



**Bear Valley Community Services District
(BVCSD)
Sewer System Management Plan (SSMP)**

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Section I.

BVCSD Sewer System Management Plan (SSMP) Goals

- Properly maintain and operate an efficient collection system
- Protection of public health and downstream waters by reducing the amount of Sewer System Overflows (SSO's) within the collection system
- Comply with all regulatory procedures and reporting requirements
- Educate the public on proper and good maintenance practices for the sewer system (privately or publicly owned)

Section II. Organization

BVCSD SSMP Organizational Chart

BVCSD Board of Directors

Jay Carlyn	Steve Roberts	Jane Baron	Gil Grace	Vacant
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BVCSD General Manager

David Edmonds

Public Works Director

Vacant

Wastewater Supervisor/CPO

Jason Parks

Collection System Maintenance Crew

Jason Parks Shawn Pimentel Allan Lacson PW Dept. (if needed)

BVCSD Board of Directors:	Funding and approval of District Budget
BVCSD General Manager:	Oversight of all District affairs
Public Works Director:	PW oversight (roads, water, wastewater), budgeting, program audits
Wastewater Supervisor/CPO:	Oversight Wastewater Department, budgeting, signatory and reporting responsibilities, overall supervision maintaining the SSMP
Coll. Sys. Maintenance Crew:	Perform any and all maintenance and repairs to collection system as needed, respond to any emergency calls for the collection system

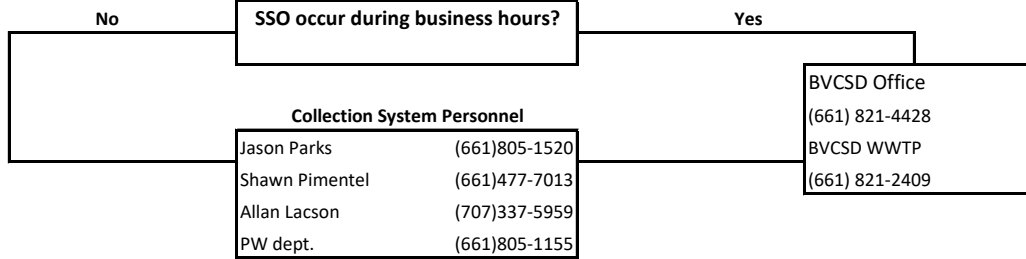
BVCSD General Manager, David Edmonds (661) 821-4428

