closure posting/details:

Describe all spill response activities including immediate spill containment, damage mitigation, public contact prevention, odor control, and cleanup efforts:

Recommended Corrective Actions:

G. SPILL RESPONSE (CATEGORY 1, 2, 3)

List all agency personnel involved in the response:

Name	Title	Role

H. WATER QUALITY (CATEGORY 1)

Photograph receiving surface water including any observed waterbody bank erosion, floating matter, water surface sheen, discoloration of water, impact to water, etc. Attach photos to this report.

Visual Inspection – Result of Impacted Waters (IA):

Any fish killed?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Any ongoing investigation?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Were health warnings posted?	<input type="checkbox"/> YES <input type="checkbox"/> NO

If yes, provide health warning/closure posting/details:

Were sample(s) of impacted water collected?	<input type="checkbox"/> YES <input type="checkbox"/> NO
---	--

Which samples of the impacted waters were collected and what analyses were performed?

- ☐ A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
Location:
- ☐ A point in the receiving water where sewage initially enters the receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
Location:
- ☐ A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
Location:
- ☐ A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
Location:

When were initial samples collected?	Date: _____ Time: _____
Estimate travel time from spill source to receiving water/point of entry into storm water system:	
Estimate travel time from point of entry of storm water system to surface water body (IA):	

I. NOTIFICATION DETAILS (COMPLETE FOR SPILLS 1,000 GAL OR GREATER)

Call CalOES at (800) 852-7550 and report the following within 2 hours of awareness of spill:

- ☐ Name and phone number of BBARWA employee notifying CalOES
- ☐ Estimated total spill volume (gallons)
- ☐ Estimated spill rate from system (gallons/minute)
- ☐ Estimated discharge rate directly into waters of the State or a drainage system leading to waters of the State (gallons/minute)
- ☐ Spill incident description including a brief narrative of the spill event and spill incident location (address, city, and zip code) and closest cross streets and/or landmarks
- ☐ Name and phone number of contact person on-scene
- ☐ Date and time the BBARWA was informed of the spill event
- ☐ Name of sanitary sewer system causing the spill
- ☐ Spill cause or suspected cause (if known)
- ☐ Amount of spill contained
- ☐ Name of receiving water body receiving or potentially receiving discharge
- ☐ Description of water body impact and/ or potential impact to beneficial uses

Assigned Control Number:

J. DAMAGE INVENTORY (SPILL AFFECTED PRIVATE PROPERTY)

Take inventory, pictures, and notes of all property damaged by spill. Pictures should show the extent of the spill. (Get occupant's signature on the list).

Item	Description of Damage

K. SPILL COST**Labor:**

Name	Hours	\$/Hour	Total Cost
Equipment Subtotal:			

Equipment:

Item	Hours	\$/Hour	Total Cost
Equipment Subtotal:			

Materials:

Item	Number	\$/Item	Total Cost
Equipment Subtotal:			

To be completed by the Plant Manager or General Manager

L. SYSTEM FAILURE ANALYSIS

Incident Report #:

Prepared By:

Spill Information

Event Date & Time:

Address:

Volume Spilled:

Volume Recovered:

Cause(s):

Summary of Historical Spills/Service Calls/Other

Date:

Cause(s):

Date Last Cleaned:

Crew:

Records Reviewed By:

Records Review Date:

Summary of CCTV Information

CCTV Inspection Date:

CCTV Review Date:

Inspection Tape Name/Number:

CCTV Inspection Tape Reviewed By:

Observations:

L. SYSTEM FAILURE ANALYSIS

Recommendations

- ☐ **No Changes or Repairs Required**
- ☐ **Maintenance (One Time)**
- ☐ **Maintenance (Recurring)**
- ☐ **Repair (Location and Type)**
- ☐ **Add to Capital Improvement Rehabilitation/Replacement List**

Describe Recommendations:

General Manager / Plant Manger Review

Signature:

Date:

Notifications for Sewer Spills

(list of agencies to be notified)

California Office of Emergency Services
3650 Shriver Ave.
Mather, CA. 95655
(916) 845-8911

California Regional Water Quality Control Board
Colorado River Basin, Region VII
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
(760) 346-7491

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348
Phone (951) 782-4130

State Water Resource Control Board
Division of Drinking Water and Field Operations
464 W. 4th Street, Room 437
San Bernardino, CA 92401
(909) 383-4328

Department of Environmental Health Services
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0160
(800) 472-2376, prop 65 report 24 hour # (800) 442-2283

Big Bear Municipal Water District
P.O. Box 2863
Big Bear Lake, CA 92315
(909) 866-5796

U. S. Forest Service, Big Bear Ranger District
P.O. Box 290
Fawnskin, CA 92333
(909) 866-3437

CHECKLIST FOR REPORTING DISCHARGE VIOLATION

1. RWQCB, Santa Ana Region

Date: _____ Time Called: _____ Person Contacted: _____

2. RWQCB, Colorado River Basin

Date: _____ Time Called: _____ Person Contacted: _____

3. State Office of Emergency Services

Date: _____ Time Called: _____ Person Contacted: _____

4. Department of Environmental Health Services

Date: _____ Time Called: _____ Person Contacted: _____

5. State Department of Health

Date: _____ Time Called: _____ Person Contacted: _____

6. Big Bear Municipal Water District

Date: _____ Time Called: _____ Person Contacted: _____

7. U. S. Forest Service

Date: _____ Time Called: _____ Person Contacted: _____

8. BBARWA

Plant Supervisor Date: _____ Time Called: _____

Plant Manager Date: _____ Time Called: _____

General Manager Date: _____ Time Called: _____

Regulatory Admin Date: _____ Time Called: _____

APPENDIX G: SPILL VOLUME WORKSHEET

Worksheets provided from *A Guide for Developing and Updating of Sewer System Management Plans*, September 2015.

SPILL VOLUME WORKSHEET

The purpose of this worksheet is to capture the data and method(s) used in estimating the volume of an SSO. Since there are many variables and often unknown values involved, this calculation is just an estimate. Additionally, it is useful to use more than one method, if possible, to validate your estimate.

The following methods and tools are the approved methods in the SOP CS-103 SSO *Response*. Check all methods and tools that you used:

- ☐ Eyeball Estimate Method
- ☐ Measured Volume Method
- ☐ Duration and Flow Rate Method (Account for diurnal flow pattern for long duration)
- ☐ USD SSO Flow Rate Estimating Tool
- ☐ Other (explain) i.e.; estimated daily use per capita upstream or meter @ Pump Station.

Eyeball Estimate Method- Imagine a bucket(s) or barrel(s) of water tipped over.

Size of bucket(s) or barrel(s)	How many of this Size?	Multiplier	Total Volume Estimated
1 gal. water jug		X 1	
5 gal. bucket		X 5	
32 gal. trash can		X 32	
55 gal drum		X 55	
Total Volume Estimated Using Eyeball Method			

**Estimating Sewer Flow Rates
from Overflowing Sewer Manholes¹**



5 gpm



25 gpm



50 gpm



100 gpm



150 gpm



200 gpm



225 gpm



250 gpm



275 gpm

¹ Sourced from City of San Diego Metropolitan Wastewater Department "Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes" (April 1999).

SSO Volume by Area Estimation Work Sheet

Page 2

Area #6 _____ % Wet _____

☐ Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #1 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #2 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #3 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #4 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #5 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #6 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ ☐ Concrete 0.0026' ☐ Asphalt 0.0013'
 Volume: _____ Cu/Ft

Total Volume:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, #6 _____ = _____ *cu ft

_____ *cu ft x 7.48 gallons = _____ gallons Spilled.

SSO Volume by Area Estimation Work Sheet

Page 4

GEOMETRY

For the purposes of this work sheet, the unit of measurement will be in feet for formula examples.

Area is two-dimensional - represented in square feet. (Length x Width)

Volume is three-dimensional - represented in cubic feet. (Length x Width x depth) or (Diameter Squared) $D^2 \times 0.785 \times \text{depth}$.

A Note about Depth

Wet Stain on a Concrete Surface - For a stain on concrete, use 0.0026'. This number is 1/32" converted to feet. For a stain on asphalt use 0.0013' (1/64"). These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error by SPUD staff. A known amount of water (one gallon) 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. 1/32" was the most consistently accurate depth on concrete and 1/64" for asphalt. This process was repeated several times.

Sewage "Ponding" or Contained - Measure actual depth of standing sewage whenever possible. When depth varies, measure several (representative) points, determine the average and use that number in your formula to determine volume.

Area/Volume Formulas

Area is two dimensional and is represented as Square Feet (Sq. Ft.)

Volume is three dimensional and is represented as Cubic Feet (Cu. Ft.)

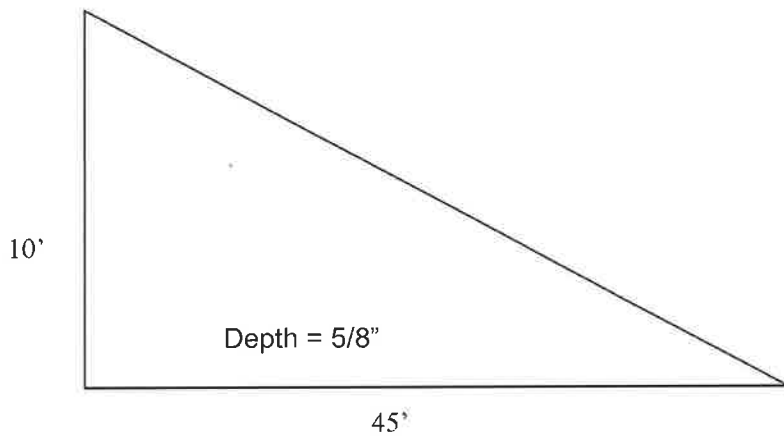
One Cubic Foot = 7.48 gallons

SSO Volume by Area Estimation Work Sheet

Page 6

AREA/VOLUME OF A RIGHT TRIANGLE

Base x Height x 0.5 x Depth = Volume in Cubic Feet



Base (45') x Height (10') x 0.5 x Depth (.05') x 7.48 gallons/cubic foot = 84 gallons

For Isosceles Triangles (two sides are equal lengths),

Break it down into two Right Triangles and compute area as you would for the Right Triangle above.

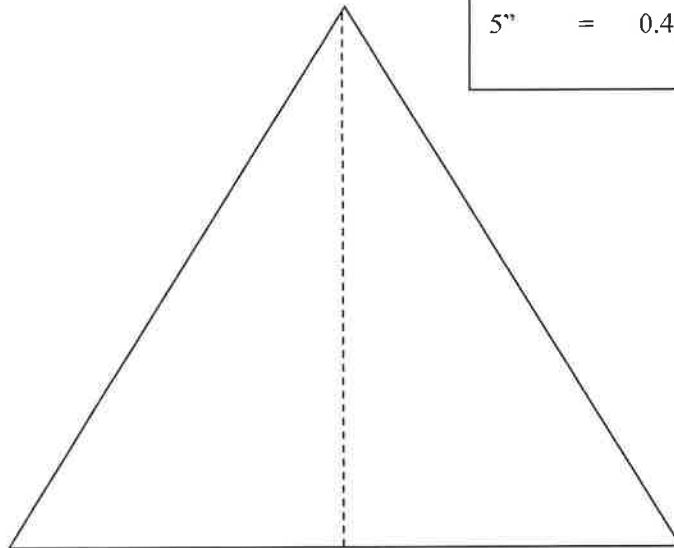


Chart A

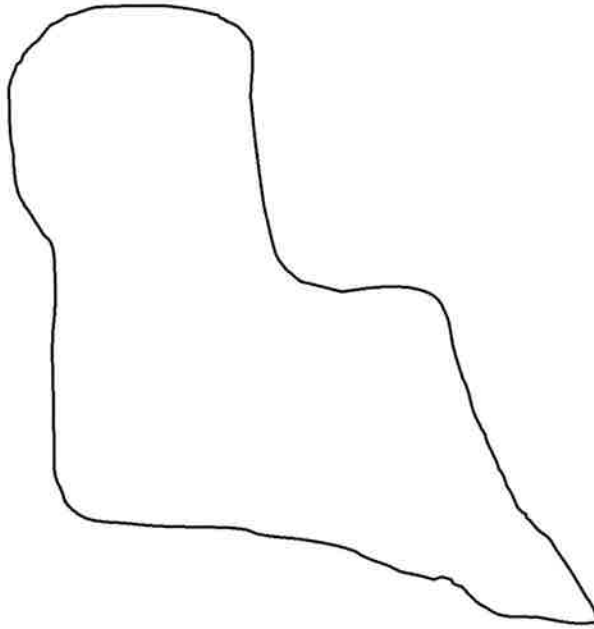
Conversion:

Inches	to	Feet
1/8"	=	0.01'
1/4"	=	0.02'
3/8"	=	0.03'
1/2"	=	0.04'
5/8"	=	0.05'
3/4"	=	0.06'
7/8"	=	0.07'
1"	=	0.08'
2"	=	0.17'
3"	=	0.25'
4"	=	0.33'
5"	=	0.42'

SSO Volume by Area Estimation Work Sheet

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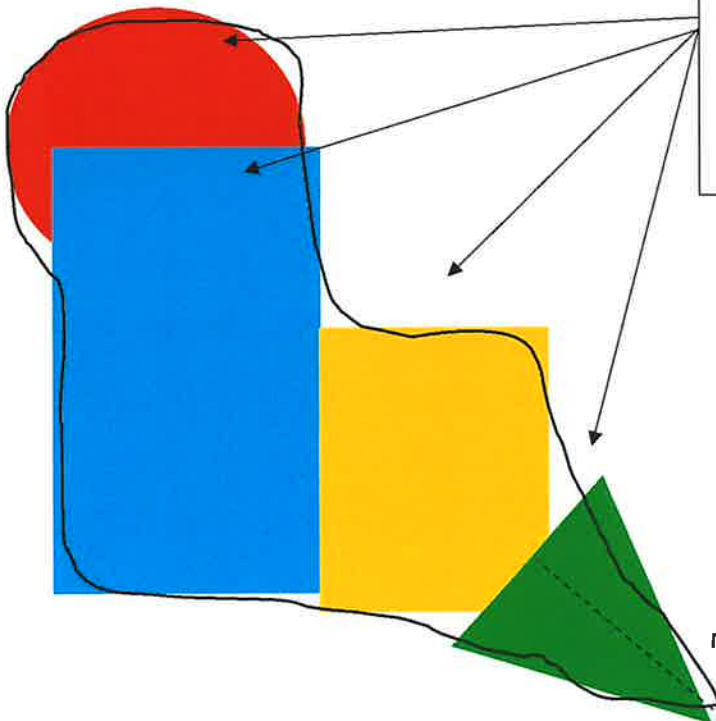
Find the geometric shapes within the shape. If this was the shape of your spill, break it down, as best you can, with the shapes we know.



1. Determine the volumes of each shape.

In this example, after the volume of the circle is determined, multiply it by 55% (+/-) so that the overlap area won't be counted twice.

2. Add all the volumes to determine total spill volume.



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

SSO Volume by Area Estimation Work Sheet

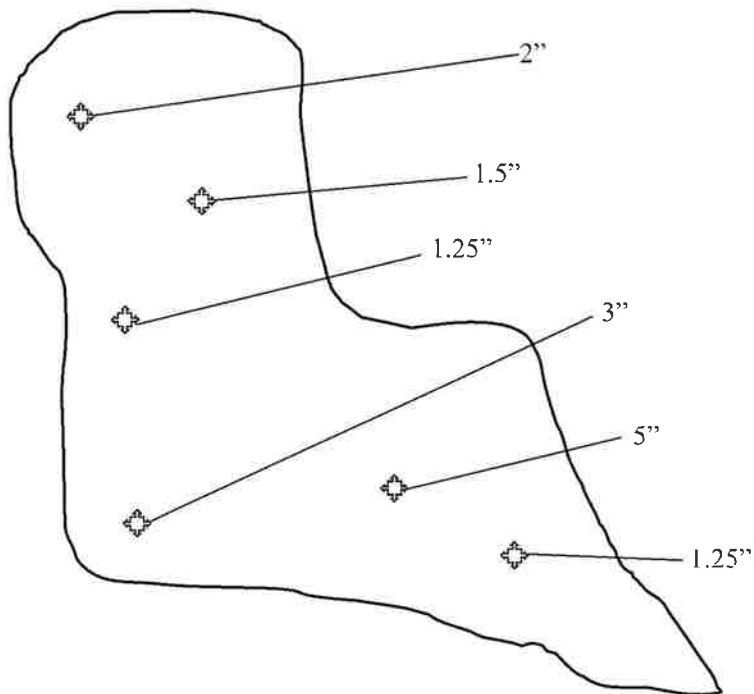
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Step 1

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.

NOTE: This can be used in a (Dry) dirt or grassy area that is not regularly irrigated like a field or a dirt parking lot.

Wet weather would make this method ineffective.



Step 2

Take a Test Sample

EXAMPLE:

If the Area of the spill was determined to be 128 Sq/Ft and the average depth of the wet soil is 2.33 inches:

$$128 \text{ Sq/Ft} \times 0.194' = 24.83 \text{ Cu/Ft}$$

$$24.83 \text{ Cu/Ft} \times 7.48 \text{ Gals/Cu/Ft} = 185.74 \text{ gallons}$$

$$185.74 \times 18\% = \underline{33 \text{ Gallons}} \text{ (water in soil)}$$

$$2" + 1.5" + 1.25" + 3" + 5" + 1.25" = 14.0"$$

$$14.0" / 6 \text{ measurements} = 2.33"$$

$$\text{Average Depth} = 2.33" (0.194')$$

APPENDIX H: WATER QUALITY MONITORING PROGRAM

Big Bear Area Regional Wastewater Agency

Water Quality Monitoring Program

Prepared for:



10/15/2024

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LIST OF TERMS, ACRONYMS AND ABBREVIATIONS

Acronym	Term
BBARWA	Big Bear Area Regional Wastewater Agency
CIWQS	California Integrated Water Quality System
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
MPN	Most Probable Number
MRP	Monitoring and Reporting Program
PPE	Personal Protective Equipment
Regional Water Board	Regional Water Quality Control Board
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSS WDRs	Sanitary Sewer System Waste Discharge Requirements
State Water Board	State Water Resources Control Board
SU	Standard Unit
WOTUS	Waters of the United States
WQMP	Water Quality Monitoring Program

1 PURPOSE OF PROGRAM

If untreated sewage reaches the Waters of the United States (WOTUS) of 50,000 gallons or greater, BBARWA will implement monitoring procedures in accordance with this Water Quality Monitoring Program (WQMP) to determine and properly address impacts to the impacted surface water. The Monitoring and Reporting Program (MRP) requires that the WQMP include at a minimum the following:

Order No. WQ 2022-0103-DWQ:

To comply with subsection E 2.3.2 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 Enrollee shall conduct the following water quality sampling no later than 18 hours after the Enrollee's knowledge of a potential discharge to a surface water:

- 1. Collect one water sample, each day of the duration of the spill at:*
 - The DCS-001 location as described in section 2.3.4 (Receiving water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system: and/or*
 - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;*
If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due to No Flow" for its receiving water sampling location.
- 2. The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:*
 - Ammonia, and appropriate bacteria indicator(s) per applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Board: Total Coliform Bacteria, Fecal Coliform Bacteria, E-Coli, Enterococcus.*
 - Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.*

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

BBARWA's WQMP complies with the requirements set forth in the MRP. The WQMP outlines procedures for taking water quality samples including where samples need to be taken on WOTUS affected by SSOs, and what samples need to be taken to evaluate the SSOs impact on the waterway. The WQMP also identifies key WOTUS within the watershed that could possibly receive SSOs, and identifies their beneficial uses and key bacteriological indicators used for water quality monitoring as provided in the Santa Ana Regional Water Board Basin Plan (Basin Plan). According to the Basin Plan, E. coli is the appropriate bacteriological indicator for all waters in the Bear Valley that are impacted by an SSO.

