Sewer System Management Plan

Original Date: August 2009

Review Date: November 8, 2019

Submitted to:

City of Arvin, California

VEOLIA WATER

VEOLIA WEST OPERATING SERVICES, INC

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INTRODUCTION AND PURPOSE

This Sewer System Management Plan (SSMP) is a guiding document that outlines the practices, systems, procedures, and data that the City of Arvin (City) employs to effectively manage its wastewater collection system. Primary goals of this SSMP are to:

- Reduce and/or eliminate (SSOs)
- Reduce mainline blockages
- Ensure a high, quantifiable level of service to the City of Arvin
- Ensure adequate system capacity for existing peak flows and future development
- Protect the public health and the environment

Description of the Sanitary Sewer Collection System

The Arvin sanitary sewage collection system is composed of thirty-six (36) miles of gravity flow collection lines; six hundred thirty-five (635) manholes; and one (1) sewer lift (pump) station (LS) located at El Camino Real and South A Street. There are 187 commercial user connections and no significant industrial users. The sanitary sewer collection system and the storm water drain system are separated.

This SSMP was developed to achieve the above-mentioned goals and comply with the Statewide General Discharge Requirements' (No.2006-0003) 11 mandatory SSMP elements.

Through the application of the plans and programs described and contained in this SSMP, the City of Arvin and its contracted operations and maintenance manager of the collection and conveyance system, Veolia West Operating Services, Inc. (Veolia Water), has established and maintained a high level of service to the community through:

- Decreased number of SSOs.
- Decreased number of blockages and interruptions in service.
- Prompt and effective emergency response.
- Prompt and effective customer service.
- Accurate and thorough information gathering and management

1.0 FRONT MATTER

1.1 Responsibilities

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Arvin Wastewater Collection and Treatment Facility
Veolia West Operating Services, Inc.
P.O. Box 665
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360-204-2242 (Mobile)
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Technical and Performance, Veolia North America
346-744-1542 (Mobile)
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1.2 References

SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirement for Sanitary Sewers

SWRCB Order No. WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

1.3 Related Procedures, Documents, and Software Tools

InfoNet™, Computerized Maintenance Management Program

PipeTech/Peninsular Technologies, PT View and PT Scan-CCTV Inspection Programs

1.4 Glossary and Abbreviations

Blockage – A buildup of debris in the sewer that stops the flow of wastewater and allows the water to back up behind the stoppage, sometimes causing an overflow (also called a stoppage).

Geographical Information System (GIS) – A database linked with mapping that includes various layers of information used by government officials. Examples of information found on a GIS can include a sewer map; sewer features such as pipe location, diameter, material, condition, last date cleaned or repaired. The GIS also typically contains base information such as streets and parcels.

Infiltration/Inflow (I/I) – Extraneous water that enters the sewer system through means other than through sanitary discharges. Infiltration is generally considered to be extraneous water that enters the sewer system over longer periods of time, such as groundwater seepage through cracks in the sewer. Inflow is generally considered to be extraneous water that enters the system as a direct result of a rain event, such as through improper connections to the sanitary sewer, through flooded manhole covers or through defects in the sewer. While it is impossible to control all I/I, it is certainly desirable to reduce I/I when cost-effective to do so.

Lateral – The portion of sewer line that connects a home or business to the main line in the street. Sometimes sewer system agencies own or maintain a portion of the lateral.

Regional Water Board – Short name for identified Regional Water Quality Control Board (also known as RWQCB). The mission of this state regulatory agency is to: preserve, enhance and restore the quality of California's water resources and ensure their proper allocation and efficient use for the benefit of present and future generations. The RWQCB with jurisdiction over the Arvin system is Region 5F, located in Fresno, CA.

Sanitary Sewer Overflow (SSO) –Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

Sewer System Agency – The legal entity that owns and is ultimately responsible for the wastewater collection system. Also called a wastewater collection system agency.

Stoppage – A buildup of debris in the sewer that stops the flow of wastewater and allows the water to back up behind the stoppage, sometimes causing an overflow. Also called a blockage. Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

Wastewater Collection System – All pipelines pump stations and other facilities upstream of the wastewater treatment plant that transport wastewater from its source to the treatment plant headworks.

Wastewater Collection System Agency – The legal entity that owns and is ultimately responsible for the wastewater collection system. Also called a sewer system agency.

LIST OF ACRONYMS

BMP	Best Management Practice
CCTV	Closed-Circuit Television
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CDFG	California Department of Fish & Game
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GIS	Geographic Information System
GPM	Gallons per Minute
GRD	Grease Removal Device
I/I or I&I	Inflow & Infiltration
LRO	Legally Responsible Official
MGD	Million Gallons per Day
MRP	Monitoring and Reporting Program
NPDES	National Pollutant Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
AMC	Arvin Municipal Code
RWQCB	Regional Water Quality Control Board
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDR	General Waste Discharge Requirements
WWTP	Water Pollution Control Plant

2.0 GOALS

2.1 Arvin Sewer System Management Plan Goals

The goals presented below for the Arvin Sewer System Management Plan were developed to provide the citizens of Arvin with a reliable conveyance system that is designed, operated and maintained to ensure protection of the public health and the environment through ensuring adequate capacity for peak wastewater flows, decreasing the number of SSOs and minimizing the impact of SSOs that do occur. The system will be operated in a fiscally responsible manner while continually reviewing the needs to improve operations and to expand and improve the system as needed.

Primary Goals

- Reduce and/or eliminate (SSOs)
- Reduce mainline blockages
- Ensure a high, quantifiable level of service to the City of Arvin community
- Ensure adequate system capacity for existing peak flows and future development
- Protection of Public Health and Environment

Wastewater collection system agencies are not required to use computer-based maintenance management and GIS software to manage their wastewater collection systems, although the use of these tools is regarded as a best practice in the industry. The city of Arvin and Veolia Water employ the use of a computerized maintenance management system InfoNet and ESRI Arc GIS software, as detailed in this SSMP, to manage its wastewater collection system.

3.0 ORGANIZATIONAL STRUCTURE

3.1 Organizational Chart

Figure 1-1, below, illustrates the organizational structure for the Arvin sanitary sewer system program.

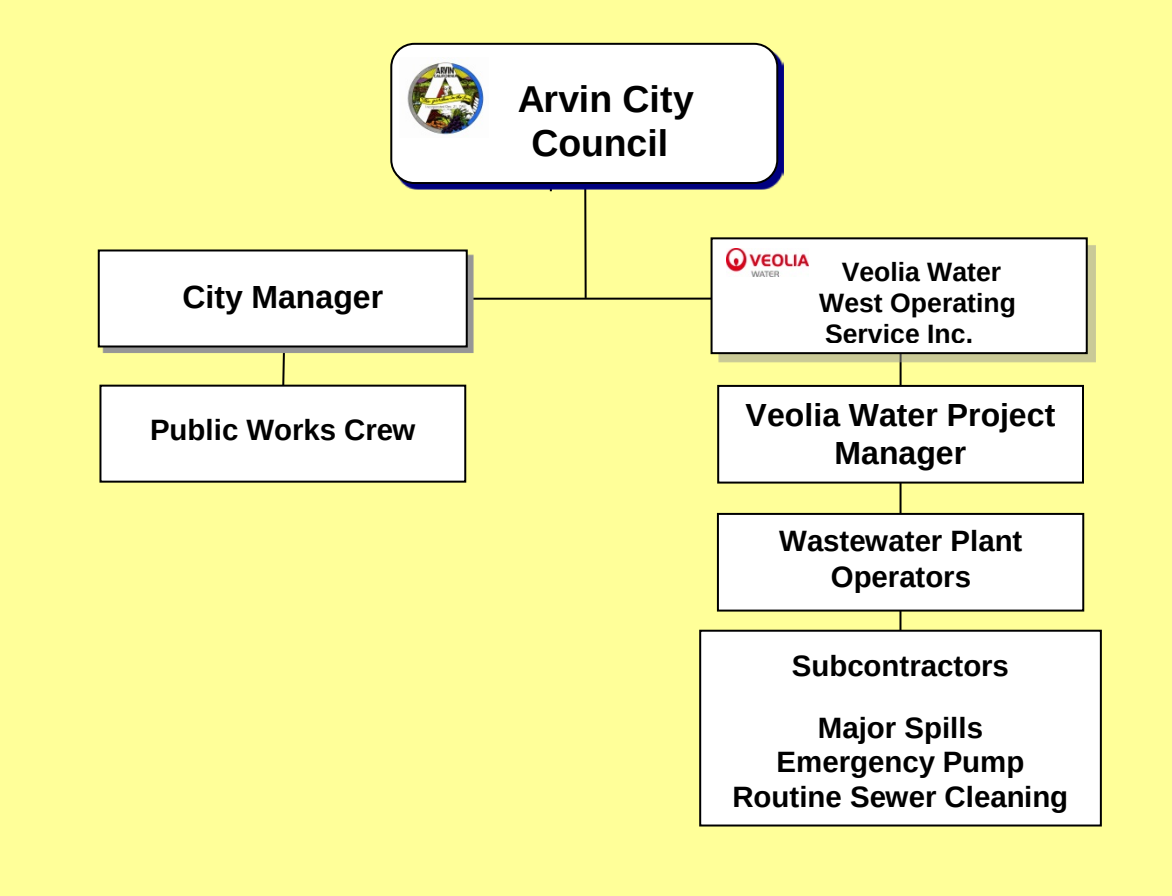


Figure 1-1. Sewer System Program Management Structure

3.2 Roles and Responsibilities

City Manager or Public Works Director – Establishes policy, plans strategy, leads staff, allocates resources, delegate's responsibility, authorizes outside contractors to perform services and may serve as public information officer.

City Engineer – Prepares wastewater collection system planning documents, manages capital improvement delivery system, documents new and rehabilitated assets, and creates and enforces city design and construction standards.

Veolia Water Project Manager – Manages field operations and maintenance activities, provides relevant information to agency management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews.

Field Crew – Staffs preventive maintenance activities, mobilizes and responds to notification of stoppages and SSOs (mobilizes sewer cleaning equipment, bypasses pumping equipment and portable generators).

City Clerk – Provides information updates to Board or City Council. Arranges for emergency meetings if necessary.

3.3 City of Arvin/Veolia Water Contacts List

Arvin City Hall – 661-854-3134

Arvin City Manager
Richard "Jerry" Breckenridge
661-854-3134 (Office)
661-345-7180 (Cell phone)

Arvin City Engineer
Adam Ojeda
661-854-2822 (Office)
661-205-7623 (Cell phone)

Arvin Wastewater Treatment Plant – 661-854-2421

Veolia Water Project Manager
Dale Ducharme
661-632-6414 (Cell phone)

Veolia Water Plant Operator II
Tim McMahon
661-979-5840 (Cell phone)

Veolia Water Plant Operator II
Stacy Billings
661-281-9708 (Cell phone)

Veolia Water Plant Operator II
Warren Barton
661-281-4760 (cell phone)

Emergency Response Subcontractors

Sewer Cleaning
Roto Rooter – 661-323-0990
Bill Dart – 661-979-3136 (Cell phone)

Pump and Pipe Rental
Rain for Rent – 661-399-1724
Matt Raymond – 661-201-9032 (Cell phone)

Emergency pipe and manhole repairs

W.M. Lyles Co.

David Stringer – 661-343-7325 (Cell phone)

4.0 LEGAL AUTHORITY

CHAPTER 13.08, WASTEWATER COLLECTION AND TREATMENT SYSTEM

ORDINANCE NO. 382

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ARVIN, STATE OF CALIFORNIA, AMENDING THE ARVIN MUNICIPAL CODE BY AMENDING CHAPTER 13.08 THEREOF. THIS ORDINANCE PROVIDES FOR THE COLLECTION AND TREATMENT OF DOMESTIC, COMMERCIAL, AND INDUSTRIAL WASTEWATER. PROVIDING GENERAL PROVISIONS FOR THE CONNECTION AND USAGE OF THE MUNICIPAL SEWER SYSTEM; PROVIDING FOR CONNECTION PERMITS, ESTABLISHING SEWER USE FEES, SEWER CONSTRUCTION STANDARDS, FUNDING OF THE MUNICIPAL SEWER SYSTEM, AND ENFORCEMENT OF THE REQUIREMENTS ESTABLISHED HEREIN. THIS ORDINANCE REPEALS ALL EXISTING SEWER USE ORDINANCES UPON THE EFFECTIVE DATE OF THIS ORDINANCE.

WHEREAS, the Federal "Clean Water Act as amended by the Clean Water Act of 1977 (Pub. L. 95-217) and contained in 33 U.S.C., Section 1251 et seq., requires the City of Arvin ("City") to adopt an Industrial Pretreatment Program; and

WHEREAS, the City of Arvin has already made and will continue to make a substantial financial investment in its wastewater treatment system to achieve the goals of the Act; and

WHEREAS, the City of Arvin seeks to provide for the use of its Publicly Owned Treatment Works (POTW) by industries served by it without impairment of its normal function of collecting, treating, and discharging domestic wastewater, and without the discharge by the City of Arvin POTW of pollutants which would violate the discharge allowed under its National Pollutant Discharge Elimination System (NPDES) permit, storm water permit, and applicable rules of all governmental authorities with jurisdiction over such discharges.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARVIN THAT CHAPTER 13.08 ARTICLES I, II, III, IV, IX, X AND XI OF THE ARVIN MUNICIPAL CODE IS HEREBY REPEALED AND REPLACED BY ARTICLES I, II, III, IV, V, AND VI AMENDED TO READ IN FULL AS FOLLOWS:

City of Arvin, California

CHAPTER 13.08
WASTEWATER COLLECTION AND TREATMENT SYSTEM

CONTENTS

City of Arvin, California

CHAPTER 13.08
WASTEWATER COLLECTION AND TREATMENT SYSTEM

ARTICLE I – CONNECTIONS TO MUNICIPAL SANITARY SEWER SYSTEM

§13.08.010 Objectives

Article I sets forth uniform requirements for connection to the Arvin Municipal Sanitary Sewer System.

§13.08.011 Definitions

Unless the particular provision or the context otherwise requires, the definitions and provisions contained in this section govern the construction, meaning and application of words and phrases used in this chapter, including the definition of each word or phrase which is derived from it or from which it is a derivative, as the case may be.

1. Building means any structure used or intended for supporting or sheltering any use or occupancy as determined by the City Public Works Director.
2. Business means all commercial uses, including, but not limited to, offices, merchandising, industrial uses and residential uses on premises where there are four (4) or more living units or where unrelated persons are housed in the same structure such as boarding houses.
3. City Sewer System means all facilities for collecting, treating and conveying domestic or industrial wastes of any nature, including all such facilities both inside and outside the city limits of Arvin that are owned, operated, and controlled by the City, and any sewer system located within the city, owned and operated by any public district, including the Kern County Sanitation District.
4. Completion means acceptance, in writing, by the City for maintenance of an addition to the City Sewer System.
5. Connected means the physical connection of any plumbing or drainage system or fixture contained in any structure to a public sewer line.
6. Customer means a person who is, or who has agreed to be, responsible for the payment of water or sewer service charges. The term “customer” is also synonymous with “account” against which charges are assessed and billed.
7. Dwelling Unit means the same as living unit.
8. Sewer Connection Fees means those fees collected or charged against property for the right to connect to a public sanitary sewer line where the property has not participated in the cost of providing treatment plant and sewer collection capacity.

§13.08.012 Conditions of Sewer Service

All persons using the sewer system of the City must pay for such service and for the privilege of connecting to the sewer at the rates, at the time and under the conditions set forth in this chapter,

and must comply with all regulations set forth in this chapter relating to the use of such sewer system.

§13.08.013 Sewer Connections within City Limits

A. Connection Required

(1) Every building or structure in which plumbing fixtures are installed, and every premises having piping thereon which conveys sewage or other liquid wastes to an approved point of disposal must be connected to the public sewer if it is available. A public sewer is available, for the purposes of this section, if the sewer had been constructed and is available for use in any public street, alley or right-of-way within one-hundred fifty (150) feet for the first unit plus seventy-five (75) feet for each additional unit, to be measured along such public street, alley or right-of-way from the nearest property line to the sewer. For the purpose of this section, the number of units computed includes all units developed on contiguous property held under one ownership. The following exception is allowed: Property located in the A-1 and A-2 zoning districts, on a lot of at least two (2) net acres in size, and provided the lot, if not served by community water system, contains one (1) dwelling unit or septic system per two (2.0) acres Under this exception connection to the City sewer may be deferred until the use of the land changes either through district amendment or special permit.

(2) Notwithstanding any provision to the contrary, buildings or structures connected to a septic tank or cesspool at the time a public sewer becomes available must be connected to the public sewer within three (3) years after the sewer becomes available. However, if the property has previously been subject to an earlier connection date by reason of requirements of a jurisdiction other than the City, the sewer connection must be made on or before specified earlier date.

If the Health Officer determines the continued use of a septic tank or cesspool will create an immediate health menace, the property must be connected within the time specified by the Health Officer.

Buildings or structures not connected as required by this section are considered a public nuisance and are subject to enforcement actions as prescribed by the City Codes.

(3) No person can cause, suffer or permit the disposal of sewage or other liquid wastes into any drainage system on any lot that is connected to a public sewer when such connection is required by this section.

B. Connection Permit Required

No person can connect any lot to the City's sewer system without first obtaining a permit issued under the authority of the City Manager. No permit will be issued by the City Manager unless a sewer connection fee is paid as specified in paragraph C of this part.

C. Sewer Connection Charges:

(1) No permit will be issued by the City Manager unless a sewer connection fee in the sum of one thousand five hundred-seventy dollars ($1,570.00) has been paid, unless otherwise provided for in this Code. All developed lots with an existing structure or structures as of January 1, 1995, located along South Derby, (or any other location designated in

Exhibit A, attached to the ordinance codified in this section, and on file in the City Clerk's Office) which were unable to connect to the City's sewer system due to lack of access to a main sewer trunk line will only be required to pay the sewer connection fee in effect as of January 1, 1990, four hundred twenty-six dollars ($426.00) per ESFD, to obtain a permit under this section.

(2) The amount of any sewer connection charges prescribed under the provisions of this chapter is a debt owing to the City which, until paid, is a continuing obligation of the owner of the property for the connection of which the charge was incurred. Any person who makes a connection to the City sewer system without having paid such charges in full or having accomplished the execution, acceptance and recording of an agreement to pay therefore as herein provided, is liable in an action in the name of the City in any court of competent jurisdiction for the amount of such charge. The conviction or punishment of any person for connecting to the City's sewer system without obtaining a permit does not relieve such person from paying the charges due and unpaid at the time of such conviction.

(3) Payment of sewer connection and related charges payable because of connection of existing single-family residences within the City may be deferred by an agreement between the property owner and the City, to pay such charges together with interest on the unpaid balance, over a period of not more than fifteen (15) years, in accordance with the following provisions:

(a) The agreement must provide for substantially equal monthly installments amortized over a period of not more than fifteen (15) years, at a fixed rate of interest, which cannot be less than the rate the City would otherwise be able to receive by placing such amount in investment accounts as periodically established by the City Manager and adopted by the City Council.

(b) The sewer connection and related charges which may be deferred, and limitations, if any, on the amounts that may be deferred, are those as established in the master fee resolution.

(c) The agreement must be of a form and content prescribed by the City Manager and approved by the City Attorney.

(d) The agreement must be signed by all persons having a record title interest in the real property being served by the City's sewer system, to which connection is requested, and must include the legal description of the property.

(e) The agreement must provide that the whole, or any part, of the balance of charges due at any time under the agreement may be accelerated and paid at any time, at the option of the payer.

(4) The agreement provided for in subsection (2) above must be in the form of a covenant running with the land, and will establish a lien against the property in favor of the City in the amount of all deferred charges, and will be recorded in the Office of the Kern County Recorder.

(5) The agreement and lien are enforceable by the City in any manner available at law or in equity, including, but not limited to, private foreclosure and sale of the property in the manner provided by Section 2924 of the California Civil Code.

§13.08.014 Sewer Connections Outside City Limits

A. Persons owning or operating premises outside the city limits of Arvin may be granted permission to connect their property with the City's sewer system.

B. Permission to connect to the sewer system will be granted by the Director of Public Works if all provisions of this chapter are complied with.

C. Every permit granted for service outside the city limits of Arvin is subject to the following conditions:

(1) That payment of the applicable sewer connection charge, established by this chapter, must be made before connection of the premises to the sewer;

(2) That all regulations of the City will be followed with respect to use of the City's sewer system;

(3) That drainage from roofs, courts or other areas must be allowed to pass into the City's sewer system.

§13.08.015 (Reserved)

§13.08.016 (Reserved)

§13.08.017 (Reserved)

§13.08.018 (Reserved)

§13.08.019 (Reserved)

ARTICLE II – SANITARY SEWER SYSTEM CONSTRUCTION

§13.08.020 Sewer System Addition – Preliminary Investigation – Inspection – Final Connection

Any person desiring to make an addition to the City's sewer system to serve property must make a request, in writing, to the City Manager for preliminary investigation into the feasibility of such addition. If the addition as requested is found to be feasible by the City Manager, such addition may be made to the City's sewer system in accordance with the provisions of this chapter. The City Manager will cause the installation to be inspected, and will allow the final connection to such system only if it is found that such additions conform in all respects with the standard specifications for sewer facilities of the City, applicable health laws and the lines and grades designated by the City Engineer.

§13.08.021 Sewer System Addition – Right-of-Way – Pump Station

If a right-of-way is needed for an addition to the City's sewer system, the person constructing the addition must obtain such right-of-way for the City, or pay the cost to the City of acquiring such right-of-way. If the City Engineer determines that a pump station is necessary to serve the property of the person installing the sewer, such person must install a pump station meeting specifications approved by the City Engineer, and pay the full cost of such installation.

§13.08.022 Sewer System Addition – Specification and Plans

Specifications and plans for the installation of additions to the City's sewer system must be prepared by a registered civil engineer and be approved by the City Engineer before a permit for doing the work may be issued.

§13.08.023 Sewer Main – Property of City

When a sewer main has been installed in public streets or easements pursuant to the regulations of the City and has been accepted by the City Manager, the sewer becomes the property of the City and a part of the City's sewer system. House branch sewers, including their connection to sewer mains, are not considered City property or parts of the City's sewer system, and their maintenance and repair will not be provided by the City.

§13.08.024 City Reimbursement

The person constructing an addition to the City's sewer system must reimburse the City for its cost of labor (including overhead), equipment and materials for the following:

A. Construction or revision of house branches where the City Engineer determines that the site conditions constitute a significant hazard to the public convenience, safety and health or to private property in the area, and that such hazard may be mitigated if the City makes arrangements for construction or revision;

B. All connections to pressure sewers after completion of such sewers;

C. Review and approval of specifications and plans submitted by the applicant for the proposed additions to the City's sewer system;

D. Preliminary investigation of the feasibility of additions to the City's sewer system; and

E. Any design, surveying, inspection or testing performed by the City in connection with an addition to the City's sewer system.

§13.08.025 Connections to Mains in Other than Dedicated and Surfaced Streets

Connections to mains in other than dedicated and surfaced streets or alleys is not permitted where service can be rendered from dedicated and surfaced streets or alleys by extension or otherwise.

§13.08.026 (Reserved)

§13.08.027 (Reserved)

§13.08.028 (Reserved)

§13.08.029 (Reserved)

ARTICLE III – SEWER SERVICE CHARGES

§13.08.030 Authority to Assess Sewer Service Charges

The City is authorized to adopt, by ordinance, regulation, or both, sewer service charges in accordance with Section 204 (b)(1)(A) of the Act, 40 CFR § 35.939-3, Section 307 (b) and (c) of the Act, and 40 CFR § 403.0.

§13.08.031 Annual Sewer Charge

The annual sewer service charge for use of the wastewater collection, conveyance and treatment facilities, whether the premises are located within or outside of the City, must be designated in the master fee resolution.

§13.08.032 Determination of Sewer Charges

The following provisions will be applied when appropriate in determining charges for sewer services and responsibility:

A. Any person charged for sewer service may, upon request to the City Manager, have his sewer service charges calculated pursuant to, and subject to, the conditions set forth as follows:

(1) The quantities of wastewater produced (discharged) may be determined by use of an effluent wastewater flow meter which has flow totalizing capability, and is installed and maintained at the expense of the owner/occupant of the premises and approved by the City Manager;

(2) If an effluent wastewater meter is not used, the City may establish appropriate guidelines to determine the volume of wastewater discharged from a property. The guidelines established by the City shall be conclusive and not subject to appeal. Such determinations are effective for no more than one (1) year. Where such guidelines are used to determine the volume of wastewater produced by any premises, instead of by measurement of an installed effluent wastewater meter, the owner or occupant of such premises shall be assessed the cost incurred by the City to develop the original guidelines and each subsequent annual discharge estimate. The City may establish, in the master fee resolution, a minimum charge for developing these guidelines and calculating the annual discharge estimate.

(3) In lieu of the above, public and parochial schools may be charged for sewer service on the basis of average daily attendance, as designated in the master fee resolution, provided the premises so charged for sewer service are used exclusively for school purposes with no residential uses thereon. Such charges are calculated on an annual basis, based on the previous school year's attendance divided by twelve to determine the monthly rate.

B. Where two (2) or more users are located on the same premises and each has a separately metered water service, the sewer service charge is calculated and billed in the same manner as if each user were located on a separate premise.

C. Where several users are served with a single metered water service and sewer service charges for one (1) or more of such users is based upon the volume of potable water delivered to such user, a single service charge is made, based upon the total volume of water delivered through such meter, which charge is the responsibility of the water service customer.

D. Where a single business occupies contiguous premises served by more than one metered water service, and sewer service charge for such use is based upon the volume of potable water delivered to such user, a separate sewer service charge will be made for the water used through each meter.

E. Where there are mixed commercial and residential users on the same premises and the commercial use has separate sewer facilities to serve employees or customers, the sewer service charge will be as specified in this section for the residential user, plus the monthly sewer service charge referred to in this article and designated in the master fee resolution for the commercial use.

F. Where there are mixed commercial and residential uses on the same premises and the commercial use does not have separate sewer facilities to serve employees or customer, the sewer service charge is calculated based upon the highest economic use.

G. Upon annexation to the City, property which has been connected to the City sewer without payment of sewer construction fees, sewer connection fees, lateral sewer charges, oversize sewer charges, house branch sewer charges, and/or other related sewer construction and connection charges imposed by the City Codes, will be due and payable to the City. Until such charges have been paid, the property will continue to be assessed Sewer Use Fees prescribed for sewer service outside the City limits.

§13.08.033 Special Disposal Site, Contract Disposal Charges

Whenever special disposal sites are constructed, the City may allow the disposal therein of the contents of trucks designed and used for the pumping out and removal of waste from septic tanks and chemical toilets. The City is authorized to enter into agreements with septic waste disposal companies regulating such disposal, and providing for charges to recover the cost of the sites and other city expenses including wastewater treatment at the rates designated in the master fee resolution.

§13.08.034 Vacant Premises – Charge Determination – Disconnection

While any premises connected to the sewer system are vacant, the regular minimum sewer charge will be payable for such premises by the owner thereof, whether or not sewer service is used, if water is connected to or available for use on the premises, unless such premises are physically disconnected from the sewer system. Applications for determination by the Director of Public Works that the premises have been physically disconnected from the sewer system will be made to the City accompanied by the disconnection inspection fee designated in the master fee resolution. Premises so disconnected will not be reconnected to the City's sewer system by any person except with permission of the Director of Public Works. If approval for reconnection to the sewer system is desired, an application for reconnection must be filed with the City, accompanied by the reconnection inspection fee designated in the master fee resolution.