Public Works Director, Vacant (661) 821-4428

Wastewater Supervisor/CPO, Jason Parks (661) 821-2409 off. (661) 805-1520 cell

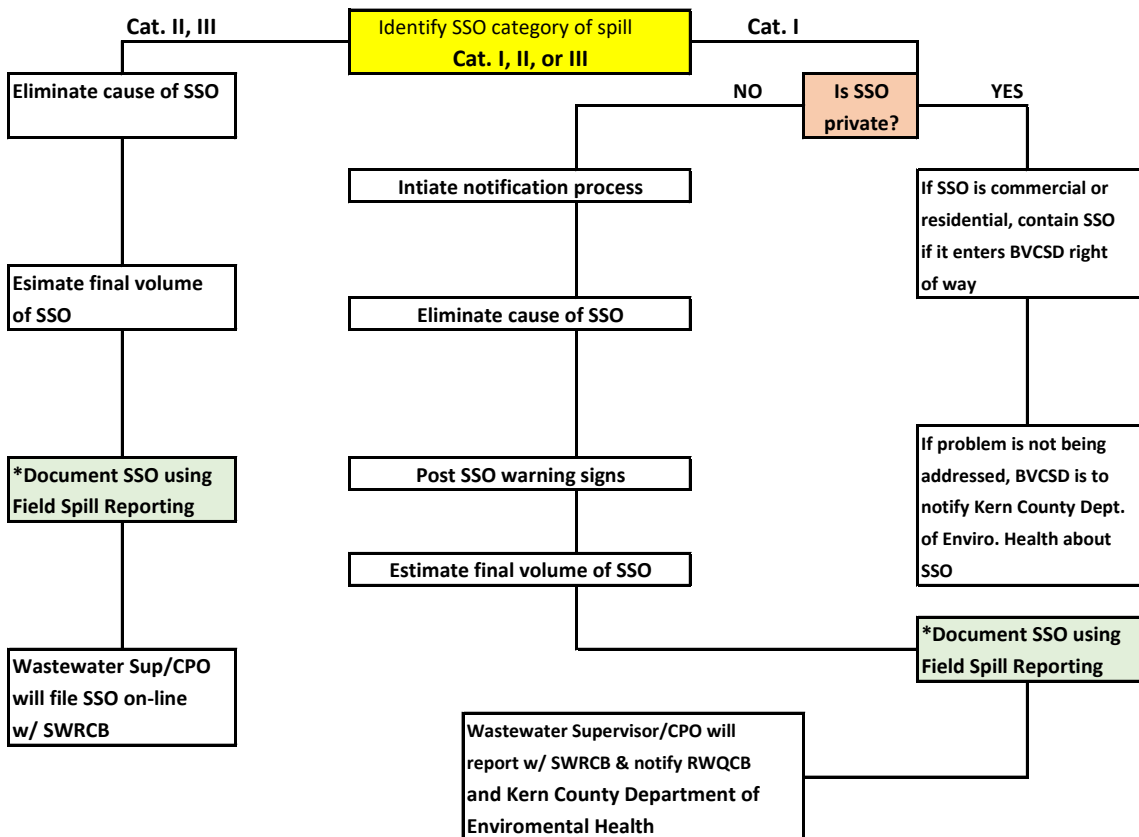
Section II. Organization

BVCSD SSO Chain of Communication



* Collection System Personnel use following when responding to an SSO:

* Assess situation, attempt containment using spill containment procedures, note time of arrival, photo area if needed



Section II. Organization

***Field Spill Reporting #'s are as follows:**

- #1 Contact Office of Emergency Services (OES) for a control # 1-800-852-7550
- #2 Notify Kern Co. Environmental Health (661) 549-9927 or EH@CO.KERN.CA.US
- #3 Notify Regional Water Board Office (Region 5 Fresno) (559) 488-4397 Alex Mushegan
(#'s 1-3 must be done within 2 hours of a sewer spill)
- #4 Certification: Certify to the State Water Board through CIWQS web-site

Category I	<p>Discharge of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow conditions that:</p> <p>Reach surface water and/or reach a drainage channel tributary to a surface water; or</p> <p>Reach a municipal separate storm sewer system and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the municipal separate storm sewer is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).</p>
Category II	<p>Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.</p>
Category III	<p>All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.</p>

Section III.

Legal Authority

Bear Valley Community Services District Code Ordinance No. 09-230

1. Title 8, Sewer Use and Services

A. Chapter 1, Sewage Disposal Services (Ord. 09-230, 1-8-2009)

- i. **8-1-2, Need for Regulation**
Sub section B, Assurance of Conditions
 - a. #1, #2, #3

- ii. **8-1-3, Sewage Disposal Systems**
Sub Section A, General Provisions

- Application Required
- Building Permit
- Inspection Required
- Design Requirements
- Abandonment of Facilities

Sub Section C, Premises Where Sewers Available

- Duty to connect to community sewer system
- Private Property
- House Lateral
- District Nonliability

B. Chapter 3, Sewer Use Requirements (Ord. 09-230, 1-8-2009)

- i. **8-3-2, Sewer Use Prohibitions and Requirements**

Sub Section A, Discharge of Storm water

Sub Section B, Discharge of Toxic wastes

Sub Section C, Acceptability of Specific Wastes Determined by the Manager

2. Title 1, Administration

A. Chapter 1, Official District Code (Ord. 09-230, 1-8-2009)

- i. **1-1-2, Acceptance**

B. Chapter 4, General Penalty

- i. **1-4-1, General Penalty**

Sub Section A, Misdemeanor

Sub Section B, Infraction

Section IV.