For all SSOs in which 50,000 gallons or more of sewage are discharged to surface water, BBARWA is to implement monitoring activities in accordance with the WQMP within 18 hours of the end of the SSO. Water quality monitoring may be implemented at BBARWA's discretion for SSOs that reach WOTUS and are less than 50,000 gallons, or as required by regulatory agencies.

2 RESPONSIBILITY

Each task related to the WQMP is assigned to staff personnel as identified by Table 2-1. Identifying roles of responsibility allows SSO impacts to WOTUS to be efficiently monitored and provides a clear point of contact for staff responding to the SSO.

Table 2-1: WQMP Roles and Responsibilities

Roles and Responsibility	Responsible Person
Provide and document regular WQMP training for all BBARWA staff responsible for responding to SSOs	Plant Manager
Two-year review of the WQMP	Plant Manager
Annual completion of the sampling kit checklist	Senior Laboratory Analyst Laboratory Technician
Calibration of sampling equipment and maintenance of calibration records	Senior Laboratory Analyst Laboratory Technician
Selection of sampling locations and field sampling coordination	Plant Operators
Conduct field sampling procedures	Plant Operators
Determination of spill travel time, if applicable.	Plant Operators
Review and evaluate lab results for termination of sampling and to determine the nature and impact of the release	General Manager
Preparation of SSO Technical Report and required supporting documents	General Manager
Review and Approval of Technical Report	General Manager
Certification and placement of Technical Report in the CIWQS spill reporting system	General Manager
Manage revisions to WQMP and all associated forms and documents	Plant Manager

3 AUTHORITY

The authority for the water quality monitoring requirements of SSOs are contained in the following documents. Updates to any of these documents may require changes to the WQMP to remain current with regulations.

1. State Water Resources Control Board Waste (State Water Board) Discharge Requirements Order WQ 2022-0103-DWQ, Section E 2.3.2.
2. Standard Methods for the Examination of Water and Wastewater, 23rd Edition, American Public Health Organization et al.
3. Clean Water Act Sections 301(a), 304(h), and 501(a).
4. Code of Federal Regulations, Title 40, Part 136.
5. Santa Ana Regional Water Quality Control Board Basin Plan
6. Colorado River Basin Region Discharge Requirements

4 LOCAL SURFACE WATERS

Surface waters within BBARWA's service area have been mapped (Figure 4-1) to assist in determining where SSOs may discharge into surface waters. Areas of concern include rivers, lakes, dry creeks, pipeline crossings over or under waterways, and storm water related infrastructure. Primary surface waters of concern within and/or adjacent to BBARWA's service area include:

- Grout Creek
- Polique Creek
- Minnelusa Creek
- Rathbun Creek
- Big Bear Lake
- Stanfield Marsh
- Caribou Creek
- Sawmill Canyon
- Shay Creek
- Baldwin Lake

5 SAMPLING PARAMETERS

Sampling of parameters provided in Table 5-1 are required.

Table 5-1: Water Quality Sampling Parameters

Parameter	Units
Ammonia (un-ionized as Nitrogen (N))¹	mg/L - N
E. coli²	MPN/100 mL
pH³	SU
Temperature³	Celsius
Dissolved Oxygen³	mg/L
¹ Required by MRP.	
² Required by MRP via Regional Water Board Basin Plan – see Table 5-2 and Table 5-3.	
³ Field measurements for pH, temperature, and dissolved oxygen (DO) are not required by the MRP but are to be taken to provide more detailed water quality information.	

The Basin Plan designates beneficial use categories and water quality objectives for all surface waters in the Region. Table 5-2 shows the beneficial use categories for surface waters in or near BBARWA's service area. The beneficial use category of the body of water receiving the SSO dictates the bacteriological indicator to be used in monitoring water quality following SSOs. Table 5-2 shows that all surface waters in or near BBARWA's service area are designated for Water Contact Recreation (REC-1), and Table 5-3¹ shows that surface waters designated as REC-1 are required to be monitored for E. coli following SSOs. Therefore, E. coli is the bacteriological indicator to sample for in all SSO water quality monitoring activities.

¹ Santa Ana Regional Water Board Basin Plan

Table 5-2: Beneficial Uses of Surface Waters

Name	Beneficial Uses (Existing Use unless otherwise noted) ¹
Big Bear Lake Watershed	
Big Bear Lake	MUN, AGR, GWR, REC-1, REC-2, COMM, WARM, COLD, WILD, RARE
Grout Creek	MUN, GWR, REC-1, REC-2, COLD, WILD, SPWN
Polique Creek	MUN ² , GWR ² , REC-1 ² , REC-2 ² , COLD ² , WILD ²
Minnelusa Creek	MUN ² , GWR ² , REC-1 ² , REC-2 ² , COLD ² , WILD ²
Rathbun Creek	MUN, GWR, REC-1, REC-2, COLD, WILD
Baldwin Lake Watershed	
Baldwin Lake ³	REC-1 ² , REC-2 ² , WARM ² , COLD ² , BIOL ² , WILD ² , RARE ²
Shay Creek	MUN, GWR, REC-1, REC-2, COLD, WILD, RARE, SPWN
Caribou Creek (and tributaries)	MUN ² , GWR ² , REC-1 ² , REC-2 ² , COLD ² , WILD ²
Sawmill Canyon (and tributaries)	MUN ² , GWR ² , REC-1 ² , REC-2 ² , COLD ² , WILD ²
Other	
Stanfield Marsh	MUN, REC-1, REC-2, COLD, WILD, RARE
¹ MUN = Municipal and Domestic Supply, AGR = Agricultural Supply, GWR = Groundwater Recharge, REC-1 = Water Contact Recreation, REC-2 = Non-contact Water Recreation, COMM = Commercial and Sportfishing, WARM = Warm Freshwater Habitat, COLD = Cold Freshwater Habitat, BIOL = Preservation of Biological Habitats of Special Significance, WILD = Wildlife Habitat, RARE = Rare, Threatened or Endangered Species, SPWN = Spawning, Reproduction, and Development ² Intermittent Beneficial Use ³ Exempt from MUN designation	

Table 5-3: Water Quality Objectives for Bacteriological Indicators

Beneficial Use	E. coli (MPN/100 ml)
Freshwater Contact Recreation (REC -1)	126 ¹
Freshwater Non-Contact Recreation (REC-2)	N/A
¹ geometric mean of at least five (5) samples in a running 30-day period	

6 SAMPLING PROCEDURES

6.A SAMPLE COLLECTION GUIDELINES

The purpose of water quality sampling is to determine the nature and extent of the impact of the SSO. Samples will be collected by plant operators and care shall be taken to ensure all sampling procedures are properly followed.

Sampling shall occur within 18 hours of an SSO. A minimum of three (3) separate sample sets (upstream, source, and downstream) shall be taken. Standard operating procedures for water sampling are provided in Attachment A: Surface Water Sampling Standard Operating Procedures. Attachment C: Surface Water Sampling Worksheet is also to be completed for each sampling session.

Sampling effluent is subject to variability that can affect the reliability of data. Therefore, the samples must be:

- Representative of the material being examined
- Uncontaminated by the sampling technique or container
- Adequate size for all laboratory examinations
- Properly identified
- Properly preserved
- Delivered and analyzed within established holding times

6.B SAMPLE TYPES

A grab sample is an individual sample collected at a given time. Grab samples represent only the condition that exists at a location at the time the sample is collected.

In-situ measurements, such as temperature, dissolved oxygen, and pH, are data collected in the field and can be recorded directly in Attachment C: Surface Water Sampling Worksheet.

6.C SAMPLING LOCATIONS

Surface water sampling locations shall be selected based on the following general guidelines:

- The sampling location should be far enough upstream or downstream of confluences or point sources so that the surface water and SSO volume is well mixed. Natural turbulence can be used to provide a good mixture.
- Samples should be collected at a location where the velocity is sufficient to prevent deposition of solids, and to the extent practical, should be in a straight reach having uniform flow. All flow in the reach should be represented, so divided flow areas should be avoided, and samples should be taken towards the middle of the reach where feasible.
- A Sampler must always stand along a bank or downstream of the collection vessel in order to sample "into the current". Care must be taken to avoid introducing re-suspended sediment into the sample.

6.D SAMPLES COLLECTED

The following samples shall be collected, in duplicate:

- a. Upstream: These samples will be collected far enough upstream of the SSO's point of entry into the surface water as to be free of contaminants from the SSO. Typically, 50-feet is sufficient, but this distance may vary.
- b. Source: Immediate vicinity where the SSO entered the surface water. If the SSO has stopped entering the surface water at the time of sampling, then this sample will be taken downstream of the actual SSO entry point. The approximate downstream distance will be calculated after first determining the stream velocity as provided below.
 - i. Determine Stream Velocity – Take visual ft/sec measurement based on floating debris, to estimate the number of feet the debris has traveled in seconds. It may be useful to perform this measurement three to five times and use the average value as the estimated travel time. The velocity can be calculated by dividing the measured distance by the average time.
 - ii. Calculate the Downstream Distance – Divide the time since the SSO occurred by the water velocity to get the approximate downstream distance from the SSO discharge point. Use this location as the "Source" sampling location.
- c. Downstream: These sample will be collected far enough downstream to be representative of the water quality of the surface water after adequate mixing of the surface water and the SSO have occurred. Typically, this location will be 50-feet downstream of the Source sample, but this may vary dependent on size and velocity of the surface water.

In total, a minimum of 16 samples shall be collected and 9 in-field readings shall be taken as shown in Table 6-1.

Table 6-1: Summary of Samples and Field Measurements to be Obtained

Constituent	Upstream	Source	Downstream	Total
Ammonia	2	2	2	6
E. coli	2	2	2	6
pH	1	1	1	3
Temperature	1	1	1	3
Dissolved Oxygen	1	1	1	3
Total	7	7	7	21

A summary of each sampling parameter and reading to be collected is provided in Table 6-2.

Table 6-2: Sampling Parameter Guidelines

Constituent	Sample Container	Sample Type	Sample Volume Required	Hold Time	Preservative	Analytical Method
Ammonia	Plastic/Glass	Grab	200 mL minimum	28 days	Sulfuric Acid	Method EPA 350.1 or Standard Methods 4500-NH ₃ D
E. coli	Plastic (sterile)	Grab	100 mL minimum	8 hours	Pre-sterilized bottle preserved with sodium thiosulfate	Multiple Tube Fermentation
pH	None (field measurement)	In-situ	N/A	N/A	None	Standard Methods 4500-H+
Temperature	None (field measurement)	In-situ	N/A	N/A	None	Direct read thermometer
Dissolved Oxygen	None (field measurement)	In-situ	N/A	N/A	None	Direct read DO meter

6.E SAMPLE LABELING AND CHAIN OF CUSTODY PROCEDURES

To ensure accuracy of data, all samples are properly documented with standardized sample identification and chain of custody procedures.

6.e.i Sample Labeling

- Grab samples must be identified by a sample label. Sample labels shall be completed for each sample, using waterproof ink. Sample tag/labels shall include:
 - Date: a six (6)-digit number indicating the year, month, day of collection
 - Time: a four (4)-digit number indicating military time of collection
 - Sample Location: sampling location description as Upstream, Source, Downstream, or Field Blank
 - Sampler(s): each sampler is identified
 - Parameter/preservative: the analysis to be conducted for the sample/sample preservation
- Photos or video of each sample location shall be taken and properly labeled with date, time and view direction. Photos and videos shall include relevant landmarks to identify sampling locations and their surroundings. In addition, a location map illustrating all sampling points shall be generated.

6.e.ii Chain of Custody

1. Possession of samples is recorded from the time the samples are collected until they are analyzed via a Chain of Custody form. A Surface Water Sample Chain of Custody Record is provided in Attachment B: Chain of Custody Forms and is to be completed for each sample. A sample is considered under your custody if:
 - a. It is in your possession
 - b. It is in your view, after being in your possession
 - c. It was in your possession and under your control to prevent tampering
 - d. It is in a designated secure area
2. As few people as possible should handle samples. The person taking the samples is personally responsible for the care and custody of the samples collected until they are transferred properly.
3. Samples are always accompanied by the Chain of Custody Record. When transferring the possession of the samples, the individuals relinquishing and receiving will sign, date, and note the time on the record.

6.F SAFETY CONSIDERATIONS

Safety of all BBARWA staff engaged in any fieldwork is of primary importance. Water quality sampling should only be performed if it is safe to do so and access to the surface water is not restricted. All staff should exercise extreme caution during all sampling procedures. Staff should never place themselves in dangerous or risky situations. Safety is paramount to complying with WDR requirements. Any hazards that are known by field personnel should be communicated to other members of the field crew.

Scenarios where monitoring may not be possible due to hazardous conditions may include, but are not limited to:

- Heavy rain, snow, or storm events
- Flooding around low-level areas
- Fast-moving water
- Slippery and/or steep stream banks
- Restricted access
- Heavy vegetation or poison oak
- Near aggressive wildlife or domestic animals

A buddy system shall be used by staff to maximize safety as appropriate when sample collection is required. When sampling is not possible due to safety considerations or restricted access, document the conditions in writing and with photos to include in the Technical Report.

The following safety guidelines apply to all sampling procedures:

- Sampling shall be postponed due to any hazardous condition.
- All staff shall use proper Personal Protective Equipment (PPE) as appropriate for the incident (e.g. gloves, goggles, life jacket, waders, etc.).
- Field sampling crew should consist of at least two (2) members unless otherwise approved by a supervisor.
- Be aware of wildlife and animals.
- Take necessary precautions to protect open body wounds using appropriate PPE.
- Do not sample at night unless otherwise approved by a supervisor.
- Do not trespass on private property or restricted public lands without prior permission and a written approval from the property owner.
- Avoid confrontation with strangers and be courteous of public concerns.
- Do not enter a stream if water is flowing too fast.

6.G FOLLOW UP SAMPLING

Sampling will be repeated every 24 hours until one (1) of the following criteria has been met:

- Both the ammonia and bacteria levels downstream are approximately equal to or less than the upstream levels.
- The concentration of ammonia is at or below that of the upstream sample, and the concentration of total coliform levels are below the applicable water quality objective for the appropriate beneficial use.
- The County Environmental Health Department or the Regional Water Board determines that sampling is no longer required.

7 EQUIPMENT AND CALIBRATION

7.A SAMPLING EQUIPMENT USED

The following sampling equipment is used by BBARWA:

- Sampling pole with fixed container
- Sampling pole with removable container
- Sampling pail and rope
- Portable pH and temperature probe
- Portable dissolved oxygen meter
- Duty Operator cell phone camera
- Grab-n-Go sampling kit containing:
 - Ice pack
 - Cooler
 - Waterproof pen
 - Sample labels
 - 9 sterile pint size plastic sample bottles preserved with sulfuric acid for ammonia analysis
 - 9 sterile 100 mL plastic sample bottles for bacterial analysis
- Personal protective equipment (PPE) including nitrile gloves and eye protection

7.B DECONTAMINATION PROCEDURES

All sampling equipment shall be cleaned to remove contaminants to reduce the risk of sample cross contamination, transfer of contaminants to clean areas, and prevents the mixing of incompatible substances.

The following decontamination procedures may be used as necessary:

- Physical removal
- Non-phosphate detergent wash
- Tap water rinse
- Distilled/deionized water rinse
- 10% nitric acid rinse
- Distilled/deionized water rinse
- Solvent rinse (pesticide grade)
- Air dry

7.C CALIBRATION AND RECORDKEEPING

A log sheet for BBARWA's DO meter, pH meter, and thermometer is required to maintain up-to-date calibration and maintenance records. The log sheet shall contain the following:

- Date
- Calibration Results
- Calibration Comments
- Initials of the individual calibrating the instrument

The calibration procedure must be followed per the manufacturer's recommended standard calibration operating procedure. The results must be recorded on the appropriate log sheet each time a piece of field equipment is used, with the date, time and name/initials of the person performing the calibration.

Any malfunction, difficulty calibrating or holding calibration shall be recorded in the log sheet and the instrument shall not be used to collect data. Steps should be taken to correct the problem in a timely manner. All equipment maintenance should be recorded in the log sheet indicating what was done to correct the problem, with the date and initials of the staff person that corrected the problem.

8 LAB SELECTION

8.A ANALYTICAL LAB

Ammonia samples collected for monitoring will be analyzed at BBARWA's laboratory. Samples for E. coli will be analyzed at Clinical Laboratory of San Bernardino, Inc. (Clinical). Both BBARWA's laboratory and Clinical are accredited through California Water Boards State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP).

8.B SAMPLE DELIVERY

All sampling hold times will be observed in accordance with Table 6-2. When samples are collected, arrangements shall be made with the receiving laboratory to coordinate delivery. Samples shall be transported to the laboratory by BBARWA staff and the Chain of Custody Record provided in Attachment B: Chain of Custody Forms shall be used.

8.C LAB CONTACT INFORMATION

For Ammonia:

Name (ELAP ID)	Big Bear Area Regional Wastewater Agency (ID 1828)
Contact Person	Nikki Crumpler or Kim Booth
Address	122 Palomino Drive/P.O. Box 517 Big Bear City, CA 92314
Hours Samples are Accepted	M-F 8:00 AM – 3:00 PM
Phone (Laboratory Direct Line)	(909) 584-4527 or (909)584-4533
Alternate Phone	(909) 584-4018

For E. coli Analyses:

Name (ELAP ID)	Clinical Laboratory of San Bernardino, Inc. (ID 686)
Address	21881 Barton Rd Grand Terrace, CA 92313
Hours Samples are Accepted	M-F 8:00 AM – 5:00 PM WKD/HOL 8:30 AM – 11:30AM
Phone	(909) 825-7693

9 TECHNICAL REPORT

BBARWA is responsible for preparation and submittal of an SSO Technical Report when 50,000 gallons or more of sewage is discharged to surface water. The Report includes a description of all water quality sampling activities conducted, a location map of all water quality sampling points, the analytical results, and evaluation of the results. The report must be submitted to the CIWQS Online SSO Database within 45 calendar days of the SSO end date.

The report shall include the following information to meet MRP requirements.