§13.08.035 High Strength Discharge Charges

A. Definition of "High Strength Discharges". Discharges from commercial and/or industrial production processes that meet one or more of the following criteria:

(1) Biochemical Oxygen Demand concentration greater than 265 milligrams per liter (>256 mg/L BOD);

(2) Total Suspended Solids concentration greater than 300 milligrams per liter (>300 mg/L TSS);

(3) Daily volume of discharge (Daily Flow) in excess of twenty-five thousand gallons per day (>25,000 gpd); or

(4) Any other pollutant discharged to the City's sewer system that is identified by the City as requiring additional treatment resulting in an increase in the cost of treatment to the City.

B. Determination of "High Strength Discharges". The City determines the strength for billing purposes by using one of the following methods:

(1) Average Pollutant Concentration. The City calculates the average of the pollutant concentrations measured during the billing period. A minimum of four (4) samples must be used to determine the pollutant concentrations for determination of high strength discharges. If fewer than four (4) samples are collected and analyzed during the billing period, the City may use the most recent four (4) analytical results for the parameter collected within the previous six (6) months. If more than four (4) samples were collected and analyzed for the parameter during the evaluation period, all results will be used for determining the average pollutant concentrations.

(2) Analytical Methods. All analytical methods must conform to analytical methods specified in this ordinance and approved under 40 CFR §§ 136 et seq.

(3) Flow measurement. All dischargers routinely discharging in excess of twenty-five thousand (25,000) gallons per day of process wastewater must install effluent flow meters approved by the City.

(a) Highstrength discharge determinations must use the measurements of the effluent flow meter.

(i) When an effluent flow meter is required, the discharger must submit detailed plans showing the operation and proposed installation of the effluent meter to the City Engineer for approval before installation of the equipment. Any subsequent changes in sampling or metering site, type of meter or other monitoring equipment must be reported to the City Engineer for prior approval.

(b) The discharger is responsible for the costs associated with the procurement, operation and calibration of the effluent flow meter and sampling manholes.

(c) The discharger is responsible for daily reading, recording and reporting of the volume of discharge to the City.

(d) If the discharger is not required to install an effluent flow meter due to low volume discharges, the City may use the water supply flow meter measurements to determine high strength discharge charges. The City must maintain the accuracy of the water supply flow meter and conduct all water supply flow meter readings.

(e) Effluent flow meters used for the measurement of high-strength discharges must be calibrated annually and must measure the discharge within plus or minus ten percent

(±10%) of the actual volume of the discharge and must measure the volume of discharge in gallons per day.

(4) The City may require additional testing to determine the average pollutant concentration for high-strength discharge charge assessment, if in the opinion of the City more tests are required due to the variability in the discharges being monitored.

(5) The discharger is responsible for the costs associated with the sample collection and analysis for determining high strength discharges.

§13.08.036 Violation

Failure to pay sewer service charges is a violation of this chapter and subject to the provisions of Chapter 1.08, Section 1.08.010 and Chapter 1.12, Section 1.12.010, 1.12.020 and 1.12.030 of this code.

§13.08.037 (Reserved)

§13.08.038 (Reserved)

§13.08.039 (Reserved)

ARTICLE IV – SEWER SERVICE FUNDS

§13.08.040 Established

A sewer service fund is established, consisting of revenue from sewer service fees and revenue from sewer connection charges as defined in this chapter.

§13.08.041 Source of Moneys

All revenue obtained from sewer service fees is deposited into said fund, must be accounted for separately and expended for the acquisition, construction, reconstruction, maintenance and operation of wastewater facilities, including payment of interest and principal on bonds issued for such purposes, and for the implementation of the City's pretreatment program. Such funds cannot be expended for new sewers less than 10 (ten) inches in diameter.

§13.08.042 Payment of Bonds – Capital Reserve

All revenue obtained from sewer service fees is deposited into said fund, must be accounted for separately and expended for the acquisition, construction and reconstruction of the wastewater system and pretreatment facilities, including payment of interest and principal on a capital reserve for depreciation and enlargement of the wastewater system and pretreatment facilities.

§13.08.043 Fees and Charges not Applicable to Plumbing Permit Fees – Loans

The terms "sewer service fees" and "sewer connection charges" as used in this chapter apply only to those funds collected for the use of the wastewater system and must not be construed to affect revenues derived from the plumbing permit fees. However, that nothing contained in this section will be construed to restrict or prohibit the making of transfers from said sewer service fund for the purpose of making temporary loans to one or more of the various departments of the City. All such temporary loans must be restored annually to the sewer service fund on or before the last day of each fiscal year.

§13.08.044 (Reserved)

§13.08.045 (Reserved)

§13.08.046 (Reserved)

§13.08.047 (Reserved)

§13.08.048 (Reserved)

§13.08.049 (Reserved)

ARTICLE V – ENFORCEMENT

§13.08.050 Right of Entry

The officers, employees and inspectors of the City have the right to enter upon the premises of any person at reasonable hours to inspect and to determine whether this chapter is being violated.

§13.08.051 Duty of Enforcement

The Public Works Director is charged with the duty of enforcing this chapter. The provisions of this chapter apply to any building, structure or property connected to the City's sewer system, whether the same is owned, operated or controlled by a private party or by a public or quasi-public agency, corporation or association, other than the City.

§13.08.052 Violation – Time Schedule for Specific Remedial Action

In addition to such other penalties as may be prescribed for a violation of this chapter, whenever the City finds that a discharge of wastewater has taken place in violation of any prohibitions or limitations or pretreatment standards promulgated in accordance here-with, a written notice will be served upon such person requiring the submission to the City for approval, and a detailed time schedule for specific actions which the user is required to take in order to prevent or correct such violation. The reporting schedule and sampling and analysis will be in accordance with the provisions for this chapter. Any failure to comply with such an approved time schedule, or sampling any analysis, is a violation of this chapter, and subject to further enforcement actions.

§13.08.053 Violation – Termination of Services

If a violation is not corrected by timely compliance, the City may order any user to show cause before the City as to why service should not be terminated, in accordance with the following provisions:

A. A notice will be served on the user, specifying the time and place of a hearing to be held by the City regarding the violation, and directing the offending party to show cause before the City as to why an order should not be made directing the termination of water service and/or severance of sewer connection. The notice of hearing will be served personally or by registered or certified mail, return receipt requested, at least ten (10) days before the hearing. Service may be made on an authorized representative of an industry, or the occupant(s) or owner(s) of record of the property.

B. The City will designate the individuals to conduct the hearing. The City may be represented by any member(s) of the City Council, the Public Works Director and/or the City Manager. These persons are authorized to:

(1) Issue notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved to such hearings.

(2) Take the evidence.

(3) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the City Council for action thereon.

C. At any public hearing, testimony taken before the City or any person designated by it must be under oath and made available to any member of the public or any party to the hearing upon request.

D. After the City Council has reviewed the evidence, it may issue an order to the user responsible for the violation directing that, following a specified time period, the sewer connection be severed unless adequate treatment facilities and devices or other related opportunities are properly operated and appropriate to ensure compliance with this chapter.

§13.08.054 Disconnection – Reinstatement

A It is hereby declared to be a policy of the City Council that any user of the City's sewage disposal system and treatment plant who violates any provision of this chapter will, upon due process, be disconnected from the City's sewer disposal system.

B. The City will reinstate sewer service upon proof of the elimination of the non-complying discharge.

§13.08.055 Imminent Hazard – Suspension

Whenever the City finds that a discharge of wastewater produces an imminent hazard to the public health or safety or endangerment to public or private property, the City is authorized to take immediate action to suspend water service and sever all pertinent connections to the sewer without giving any advance notice or warning to the user.

§13.08.056 Grievance – Appeal-Determination

Any person aggrieved by any decision, action or determination made by the City, interpreting or implementing the provisions of this Code, including, but not limited to, charges required to be paid, may file with the Public Works Director a written request for reconsideration within ten (10) days of such decision, action or determination, setting forth, in detail, the facts supporting the request for reconsideration. If the ruling made by the Public Works Director on such request for reconsideration is not satisfactory to the person requesting the same, s/he may, within ten (10) days after written notification of the Public Works Director's ruling, appeal the same to the City Council by filing a written notice of appeal with the City Clerk. The appeal will be heard by the City Council within thirty (30) days from the date of filing. After hearing the appeal of such person and giving due consideration thereto, the City Council will make its determination and notify the aggrieved party of such determination within ten (10) days of the hearing. The appeal will be based on the appellant's written request to the Public Works Director and such Director's ruling thereon. The ruling of the Public Works Director is final and conclusive for all purposes, except for any ruling by such Director that the City Council finds to be arbitrary, capricious or not based on substantial evidence. The Public Works Director's decision, actions or determination will remain in full force and effect during such periods of reconsideration and/or appeal.

§13.08.057 Violation – Penalty – General

Pursuant to the provisions of the United States Code, title 18, section 1001, relating to fraud and false statements, and the provisions of Section 309(c)(2) of the Clean Water Act governing false statements, representations or certification in reports required under the Clean Water Act, any person who knowingly makes any false statements, representation or certification in any application, record, report, plan or other document filed or required to be maintained for this

chapter, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this chapter, will, upon conviction, be punished by a fine of not more than twenty-thousand dollars ($20,000) or imprisonment for not more than six (6) months, or both.

§13.08.058 Council Order or Ordinance Violation – Penalty

Any user who is found to have violated an order of the City Council, or who willfully or negligently fails to comply with any provisions of this chapter, or the orders, rules and regulations, will be fined not more than twenty-five thousand dollars ($25,000) for each offense (California Government Code section 54740). Each day on which a violation occurs, or continues to occur, is a separate and distinct offense. The City may petition the Superior Court to impose, assess and recover such sums or to issue a preliminary or permanent injunction, or both, as may be appropriate in restraining the continuance of such violation. In addition to the penalties provided herein, the City may recover reasonable attorneys' fees, court costs, court reporter fees and other expenses of litigation by appropriate suits at law against the person found to have violated this chapter or the orders, rules and regulations hereunder.

ARTICLE VI – §13.08.059 THROUGH §13.08.099 (Reserved)

CITY OF ARVIN RESOLUTION NO.

To be updated with most current

resolution 2010-42

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ARVIN INCREASING THE CITY'S WASTEWATER CONNECTION FEE.

WHEREAS, the City Council previously adopted Resolution No. 97-15 establishing a Wastewater Connection Fee applicable to all new development within the City; and

WHEREAS, the City's hired consultant has conducted an analysis of the proposed increased wastewater connection fee and prepared a report that has been made available for public inspection. The consultant's analysis is attached to the Resolution as Exhibit A and incorporated by this reference; and

WHEREAS, the City Council held a duly noticed public hearing for the increased wastewater connection fee on September 07, 2010, as required by Government Code Section 66016; and

WHEREAS, the public hearing of September 07, 2010 was continued to the Council Meeting of October 05, 201O;

WHEREAS, the City Council finds it in the best interest of the health, safety and welfare of the residents of the City of Arvin to authorize the City Council to increase the Wastewater Connection Fee;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ARVIN DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. Recitals. The Arvin City Council finds and declares that the above recitals are true and correct and incorporates them herein.

SECTION 2. Findings. The Arvin City Council makes the following findings, as required by Government Code Section 66001:

(a) The policy of the City is that new users or new development will not burden existing ratepayers with the cost of public facilities required to accommodate growth. The purpose of the increased wastewater connection fee is to implement this policy by providing a funding source from new users for infrastructure that is available to meet their demands on the system. The exaction of the connection fee advances a legitimate interest by enabling the City to meet the wastewater capacity needs of new users.

(b) The increased wastewater connection fee will be used to "buy-in" to the future wastewater system. New development creates a need for additional capacity, the charge is used to fund the costs associated with adding additional system capacity. Collected revenues will be used to reimburse the City for capital

investments made that resulted in capacity for future demand, for new facilities, to upgrade existing facilities, or for other capital infrastructure costs to keep the system operating at acceptable levels. The cost of the existing wastewater facilities was provided by the City.

(c) The City's existing facilities and system provide a City-wide network of service accessible to the buildings and facilities resulting from new users or new development. Connection fee revenues will be used to expand, upgrade, restore, rehabilitate, maintain, and modernize the existing system, which will benefit all new users. Thus, there is a reasonable relationship between the use of connection fee revenues and the types of new users or new development that will pay the fee.

(d) The need for the facilities is based on the cumulative demands for wastewater imposed on the system based on the number and types of fixtures or wastewater using processes within the proposed development. These demands generate the need for a particular meter size for each development. Thus, there is a reasonable relationship based on sound engineering principles for the charges imposed.

(e) This reasonable relationship between the connection fee for a specific development project and the cost of the facilities attributable to the wastewater demand resulting from that development project will reflect the estimated wastewater system capacity demand of that project. The total charge for a specific project is based on the project's projected use of wastewater system capacity. The schedule of charges converts the estimated capacity that a development project will use in the wastewater system into a charge based on the equivalent dwelling units ("EDUs") required by that project. Projects that are projected to discharge more wastewater will require more EDUs and will, correspondingly, pay a higher fee, as they will use more of the system's capacity. Thus, the schedule of charges ensures a reasonable relationship between the connection fee for a specific development project and the cost of the facilities associated with wastewater demand resulting from that development project.

SECTION 3. Wastewater Connection Fee.

The City's Wastewater Connection Fee shall be increased as follows:

Oct 05, 2010 through Dec 31, 2011 = $3,600 per equivalent dwelling unit.

Jan 1, 2012 through Dec 31, 2012 = $4,000 per equivalent dwelling unit.

Jan 1, 2013 and forward = $4,400 per equivalent dwelling unit

SECTION 4. Effective Date. This Resolution shall take effect 60 days after its date of passage, approval and adoption.

SECTION 5. Certification. The City Clerk shall certify the adoption of this Resolution.

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the Arvin City Council at regular meeting thereof held on the 05th day of October,2010 by The following vote:

AYES: CM Guzman, CM Pichardo, MPT Ojeda, Mayor Tarver

NOES: CM Flores

ABSENT:

ABSTAIN:

ATTEST

CECILIA VELA, City Clerk

CITY OF ARVIN

By: TIM TARVER, Mayor

APPROVED AS TO FORM:

By: RACHEL RICHMAN, City Attorney

I, _____, City Clerk of the City of the City of Arvin, California, DO HEREBY CERTIFY the foregoing is a true and accurate copy of the Resolution passed and adopted by the City Council of the City of Arvin on the date and by the vote indicated herein

5.0 OPERATION AND MAINTENANCE PROGRAM

5.1 Veolia Water/City of Arvin Sanitary Collection System Project Management Plan

The sanitary sewer collection system has approximately 36 miles of gravity and pressure sewer pipes with appurtenant manholes and 1 lift station. System components are summarized below in Table 5-1:

Table 5-1
City of Arvin Collection System Assets

Sanitary System Components	Approximate Number of Units
Customers	4,740 (SFD, MFD, Bus. and Spec.)
Service Laterals	3,000±
Gravity Sewer Mains	35.5 miles, 187,440 lf
Pressure Sewer Mains	0.5 miles, 2,640 lf
Manholes	635
Lift/Pumping Stations	1
Permitted CSOs	0

Sewer System Plan Elements

The SSMP was developed to incorporate the elements described below.

SSMP Goals

This management plan is driven to meet the critical goals and accomplish the required actions outlined in the Table 5.2. This will result in meeting the terms of the contract with the City, complying with regulatory requirements, providing customers quality service, and optimizing the life of the system.

Table 5-2
Veolia Water Asset Management Plan Goals

Goal	Required Actions
Comply with the requirements of the Contract Amendment	• Provide an asset management program that includes O&M & asset repair, replacement & rehabilitation. • Improve the preventive maintenance program. • Minimize sanitary systems spills. • Minimize pump station spills. • Minimize grease blockages. • Clean and maintain the sanitary sewer system. • Achieve the expected life of the managed assets. • Meet or exceed the performance goals.

Table 5-2 Veolia Water Asset Management Plan Goals- CONTINUED	
Goal	**Required Actions**
Eliminate spills (SSOs)	• Perform preventive and predictive maintenance. • Repair, replace and rehabilitate assets. • Develop and implement a formal SSO response protocol.
Develop and implement SSMP per SWDR	• Develop SSMP that meets State requirements. • Maximize efficiency and minimize risk of SSOs. • Provide a proactive preventive maintenance program and Asset Management program. • Clean the entire system on a risk-based schedule, but not less than once every four years; problem areas (hot spots) as required. • Televise system on a risk-based schedule, but not less than once every 10 years. • Inspect manholes. • Identify and resolve grease problems in the sanitary sewer mains.
Increase reliability of lift station	• Provide O&M of sanitary sewer lift station. • Keep records and monitor the asset. • Provide capital improvements if necessary. • Include in emergency response plan.
Provide quick response and resolution to customer complaints	• Be available to handle customer complaints. • Handle emergencies in a timely manner. • Solve the customer's problem.
Comply with regulatory requirements including environmental and safety	• Analyze existing operations for compliance. • Submit accurate reports in a timely manner. • Provide employee training. • Meet permit requirements.
Develop SECAP in compliance with SWDR requirements	• Monitor flows and evaluate inflow/infiltration. • Evaluate the sanitary sewer system's existing and future capacity. • Develop a CIP to address deficiencies in the existing system. • Provide repair, replacement and rehabilitation of the assets.
Achieve the expected life of the assets	• Perform preventive and predictive maintenance. • Perform major maintenance as required.
Maintain accurate records	• Implement InfoNet CMMS. • Periodically update system maps and records. • Maintain an accurate relational database of O&M records for the sanitary sewer system assets.
Provide quality service to the City	• Meet the requirements of the Contract Amendment. • Provide timely and complete reports. • Achieve the Asset Management goals outlined herein.

Organization

The organization and staffing plan was developed to meet the goals and contract requirements. The total number of positions was determined by developing an activities-based labor budget. For example, the contract requires the system to be cleaned on a four-year cycle. To accomplish this, the total labor hours were estimated to form the basis for the budget. Each position has a job description. Exhibit C in the Appendix is the Organization Chart.

The duties and responsibilities of the different positions are briefly described below:

- **City Manager:** Establishes policy, plans strategy, provides oversight of Veolia Water and allocates resources.
- **City Engineer:** Reviews and approves the wastewater master plans and the capital improvements program.
- **Veolia Water Project Manager:** Provides overall management for the O&M and capital improvements for the collection systems. This individual serves as the primary contact between Veolia Water and the City.
- **Veolia Water's Arvin project operations staff:** Conducts field operations and maintenance activities, provides relevant information to Veolia Water management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, supervises subcontractors, conducts preventive maintenance activities and responds to stoppages and SSOs.

Legal Authority

The City of Arvin has the legal authority to own, operate, maintain and construct capital improvements to its sanitary sewer system. City has adopted Ordinance 381 to control fats, oils and grease (FOG) in the City's sanitary sewer collection system. The City has also established standards for the design, construction, and use of the sanitary sewer systems as found in Chapter 13.08, Wastewater Collection and Treatment System of the City of Arvin Wastewater Ordinances 382 and 383.

Measures and Activities

System Maps and Records

The City has a CAD-based map of the sanitary sewer system. The base map shows the sewer mains, manholes, pumping station, and other appurtenances. The maps show pipe size, pipe length and manhole numbers. Other attributes such as pipe diameter, materials of construction, date of construction and history of repair, rehabilitation and replacement will be added as the data becomes available.

Currently the accuracy and completeness of the sanitary sewer system maps is good. Veolia Water has developed a sanitary sewer GIS layer as part of its services to build and maintain an accurate system inventory, according to the SSMP.

The backbone of an effective O&M program is the effective management of data and information. As part of our SSMP,

Veolia Water implemented the InfoNet sanitary sewer system CMMS.

Operations, maintenance and other databases have been integrated with CMMS. InfoNet will facilitate customer service, provide Veolia Water with the condition information it needs to make sound repair, maintenance and capital improvement decisions and make this information available to the City, while satisfying the SWDR SSMP requirements.

Equipment

Veolia Water purchased small tools, spare parts, repair parts, and other equipment required for the O&M of the sanitary sewer system. The small tools are maintained and replaced as needed and during the term of the contract. Heavy equipment, such as production sewer cleaning equipment, is provided through subcontractors.

Veolia Water owns and maintains a 4" trailer mounted trash pump with appropriate hoses and fittings, capable of bypassing any segment of sanitary sewer. A Veolia owned trailer mounted sewer flusher is maintained at the wastewater plant for rapid response to sewer overflows.

Prioritizing Maintenance - Computerized Maintenance Management System

Veolia Water uses the InfoNet computerized maintenance management system (CMMS) as a tool to manage all aspects of the operations and maintenance of the sanitary sewer systems. InfoNet tracks system data and planned maintenance. Prioritizing maintenance for the sanitary systems will accomplish the following:

- Provide for response to emergencies and SSOs within 30 minutes and ensure on-site presence within two hours.
- Optimize the managed assets to avoid spills.
- Meet regulatory requirements.
- Reduce the occurrence of emergencies situations.

Veolia Water has people, equipment and materials available 24 hours per day, 7 days per week, and 365 days per year to respond to emergencies. When necessary, Veolia Water can call upon resources from its other projects in the area to assist with emergency response. Veolia Water will use contractors from the local area to provide assistance in responding to major emergencies, as necessary.

Veolia Water will respond expeditiously to all reported sewer main blockages and failures, alarms, pump station failures and other emergencies. Veolia Water will respond to pipe breaks, pump station failures and other emergencies within 30 minutes and be on site within two hours. The specifics of the above are included in our SSO Emergency Response Plan.

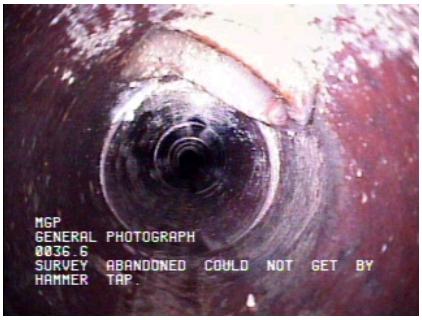
A detailed record of our response to emergencies will include the type of emergency, actions taken and any follow up work that will be required.

If the cause of a sanitary system break or blockage is identified as a broken pipe or blockage on the City's portion of the sanitary system, the Veolia Water representative on site will arrange to have the broken pipe repaired (in accordance with Contract terms) or the blockage cleared and the area cleaned up. If the cause is a pump station failure, Veolia Water will take immediate action to restore facility service.

If the cause of a sanitary system break or blockage is identified as private and *Not* City owned, then the customer is responsible and Veolia Water's on-site representative will notify the customer of the problem. The customer will be responsible to clear the blockage and make the necessary repairs.

Veolia Water maintains detailed information in InfoNet of operations and maintenance, including pipe breaks, blockages and spills.

Structural Deficiencies



Veolia Water performs CCTV inspections of the system on a condition-driven-needs basis. Additional inspections are performed annually to meet a contract obligation to inspect 10% of all sewers annually. The results of the CCTV work will be used to identify structural deficiencies. The structural deficiencies will be categorized and prioritized using the Pipeline Assessment Certification Program (PACP) rating system. These ratings will be an important element, but not the only factor, in developing a comprehensive program for the repair, replacement and rehabilitation of system assets.

Management and Routine Preventive Maintenance

- **System Cleaning -** Veolia Water prepared a plan for cleaning the sanitary sewer system. Sanitary sewer system cleaning will be performed no less than on a four-year cycle. Hot spots are cleaned twice a year. Jetting and flushing is used to clean the sanitary system. The System Cleaning Plan will be updated every three years to incorporate system additions.
- **Manhole Inspection and Maintenance -** Veolia Water has a comprehensive manhole inspection and maintenance program for managing the sanitary system assets, controlling I/I and minimizing customer service problems. This work is coordinated with the system cleaning. The manhole work includes replacing worn manhole rings and covers. Raising or lowering manhole rings and covers to accommodate road construction will be the City's responsibility. Veolia Water will provide replacement manhole frames and covers when the frame and cover that require adjustment to facilitate road construction are unsuitable due to age or damage.

- **Utility Locations -** Veolia Water will comply with and perform utility locates according to the California utility protection requirements for excavations for maintenance, repair and replacement of the system assets.
- **Maintenance of Easements -** Veolia Water will have no responsibility for maintenance of City easements.
- **Roach Control -** Veolia Water provides roach control to minimize inconvenience and potential health impacts to the public.

- **Operation of Lift Station -** Veolia Water operates the lift station.
- **Maintenance of Lift Station -** The lift station is part of the CMMS. The emphasis is on performing planned – preventive and predictive -- maintenance of all critical equipment.
- **Minimization of I/I -** I/I is not currently a major problem in the sanitary sewer system. One of the key benefits of implementing the SSMP for the City of Arvin will be to keep I/I levels low. If areas of unacceptable I/I are discovered, Veolia Water will use the O&M information that will be collected from the system to perform an updated assessment of the sanitary system. The assessment will use Veolia Water's pipe evaluation model to identify the highest priority needs.
- **Repairs -** Repairs to the sanitary system will be performed based on priority established using PACP ratings and other factors such as risk. For example, a line segment near a critical public facility such as a hospital or school will receive a higher priority than a line segment in the same condition in an unoccupied part of town. Scheduled repairs will be prioritized in accordance with the need and the date notified. Any repairs exceeding $5,000 will require City approval prior to commencing the work. Repairs will be based on $5,000 per occurrence/$20,000 annual limits, as specified in the Contract. Emergencies include lift station failures, main blockages and spills. Emergency repairs must be completed in a timely manner to avoid the following:
  - Regulatory or permit violations such as an SSO.
  - Situations that involve public and employee health and/or safety.
  - Situations that involve serious property or liability issues.
- **Work Management System -** Veolia Water utilizes InfoNet to plan and execute O&M of the sanitary systems. **Research and Development (R&D) -** Through its R&D efforts, Veolia Water is committed to improving the quality of service provided to customers. Current research involves techniques for assessing the condition of underground pipes and improved processes for the repair, rehabilitation and replacement of pipes.
- **Public Relations -** Part of Veolia Water's management plan for the sanitary system includes effective communications with customers, regulators, City personnel and officials. These entities need to be advised of problems and plans for system improvements. Veolia Water's Arvin Project Manager will coordinate public relations.

  The sanitary sewer laterals are not part of the managed assets. This can create public relations and customer service problems. Veolia Water is sensitive to this and will work with customers to help them resolve their lateral problems.
- **Emergency/Contingency Planning -** See Veolia Water's Emergency Response Plan.

Capacity Assessment

The City of Arvin updated its Sewer System Master Plan (System Evaluation and Capacity Assurance Plan (SECAP) and Capital Improvements Program (CIP)) in 2014. This plan identifies the current system capacity-based deficiencies and predicts deficiencies based on growth to the year 2030. The SECAP includes pipe line capacities for peak flows for the main-line pipes. Capacity deficiencies are addressed in the capital improvements plan.

Replacement Inventories

Contingency equipment such as portable pumps are available to handle emergency conditions.

Training

To ensure employees can handle maintenance, operation and emergencies in proper and safe manner, staff receive targeted training. Documentation will be completed for all training classes, including tailgate sessions, and will be included in individual employee files as well.

Quality customer service for field operations begins with employees being pleasant and knowledgeable on the telephone with respect to solving the customer's problem. Secondly, quality customer service is letting the customer know when their problem will be solved and then following up to be certain the problem has been resolved to their satisfaction.

Design and Construction Standards

Standards for Installation, Rehabilitation and Repairs

The City of Arvin has established standards for the installation, rehabilitation and repairs of sanitary and storm water systems. The design criteria includes pipe materials, minimum sizes, minimum cover, strength, minimum slope, trench and backfill requirements, structure standards and other factors.

Inspection and Testing of New and Rehabilitated Sewers

Veolia Water will assist the City of Arvin with oversight of construction of new and rehabilitated sewers. Veolia Water will operate under the standards established for inspecting and testing new sewers.

Monitoring, Measurement and Program Modifications

Veolia Water provides monthly and annual reports to the City on the O&M of the sanitary sewer system in accordance with the requirements of the Contract Amendment. Veolia Water will assist the City in preparing regulatory filings, State Revolving Funds (SRF) forms and applications, governmental approval submittals, consent order reports, etc. Veolia Water will assist the City in preparing project-related regulatory submittals required by applicable law.