Operations and Maintenance Programs (O&M)

Collections O&M: The BVCS D collection's system consist of seven (7) miles of gravity flow sanity sewer lines and one (1) lift station. All collection lines gravity flow to the BVCS D lift station, which is level controlled, and then is pumped through a force main to the BVCS D Wastewater Treatment Facility. The lift station consists of a wet well, dry well, and two (2) pumps that are programmed to operate in the auto position as a lead/lag set-up. The lift station is accessed monthly by the BVCS D wastewater staff for routine maintenance. Routine maintenance consists of: greasing of pump and motor bearings, valve exercising, emptying of the humidifier, general inspection of the dry well, and rotating the lead/lag pump positions. ***All PPE and confined space procedures and equipment must and will be utilized when entering the lift station dry well*.**

The BVCS D wastewater staff shall hydro-jet 25,000 feet each year for collections system maintenance. During this time the BVCS D staff will note any "trouble areas" throughout the system and take correction action to mitigate any negative impact these "trouble areas" may present in all efforts to reduce potential SSO's. All hydro-jetted lines shall be highlighted on a designated map stored at the wastewater facility for that operational year. Dates, footages and observations of the collections system lines shall be entered on the collection's system work forms.

Collections system mapping: A master map of the collections system shall be stored at the BVCS D Wastewater Facility. Any inaccuracies shall be noted on the map and reviewed for corrections annually. All vehicles designated for the collection system shall carry a map of the system in that vehicle.

Rehabilitation and Replacement Plan: Currently the BVCS D does not have the equipment for inspections of the sewer collection system via CCTV. The BVCS D wastewater staff intends to incorporate the proper CCTV inspection equipment in the upcoming budget. The introduction of inspections of the collection system via CCTV will allow the BVCS D more access to the collections system to determine a better plan for rehabilitation and replacement of system lines. Currently, BVCS D had tasked Willdan Engineering with preparing a rate study of the collections system as well to evaluate and help create a proactive repair and replacement program for the BVCS D wastewater department.

Training: The BVCS D currently hold bi-weekly safety meetings for all Public Works staffing. Additionally, employees in the Wastewater Department shall know how to properly enter a confined space, proper equipment and PPE for entering confined space, and proper PPE and equipment needed for routine and emergency hydro-jetting of the collection's system. All wastewater staff will be trained on how to properly document collections system maintenance and proper documentation, procedures and reporting requirements for a SSO.

Continued...

Section IV.

Operations and Maintenance Programs (O&M) cont...

Equipment and Replacement Parts: The following equipment is available for the BVCSO staff for collections system operations:

- Hydro-jetting trailer unit, 4000 psi
- Cleaning and root cutting nozzles for hydro-jetting unit
- Reflective vests for staff
- Safety glasses
- Gloves
- Body harnesses
- Tri-pod hoist
- Gas detectors
- Blower for ventilation
- Portable generator
- Truck w/ hydraulic lifting crane
- Manhole lifting tools
- Back hoe
- Compressor
- Pipe repair equipment
- Pipe plugs
- Maps
- Pedometer
- Marking paint

Proper planning, training, and communication within the BVCSO organization helps reduce and prevent SSO's and provides a safe environment for the community of Bear Valley Springs.

Section V.