1. Introduction
 - a. Agency and system description
2. Causes and Circumstances of the SSO
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed, and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
3. Response to the SSO
 - a. Chronological narrative description of all actions taken by BBARWA to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response Plan and Facilities EAP were implemented to respond to and mitigate the SSO.
 - c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.
4. Water Quality Monitoring
 - a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
 - b. Detailed location map illustrating all water quality sampling points.
5. Conclusions

10 RECORDKEEPING

All sampling related records shall be contained in an SSO Incident file designated with a specific locator record number. These records shall include at least the following documents:

- A narrative description of water quality sampling activities associated with the event
- Timeline of the sampling activities until sampling is terminated
- All surface water sampling worksheets
- Computations of spill travel time, if applicable
- Chain of Custody for all samples
- Sampling Map of all sample locations
- All photos or video related to sampling activities
- Final analytical results from the certified laboratory conducting the sample analysis along with BBARWA's evaluation of the results to determine the nature and impact of the SSO
- Failure analysis review of the WQMP including recommendations for changes and modifications
- Notification documentation for all public and private agencies involved with or requiring monitoring related to final sample results

BBARWA shall maintain all SSO event records including any records from service contractors. These records shall be maintained for a minimum period of five (5) years from the end date of the SSO.

11 TRAINING

BBARWA includes surface water sampling training as part of their new employee and annual training program. WQMP training information is outlined in Table 11-1.

Table 11-1: Water Quality Monitoring Program Training Requirements

Training Parameter	Description
Personnel Required to Attend	All Operations Staff
Trainer Qualifications	Trainer shall demonstrate expertise in surface water sampling science, techniques, and documentation.
Training Curriculum	Shall include, at a minimum: <ul style="list-style-type: none">• Review of BBARWA's WQMP including forms and maps• Sampling technique, including hands on practice• Sampling equipment calibration, use, and decontamination procedures, including hands on practice• Safety procedures• Completion of the Sampling Equipment Calibration/Maintenance Log, Surface Water Sampling Worksheet, and Chain of Custody Form
Training Documentation	Employee training sign-in log
Training Frequency	<ul style="list-style-type: none">• Annually for all operations staff• New operations staff as part of initial training

12 UPDATE OF THE WQMP

The Plant Manager shall initiate reviews of the WQMP on a three-year basis in coordination with SSMP Audits, or more frequently as deemed appropriate by the Plant Manager. Reviews should confirm that information is current, classification responsibilities are applicable, appropriate forms are included, and necessary procedures are in place to respond to SSO events requiring water quality monitoring.

Consideration should be given to revising the WQMP based on BBARWA staff performance and testing laboratory performance after water quality monitoring occurs. Finally, compliance with the Regional Water Board Basin Plan should be confirmed with reviews. All changes shall be recorded and documented in the SSMP Supporting Document History (Appendix A of the SSMP), including the section being changed, a description of the changes, and the person(s) authorizing the changes

APPENDIX I: SPILL EMERGENCY RESPONSE PLAN (SERP)



BIG BEAR AREA REGIONAL WASTEWATER AGENCY

Spill Emergency Response Plan

JUNE 2023

Prepared by Water Systems Consulting, Inc



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6 Spill Emergency Response Plan

The purpose of the Spill Emergency Response Plan (SERP) is to support an effective response to sanitary sewer spills in order to minimize spill volumes and collect data to prevent future spills. The SERP provides guidelines for BBARWA personnel to follow in responding to, cleaning up, and reporting spills that may occur within the service area. This SERP is intended to satisfy the Statewide Sanitary Sewer Systems General Order WQ 2022-0103-DWQ, which requires wastewater collection agencies to have a Spill Emergency Response Plan and to review it annually.

This SERP provides an outline of spill emergency response procedures. Detailed response, notification, reporting, and monitoring procedures are found in the Appendices in the SSMP. The following table provides a summary of the attachments referenced in this SERP:

Appendix	Relevant Information
Appendix D: Staff Training Program	Spill training includes spill response training.
Appendix F: Emergency Action Plan	Spill prevention and contingency plan contains guidelines for operating to prevent a spill and other emergency operations.
Appendix G: Spill Volume Worksheet	Spill volume estimating techniques to be used during spill response.
Appendix H: Water Quality Monitoring Program	Contains water quality sampling guidelines for responding to spills that reach surface water.
Appendix J: Spill Notifications and Reporting	Contains spill response guidelines, templates, and contact information for notifications and reporting to be used during spill response.

6-1 Waste Discharge Requirements

This Spill Emergency Response Plan is required by the General Order WQ 2022-0103-DWQ (General Order) to include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State

- Comply with the notification, monitoring and reporting requirements in the General Order, State law and regulations, and applicable Regional Water Board Orders
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained
- Address emergency system operations, traffic control, and other necessary response activities
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State
- Remove sewage from the drainage conveyance system
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event
- Conduct post-spill assessments of spill response activities
- Document and report spill events as required by the General Order
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed

6-2 SSMP Program Implementation

BBARWA maintains a separate Emergency Action Plan (EAP) which provides procedures for responding to incidents at the WWTP or in the collection system (*Appendix F: Emergency Action Plan*). BBARWA continues to refine its EAP and completed its most recent update in October 2019. The EAP includes detailed procedures to respond to a spill, including procedures for high-flow operations at the WWTP or in the collection system to prevent spills from occurring. This Element of the SSMP, in combination with the EAP, meets the Spill Emergency Response Plan requirements of the SSS WDRs.

6-2.a Definitions

Spill Categories

The spill categories referred to in this plan include:

Category 1

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water;
or

- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

Category 2

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

Category 3

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill. All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Category 4

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

Other Definitions

Annual Report

An Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) is a mandatory report in which BBARWA provides a calendar-year update of its efforts to prevent spills.

Basin Plan

A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

Beneficial Uses

The term “Beneficial Uses” is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

California Integrated Water Quality System (CIWQS)

CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

Data Submitter

A Data Submitter is an individual designated and authorized by the Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System

Database. A Data Submitter does not have the authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

Drainage Conveyance System

A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

Exfiltration

Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

Flood Control Channel

A flood control channel is a channel used to convey stormwater and non-stormwater flows through and from areas for flood management purposes.

Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of the General Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)

Lateral

A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer’s building or property (residential, commercial, or industrial) to the main sewer line in a street or easement. Laterals are privately owned in BBARWA’s system.

Legally Responsible Official



A Legally Responsible Official is an official representative, designated by BBARWA, with authority to sign and certify submitted information and documents required by the General Order. The Legally Responsible Official must have responsibility over management of BBARWA's entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

BBARWA shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board.

Nuisance

A nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- 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;
- 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; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

Private Sewer Lateral

A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system. All laterals in BBARWA's collection system are privately owned.

Private Sanitary Sewer System

A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

Potential to Discharge, Potential Discharge

Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

Receiving Water



A receiving water is a water of the State that receives a discharge of waste.

Sanitary Sewer System

A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals operated by BBARWA;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

For purpose of the General Order, sanitary sewer systems include only systems owned and/or operated by BBARWA.

Sewage

Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system.

Spill

A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under the General Order if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

Training

Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with the General Order.

Wash Down Water

Wash down water is water used to clean a spill area.

Waste

Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Identification Number (WDID)



A waste discharge identification number (WDID) identifies each individual sanitary sewer system enrolled under the General Order. A WDID number is assigned to each enrolled system upon an approved regulatory coverage.

Waters of the State (WOTS)

Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

Waters of the United States (WOTUS)

Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

Water Quality Objective (WQO)

A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards' Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

6-2.b Initial Spill Notification

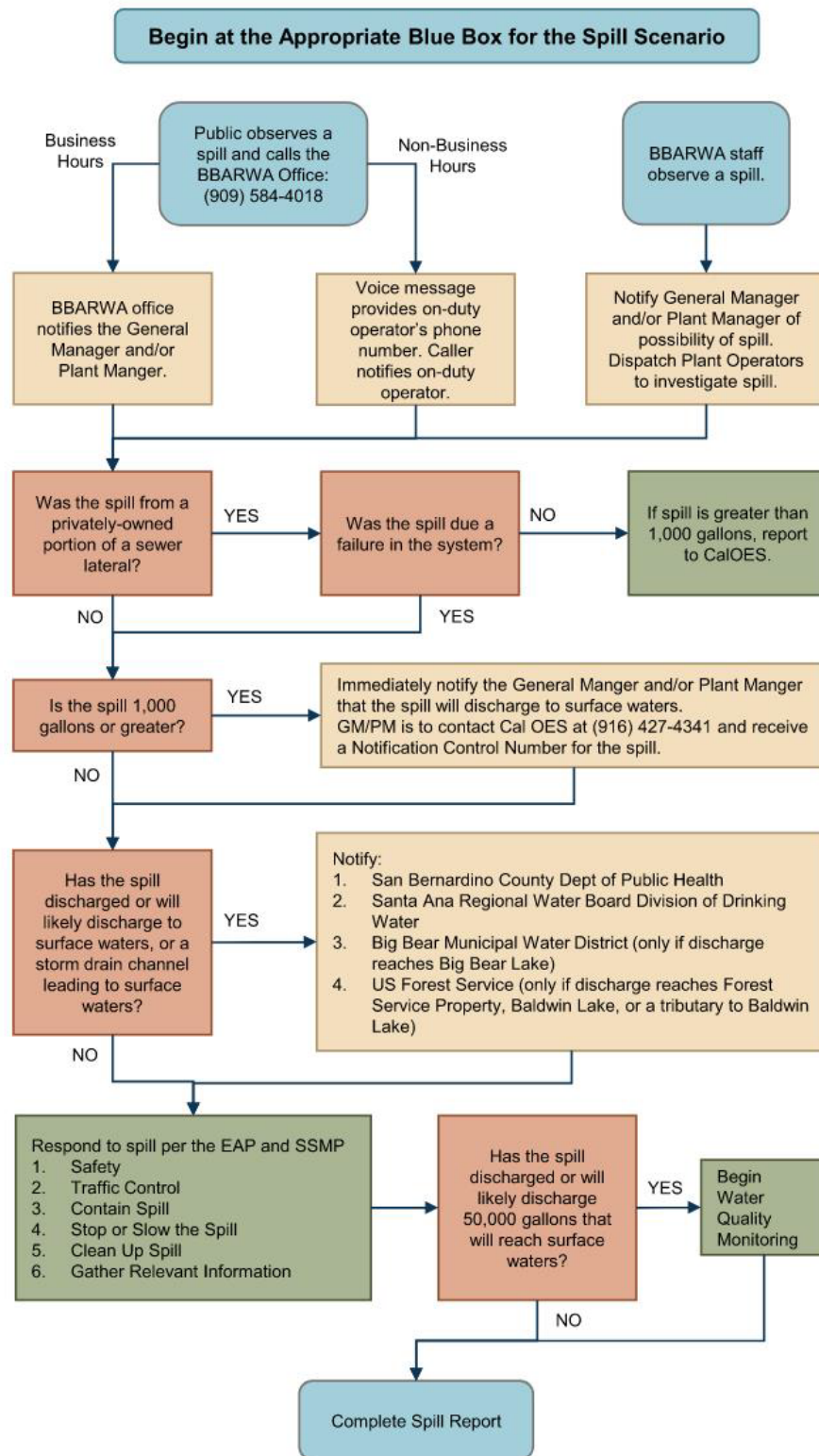
A spill may be detected by BBARWA employees or by others. The public can report a spill 24 hours a day, seven days a week by calling BBARWA's office at (909) 584-4018 or via BBARWA's website which includes a "Report-a-Spill" webpage (www.bbarwa.org/report-a-spill/#). Online spill notifications from the public immediately notify the Plant Manager, Plant Supervisor, and/or Designee by email. There are four (4) sanitary sewer agencies in the area, so it is possible that the notifier will contact the wrong agency regarding a spill. In this case, it is likely that the other agency would investigate the spill and then contact BBARWA if it determines the spill is from a BBARWA facility. For all spill notifications, BBARWA shall record the name, phone number, and time of call. For spill notifications received by member agencies, BBARWA shall record the name of the member agency employee, the time of the call, as well as the name, phone number, and time of the individual who first reported the spill. If the call is made after hours, a voice message provides the on-duty operator's phone number to the caller and directs the caller to contact the on-duty operator if the situation is an emergency.

Upon receiving notification of a spill, BBARWA will notify the appropriate health and first responder agencies in accordance with the General Order. The BBARWA employee first notified of the spill shall immediately notify the Plant Manager, General Manager, and/or Designee of the possibility of a spill, and operators shall be dispatched to confirm the spill and take corrective action as outlined in the EAP and discussed later in this Element. If the Plant



Manager, General Manager, and/or Designee is unavailable, the next highest ranked available employee shall be contacted and will take responsibility for the notification responsibilities.

Once a spill event is confirmed, the BBARWA operator that confirmed the event shall contact the Plant Manager, General Manager, and/or Designee by phone immediately or as soon as it is safe to do so. The operator is to inform the Plant Manager, General Manager, and/or Designee whether the spill has reached or will reach surface water or other drainage conveyance system and provide an estimate of volume spilled using *Appendix G: Spill Volume Worksheet*. If the spill is estimated to be over 1,000 gallons and will reach surface water or other drainage conveyance system leading to a surface water, the Plant Manager, General Manager, and/or Designee contacts the California Office of Emergency Services (Cal OES) and obtains a notification control number within two (2) hours of BBARWA first being notified of the spill. *Appendix J: Spill Notification and Reporting* provides notification procedures and up-to-date contact information for Cal OES and other agencies to be notified in the event of a spill. The figure below illustrates a flowchart of how the appropriate agencies are notified of spills from when they are first detected.



6-2.c Spill Response

The Spill Prevention and Contingency Plan section of BBARWA's EAP provides spill response procedures for spills due to lift station failure, gravity interceptor failure, force main failure, and high flows due to heavy rainfall. The EAP includes general spill response procedures that are applicable to spills in any area of the collection system, as well as specific procedures for failures at Pump Station #2, the Lake Pump Station, the Lake Interceptor Force Main, and the manhole at the intersection of Teal Drive and Fairway Boulevard (Manhole 21) which have the potential to experience capacity issues in heavy rainfall. The EAP summarizes the following spill response procedures: berm and containment, bypass operations, emergency storage solutions, correction, and emergency response. *Appendix J: Spill Notifications and Reporting* contains a guide for notification of regulatory agencies, documentation, and reporting. In addition, BBARWA maintains separate documents for procedures on traffic control and spill clean-up.

Traffic Control

BBARWA maintains a Traffic Control Safety Plan (TCSP) based on the California Temporary Traffic Control Handbook and California Manual of Uniform Traffic Control Devices. BBARWA operators receive initial TCSP training and use those procedures when controlling traffic around a spill discharge site. Traffic control procedures protect the public by restricting access to contaminated and unsafe areas.

Spill Clean-Up

For spill cleanup on roads or hard surfaces, operators use potable water and push brooms and shovels to clean the area. Wash down water is diverted to a nearby manhole if available. Vactor trucks may be rented if required. Granular pool grade chlorine is applied to the wash water to disinfect the surface. Spills on dirt surfaces are cleaned by using rakes and shovels to manually remove all debris and contaminated material from the site and dispose of in waste facilities.

6-2.d Water Quality Monitoring

The EAP and this SSMP include procedures to prevent wastewater discharges to surface water, and to minimize the severity of spills when they occur. In the event that 50,000 gallons of untreated sewage reach surface water, BBARWA will implement monitoring procedures in accordance with its Water Quality Monitoring Program (WQMP) to determine impacts to the surface water. The General Order requires that the WQMP include at a minimum the following:

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 Spill 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 18 hours of BBARWA becoming aware of the spill, require water quality sampling for, at a minimum, the following constituents:
 - a. Ammonia
 - b. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

BBARWA's WQMP is provided in *Appendix H: Water Quality Monitoring Program*. The WQMP outlines procedures for taking water quality samples including where samples need to be taken on surface water affected by spills, and what samples need to be taken to evaluate the spills impact on the waterway. The WQMP also identifies key surface waters within the watershed that could possibly receive spills and identifies their beneficial uses and key bacteriological indicators used for water quality monitoring as provided in the Santa Ana Regional Water Board Basin Plan (Basin Plan). According to the Basin Plan, *E. coli* is the appropriate bacteriological indicator for all waters in the Big Bear Valley that are impacted by a spill. BBARWA may also voluntarily choose to implement the WQMP for spills that are less than 50,000 gallons if they wish to monitor the effects of a spill for their own records, or at the request of a health agency.

6-2.e Spill Notifications

For all spills in public areas, the General Manager, Plant Manager, or Designee is to notify the Santa Ana Regional Water Board, the San Bernardino Office of California State Health Services, and the Department of Environmental Health Services of San Bernardino County. Additionally, the Big Bear Municipal Water District is to be notified if a spill discharges into Big Bear Lake, and the local U.S. Forest office is to be notified if a spill discharges into Baldwin Lake, a tributary of Baldwin Lake, or U.S. Forest Service property. Contact information for reporting to regulatory agencies is provided in *Appendix J: Spill Notifications and Reporting*.

6-2.f Spill Reporting

BBARWA will adhere to reporting requirements required by the General Order. BBARWA is responsible for preparing and submitting reports for spills in its system or from laterals if due to a failure in its system to the California Integrated Water Quality System (CIWQS) website (<http://ciwqs.waterboards.ca.gov/>). The LRO or Data Submitter is responsible for reporting spills to the CIWQS online database. BBARWA always has at least one LRO to perform this requirement. Information collected during a spill response can be found in the Spill Report in the EAP.

In accordance with the General Order, BBARWA maintains records for each sanitary sewer spill for at least five (5) years including:

- Documentation of response steps and/or remedial actions



- Photographic evidence to document the extent of the spill, field crew response operations, and site conditions after field crew spill response operations have been completed. The date, time, location, and direction of photographs taken will be documented.
- Documentation on how the estimations on the volume of discharged and/or recovered spill were calculated

BBARWA's LRO is responsible for certifying reports submitted to CIWQS in accordance with the timelines and information in the following tables.