Veolia Water reports SSOs via the state E-reporting protocols outlined in the SWDR.

Veolia Water will provide detailed reports on SSOs, including the response time, volume spilled, the duration and the corrective measures taken to stop the SSO to the City of Arvin. In addition, a follow-up analysis will be performed to minimize a recurrence.

Veolia Water also prepares an Annual Operations and Maintenance Report within 30 days following the end of each fiscal year. In addition to summarizing key events that occurred in the system over the previous 12 months, the annual report will have overall assessments of the administrative, operational and maintenance practices being used by Veolia Water for the managed assets. Recommendations and actions for improvement will also be included.

The SSMP will be reviewed biannually, as specified in the SWDR SSMP, to ensure it is accurate and the work is being carried out as outlined. The SSMP will be updated as required. Any major changes will be discussed with the City prior to implementation.

Overflow Emergency Response Plan

An overflow emergency response plan to effectively handle SSOs has been developed to address notification, response, and reporting and impact mitigation. Emergency calls will be received and responded to 24 hours per day and 7 days per week. Veolia Water personnel will be on site within two hours after notification of an overflow emergency.

The Veolia Water employee on site will assess the overflow emergency and determine the corrective action required. The Veolia Water Program Manager will also be notified. The appropriate personnel/equipment will be allocated to mitigate the spill and the electronic reporting requirements to the State of California will be completed in the specified protocol and time.

Veolia Water has the training and equipment to properly respond to an SSO to mitigate adverse impacts. This includes containing the sewage, minimizing the spill volume and cleaning up the spill. Emergency equipment, including bypass pumping, will be used when necessary.

Fats, Oil and Grease (FOG) Control Program

Veolia Water assumes responsibility for the FOG control program, other than enforcement -- which only the City has the legal authority to enforce. Veolia Water's responsibility includes a regular program for inspecting grease-producing facilities. The City and Veolia Water will work cooperatively to identify and correct FOG problems. Through its emergency and normal collection system maintenance, Veolia Water identifies FOG problems and sends a report to the City describing the problem and the needed corrective action. Veolia Water also recommends the City's response to the problem, including enforcement if necessary.

System Evaluation and Capacity Assurance Plan

Veolia Water and the City worked together to develop and implement a comprehensive capital improvements program. Throughout the term of the Contract Amendment, Veolia Water will be responsible for identifying and prioritizing capital repair, rehabilitation and replacement projects for the managed assets. This will be presented in the five-year capital improvements plan (CIP) that will be updated annually. The City will determine which projects to fund each year.

Another major aspect of capital improvements will be the repair, rehabilitation and replacement of pipes. The City and Veolia Water will work closely to determine the projects to be implemented.

Management Plan Audits

Under the terms of the Contract, Veolia Water will perform self-audits through its peer audit program – which will assess the quality of this management plan. Any major changes to the management plan will be discussed with the City prior to implementation.

A vital component of the management audit is a review of data and information on key performance measures such as SSOs, service outages, planned maintenance versus actual, etc.

5.2 Standard Maintenance Practices and Procedures Using the InfoNet™ Maintenance Management System

Goal

The goal of Veolia Water/Arvin's use of the InfoNet maintenance management system is to improve sewer system operation and maintenance performance, achieve all regulatory compliance objectives, and evaluate and prioritize maintenance and operations activities for sanitary sewer collection systems.

Regulatory Driver

The Capacity Management Operations and Maintenance (CMOM) initiative in California is termed the Sewer System Management Plan (SSMP). As the "first cab off the rank" in terms of the CMOM initiative, California is likely to serve as a blueprint for the rest of the country.

The U.S. EPA's CMOM is an environmental management approach to wastewater collection system management. When integrated with asset management planning, it can improve the effectiveness of the CMOM effort. (U.S. EPA Fact Sheet: Asset Management for Sewer Collection Systems)

The content of the SSMP includes the following portions that our product must encompass:

- Goal – stated intent.
- Organization – responsibilities and internal and external reporting processes.
- Legal Authority – demonstrated legally binding procedures.
- Operation and Maintenance Program – preventive/predictive maintenance, rehab and replacement plans, etc.
- Design and Performance Provisions.
- Overflow Emergency Response Plan.
- FOG Control Program.
- System Evaluation and Capacity Assurance Plan – modeling and CIP.
- Monitoring, Measurement and Program Modifications.
- SSMP Program Audits.
- Communication Program.

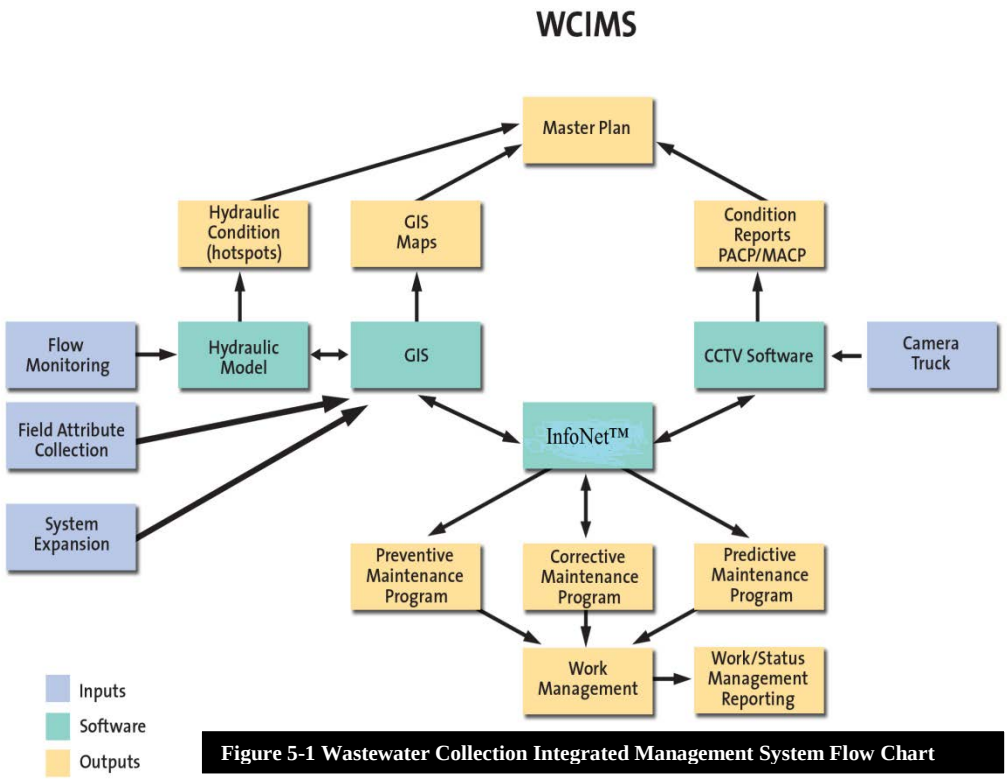


Figure 5-1 Wastewater Collection Integrated Management System Flow Chart

Veolia Water's computerized maintenance management system (CMMS), which uses Innovyze® InfoNet™ software. InfoNet generates work orders for sewer system and pump station preventive maintenance, respectively, and store the resulting findings and recommendations. The InfoNet plays a key part in the Veolia Water wastewater collection integrated management system (WCIMS) product which is shown in Figure 5-1, above.

Objectives

The objective of using the InfoNet program is to enhance our underground asset management offering by allowing Veolia Water operations staff to:

- Maintain an inventory of system assets, including location, length, material, size, slope, burial depth, beginning and ending manholes, and approximate or actual age, and capacity.
- Maintain an up-to-date system map that identifies the components that make up the collection system.
- Establish operation and maintenance goals and objectives, levels of service objectives, and asset plans for the collection system.
- Maintain results of inspections and tests for new or rehabilitated system components, including sewers, pumps, manholes, and other appurtenances.
- Track information related to identified structural and nonstructural defects (using PACP), including type of defect, severity, location, and date of discovery.

- Issue and track maintenance records of routine preventive operation and maintenance activities, including type of activity, location, date, and labor, material, and equipment costs.
- Manage collection system information (organize the data, perform many standard analyses, and facilitate planning, scheduling, and budgeting) so it is readily available for analysis and decision-making.
- Support schedule and budgets for routine operations and maintenance activities and planned rehabilitation and replacement projects.
- Track all SSOs, including location, date discovered, internal notification procedures, estimated volume of release, emergency response taken, and notification of affected parties, including environmental and health agencies, water supply utilities, private property owners, and the public.
- Communicate with other Veolia Water sites on the implementation and performance of InfoNet program.

Maintenance Programs

The objective of the O&M program is to sustain system functionality (operational and structural integrity) to meet the defined levels of service established for the system. The O&M programs are built on knowing what components make up the system, where they are located, their condition, capacity and system criticality. With this information managed in Infonet, the most efficient and cost effective maintenance can be planned and scheduled, rehabilitation needs identified, and long-term CIP projects identified and budgeted. InfoNet can be used by O&M staff to continuously look to improve business processes and procedures to achieve the most effective program in terms of O&M cost and performance.

System maintenance programs are broken down into preventive and corrective activities, as described below:

- Normal operation, alternative operation and emergency operation
- Inspections
- Maintenance tasks, schedules and procedures
- Emergency repair procedures and procedures for obtaining outside help
- Troubleshooting guide (table format)
- Safety associated with tasks

Planned Maintenance

Planned maintenance is either preventive maintenance or predictive maintenance.

Preventive maintenance (PM) establishes proactive, systematic maintenance activities. The PM program is designed to achieve the most cost effective improvements in system performance except in the case where major chronic problems are the result of design and/or construction flaws that cannot be completely corrected by O&M activities. Proactive maintenance includes inspections and cleaning that are performed on a periodic (preventive) basis or an-as needed (predictive) basis. Preventive maintenance is planned and scheduled on the basis of specific criteria, such as known problem areas (examples: a line segment that is

prone to blockages, a low point that is first to overflow in a storm event, or an area that has a high criticality or probability of failure). PMs are planned by maintenance activity for a certain frequency (calendar period) or equipment operating time since the last maintenance was performed. Predictive maintenance (Pd M), which is also proactive, is centered on establishing baseline performance data, monitoring performance criteria over a period of time, and observing changes in performance so that system failures can be predicted and maintenance can be performed on a planned, scheduled basis. System performance is frequently a reliable indicator of how the system is operated and maintained.

Reactive Maintenance

Reactive maintenance is essentially corrective in nature and includes emergency maintenance or repairs, service call-outs, incident responses, and structure, pipeline, and equipment repairs and refurbishments. Reactive maintenance as the primary maintenance activity typically results in decreasing system performance, especially as the system ages.

Our planned maintenance program is designed to reduce corrective emergency maintenance, which has a high cost and high impact on level of service to the end customer. The effects of extraordinary emergencies -- such as high-intensity rainstorms, floods, and earthquakes -- on the system's performance is minimized by implementation of these preventive and predictive maintenance programs and development of a comprehensive emergency response plan.

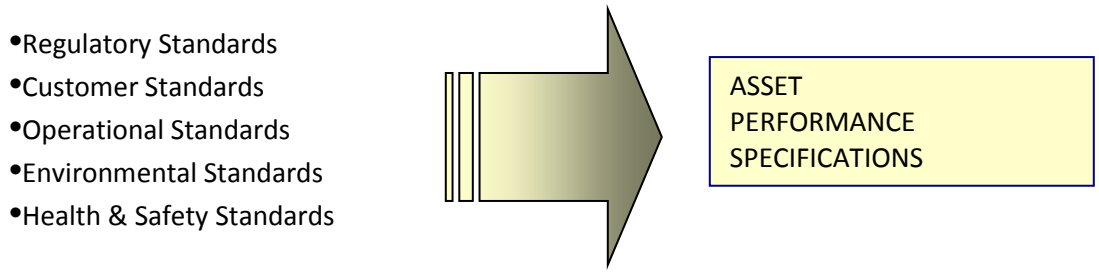
Maintenance Planning

InfoNet is used to develop and plan routine maintenance activities. Maintenance planning is based on achieving the desired levels of service for the system. Planning can be updated throughout the year as needed to address changing conditions. Maintenance activities are planned (e.g., inspecting system lines every five years, cleaning lines on a rotating basis every two years).

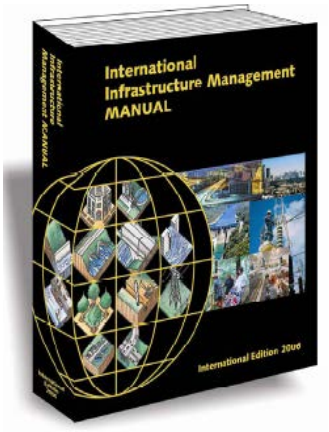
Veolia Water's maintenance goal is to maximize planned maintenance and minimize unplanned maintenance. Maintenance planning is reviewed annually by evaluating failures leading to unplanned maintenance to see if they were related to timing (the line failed before the next cleaning was scheduled), ineffective maintenance methods (repeatedly clearing sediment blockages in a sagging line, rather than correcting the sag), or deterioration based on design issues.

Level of Service

A definition of the agreed-upon level of service is the very core for developing an Asset Management program. The sources for input on the level of service for any particular municipal service come from the customers in a number of different forms, as illustrated below.



Regulatory requirements represent the wishes of customers on a national, state, or local level. Specific local customers (neighbors) may have requirements for the way a municipal project looks, sounds, or emits odors that will affect their property values. In addition, there may be a need from the larger population to create a recreational resource or to create a certain "feeling" about a public space. All of these inputs from various sources need to be considered in the development of a level-of-service requirement for a municipal project or service.



The challenge is to match the level of service provided by an asset with stakeholder expectations. The International Infrastructure Management Manual suggests that this can be organized into the strategic outcome and then the customer and technical levels of service. The strategic outcome is an overarching statement such as, "There will be no negative impact on the Blue River from the City's wastewater operations."

First, this outcome can be addressed as the customer-defined level of service, which deals with how the customer receives the service (e.g., "There will be zero discharges to the water environment.") Second, and what can form a Key Performance Indicator (KPI) at the contractual level, is the technical level of service, which deals with how the organization provides the service. An example of this KPI could be, "Contractor shall respond to wastewater pump station alarms within 30 minutes."

In summary, any level of service must be considered around four themes:

- Quality
- Quantity
- Timeliness
- Cost

Level-of-service definitions for collection systems are based on delivering reliable sewage collection services at a minimum cost in compliance with all applicable environmental and regulatory compliance requirements. Level-of-service criteria are system-specific and address prioritizing activities where improvements are most needed and will yield the greatest benefits. These include:

- Inspect and maintain manholes on a four-year cycle - % compliance.
- Inspect whole system in 10 years - % compliance.
- Clean whole system in four years - % compliance.
- Attend wastewater pump station emergencies within two hours.

- Attend SSOs within two hours of reported time.
- Experience fewer than X number of SSOs per 100 miles of sewer line per year.
- Mitigate repeat spill locations – no more than two sewage spills from any two of the same sewer line segments or manholes within a calendar year.
- Proactively treat debris, roots and grease problems in problem areas to prevent SSOs.
- Mark underground utilities within industry standard of 72 hours - 100% compliance.
- Provide CCTV inspections of sanitary sewer lines to assess condition and identify potential remediation to prevent system failures.
- Perform routine O&M of pump stations.
- Repair of all city storm and sanitary sewer lines.
- Repair and/or replacement of sanitary manholes.
- Locate and mark city mainline sewers for utilities and contractors.
- Install new sanitary and storm lines at the direction of City engineering division.
- Answer all citizen complaints regarding sewer malfunctions.

Routine Cleaning Program

Preventive Maintenance Procedures

Needs Determination

Hydraulic cleaning is used for both preventive and corrective maintenance, although it is primarily a preventive activity. Mechanical cleaning uses rodders and/or buckets for removal of large or hardened debris. It is often used in conjunction with hydraulic cleaning.

Planning/Scheduling

Line segments are planned for routine cleaning on a recurring schedule, usually every two years. Certain areas, or hot spots, are scheduled on a more frequent basis. When a line segment is due for cleaning and, on observation, it is determined that cleaning is not necessary, then the frequency for that line is increased, typically for a period one and one half times that of the previous period. If on observation the line segment requires heavy cleaning after it has been cleaned once, then the frequency is adjusted to be one half of the previous period.

Maintenance Activities

- **Jetting/Jet Rodding -** Jetting is the primary cleaning activity used to clear and collect most debris, roots and grease buildup in pipes. A combination vacuum/flusher truck is used for hydraulic cleaning activities. Jetting information includes:
  - Cleans dirt, sludge, and debris from sewers ranging from 4" through 72" in diameter.
  - Use a hydraulic root cutter to remove roots in sewers ranging from 6" to 24" in diameter.

- Can clean 600 to 1,000 feet from one point of entry on the downstream side.
- Efficient for routine cleaning of small diameter, low-flow sewers.
- Most effective when used in combination with rodding.

- **Flushing (not used at this time) -** Flushing is used to move debris downstream. Flushing introduces a heavy flow of water into the line at a manhole to remove floatables and some sand and grit.
- **Rodding (not used at this time)–** Rodding is most effective in lines up to 12 inches in diameter and employs mechanical rods and cutters to:
  - Break up grease deposits, cut roots, and loosen debris.
  - Help thread the cables used for TV inspections and bucket machines.
  - Remove large deposits of silt, sand, gravel, and some types of solid waste in sewer lines. Most effective in lines up to 12 inches in diameter.
- **Chemical Cleaning/Treatments (not used at this time)–** Chemical approaches for line maintenance address the following:
  - Roots, grease, odors (H_2S gas), concrete corrosion, rodents and insects. Chemical treatments deliver longer-lasting effects than power rodding (approximately two to five years).
  - H_2S odors. Some common odor control chemicals are chlorine (Cl_2), hydrogen peroxide (H_2O_2), pure oxygen (O_2), air, lime ($Ca(OH)_2$), sodium hydroxide (NaOH), and iron salts.
  - Grease and soap problems. Some common chemicals used are bioacids, digester enzymes, bacteria cultures, catalysts, caustics, hydroxides, and neutralizers.

Work Management

Work management for routine cleaning is carried out using the InfoNet work management module. The following tasks are tracked for planning and issuing work orders

Cleaning Planning/Scheduling

- The sewer system has been divided into 14 standard and one hot spot routes.
  - Routine cleaning areas are currently scheduled to be cleaned approximately every 36 months
  - Hot spots are cleaned twice annually
- All cleaning is performed using combination sewer flusher / vacuum trucks
  - Equipment and labor is provided by sub-contractors

Cleaning Work Management

- Project Manager assigns work orders:
  - From planner
  - Ad hoc
- Contractor closes work orders:
  - At completion of activity

- Project Manager uploads completed work orders to InfoNet

Records/Reports

Cleaning Assessment/Analysis and Reporting

Veolia Water submits all reports and notifications to governing bodies including immediate reporting to the Office of Emergency Services (OES).

Performance Measures

- Cleaning program
- CCTV inspection program
  From Maintenance activities above

♦

Manhole preventive maintenance

Pump station preventive maintenance
- Routine inspections
- Electrical maintenance
- Mechanical maintenance
- Physical maintenance

Force main preventive maintenance
- Routine inspections
- Air release valves
- Valve exercise program

Support maintenance
- Maintenance of rights-of-way and easements
- Monitoring of street paving
- Line location for third parties

Corrective Maintenance Program

Corrective Maintenance Procedures

Needs Determination

Corrective maintenance includes emergency maintenance or repairs, service call-outs, incident responses, and structure, pipeline, and equipment repairs and refurbishments. Corrective maintenance activities are primarily based on unforeseen events such as customer complaints, SSOs, or equipment problems. Corrective maintenance does not necessarily follow a system failure, but corrective maintenance typically is reactive in nature. Each event is responded to immediately, appropriate follow up actions are recommended, and the maintenance supervisor schedules the additional maintenance or repair activities on an ad-hoc basis.

Planning/Scheduling

Corrective maintenance or repairs for line segments, other than emergency activities, come from the CIP planning processes. Corrective maintenance typically includes point repairs. Other refurbishment or replacement work is done by contractors.

Maintenance Activities

Responding to service calls is the primary activity associated with our corrective maintenance program. Typically, calls relate to grease and soap problems. These are usually treated through chemical approaches using bio-acids, digester enzymes, bacteria cultures, catalysts, caustics, hydroxides, and neutralizers.

Work Management

Work management for routine cleaning is carried out using the InfoNet work management module. The following tasks are tracked for planning and issuing work orders:

- Collection System Service Calls
  - Call-ins
    - Record caller information (InfoNet primary, secondary is service call form)
    - Record nature and location of problem (InfoNet primary, secondary service call form)
    - Review call history (InfoNet)
  - Dispatch notifies maintenance first responder (personnel assigned to service calls)
    - Via InfoNet to field unit
    - Via InfoNet printed work request
    - Via telephone
    - Via paper work request
  - First Responder
    - Records observed problem (service call form)
    - Assesses activities required (service call form)
    - Performs and records activities that can be done (Work Order)
    - Initiates work request for additional activities required (planned Work Order status)
    - Records additional recommended activities provided to caller (Contractors)
  - Follow-up
    - Maintenance supervisor converts planned work order to assigned work order
    - Work order tracks per CM work flow
- Collection System Corrective Maintenance
  - Cleaning planning/scheduling
    - Define cleaning goals and objectives
    - Define cleaning projects/tasks and frequencies (InfoNet planner)
      - Hydro
      - Rodding
      - Root treatments
  - Assign job plans/special instructions (routes/hydraulic ordering)
  - Cleaning work management
    - Assign work orders
      - From planner
      - Ad-hoc
    - Issue work orders to crews
      - From InfoNet to field units
    - Crews fill out work orders

  - Into InfoNet from field units
- Crews close work orders
  - At completion of task
  - At completion of activity
- Crews submit work request for additional work required
- Supervisor reviews and approves work orders
- Cleaning assessment/analysis and reporting

- CCTV planning/scheduling
  - Define cleaning goals and objectives
  - Define cleaning projects/tasks and frequencies (InfoNet planner)
    - Hydro
    - Rodding
    - Root treatments
    - Assign job plans/special instructions (routes/hydraulic ordering)
  - CCTV work management
    - Assign work orders
      From planner
      Ad-hoc
    - Issue work orders to crews
      From InfoNet to field units
    - Crews fill out work orders
      Into InfoNet from field units
    - Crews close work orders
      At end of shift
      At completion of task
      At completion of activity
    - Crews submit work request for additional work required
    - Supervisor reviews and approves work orders

6.0 OVERFLOW AND EMERGENCY RESPONSE PLAN

Sanitary Sewer Overflow Prevention, Response & Reporting Plan

Arvin Wastewater Treatment Plant (WWTP)
City of Arvin, California

California Water Code Section 13267
Monitoring and Reporting Program No. 2006-0003-DEQ
of the Statewide General WDRs for Sanitary Sewer Systems
Central Valley Regional Water Quality Control Board
WDR Order No. 5-00-093

CA SWRCB Order No. WQ 2013-0058-EXEC
Spill Reporting Procedures, August 2013

California Integrated Water Quality System (CIWQS) SSO Database

Address:	P.O. Box 665 – 2401 El Camino Real Arvin, CA 93203
Contract Operator:	Veolia West Operating Services, Inc. holding California Contractor's State License Number 866429
Project Manager:	Dale Ducharme
Address:	P.O. Box 665 2401 El Camino Real Arvin, CA 93203
Office:	661-854-2421
FAX:	661-854-3869

Reporting of an SSO

All reporting requirements are provided in Section 4 of this plan. Please refer to the Table of Contents for rapid access to Reporting Requirements.

Local Contact List

City of Arvin Police Department	911 or 661-854-5583
Public Works Director	661-854-3134
Arvin Wastewater Treatment Plant (Veolia Water-Arvin – Dale Ducharme, PM)	661-854-2421

6.1 Introduction

Purpose

The purpose of the Sanitary Sewer Overflow Plan (SSOP) is to establish guidelines for the prevention, response, and reporting of releases of untreated sanitary sewage from the City's sewage collection system. Implementing these guidelines will reduce the potential for overflows and improve the efficient use of the resources available to the City in halting, containing, and cleaning up overflows. Through effective use of resources, the City strives to improve the health and safety of the general public and the local environment.

Policy

All City employees are required to report all wastewater overflows and to take the appropriate action to secure the wastewater overflow area. Collection system operators are required to take appropriate actions to relieve the cause of an overflow and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system overflows as soon as possible following notification – within 20 minutes. The City will follow reporting procedures in regards to sewage spills as set forth by the RWQCG, Central Valley Region.

Contract Operations

The City has contracted with Veolia West Operating Services, Inc., to operate and maintain the City sewage collection system and wastewater treatment plant. Veolia Water personnel will perform many of the O&M actions identified in the plan. The City retains oversight and enforcement authority for all operations, maintenance, and ordinance implementation. Veolia Water has established agreements with subcontractors as needed to fulfill the requirements of this plan. Other departments within the City will provide support to Veolia Water as needed to respond to an overflow.

Definitions

City – As used in this plan, "City" means the City of Arvin; departments and/or employees of the City; or contract operators for the City; or other authorized agents of the City.

Nuisance - California Water Code section 13050, subdivision (m), defines *nuisance* as 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 an entire community or neighborhood at the same time, or any considerable number of people, although the extent of annoyance or damage inflicted upon individuals may be unequal.
- Occurs during, or as a result of, the treatment or disposal of wastes.

Sanitary Sewer Overflow (SSO) - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- Overflows or releases of untreated or partially treated wastewater that reach waters of the United States.
- Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States.
- Wastewater backups into buildings and onto private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer System – Any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks that collects and conveys wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

SSO Categories – SSOs are segregated into three categories based on the: (1) volume and destination of the release; (2) cause of the release; or (3) the source of the release.

- **Category 1:** Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that:
  - Reach surface water and/or reach a drainage channel tributary to a surface water; or
  - Reach a municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
- **Category 2:** Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- **Category 3:** All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

Private Lateral Sewage Discharge (PLSD) – Discharges of untreated or partially treated wastewater resulting from the blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private assets. PLSD's that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Untreated or Partially Treated Wastewater – Any volume of waste discharged from the sanitary sewer system upstream of the inlet to the wastewater treatment plant.

Sanitary Sewer Overflow Prevention Plan

Purpose

The Sanitary Sewer Overflow Prevention Plan (SSOP Plan) is a comprehensive approach to prevent sewer overflows and spills of sanitary sewage from the Arvin sanitary sewage collection system and the Arvin wastewater treatment plant.

Sewer System Management Plan

The City has developed a Sewer System Management Plan (SSMP). This plan provides a comprehensive map of the wastewater collection system and a detailed inventory of manholes, the lift station and equipment. The plan identifies those collection lines that are at, or near, their carrying capacity and produces long-range planning for upgrades and expansions of the collection system. The SSMP includes a condition assessment of the system that is also used for long-term planning purposes. The SSMP establishes routine preventive maintenance and identifies problem sites within the system that require extra maintenance. The consistent and effective implementation of the SSMP is the key to prevention of SSOs. It is not the intent of the SSOP Plan to include the SSMP as part of this plan. However a brief description of the SSMP is provided. The SSMP is composed of the elements described below:

Asset Management Program

The Asset Management Program identifies the sewer system assets and defines the expected life of the system components. The Asset Management Program is intended to provide guidance and track actions taken to attain optimal performance of all assets over each asset's expected life.

Computerized Maintenance Management System

The computerized maintenance management system (CMMS) facilitates maintenance scheduling, maintenance tracking, and system maintenance histories. Maintenance histories facilitate planning for preventive maintenance and help staff objectively measures the effectiveness of the preventive maintenance program so that adjustments may be made to improve system performance. Maintenance scheduling is provided based on the best professional judgment of the Veolia Water staff. The CMMS generates work orders for maintenance and tracks the completion of the work orders and the details of the maintenance performed. It is not the intent of this plan to provide the detailed works of the CMMS, However, full documentation of the CMMS is available on request.