Design and Performance Provisions

Bear Valley Community Services District Code Ordinance No. 09-230

3. Title 8, Sewer Use and Services

C. Chapter 1, Sewage Disposal Services (Ord. 09-230, 1-8-2009)

iii. 8-1-2, Need for Regulation

Sub section B, Assurance of Conditions

b. #1, #2, #3

iv. 8-1-3, Sewage Disposal Systems

Sub Section A, General Provisions

- Application Required
- Building Permit
- Inspection Required
- Design Requirements
- Abandonment of Facilities

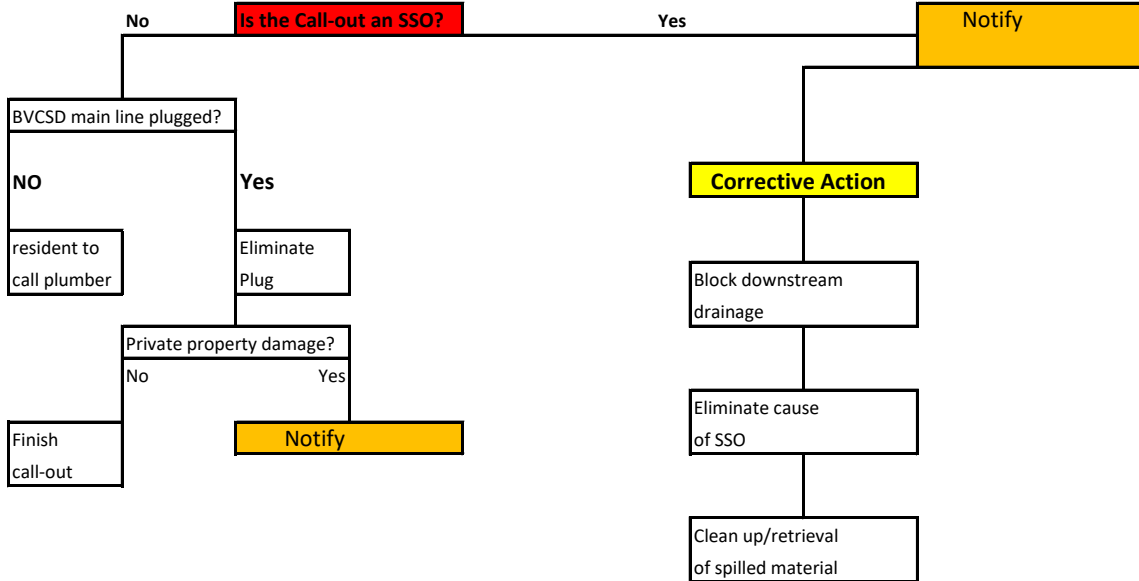
Sub Section C, Premises Where Sewers Available

- Duty to connect to community sewer system
- Private Property
- House Lateral
- District Nonliability

Section VI. Overflow Emergency response Plan

When dealing with an SSO, the following shall be utilized:

1. Overflow Reponse Plan Flow Chart
2. BVCSD Chain of Communication Chart



Wastewater personnel
Jason Parks (661)805-1520

Wastewater personnel are to notify the following:

- a. persons needed to assist with SSO
- b. Office of Emergency Services (OES) 1-800-852-7550
- c. Kern County Environmental Health (661)862-8700
- d. Regional Water Board (Region 5) Alex Mushegan (559)488-4397

* b - d must all be done withing 2 hours of the SSO*

Section VII.

Fats, Oils, and Greases (F.O.G)

Bear Valley Community Services District Code Ordinance No. 09-230

1. **Legal Authority**
 - C. **Title 1, Administration**
 - Chapter 1, Official District Code (Ord. 09-230, 1-8-2009)
 - ii. **1-1-2, Acceptance**
 - D. **Title 8, Sewer Use and Services**
 - Chapter 1, Sewage Disposal Services (Ord. 09-230, 1-8-2009)
 - v. **8-1-2, Need for Regulation**
 - Sub section A, Statement in Resolution**
 - Chapter 3, Sewer Use Requirements (Ord. 09-230, 1-8-2009)
 - i. **8-3-2, Sewer Use Prohibitions and Requirements**
 - Sub Section B, Discharge of Toxic wastes**
2. **Purpose**
 - A. **Prevention of Sewer System Overflows (SSO's)**
 - Communication with businesses
 - 1. Bear Valley Springs Association (BVSA)
 - a. Mulligan Room & Country Club
 - i. Grease trap inspections and pump outs
 - b. Equipment
 - i. Lid puller
 - ii. Flashlight
 - iii. Sludge tube
 - iv. Gloves
 - c. 25 % rule
 - i. Grease and food layer > 25%, pump out required
 - d. Scheduling
 - i. BVSA contacts BVCSD WWTP during scheduled pump outs
 - quarterly pump outs
3. **Best Management Practices (BMPs)**
 - A. **Educating the Public**
 - Informative brochures/pamphlets
 - 1. Residents
 - a. good housekeeping
 - b. drain awareness
 - A. **Educating the Public cont...**
 2. Commercial
 - a. Haulers
 - i. Direct Environmental Solutions, LLC. 1-800-347-7876
 - ii. Waste Management (661) 822-5273
 - B. **Preventative Maintenance**
 1. Routine inspections
 - a. Business
 - b. Lift station