Reporting Requirement	Category 1	Category 2	Category 3	Category 4	Lateral Spills
Draft Spill Report (DSR)	Within 3 business days of knowledge of a Category 1 spill, submit a Draft Spill Report to the CIWQS.	Within 3 business days of knowledge of a Category 2 spill, submit a Draft Spill Report to the CIWQS.	N/A	N/A	N/A
Certified Spill Report (CSR)	Within 15 calendar days of the spill end date, submit a Certified Spill Report for Category 1 spills, to the CIWQS. Upon completion of the Certified Spill Report, the CIWQS will issue a final spill event identification number.	Within 15 calendar days of the spill end date, submit a Certified Spill Report for the Category 2 spill, to the CIWQS. Upon completion of the Certified Spill Report, the online CIWQS will issue a final spill event identification number.	Within 30 calendar days after the end of the month in which the spills occurred, report and certify all Category 3 spills to the CIWQS. After the Legally Responsible Official certifies the spills, the CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.	Within 30 calendar days after the end of the month in which the spills occurred, report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the CIWQS.	N/A
Annual Certified Spill Report (ACSR)	N/A	N/A	N/A	Annually upload and certify a report, of all recordkeeping of Category 4 and lateral spills to the CIWQS, by February 1st after the end of the calendar year in which the spills occurred.	
Spill Technical Report (STR)	Within 45 calendar days of the spill end date, for any spill in which 50,000 gallons or greater discharged into a surface water, submit a Spill Technical Report to the online CIWQS Database.	N/A	N/A	N/A	N/A
Amended Certified Spill Report	Within 90 calendar days of the spill end date, update or add additional information to a Certified Spill Report within 90 calendar days of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. Certify the amended report. After 90 calendar days , contact the State Water Board to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.			N/A	N/A
No Spills, Category 4 Spills, Non-Category 1 Lateral Spills Certification	Within 30 calendar days after the end of each calendar month, certify either a “No-Spill” statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” statement in the CIWQS. Applicable if either (1) no spills occur during a calendar month or (2) only Category 4, and/or BBARWA- operated lateral spills (that do not discharge to a surface water) occur during a calendar month.				
Annual Report	By April 1 of each year , update the previous year’s Annual Report, by April 1 of each year after the Effective Date of this General Order, for each calendar year (January 1 through December 31). The Legally Responsible Official shall certify the Annual Report				

Note: In the event that the CIWQS online database is not available, notify the State Water Resources Control Board (SWRCB) by phone or email and provide required information until the CIWQS online database becomes available. For reporting purposes, if one spill event results in multiple appearance points, complete one spill report in the CIWQS Online Database, and report the location of the failure point, blockage or location of the flow condition that caused the spill, in the CIWQS Online Database, including all the discharge points associated with the spill event.

Reporting Requirement	Category 1		Category 2		Category 3	Category 4	Category 4 / Lateral Spills
	DSR	CSR	DSR	CSR	MCSR	MCSR	ACSR
Contact information: Name and telephone number of contact person to respond to spill-specific questions	X		X		X		X
Spill location name	X		X		X		X
Date and time BBARWA was notified of, or self-discovered, the spill	X		X		X		
Operator arrival time	X		X		X		
Estimated spill start date and time	X		X		X		X
Date and time California Office of Emergency Services was notified, and the assigned control number	X		X				
Description, photographs, and GPS coordinates of the system location where the spill originated							
o If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field	X		X		X		X
Estimated total spill volume exiting the system	X		X		X	X	X
Description and photographs of the extent of the spill and spill boundaries	X		X		X		
Did the spill reach a drainage conveyance system? If Yes:							
o Description of the drainage conveyance system transporting the spill							
o Photographs of the drainage conveyance system entry location(s)							
o Estimated spill volume fully recovered from the drainage conveyance system	X		X		X		X
o Estimated spill volume remaining within the drainage conveyance system							
o Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable							
Description and photographs of all discharge point(s) into the surface water.	X						
Estimated spill volume that discharged to surface waters.	X						
Estimated total spill volume recovered.	X		X		X		
Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill		X		X	X		
Spill end date and time		X		X	X		
Description of how the spill volume estimations were calculated, including at a minimum:							
o The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered)		X		X	X		X
o The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time							
Spill cause(s) (for example, root intrusion, grease deposition, etc.)		X		X	X		X
System failure location (for example, main, lateral, pump station, etc.)		X		X	X		X
Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location		X		X	X		



Reporting Requirement

Reporting Requirement	Category 1		Category 2		Category 3	Category 4	Category 4 / Lateral Spills
	DSR	CSR	DSR	CSR	MCSR	MCSR	ACSR
Description of the impact of the spill		X		X	X		
Whether or not the spill was associated with a storm event		X		X	X		
Description of spill response activities including description of immediate spill containment and cleanup efforts		X		X	X		X
Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps		X		X			
Spill response completion date		X		X	X		
Detailed narrative of investigation and investigation findings of cause of spill		X		X	X		
Reasons for an ongoing investigation (as applicable) and the expected date of completion		X		X	X		
Name and type of receiving water body(s)		X					
Description of the water body(s), including but not limited to:							
o Observed impacts on aquatic life							
o Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill		X					
o Responsible entity for closing/restricting use of water body							
o Number of days closed/restricted as a result of the spill							
Whether or not the spill was located within 1,000 feet of a municipal surface water intake		X		X			
If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected		X					
Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:							
o Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable							
o Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:							
• Adjusted schedule/method of preventive maintenance						X	X
• Planned rehabilitation or replacement of sanitary sewer asset							
• Inspected, repaired asset(s), or replaced defective asset(s)							
• Capital improvements							
• Documentation verifying immediately implemented system modifications and operating/maintenance modifications							
Total number of spills							X

Annual Report

In addition to reporting individual spills as outlined in the table above, BBARWA must update their previous year's Annual Report, by April 1 of each year. The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The LRO shall certify the Annual Report as instructed in CIWQS.

The Annual Report must address, and update as applicable, the following items:

- Population served
- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted
- Number of system operation and maintenance staff:
 - Entry level (less than two years of experience)
 - Journey level (greater than two years of experience)
 - Supervisory level
 - Managerial level
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
 - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V)
- System information:
 - Miles of system gravity and force mains
 - Number of upper and lower service laterals connected to system
 - Estimated number of upper and lower laterals owned and/or operated by BBARWA
 - Portion of laterals that is BBARWA's responsibility
 - Average age the major components of system infrastructure
 - Number and age of pump stations
 - Estimated total miles of the system pipeline not accessible for maintenance
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste
- Name of satellite sewer system tributaries
- Number of system's gravity sewer above or underground crossings of water bodies throughout system
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods)
- System Performance Evaluation
- Major spill causes (for example, root intrusion, grease deposition)
- System infrastructure failure points (for example, main, pump station, lateral, etc.)

- Ongoing spill investigations
- Actions taken to address system deficiencies

6-2.g Post-Spill Assessment

The objective of the post-spill assessment is to determine the cause of the spill and to identify corrective action(s) needed that will reduce or eliminate future potential for the spill to recur.

Appendix J: Spill Notifications and Reporting contains a form to guide the post-spill assessment process. Every spill event is an opportunity to evaluate the response and reporting procedures. Each event is unique, with its own elements and challenges including volume, cause, and location.

As soon as possible after a Category 1 or Category 2 spill event, all of the responders, should meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future spill events. The results of the debriefing should be documented to ensure the action items are used to update the SERP during the annual review and update.

6-2.h Training

BBARWA holds a mandatory EAP training seminar annually for all BBARWA employees to ensure that all operators and staff are prepared to properly respond to spills and other possible emergencies. The EAP training includes emergency support procedures, high-flow operations and spill prevention measures, sewage spill response, and sewage spill reporting. BBARWA also holds annual training for its operators on safety while working near water, traffic control procedures, and BBARWA's Storm Water Pollution Prevention Plan (SWPPP), which assist in spill response activities and water quality monitoring. A list of BBARWA training activities is provided in *Appendix D: Staff Training Program*.

6-2.i Annual SERP Review

This document will be reviewed annually and assessed for effectiveness. Findings documented in the spill reports and post-spill assessments will be incorporated into the SERP. The following log provides a summary of the findings and updates made from yearly reviews:

REVIEW - MONTH, YEAR	EFFECTIVENESS FINDINGS	UPDATES

APPENDIX J: SPILL NOTIFICATIONS AND REPORTING



BIG BEAR AREA REGIONAL WASTEWATER AGENCY

Spill Notifications and Reporting

JUNE 2023

Prepared by Water Systems Consulting, Inc



Spill Response

This document is intended to be used as a field resource to document spill characteristics, spill response actions, and agency/vendor notifications for BBARWA records and reporting to regulatory agencies.

INDIVIDUAL

CHAIN OF CUSTODY

Operations Staff:

Print Name:

Initial:

Date:

Time:

General Manager / Plant Manger:

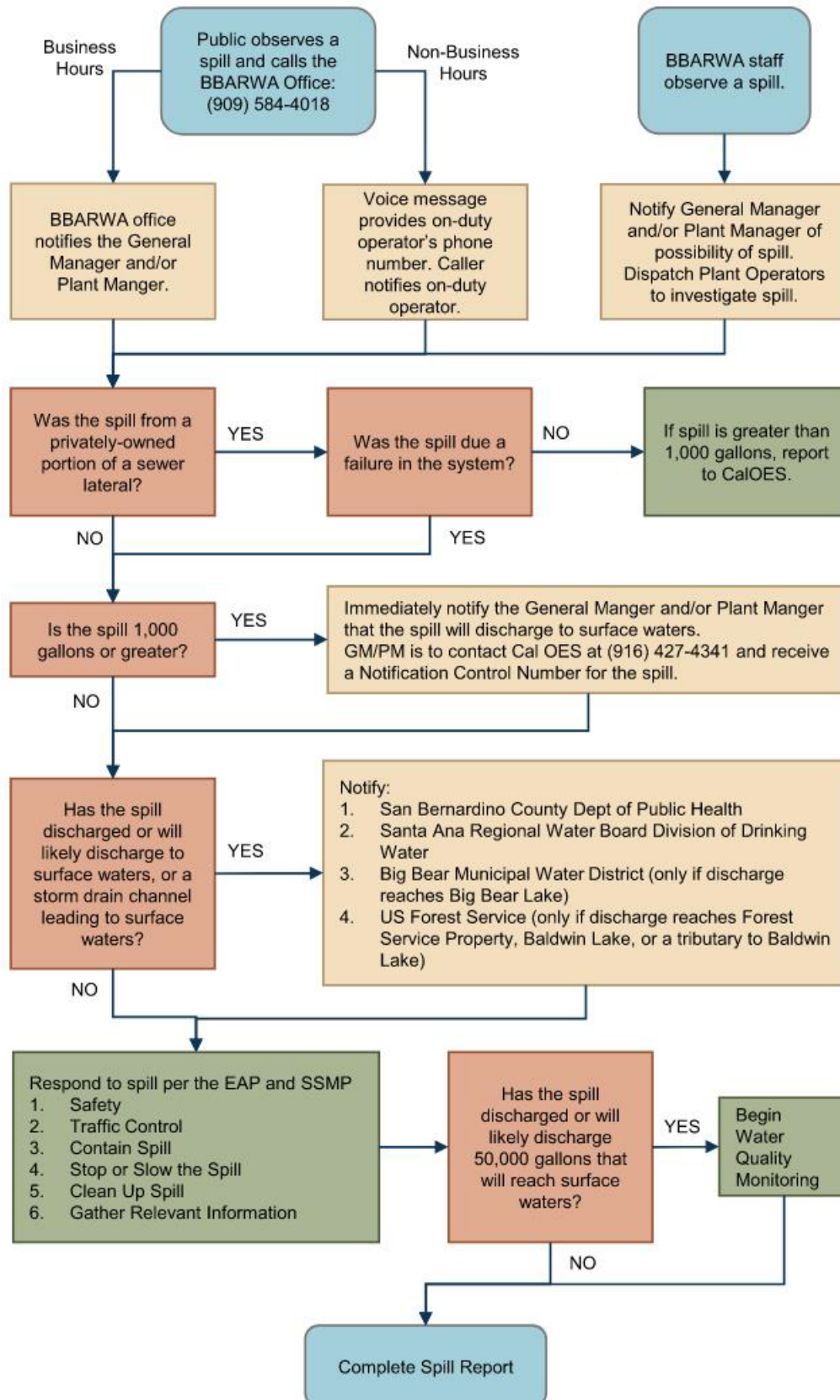
Print Name:

Initial:

Date:

Time:

Begin at the Appropriate Blue Box for the Spill Scenario



Definitions of Spill Categories

Category	Definition
Category 1	<p>A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:</p> <ul style="list-style-type: none">• A surface water, including a surface water body that contains no flow or volume of water; or• A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly. <p>Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.</p> <p>A spill from a BBARWA-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.</p>
Category 2	<p>A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.</p> <p>A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.</p>
Category 3	<p>A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.</p> <p>A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.</p>
Category 4	<p>A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.</p> <p>A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.</p>

Spill Reporting and Notifications

Reporting Requirement	Category 1	Category 2	Category 3	Category 4	Lateral Spills
Draft Spill Report (DSR)	Within 3 business days of knowledge of a Category 1 spill, submit a Draft Spill Report to the CIWQS.	Within 3 business days of knowledge of a Category 2 spill, submit a Draft Spill Report to the CIWQS.	N/A	N/A	N/A
Certified Spill Report (CSR)	Within 15 calendar days of the spill end date, submit a Certified Spill Report for Category 1 spills, to the CIWQS. Upon completion of the Certified Spill Report, the CIWQS will issue a final spill event identification number.	Within 15 calendar days of the spill end date, submit a Certified Spill Report for the Category 2 spill, to the CIWQS. Upon completion of the Certified Spill Report, the online CIWQS will issue a final spill event identification number.	Within 30 calendar days after the end of the month in which the spills occurred, report and certify all Category 3 spills to the CIWQS. After the Legally Responsible Official certifies the spills, the CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.	Within 30 calendar days after the end of the month in which the spills occurred, report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the CIWQS.	N/A
Annual Certified Spill Report (ACSR)	N/A	N/A	N/A	Annually upload and certify a report, of all recordkeeping of Category 4 and lateral spills to the CIWQS, by February 1st after the end of the calendar year in which the spills occurred.	
Spill Technical Report (STR)	Within 45 calendar days of the spill end date, for any spill in which 50,000 gallons or greater discharged into a surface water, submit a Spill Technical Report to the online CIWQS Database.	N/A	N/A	N/A	N/A
Amended Certified Spill Report	Within 90 calendar days of the spill end date, update or add additional information to a Certified Spill Report within 90 calendar days of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. Certify the amended report. After 90 calendar days , contact the State Water Board to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.			N/A	N/A
No Spills, Category 4 Spills, Non-Category 1 Lateral Spills Certification	Within 30 calendar days after the end of each calendar month, certify either a "No-Spill" statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" statement in the CIWQS. Applicable if either (1) no spills occur during a calendar month or (2) only Category 4, and/or BBARWA-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month.				
Annual Report	By April 1 of each year , update the previous year's Annual Report, by April 1 of each year after the Effective Date of this General Order, for each calendar year (January 1 through December 31). The Legally Responsible Official shall certify the Annual Report				

Note: In the event that the CIWQS online database is not available, notify the State Water Resources Control Board (SWRCB) by phone or email and provide required information until the CIWQS online database becomes available. See contact information on Side B. For reporting purposes, if one spill event results in multiple appearance points, complete one spill report in the CIWQS Online Database, and report the location of the failure point, blockage or location of the flow condition that caused the spill, in the CIWQS Online Database, including all the discharge points associated with the spill event.

Spill Report

A. SPILL LOCATION (ALL SPILLS)

Spill Location Name:

Latitude Coordinates:

Longitude Coordinates:

If multiple appearance points, use the GPS coordinates for the location of the spill appearance point closest to the failure point/blockage.

Street Name and Number:

Nearest Cross Street:

County:

City:

Zip Code:

Spill Location Description:

System Location Where Spill Originated:

B. SPILL OCCURING TIME (ALL SPILLS)

Was spill reported to or discovered by BBARWA?

Spill Reported to/Discovered by BBARWA

Date:

Time:

Sewer Crew/Operator Arrived

Date:

Time:

Estimated Spill Start

Date:

Time:

Estimated Spill End

Date:

Time:

Describe how the spill was reported to / discovered by the BBARWA:

Please list name and contact information for person who discovered spill:

Attach documentation including assumptions and type of data used for estimation of spill start and end times.

C. SPILL CATEGORIZATION (ALL SPILLS)

Answer the questions below to determine spill Category then, find appropriate forms to fill out for that Category of spill.

Did the spill reach surface water and/or a drainage channel? ☐ YES (Category 1) ☐ NO

Did the spill reach a drainage conveyance system? ☐ YES ☐ NO

If the spill reached a drainage conveyance system, was it fully captured and returned to the Sanitary Sewer? ☐ YES ☐ NO (Category 1)

Was this spill from a private lateral? ☐ YES ☐ NO

If from a private lateral, was the spill likely due to failure in the system? ☐ YES ☐ NO

Use the spill estimation worksheet to estimate the following:

Total Spill Volume (gal):

Spill Category (based on information above, select a spill category):

- ☐ **Category 1:** A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:
- A surface water, including a surface water body that contains no flow or volume of water; or
 - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from an Enrollee owned and/or operated lateral that discharges to a surface water is a Category 1 spill

- ☐ **Category 2:** A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- ☐ **Category 3:** A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- ☐ **Category 4:** A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

- ☐ **Non-Category 1-4 Private Lateral Spill**

Property Owner/Resident Contact Information:

☐ Building/Structure ☐ Force Main ☐ Gravity Sewer ☐ Pump Station ☐ Lateral

☐ AirVac or Blow-Off ☐ Other Sewer System Structure (*i.e.* cleanout):

☐ Manhole – ID#: _____ ☐ Other: _____

☐ Main ☐ Lateral ☐ Private Lateral ☐ MH or Vault ☐ AirVac or Blow-Off

☐ Other:

☐ Debris/Blockage ☐ Flow Exceeded Capacity ☐ Grease ☐ Operator Error ☐ Roots
☐ Pipe problem/failure ☐ Pump station failure ☐ Rainfall Exceeded Design ☐ Vandalism
☐ Inflow/Infiltration ☐ Animal Carcass ☐ Electrical Power Failure ☐ Bypass
☐ Pressure Bypass ☐ Debris From Laterals ☐ Construction Debris ☐ Contractor Error
☐ Flow-Through Bypass (MH) ☐ Other:

Spill Rate when Discovered (*gallons/minute*):

Total Spill Volume:	Spilled: gal	Recovered: gal
Volume Reached Drainage Conveyance System	Spilled: gal	Recovered: gal
Volume Discharge to Land	Spilled: gal	Recovered: gal

☐ Eyeball ☐ Photo Comparison ☐ Upstream Connections ☐ Area/Volume
☐ Lower Lateral ☐ Other:

☐ Cleaned Up ☐ Contained All/Portion of Spill ☐ CCTV Inspection ☐ Restored Flow

☐ Returned All/Portion of Spill to Sanitary Sewer ☐ Other: _____

D. SPILL RECORD (CATEGORY 4 OR LATERAL SPILL)

Spill Corrective Actions:

- ☐ Local regulatory enforcement action taken against the sewer lateral owner
- ☐ System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location

Describe Corrective Actions:

Inventory (:

Take inventory, pictures, and notes of all property damaged by spill. Pictures should show the extent of the spill. (Get occupant’s signature on the list).