Collection Line Capacity Management

As part of the SSMP, the flow capacity of the sewage collection lines is evaluated, and collection lines at or near their carrying capacity are prioritized for replacement or re-routing of hydraulic loads. As the collection system is expanded over time, the line capacity is maintained to prevent SSOs caused by hydraulic overloading.

Veolia Water Maintenance Management Practices

Veolia Water's maintenance management practices establish the policy, performance goals, and maintenance practices that are implemented by Veolia Water staff. Management practices include normal and emergency, corrective and preventive maintenance activities.

Fat, Oil and Grease (FOG) Source Control Program

The FOG program is designed to reduce or eliminate the discharge of fats, oils, and grease (FOG) that may build up in the wastewater collection lines to form blockages that result in an SSO. The City has adopted an ordinance providing it the legal authority to require installation of FOG treatment units at businesses that are known to generate FOG; to require the routine maintenance of these treatment units; and to enforce the ordinance.

The primary source of FOG is food service establishments (FSE), such as restaurants, cafeterias, schools, etc. FOG discharges from FSEs are usually controlled by installation and maintenance of grease interceptors and implementation of best management practices. The maintenance of these interceptors is the responsibility of the owner. To confirm compliance with the city ordinance, the City conducts routine inspections of FOG interceptors.

Industrial Pretreatment Program

The City's Sewer Use Ordinance regulates industrial facilities from discharging more than 25,000 gallons per day of process wastewater, or pollutants that have the potential to interfere with the conveyance of wastewater to the treatment plant or interfere or pass through the wastewater treatment plant. The ordinance establishes the City's legal authority to condition or deny these discharges. It establishes a formal industrial discharge permitting program and the legal authority to enforce the terms and conditions of the ordinance and permits. The goal of this program is to limit the pollutants and hydraulic loads that the industry discharges by controlling their production processes or requiring wastewater treatment of the industrial discharge before discharge to the city sewer system. The City routinely surveys the industrial and commercial users to determine if their discharges are having an adverse impact on the collection system that may cause an SSO. The City has not identified any Significant Industrial Users as of this date but continues to be vigilant and will implement the City Industrial Pretreatment Regulations should an SIU be identified.

Description of Sanitary Sewage Collection System

The Arvin sanitary sewage collection system is composed of thirty-six (36) miles of gravity flow collection lines; six hundred thirty-five (635) manholes; and one (1) sewer lift (pump) stations (LS) located at El Camino Real and South A Street. There are 187 commercial user connections and no significant industrial users. The sanitary sewage collection system and the storm water drain system are separate.

Potential Sanitary Sewer Overflow Sites

Typical of most sanitary sewer systems, there are four primary location types that lend themselves to SSOs:

- **Tanks and lines located at the wastewater treatment facility:** At the wastewater treatment facility, the most likely sites for SSOs or spills are from breakage of pipes and tanks. In some cases, automated process control failure may result in overflows. Other maintenance activities and materials handling in the wastewater treatment facility or in the sewage collection system create possible SSOs (spills).
- **Sewer lift station:** At the sewer lift station, loss of electrical power is the most common cause of SSOs (spills). Other causes may be due to flow blockage of the lift pump discharge lines or failure of the pump control systems, pump failures, and operator error.

- **Manholes:** The most visible sanitary sewer overflows are those that occur at manholes. The primary cause of SSOs from manholes is due to restrictions and blockages to flow in the sewer line. Blockages cause the wastewater to back up in the sewer line until it reaches a level that allows the water pressure to raise the manhole cover or flow through vent holes in the manhole cover. Flow restrictions and blockages may be caused by roots, grit buildup, collapsed pipes, and/or a buildup of grease. In addition to line blockage, SSOs may occur because of hydraulic overload of a collection line that results in the wastewater backing up in the lines until they flow out of the manholes. Hydraulic overloading most often occurs during storm events where storm water enters the sanitary sewer through direct inflows or indirectly through the soil and into breaks and cracks in the sewer piping (infiltration). In some cases, SSOs due to hydraulic overload are the result of poor engineering practices that allow new sewer lines to connect to undersized existing sewer lines.
- **Broken sewer lines:** Line breakage may be due to the age of the line that has deteriorated over time. Other causes of broken lines include industrial or commercial discharges that have an adverse impact on the system lines and manholes, (i.e., low pH discharges which cause concrete to deteriorate.) Contractors may also break sewer lines while working with heavy equipment at a construction site.

Routes of Overflows

Routes of Overflows refer to the route the overflowed wastewater will take to enter a receiving stream. Due to the geography of the city and its surrounding area, there are no receiving streams. Storm water collects in low areas and evaporates or percolates into the soil. SSOs occurring within the sewer service area have the potential to create a health hazard to the populace or to contaminate the groundwater. In nearly all cases, an SSO can be contained and collected for proper disposal. The goal is to limit the area that is exposed to the SSO and to limit property damage caused by the SSO.

Preventive Activities

The key to prevention of SSOs is aggressive preventive maintenance, prompt corrective maintenance, and effective operator training. One purpose of the SSMP is to establish an inspection and maintenance schedule to implement these preventive actions. SSO prevention is focused on the four primary potential SSO areas:

- *Wastewater Treatment Facility*: To reduce the possibility of an SSO occurring at the wastewater treatment facility, the plant operators must be fully trained in the proper operation of the treatment units, and standard operating protocols must be established and followed. These protocols are usually in the form of SOPs (standard operating procedures) that provide detailed directions for the startup, shutdown, and process control of each treatment unit. Routine inspections of tanks and mechanical systems can identify conditions that may result in an overflow or spill or system failure. An effective preventive maintenance program must be implemented to maintain all systems in good working condition. Equipment upgrades and replacements must be made as needed and in a timely manner. Emergency electrical supply is also provided to prevent an overflow due to a loss of pumping power. Plant SOPs should be thoroughly reviewed with all operators involved in process changes, especially infrequent operations, before altering any process operation.
- *Sewer Lift Station*: To reduce the possibility of SSOs at the lift station, a combination of the following is critical:
  - Mechanical fixes, such as:
    - Redundancy of critical equipment
    - Backup electrical supply
  - Automated controls and testing of automatic functions
  - Remote monitoring and alarms

  - Implementation of an effective preventive maintenance program
  - Prompt corrective maintenance
  - Routine operator inspections and testing of automatic functions
- *Manholes:* To reduce the possibility of SSOs, several activities are implemented:
  - Routine maintenance (hydro-jet cleaning with removal of debris)
  - Routine inspections of the manholes
  - Manhole covers and cover rings maintained in good condition to reduce storm water inflows
- *Sewer Collection Lines:* To reduce SSOs, several primary activities are implemented:
  - Routine maintenance of sewer lines consists of:
    - Hydro-jet cleaning (pressure washing) of the collection lines
    - Removal of grit, debris, grease, and roots
    - Video inspection of the lines using special video cameras that can detect broken lines, grease and grit buildup, and root intrusion

The SSMP establishes the annual goals for the number of lineal feet of sewer lines that will be cleaned and televised. Typically, the City's goal is to clean approximately 25 percent of the collection system per year. This would result in cleaning the entire collection system once every four years.

A regular program of collection system cleaning will prevent hydraulic overloading of the collection lines through:

- Proper design of sewer expansions to prevent hydraulic overload of existing collection lines as new lines are added. This may require replacement of smaller lines with larger lines to carry an increase in flow as new areas are brought into the sewer system service area.
- Control of I/I of groundwater, storm water, or un-contaminated water into the collection system. This is achieved by smoke testing and video inspection of collection lines to detect inflow sites and then making appropriate repairs. Inspections conducted by the City Building Department prevent the connection of storm water drains and roof drains to the sanitary system.
- Prompt repair of broken sewer lines.

Contracted Line Maintenance

Veolia owns and maintains a trailer mounted hydraulic sewer flusher. The hydraulic cleaning unit is capable of clearing most line blockages but is not practical for cleaning extensive lengths of line, nor does it have a vacuum system to remove the solids (grease, grit, and debris) that is washed from the sewer lines. Therefore, the use of the hydraulic cleaner is limited to an initial response to an SSO.

For routine line maintenance and follow-up responses to SSOs, Veolia contracts with local sewer maintenance companies to perform sewer line cleaning and to provide follow-up assistance in the event of a line blockage. These services are contracted and managed by Veolia Water.

Routine line maintenance performed by contracted services is scheduled by the Veolia Water Project Manager using the computerized maintenance management program and following Veolia Water maintenance management practices.

6.3 Sanitary Sewer Overflow Response Plan

Notification of an Overflow

Overflows may be identified and reported by City personnel, Veolia Water personnel or by the general public.

Receiving an SSO Report

The following information should be obtained and documented from the person making the SSO report:

- Date.
- Name, address and phone number of person making SSO report (name and department if City or Veolia Water personnel making the report).
- Location of SSO (address or nearest cross streets or landmarks).
- Time the SSO was first noticed.
- Is the SSO still occurring or has it halted?
- Is the SSO flowing to a City street? Private Property? Residence or a Business?
- Is foot or vehicular traffic passing through the SSO?

Receiving SSO Notification from the General Public

SSO notification from the general public is most likely to come through the City Hall, Public Works Department, Police Department or Fire Department, since these departments are more visible to the general populace. If the notification comes through one of the departments, the person receiving the notification should try to get the name and phone number of the person who made the initial report. As soon as the response has been initiated, the responders or Veolia Water supervisors should attempt to contact to the individual who reported the SSO and gather the needed information.

What to Tell the Customer (General Public)

Clearly communicate that a response has been initiated and tell them who will be responding. Provide them with an estimated time that the response team should arrive.

- Use general terms that the caller can understand.
- Give the caller your name for future reference.
- Clearly communicate that a blockage in the City sewer main line will be promptly cleared, but that Veolia Water is not allowed to work on a blockage in the property owner's/ resident's service lateral line.
- Show concern and empathy for the property owner/resident, but do not admit or deny liability.
- Instruct the customer to keep all family members and pets away from the affected area.
- Instruct the caller to move any uncontaminated property away from the overflow area.
- If the sewer has backed up in the customer's house:
  - Instruct the customer to place towels, rags, blankets, etc., between areas that have been affected and areas that have not been affected.
  - Instruct the customer to not remove any contaminated items – let the professionals do this.
  - Instruct the customer to turn off their heating and/or air conditioning systems until the contaminated areas can be cleaned up.

City/Veolia Water Personnel Reporting a SSO

Whether the overflow is within the treatment plant, at the sewer lift station, or along a gravity pipeline, forced main, or manhole, it is likely the employee making the discovery of the overflow will be alone. Therefore, it is extremely important that the person making the discovery be capable of identifying the wastewater as a sanitary sewer overflow and that they notify their immediate supervisor or the operator in-charge at the wastewater treatment plant. Notification is the first action that should be taken, regardless of the size, volume, cause, or corrective actions that could be taken. By communicating to other operators that a problem exists,

additional support and aid can be sent to the scene. If an overflow event is not reported immediately and the operator decides to attempt to halt the overflow, the operator may become injured or incapacitated. This allows the overflow to not only continue, but no one else is aware of the overflow and that aid and assistance are required. In any emergency event, including an SSO, the *initial response should always be NOTIFICATION* – prior to attempting any corrective action.

Initial Response after the Notification Has Been Made

The general public should not be encouraged to participate in the response to the SSO. Once notification of the SSO has been filed, the following actions should be initiated:

- **Isolation --** The first responder on the scene should make an attempt to isolate the SSO. Isolation means to deny or control access -- prevent people and/or animals from entering the area of the overflow to avoid exposing them to the raw sewage and spreading contamination to unaffected areas.
- **Containment --** If the initial responder has the means to contain the overflow and the containment can be safely achieved, then they may attempt to contain the overflow. Containment means to capture the overflow material to prevent it from spreading or leaving the immediate area. Containment typically is accomplished by blocking the flow in open ditches, gutters, streets, and storm water catch basins. Often, containment is accomplished by dump trucks hauling sand and dirt to the SSO site and dumping their loads in strategic locations to contain the flow. Sandbags, straw bales, plastic bags filled with water, etc., can be used to contain the overflow. Containment efforts typically require support and cannot be accomplished by an individual.
- **Halting Overflow --** If the overflow can be halted by turning off a pump, closing a valve or similar operator action, and in so doing the responder is not exposed to a hazardous situation then the responder should take the appropriate action to halt the overflow. Often, the flow can only be halted temporarily. This may be sufficient to allow other work to be accomplished that eliminates the overflow and allows a return to normal conditions, or the establishment of alternative movement of the wastewater to prevent the overflow.
- **Emergency Services --** Emergency Services are fire, police, EMT, medical emergency care. Fire and police may be instrumental in securing access to SSOs that are captured and waiting for clean up to start. It is important that the general public be kept from coming into contact with raw sewage from the sewer system.

Incident Control

Once assistance has arrived, the senior operator or manager should take charge and direct all further responses. In the event the fire and/or police departments respond to an SSO, these City departments may assume control of the incident in accordance with the City Emergency Management Plan. In this situation, Veolia Water personnel will provide technical and operational functions under the incident commander.

Maintain an SSO Response Log

The in-charge manager or operator should attempt to record the time the SSO started. This should not be a guess. To determine the start time, assume that the SSO started when a person can confirm the SSO was observed. This can be the time the SSO was reported or a statement from the general public with the time they observed the SSO flowing. The in-charge manager/
operator should record the time the SSO was halted. The time the SSO cleanup was completed and the cleanup actions should also be recorded. If the SSO was due to system failure, loss of electrical power, blockage of sewer line or broken line, the SSO event is not fully complete until the system has been returned to normal operations. The in-charge operator/manager should maintain a written log of the actions taken from the start of the SSO response until the SSO is fully complete and returned to normal. Attachment B provides a reporting checklist to facilitate the collection and documentation of critical information.

Response Activities

Under the leadership of the Incident Manager, the response should be organized to accomplish the following:

- Maintain isolation of the scene. Establish and restrict access to the affected areas and post hazard warnings to inform the general public of the danger. Site isolation should be maintained until the area has been cleaned up and decontaminated.
- Contain the spilled material to limit contamination of surrounding areas.
- Halt the overflow.
- Estimate the volume of overflow and/or flow rate.
- Collect samples when appropriate.
- Obtain additional assistance and/or support as needed.

Equipment

- Veolia Water-Owned Equipment is available for immediate response to a SSO. Operators should be familiar with available equipment and equipment operators to allow their effective use. A partial list of equipment and resources from Veolia Water is as follows:
  - Pickup trucks (2)
  - Sewer flusher
  - Trash pumps (2)
- City-Owned Equipment is also available for response but may require a longer time period than accessing Veolia Water equipment. The senior operator/manager in charge of the SSO response must be able to access the appropriate City department for equipment and personnel needs. City of Arvin equipment available to Veolia Water includes:
  - Street sweeper
  - Portable barricades
- Commercial Rental Businesses are an excellent source of equipment that is often only needed for a short period of time. Veolia Water maintains service contracts with one or more local rental companies for 24/7 availability of emergency equipment. Examples of rental equipment include:
  - Portable pumps
  - Portable electrical generators
  - Other miscellaneous equipment

Determine the SSO Route

Once the immediate response has been completed, the in-charge manager or operator should document the most likely route for the movement of the SSO wastewater from the overflow site to the waters of the state. A brief sketch of the site and flow will help when reconstructing the SSO events. If the SSO cannot reach the waters of the state, a sketch of the overland flow path to the collection site where the overflow is captured and cleaned up should be included in the SSO documentation. The sketch should provide relationship of the SSO to public and private streets, homes, businesses, public access points, and other features impacting the SSO and clean-up activities.

Determine the Volume of the SSO

It is important to determine the volume of the SSO because SSOs greater than 1,000 gallons must be reported to more agencies and more immediately than smaller SSOs. In addition, the estimated volume of the SSO

must be reported to determine the severity of the SSO. The volume can be calculated based on the surface area and depth of the SSO. The length of time the SSO continued and the volume or source rate can be used to estimate the total volume of the SSO. Attachment C provides examples of volume estimating methods.

Categorize SSO

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

Reach surface water and/or reach a drainage channel tributary to a surface water; or

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

Category 2: Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

Private Lateral Sewage Discharge (PLSD) – Discharges of untreated or partially treated wastewater resulting from the blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private assets. PLSD's that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

SSO Sampling and Data Collection

Small SSOs that are contained, cleaned up and disinfected will most likely not require sampling. The wastewater treatment plant should have on-hand the containers used for sampling the following pollutants:

- Biochemical Oxygen Demand
- Total Suspended Solids
- Total Solids
- Total Dissolved Solids

The decision to collect and analyze samples is to be made by the senior operator or manager in-charge at the SSO scene.

If sampling and analysis are needed, only those pollutants that are suspected in the discharge should be collected. Typically, sampling is conducted to confirm the presence or absence of sanitary sewage in the receiving stream. There are no surface streams in Arvin. All storm drains discharge to dedicated storm water retention/percolation basins. Very few samples must be analyzed immediately; pH (within 15 minutes of collection) and bacteria (within six hours of sampling) are two that do require immediate analysis. Other pollutants, such as BOD, can be held for 48 hours if properly preserved. Heavy metals can be held for six months if properly preserved.

Sample preservation should follow the approved preservation and holding times found in the Code of Federal Regulations, Volume 40, Part 136 (40 CFR 136). This source also provides a list of the approved analytical methods for the analysis of the pollutants listed above.

The decision to analyze a sample should be considered carefully and the pollutants to be analyzed must be carefully selected. Discussion with our commercial laboratory can often provide good direction. Suspected

organic compounds (i.e., solvents, petroleum fuels, pesticides, herbicides) can be detected by running scans for different organic compound groups. Our commercial laboratory can assist in guiding a cost efficient search for organic compounds.

If the SSO is large in volume and it is absorbed into the soil before the wastewater can be collected and returned to the sanitary sewer, a soil sample may be appropriate, or if groundwater monitoring wells are nearby, samples of the groundwater may be appropriate. If the SSO is small in volume, absorption into the soil may only result in the soil being cleaned naturally by the bacteria in the soil, with no harm to the environment. Restricted access to an area where the soil has absorbed the SSO should be maintained until it can be determined that the area is no longer contaminated by fecal bacteria. Fecal bacteria do not survive well out of a water environment or when exposed to the sun. Follow-up fecal coliform testing may be needed to determine when the SSO site is safe. If the area is disinfected, testing will probably not be required to determine that the soil and general environment of the SSO site are pathogen-free.

When sampling an SSO, provide a simple sketch of the area and the location of each of the sample sites and what analysis was requested for each sample collected.

Clean Up

Once the overflow has been stopped and the situation has been stabilized, management must develop an appropriate clean-up strategy that includes personnel assignments, equipment needed to complete the clean-up, appropriate disposal of collected material and required services (wastewater, trash, debris, sand, etc.)

Clean up typically consists of vac-trucks that collect the captured wastewater and return it directly to the wastewater treatment plant or the sanitary sewer. Once the wastewater is removed from the capture site, the ground should be washed down and the wash-down water collected and returned to the sanitary sewer or wastewater treatment plant. Following wash down, the area should be disinfected, typically using bleach, lime, or swimming pool hypochlorite. Following disinfection, the area should be washed down again and the wash-down water collected and returned to the City sewer or the treatment plant

Reporting

The operator who takes control of the scene is responsible for reporting the overflow, unless senior management assumes the responsibilities. However, the Operator in Control is responsible for providing senior management with all data and information needed to file reports. If senior management is not available, the Operator in Control must review and follow the SSO Reporting Plan and make the appropriate verbal and written reports as specified in Section 3 - SSO Reporting Plan. A copy of the plan is available in the Operations Control Room at the wastewater plant. Forms and guidance are provided in the attachments to that plan.

SSO Review

Following an SSO event, senior management and operations staff should review the event for lessons learned: Identify what worked, what was good, what didn’t work and what needs to be changed to improve the response to a future SSO, and what can be done to prevent future SSOs.

Training

For operators to manage sanitary sewer overflow situations, they must be able to identify an SSO, understand the problems that create a SSO and be trained in the appropriate response to an SSO and the SSO reporting requirements. Routine training is the only means of keeping SSO issues fresh in the minds of those individuals who are most likely to encounter an SSO.

It is recommended that annual SSO training be held for all operators and supervisors. In addition, brief SSO reviews should be conducted during other operator trainings throughout the year. A record of each training event should be maintained with the names of the individuals attending.

6.4 Sanitary Sewer Overflow Reporting Plan

Mandatory SSO Reporting Timeframes

In accordance with the mandatory reporting requirements in the August 8, 2013, SWRCB Executive Order No. WQ 2013-0058-EXEC compliance with the following reporting time frames is mandatory.

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to $5,000 a day per violation pursuant to Water Code section 13350; up to $1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	**DEFINITIONS** [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELIMENT	REQUIREMENT	METHOD
NOTIFICATION **(see section B of MRP)**	• Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number	Call Cal OES at: **(800) 852-7550**
REPORTING **(see section C of MRP)**	• Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING **(see section D of MRP)**	• Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters
RECORD KEEPING **(see section E of MRP**	• SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request

B. NOTIFICATIONREQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, 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, notify the Cal OES and obtain a notification control number.

2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:

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

3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).

4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.

2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

3. **SSO Categories**

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

      a. Reach surface water and/or reach a drainage channel tributary to a surface water; or

      b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

   ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.

   iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**

   i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:

      a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.

      b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.

iii. **"No Spill" Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a "No Spill" certification statement for that month.

iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

i. **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.

ii. **Enrollee's Response to SSO:**

a. Chronological narrative description of all actions taken by enrollee to terminate the spill.

b. Explanation of how the SSMP Overflow Emergency Response plan was 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.

iii. **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.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.

ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWOS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWOS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database.
Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:

1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
2. SSO Location Name.
3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow 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 SSO appearance point explanation field.
4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
5. Whether or not the SSO reached a municipal separate storm drain system.
6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
7. Estimate of the SSO volume, inclusive of all discharge point(s).
8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
9. Estimate of the SSO volume recovered (if applicable).
10. Number of SSO appearance point(s).
11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
12. SSO start date and time.
13. Date and time the enrollee was notified of, or self-discovered, the SSO.
14. Estimated operator arrival time.
15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.

b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :

1. Description of SSO destination(s).
2. SSO end date and time.
3. SSO causes (mainline blockage, roots, etc.).
4. SSO failure point (main, lateral, etc.).
5. Whether or not the spill was associated with a storm event.
6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
7. Description of spill response activities.
8. Spill response completion date.
9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
11. Whether or not health warnings were posted as a result of the SSO.
12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
13. Name of surface water(s) impacted.
14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.

c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:

   1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.

d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:

   1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.

e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:

   1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

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

1. Contain protocols for water quality monitoring.

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

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

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

5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
   i. Ammonia
   ii. 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.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).

2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
   i. Complaint records documenting how the enrollee responded to all notifications of possible

or actual SSOs, both during and after business hours, including complaints that do not result in SSOs. Each complaint record shall, at a minimum, include the following information:

a. Date, time, and method of notification.

b. Date and time the complainant or informant first noticed the SSO.

c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.

d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.

e. Final resolution of the complaint.

ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.

iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.

3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.

4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:

i. Supervisory Control and Data Acquisition (SCADA) systems

ii. Alarm system(s)

iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.

2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.

3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13
Date

Jeanine Townsend
Clerk to the Board

- **County Health Officials: The** City shall report SSOs to Kern County Health officials in accordance with California Health and Safety Code Section 5410 et seq.

Director
County of Kern
Environmental Health Services
2700 M Street, Suite 300
Bakersfield, Ca 93301

Phone: 661-862-8700

Attachment A. Communication with the General Public

Good communication with homeowners, the news media, and the general public, whether in writing, on the phone, or in person establishes how we are perceived and establishes confidence in our ability to resolve the problems in a timely, safe, and professional manner. This is a very stressful event and even a reasonable homeowner may become irate if they perceive us as being indifferent, uncaring, or unresponsive, or incompetent.

The following guide will help to assure a homeowner that their best interest is a top priority for us.

- Identify yourself.
- Never admit fault or lay blame on anyone.
- Never argue with the homeowner.
- Listen to the homeowner. Let them explain the situation or to vent their frustration. Repeat critical information to confirm that you are listening and pay attention. Although you may have heard it all before, and understand the situation better than the homeowner, if you understand how they perceive the problem you will be better able to explain the situation to them.
- Acknowledge the homeowner's concerns.
- Express understanding and empathy for any inconveniences caused by the incident.
- Briefly explain that you will determine if the source of the backup is in the sewer main and if it is, that it will be cleared as quickly as possible.
- Keep the homeowner informed of what is being done and what will be done to correct it.
- Notify the homeowner when the problem has been corrected.
- If the problem is found to be in the private lateral, inform the homeowner and provide recommendations what they need to do to get the problem corrected.
- Keep focused on halting the SSO and restoring service. Don't get side tracked or distracted.
- Provide contact numbers for the homeowner should they have further questions.

Attachment B. SSO Incident Log Guide

City of Arvin
SSO Incident Log Guide

Initial SSO notification received by: _____

Date/time SSO received: _____

Date/time SSO started: _____

Date/time SSO stopped: _____

Location of SSO (Use nearest street address if possible. Cross streets are next best location description):

_____

Describe SSO site (Is SSO coming from a lift station, manhole, broken line, private service lateral, etc.?):

_____

_____

Status of SSO when first arrived on-scene (Flow continuing, flow stopped, overflow contained, uncontained, flowing to receiving stream, etc.):

_____

_____

Incident Control (Name of on-scene incident manager, department, and title.):
If the incident manager changes, enter the new incident manager and the time the new incident manager assumed control. The log should be handed off to the new incident manager.

_____

_____

Isolation (Provide the date/time isolation of the SSO was achieved. Describe actions taken to isolate the SSO.):

_____

_____

_____

Containment (Provide the date/time containment of the SSO was achieved. Describe actions taken to contain the SSO.):

_____

_____

_____

Support requested/received (Provide any support requested and the support received from agencies, city departments, private contractors, etc.):

_____

_____

_____

Estimate of volume released (Provide the method used to estimate the volume released and any measurements made to estimate the volume released):

_____

_____

_____

Samples collected for analysis (Provide a brief list of samples that were collected for analysis):

_____

_____

_____

Clean up (Provide a description of the actions taken to clean up the SSO, include the support services used; and disinfection efforts):

_____

_____

_____

_____

_____

_____

Follow up (Provide a description of the follow-up actions taken, such as subcontractor cleaning of lines, additional clean up, repairs performed, etc. Include the city department, subcontractors or other persons involved in the follow up activities):

_____

_____

_____

_____

_____

_____

Prevention (Provide a description of the actions taken to prevent future SSOs from this site. Include recommendations for preventive actions that may be needed in the future at this location or at similar sites within the system.)

_____

_____

_____

_____

Attachment C. Released Volume Estimation Methods

Method 1 – Captured Volume

Use Method 1 if the SSO is contained in an area and other flows are not co-mingled with the spilled liquids. If the spill is contained in more than one area or in an irregular area, it may be more accurate to divide the containment area into smaller areas to facilitate the calculations. This method calculates the volume by determining the shape and depth of the spilled wastewater. The following steps are used to calculate the volume of each containment area, and then the calculated volumes are totaled to provide the total estimated volume of the spill.

Step 1 Sketch the shape of the containment area.

Step 2 Measure or pace off the dimensions of the containment area.

Step 3 Calculate the average DEPTH by measuring the depth of the contained wastewater at several locations. Calculate the average depth for the entire area by adding the measured depths together and dividing by the number of measurements. The accuracy of the estimation will improve as more depth measurements taken.

Step 4 Convert the dimensions, including the depth estimated in Step 3, into feet. If the area was paced off, estimate the average length of the stride and convert the length into feet.