Section VIII.

System Evaluation and Capacity Fees

Bear Valley Community Services District Code Ordinance No. 09-230

8-5-1: FINDINGS:

The board finds that:

A. Purpose: The purpose of such fees is to replace the wastewater treatment and disposal capacity owned by the district and still allow for the growth of residential and other development.

C. Anticipated Growth: Because of the anticipated growth in residential housing demand, the existing wastewater capacity owned by the district will be consumed by residential development long before the vacant land within the boundaries served by the district's wastewater plant is fully occupied. When residential development occurs, without such fees being collected by the district, the existing wastewater capacity will already have been used. If all of the unused capacity of the wastewater plant is used, then no development could occur within the boundaries served by the district's wastewater plant unless funding from the state or the federal government was obtained. Since such funds are difficult to obtain, development would be greatly delayed or might not occur at all, which is not in the best interests of the residents of the district.

8-5-2: WASTEWATER SYSTEM CAPACITY FEE:

A. Establishment of Wastewater System Capacity Fee: Except as may be provided by this chapter or any amendment to this chapter, the applicant for approval of new wastewater connections must:

1. Deposit: Deposit at the district office the wastewater system capacity fee before the district can issue a letter of intent to provide service or actually provide service to all or any part of the land which is the subject of the application. When, if, and to the extent that the general manager determines that services will not be provided to the land which is the subject of the application, the general manager shall order such fees to be refunded to the applicant. If, and to the extent that the application for wastewater service is granted by the general manager, the district shall deposit the wastewater system capacity fee in a segregated account as is more fully set forth below.

B. Conditional Approval of Application: Any approval of an application for a new wastewater service shall be conditioned on both the applicant's signing a contract with the district to construct to the

district specifications the improvements to the wastewater delivery system and the payment of all fees and charges required by this chapter or by any other ordinance of the district. The wastewater system capacity fee shall be in addition to any fees for the actual cost of connection to the wastewater system. In addition to connection charges and the wastewater capacity fee, the applicant may be required to install a wastewater main or other wastewater improvement if the general manager, in considering the application, concludes that such improvement is necessitated by the granting of the application. If such additional improvement is required, that improvement shall be constructed at the time the general manager directs but, in no event, later than the physical connection to the district wastewater system of any of the property which is the subject of the application.

C. Determination of Wastewater System Capacity Fee:

1. Wastewater System Capacity Fee Rate:

- a. The wastewater system capacity fee shall be set on a per residential unit basis, for residential development, by resolution of the board of directors. For all development other than development which is exclusively residential, the rate shall be set after the board of directors consults an engineer of the board's choice who then advises the district of the expected usage of the development. The board shall then consider a fee for the development which is comparable on a volume of use basis to the fee set for residential units.
- b. The rate for the wastewater system capacity fee shall be set annually by resolution. The rate shall be adjusted each July 1 in the amount of the consumer price index as determined for wages in the Los Angeles-Riverside-Orange County area as determined for the previous calendar year.