Item	Description of Damage

F. CAUSE OF SPILL (CATEGORY 1, 2, OR 3)**Location of Failure:**

- ☐ Main ☐ Lateral ☐ Private Lateral ☐ MH or Vault ☐ AirVac or Blow-Off
☐ Other:

Spill Cause(s) (check all that apply):

- ☐ Debris/Blockage ☐ Flow Exceeded Capacity ☐ Grease ☐ Operator Error ☐ Roots
☐ Pipe problem/failure ☐ Pump station failure ☐ Rainfall Exceeded Design ☐ Vandalism
☐ Inflow/Infiltration ☐ Animal Carcass ☐ Electrical Power Failure ☐ Bypass
☐ Pressure Bypass ☐ Debris From Laterals ☐ Construction Debris ☐ Contractor Error
☐ Flow-Through Bypass (MH) ☐ Other:

Was this spill event associated with a storm event?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Diameter (inches) of pipe at point of blockage/spill cause (IA):	
Sewer pipe material at point of blockage/spill cause (IA):	
Estimated age of sewer asset at the point of blockage or failure (IA):	
Description of terrain surrounding point of blockage/spill cause:	
<input type="checkbox"/> Flat <input type="checkbox"/> Mixed <input type="checkbox"/> Steep <input type="checkbox"/> Under Body of Water	
Describe the impact of the spill:	

G. SPILL RESPONSE (CATEGORY 1, 2, 3)**Spill Response Activities (check all that apply):**

- ☐ Cleaned Up ☐ Contained All/Portion of Spill ☐ CCTV Inspection ☐ Restored Flow
☐ Returned All/Portion of Spill to Sanitary Sewer ☐ Other:

Spill Response Completed:**Date:****Time:**

Any ongoing investigation?☐ YES ☐ NO

Were health warnings posted?☐ YES ☐ NO

If yes, provide health warning/closure posting/details:

Describe all spill response activities including immediate spill containment, damage mitigation, public contact prevention, odor control, and cleanup efforts:

Recommended Corrective Actions:

G. SPILL RESPONSE (CATEGORY 1, 2, 3)

List all agency personnel involved in the response:

Name	Title	Role
------	-------	------

H. WATER QUALITY (CATEGORY 1)

Photograph receiving surface water including any observed waterbody bank erosion, floating matter, water surface sheen, discoloration of water, impact to water, etc. Attach photos to this report.

Visual Inspection – Result of Impacted Waters (IA):

Any fish killed?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Any ongoing investigation?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Were health warnings posted?	<input type="checkbox"/> YES <input type="checkbox"/> NO

If yes, provide health warning/closure posting/details:

Were sample(s) of impacted water collected?	<input type="checkbox"/> YES <input type="checkbox"/> NO
---	--

Which samples of the impacted waters were collected and what analyses were performed?

- ☐ A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
 Location:
- ☐ A point in the receiving water where sewage initially enters the receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
 Location:
- ☐ A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
 Location:
- ☐ A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.
☐ Ammonia ☐ Bacteria ☐ DO ☐ pH ☐ Temp
☐ Other(s):
 Location:

When were initial samples collected?	Date:	Time:
Estimate travel time from spill source to receiving water/point of entry into storm water system:		
Estimate travel time from point of entry of storm water system to surface water body (IA):		

I. NOTIFICATION DETAILS (COMPLETE FOR SPILLS 1,000 GAL OR GREATER)

Spill Reporting and Notifications

[illegible]

Call CalOES at (800) 852-7550 and report the following within 2 hours of awareness of spill:

- ☐ Name and phone number of BBARWA employee notifying CalOES
 - ☐ Estimated total spill volume (gallons)
 - ☐ Estimated spill rate from system (gallons/minute)
 - ☐ Estimated discharge rate directly into waters of the State or a drainage system leading to waters of the State (gallons/minute)
 - ☐ Spill incident description including a brief narrative of the spill event and spill incident location (address, city, and zip code) and closest cross streets and/or landmarks
 - ☐ Name and phone number of contact person on-scene
 - ☐ Date and time the BBARWA was informed of the spill event
 - ☐ Name of sanitary sewer system causing the spill
 - ☐ Spill cause or suspected cause (if known)
 - ☐ Amount of spill contained
 - ☐ Name of receiving water body receiving or potentially receiving discharge
 - ☐ Description of water body impact and/ or potential impact to beneficial uses
-

Assigned Control Number:

J. DAMAGE INVENTORY (SPILL AFFECTED PRIVATE PROPERTY)

Take inventory, pictures, and notes of all property damaged by spill. Pictures should show the extent of the spill. (Get occupant's signature on the list).

Item	Description of Damage

K. SPILL COST**Labor:**

Name	Hours	\$/Hour	Total Cost
Equipment Subtotal:			

Equipment:

Item	Hours	\$/Hour	Total Cost
Equipment Subtotal:			

Materials:

Item	Number	\$/Item	Total Cost
Equipment Subtotal:			

To be completed by the Plant Manager or General Manager

L. SYSTEM FAILURE ANALYSIS

Incident Report #:

Prepared By:

Spill Information

Event Date & Time:

Address:

Volume Spilled:

Volume Recovered:

Cause(s):

Summary of Historical Spills/Service Calls/Other

Date:

Cause(s):

Date Last Cleaned:

Crew:

Records Reviewed By:

Records Review Date:

Summary of CCTV Information

CCTV Inspection Date:

CCTV Review Date:

Inspection Tape Name/Number:

CCTV Inspection Tape Reviewed By:

Observations:

L. SYSTEM FAILURE ANALYSIS

Recommendations

- ☐ No Changes or Repairs Required
- ☐ Maintenance (One Time)
- ☐ Maintenance (Recurring)
- ☐ Repair (Location and Type)
- ☐ Add to Capital Improvement Rehabilitation/Replacement List

Describe Recommendations:

General Manager / Plant Manger Review

Signature:

Date:

Notifications

Use the flowchart and category determination sections in this document to determine if mandatory reporting agencies should be contacted. Additional contacts are provided to be used as required.

Authorized Personnel

The following personnel are Legally Responsible Officials (LROs) and are authorized to electronically sign and certify Spill reports in CIWQS:

Name	Job Title	Telephone	
David Lawrence	General Manager	Daytime:	(909) 584-4018
		Cellular:	(818) 581-1561
John Shimmin	Plant Manager & Health and Safety Coordinator	Daytime:	(909) 584-4520
		Cellular:	(760) 808-1256

Additionally, the following personnel are Data Submitters and are authorized to report spill data to CIWQS:

Name	Job Title	Telephone	
Kim Booth	Laboratory Technician	Daytime:	(909) 584-4533

Mandatory Reporting Agencies

AGENCY	ADDRESS	PHONE NUMBER
California Office of Emergency Services	3650 Shriver Ave. Mather, CA. 95655	(916) 845-8911
California Regional Water Quality Control Board Colorado River Basin, Region VII	73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260	(760) 346-7491
California Regional Water Quality Control Board Santa Ana Region	3737 Main Street, Suite 500 Riverside, CA 92501-3348	(909) 782-4130
State Department of Health Division of Drinking Water and Field Operations	464 W. 4th Street, Room 437 San Bernardino, CA 92401	(909) 383-4328
Department of Environmental Health Services	385 N. Arrowhead Avenue San Bernardino, CA 92415-0160	(800) 472-2376 (800) 442-2283 (24 hr)
Big Bear Municipal Water District	P.O. Box 2863 Big Bear Lake, CA 92315	(909) 866-5796
U. S. Forest Service, Big Bear Ranger District	P.O. Box 290 Fawnskin, CA 92333	(909) 866-3437

Notifications Record

Date of Event:

Type of Event:

Report Number (if applicable):

Name of person contacting listed agency(s):

AGENCY	PHONE # OR EMAIL	DATE NOTIFIED	TIME NOTIFIED	CONTACT PERSON/ MESSAGE LEFT

Utility Agencies

AGENCY	PHONE NUMBER OR EMAIL
BIG BEAR CITY COMMUNITY SERVICES DISTRICT	(909) 585-2565 Emergency After-Hours: (909) 585-2567
<u>Sewer Department</u> Nathan Zamorano	(909) 584-4007 Cell: (909) 936-4428
<u>Water Department</u> Jerry Griffiths	(909) 584-4008 Cell: (909) 936-3372
CITY OF BIG BEAR LAKE	Public Works Main Office: (909) 866-7521
<u>Sewer Department</u> Jason Watterson	(909) 633-2565
<u>Streets Department</u> Ryan Dorsett	(909) 866-5831
SAN BERNARDINO COUNTY WATER AND SANITATION	24-Hour Emergency (760) 955-9885 or (800) 554-0565
BIG BEAR MUNICIPAL WATER DISTRICT	Business: (909) 866-5796 After-Hours Emergency: (909) 838-2967
General Manager – Jared Cheek	(909) 712-6019
West Ramp	(909) 866-2917
East Ramp	(909) 866-5200
BEAR VALLEY ELECTRIC	(909) 866-4678
SOUTHWEST GAS	(909) 366-4868 Emergency: (877) 860-6020
VERIZON	(800) 483-2000

Water Providers and Drainage Conveyance Agencies

AGENCY	PHONE NUMBER OR EMAIL

Other Agencies

AGENCY(S)	PHONE NUMBER OR EMAIL
San Bernardino County Sheriff	(909) 866-0100
Big Bear Fire Authority	(909) 866-7566

BBARWA Staff

BBARWA STAFF		PHONE NUMBER OR EMAIL	
PRIMARY CONTACTS			
General Manager	Daytime:	(909) 584-4018	
David Lawrence	Cellular:	(818) 581-1561	
Plant Manager & Health and Safety Coordinator	Daytime:	(909) 584-4520	
John Shimmin	Cellular:	(760) 808-1256	
Plant Supervisor	Daytime:	(909) 584-4018	
Troy Bemisdarfer	Cellular:	(909) 520-2835	
Duty Operator (7-day rotating schedule)	Cellular:	(909) 261-6645	
OPERATORS			
Brent Berg – Operator II	Cellular:	(909) 261-6876	
Ryan Connelly – Operator II	Cellular:	(951) 692-2423	
Ralph Curiel – Operator II	Cellular:	(909) 437-5573	
Sam Essex – Operator II	Cellular:	(858) 361-2564	
Chris Santillan – Operator II	Cellular:	(909) 240-7329	
Tyler Westplat – Operator II	Cellular:	(909) 727-4382	
OTHER CONTACTS			
Christine Bennett – Finance Manager	Cellular:	(909) 744-4296	
Kimberly Booth – Laboratory Technician	Cellular:	(909) 573-4148	
Bridgette Burton – Admin. Services Manager/Board Sec.	Cellular:	(909) 744-4843	
Nikki Crumpler – Senior Lab Analyst	Cellular:	(909) 856-8051	
Sonja Kawa – HR/Accounting Tech	Cellular:	(909) 815-7870	

Cleanup Contractors / Equipment Rental

COMPANY	PHONE NUMBER OR EMAIL	
LOCAL CONTRACTORS		
Ludecke Electrical Service	(909) 866-1900	
Roman's Construction	(909) 866-4270	
Ken Willis Construction, Inc.	(909) 641-3644	
Bear Valley Paving	(909) 866-4746	
Mile High Equipment	(909) 866-6642	
NON-B HAZARDOUS PUMPERS		
Connelly Pumping Services	(909) 584-9365 or (909) 556-1120 or (909) 709-5091	
Big Bear Disposal, Inc.	(909) 866-3942	
Roman's Construction	(909) 866-4270	
Ken Willis Construction, Inc.	(909) 641-3644	
HAZARDOUS WASTE HAULERS (EPA NUMBER CA 100006264508245)		
Asbury Environmental	(800) 322-8882	
HazMat Trans (Mike Hammer)	(909) 889-5607	
GENERATORS		
Quinn Company - Generator Division	(951) 683-5960	
GENERATOR REPAIR/TROUBLE		
Johnson Power Systems, Generator Division	(909) 683-5960	
Harbor Diesel and Equipment, Inc.	(562) 591-5665	
Valley Power Systems	(661) 979-7956	
Energy Link	(661) 765-4444	Cell: (626) 826-4320
ELECTRICAL MOTOR REPAIR		
Sulzer	(909) 825-7971 x 118	
PUMP SALES AND REPAIRS		
John Lisee	(562) 927-2623	
Cortech Engineering	(714) 779-0911	
Energy Link	(661) 765-4444	Cell: (626) 826-4320
STORAGE TANKS		
Rain for Rent	(800)-742-7246	
VEHICLE / EQUIPMENT RENTAL		
Twin Bear Equipment Rentals	(909) 585-2888	
ELECTRICIAN		
Skyview Electric (Ryan Abeln)	(909) 585-3631	
Gierlich-Mitchell, Inc.	(714) 236-6070	
Mark Burnett Electronics	(909) 316-5473	
SPECIALTY PIPE AND MANHOLE REPAIR		
Sancon	(714) 891-2323	
MECHANICAL REPAIR		

Spill Reporting and Notifications

COMPANY	PHONE NUMBER OR EMAIL
Bear Valley Paving (JP)	(909) 866-4746
WELDING/FABRICATION	
Bear Valley Paving (JP)	(909) 866-4746
HYDRO AND TV	
Houston & Harris PCS, Inc.	(909) 686-4241

APPENDIX K: SANITARY SEWER SYSTEM WASTE DISCHARGE REQUIREMENTS

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
ORDER WQ 2022-0103-DWQ
STATEWIDE WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.

This Order shall become effective **180 days after the Adoption Date of this General Order**, on June 5, 2023.

The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

This General Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, protect the Enrollee from liability under federal, state, or local laws, nor create a vested right for the Enrollee to continue the discharge of waste.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

AYE: Chair E. Joaquin Esquivel
Vice Chair Dorene D'Adamo
Board Member Sean Maguire
Board Member Laurel Firestone
Board Member Nichole Morgan

NAY: None

ABSENT: None

ABSTAIN: None

 for

Jeanine Townsend
Clerk to the Board

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

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STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

1. INTRODUCTION

This General Order regulates sanitary sewer systems designed to convey sewage. For the purpose of this Order, a sanitary sewer system includes, but is not limited to, pipes, valves, pump stations, manholes, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks. A sanitary sewer system includes:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. Sewage contains high levels of suspended solids, non-digested organic waste, pathogenic bacteria, viruses, toxic pollutants, nutrients, oxygen-demanding organic compounds, oils, grease, pharmaceuticals, and other harmful pollutants.

For the purpose of this General Order, a spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). Through this General Order, the State Water Board requires an Enrollee to:

- Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States;
- Comply with specifications, and notification, monitoring, reporting and recordkeeping requirements in this General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies;
- Proactively operate and maintain resilient sanitary sewer systems to prevent spills;
- Eliminate discharges of sewage to waters of the State through effective implementation of a Sewer System Management Plan;
- Monitor, track, and analyze spills for ongoing system-specific performance improvements; and
- Report noncompliance with this General Order per reporting requirements.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one (1) mile or less in length where the State Water Board or a Regional Water Board requires regulatory coverage under this Order; or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Board or a Regional Water Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

For the purpose of this Order, a sanitary sewer system includes only systems owned and/or operated by the Enrollee.

2. REGULATORY COVERAGE AND APPLICATION REQUIREMENTS

2.1. Requirements for Continuation of Existing Regulatory Coverage

To continue regulatory coverage from previous Order 2006-0003-DWQ under this General Order, **within the 60-days-prior-to the Effective Date of this General Order**, the Legally Responsible Official of an existing Enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage under this General Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of this Order.

An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to this General Order remains unchanged.

A previous Enrollee of Order 2006-0003-DWQ that fails to certify the Continuation of Existing Regulatory Coverage form in the online CIWQS database by the Effective Date of this Order is considered a New Applicant, and will not have regulatory coverage for its sanitary sewer system(s) until:

- A new application package for system(s) enrollment is submitted per section 2.2 (Requirements for New Regulatory Coverage) below; and
- The new application package is approved per section 2.2.2 (Approval of Application Package (For New Applicants Only)).

2.2. Requirements for New Regulatory Coverage

No later than 60 days prior to commencing and/or assuming operation and maintenance responsibilities of a sanitary sewer system, a duly authorized representative that

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maintains legal authority over the public or private sanitary sewer system is required to enroll under this General Order by submitting a complete application package as specified below and as provided in Attachment B (Application for Enrollment Form) of this General Order.

Unless required by a Regional Water Board, a public agency that owns a combined sewer system subject to the Combined Sewer Overflow Control Policy (33 U.S. Code § 1342(q)), is not required to enroll, under this Order, the portions of its sanitary sewer system(s) that collects combined sanitary wastewater and stormwater.

2.2.1. Application Package Requirements

The Application for Enrollment package for new applicants must include the following items:

- **Application for Enrollment Form.** The form in Attachment B of this General Order must be completed, signed, and certified by a Legally Responsible Official, in accordance with section 5.1 (Designation of a Legally Responsible Official) of this General Order. If an electronic Application for Enrollment form is available at the time of application, a new applicant shall submit its application form electronically; and
- **Application Fee.** A fee payable to the “State Water Resources Control Board” in accordance with the Fee Schedule in the California Code of Regulations, Title 23, section 2200, or subsequent fee regulations updates.

The application fee for this General Order is based on the sanitary sewer system’s threat to water quality and complexity designations of category 2C or 3C, which is assigned based on the population served by the system. The current Fee Schedule for sanitary sewer systems is listed under subdivision (a)(2) at the following website: [Fee Schedule](https://www.waterboards.ca.gov/resources/fees/water_quality/) (https://www.waterboards.ca.gov/resources/fees/water_quality/).

2.2.2. Approval of Application Package (For New Applicants Only)

The Deputy Director of the State Water Board, Division of Water Quality (Deputy Director) will consider approval of each complete Application for Enrollment package. The Deputy Director will issue a Notice of Applicability letter which serves as approved regulatory coverage for the new Enrollee.

If the submitted application package is not complete in accordance with section 2.2.1 (Application Package Requirements) of this General Order, the Deputy Director will send a response letter to the applicant outlining the application deficiencies. The applicant will have 60 days from the date of the response letter to correct the application deficiencies and submit the identified items necessary to complete the application package to the State Water Board.

2.2.3. Electronic Reporting Account for New Enrollee

Within 30 days after the date of the Approval of Complete Application Package for System Enrollment, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the “User Registration” button and following the directions on the [CIWQS Login Page](#)

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(<https://ciwqs.waterboards.ca.gov>). If additional assistance is needed to establish an online CIWQS user account, contact State Water Board staff by email at CIWQS@waterboards.ca.gov. The online user account will provide the Enrollee secure access to the online CIWQS database for electronic reporting.

2.3. Regulatory Coverage Transfer

Regulatory coverage under this General Order is not transferable to any person or party except after an existing Enrollee submits a written request for a regulatory coverage transfer to the Deputy Director, at least 60 days in advance of any proposed system ownership transfer. The written request must include a written agreement between the existing Enrollee and the new Enrollee containing:

- Acknowledgement that the transfer of ownership is solely of an existing system with an existing waste discharge identification (WDID) number;
- The specific ownership transfer date in which the responsibility and regulatory coverage transfer between the existing Enrollee and the new Enrollee becomes effective; and
- Acknowledgement that the existing Enrollee is liable for violations occurring up to the ownership transfer date and that the new Enrollee is liable for violations occurring on and after the ownership transfer date.

The Deputy Director will consider approval of the written request. If approved, the Deputy Director will issue a Notice of Applicability letter which serves as an approved transfer of regulatory coverage to the new Enrollee.