Step 5 Calculate the AREA using the following formulas:

Rectangle:	Area = Length x Width
Circle:	Area = diameter x diameter x 0.785
Triangle:	Area = Base x Height x 0.5

The result of this calculation is expressed in square feet and represents the area of the containment area.

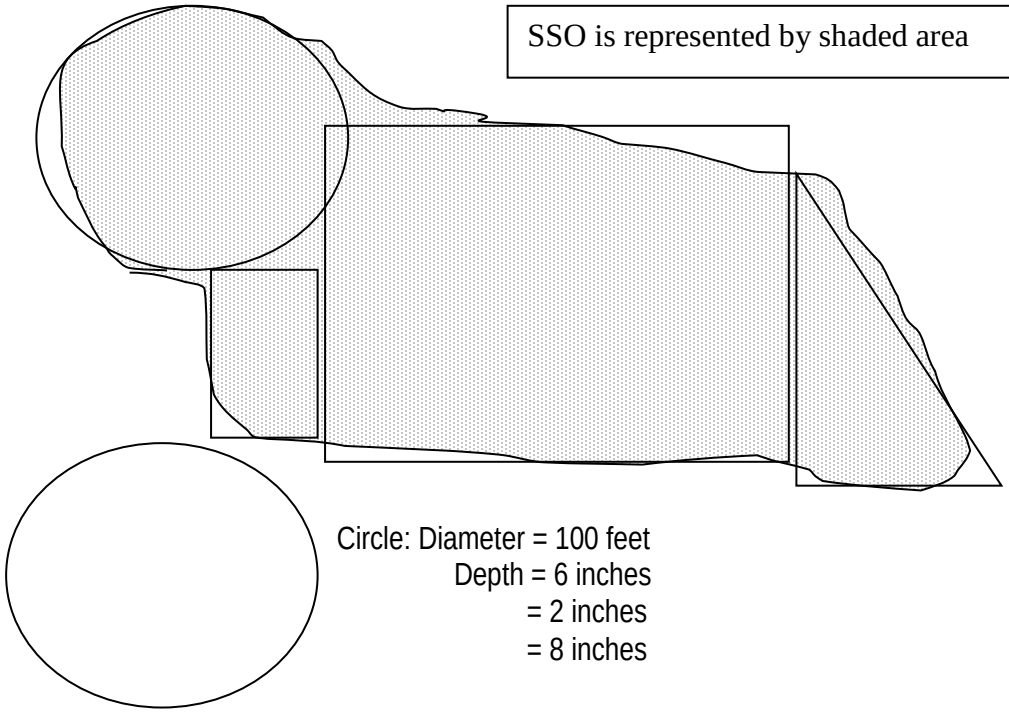
Step 6 Calculate the VOLUME by multiplying the AREA by the DEPTH

The result of this calculation is expressed in cubic feet and represents the volume of the containment area.

Step 7 Calculate the VOLUME (expressed in gallons) by multiplying the VOLUME (expressed in cubic feet) by 7.48 gallons per cubic foot. The result of this calculation is expressed in gallons.

Step 8 Calculate the TOTAL ESTIMATED VOLUME by adding all the estimated volumes of each containment area measured. (Note: all estimated volumes should be expressed in gallons.)

Example:



Circle: Diameter = 100 feet
Depth = 6 inches
= 2 inches
= 8 inches

Rectangle: Length = 73 feet
Width = 34 feet
Depth = 2 inches
= 4 inches
= 3 inches

Rectangle: Length = 210 feet
Width = 181 feet
Depth = 2 inches
= 4 inches
= 22 inches
= 6 inches
= 18 inches

Triangle: Height = 168 feet
Base = 56 feet
Depth = 1 inch
= 3 inches
= 13 inches
= 5 inches
= 1 inch

Circle: Diameter = 100 feet

Depth = 6 inches
= 2 inches
= 8 inches

$$\text{Average Depth} = \frac{2" + 6" + 8"}{3} = \frac{16"}{3} = 5.3" \text{ x } \frac{1'}{12"} = 0.44 \text{ feet}$$

Area of Circle = diameter x diameter x 0.785
Area of Circle = 100' x 100' x 0.785 = 7,850 sq ft

Volume of Circle = Area x Average Depth
Volume of Circle = 7,850 sq ft x 0.44 ft = 3,454 cubic feet
or
Volume of Circle = 3,454 cu ft x 7.48 gallons/cu ft = 25,836 gallons

Rectangle: Length = 73 feet
Width = 34 feet
Depth = 2 inches
= 4 inches
= 3 inches

$$\text{Average Depth} = \frac{2" + 4" + 3"}{3} = \frac{9"}{3} = 3" \text{ x } \frac{1'}{12"} = 0.25 \text{ feet}$$

Area of Rectangle = length x width
Area of Rectangle = 73' x 34' = 2,482 sq ft

Volume of Rectangle = Area x Average Depth
Volume of Rectangle = 2,482 sq ft x 0.25 ft = 620.5 cu ft
or
Volume of Rectangle = 620.5 cu ft x 7.48 gallons/cu ft = 46,413 gallons

Rectangle: Length = 210 feet
Width =181 feet
Depth = 2 inches
= 4 inches
= 22 inches
= 6 inches
= 18 inches

$$\text{Average Depth} = \frac{2" + 4" + 22" + 6" + 18"}{5} = \frac{52"}{5} = 10.4" \text{ x } \frac{1'}{12"} = 0.87 \text{ feet}$$

Area of Rectangle = length x width
Area of Rectangle = 210' x 181' = 38,010 sq ft

Volume of Rectangle = Area x Average Depth
Volume of Rectangle = 38,010 sq ft x 0.87 ft = 33,069 cu ft
or
Volume of Rectangle = 33,069 cu ft x 7.48 gallons/cu ft = 247,356 gallons

Triangle: Height = 168 feet
Base = 56 feet
Depth = 1 inch
= 3 inches
= 13 inches
= 5 inches
= 1 inch

$$\text{Average Depth} = \frac{1" + 3" + 13" + 5" + 1"}{5} = \frac{23"}{5} = 4.6" \text{ x } \frac{1'}{12"} = 0.38 \text{ feet}$$

Area of Triangle = height x base x 0.5
Area of Triangle = 168' x 56' = 9,408 sq ft

Volume of Triangle = Area x Average Depth
Volume of Triangle = 9,408 sq ft x 0.38 ft = 3575 cu ft
or
Volume of Triangle = 3,575 cu ft x 7.48 gallons/cu ft = 26,741 gallons

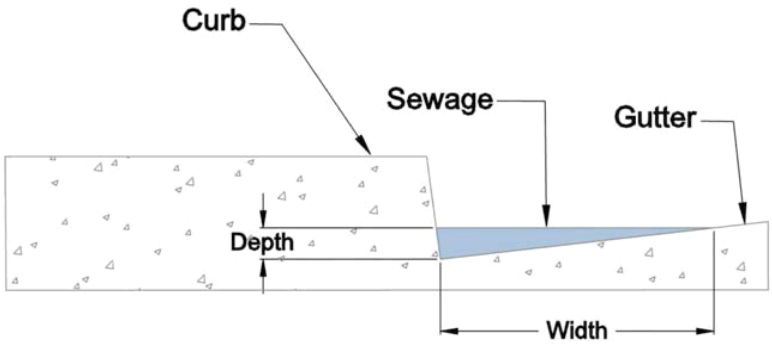
Estimated Volume of SSO

Circle	25,836 gallons
Rectangle	45,413 gallons
Rectangle	247,356 gallons
Triangle	26,741 gallons
Total Estimated Volume	**345,346 gallons**

Based on the above calculations the Estimated Volume of the SSO of this example would be reported as 345,346 gallons.

Method 2 – Curb & Gutter

If the SSO is captured in the street and remains in the gutter along a concrete curb, this method will provide an estimate of the volume held along the curb. If the SSO fills the street, then Method 1 would be a better estimating tool. Refer to the diagram and estimate the volume following these steps:



Step 1 Measure the length of the gutter containing the overflow.

Step 2 Measure the depth and width of the overflow (sewage) in the gutter at the highest end of the gutter.

Step 3 Convert all measurements to feet.

Step 4 Calculate the overflow volume using the following equation:

Volume measured in cubic feet = Length x Width x Depth x 0.5

Volume measured in gallons = Volume in cu ft x 7.48 gallons per cu ft

Note that the volume calculated is ½ the typical volume calculated in the equation for a triangle (multiply by 0.5). The reason for this is based on the assumption that the curb is falling from the highest end of the gutter to the gutter drain. This results in forming a triangle starting at the curb side of the highest end of the gutter, at the water level to the gutter and from the gutter drain to the water level on the street side of the gutter at the highest end. Therefore, only half of the volume of the standard triangle volume calculation is actually present. As a result, half of the volume expressed in cubic feet would be lost as the water line narrows toward the gutter drain.

Example:

Refer the above drawing. At the highest end of the gutter, the depth of sewage is 4 inches; the width is 12 inches; and the sewage runs 800 feet along the curb with no flow away from the curb.

$$\text{Volume Measured in Cubic Feet} = \text{Length x Depth x Width x } 0.5$$

$$\text{Volume measured in cu ft} = 800\text{ ft x } 4\text{"}\left(1\text{ ft}/12\text{"}\right) \text{ x } 12\text{"}\left(1\text{ ft}/12\text{"}\right) \text{ x } 0.5$$

$$\text{Volume measured in cu ft} = 800\text{ ft x } 0.33\text{ ft x } 1\text{ ft x } 0.5$$

$$\text{Volume measured in cu ft} = 132\text{ cu ft}$$

$$\text{Volume measured in gallons} = 132\text{ cu ft}\left(7.48\text{ gallons}/\text{cu ft}\right)$$

$$\text{Volume measured in gallons} = 987\text{ gallons}$$

Method 3 – Duration & Flow Rate

This method is used when the SSO is not totally captured and held in a containment area. This method depends on the operator making an estimate of the flow rate measured in gallons per minute (gpm) and the duration of the SSO. This method is usually less accurate than the previous methods, but is accurate enough for the purposes of estimating the volume of the SSO.

Estimating Flow Rate

There are several methods that can be used to estimate the flow rate:

(1) Flow from Manhole Covers:

The following tables contain tabulated values for different maintenance hold overflows. This table only provides estimates for two manhole cover sizes and whether the cover is in place or lifted out of place, allowing additional flow around the manhole cover. The operator should be aware that these flow rates are only estimates and will vary greatly depending on actual circumstances. "Height" refers to the approximate height of the water spout above the manhole cover. The minimum sewer size that will support the flows with the manhole cover in-place is 6 inches or less. The minimum sewer size that will support the flows with the manhole cover off-set ranges from 24" to 36". Supporting the estimated flows means that the sewer line can carry sufficient volume of water at a pressure that will actually discharge the estimated flow rates.

Height (inches)	MH Cover In Place			MH Cover Off Set	
	Single Pick Hole	24" Cover	36" Cover	24" Cover	36" Cover
	Flow (gpm)	Flow (gpm)	Flow (gpm)	Flow (gpm)	Flow (gpm)
1	2.7	9	13	799	660
2	3.9	25	37	3,444	4,458
3	4.7	54	78	4,910	9,062
4	5.5	100	147		12,861
5	6.1	166	243		

"Pick hole" refers to a single 7/8" hole in the manhole cover used as a vent or as a pick hole used to lift the MH cover. Flow rate in this case is not dependent on the diameter of the manhole cover.

(2) Open Channel Flow

Overflows often run into nearby ditches, channels, gutters, etc. Flow can be quantified by measuring the cross-sectional area and velocity of the overflow. First, measure the depth of flow and the dimensions of the channel. For the purposes of this estimate, simplify the dimensions of the channel by assuming it to be rectangular in shape and calculate the area of the channel by multiplying the width of the stream and depth of the water. Several width and depth measurements along the stream may improve the accuracy of the estimate if the averages are used for the area calculation.

Then measure the velocity by dropping a floating object into the flow and clocking the time it takes to travel a set distance. The resulting velocity will be expressed in feet per second. Several measurements should be taken and the average flow rate used in volume estimates. Calculate the flow into the channel using the flowing formula:

Flow Rate = Velocity x Area

Flow Rate, measured in cubic feet per second, equals Velocity measured in feet per second multiplied by the area measured in square feet. Convert the cubic feet to gallons by multiplying by 7.48 gallons per cu ft and convert the time from seconds to minutes to result in a Flow Rate measured in gallons per minute. If the conversion factor of 449 is used in the above equation, the result will be measured in gallons per minute.

Flow Rate in gallons per minute = Velocity x Area x 449

(3) Pump Stations

If the SSO is driven by the discharge from the sewer lift station, the volume of the SSO may be estimated based on pump hour and the use of pump curves found in the technical manuals provided by the pump manufacturer. Since there is only one lift station in the City's sewer system, this may not be practical very often.

Estimating SSO Duration

The start and end times of the overflow can be estimated by the operator or by public bystanders who saw the overflow begin and/or end. The operator should refrain from guessing when the SSO started or stopped. If the start time could not be verified, assume it commenced at or about the time the SSO report was first received by the City. If the SSO stopped prior to operators arriving at the SSO site, it should be assumed that the SSO stopped at the time the operators arrived at the site.

Estimating SSO Volume

Once the Flow Rate and the Duration of the SSO have been determined, the final step to estimating the SSO volume can be calculated using the following formula:

SSO Volume (gallons) – Flow (gpm) x Duration (min)

Using the units of flow measured in gallons per minute and the SSO duration measured in minutes, the resulting volume will be expressed in gallons.

Attachment D. Quick Guide to Containment

One of the most important actions taken in an SSO Response is containing the overflowing sewage. Under the stress of the response, the obvious is often overlooked. This guide is intended to focus the responder and provide some basic ideas for containing the overflow. Upon arrival at the SSO site, take a few moments to assess the situation. Try to identify:

- Where the overflow is going.
- How much sewage is already present?
- If the overflow has already stopped.
- Natural containment areas that can be used.
- Obstacles that will prevent containment.
- What the exposure risk is to responders and the general public.
- What materials you have at hand that can be used to contain the overflow.
- If storm drains are present in the potential containment areas.

Tools & Materials

The following tools and materials are often useful in effecting containment:

- Shovels
- Plugs
- Rubber mats
- Sand bags
- Plastic sheeting
- Plastic bags (construction type)
- Sand or dirt

The following equipment is often useful to effect containment:

- Trash pumps
- Emergency generators
- Front-end loader
- Backhoe
- Dump truck
- Vac truck

Sewer Back up in a Building

- Isolate the affected area of the building.
- Evacuate people from affected area.

- Shut down heating and air conditioning systems to avoid spreading airborne pathogens.
- Shut off electrical power to prevent electric shock.
- Remove uncontaminated furniture from affected area.
- Do not remove furnishings that have contacted overflowed sewage.
- Attempt to limit the spread of sewage by using plastic sheeting, sandbags or other materials available.
- Attempt to re-direct overflow to non-critical areas or outside the building.

Overflow to Ground

An overflow to the dirt or gravel-covered soil may appear to be desirable but this may prove to be more difficult and more costly to decontaminate than an overflow to an asphalt or concrete cover. In addition, the sewage may percolate into the soil and contaminate the soil or shallow groundwater.

- Dig earthen trench to redirect overflow to asphalt or concrete covered area if possible.
- Attempt to pond overflow in the gutter or low area. This may be accomplished using sand bags, plastic sheeting or water-filled plastic bags.
- Avoid electric shock; watch for downed or low-hanging power lines.
- Use rubber mats to cover storm drain inlets and catch basins to keep overflow out of storm-water system.
- If it is not raining and not likely to rain, you may try to use the storm drain system as a containment area.
- Try to use the natural topography to create ponding areas; be prepared to create or redirect flow of more than one ponding area.
- Seek equipment and operator assistance as early as possible. Don't wait for the last minute before seeking assistance.

Overflow to Storm Drains

An overflow to a storm drain, open ditch, natural drainage may appear to solve the overflow problem, but the cost of cleanup multiplies as the length of the contaminated drain increases. Containing the overflow in the storm drains is a good practice, but attempt to limit the length of the drain that is contaminated.

- Trace the overflow downstream to determine the end point of the overflow.
- In an open drain, attempt to dam the drain to limit the extent of the overflow without overflowing the banks of the drain ditch.
- In a piped drain, attempt to determine the locations that the drain can be plugged or partially plugged to allow the pipe to act as a storage area for containment.
- If the overflow enters a storm water pond, the entire pond will become contaminated. Attempt to prevent this from occurring if the storm water pond already holds water. If

the pond is normally dry, it may be an effective containment pond that can be cleaned up once the overflow in stopped and the situation has been stabilized.

- If the overflow is entering a storm water lift station, turn off the automatic pumps and allow the lift station to act as the containment area. The wet well should be closely monitored to prevent the wet well from overflowing.

Attachment E. Sanitary Sewer Overflow Guide for Private Property Owners

Recognizing a Sewer Overflow

Recognizing a sewer overflow is usually very noticeable. Typical observations include:

- Water flowing from a manhole.
- Wet areas with an usual odor along sidewalks, building walls, landscaping, or standing water.
- Water flowing from cleanouts or outdoor drains.; and/or
- Sewer backup into a building.

Reporting a Sewer Overflow

Always notify the sewer department or public works department as soon as an overflow is observed.

City of Arvin, Police Department	(911) or 661-854-5583
Public Works Director	661-854-3134
Arvin Wastewater Treatment Plant	661-854-2421
(Veolia Water -.Arvin – Dale Ducharme, Project Manager)	
Kern County Health Department	661-862-8700
Director Environmental Health Services	
2700 M Street, Suite 300	
Bakersfield, Ca 93301	
California Office of Emergency Services	800-852-7550

Property Owner Responsibility

It is against City ordinances and State law to allow the discharge of sewage to the general environment, and the property owner could be guilty of a misdemeanor and subject to fines and imprisonment. Untreated sewer poses a serious health risk to persons coming into contact with it.

City Responsibility: The City is responsible for the response and cleanup of sewer overflows that are caused by an overflow from a public sewer system. The public sewer system starts at the mainline located in the public right-a-way and continues all the way to the City wastewater treatment plant.

Property-Owner Responsibility: The property owner is responsible for the sewers in the buildings on the property and the service line connecting the building sewers to the public sewer line in the right-a-way.

Once the City is notified of a sewer overflow, a response team will be dispatched to the location of the overflow and the City sewer lines will be checked to determine if the overflow is due to a blockage or breakage of the City sewer system or if the overflow is due to a problem in the private sewer system. The City will make the appropriate reports to the

County Health Department, the State Office of Emergency Services, and the Regional Water Quality Control Board. The City will also inform the private property owner of their reporting responsibilities if the overflow is a result of a problem in the private sewer system. The City is required to notify the above agencies, whether the overflow is the responsibility of the City or a private property.

Response Guide for Property Owners

Initial response

- Keep children, pets, and others from entering the affected area.
- Immediately shut off and do not use any water (sinks, tubs, shower, toilets, dishwashers, clothes washers).
- Turn off air conditioning and heating systems to avoid spreading potentially contaminated air throughout the building.
- If there is a possibility of the overflow reaching an electrical outlet or electrical appliance or light, shut off all electrical power to the affected area of the building and/or the entire building.
- Do not remove items already contaminated by the sewer overflow.
- Move any uncontaminated items to avoid further contamination.
- Use towels, sandbags, water-filled plastic bags, plastic sheets, etc., to block and contain the overflow.
- Attempt to redirect the overflow to areas that will limit the contamination of living areas and facilitate cleanup.
- Do not redirect overflow to storm water drains. Attempt to keep overflow from reaching storm drains.

Follow up

The property owner is responsible for clearing and repairing the private sewer lines. The property owner should call a plumbing professional to clear blockages and make repairs. The City crews can not recommend a plumbing service, but a full listing can be found in the telephone business yellow pages. City crews are not authorized to affect repairs to a private sewer system.

If the overflow is greater than 1,000 gallons and it is due to a problem in the private sewer system, the property owner must contact the Governor's Office of Emergency Services. The phone number is provided in this guide. The City crew will also be making a report to the same office but the property owner is still required to make this report.

Cleanup

- The property owner is responsible for cleaning up the overflow on private property. If the overflow is extensive, it is recommended that the property owner hire qualified professionals to clean up from a sewer overflow.
- Never open manholes or other City sewer structures. Only authorized personnel are allowed to open these structures. If the overflow was contained, the contained water

may discharge to the City sewer system. If the contained water cannot be discharged through the private sewer lines to the City sewer, contact the City wastewater plant or the City Public Works Department, and an authorized operator will be dispatched to provide appropriate access to the sewer system.

- Wear rubber boots, rubber gloves, and goggles during cleanup of affected areas. Never handle sewer contaminated material with unprotected hands. A painter's mask may be used to avoid breathing contaminated air is using a shop vac or other cleanup equipment.
- Solid material can be double bagged and disposed of with household trash.
- On hard surfaces, such as, asphalt, concrete, tile, wood, or linoleum surfaces (floors, garages, driveways, etc.) it is safe to use a 2% bleach solution or ½ cup of bleach to 5 gallons of water to disinfect the area. Let the bleach stand for thirty minutes and the wash the surface to the storm drain.
- Carpeting that was affected by the overflow and contaminated with sewage should be removed and disposed of in the local landfill.
- If an on-site water well was affected by the overflow, the well should be disinfected, purged, and tested for fecal coliform bacteria by a certified water laboratory.
- Avoid spreading contamination during cleanup activities. Avoid unnecessary walking outside of contaminated areas. Clean all boots and gloves with soap and water when finished using them. All clothing worn during the clean up should be assumed to have been contaminated and should be washed separate from other personal clothing.
- All washable throw rugs, drapes, clothing, towels, bedding, etc. should be laundered.

Attachment F.
SSO 2-Hour Notification Forms

SSO 2-Hour Notification
Office of Emergency Services

To: CALIFORNIA **OFFICE OF EMERGENCY SERVICES**	From: City of Arvin (name/title) Veolia West Operating Services – City of Arvin P.O. Box 665, 18500 Rancho Drive Arvin, CA 93203
Phone: **800-852-7550**	Fax: 661-854-3869 Phone: 661-854-2421
Re: NOTIFICATION OF SANITARY SEWER OVERFLOW	DATE/TIME:

NOTICE OF SANITARY SEWER OVERFLOW
In accordance with California Water Code Section 13267 and State Water Quality Control Board Order No. WQ 2008-0002 EXEC the City is providing notification of a sanitary sewer overflow.

Date: _____ Time Spill was Noticed: _____

Location:
_____

City:
_____

SSO has been stopped: ☐ YES ☐ NO If NO, is there an estimate of the time that the SSO will be stopped?

_____

Estimated Volume: _____gallons (may not have this estimate at this time)

OES Control Number _____
Note: The Office of Emergency Services (OES) will issue a Control Number at the time of this report. Make sure to record this number. It will be needed in other reports associated with this SSO event.

SSO 2-Hour Notification
Kern County Health Department

To:	From: City of Arvin
DIRECTOR **ENVIRONMENTAL HEALTH SERVICES** **KERN COUNTY** **HEALTH DEPARTMENT**	(name/title) Veolia West Operating Services – City of Arvin P.O. Box 665, 18500 Rancho Drive Arvin, CA 93203
Phone: **661-862-8700**	Fax: 661-854-3869
	Phone: 661-854-2421
Re: NOTIFICATION OF SANITARY SEWER OVERFLOW	DATE/TIME:

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY

NOTICE OF SANITARY SEWER OVERFLOW
In accordance with California Water Code Section 13267 and State Water Quality Control Board Order No. WQ 2008-0002 EXEC the City is providing notification of a sanitary sewer overflow.

Date: _____ Time Spill was Noticed: _____

Location:
_____

City:
_____

SSO has been stopped: ☐ YES ☐ NO If NO, is there an estimate of the time that the SSO will be stopped?

_____

Estimated Volume: _____gallons (may not have this estimate at this time)

SSO 2-Hour Notification
Central Valley Regional Water Quality Control Board

To:	From: City of Arvin
CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD	(name/title) Veolia West Operating Services – City of Arvin P.O. Box 665, 18500 Rancho Drive Arvin, CA 93203
Phone: **559-445-5116**	Fax: 661-854-3869 Phone: 661-854-2421
Re: NOTIFICATION OF SANITARY SEWER OVERFLOW	DATE/TIME:

NOTICE OF SANITARY SEWER OVERFLOW
In accordance with California Water Code Section 13267 and State Water Quality Control Board Order No. WQ 2008-0002 EXEC, the City is providing notification of a sanitary sewer overflow.

Date: _____ Time Spill was Noticed: _____

Location:
_____

City:
_____

Estimated Volume: _____gallons

Actions Taken: ☐ Cleanup
☐ Containment
☐ Repair Needed: Est. Date of _____

For SSOs in excess of 1,000 gallons
☐ Notified Central Valley Regional Water Quality Control Board
☐ Notified Office of Emergency Services

Attachment G.
SSO 24-Hour Certification Form

Central Valley Regional Water Quality Control Board
Sanitary Sewer Overflow 24-Hour Certification Report Form

RWQCB Staff Contact: _____

Date of Certification _____/____/____ Time of Certification __ __ : __ __ AM/PM

Reported by: _____ Phone: (_____) _____

Reporting Agency: _____

Address: _____

Responsible Party (if not the Reporting Agency):_____

Mark One: ☐ Public Spill ☐ Private Spill

Estimated Total SSO Volume (gallons): _____ SSO Discovery Time/Date: _____

Estimated Recovered Volume (gallons) _____ Start Date/Time: _____

Location of SSO _____ ☐ Contained ☐ On-going

End: Date/Time:_____

SSO Location GPS coordinates: _____

City:_____Arvin, California_____Zip code:_93203_.

Waters of the State Impacted? ☐ YES ☐ NO

Storm Drain: _____

Primary Surface Water: _____

Secondary Surface Water: _____

Other Impacted Water: _____

Samples Collected? ☐ YES ☐ NO

Kern County Director of Environment Health Notified Immediately?
☐ YES ☐ NO Date/Time: _____

Office of Emergency Services Notified? ☐ YES ☐ NO
Date/Time: _____

OES Control No. _____

Corrective Actions Taken: _____

Attachment H.
SSO 5-Working Day Written Report Form
Sanitary Sewer Overflow
Written Report

City of Arvin, California WDR Order No. 5-00-093

A. Spill Location		
Spill Location Name:		
GPS Longitude/Latitude Coordinates:		
Street Name and Number:	City: Arvin	Zip code: 93203
Nearest Cross Street		County: Kern
Spill Location Description:		

B. SPILL DESCRIPTION	
Spill Appearance Point: □ Building/Structure □ Force Main □ Gravity Sewer □ Other Sewer System Structure □ Pump Station □Manhole Structure ID#	
Did the spill reach a drainage channel and/or surface water? □ YES □ NO	
If the spill reached a storm sewer, was it fully captured and returned to the sanitary sewer? □ YES □ NO	
Was this spill from a private service lateral? □ YES □ NO If YES, Identify the Responsible Party:	
Final spill destination: □ Beach □ Building Structure □ Other paved surface □ Storm Drain □ Street/Curb & Gutter □ Surface Water □ Unpaved Surface □ Other (specify)	
Estimated spill volume (gal):	Method of calculation:
Est. volume of SSO recovered (gal):	Photos taken? □ YES □ NO How many?
Estimated volume of spill reaching surface water, drainage channel, or not recovered from a storm drain (gal):	

C. SPILL OCCURRING TIME	
SSO Reported by:	SSO Reported to:
Phone Number of Reporter:	Estimated SSO Start Date/Time:
Date/Time Sewer Crew received Notice of SSO	Estimated SSO End Date/Time:
Date/Time Sewer Crew arrived on-scene	Estimated Duration of SSO (hrs):
Weather conditions 72 hrs prior to SSO: □ Sunny Weather □ Cloudy □ Measurable Rain □ Rain for Several Days	
Weather conditions at time of SSO Response: □ Sunny Weather □ Cloudy □ Measurable Rain	

D. CAUSE OF SPILL *(check all that apply)*			
□ Debris/Blockage	□ Flow Exceeded Capacity	□ Pipe Failure	□ Operator Error
□ Grease	□ Rainfall Exceed Design	□ Electrical Power Failure	□ Bypass
□ Roots	□ Inflow/Infiltration	□ Pump Station Failure	□ Vandalism
□ Debris from Laterals		□ Structural Failure	
□ Construction Debris	□ Other (Specify		
If SSO is caused by a private service lateral specify: □ Owner □ Tenant □ Manager Contact Person: Phone:			
If the SSO is caused by wet weather, choose size of storm: □ 1-yr □ 5-yr □ 10-yr □ 50-yr □ 100-yr □ Unknown			
Diameter (in inches) of pipe at point of blockage/spill cause (if applicable):			
Sewer pipe material at point of blockage/spill cause (if applicable):			
Description of terrain surrounding point of blockage/spill cause: □ Flat □ Steep □ Mixed			

E. SPILL RESPONSE			
Spill response activities *(check all that apply)*			
□ Isolated impacted area	□ Contained All of Spill	□ Contained Portion of Spill	□Halted SSO
□ Cleaned Lines/Restored Flow	□ Recovered Spill	□ Cleaned up & disinfected impacted area	□ Other (specify)
Samples of impacted waters collected? □ YES □ NO If Yes, provide list of analysis to be performed.			