2. Procedure:

- a. Engineer's Report: At the time of the initial application for wastewater service, the applicant shall deposit with the district the amount determined by the general manager as the estimated cost of the engineer's report and sign an agreement to reimburse to the district any cost of the engineer's report which exceeds the amount of the deposit. The district will then consult an engineer of the district's choice and arrange for a study and a report to be made which includes all of the following:
 - (1) The anticipated usage of capacity of the wastewater plant expressed in terms of residential equivalents;
 - (2) Any additional construction which will, in the engineer's opinion, be required to be performed on the district wastewater delivery system in order to allow for the service to the new development without diminishing the level of service provided to the balance of the district users who are currently receiving service;
 - (3) Any additional recommendations to offset costs to the district of the new growth; and
 - (4) Whether the district currently owns enough capacity to accommodate the growth.
- b. Determination of Exactions to be Required: The general manager will not act on the application until after the submission of the engineer's report. Any approval of the application will be conditioned upon the payment of the full amount of the wastewater system capacity fee prior to the actual connection of any of the connections approved by the general manager in his action on the application. After the submission of the engineer's report, the wastewater system capacity fee shall then be set by the board for that particular project and what additional improvements would be required to the district

wastewater delivery system before it will allow the connection. If the general manager determines that the applicant will have to construct any such improvements, then the general manager will enter into an agreement with the applicant as a condition of the granting of the application that the applicant will construct the improvements identified by the engineer to the district specifications before connecting any of the new wastewater users to the district system.

- c. Exceptions for Single-Family Dwelling Unit: An engineer's report will not be required for connection of a single-family dwelling unit. "Dwelling unit" means one or more habitable rooms which are occupied or which are intended or designed to be occupied by one family with facilities for living, sleeping, cooking and eating. Furthermore, the general manager shall have the authority to approve the application for service for a single-family dwelling. (Ord. 09-230, 1-8-2009)

8-5-4: ANNUAL REVIEW:

Prior to July 1 of each year, during the budget review process, the board of directors of the district shall review the status of compliance with this chapter, and the degree to which fees collected pursuant to this chapter are mitigating the impacts of new commercial and residential development projects and new development entitlement. (Ord. 09-233, 10-8-2009)

Section IX.

Monitoring, Measurements, and Plan Modifications

The BVCSD shall monitor all maintenance and call-outs of the collections system. A collections system work order sheet has been created and a WWTP Master Maintenance program are in place to track any such events. Based on these tools, the BVCSD, shall construct an annual spreadsheet of all events related to the collections system allowing them to make proper and effective modifications to the SSMP and the collections system O&M.

The Spreadsheet shall consist of the following information:

General Maintenance

- Hydro-jetting
- Lift station

SSO's/ Blockages

- Locations
- Causes

Fats, Oils, and Greases (F.O.G.) Inspections

- BVSA grease trap pump outs
- Documentation

Additionally, The BVCSD shall track and highlight all lines of the collections system where maintenance was performed for the entire year on a master map, located at the wastewater facility.

Section X.

SSMP Program Audits

The BVCSD Wastewater Supervisor shall conduct an audit of The SSMP every two years from the original date of implementing the SSMP. The audit shall consist of, but not limited to:

- All Sewer System Overflows (SSO's)
- SSO remedies
- Lift Station Maintenance
- Mainline hydro-jetting
- Public Education efforts

Section XI.

Communication Program

Availability of the BVCSD Sewer System Management Plan (SSMP) can be found on-line at the District web site, www.bvcسد.com, or a copy can be requested at the District office, located at 28999 South Lower Valley Road, Tehachapi, CA 93561. Any additional questions, feel free to contact the Wastewater Supervisor at (661) 821-2409.

**BVCSD Collections System
Work Order**

Date: _____

Location of work: _____

Type of work being performed: Routine Call-out

Notes:

Line Evaluation: Grease Roots Obstructions

Notes:

CCTV: YES NO

Notes:

Length of run: _____ ft

Daily total of lines ran: _____ ft

Additional comments: _____

Operators: _____