3. FINDINGS

3.1. Legal Authorities

3.1.1. Federal and State Regulatory Authority

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (33 U.S.C. 1251). The Water Code authorizes the State Water Board to implement the Clean Water Act in the State and to protect the quality of all waters of the State (Water Code sections 13000 and 13160).

3.1.2. Discharge of Sewage

A discharge of untreated or partially treated sewage is a discharge of waste as defined in Water Code section 13050(d) that could affect the quality of waters of the State and is subject to regulation by waste discharge requirements issued pursuant to Water Code section 13263 and Chapter 9, Division 3, Title 23 of the California Code of Regulations. A discharge of sewage may pollute and alter the quality of the waters of the State to a degree that unreasonably affects the beneficial uses of the receiving water body or facilities that serve those beneficial uses (Water Code section 13050(l)(1)).

3.1.3 Water Boards Authority to Require Technical Reports, Monitoring, and Reporting

Water Code sections 13267 and 13383 authorize the Regional Water Boards and the State Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Water Code section 13267(b), authorizes the Regional Water Boards to “require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires...In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.” Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

The technical and monitoring reports required by this General Order and Attachment E (Notification, Monitoring, Reporting and Recordkeeping Requirements) are necessary to evaluate and ensure compliance with this General Order. The effort to develop required technical reports will vary depending on the system size and complexity and the needs of the specific technical report. The burden and cost of these reports are reasonable and consistent with the interest of the state in protecting water quality, which is the primary purpose of requiring the reports.

Water Code section 13383(a) authorizes the Water Boards to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements... for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.” Section 13383(b) continues, “the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.”

Reporting of spills from privately owned sewer laterals and systems pursuant to section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) of this General Order is authorized by Water Code section 13225(c) and encouraged by the State Water Board, wherein a local agency may investigate and report on any technical factors involved in water quality control provided the burden including costs of such reports bears a reasonable relationship to the need for the report and the benefits to be obtained therefrom. The burden of reporting private spills under section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) is minimal and is outweighed by the benefit of providing Regional Water Boards an opportunity to respond to these spills

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when an Enrollee, which in many cases has a contractual relationship with the owner of the private system, has knowledge of the spills.

3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements

Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general waste discharge requirements than individual waste discharge requirements.

Since 2006, the State Water Board has been regulating over 1,100 publicly owned sanitary sewer systems (See section 3.1.5 (Previous Statewide General Waste Discharge Requirements) of this General Order). California also has a large unknown number of unregulated privately owned sanitary sewer systems. All waste conveyed in publicly owned and privately owned sanitary sewer systems (as defined in this General Order) is comprised of untreated or partially treated domestic waste and/or industrial waste. Generally, sanitary sewer systems are designed and operated to convey waste by gravity or under pressure; system-specific design elements and system-specific operations do not change the common nature of the waste, the common threat to public health, or the common impacts on water quality. Spills of waste from a sanitary sewer system prior to reaching the ultimate downstream treatment facility are unauthorized and enforceable by the State Water Board and/or a Regional Water Board. Therefore, spills from sanitary sewer systems are more appropriately regulated under general waste discharge requirements.

As specified in Water Code sections 13263(a) and 13241, the implementation of requirements set forth in this Order is for the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each Regional Water Board and take into account the environmental characteristics of sewer service areas and hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality, costs associated with compliance with these requirements, the need for developing housing within California, and the need to protect sources of drinking water and other water supplies.

3.1.5. Previous Statewide General Waste Discharge Requirements

On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ serving as Waste Discharge Requirements pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260) for inadvertent discharges to waters of the State. Order 2006-0003-DWQ prohibited discharges of untreated or partially treated sewage. Order 2006-0003-DWQ also required system-specific management, operation, and maintenance of publicly owned sewer systems greater than one mile in length.

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To decrease the impacts on human health and the environment caused by sewage spills, the previous Order required enrollees to develop a rehabilitation and replacement plan that identifies system deficiencies and prioritizes short-term and long-term rehabilitation actions. The previous Order also required enrollees to:

1. Maintain information that can be used to establish and prioritize appropriate Sewer System Management Plan activities; and
2. Implement a proactive approach to reduce spills.

The previous Order required Sewer System Management Plan elements for “the proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management.”

On July 30, 2013, the State Water Board amended General Order 2006-0003-DWQ with Order WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Many enrollees of Order 2006-0003-DWQ have already implemented proactive measures to reduce sewage spills. Other enrollees, however, still need technical assistance and funding to improve sanitary sewer system operation and maintenance for the reduction of sewage spills.

3.1.6. Existing Memorandum of Agreement with California Water Environment Association

The California Water Environment Association is a nonprofit organization dedicated to providing water industry certifications, training, and networking opportunities. The Association’s Technical Certification Program provides accredited sanitary sewer system operator certification for collection system operators and maintenance workers.

On February 10, 2016, the State Water Board entered into a collaborative agreement with the Association titled *Memorandum of Agreement Between the California State Water Resources Control Board and the California Water Environment Association - Training Regarding Requirements Set Forth in Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. The Memorandum sets forth collaborative training necessary for regulated sanitary sewer system personnel to operate and maintain a well operating system and ensure full compliance with statewide sewer system regulations.

On March 15, 2018, the State Water Board and the California Water Environment Association amended the existing Memorandum of Agreement to include collaborative outreach and expand training needs associated with further updates to Water Board regulations for sanitary sewer systems. The State Water Board encourages further Agreement updates as necessary to support improved sewer system operations and the professionalism of collection system operators.

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3.2. General

3.2.1. Waters of the State

Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state as defined in Water Code section 13050(e), and are inclusive of waters of the United States.

3.2.2. Sanitary Sewer System Spill Threats to Public Health and Beneficial Uses

Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

More specifically, sanitary sewer spills may:

- Adversely affect aquatic life and/or threaten water quality when reaching receiving waters;
- Inadvertently release trash, including plastics;
- Impair the recreational use and aesthetic enjoyment of surface waters by polluting surface water or groundwater;
- Threaten public health through direct public exposure to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as gastroenteritis, hepatitis, cryptosporidiosis, and giardiasis;
- Negatively impact ecological receptors and biota within surface waters; and
- Cause nuisance including odors, closure of beaches and recreational areas, and property damage.

Sanitary sewer system spills may pollute receiving waters and threaten beneficial uses of surface water and groundwater. Potentially threatened beneficial uses include, but are not limited to the following (with associated acronym representations as included in statewide water quality control plans and Regional Water Boards' Basin Plans):

- Municipal and Domestic Supply (MUN)
- Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Native American Culture (CUL)
- Wildlife Habitat (WILD)
- Rare, Threatened, or Endangered Species (RARE)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wetland Habitat (WET)
- Agricultural Supply (AGR)
- Estuarine Habitat (EST)

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- Commercial and Sport Fishing (COMM)
- Subsistence Fishing (SUB)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Aquaculture (AQUA)
- Marine Habitat (MAR)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Migration of Aquatic Organisms (MIGR)
- Shellfish Harvesting (SHELL)
- Industrial Process Supply (PROC)
- Industrial Service Supply (IND)
- Hydropower Generation (POW)
- Navigation (NAV)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Water Quality Enhancement (WQE)
- Fresh Water Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Inland Saline Water Habitat (SAL)

3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

Finding 3 of the previous Order, 2006-0003-DWQ, states: “Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO [sanitary sewer overflow]. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.”

Many spills are preventable through proactive attention on sanitary sewer system management using the best practices and technologies available to address major causes of spills, including but not limited to:

- Blockages from sources including but not limited to:
 - Fats, oils and grease;
 - Tree roots;
 - Rags, wipes and other paper, cloth and plastic products; and
 - Sediment and debris.
- Sewer system damage and exceedance of sewer system hydraulic capacity from identified system-specific environmental, and climate-change impacts, including but not limited to:

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- Sea level rise impacts including flooding, coastal erosion, seawater intrusion, tidal inundation and submerged lands;
- Increased surface water flows due to higher intensity rain events;
- Flooding;
- Wildfires and wildfire induced impacts;
- Earthquake induced damage;
- Landslides; and
- Subsidence.
- Infrastructure deficiencies and failures, including but not limited to:
 - Pump station mechanical failures;
 - System age;
 - Construction material failures;
 - Manhole cover failures;
 - Structural failures; and
 - Lack of proper operation and maintenance.
- Insufficient system capacity (temporary or sustained), due to factors including but not limited to:
 - Excessive and/or increased storm or groundwater inflow/infiltration;
 - Insufficient capacity due to population increase and/or new connections from industrial, commercial and other system users; and
 - Stormwater capture projects utilizing a sanitary sewer system to convey stormwater to treatment facilities for reuse.
- Community impacts, including but not limited to:
 - Power outages;
 - Vandalism; and
 - Contractor-caused or other third party-caused damages.

3.2.4. Underground Sanitary Sewer System Leakage

Portions of some sanitary sewer systems may leak, causing underground exfiltration (exiting) of sewage from the system. Exfiltrated sewage that remains in the underground infrastructure trench and/or the soil matrix, and that does not discharge into waters of the State (surface water or groundwater) may not threaten beneficial uses.

Underground exfiltrated sewage may threaten beneficial uses if discharged to waters of the State. Exfiltrated sewage that discharges to groundwater may impact beneficial uses of groundwater and pollute groundwater supply. Additionally, if in close proximity, exfiltrated sewage may enter into a compromised underground drainage conveyance system that discharges into a water of the United States, or into groundwater that is hydrologically connected to (feeds into) a water of the United States, thus potentially causing: (1) a Clean Water Act violation, (2) threat and impact to beneficial uses, and/or (3) surface water pollution.

3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration

Excessive inflow (stormwater entering) and infiltration (groundwater seepage entering) to sanitary sewer systems is preventable through proactive sewer system management using the best practices and technologies available. The efficiency of the downstream wastewater treatment processes is dependent on the performance of the sanitary sewer system. When the structural integrity of a sanitary sewer system deteriorates, high volumes of inflow and infiltration can enter the sewer system. High levels of inflow and infiltration increase the hydraulic load on the downstream treatment plant, which can reduce treatment efficiency, lead to bypassing a portion of the treatment process, cause illegal discharge of partially treated effluent, or in extreme situations make biological treatment facilities inoperable (e.g., wash out the biological organisms that treat the waste).

3.3. Water Quality Control Plans, Policies and Resolutions

The nine Regional Water Boards have adopted region-specific water quality control plans (commonly referred to as Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. The State Water Board has adopted statewide water quality control plans, policies and resolutions establishing statewide water quality objectives, implementation programs and initiatives.

3.3.1. State Water Board Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution 68-16, titled Statement of Policy with Respect to Maintaining High Quality of Waters in California, which incorporates the federal antidegradation policy. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The continued prohibition of sewage discharges from sanitary sewer systems into waters of the State aligns with Resolution 68-16. A sewage discharge from sanitary sewers to waters of the State is prohibited by this Order. Therefore, this Order does not allow degradation of waters of the State. In addition, this Order: (1) further expands the existing prohibition of sewage discharges to include waters of the State, in addition to waters of the United States as provided in previous Order 2006-0003-DWQ, and (2) enhances the ability for Water Board enforcement of violations of the established prohibitions.

3.3.2. State Water Board Sources of Drinking Water Policy

On May 19, 1988, the State Water Board adopted Resolution 88-63 (amended on February 1, 2006), titled Sources of Drinking Water, establishing state policy that all waters of the State, with certain exceptions, are suitable or potentially suitable for municipal or domestic supply.

3.3.3. State Water Board Cost of Compliance Resolution

On September 24, 2013, the State Water Board adopted Resolution 2013-0029, titled Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of

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Compliance While Maintaining Water Quality Protection. Through this resolution, the State Water Board committed to continued stakeholder engagement in identifying and implementing measures to reduce costs of compliance with regulatory orders while maintaining water quality protection and improving regulatory program outcomes.

3.3.4. State Water Board Human Right to Water Resolution

On February 16, 2016, the State Water Board adopted Resolution 2016-0010, titled Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities, addressing the human right to water as a core value and directing Water Board programs to implement requirements to support safe drinking water for all Californians.

On November 16, 2021, the State Water Board adopted Resolution 2021-0050 titled Condemning Racism, Xenophobia, Bigotry, and Racial Injustice, and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-racism. Among other actions, through Resolution 2021-0050, the State Water Board, in summary as corresponding to this General Order, reaffirms its commitment to its Human Right to Water resolution, upholding that every human being in California deserves safe, clean, affordable, and accessible water for human consumption, cooking, and sanitation purposes. Resolution 2021-0050 provides the State Water Board commitment to:

- Protect public health and beneficial uses of waterbodies in all communities, including communities disproportionately burdened by wastes discharge of waste to land and surface water;
- Restore impaired surface waterbodies and degraded aquifers; and
- Promote multi-benefit water quality projects.

Through Resolution 2021-0050, the State Water Board also commits to expanding implementation of its Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing:

- The right to safe, clean, affordable, and accessible drinking water and sanitation;
- Sustainable management and protection of local groundwater resources;
- Healthy watersheds; and
- Access to surface waterbodies that support subsistence fishing.

On June 7, 2022, the State Water Board adopted a Resolution, titled Authorizing the Executive Director or Designee to Enter into One or More Multi-Year Contracts Up to a Combined Sum of \$4,000,000 for a Statewide Wastewater Needs Assessment, supporting the equitable access to sanitation for all Californians and implementation of Resolutions 2016-0010 and 2021-0050.

This General Order supports the State Water Board priority in collecting a comprehensive set of data for California's wastewater systems, including sanitary sewer systems. Data reported per the requirements of this Order will be used with data from other Water Boards' programs, to further develop criteria and create a statewide risk

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framework to prioritize critical funding and infrastructure investments for California's most vulnerable populations, including disadvantaged or severely disadvantaged communities with inadequate or failing sanitation systems and threatened access to healthy drinking water supplies.

3.3.5. State Water Board Open Data Resolution

On July 10, 2018, the State Water Board adopted Resolution 2018-0032, titled Adopting Principles of Open Data as a Core Value and Directing Programs and Activities to Implement Strategic Actions to Improve Data Accessibility and Associated Innovation, directing regulatory programs to assure all monitoring and reporting requirements support the State Water Boards' Open Data Initiative.

3.3.6. State Water Board Response to Climate Change

On March 7, 2017, the State Water Board adopted Resolution 2017-0012, titled Comprehensive Response to Climate Change, requiring a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities.

3.4. California Environmental Quality Act

The adoption of this Order is an action to reissue general waste discharge requirements that is exempt from the California Environmental Quality Act (Public Resources Code section 21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment (Cal. Code Regs., Title 14, section 15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal. Code Regs., Title 14, section 15301, to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in sections 15301 and 15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders

The State Water Board, Division of Financial Assistance administers the implementation of the State Water Board financial assistance programs, per Board-adopted funding policies. Among other funding areas, the Division administers loan and grant funding for the planning and construction of wastewater and water recycling facilities per funding program-specific policies and guidelines. Applicants may apply for Clean Water State Revolving Fund low-interest loan, Small Community Wastewater grant funding assistance, and other funding available at the time of application, for some of the costs associated with complying with this General Order.

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: [Financial Assistance Funding - Grants and Loans | California State Water Resources Control Board](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/).

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)

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Section 13477.6 of the Water Code authorizes the Small Community Grant Fund. The Small Community Grant Fund allows the State Water Board to provide grant funding assistance to small, disadvantaged communities and small severely disadvantaged communities that may not otherwise be able to afford a loan or similar financing for projects to comply with requirements of this General Order. The State Water Board also considers loan forgiveness on a disadvantaged community-specific basis.

For disadvantaged communities' wastewater needs, the State Water Board places priority on the funding of projects that address:

- Public health;
- Violations of waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits;
- Providing sewer system service to existing septic tank owners; and
- High priority public health and water quality concerns identified by a Regional Water Board.

3.6. Notification to Interested Parties

On January 31, 2022, the State Water Board notified interested parties and persons of its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60-day public comment period. State Water Board staff conducted extensive stakeholder outreach and encouraged public participation in the adoption process for this General Order. On March 15, 2022, the State Water Board held a public meeting to hear and consider oral public comments. The State Water Board considered all public comments prior to adopting this General Order.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13263, 13267, and 13383 this General Order supersedes Order 2006-0003-DWQ, Order WQ 2013-0058-EXEC, and any amendments made to these Orders thereafter, except for enforcement purposes and to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Enrollee shall comply with the requirements in this Order.

4. PROHIBITIONS

4.1 Discharge of Sewage from a Sanitary Sewer System

Any discharge from a sanitary sewer system that has the potential to discharge to surface waters of the State is prohibited unless it is promptly cleaned up and reported as required in this General Order.

4.2 Discharge of Sewage to Waters of the State

Any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited.

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4.3. Discharge of Sewage Creating a Nuisance

Any discharge from a sanitary sewer system that creates a nuisance or condition of pollution as defined in Water Code section 13050(m) is prohibited.

5. SPECIFICATIONS

5.1. Designation of a Legally Responsible Official

The Enrollee shall designate a Legally Responsible Official that has authority to ensure the enrolled sanitary sewer system(s) complies with this Order, and is authorized to serve as a duly authorized representative. The Legally Responsible Official must have responsibility over management of the Enrollee's entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

For example, a sewer system superintendent or manager, an operations manager, a public utilities manager or director, or a district engineer may be designated as a Legally Responsible Official.

The Legally Responsible Official shall complete the electronic [CIWQS "User Registration" form](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>). A Legally Responsible Official that represents multiple enrolled systems shall complete the electronic CIWQS "User Registration" form for each system.

The Enrollee shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.2. Sewer System Management Plan Development and Implementation

To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the

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prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.

For an existing Enrollee under Order 2006-0003-DWQ that has certified its Continuation of Existing Regulatory Coverage, per section 2.1 (Requirements for Continuation of Existing Regulatory Coverage) of this General Order:

Within six (6) months of the Adoption Date of this General Order:

- The Legally Responsible Official shall upload the Enrollee's existing Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

For a new Enrollee:

Within twelve (12) months of the Application for Enrollment approval date:

- The governing entity of the new Enrollee shall approve its Sewer System Management Plan; and
- The Legally Responsible Official shall certify and upload its Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

5.3. Certification of Sewer System Management Plan and Plan Updates

The Legally Responsible Official shall certify and upload its Sewer System Management Plan and all subsequent updates to the online CIWQS Sanitary Sewer System Database.

5.4. Sewer System Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. **Within six months after the end of the required 3-year audit period**, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and

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- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

A new Enrollee of this General Order (that did not have a sanitary sewer system enrolled in the previous State Water Board Order 2006-0003-DWQ) shall conduct its first internal Sewer System Management Plan audit for the time period between the date of submittal of its certified Sewer System Management Plan and the third subsequent December 31st date. The audit report must be submitted into the online CIWQS Sanitary Sewer System Database **by July 1 of the following calendar year**.