F. CORRECTIVE/PREVENTIVE ACTIONS	
Line maintenance activities *(check all that apply)*	
□ Contractor - Hydro jet cleaned and vacuumed impacted sewer lines.	□ Electrical power restored
□ Point repairs made to damaged sewer lines	□ Lift Station equipment/controls repaired
□ TV impacted sewer line	□ If SSO was caused by a grease blockage, the SSO event information was forwarded to the City FOG Source Control Program for follow up inspection and enforcement actions against FOG source
If system repairs have not been completed, provide the repairs needed and the target date for completion of the planned repairs:	
Preventive Activities *(check all that apply)*	
□ Add SSO site to hot spot list for accelerated inspection and maintenance	□ Forwarded information to City Engineers to re-assess cause of electrical power supply failure and whether backup power is needed
□ Review current PM schedule and made appropriate changes	□ Review SSO response and identify strengths and weaknesses and adjust SSO plant to strengthen the SSO program
□ TV impacted sewer line	□ Operator training held on SSO event and changes being made as a result of the SSO review
□ Add SSO site to hot spot list for accelerated inspection and maintenance	□ Forward SSO information to City Engineers to assess rehab and upgrade needs for City sewer system

G. NOTIFICATION SUMMARY	
2-hour Notification to Governor's Office of Emergency Services	Date/Time:
	OES Control Number:
2-hour Notification to Central Valley Regional Water Quality Control Board	Date/Time:
2-hour Notification to Director of Environmental Health Services, Kern County	Date/Time
24-hour Certification to Central Valley Regional Water Quality Control Board	Date/Time
5-working day written report to Central Valley Regional Water Quality Control Board	Date/Time
Immediate: State Water Resources Control Board (electronic reporting for SSOs >1,000 gallons)	Date/Time
30-day State Water Resources Control Board (all SSOs regardless of size, 30-days following the last day of the month in which the SSO occurred)	Date/Time

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Submitted this date: _____

By:_____

Name/Title Printed or Typed)

Attachment I.
SSO Web-Based Reporting

SSO Web-Based Reporting
Water Resources Control Board Report

If the estimated SSO volume is greater than 1,000 gallons, the City must report the SSO to the Water Resources Control Board via the Internet-based California Integrated Water Quality System (CIWQS) SSO database. The City must be registered with the state Water Resource Control Board and have the user name and password in place prior to reporting any SSOs through this system.

The state has posted a copy of the CIWQS Workbook and other support documentation at the following Web page:

http://www.waterboards.ca.gov/water_issues/programs/sso/

It is recommended that the persons delegated to be the Legal Responsible Official and the registered "Data Submitter" become familiar with the policies and procedures provided in the CIWQS Workbook and the Web based reporting system.

Attachment J.
Spill Reporting Fact Sheet

City of Arvin
SPILL REPORTING FACT SHEET

WHEN A SPILL OCCURS, YOU MUST FOLLOW THE MANDATORY PROCEDURES IN THE TABLE BELOW:

A spill is any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into surface waters or drainage channels that is not permitted or authorized by a regulatory agency. (A spill includes an unauthorized discharge to land that poses a public health threat.)

Be on the safe side. REPORT IT!

Required Communication	Agency to Contact (all are required)	Time Requirements	Contact Method
1. Notification	Office of Emergency Services (OES)	As soon as possible, but not later than **2 hours** after becoming aware of the unauthorized discharge	Phone: 800-852-7550 (Obtain a control number from OES)
	Kern County Health Department		Phone: 661-862-8700
	Central Valley Regional Water Quality Control Board – Fresno (FB5F)		Phone: RB5F 559-445-5116
2. Certification	Central Valley Regional Water Quality Control Board	As soon as possible, but not later than **24 hours** after becoming aware of the unauthorized discharge	Phone 916-46403291 (provide detailed information)
3. Reporting	Central Valley Regional Water Quality Control Board	Within **5 business days**, submit written report	Mail or Hand Deliver
4. CIWQS	State Water Resources Control Board	See: Guide for SSO Category Reporting Requirements	Internet Based Reporting See: Guide for Web Address

Who should make these reports – Veolia West Operating Services Project Manager
- Registered Data Submitter
- Legal Responsible City Official

If none of these people are available, the Operator in Charge will contact the City Manager and the reports will be submitted by the City official.

Sections covering abnormal, emergency, unusual, or temporary situations. Each provided with its own section. Each section should cover background, philosophy, and methodology as applicable to each situation.

7.0 FATS, OIL AND GREASE

7.1 Summary

The Sewer Use Ordinances are intended to accomplish the following:

- Reorganize the existing sewer ordinances to separate the mandated Industrial Pretreatment Program (IPP) from the General Sewer Connection, Construction, and User Fees. The Regional Board is required by state law to provide oversight of the City's implementation of the IPP. The other sections of the sewer ordinances do not require state oversight.

Once the Regional Board has given prior (conditional) approval and the City Council has adopted the Article VII of the ordinance, then the City must re-submit the adopted ordinance to the Regional Board for final approval and receive written approval from the Regional Board prior to implementing the new ordinance. The other articles of the Sewer Use Ordinances do not require final approval from the Regional Board and may be implemented immediately upon adoption by the City Council, as provided in the City's Constitution.

Ordinance 381 is the Fats, Oil and Grease Source Control Ordinance required by the state SSMP order. This ordinance does not require prior conditional or final approval from the Regional Board. There may be some oversight of this ordinance, but it will probably be as the state inspects for the SSMP implementation and not the industrial pretreatment oversight.

The City Council adopted Ordinance 383 Article VII (Industrial Pretreatment Ordinance). The City has no Significant Industrial Users.

Along with the Industrial Pretreatment Ordinance 383 (Article VII), the City submited an enforcement response plan; implementation procedures; a statement delegating the authority to a City official to implement the program; an organizational chart of the staffing to be used for implementation, and a commitment (budget) of resources to implement the program.

7.2 Introduction

The City of Arvin has developed an *Enforcement Response Plan* for the enforcement of the City Codes implementing the provisions of 40 CFR Part 403.8(f)(5) of the National Industrial Pretreatment Rules as required under the Central Valley Regional Water Quality Control Board *(CRWQCB) Order No.* 5-00-093. This plan contains detailed procedures indicating how the City will investigate and respond to instances of industrial user noncompliance.

Personnel involved in the City of Arvin IPP include:

Director of Public Works	**Phone: 661-854-3134**
City Manager	**Phone: 661-854-3134**
POTW Facility Manager (Veolia Water)	**Phone: 661-8542421**
Pretreatment Coordinator (Veolia Water)	**Phone: 661-854-2421**

7.3. Provisions for Enforcement of the Sewer Use Ordinance

The Sewer Use Ordinance includes all pretreatment program regulations as required by 40 CFR 403.8. The EPA's *Enforcement Response Plan Guidance Manual* was used in the development of this plan. A summary of ordinance provisions shows that the POTW legal authority requirements have been satisfied follows:

Table 7-1
Summary of Ordinance Provisions

40 CFR 403.8(f)			Topic	Ordinance Provisions
1	i	i	Deny or Condition	§13.08.101 Prohibited Discharge Standards
	ii		Comply with Standards	§13.08.100 Purpose and Policy, Legal Authority §13.08.101.B. & C Federal and State Requirements
	iii		Control through Permit	§13.08.103.B. Industrial Discharge Permit Required Discharge to POTW
		a)	Duration	§13.08.103.G. Wastewater Discharge Permit - Duration-5 years
		b)	Transferability	§13.08.103.K. Wastewater Discharge Permit Transfer §13.08.103.D. Wastewater Discharge Permit Contents
		c)	Effluent Limits	§13.08.103.D. Wastewater Discharge Permit Contents
		d)	Self-Monitoring	§13.08.103.D; 105; & 111 Monitoring and Reporting
		e)	Civil & Criminal Penalties	§13.08.115 Regulatory Actions
	iv	a)	Compliance Schedules	§13.08.103.D. & 114.D. Wastewater Discharge Permit Contents/Compliance Order
		b)	Monitoring Reports	§4.2, §4.3 Reporting Requirements §3.7 Wastewater Discharge Permit Contents
	v		Inspections	§§13.08.111.A. Right of Entry: Inspection and Sampling
	vi	a)	Injunctive Relief - Civil or Criminal Penalties	§13.08.115.A. Injunctive Relief §13.08.115.B. Civil Penalties §13.08.115.C. Criminal Penalties
		b)	Halt Discharges	§13.08.114.G. Emergency Suspensions §13.08.114.H. Termination of Discharge
	vii		Confidentiality	§13.08.112 Confidential Information
2	i		Identify and Locate	§13.08.103.A. User Survey IMP-1 IPP Implementation Plan
	ii		Characterize	§13.08.103.D. Wastewater Discharge Permit Application Contents §13.08.105.3 Categorical Baseline Monitoring Reports §13.08.103.D. Wastewater Discharge Permit Contents IMP-2 IPP Implementation Plan
	iii		Notify User	§13.08.103 User Notification §13.08.114.A. Notice of Violation
	iv		Receive Reports	§13.08.105 Reporting Requirements IMP-9 IPP Implementation Plan

Table 7-1 Summary of Ordinance Provisions CONTINUED				
40 CFR 403.8(f)			Topic	Ordinance Provisions
	v		Random Sampling Slug Discharges	§13.08.102.C. & 105.H. Accidental Discharge/ Slug Discharge Control Plans §13.08.111 Compliance Monitoring IMP-8, 9, 10 & 12 IPP Implementation Plan
	vi		Investigate	§13.08.111 Compliance Monitoring IMP-8 IPP Implementation Plan
	vii		Public Participation	§13.08.113 Publication of Users in SNC IMP-16 IPP Implementation Plan
3			Funding	O&M Contract with Veolia Water Operating Services
4			Local Limits	§13.08.101.D. Local Limits IPP Derivation of Technically Based Local Limits
5			Enforcement Response Plan	IPP Enforcement Response Plan
6			Industrial User List	IMP-1, 2, & 3 IPP Implementation Plan Industrial User Survey

7.4 Enforcement Remedies

Levels of Response

There are three possible levels of response to all violations available to the City: *no response*, *an informal response*, or a *formal response*. For any violation, the City must review the violation and determine the appropriate response.

Violations of monitoring, reporting, and treatment requirements may range from relatively minor violations to major violations causing adverse environmental effects, health problems, or interference or pass through at the POTW. Each instance of noncompliance is a violation and sound enforcement policy would be to review each and respond appropriately. Selection of the appropriate enforcement response will relate to whether the violation is major or minor and other factors such as duration of the violation, compliance history, good faith of the violator, and the harm caused by the violation. For example, if a self-monitoring report is late by a week, the City may not consider that a serious violation. In most cases, a telephone call or verbal notice of violation from the City requesting compliance and an explanation will bring the problem to the attention of the Industrial User's (IU) management. Frequently, such notification is sufficient to correct the problem.

Isolated violations will usually be attributed to a relatively simple problem that can be easily corrected. Although the tendency is to assume that minor exceedances are unimportant, the persistence of minor violations could indicate a more serious problem and necessitate an escalated enforcement response. More aggressive enforcement actions should normally be taken against facilities that frequently exceed numerical pretreatment standards than those that report isolated exceedances (unless the isolated exceedances are large and troublesome). Informal meetings or a written notice of violation should seek specific explanations of the

causes of frequent exceedances. If inadequate operating practices are found to be the cause, the City should seek specific commitments and deadlines to improve operating practices. If additional treatment is required, an enforceable compliance schedule should be issued to the industrial facility.

If the IU personnel appear to be attempting in good faith to comply with pretreatment requirements, the City enforcement actions should be on a more cooperative level than if the IU personnel do not appear to attempting to comply in good faith.

The City should be aware that the Clean Water Act requires extraordinary efforts to comply with its requirements in a timely way. Good faith must be measured against this standard. Congress clearly expresses the efforts that are expected:

> *"The Act requires industry to take extraordinary efforts if the vital and ambitious goals of the Congress are to be met. This means that business-as-usual is not enough. Prompt, vigorous, and in many cases, expensive pollution control measures must be initiated and completed as promptly as possible. In assessing the good faith of a*
>
> Legislative History of the Clean Water Act, No. 95-14, Vol. 3, p. 463.

If a facility challenges a permit or applicable pretreatment standard and delays progress toward compliance, the facility assumes the risk that the permit, contract, or standard will be upheld on judicial review. If the facility begins aggressively to come into compliance only after a decision is made adverse to its interests, it cannot be considered to have acted in good faith. Likewise, if a facility follows business-as-usual procedures, it cannot be considered to have acted in good faith.

IU noncompliance that results in interference with the POTW or causes pass-through of pollutants should be addressed through formal enforcement actions and penalties to ensure that adequate treatment and compliance is achieved promptly. In some cases, injunctive measures will also be appropriate.

1. No Response -- In most cases, "No Response" is not acceptable when a permit holder has violated the terms and conditions of the permit or the Sewer Use Ordinance. If no response is taken to a violation, the City should document the conditions that led to the decision to take no action.
2. Informal Response -- Informal enforcement can be an inspection, phone call, informal meeting, or a verbal notice of violation to the industrial user. The verbal notice of violation is limited to a notification that the IU has violated the permit. It may also require the IU to conduct additional investigation into the cause of the violation and corrective actions taken to return to compliance. For some violations, the City may determine that the corrective actions taken by the IU are adequate and that no further actions are necessary. In other cases, the City may direct the IU to conduct additional sampling or conduct additional investigation and reporting. The Pretreatment Coordinator is authorized to take informal enforcement actions. A written comment should be recorded in the IU's files that an informal enforcement action was taken and the details of that action.

3. Formal Responses -- Formal enforcement responses are specified under the ordinance and include all enforcement remedies provided. There are three levels of formal enforcement remedies: *Administrative*, *Judicial*, and *Supplemental* remedies.

Administrative Enforcement Remedies

Notice of Violation §13.08.114.A

> *SUO §13.08.114.A –"When the City finds that a User has violated, or continues to violate, any provision of this ordinance, a wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, the City may serve upon that User a written Notice of Violation. Within thirty (30) days of the receipt of such notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the User to the City. Submission of such a plan in no way relieves the User of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this Section shall limit the authority of the City to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation."*

The City codes require a formal written Notice of Violation (NOV) to the IU that a specific violation of the permit has occurred. The NOV may specify actions to be taken by the IU to return to compliance and to prevent future violations. It is the City's policy to issue a formal NOV for exceedance of numerical permit limits and other permit violations. An NOV may require review of procedures and permits, additional testing, additional reporting, in-depth investigation as to the cause and corrective actions, and preparation of plans to return to compliance or to prevent future violations. Specific time limitations may be placed on the required actions. The Pretreatment Coordinator has authority to issue formal NOVs.

An NOV cannot assess administrative fines or cost recovery, require installation of additional pretreatment equipment, or halt production at the IU's facility. However, it is the duty of the IU to comply with the terms and conditions of the permit and to take appropriate actions to prevent violating the permit, which may include a sharp reduction in the production level, or a complete halt to one, or more, or all production to prevent permit violations. Failure to take appropriate corrective actions may be considered a failure of the IU to comply with the discharge permit.

Consent Order §13.08.114.B

A Consent Order is a formal enforcement action in which the permit holder (IU) has developed a plan with scheduled milestone dates that will return the IU to compliance and prevent future violations. The Consent Order is a formal agreement between the City and the IU to provide sufficient time for the IU to attain compliance. The Pretreatment Coordinator is not authorized to issue Consent Orders. Consent Orders are issued under the authority of the City Public Works Director or higher. Consent Orders may establish interim discharge limits or permit conditions to allow the IU to operate at, or near, its current level of production and with its associated waste load until the IU or the City can implement a long-term plan to attain full compliance in a scheduled time period.

Show Cause Hearing §13.08.114.C

A Show Cause Hearing is a formal enforcement action that allows the IU to establish a basis for the City not to take further enforcement actions against it. Show Cause Hearings are usually held prior to taking escalated enforcement actions for serious or persistent violations. The Pretreatment Coordinator is not authorized to conduct Show Cause Hearings. This enforcement action requires the authority of the Public Works Director or higher. If the Show Cause Hearing is addressing a planned escalated enforcement action, then the hearing must be held by the level of authority required for the planned enforcement action. A Show Cause Hearing should be held before issuing administrative fines, terminating a discharge permit, or taking a civil or criminal legal action, but is not required.

Compliance Orders §13.08.114.D

Compliance Orders (Administrative Orders) are formal enforcement actions in which the City establishes a schedule of activities to be performed by the IU to accomplish compliance with the terms and conditions of the permit and/or Sewer Use Ordinance. Compliance Orders must contain milestone dates for completion of intermediate actions and final actions to attain full compliance with the permit and/or ordinance. Failure to meet the milestone dates is considered an additional violation of the permit and subject to additional enforcement actions. Compliance Orders require the authority of the Public Works Director or higher. The Pretreatment Coordinator is not authorized to issue Compliance Orders. Compliance Orders (Administrative Orders) may establish interim discharge limits or permit conditions to allow the IU to operate at, or near, its current level of production and with its associated waste load until the IU or the City can implement a long-term plan to attain full compliance in a scheduled time period.

Cease and Desist Orders §13.08.114.E

Cease and Desist Orders are formal enforcement actions prepared by the City Attorney and are intended to prevent an immediate threat to the health and safety of the general public and/or the workers of the POTW; or to prevent property damage to public or private property. Cease and Desist Orders are not an enforcement action under the Sewer Use Ordinance but rather are under the Public Safety Codes. These orders usually require the IU to immediately halt specific activities. Under a Cease and Desist Order, the IU is obligated to take immediate action as specified in the Order. Failure to take the required actions may result in further criminal or civil enforcement actions taken by the City against the IU. Cease and Desist Orders require the authority of the City Manager as advised by the City Attorney. The Pretreatment Coordinator is not authorized to issue Cease and Desist Orders but may be involved in the implementation, monitoring, or documentation of the IU's actions in response to the Cease and Desist Order.

Administrative Fines §13.08.114.F

Administrative Fines are formal enforcement actions that impose fines on the IU for violations of the permit and/or Sewer Use Ordinance. Administrative Fines are punitive in nature and are used to discourage continued violations. Administrative Fines may also reduce the economic benefit derived by the IU by violating the permit. Administrative Fines require the authority of the City Manager or higher. In addition, the City Attorney must review all Administrative Fines prior to issuance. The Pretreatment Coordinator is not authorized to issue administrative fines. Compliance Orders may contain provisions for administering Administrative Fines

automatically when milestone dates are missed. However, the assessment of the fine must be made by the City Manager, under the review of the City Attorney. The authority to issue Administrative Fines is not covered under the Sewer Use Ordinance. The authority for the City to assess Administrative Fines comes from State Government Codes Section 36901 that authorizes municipalities to assess Administrative Fines not to exceed $1,000 per day per violation of City Ordinances. The following is an excerpt from the State Government Codes. (It is the responsibility of the City to ensure changes in the codes have not occurred since the time of this writing.)

> *36901. "The city legislative body may impose fines, penalties, and forfeitures for violations of ordinances. It may fix the penalty by fine or imprisonment, or both. A fine shall not exceed one thousand dollars ($1,000). Imprisonment shall not exceed six months."*

Emergency Suspension §13.08.114.G

Emergency Suspension is a formal enforcement action that requires the IU to immediately halt all discharges to the POTW. Emergency Suspensions do not require formal notification prior to issuing the suspension order. Informal notice may be given to the IU prior to suspension. Emergency Suspensions are intended to halt discharges that threaten to damage the POTW, cause interference or pass through, or endanger the environment, the general public and/or POTW employees. Suspensions require the authority of the Pretreatment Coordinator or higher. The POTW Superintendent is also authorized to order an Emergency Suspension. The City must be prepared to defend its position when ordering the Emergency Suspension. A Show Cause Hearing is not required to order an Emergency Suspension.

Termination of Discharge §13.08.114.H

Termination of Discharge is a formal enforcement action that requires the IU to terminate all discharges to the POTW. This action, unlike the Emergency Suspension, allows the IU to conduct a Show Cause Hearing and may provide a reasonable time to shutdown the current operation prior to terminating the discharge. Termination of Discharge requires the authority of the City Manager or higher. The City Attorney should review the circumstances justifying the termination prior to issuance of the termination order. To restore the permit, the IU must submit a permit application and demonstrate the IU's ability to comply with the terms and conditions of the new permit, prior to commencement of discharge. Termination of Discharge is not an emergency action and is not intended to be easily ordered or the permit restored.

Judicial Enforcement Remedies §13.08.115

The authority to take Judicial Enforcement Remedies is not provided under the Sewer Use Ordinance; it comes from the California Government Codes for Civil and Criminal Penalties: These codes specifically address violations of environmental codes established by the federal and state government that are adopted into the City Codes for implementation, as are the industrial pretreatment rules implemented under the City Sewer User Ordinance. An excerpt from the Government Codes follows:

California Government Codes
Civil & Criminal Penalties

Section 54739.

(a) Any local agency listed in Section 54725 may require any of the following:

(1) Pretreatment of any industrial waste which the local agency determines is necessary in order to meet standards established by the federal or California state government or other regulatory agencies or which the local agency determines is necessary in order to protect its treatment works or the proper and efficient operation thereof or the health or safety of its employees or the environment.

(2) The prevention of the entry of such industrial waste into the collection system and treatment works.

(3) The payment of excess costs to the system for supplementary treatment plants, facilities, or operations needed as a result of allowing the entry into the collection system and treatment works of such industrial waste.

(b) The provisions of this section shall be in addition to other requirements provided for in the respective enabling acts of those local agencies incorporated by reference in subdivision (a).

Section 54740.

(a) Any person who violates any requirement adopted or ordered by a local agency pursuant to paragraph (1) or (2) of subdivision (a) of Section 54739 may be civilly liable in a sum of not to exceed twenty-five thousand dollars ($25,000) a day for each violation.

(b) The local agency may petition the superior court to impose, assess, and recover the sums provided for in subdivision (a). In determining the amount, the court shall take into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs, and corrective action, if any, attempted or taken by the discharger.

(c) Notwithstanding any other provision of law, all civil penalties imposed by the court for a violation of this section shall be distributed to the local agency.

(d) Remedies under this section are in addition to and do not supersede or limit any and all other remedies, civil or criminal, but no liability shall be recoverable under this section for any violation for which liability is recovered under **Section 54740.5**.

Section 54740.5.

(a) The local agency may issue an administrative complaint to any person who violates any requirement adopted or ordered by a local agency pursuant to paragraph (1) or (2) of subdivision (a) of Section 54739. The administrative complaint shall allege the act or failure to act that constitutes the violation of the local agency's requirements, the provisions of law authorizing civil liability to be imposed, and the proposed civil penalty.

(b) The administrative complaint shall be served by personal delivery or certified mail on the person subject to the local agency’s discharge requirements, and shall inform the person served that a hearing shall be conducted within 60 days after the person has been served. The hearing shall be before a hearing officer designated by the governing board of the local agency. The person who has been issued an administrative complaint may waive the right to a hearing, in which case the local agency shall not conduct a hearing. A person dissatisfied with the decision of the hearing officer may appeal to the governing board of the local agency within 30 days of notice of the hearing officer's decision.

(c) If after the hearing, or appeal, if any, it is found that the person has violated reporting or discharge requirements, the hearing officer or board may assess a civil penalty against that person. In determining the amount of the civil penalty, the hearing officer or board may take into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs and corrective action, if any, attempted or taken by the discharger.

(d) Civil penalties may be imposed by the local agency as follows:

(1) In an amount which shall not exceed two thousand dollars ($2,000) for each day for failing or refusing to furnish technical or monitoring reports.

(2) In an amount which shall not exceed three thousand dollars ($3,000) for each day for failing or refusing to timely comply with any compliance schedule established by the local agency.

(3) In an amount which shall not exceed five thousand dollars ($5,000) per violation for each day for discharges in violation of any waste discharge limitation, permit condition, or requirement issued, reissued, or adopted by the local agency.

(4) In an amount which does not exceed ten dollars ($10) per gallon for discharges in violation of any suspension, cease and desist order or other orders, or prohibition issued, reissued, or adopted by a local agency.

(5) The amount of any civil penalties imposed under this section which have remained delinquent for a period of 60 days shall constitute a lien against the real property of the discharger from which the discharge originated resulting in the imposition of the civil penalty. The lien provided herein shall have no force and effect until recorded with the county recorder and when recorded shall have the force and effect and priority of a judgment lien and continue for 10 years from the time of recording unless sooner released, and shall be renewable in accordance with the provisions of Sections 683.110 to 683.220, inclusive, of the **Code** of Civil Procedure.

(e) All moneys collected under this section shall be deposited in a special account of the local agency and shall be made available for the monitoring, treatment, and control of discharges into the local agency's sanitation or sewer system or for other mitigation measures.

(f) Unless appealed, orders setting administrative civil penalties shall become effective and final upon issuance thereof, and payment shall be made within 30 days. Copies of these orders shall be served by personal service or by registered mail upon the party served with the administrative complaint and upon other persons who appeared at the hearing and requested a copy.

(g) The local agency may, at its option, elect to petition the superior court to confirm any order establishing civil penalties and enter judgment in conformity therewith in accordance with the provisions of Sections 1285 to 1287.6, inclusive, of the **Code** of Civil Procedure.

(h) No penalties shall be recoverable under this section for any violation for which civil liability is recovered under Section 54740.

Section 54740.6.

(a) Any party aggrieved by a final order issued by the governing board of a local agency under Section 54740.5, after granting review of the order of a hearing officer, may obtain review of the order of the board in the superior court by filing in the court a petition for writ of mandate within 30 days following the service of a copy of a decision and order issued by the board. Any party aggrieved by a final order of a hearing officer issued under Section 54740.5, for which the board denies review, may obtain review, of the order of the hearing officer in the superior court by filing in the court a petition for writ of mandate within 30 days following service of a copy of a decision and order denying review by the board.

(b) If no aggrieved party petitions for writ of mandate within the time provided by this section, an order of the board or a hearing officer shall not be subject to review by any court or agency, except that the board may grant review on its own motion of an order issued under Section 54740.5 after the expiration of the time limits set by that section.

(c) The evidence before the court shall consist of the record before the board, including the hearing officer's record, and any other relevant evidence which, in the judgment of the court, should be considered to effectuate and implement policies of this division. In every such case, the court shall exercise its independent judgment on the evidence.

(d) Except as otherwise provided in this section, subdivisions (e) and (f) of Section 1094.5 of the Code of Civil Procedure shall govern proceedings pursuant to this section.

Injunctive Relief §13.08.115.A

Injunctive Relief is a formal enforcement action that moves the authority from the City to the Courts. When an IU continues to violate any provision of the ordinance, the permit or informal or formal enforcement order, the City may petition the Court through the City's attorney for the issuance of a temporary or permanent injunction. The City Manager, under the direction of the Mayor, may have the City Attorney initiate this action.

Civil Penalties §13.08.115.B

The City may file a suit for civil penalties to recover reasonable costs and expenses associated with the enforcement actives and the IU's discharge. In addition, the City may file for civil penalties. Civil actions require the authority of the Mayor and City Manager and may require approval of the City Council.

Criminal Penalties §13.08.115.C

Criminal Penalties are formal enforcement remedies pursued under the criminal courts. Criminal Penalties require the authority of the City Manager and may require approval of the City Council. The City must be capable of proving criminal intent to pursue this enforcement action.

Remedies Nonexclusive §13.08.116

Remedies Nonexclusive means that the City may take any, all, or any combination of the formal and informal enforcement actions against an IU. Enforcement of the Pretreatment Ordinance will generally be in accordance with the City's Enforcement Response Plan. However, the City may take other actions against an IU when the circumstances warrant. Has the authority to take more than one enforcement action against any noncompliant IU. Remedies Nonexclusive requires the authority of the highest authority assigned to those remedies to be taken by the City.

Supplemental Enforcement Actions §13.08.117

Penalties for Late Reports §13.08.117.A

A penalty of $100 may be assessed to any User for each day that a required report is late; beginning five days after the date the report is due. Higher penalties may also be assessed where reports are more than 30-45 days late. Actions taken by the City to collect late reporting penalties shall not limit the City authority to initiate other enforcement actions that may include penalties for late reporting violations. The City Manager, as advised by the City Attorney, is authorized to assess Late Report Penalties.

Performance Bonds §13.08.117.B

The City may require an IU to file a performance bond payable to the City upon failure to comply with the terms of the permit, ordinance, or enforcement action. The value of the bond should not exceed the estimated costs necessary to achieve consistent compliance to the permit and/or ordinance. The requirement to post a Performance Bond requires the authority of the Public Works Director or higher.

Liability Insurance §13.08.117.C

The City may require an IU to obtain liability insurance sufficient to restore or repair damage to the POTW caused by an unauthorized discharge from the IU. The requirement to maintain liability insurance requires the authority of the Public Works Director or higher.

Water Supply Severance §13.08.119

The City has the authority to sever water service to the IU until the IU can demonstrate its ability to comply with the permit and/or Sewer Use Ordinance. Severance of the Water Supply to an IU requires the authority of the Public Works Director or higher.

Public Nuisance §13.08.120

A violation of any provision of this ordinance, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, is hereby declared a public nuisance and shall be corrected or abated as directed by the City. Any persons(s) creating a public nuisance shall be subject to the provisions of the City Codes governing such nuisances, including reimbursing the City for any costs incurred in removing, abating, or remedying said nuisance.

Affirmative Defenses to Discharge Violations §13.08.121

Section 13.08.121 of the Sewer Use Ordinance provides the IU with an affirmative defense to discharge violations. There are three affirmative defenses that may be used by the IU to avoid enforcement actions imposed by the City. The ordinance is very clear on these defenses.

Upset (§13.08.121.A)

For the purposes of this section, “upset” means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the user. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements listed below are met. A user who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- An upset occurred and the user can identify the cause(s) of the upset.
- The facility was at the time being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures.
- The user submitted the following information to the City within twenty-four (24) hours of becoming aware of the upset. If this information is provided orally, a written submission must be provided within five (5) days.
  - Description of the indirect discharge and cause of noncompliance.
  - The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue.
  - Steps being taken and/or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

In any enforcement proceeding, the user seeking to establish the occurrence of an upset will have the burden of proof.

Users will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.

Users will control production of all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

Prohibited Discharge Standards (§§13.08.121.B)

A user will have an affirmative defense to an enforcement action brought against it for noncompliance with the general prohibitions in Section 13.08.101.A. (1) of the ordinance, or the specific prohibition in Sections 13.08.101.A. (2) of this ordinance, if it can prove that it did not know, or have reason to know, that its discharge, alone or in conjunction with discharges from other sources, would cause pass through or interference and that either:

- A local limit exists for each pollutant discharged and the user was in compliance with each limit directly prior to, and during, the pass through or interference.
- No local limit exists, but the discharge did not change substantially in nature or constituents from the user's prior discharge when the City was regularly in compliance with its NPDES permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.

Bypass (§13.08.121.C)

For the purposes of this section, the following definitions apply:

- *Bypass* means the intentional diversion of waste streams from any portion of a user's treatment facility.
- *Severe property damage* means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (d) and (e) of this section.

Bypass is prohibited, and the City may take an enforcement action against a user for a bypass, unless:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.
- The user submitted notices as required under paragraph (e) of this section.

The City may approve an anticipated bypass, after considering its adverse effects, if the City determines that it will meet the three conditions listed in paragraph (c) of this section.

Notification of a bypass must be handled in either of the following manners:

- If a user knows in advance of the need for a bypass, it must submit prior notice to the City at least ten (10) days before the date of the bypass, if possible.

- A user must submit oral notice to the City of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission must also be provided within five (5) days of the time the user becomes aware of the bypass. The written submission must contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass. The City may waive the written report on a case-by-case basis if the oral report is received within twenty-four (24) hours.

7.5 Implementation

CRWQCB Order No **5-00-093**

Industrial Pretreatment Program -- Authorization & Organization

Part I – Authorization

Upon adoption of Chapter 13.08, Article VII, by the Arvin City Council; the Arvin Public Works Director is delegated the authority to implement the provisions of the Ordinance. The Public Works Director is authorized to delegate authority to individuals to perform specific duties under the Industrial Pretreatment Program established under the ordinance. The Public Works Director will assume the duties, responsibilities, and perform those tasks assigned to the "City" under the codes. The Public Works Director has the authority to issue industrial wastewater discharge permits, issue enforcement orders and take appropriate enforcement actions as specified in the Industrial Pretreatment Program Enforcement Response Plan.

Upon adoption of Chapter 13.08, Article VII, the Arvin Industrial Pretreatment Coordinator, is delegated the authority to implement the Arvin Industrial Pretreatment Program, authorized under the Ordinance, and in accordance with the Industrial Pretreatment Program Implementation Procedures. The Industrial Pretreatment Coordinator is authorized as an agent for the City to conduct industrial facility inspections, sampling of industrial discharges, preparation of official reports and other documentation necessary to carry out the provisions of the ordinance. Under no circumstances is the Industrial Pretreatment Coordinator authorized to take direct enforcement actions against an industrial user; assess or collect fees or issue, revoke, or terminate an industrial user permit; or to terminate water or sewer service.

Authorized this _____ day, of _____, 2009

Authorized by _____, Mayor, City of Arvin, California

Part II -- Organization

The following Organizational Chart identifies the officials and organizations involved in the implementation of the City Sewer User Ordinances and Industrial Pretreatment Program:

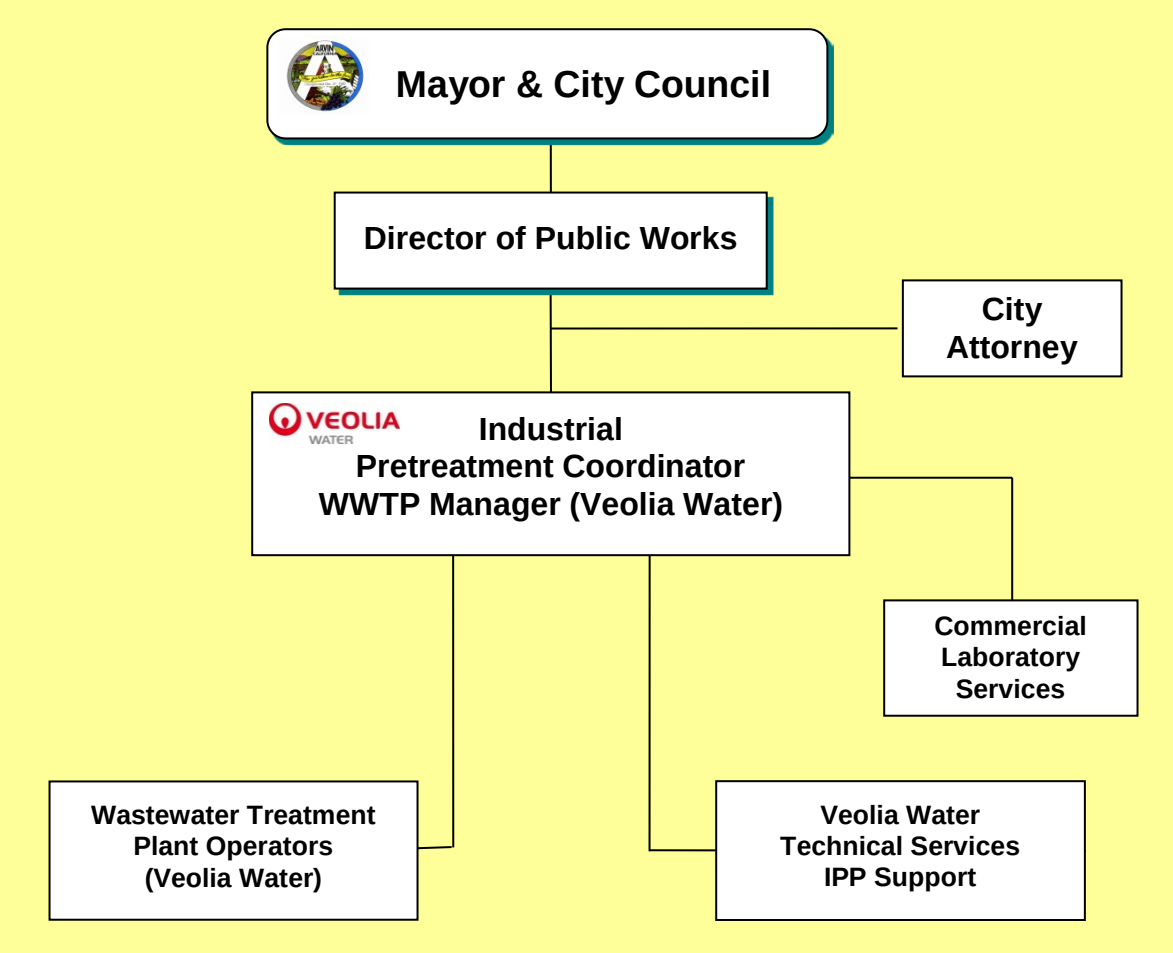


Figure 7-1. Industrial Pretreatment Program Management Structure

The following individuals and firms comprise the City of Arvin's Industrial Pretreatment Program management structure:

- **Mayor and City Council –** The Mayor and City Council are the ultimate control authority and are responsible for ensuring that all regulations (ordinances) kept current and delegation of authority to the appropriate City staff and/or contract operators. The Mayor and Council have delegated their authority to the Director of Public Works to issue IU permits, enforce the City ordinance, and manage the staffing of the IPP.
- **Director of Public Works –** The Director of Public Works is an employee of the City and is the individual holding the authority to implement the City's Sewer Use Ordinance and IPP. Implementation includes delegation of duties and responsibilities; enforcement of the ordinance, issuance of industrial wastewater discharge permits, and gathering of information and compliance data. The Director of Public Works is responsible to the Mayor and City Council.

- **Industrial Pretreatment Coordinator –** The Industrial Pretreatment Coordinator may be an employee of the City or a contractor to the City. The Industrial Pretreatment Coordinator is the person responsible for the gathering of data on industrial discharges, identifying new users and new sources of industrial wastewater, preparing IU permits, conducting monitoring (inspections and samplings) of industrial users, evaluating industrial discharges for compliance to the City Sewer Use Ordinance and industrial waste discharge permits, receiving and evaluating Industrial User reports; and preparing all documentation and evidence used to enforce the City ordinance.
- **City Attorney –** The City Attorney may be an employee of the City or a contractor to the City. The City Attorney provides legal guidance to the City for all industrial pretreatment issues, both between the City and the State/Federal authorities; or between the City and an industrial user.
- **Wastewater Treatment Plant Manager –** The manager of the City's wastewater treatment plant provides technical and manpower support for the IPP. The plant manager may serve as the Industrial Pretreatment Coordinator. The plant manager may be an employee of the City or a contract operator. The plant manager has the authority to order an industrial user to halt its discharge if, in the plant manager's opinion, the industrial discharge causes an imminent threat to life or property. The plant manager does not have the authority to issue industrial wastewater discharge permits or take direct enforcement actions against an industrial user, except under emergency situations as specified in the ordinance.**Wastewater Treatment Plant Operators –** The Industrial Pretreatment Coordinator may call upon certified wastewater operator -- both collection system and treatment plant operators -- for support when conducting routine monitoring and inspections and investigations into unknown discharges identified at the wastewater treatment plant or in the collection system.
- **Commercial Laboratory Services –** The City utilizes commercial laboratory services for collecting and analyzing samples from industrial dischargers. This produces discharge characterization independent of Industrial User bias or City bias analysis. The commercial laboratory may also provide technical assistance when confronted with pollutants that are not familiar to the City or contract operator staff.
- **Veolia Water Technical Services –** The City has contracted with Veolia Water North America -- West, LLC, to operate the City's wastewater treatment plant and sewage collection system. Veolia Water maintains a technical services group to provide technical support to the company's projects. This includes technical assistance with the IPP. This support is available on an as needed basis and is easily accessed through the Veolia Water Project Manager. Technical support staff will interact directly with the Industrial Pretreatment Coordinator and/or City officials.

Pretreatment Year - Labor

The City will budget sufficient resources to implement the IPP. Should significant industrial discharges connect to the system in the future. Although the dollar amount varies from year to year, the following table provides the annual commitment to implement the pretreatment program. The City will report this commitment in the annual pretreatment report submitted to the Regional Board.

EXAMPLE

Table 7-2.
City of Arvin Annual Budget for the Industrial Pretreatment Program

Position	Est. Annual Man-hours	Labor/ Expenses
Pretreatment Coordinator/Project Manager – Veolia Water	50	$3,750
Pretreatment Inspector/Collection System Supervisor – Veolia Water	20	$2,500
Corporate Technical Services Support	20	$2,000
City Enforcement	10	$4,000
Sampling Assistance (Veolia Water Wastewater Plant Operators)	20	$2,500
Total Labor & Expenses	**120**	**$14,750**

Pretreatment Program – Equipment Inventory

The City will maintain sufficient equipment to implement the IPP. The following table provides a typical inventory of equipment. This should be understood that the equipment is not used exclusively for pretreatment and that additional equipment is available from the wastewater treatment plant to support the IPP activities.

EXAMPLE

Table 7-3.
City of Arvin Pretreatment Program Equipment Inventory

Item	Qty	Extended Value
Computer and printer	1	$ 400
pH meter	1	500
Grab sampling equipment	1	2,300
Sample containers and cooler provided by contract lab.		Sampling Costs Assessed to User
Vehicles and other support equipment provided by Veolia Water as needed		Costs contained in annual O&M fees paid to Veolia Water by the City
Total Inventory Value		**$ 3,200**

Additional Equipment

Veolia Water will provide vehicles for use by the pretreatment personnel and other equipment is made available as needed, using Veolia Water rolling stock, equipment, and tools.

In-House Consulting and Project Assistance

Veolia Water maintains a Technical Services Group to provide technical support and project assistance when key personnel are lost to a Veolia Water project, or special projects are conducted, such as derivation to Technically Based Local Limits. Travel and lodging expenses are paid by Veolia Water unless additional services beyond the scope of the Veolia Water contract are requested by the client. Relocation expenses to promote Veolia Water personnel within the corporate work base are also provided by Veolia Water. These services are direct support to the project and considered an essential service provided to the client.

Training

Veolia Water will provide in-house training for new employees and continuing education for employees. An estimated expenditure of $2,500 is provided for operator training annually. It is the decision of the Veolia Water Project Manager which workshop, seminar, or other training will be provided throughout the year. The training budget is not carried by the Pretreatment Budget, but maintained in the general employee-training budget of the Veolia Water Project Operating Budget. The City is not required to maintain a separate training budget for the Veolia Water personnel assigned to the pretreatment program.

Part III – Multi-Jurisdictional Agreements

The City of Arvin does not have any multi-jurisdictional agreements with any neighboring jurisdiction.

7.6 Implementation Procedures

The purpose of this guide is to provide direction to City staff in the implementation of the Industrial Pretreatment Sewer Use Ordinance for the City of Arvin, California. The goal of this guide is to provide efficient timely implementation and consistent administration of the IPP. It is the expressed wishes of the City of Arvin to provide consistent application of the City codes to all domestic and non-domestic sewer users.

The City of Arvin may contract with Veolia Water North America-West, LLC, to provide administration of the pretreatment program and to provide a Pretreatment Coordinator, who is an employee of the Veolia Water. All industrial sampling is conducted under the direction of the Pretreatment Coordinator, and a third-party commercial analytical laboratory is used for analyses of industrial samples. Sampling schedules will be set by the Pretreatment Coordinator. The City will budget for sampling services conducted under the IPP and will assess sampling fees to the industries sampled under the cost-recovery provisions of the Sewer Use Ordinance. It is the responsibility of the Pretreatment Coordinator to prepare billing data and for the City of Arvin Utility Billing Department to bill the appropriate industries for pretreatment sampling costs.

The Implementation Guide provides guidance for the activities of the Pretreatment Coordinator. Detailed guidance is provided in the City of Arvin Sewer Use Ordinance, City of Arvin Enforcement Response Guide, and the U.S. EPA Industrial User Inspection and Sampling Manual for POTWs, April 1994. In addition, the Pretreatment Coordinator is encouraged to obtain copies of U.S. EPA and State guidance documents when a new or specific industrial sector is under consideration by the City. These guides are often available on the Internet or available thought State or U.S. EPA publications. Additional assistance and guidance is available from the Veolia Water Industrial Pretreatment Technical Manager.

The following implementation procedures can be referenced at the following locations in the Implementation Guide:

IMP 1 – Identification of Existing and New Sources
IMP 2 – Classify Existing and New Sources
IMP 3 – User Database Maintenance
IMP 4 – Permitting Existing and New Sources
IMP 5 – Permit Modification
IMP 6 – Permit Termination & Closure
IMP 7 – Permit Renewal
IMP 8 – Monitoring
IMP 9 – IU Self-Monitoring & Reporting
IMP 10 – Reporting Requirements
IMP 11 – Recordkeeping
IMP 12 – Slug Discharge Prevention
IMP 13 – Best Management Practices
IMP 14 – Pollution Prevention
IMP 15 – Enforcement
IMP-16 – SNC Evaluation

Implementing Enforcement Actions

The persons identified in Part II, Organization, above, are responsible for determining that a violation has occurred and what type of enforcement response is required.

The time frames for responses are as follows:

- All violations will be identified and documented within five (5) days of receiving compliance information.
- Initial enforcement responses (involving contact with the IU and requesting information on corrective or preventive action(s) will occur within fifteen (15) days of violation detection.
- Follow-up actions for continuing or recurring violations will be taken within sixty (60) days of the initial enforcement. For all continuing violations, the response will include a compliance schedule.
- Violations that threaten health, property or environmental quality are considered emergencies and will receive immediate responses, such as halting the discharge or terminating service.
- All violations meeting the criteria for significant noncompliance will be addressed with an enforceable order within thirty (30) days of significant noncompliance.

All investigative records and monitoring schedules will be considered CONFIDENTIAL and will be maintained as CONFIDENTIAL to the full extent of the law. In the event of any requests for the release of investigative records and/or monitoring schedules, a written request will be made to the Arvin City Attorney for release of such information.

Tracking Enforcement Related Situations

The City will manually track due dates for all compliance actions and responses. Dates and actions will be noted on a calendar as a reminder of pending enforcement activities. As

responses are received, the City will record the date received on the document and check the due date. A note will be written on the document if the document is late.

Assessment of Administrative Fines

Purpose

Purpose

Assessments of fines are among the most effective responses to user noncompliance because they may be assessed at the City's discretion and the amount of the fines may be determined on an individual basis. Fines are punitive in nature and are not related to a specific cost borne by the City. Fines may be used to recapture the full or partial economic benefit of noncompliance and to deter future violations.

Legal Authority

The City is provided authority in the Sewer Use Ordinance to assess administrative fines. The California Governmental Codes Section 36901 gives municipalities the authority to issue administrative fines for violations of their City ordinances.

> *36901. "The city legislative body may impose fines, penalties, and forfeitures for violations of ordinances. It may fix the penalty by fine or imprisonment, or both. A fine shall not exceed one thousand dollars ($1,000). Imprisonment shall not exceed six months."*

When to Assess Administrative Fines

Administrative fines are recommended as an escalated enforcement response, particularly when NOVs or Consent Orders have not prompted a return to compliance. Whether administrative fines are appropriate responses to noncompliance also depends greatly on the circumstances surrounding the violation. When using this enforcement response, either singly or in conjunction with another response, the City should consider the following factors:

- The type and severity of the violation
- The number of violations cited
- The duration of the noncompliance
- The impact of the violation on the wastewater treatment plant and the environment
- Whether the violation threatened human health
- Whether the industrial user derived any economic benefit or savings from the noncompliance
- The compliance history of the IU
- Whether the IU is making good-faith efforts to restore compliance
- Other policy considerations normally involved in an enforcement decision

Determining the Amount of the Fine

The amount of the fine should be proportionate to the economic benefit enjoyed by the IU from the noncompliance and the harm caused by the violation. Each violation in the response plan has a fine or penalty category assigned to it. The categories are related to dollar amounts as shown in the following table.

Table 7.4 Fine or Penalty Plan Based on Category of Severity	
Category	**Fine or Penalty**
0	$0.0
1	$100 to $500
2	$500 to $1,000
3	$1,000
4	Civil penalties imposed within the range of Category 3, plus all expenses reasonably incurred by the City as a direct result of the violation, and the cost of litigation including attorney fees and expert witness fees.

The guide, combined with the table, provides a starting point for making the decision on the appropriate amount that should be fined. The City is not bound to a specific dollar amount for a specific violation but must make a judgment based on the factors discussed in the Enforcement Response Plan. When it has been determined that a fine is appropriate, the fine assessed should reflect the severity of the noncompliance based on the determination of severity in the Enforcement Response Plan. Determining a fine amount that reflects the violation's significance is extremely important. If a fine is too small, its deterrent value is lost and the amount may be regarded by the IU as a tax or nominal charge to pollute. If the fine is too great, it is more likely to be contested and could bankrupt the industry. In cases of extreme hardship, the City may consider reducing or suspending the fine as part of a Consent Order or a show cause proceeding. For guidance on calculating fines based on the economic benefit of noncompliance, see the Guidance Manual for Calculation of Economic Benefit of Noncompliance with Pretreatment Standards (1989), U.S. EPA.

Method of Assessing Administrative Fines

Once the violation is documented and an appropriate fine amount is determined, the City must notify the IU of the fine by issuing a Compliance Order. The Compliance Order will specify the violation, the actions required to return to compliance, and the amount of the fine assessed. The Compliance Order will include an invoice specifying the method of payment and the due date.

Termination of Discharge §13.08.114

General Discussion

Termination of Discharge is the revocation of an IU’s privilege to discharge to the City's sewer system. Termination maybe accomplished by physical severance of the industry's connection to the collection system, by issuance of a Compliance Order that compels the user to terminate its discharge or by a court ruling. However, since termination of discharge may force an industry to halt production and may force closure, the City must carefully consider all of the legal and operational implications of termination before using this enforcement response.

Legal Authority

Under §13.08.114 of the Sewer Use Ordinance, the City establishes the right to terminate services to industrial users.

When to Terminate Discharge

Termination of discharge is an appropriate response to industries that have not responded adequately to previous enforcement responses. Unlike civil and criminal proceedings, termination of sewer discharge is an administrative response that can be implemented directly by the City. This drastic measure is sometimes necessary to address emergency situations or industries resistant to previous enforcement measures. Service termination is sometimes used as an initial response to noncompliance that causes or threatens to cause an emergency situation. However, it is more frequently used as an escalated response to a significant violation when other enforcement responses fail to bring the IU into compliance. Assuming other enforcement responses are unsuccessful, the types of violations warranting termination include, but are not limited to, the following:

- Unpermitted discharges that violate the POTW's Wastewater Discharge Requirements (WDR 5-00-093) or that create a dangerous situation threatening human health, the environment or the treatment plant.
- Discharges that exceed local or categorical discharge limits and result in damage to the environment.
- Slug loads causing interference, pass through or damage to human health, the environment or the treatment plant.
- Failure of the IU to notify the City of effluent limit violations or a slug discharge that resulted in environmental or POTW damage.
- Complete failure of the IU to sample, monitor, or report as required by an Administrative Order.
- Failure of the industrial user to install required monitoring equipment per the condition of an Administrative Order.
- Major violation of a permit condition or Administrative Order accompanied by evidence of negligence or intent.

Reference

For additional information and general discussions about other enforcement actions not discussed in this plan, refer to the U.S.EPA -Guidance for Developing Control Authority Enforcement Response Plans, U.S. EPA, 1989; and U.S. EPA Pretreatment Compliance Monitoring and Enforcement Guidance, July 1986.

7.7 Enforcement Response Guide

Description of Terms

CA - City Attorney

Civil Litigation - Civil action against the industrial user seeking equitable relief, monetary penalties, and actual damages.

Criminal Penalties - Pursuing punitive measures against an individual and/or organization through a court of law.

Consent Orders - An order issued against an IU to assure voluntary compliance or similar documents establishing an agreement for compliance.

PWD - Public Works Director.

Fine - Monetary penalty assessed by Control Authority officials.

IU -Industrial User as defined in the City of Arvin Pretreatment Ordinance.

Meeting - Informal compliance meeting with the IU to resolve recurring noncompliance.

NOV - Notice of Violation.

PC - Pretreatment Coordinator.

PM - Treatment Plant Manager.

Show Cause Hearing - Formal meeting requiring the IU to appear and demonstrate why the Control Authority should not take a proposed enforcement action against it. The meeting may also serve as a forum to discuss corrective actions and compliance schedules.

Significant Non-Compliance (SNC) – A Significant Industrial User is considered to be in SNC when the samples collected over a six-month period meet one or more of the following criteria: (For compliance purposes, the use of rolling quarter protocols are used to determine the SNC status of an SIU. At the end of each calendar quarter, the previous six months are used as the SNC review period.)

- Chronic violations of wastewater discharge limitations, defined here as those in which sixty-six percent (66%) or more of the wastewater measurements taken for the same pollutant parameter during a six- (6) month period exceed a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l).
- Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent (33%) or more of wastewater measurements taken for the same pollutant parameter during a six- (6) month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the TRC [TRC = 1.4 for BOD, TSS, FOG, O&G, and 1.2 for all other pollutants except pH].
- Any other discharge violation of a pretreatment standard or requirement as defined by 40 CFR 403.3(l) (daily maximum, longer-term average, instantaneous limit, or narrative standards) that the POTW determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public.)
- Any discharge of pollutants that has caused imminent endangerment to the public or to the environment, or has resulted in the City's exercise of its emergency authority to halt or prevent such a discharge. (Note: any user, whether domestic, residential, commercial, non-significant industrial user or significant user will be considered in SNC based on a single event meeting this criteria.)
- Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance.
- Failure to provide within thirty (30) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standards deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules.

- Failure to accurately report non-compliance.
- Any other violation or group of violations that may include a violation of Best Management Practices, which the POTW determines will adversely affect the operation or implementation of the local pretreatment program.