See the following tables for clarification:

Initial Audit Period and Audit Due Date for New Enrollees

	Audit Period	Audit Due Date
New Enrollee	Certified Sewer System Management Plan Submittal Date through the third subsequent December 31 st date	July 1 st date after audit period
<i>Example</i>	<i>Certified Sewer System Management Plan Submittal Date of August 2, 2025 Audit Period of August 2, 2025 through December 31, 2027</i>	<i>July 1, 2028</i>

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Initial Audit Period for Transition from 2-Year Audit Required in Previous Order 2006-0003-DWQ to 3-Year Audit Required in this General Order

	Audit Period	Audit Due Date
An Enrollee previously regulated by Order 2006-003-DWQ	A 3-year period starting from the end of last required 2-year Audit Period	Within six months after end of 3-year Audit Period
<i>Example</i>	<i>Last required Audit Period start date of August 2, 2021; Audit Period of August 2, 2021 through August 1, 2024</i>	<i>February 1, 2025</i>

Three-Year Ongoing Audit Period

	Audit Period	Audit Due Date
Each Enrollee	A 3-year period starting from the end of last required Audit Period	Within six months after end of 3-year Audit Period

5.5. Six-Year Sewer System Management Plan Update

At a minimum, the Enrollee shall update its Sewer System Management Plan every six (6) years after the date of its last Plan Update due date. (For an Enrollee previously regulated by Order 2006-0003-DWQ, the six-year period shall commence on the due date identified in section 3.11 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this Order. The Updated Sewer System Management Plan must include:

- Elements required in Attachment D (Sewer System Management Plan – Required Elements) of this Order;
- Summary of revisions included in the Plan update based on internal audit findings; and
- Other sewer system management-related changes.

The Enrollee's governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database in accordance with section 3.11 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. During the time period in between Plan updates, the Enrollee shall continuously document changes to its Sewer System Management Plan in a change log attached to the Plan.

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5.6. System Resilience

The Enrollee shall include and implement system-specific procedures in its Sewer System Management Plan to proactively prioritize: (1) operation and maintenance, (2) condition assessments, and (3) repair and rehabilitation, to address ongoing system resilience, as specified in Attachment D (Sewer System Management Plan – Required Elements) of this General Order.

5.7. Allocation of Resources

The Enrollee shall:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for:
 - Compliance with this General Order,
 - Full implementation of its updated Sewer System Management Plan,
 - System operation, maintenance, and repair, and
 - Spill responses.

5.8. Designation of Data Submitters

The Legally Responsible Official may designate one or more individuals as a Data Submitter for reporting of spill data. The Legally Responsible Official shall authorize the designation of Data Submitter(s) through the online [CIWQS database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>) prior to the individuals establishing a [CIWQS user account](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>) and entering spill data into the online CIWQS Sanitary Sewer System Database.

The Legally Responsible Official shall submit any change to its Data Submitter(s), and/or change in Data Submitter contact information, to the State Water Board within 30 calendar days of the change, by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.9. Reporting Certification

The Legally Responsible Official shall electronically certify, on the Enrollee's behalf, all applications, reports, the Sewer System Management Plan(s) and corresponding updates, and other information submitted electronically into the online CIWQS Sanitary Sewer System Database, as follows:

"I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information."

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Hardcopy submittals to the State Water Board must be accompanied by the above certification statement.

5.10. System Capacity

The Enrollee shall maintain the system capacity necessary to convey: (1) base flows during dry weather conditions, and (2) wet weather peak flows consistent with designated local historic storms. Design storms must take into account system-specific stormwater contributions via inflow and infiltration, and location-specific depth of groundwater and storm frequencies. The Enrollee shall implement capital improvements to provide adequate hydraulic capacity to:

- Meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance element of its Sewer System Management Plan; and
- Prevent system capacity-related spills, and adverse impacts to the treatment efficiency of downstream wastewater treatment facilities.

5.11. System Performance Analysis

The Enrollee shall include a running 10-year system performance analysis in its Annual Report. The analysis must include two CIWQS-generated graphs presenting the following information:

Graph 1 – Total Spill Volume per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total spill volume, per Spill Category, for each calendar year.

Graph 2 – Total Number of Spills per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total number of spills, per Spill Category, for each calendar year.

The current calendar year is the calendar year covered in the Annual Report.

The Enrollee shall generate the graphs in CIWQS, using the existing data in the online CIWQS Sanitary Sewer System Database at the following graph generation link: (https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_operation_report).

5.12. Spill Emergency Response Plan and Remedial Actions

For Existing Enrollees (with regulatory coverage under Order 2006-0003-DWQ):

Within six (6) months of the Adoption Date of this General Order, the Enrollee shall update and implement its Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

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For New Enrollees:

Within six (6) months of the Application for Enrollment approval date, the Enrollee shall develop and implement a Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

The Enrollee shall certify, in its Annual Report, that its Spill Emergency Response Plan is up to date.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The Enrollee shall respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing toxic discharges to waters of the State.

5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements

The Enrollee shall comply with notification, monitoring, reporting, and recordkeeping requirements in Attachment E1 of this General Order.

5.13.1. Spill Categories

Individual spill notification, monitoring and reporting must be in accordance with the following spill categories:

- **Category 1 Spill**

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water; or
- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

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A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

5.13.2. Annual Report

The Enrollee shall submit an Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

For new Enrollees: Within 30 days of obtaining a CIWQS account, a new Enrollee shall submit its initial Annual Report, as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

5.14. Electronic Sanitary Sewer System Service Area Boundary Map

For continuing enrollees, starting on July 1, 2025, and no later than December 31, 2025:

For new enrollees – no earlier than July 1, 2025, or within 12 months of the Application for Enrollment approval date, whichever date is later:

The Legally Responsible Official shall submit, to the State Water Board, geospatial data detailing the locations of the Enrollee's sanitary sewer system service area boundary, per the required content and specifications in section 3.8 (Electronic Sanitary Sewer System Service Area Boundary Map) of Attachment E1 of this General Order, for each system identified by a WDID number.

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at SanitarySewer@waterboards.ca.gov.

5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems

Within 24 hours of becoming aware of a spill (as described below) from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to report the following observations to the online CIWQS Sanitary Sewer System Database at the following link:

<https://ciwqs.waterboards.ca.gov>:

- A spill equal or greater than 1,000 gallons that discharges (or has a potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; **or**
- Any volume of sewage that discharges (or has a potential to discharge) to surface waters.

In the CIWQS module, the Enrollee is encouraged to identify:

- Time of observation;
- Description of general spill location (for example, street name and cross street names);
- Estimated volume of spill;
- If known, general description of spill destination (for example, flowing into drainage channel, flowing directly into a creek, etc.); and
- If known, name of private system owner/operator.

The CIWQS database will make the name and contact information of the entity voluntarily reporting a private spill, accessible to State and Regional Water Board staff only. The CIWQS database will only make information regarding the actual spill, accessible to the public.

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5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters.

5.17. Unintended Failure to Report

If an Enrollee becomes aware that they unintentionally failed to submit relevant facts in any report required in this General Order, the Enrollee shall promptly notify Regional Water Board and State Water Board staff. Regional Water Board contact information is included in Attachment F of this Order. State Water Board staff shall be contacted by email at SanitarySewer@waterboards.ca.gov for assistance in formally amending the corresponding report(s) in the online CIWQS Sanitary Sewer System Database.

5.18. Duty to Report to Water Boards

In accordance with Water Code section 13267 and/or section 13383, upon request by the State Water Board Executive Director (or designee) or a Regional Water Board Executive Officer (or designee), the Enrollee shall provide the requested information which the State or Regional Water Board deems necessary to determine compliance with this General Order.

5.19. Operation and Maintenance

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

6. PROVISIONS

6.1. Enforcement Provisions

The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.

6.1.1. Enforceability of Clean Water Act and Water Code Violations

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential

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violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

6.1.2. Monetary Penalties

The Water Code provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of this General Order and violations of the Clean Water Act.

6.1.3. Falsifying or Failure to Report

The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this General Order, or falsifying any information provided in the technical or monitoring reports is subject to administrative liability and civil monetary penalties. Any person who knowingly fails or refuses to furnish technical or monitoring program reports or falsifies any information provided in reports required by this General Order is subject to criminal penalties.

6.1.4. Severability of General Order

The provisions of this General Order are severable; if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

6.1.5. Indirect Discharges

In the event that a spill enters into a drainage conveyance system, the Enrollee shall take all feasible steps to prevent discharge of sewage into waters of the State by blocking or redirecting the flow in the drainage conveyance system, removing the sewage from the drainage conveyance system, and cleaning the system in a manner that does not inadvertently impact beneficial uses of the receiving water body.

6.1.6. Water Boards' Considerations for Discretionary Enforcement

Consistent with the State Water Board Enforcement Policy, when considering Water Code section 13327 factors, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to contain, control, clean up, and mitigate spills. In assessing the factors, the State Water Board or the applicable Regional Water Board will consider:

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- The Enrollee's compliance with this General Order with a focus on compliance with reporting requirements;
- The Enrollee's provision of adequate funding to implement the requirements of this General Order;
- The Enrollee's compliance with providing a complete and updated Sewer System Management Plan;
- The Enrollee's compliance with implementing its Sewer System Management Plan;
- The overall effectiveness of the Enrollee's Sewer System Management Plan with respect to:
 - System management, operation, and maintenance,
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent spills (e.g. adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc.),
 - Preventive maintenance (including cleaning, root grinding, and fats, oils, and grease control) and source control measures,
 - Implementation of backup equipment,
 - Inflow and infiltration prevention and control,
 - Appropriate sanitary sewer system capacity to prevent spills, and
 - The Enrollee's responsiveness to stop and mitigate the impact of the discharge;
- The Enrollee's compliance with identifying the cause of the spill;
- The Enrollee's use of available information and observations to accurately estimate the spill volume and identify the affected or potentially affected receiving waters;
- The Enrollee's thoroughness of cleaning up sewage in drainage conveyance systems after the spill(s);
- The Enrollee's use of water quality and biological monitoring and assessment to determine the short-term and long-term impacts to beneficial uses and the environment;
- The Enrollee's follow up actions to improve system performance;
- The Enrollee's implementation of feasible alternatives to prevent spills, such as:
 - Use of temporary storage or waste retention,
 - Reduction of system inflow and infiltration,
 - Collection and hauling of waste to a treatment facility,
 - Prevention of and/ or containment of spills due to a design storm event identified in the Enrollee's Sewer System Management Plan,

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- Implementation of available equipment, technologies, strategies, and recommended industry practices for maintaining and managing sewer systems to prevent spills, and contain and eliminate discharges to waters of the State; and
- The spill duration and factors beyond the reasonable control of the Enrollee causing the event.

6.1.7. Enforcement Discretion Based on Reporting Compliance

Consistent with the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to comply with spill reporting requirements when determining compliance with Water Code section 13267 and section 13383. When assessing Water Code section 13227 factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's diligence to comply with all reporting requirements in this General Order;
- The use of best available information for the Enrollee's reporting of spill start date and start time in which the release of sewage from the sanitary sewer system initiated;
- The Enrollee's reporting of spill end date, and end time to be the date and time in which the release of sewage from the sanitary sewer system was stopped;
- The Enrollee's diligence to accurately estimate and report spill volumes;
- The Enrollee's subsequent verification and/or updates to initial Draft Spill Reports in accordance with this General Order; and
- The Enrollee's timely certification of required spill reports.

Consistent with Water Code section 13267 and section 13383, the State Water Board or a Regional Water Board may require an Enrollee to report the results of a condition assessment of a specified portion of the Enrollee's sanitary sewer system.

6.2. Other Regional Water Board Orders

It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with federal and state regulations. This Order will not be interpreted or applied:

- In a manner inconsistent with the federal Clean Water Act;
- To authorize a spill or discharge that is illegal under either the Clean Water Act, the Water Code, and/or an applicable Basin Plan prohibition or water quality standard;
- To prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System (NPDES) permit or individual waste discharge requirements superseding an Enrollee's regulatory coverage under this General Order for a sanitary sewer system authorized under the Clean Water Act or Water Code;

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- To supersede any more specific or more stringent waste discharge requirements or enforcement orders issued by a Regional Water Board; or
- To supersede any more specific or more stringent state or federal requirements in existing regulation, an administrative/judicial order, or Consent Decree.

6.3. Sewer System Management Plan Availability

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

6.4. Entry and Inspection

6.4.1. Entry and Availability of Information

The Enrollee shall allow State and Regional Water Board staff, upon presentation of credentials and other documents as may be required by law, to:

- Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this General Order;
- Have access to and reproduce any records required to be maintained by this General Order;
- Inspect any facility and/or equipment (including monitoring and control equipment), practices, or operations required in this General Order; and
- Sample or monitor substances or parameters for assuring compliance with this General Order, or as otherwise authorized by the Water Code.

6.4.2. Pre-Inspection Questionnaire

The Enrollee shall provide pre-inspection information to State and Regional Water Board staff through the completion of a Pre-Inspection Questionnaire provided by Water Board staff.

ATTACHMENT A - DEFINITIONS

Annual Report

An Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) is a mandatory report in which the Enrollee provides a calendar-year update of its efforts to prevent spills.

Basin Plan

A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

Beneficial Uses

The term “Beneficial Uses” is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

California Integrated Water Quality System (CIWQS)

CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

Data Submitter

A Data Submitter is an individual designated and authorized by the Enrollee's Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System Database. A Data Submitter does not have the authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

Disadvantaged Community

A disadvantaged community is a community with a median household income of less than eighty percent (80%) of the statewide annual median household income.

For the purpose of this General Order, there is no differentiation between a small and large disadvantaged community.

Drainage Conveyance System

A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

Enrollee

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one mile or less in length where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order, or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

Environmentally Sensitive Area

An environmentally sensitive area is a designated agricultural and/or wildlife area identified to need special natural landscape protection due to its wildlife or historical value.

Exfiltration

Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

Flood Control Channel

A flood control channel is a channel used to convey stormwater and non-stormwater flows through and from areas for flood management purposes.

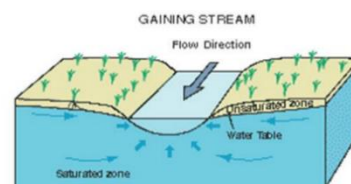
Governing Entity

A governing entity includes but is not limited to the following:

- A publicly elected governing board, council, or commission of a municipal agency;
- A Department or Division director of a federal or state agency that is not governed by a board;
- A governing board or commission of an organization or association; and
- A private system owner/manager that is not governed by a board.

Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of this General Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)



Lateral (including Lower and Upper Lateral)

A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the Enrollee's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership.

A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations.

An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

Legally Responsible Official

A Legally Responsible Official is an official representative, designated by the Enrollee, with authority to sign and certify submitted information and documents required by this General Order.

Nuisance

For the purpose of this General Order, a nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- 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;
- 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; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

Private Sewer Lateral

A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system.

Private Sanitary Sewer System

A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

Potential to Discharge, Potential Discharge

Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

Receiving Water

A receiving water is a water of the State that receives a discharge of waste.

Resilience

Resilience is the ability to recover from or adjust to adversity or change, and grow from disruptions. Resilience can be built through planning, preparing for, mitigating, and adapting to changing conditions.

Sanitary Sewer System

A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

For purpose of this Order, sanitary sewer systems include only systems owned and/or operated by the Enrollee.

Satellite Sewer System

A satellite sewer system is a portion of a sanitary sewer system owned or operated by a different owner than the owner of the downstream wastewater treatment facility ultimately treating the sewage.

Sewer System Management Plan

A sewer system management plan is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system(s) in accordance with this General Order.

Sewage

Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system.

Spill

A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under this General Order if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

Training

Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with this General Order.

Wash Down Water

Wash down water is water used to clean a spill area.

Waste

Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Identification Number (WDID)

A waste discharge identification number (WDID) identifies each individual sanitary sewer system enrolled under this General Order. A WDID number is assigned to each enrolled system upon an Enrollee's approved regulatory coverage.

Waters of the State

Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

Waters of the United States

Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

Water Quality Objective

A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards' Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

ATTACHMENT B – APPLICATION FOR ENROLLMENT

1. Enrollment Status: (Mark only one item)

☐ New Enrollee

☐ New Enrollee with previous regulatory coverage under Order 2006-0003-DWQ
(that failed to certify continuation of coverage in CIWQS per Order 2022-XXXX-DWQ)

Existing WDID Number: _____

2. Applicant Information:

Legally Responsible Official Submitting Application

First and Last Name: _____

Title: _____

Phone: _____

Email: _____

System Owner/Operator Name: _____

Mailing Address: _____

City, State, Zip: _____

County: _____

Sanitary Sewer System Name: _____

Regional Water Quality Control Board(s): _____

Signature and Date: _____

3. Applicant Type (Check one):

☐ City ☐ County ☐ State ☐ Federal ☐ Special District

☐ Government Combination ☐ Private ☐ Other Non-governmental Entity

4. Wastewater Treatment Plant Receiving Sanitary Sewer System Waste:

Wastewater Treatment Plant Permittee: _____

WDID No.: _____

5. Billing Information

Billing Address: _____

City, State, Zip: _____

Billing Contact Person and Title: _____

Phone and Email Address: _____

6. Application Fee:

The application fee, as required by Water Code section 13260, is based on the daily population served by the sanitary sewer system. See updated [Fee Schedule](https://www.waterboards.ca.gov/resources/fees/water_quality/).
(https://www.waterboards.ca.gov/resources/fees/water_quality/)

Check one of the following and enter fee amount:

☐ Population Served < 50,000 – Total Fee submitted: \$ _____

☐ Population Served ≥ 50,000 – Total Fee submitted: \$ _____

Make the fee payment payable to the State Water Resources Control Board and mail the complete application package to:

State Water Resources Control Board, Accounting Office

P. O. Box 1888

Sacramento, CA 95812-1888

Attention: Statewide Sanitary Sewer System Program

7. Application Submittal Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge and belief, the information in the submitted application package is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Print Name: _____

Title: _____

Signature: _____ Date: _____

ATTACHMENT C - NOTICE OF TERMINATION

1. Enrollee Information

Enrollee Name: _____

WDID No: _____

Legally Responsible Official Requesting Termination of Coverage: _____

First and Last Name: _____

Title: _____

Phone: _____

Email:

Mailing Address: _____

City, State, Zip: _____

County:

Sanitary Sewer System Name(s) or Unique Identifier(s): _____

Regional Water Quality Control Board(s): _____

Signature and Date: _____

2. Basis of Termination

Explanation of termination, including subsequent regulatory coverage and subsequent owner/operator of enrolled sanitary sewer system, as applicable:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

3. Regulatory Coverage Termination Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge: 1) the sanitary sewer system I officially represent is not required to be regulated under the Statewide Waste Discharge Requirements for Sanitary Sewer Systems Order 2022-XXXX-DWQ, and 2) the information submitted in this Notice of Termination is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I understand that the submittal of this Notice of Termination does not release sanitary sewer system agencies from liability for any violations of the Clean Water Act.

Print Name: _____

Title: _____

Signature: _____ Date: _____

For State Water Board Use Only

☐ Approved for Termination

☐ Denied and Returned to Enrollee

Deputy Director of Water Quality Signature: _____

Date: _____ Notice of Termination Effective Date: _____

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

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ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

A Sewer System Management Plan (Plan) is a living planning document that documents ongoing local sewer system management program activities, procedures, and decision-making – at the scale necessary to address the size and complexity of the subject sanitary sewer system(s). This Plan may incorporate other programs and other plans by reference, to address short-term and long-term system resilience through:

- Proactive planning and decision-making;
- Local government ordinances;
- Updated operations and maintenance activities and procedures;
- Implementation of capital improvements;
- Sufficient local budget to support staff resources, contractors, equipment, and training; and
- Updated training of staff and contractors.

The Enrollee's development, update, and implementation of a Sewer System Management Plan addressing the requirements of this Attachment is an enforceable component of this General Order. As specified in Provision 6.1 (Enforcement Provisions) of this General Order, consistent with the Water Code and the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts in implementing an effective Sewer System Management Plan to prevent, contain, control, and mitigate spills when considering Water Code section 13327 factors to determine necessary enforcement of this General Order.

This Attachment includes the following required elements that the Enrollee shall address in its Plan and subsequent updates. The Enrollee shall identify any requirement in this Attachment that is not applicable to the Enrollee's sewer system and shall explain in its Plan why the requirement is not applicable.

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1. Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2. Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3. Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee's up-to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county

health officer, county environmental health agency, and State Office of Emergency Services.)

3. LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
- Require that sewer system components and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee;
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1. Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2. Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- Inspection and maintenance activities;

- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3. Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

4.4. Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

5. DESIGN AND PERFORMANCE PROVISIONS

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

5.1. Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

5.2. Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;

- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;
- Prioritize the condition assessment of system areas that:
 - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
 - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
 - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.2. Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

- Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
- Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;

- Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
- Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;
- Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and
- Necessary redundancy in pumping and storage capacities.

8.3. Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4. Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;
- Monitoring the implementation and measuring the effectiveness of each Plan Element;
- Assessing the success of the preventive operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and
- Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.

10. INTERNAL AUDITS

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
 - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
 - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
 - System operation, maintenance, and capital improvement-related activities.

ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

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ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system.

Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order may subject the Enrollee to civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement.

Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken.

1. NOTIFICATION REQUIREMENTS

1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of Emergency Services

Per Water Code section 13271, for a spill that discharges in or on any waters of the State, or discharges or is deposited where it is, or probably will be, discharged in or on any waters of the State, the Enrollee shall notify the California Office of Emergency Services and obtain a California Office of Emergency Services Control Number as soon as possible **but no later than two (2) hours** after:

- The Enrollee has knowledge of the spill; and
- Notification can be provided without substantially impeding cleanup or other emergency measures.

The notification requirements in this section apply to individual spills of 1,000 gallons or greater, from an Enrollee-owned and/or operated laterals, to a water of the State.

1.2. Spill Notification Information

The Enrollee shall provide the following spill information to the California Office of Emergency Services before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description:
 - Brief narrative of the spill event, and
 - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;
- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

1.3. Notification of Spill Report Updates

Following the initial notification to the California Office of Emergency Services and until such time that the Enrollee certifies the spill report in the online CIWQS Sanitary Sewer System Database, the Enrollee shall provide updates to the California Office of Emergency Services regarding substantial changes to:

- Estimated spill volume (increase or decrease in gallons initially estimated);
- Estimated discharge volume discharged directly into waters of the State or indirectly into a drainage conveyance system (increase or decrease in gallons initially estimated); and
- Additional impact(s) to the receiving water(s) and beneficial uses.

2. SPILL-SPECIFIC MONITORING REQUIREMENTS

2.1 Spill Location and Spread

The Enrollee shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The Enrollee shall document the critical spill locations, including:

- Photography and GPS coordinates for:
 - The system location where spill originated.
For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
 - Drainage conveyance system entry locations,
 - The location(s) of discharge into surface waters, as applicable,
 - Extent of spill spread, and
 - The location(s) of clean up.

2.2 Spill Volume Estimation

To assess the approximate spill magnitude and spread, the Enrollee shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting. The Enrollee shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

2.3. Receiving Water Monitoring

2.3.1. Receiving Water Visual Observations

Through visual observations and use of best available spill volume-estimating techniques and field calculation techniques, the Enrollee shall gather and document the following information for spills discharging to surface waters:

- Estimated spill travel time to the receiving water;
- For spills entering a drainage conveyance system, estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water;
- Estimated spill volume entering the receiving water; and
- Photography of:
 - Waterbody bank erosion,
 - Floating matter,
 - Water surface sheen (potentially from oil and grease),

- Discoloration of receiving water, and
- Impact to the receiving water.

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:
 - The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or
 - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;

If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
 - Total Coliform Bacteria
 - Fecal Coliform Bacteria
 - *E-coli*
 - Enterococcus

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

2.3.3. Water Quality Analysis Specifications

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

¹ The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

3. REPORTING REQUIREMENTS

All reporting required in this General Order must be submitted electronically to the online [CIWQS Sanitary Sewer System Database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>), unless specified otherwise in this General Order. Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of this General Order.

The Enrollee shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

3.1. Reporting Requirements for Individual Category 1 Spill Reporting

3.1.1. Draft Spill Report for Category 1 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 1 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;

5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;
 - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;
11. Description and photographs of all discharge point(s) into the surface water;
12. Estimated spill volume that discharged to surface waters; and
13. Estimated total spill volume recovered.

3.1.2. Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database. Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.1.1 (Draft Spill Report for Category 1 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

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4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
 - Observed impacts on aquatic life,
 - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - Responsible entity for closing/restricting use of water body, and
 - Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

3.1.3. Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
 - Complete and detailed explanation of how and when the spill was discovered;

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- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
 - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
 - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
 - Detailed description of the spill cause(s);
 - Description of the pipe material, and estimated age of the pipe material, at the failure location;
 - Description of the impact of the spill;
 - Copy of original field crew records used to document the spill; and
 - Historical maintenance records for the failure location.
2. Enrollee's response to the spill:
- Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
 - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
 - Final corrective action(s) completed and a schedule for planned corrective actions, including:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
 - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
- Description of all water quality sampling activities conducted;
 - List of pollutant and parameters monitored, sampled and analyzed; as required in section 2.3 (Receiving Water Monitoring) of this Attachment;
 - Laboratory results, including laboratory reports;
 - Detailed location map illustrating all water quality sampling points; and
 - Other regulatory agencies receiving sample results (if applicable).
4. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.2. Reporting Requirements for Individual Category 2 Spill Reporting

3.2.1. Draft Spill Report for Category 2 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 2 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;

If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;

8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;

- Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and

11. Estimated total spill volume recovered.

3.2.2. Certified Spill Report for Category 2 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for the Category 2 spill, to the online [CIWQS Sanitary Sewer System Database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.2.1 (Draft Spill Report for Category 2 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and

14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.3. Monthly Certified Spill Reporting for Category 3 Spills

The Enrollee shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated:
 - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry locations(s);
 - Estimated spill volume fully recovered from the drainage conveyance system; and

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- Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.
- 10. Estimated total spill volume recovered;
- 11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
- 12. Spill end date and time;
- 13. Description of how the spill volume estimations were calculated, including, at minimum:
 - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
- 14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 15. System failure location (for example, main, pump station, etc.);
- 16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
- 17. Description of the impact of the spill;
- 18. Whether or not the spill was associated with a storm event;
- 19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
 - Adjusted schedule/method of preventive maintenance,
 - Planned rehabilitation or replacement of sanitary sewer asset,
 - Inspected, repaired asset(s), or replaced defective asset(s),
 - Capital improvements,
 - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
 - Description of spill response activities,

- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

21. Detailed narrative of investigation and investigation findings of cause of spill.

3.4. Monthly Certified Spill Reporting for Category 4 Spills

The Enrollee shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

3.5. Amended Certified Spill Reports for Category 3 Spills

Within 90 calendar days of the certified Spill Report due date, the Enrollee may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:

- Maintain records per section 4.4. of this Attachment;
The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1 Lateral Spills”

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after

the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of this Attachment) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the Enrollee has no further spills of any category, in the subsequent calendar month, the Enrollee shall certify “no-spills” for the subsequent calendar month.

If the Enrollee has no spills from its systems during a calendar month, but the Enrollee voluntarily reported a spill from a private lateral or a private system, the Enrollee shall certify “no-spills” for that calendar month.

If the Enrollees has spills from its owned and/or operated laterals during a calendar month, the Enrollee shall not certify “no spills” for that calendar month.

3.8. Electronic Sanitary Sewer System Service Area Boundary Map

The Legally Responsible Official shall submit, to the State Water Board, an up-to-date electronic spatial map of its sewer system service area boundaries. The map must be in accordance with section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order and the specification provided on the statewide Sanitary Sewer Systems program website. The map must include the location of wastewater treatment facility(ies) that treats the sewer system waste, if in the same sewer service boundary.

By the Effective Date of this General Order, specifications for the electronic sanitary sewer service area boundary map format will be provided on the statewide Sanitary Sewer Systems Order program website.

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

A new Enrollee shall complete and submit its first certified Annual Report into the online CIWQS Sanitary Sewer System Database, **within 30 days of obtaining a CIWQS account**; Subsequent Annual Reports are due by April 1 of each year.

All enrollees shall update their previous year’s Annual Report, **by April 1 of each year after the Effective Date of this General Order**, for each calendar year (January 1 through December 31).

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee’s Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

- Population served;

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- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;
- Number of system operation and maintenance staff:
 - Entry level (less than two years of experience),
 - Journey level (greater than two years of experience),
 - Supervisory level, and
 - Managerial level;
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
 - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);
- System information:
 - Miles of system gravity and force mains,
 - Number of upper and lower service laterals connected to system,
 - Estimated number of upper and lower laterals owned and/or operated by the Enrollee,
 - Portion of laterals that is Enrollee's responsibility,
 - Average age the major components of system infrastructure,
 - Number and age of pump stations, and
 - Estimated total miles of the system pipeline not accessible for maintenance;
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste;
- Name of satellite sewer system tributaries;
- Number of system's gravity sewer above or underground crossings of water bodies throughout system;
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned;
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);
- System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;
- Major spill causes (for example, root intrusion, grease deposition);

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- System infrastructure failure points (for example, main, pump station, lateral, etc.);
- Ongoing spill investigations; and
- Actions taken to address system deficiencies.

3.10. Sewer System Management Plan Audit Reporting Requirements

The Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database **by six (6) months after the end of the 3-year audit period.**

If a Sewer System Management Plan Audit is not conducted as required: the Enrollee shall:

- Update the online CIWQS Sanitary Sewer System Database and select the justification for not conducting the Audit; and
- Notify its corresponding Regional Water Board (see Attachment F (Regional Water Quality Control Board Contact Information)) of the justification for the lapsed requirements.

The Enrollee's reporting of a justification for not conducting a timely Audit does not justify non-compliance with this General Order. The Enrollee shall:

- Submit the late Audit as required in this General Order; and
- Comply with subsequent Audit requirements and due dates corresponding with the original audit cycle.

3.11. Sewer System Management Plan Reporting Requirements

For an Existing Enrollee previously regulated by Order 2006-0003-DWQ: **Within every six (6) years after the required due date of its last Plan Update**, the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

Order 2006-0003-DWQ required each enrollee to develop its initial Sewer System Management Plan per the following schedule, with required Plan updates at a frequency of 5-years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2009

Between 100,000 and 10,000: August 2, 2009

Between 10,000 and 2,500: May 2, 2010

Less than 2,500: August 2, 2010

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This Order carries forth the previously-required Plan Update schedule per Order 2006-0003-DWQ. Per the six-year Plan Update frequency required in this Order, the Enrollee shall upload and certify its first Plan Update, to the online CIWQS Sanitary Sewer System Database by the following due dates, with subsequent Plan Updates at the frequency of six years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2025

Between 100,000 and 10,000: August 2, 2025

Between 10,000 and 2,500: May 2, 2026

Less than 2,500: August 2, 2026

For a New Enrollee: **Within twelve (12) months of its Application for Enrollment Approval date**, the Legally Responsible Official of a new Enrollee shall upload and certify a local governing entity-approved Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database. If electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its Sewer System Management Plan posted on its own website. The due date for subsequent 6-year Plan updates, is six (6) years from the submittal due date of the new Enrollee's first Sewer System Management Plan.

4. RECORDKEEPING REQUIREMENTS

The Enrollee shall maintain records to document compliance with the provisions of this General Order, and previous General Order 2006-0003-DWQ as applicable, for each sanitary sewer system owned, including any required records generated by an Enrollee's contractor(s).

4.1. Recordkeeping Time Period

The Enrollee shall maintain records of documents required in this Attachment, including records collected for compliance with this General Order, and records collected in accordance with previous General Order 2006-0003-DWQ, for five (5) years.

4.2. Availability of Documents

The Enrollee shall make the records required in this General Order readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request.

4.3. Spill Reports

The Enrollee shall maintain records for each of the following spill-related events and activities:

- Spill event complaint, including but not limited to records documenting how the Enrollee responded to notifications of spills. Each complaint record must, at a minimum, include the following information:
 - Date, time, and method of notification,

- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;
- Records documenting the steps and/or remedial action(s) undertaken by the Enrollee, using all available information, to comply with this General Order, and previous General Order 2006-0003-DWQ as applicable;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Records, in accordance with the Monitoring Requirements in this Attachment.

4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills

An Enrollee must maintain the following records for each individual Category 4 spill and for each individual non-Category 1 Enrollee-owned and/or operated lateral spill, and report in accordance to section 3.6 (Annual Certified Spill Reporting of Category 4 and/or Lateral Spills) of this Attachment.

Recordkeeping of Individual Category 4 Spill Information:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Description and GPS coordinates for the system location where the spill originated;
4. Did the spill reach a drainage conveyance system? If Yes:
 - Description of drainage conveyance system location,
 - Estimated spill volume fully recovered within the drainage conveyance system, and
 - Estimated spill volume remaining within the drainage conveyance system;
5. Estimated total spill volume exiting the sanitary sewer system;
6. Spill date and start time;
7. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
8. System failure location (for example, main, pump station, etc.);
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of how the volume estimation was calculated, including, at minimum:

- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;

11. Description of implemented system modifications and operating/maintenance modifications.

Recordkeeping of Individual Lateral Spill Information:

1. Date and time the Enrollee was notified of, or self-discovered, the spill;
2. Location of individual spill;
3. Estimated individual spill volume;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.); and
5. Description of how the volume estimations were calculated.

Total Annual Spill Information:

1. Estimated total annual spill volume;
2. Description of spill corrective actions, including at minimum:
 - Local regulatory enforcement action taken against the sewer lateral owner in response to a spill, as applicable, and
 - System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location.

4.5. Sewer System Telemetry Records

The Enrollee shall maintain the following sewer system telemetry records if used to document compliance with this General Order, and previous General Order 2006-0003-DWQ as applicable, including spill volume estimates:

- Supervisory control and data acquisition (SCADA) system(s);
- Alarm system(s);
- Flow monitoring device(s) or other instrument(s) used to estimate sewage flow rates, and/or volumes;
- Computerized maintenance management system records; and
- Asset management-related records.

4.6. Sewer System Management Plan Implementation Records

The Enrollee shall maintain records documenting the Enrollee's implementation of its Sewer System Management Plan, including documents supporting its Sewer System Management Plan audits, corrections, modifications, and updates to the Sewer System Management Plan.

4.7. Audit Records

The Enrollee shall maintain, at minimum, the following records pertaining to its Sewer System Management Plan audits, and other internal audits:

- Completed audit documents and findings;
- Name and contact information of staff and/or consultants that conducted or involved in the audit; and
- Follow-up actions based on audit findings.

4.8. Equipment Records

The Enrollee shall maintain a log of all owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment.

4.9. Work Orders

The Enrollee shall maintain record of work orders for operations and maintenance projects.

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring; Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	<p>(Section 3.1 of Attachment E1)</p>

Table E2-2**Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters**

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1)

Table E2-3**Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters**

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4**Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters**

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5**Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters**

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee's knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

ATTACHMENT F – REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION

This Attachment provides a map, list of counties, and contact information to assist the Enrollee in identifying the corresponding Regional Water Quality Control Board office, for all Regional Water Board notification requirements in this General Order.



Region 1 -- North Coast Regional Water Quality Control Board:

Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity counties.

RB1SpillReporting@waterboards.ca.gov or (707) 576-2220

Region 2 -- San Francisco Bay Regional Water Quality Control Board:

Alameda, Contra Costa, San Francisco, Santa Clara (Northern most part of Morgan Hill), San Mateo, Marin, Sonoma, Napa, Solano counties.

RB2SpillReports@waterboards.ca.gov or (510) 622-2369

Region 3 -- Central Coast Regional Water Quality Control Board:

Santa Clara (most of Morgan Hill), San Mateo (Southern portion), Santa Cruz, San Benito, Monterey, Kern (small portions), San Luis Obispo, Santa Barbara, Ventura (Northern portion) counties.

CentralCoast@waterboards.ca.gov or (805) 549-3147

Region 4 -- Los Angeles Regional Water Quality Control Board:

Los Angeles, Ventura counties (small portions of Kern and Santa Barbara counties).

rb4-ssswdr@waterboards.ca.gov or (213) 576-6600

Region 5 -- Central Valley Regional Water Quality Control Board:

Rancho Cordova (Sacramento) Office: Colusa, Lake, Sutter, Yuba, Sierra, Nevada, Placer, Yolo, Napa, (North East), Solano (West), Sacramento, El Dorado, Amador, Calaveras, San Joaquin, Contra Costa (East), Stanislaus, Tuolumne counties.

RB5sSpillReporting@waterboards.ca.gov or (916) 464-3291

Fresno Office: Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare counties, and small portions of San Benito and San Luis Obispo counties.

RB5fSpillReporting@waterboards.ca.gov or (559) 445-5116

Redding Office: Butte, Glen, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Tehama counties.

RB5rSpillReporting@waterboards.ca.gov or (530) 224-4845

Region 6 -- Lahontan Regional Water Quality Control Board:

Lake Tahoe Office: Alpine, Modoc (East), Lassen (East side and Eagle Lake), Sierra, Nevada, Placer, El Dorado counties.

RB6sSpillReporting@waterboards.ca.gov or (530) 542-5400

Victorville Office: Mono, Inyo, Kern (East), San Bernardino, Los Angeles (North East corner) counties.

RB6vSpillReporting@waterboards.ca.gov or (760) 241-6583

Region 7 -- Colorado River Basin Regional Water Quality Control Board:

Imperial county and portions of San Bernardino, Riverside, San Diego counties.

RB7SpillReporting@waterboards.ca.gov or (760) 346-7491

Region 8 -- Santa Ana Regional Water Quality Control Board:

Orange, Riverside, San Bernardino counties.

RB8SpillReporting@waterboards.ca.gov or (951) 782-4130

Region 9 -- San Diego Regional Water Quality Control Board:

San Diego county and portions of Orange and Riverside counties.

RB9Spill_Report@waterboards.ca.gov or (619) 516-1990

End of Order 2022-0103-DWQ