Using the Enforcement Response Guide

This plan addresses a broad range of pretreatment violations. It is not intended to cover all types of violations. The responses in this plan are suggested responses; the City may use alternative enforcement remedies that are equally effective. The enforcement response guide is used as follows:

- Locate the type of noncompliance in the first column and identify the most accurate description of the violation in column 2.
- Assess the appropriateness of the recommended response(s) in columns three and four using the criteria of magnitude, duration, effects, compliance history, and good faith.
- Apply the enforcement response to the IU, specifying corrective action(s) or other responses required of the industrial user. Column five indicates responsible personnel.
- Track IU's response and follow up with escalated enforcement action if a response is not received or violation continues.

Table 7-5
Enforcement Response Guide

Noncompliance	Nature of Violation	Category	Enforcement Response	Authority
Discharge without a Permit	IU Unaware of requirements; NO harm to POTW or environment.	**0**	Phone call; NOV with application form attached to be submitted within 30 calendar days. Application deadline to be specified in the NOV.	**PC**
	IU unaware of requirements; HARM to POTW or environment is evident (SIGNIFICANT NONCOMPLIANCE).	**3** **4**	a. Cease & Desist Order; Issuance of a COMPLIANCE ORDER requiring submittal of a permit application within 30 calendar days and assessing any penalties or recovery of damages and costs. b. Termination of Service & Civil Litigation or Criminal Investigation.	**PWD S** **PWD CA**
	IU has not submitted permit application by deadline.	**0**	NOV for missed deadline. Require submittal within 15 calendar days or further enforcement action will be pursued.	**PC**
	IU has not submitted application within 15 calendars days of date specified in NOV (SIGNIFICANT NONCOMPLIANCE).	**1**	SHOW CAUSE ORDER assessing a penalty per day of violation and requiring the IU to appear before the PWD to show cause as to why further enforcement should not be pursued. Penalty to be assessed from the 16th day forward.	**PWD**
	Failure to submit permit application continues more than 60 days after receipt of NOV by the IU. (SIGNIFICANT NONCOMPLIANCE).	**4**	a. Civil Litigation b. Termination of Service	**PWD CA** **PWD**
Discharge Limit Violation **(Local &/Or Federal)**	Type A- exceeds one or more daily or average parameter limits by less than a factor of 3.0.	**0**	NOV detailing violation and requiring repeat sampling and analysis within 30 days of becoming aware of the violation and submit results to PC.	**PC**
	Type B- exceed one or more daily or average parameter limits by a factor of 3.0 or greater (SIGNIFICANT NONCOMPLIANCE).	**1**	NOV detailing violation and requiring correction within 30 business days. Industry must repeat sampling and analysis within 30 days of becoming aware of the exceedance and submit results to PC. Penalties to be assessed by Compliance Order for each day of violation.	**PC** **PWD**
	Type C- Chronic and/or TRC violation as defined by EPA (SIGNIFICANT NONCOMPLIANCE).	**2**	Show Cause Order assessing a penalty per violation per day and requiring the IU to appear before the PWD to show cause why further enforcement should not be pursued. Further actions (if warranted) will be addressed in a Compliance Order.	**PWD**

Table 7-5
Enforcement Response Guide-CONTINUED

Noncompliance	Nature of Violation	Category	Enforcement Response	Authority
Discharge Limit Violation (continued)	Type D- exceedance of any daily or average parameter limit which adversely affects the POTW. Interference, inhibition, or pass-through. (SIGNIFICANT NONCOMPLIANCE).	**3**	Cease and Desist Order requiring the IU to halt the violation immediately or terminate the discharge altogether. Issuance of a Compliance Order assessing any penalties and/or cost recovery.	**PWD S**
Noncompliance	**Nature of Violation**	**Category**	**Enforcement Response**	**Authority**
Reporting Violations	Report is improperly signed or certified.	**0**	Phone Call	**PC**
	Report is improperly signed or certified after phone call by POTW.	**0**	NOV requiring correction on the next report.	**PC**
	Report is improperly signed or certified after issuance of NOV by POTW (SIGNIFICANT NONCOMPLIANCE).	**1**	Compliance Order assessing a penalty and requiring the IU to properly sign or certify the next regularly scheduled report.	**PWD**
	Report Late by less than 30 calendar days.	**0**	NOV	**PC**
	Report Late 30 calendar days or more.	**1**	Informal meeting between the IU and the Pretreatment Coordinator. NOV requiring report submittal no later than 45 days from the original report deadline.	**PWD**
	Report late 45 calendar days or more (SIGNIFICANT NONCOMPLIANCE).	**2**	Show Cause Order assessing a penalty per day of violation and requiring the IU to appear before the PWD to show cause why further enforcement should not be pursued.	**PWD**
	Report late 60 calendar days or more (SIGNIFICANT NONCOMPLIANCE).	**3**	Compliance Order requiring IU to submit the required report within 15 calendar days.	**PWD**
	Report late 90 calendar days or more (SIGNIFICANT NONCOMPLIANCE).	**4**	Civil Litigation	**PWD CA**
	Failure to report SPILLS or CHANGED DISCHARGE. (NO harm to POTW or environment). Isolated incident.	**0**	NOV and Compliance Order requiring the IU to develop and implement a spill prevention plan by a specified deadline.	**PC**
	Failure to report SPILLS or CHANGED DISCHARGE (harm to the POTW or environment) (SIGNIFICANT NONCOMPLIANCE).	**1**	Cease and Desist Order requiring IU to halt the illegal discharge immediately or terminate its discharge altogether. Issuance of a Compliance Order assessing a penalty per day of violation and addressing cost recovery.	**PWD**
	Repeated failure to report SPILLS (SIGNIFICANT NONCOMPLIANCE).	**2**	Sow Cause Order assessing a penalty per incident and requiring the IU to appear before the PWD to show cause why further enforcement should not be pursued.	**PWD**

Table 7-5
Enforcement Response Guide CONTINUED

Noncompliance	Nature of Violation	Category	Enforcement Response	Authority
Inadequate Recordkeeping	Pretreatment Coordinator finds files incomplete or missing (no evidence of intent).	**0**	NOV explaining the required recordkeeping and documentation.	**PC**
	Recurring	**1**	Compliance Order requiring proper maintenance of records. Assessment of penalty to be issued on severity of violation.	**PWD**
Failure To Report Additional Monitoring	Pretreatment Coordinator finds additional files.	**0**	NOV	**PC**
	Recurring (considered falsification).	**3**	Compliance Order requiring submittal of all additional monitoring. Assessment of a penalty to be based on the severity of the violation.	**PWD**
Falsification	First occurrence (SIGNIFICANT NONCOMPLIANCE).	**1**	Show Cause Order requiring IU to appear before the Director to show cause why enforcement action should not be pursued.	**PWD**
	Subsequent occurrences (SIGNIFICANT NONCOMPLIANCE)	**4**	Civil Litigation	**PWD CA**
Improper Monitoring	Failure to monitor all pollutants as required by IU's Permit.	**0**	Informal meeting with IU to review required sampling and reporting.	**PC**
	Failure to monitor all pollutants as required by IU's Permit (Second occurrence).	**0**	NOV requiring complete sampling and analysis with report due no later than 30 calendar days from receipt of NOV.	**PC**
	Recurring failure to monitor properly. (Third occurrence) (SIGNIFICANT NONCOMPLIANCE).	**1**	Show Cause Order assessing a penalty for each incidence and requiring the IU to appear before the PWD to show cause why further enforcement should not be pursued.	**PWD**
Improper Sampling (Sample Type, Sample Location, Or Collection Technique)	No evidence of intent (First Violation).	**0**	NOV explaining correct procedure and requiring proper sampling for the next self-monitoring report.	**PC**
	Improper sampling continues (second violation).	**0**	Informal meeting with IU to review proper sampling criteria.	**PC**
	Evidence of Intent. (Failure to properly sample after informal meeting is viewed as evidence of intent.) (SIGNIFICANT NONCOMPLIANCE).	**1**	Show Cause Order assessing a penalty for each incidence. Order requires IU to appear before the PWD to show cause why further enforcement should not be pursued.	**PWD**
Failure to Install Monitoring Equipment as Set forth in IU Permit or Compliance Order	Missed final installation deadline.	**0**	NOV requiring complete installation within 30 calendar days of receipt of NOV.	**PC**
	Non-Compliance with NOV. (Delay of more than 30 calendar days) (SIGNIFICANT NONCOMPLIANCE).	**1**	Compliance Order requiring final installation by a specified deadline. Assessment of a daily penalty if the requirements of this Order are not met.	**PWD**

Table 7-5
Enforcement Response Guide CONTINUED

Noncompliance	Nature of Violation	Category	Enforcement Response	Authority
Compliance Schedules (In A Permit or Order)	Missed interim milestone date by less than 30 days will not affect final compliance deadline.	**0**	NOV which restates any remaining milestone deadlines.	**PC**
	Missed interim milestone date by less than 30 days and will affect final compliance deadline.	**1**	Compliance Order detailing revised compliance schedule. Order may assess fines if delay was avoidable (no good cause).	**PWD**
	Missed interim milestone date by more than 30 days, and will not affect final compliance deadline.	**0**	Informal meeting with IU to review compliance schedule, milestone dates, and final compliance deadline.	**PWD**
	Missed interim milestone date by more than 30 days, and will affect final compliance deadline.	**1**	Show Cause Order requiring IU to appear before the PWD to show cause why further enforcement should not be pursued. Must result in a revised Compliance Order.	**PWD**
	Missed interim milestone date by more than 90 days (SIGNIFICANT NONCOMPLIANCE).	**4**	Civil Litigation	**PWD CA**
Missed Final Compliance Deadline	Failure to comply with an Administrative Order.	**4**	Compliance Order assessing a penalty per day past the Final Compliance Deadline and requiring immediate compliance.	**PWD**
			Civil Litigation should be pursued if IU has not complied within 30 calendar days of the original Final Compliance Deadline.	**CA**
Waste streams Are Diluted	Dilution of regulated waste streams with non-polluted water.	**0**	NOV citing regulatory prohibition against dilution and requiring correction within 30 calendar days of receipt of the NOV.	**PC**
	Recurring violations (DILUTION continues to occur after NOV).	**1**	Informal meeting with IU to review Ordinance prohibitions. Issuance of a Compliance Order with deadline for correction.	**PWD**
Failure To Mitigate Noncompliance or Halt Production	Failure to reduce the severity of the violation(s) and/or failure to comply with a Cease and Desist Order.	**4**	Civil prosecution seeking an injunction to HALT DISCHARGE. Termination of Permit and Service if potential for POTW and/or environmental harm is evident.	**PWD CA**
Entry Denial	Entry denied or consent withdrawn. Record access denied.	**0**	Obtain warrant and return to IU	**PC**
Illegal Discharge (Violation of Standards [40 CFR 403.5(A) And (B)	No harm to POTW or environment. No Interference or pass-through at the POTW.	**0**	NOV explaining the General Prohibited Discharge Standards as contained in 40 CFR 403.5 (a) and (b).	**PC**
	Discharge causes harm, pass-through, or interference.	**3**	Cease and Desist Order requiring the IU to halt the violation immediately or terminate the discharge altogether. Issuance of a Compliance Order assessing any penalties and/or cost recovery	**PWD PC**

Table 7-5
Enforcement Response Guide CONTINUED

Noncompliance	Nature of Violation	Category	Enforcement Response	Authority
Failure to Properly Operate and Maintain Pretreatment Facility	No violation results from failure of IU to properly operate & maintain facility.	**0**	NOV explaining the requirement to properly operate and maintain pretreatment facilities.	**PC**
	Violations of Permit or Pretreatment Standards occur because of failure of IU to properly maintain and operate pretreatment facility.	**1**	Compliance Order requiring proper maintenance and operation of pretreatment facility with schedule of compliance.	**PWD**
	Recurring violation or failure to meet compliance schedule; no harm to POTW.	**3**	Assessment of a penalty to be based on the severity of the violation,	**PWD CA**
	Recurring violation or failure to meet compliance schedules; harm to POTW.	**4**	Civil Litigation; Termination of Permit; Termination of Service; Assessment of Administrative Fines and Cost Recovery	**PWD CA, CM**

CA - City Attorney
Civil Litigation - Civil action against the industrial user seeking equitable relief, monetary penalties, and actual damages.
Criminal Penalties - Pursuing punitive measures against an individual and/or organization through a court of law.
Consent Orders - An order issued against an IU to assure voluntary compliance, or similar documents establishing an agreement for compliance.
PWD - Public Works Director
Fine - Monetary penalty assessed by Control Authority officials.
IU -Industrial User as defined in the City of Arvin Pretreatment Ordinance
Meeting - Informal compliance meeting with the IU to resolve recurring noncompliance
NOV - Notice of Violation
PC -Pretreatment Coordinator
S - Treatment Plant Manager

8.0 DESIGN AND PERFORMANCE STANDRADS

The City of Arvin presently has in place construction standard details for new construction, improvements on existing facilities, and testing and inspection. These standards of design and material are to ensure correct and applicable new construction/expansion to the existing collection and conveyance system, and assure that maximum life is achieved in repairs to the existing system. These standards are established with the goal of preventing SSOs and deterioration to system performance through improper construction materials and methods.

The City of Arvin Construction Standard Details, Resolution No. 02-43 is referenced in this section and is available through the City of Arvin or Veolia West Operating Services, Inc

1 EXECUTIVE SUMMARY

This Sewer Master Plan (SMP) provides a comprehensive review and evaluation for the City of Arvin (City) sanitary sewer collection, conveyance, and pumping system. This study analyzes sewer system flow capacity through buildout and across a 20-year planning horizon. Based on the findings of the evaluation and analysis, the master plan recommends facility improvements and additions to help the City manage collection system infrastructure to service the City's plans for growth through buildout of the City's draft Land Use Element of the City's General Plan.

Findings include:

- The pre-existing GIS data lacked reliable spatial information on the manholes for modeling. A survey of 143 of the 644 system nodes was performed and used for the hydraulic capacity analysis.

- Land use data from a Blight Analysis and 2030 General Plan Land Use Update were used as the basis of existing and future flow generation. The study area includes the City Sphere of influence, as well as the South Arvin Plan Area.

- Over the 2030 planning horizon, the City is expecting to increase its sewer service area boundary (and municipal boundary) from 3,056 acres in 2010 to 3,164 acres upon expansion to the adopted Sphere of Influence. The Study area also includes the 1,208 acre portion of the South Arvin Plan Area outside the current Sphere of Influence that is being considered for future annexation.

- Based on population trends, the residential population is projected to increase from 16,675 in 2009 to 26,332 in 2030, to 59,530 at buildout of the General Plan in approximately 2067.

- Average daily sewer flows are expected to increase from a measured 1.4 mgd peak monthly average flow in 2008 to 3.0 mgd in 2030, to 5.6 mgd at buildout.

- Peak daily sewer flows are expected to increase from 2.4 mgd in 2010 to 4.6 mgd in 2030, to 8.4 mgd at buildout.

- Pipeline capacity upgrades needed to serve the 2030 growth areas include the upsizing of approximately 14,000 feet of 10 to 18 inch diameter sewer lines with 15 to 30-inch diameter lines.

- The expected costs for the pipeline upsizes is $3.4 Million through year 2030 and $5.9 Million to buildout

- Industrial land use development will drive the need for capacity upgrades between 2010 and 2015. Bypassing the A Street Pump Station with a gravity pipeline is feasible and would defer the need for capacity upgrades of the Sycamore Trunk system by approximately ten years.

- The existing treatment plant capacity of 1.7 mgd[1] is projected to be reached in 2015. The 2006 report shows the extent to which that the existing WWTP can be expanded incrementally to serve projected growth. Orbal system upgrades would bring the capacity up to the rated 2 mgd capacity, which would be reached by 2017.

- Flow monitoring was performed at seven locations from late January through early April of 2009. Flow measurements did not show a response to several rain events. Treatment plant flows from 2001 to 2008 show that the peak monthly average flows in August, near the peak of field Irrigation and farm worker population. Based on these observations, inflow and infiltration (I&I) is not considered to be a significant contributor to peak flows and was not used in the capacity analysis.

- The A Street Pump Station can be eliminated with a 1,337 foot gravity bypass. The benefits will reduce energy consumption, reduce maintenance needs, and will eliminate an existing pulsed surcharge condition at the force main outfall manhole.

- A 950 percent expansion in Industrial land use is concentrated in the area east of Derby Road. This expansion, coupled with intensified sewer use is projected to produce a ten-fold increase in peak sewer flows in 2030 and a twenty fold increase in peak flows at buildout of the Proposed General Plan. The increase is a dominant factor the capacity analysis.

- Flow from the South Arvin Plan area (based on the Proposed General Plan) is projected to reach an average of 2.0 mgd and 3.1 mgd peak of at buildout. The South Arvin Plan Developer analysis predicted 2.87 mgd average and 6.21 mgd peak based in part on a higher intensity land use and a higher peaking factor including that includes I&I contributions.

The elements of a recommended Capital Improvement Program are summarized in TABLE 1-1. The recommended projects will help the City accommodate sewer flows that will be generated from buildout of the Proposed General Plan. In conformance with the State Waste Discharge requirements, these findings should be re-assessed on a three year basis as assumptions and conditions change.

[1] Reference: City of Arvin Wastewater Treatment Plan Expansion Project Report, Carollo Engineers, July 2006

TABLE 1-1 – CAPITAL IMPROVEMENT PROGRAM SUMMARY

	Year 0-5	Year 5-10	Year 10-20	Year 0-20 CIP
CAPACITY PROJECT COSTS	$447,820	$360,680	$2,555,901	**$3,364,400**
PUMP STATION O&M PUMP STATION ENERGY PUMP	$13,000	$13,000	$26,000	$52,000
STATION UPGRADES	$9,900	$9,900	$19,800	$39,600
PUMP STATION LIFE CYCLE COST	$0	$20,000	$20,000	$40,000
	$22,900	$42,900	$65,800	**$131,600**
SURVEY REMAINING MANHOLES AND UPDATE GIS	$120,000			$120,000
ANNUALIZED COST OF 5 YEAR SMP UDPATES	$50,000	$50,000	$10,000	$110,000
O&M SUBTOTAL	$170,000	$50,000	$10,000	**$230,000**
REPLACEMENT / REHABILITATION ALLOWANCE	$197,248	$197,248	$394,497	**$788,993**
GRAND TOTAL COLLECTION SYSTEM CIP	$837,968	$650,828	$3,026,198	**$4,514,994**
ARVIN TREATMENT PLANT IMPROVEMENTS	$28,842,000			**$28,842,000**
GRAND TOTAL	$30,517,936	$1,301,656	$6,052,395	**$37,871,987**

Notes:
Pipeline replacement is estimated at $15 per inch diameter per linear foot, plus 50% for contingencies.
Pump Station Upgrades are projected to include pump replacement and minor electrical upgrades every 10 years at $20,000 each time, plus one major rehabilitation within 50 years at $50,000.
Pump Station Energy is based on $150 per month average cost with a ten percent contingency for cost escalation.
Bypassing the pump station is an alternative to the pump station.
Treatment Plant Upgrades based on 2006 Wastewater Expansion Report by Carollo Engineers, plus a 15 percent escalation to 2010 dollars.
Buildout estimate is based roundly on $12.5 per gallon of average dry weather flow for rehabilitationa and 2 mgd upgrade
All costs in 2010 dollars

10.0 MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The City of Arvin and Veolia West Operating Services, Inc., maintain a Monitoring, Measurement and Program Modifications (MMPM) program through use of InfoNet CMMS, and the Operations and Management Plan (Section 5) of this Sewer System Management Plan (SSMP). This Program meets or exceeds the MMPM outlined in Section D, 13, in of the SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirement for Sanitary Sewers.

Specific Key Performance Indicators (KPI) have been established for operations and maintenance activities and SSO response, mitigation and reporting:

- Location of spill
- Destination of spill
- Root cause of spill
- Volume of spill
- Recovered volume of spill
- Volume dispersion of spill
- Spills per location
- Trending of spills per location, cause and time
- Reporting protocols
- Number of spills per week, month, year
- Planned and scheduled cleaning and inspecting activities for week, month, year
- Minimum targeted cleaning goals
- Minimum targeted Inspection goals
- Miles of sanitary sewer line cleaned per week, month, year
- Miles of sanitary sewer line inspected per week, month, year
- Number of blockages by root cause (grease, roots, etc) by line segment
- Number of blockages by week, month, year
- Blockages related to SSOs
- Asset criticality and repair/rehab prioritization

These KPIs are evaluated at specific intervals established by the System Manager, and are audited annually (Section 5). Operations and Maintenance Programs are evaluated and adjusted as necessary if KPIs are out of targeted parameters.

This data is available both as stored data and graphically displayed through the CSD's InfoNet. All system data, historical and planned, and KPIs are updated in real time as new data is compiled.

11.0 SSMP PROGRAM AUDITS

Audits of the SSMP will be conducted annually, covering the most recent calendar year, and be submitted to the SWRQCB by March 15 of the year following the calendar year for which the analyses applies. The SSMP audit will identify revisions to the SSMP, effectiveness of implementation, deficiencies and needed revisions, and a performance summary of the Monitoring, Measurement and Program Modifications Plan (Section 10), and O&M Plan (Section 5)

An explanation of the SSMP development and accomplishments will be included, covering the following topics:

- Progress made on development/revision of SSMP elements
- Implementation progress
- Effectiveness of implemented SSMP elements
- Description of additions and improvements made to the collection and conveyance system in the past reporting year
- Sanitary sewer overflow history

12.0 COMMUNICATION PROGRAM

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

The City maintains a Web site www.arvin.org to inform the public about City activities. The City's Web site is an effective communication channel for providing alerts and news to the public. The main page of the Web site provides important announcements, agendas and minutes for City Council meetings and other key information for City residents. Various Public Works documents are published on the City's Public Works Department page of the Web site.

The City plans to publish this SSMP on the City Web site. The completed SSMP will be certified by the City Council during a public City Council meeting. The City will also use the Web site to notify the public of important upcoming activities related to sewer system management.

APPENDIX A ENFORCEMENT DOCUMENTS

APPENDIX A

SAMPLE

ENFORCEMENT DOCUMENTS

IN THE MATTER OF
XXXX yyy Company
aaaaaa aaaaa, Plant Mgr
3333 Main
Arvin, California 93203

Surcharges
[TREATMENT COST RECOVERY]
Permit #_____

LEGAL AUTHORITY

Pursuant to the Arvin City Codes, the Arvin Pretreatment Coordinator shall evaluate and assess surcharge fees based on the cost of treatment of pollutants discharged from XXXXyyy Company in accordance with Section 13.08.103 of the Codes and Wastewater Discharge Permit #920001.

FINDINGS

The Arvin Pretreatment Coordinator has reviewed the Self-Monitoring Report and has determined that pollutants discharged from XXXXyyy Company during the month of **XXX, 200X** are in excess of Domestic Loading and therefore shall be SURCHARGED for additional treatment as detailed in the attached Surcharge Distribution Calculation.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS, **XXXXYYY COMPANY IS** HEREBY ASSESSED A TOTAL of
$ X,XXX.XX for treatment of pollutants in excess of domestic loading.

SURCHARGES ARE DUE AND PAYABLE WITHIN 30 DAYS OF ASSESSMENT.

Please Make Check Payable to: **The City of Arvin**

Mail to the Attention of: Public Works Director
Wastewater Treatment Surcharges

Signed:_____ Date: _____
Arvin Pretreatment Coordinator,

cc. Arvin Public Works Director
Pretreatment File

CITY of ARVIN

Industrial Pretreatment
200 Campus Drive

Arvin, California 93203

IN THE MATTER OF
XXXX yyy Company
aaaaaa aaaaa, Plant Mgr
Arvin, California 93203

Notice of Violation
Permit #_____

LEGAL AUTHORITY

Pursuant to the Arvin City Codes, 13.08, "Discharge of Industrial Wastes," the Arvin Public Works Director has issued Wastewater Discharge Permit #___.___ to XXXXyyy Company in accordance with Section 13.08.103 of the Codes.

FINDINGS

The Arvin Pretreatment Coordinator has reviewed the Self-Monitoring Report for the month of **XXX 200X** submitted by Mr. Aaaaaa. It has been determined that the following pollutants reported by XXXXyyy Company are in violation of the numerical limits as specified by permit #920001.

Parameter	Limit	Reported Value	Violations	
			*Base	**TRC
Flow (5/03/94)	90,000 gpd	95,590 gpd	1	
BOD Conc. Max Daily (5/26/94)	3,000 mg/L	3,130 mg/L	1	
BOD Loading Monthly Avg	540 lbs.'/day	657 lbs.'/day	1	

*Note: * Base Violations are simple numerical values greater than the Limit.*
*** TRC Violations are Violations based on Technical Review Criteria; [Re: Arvin Sewer Use Ordinance and/or Enforcement Response Guide]*

NOTICE

THEREFORE, BASED ON THE ABOVE FINDING, XXXXyyy Company IS HEREBY NOTIFIED THAT it is in violation of the terms and conditions of discharge permit #_____ and Chapter 12.27 of the Arvin City Ordinances.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS, XXXXyyy Company IS HEREBY ORDERED TO TAKE THE FOLLOWING ACTIONS:

1. Continue to monitor flow as specified in the discharge permit.
2. Evaluate the production for _____ to determine unusual operations that could have resulted in the high BOD reported for that date.

Signed:_____ Date: _____
Arvin Pretreatment Coordinator

cc. Mr. Aaaaa Bbbbbb, Arvin Public Works Director Pretreatment File
RR # P 224 500 774

CITY of ARVIN

Industrial Pretreatment
200 Campus Drive

Arvin, California 93203

IN THE MATTER OF
(Industry)
(Address)

Cease and Desist
Permit #_____

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Pretreatment Department, under Section 13.08.103 of the City's Pretreatment Ordinance. This order is based on findings of violation of the conditions of the wastewater discharge permit issued under Section 13.08.103 of the City's Pretreatment Ordinance.

FINDINGS

1. (Industry) discharges non-domestic wastewater containing pollutants into the sanitary sewer system of the City of Arvin.
2. (Industry) is a "significant industrial user" as defined by Section 13.08 of the City' Pretreatment Ordinance.
3. (Industry) was issued a wastewater discharge permit on (date) which contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the sanitary sewer.
4. Pursuant to the ordinance and the above-referenced permit, data is routinely collected or submitted on the compliance status of (Industry).
5. This data shows that (Industry) has violated the Pretreatment Ordinance in the following manner:
   a. (Industry) has continuously violated its permit limits for parameter(s) in each sample collected between (date) and (date).
   b. (Industry) has also failed to comply with an administrative compliance order requiring the installation of a pretreatment system and the achievement of compliance with its permit limits by (date).
   c. (Industry) has failed to appear at a show cause hearing pursuant to an order requiring said attendance.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS (INDUSTRY) IS HEREBY ORDERED TO:

1. Within 24 hours of receiving this order, cease all non-domestic discharges into the City's sanitary sewer. Such discharges shall not recommence until such time as (Industry) is able to demonstrate that it will comply with its current permit limits.
2. Failure to comply with this order may be subject to (Industry) having its connection to the sanitary sewer sealed by the City and assessed the costs therefore.
3. Failure to comply with this order shall also constitute a further violation of the sewer pretreatment ordinance and may subject (Industry) to civil or criminal penalties or such other enforcement as may be appropriate.
4. This order, entered this ___ day of (month, year) shall be effective upon receipt by (Industry).

Signed _____ Date: _____
Public Works Director

cc Pretreatment Files

RR #P 023 345 033

Consent Order Permit #_____

CONSENT ORDER

WHEREAS, The City of Arvin, pursuant to the powers, duties and responsibilities vested in and imposed upon the Pretreatment Department by provisions of the City's Pretreatment Ordinance, has conducted ongoing investigations of (Industry) and has determined that:

1. The City owns and operates a wastewater treatment plant that is adversely impacted by discharges from industrial users, including (Industry), and has implemented a pretreatment program to control such discharges.
2. (Industry) has consistently violated the pollutant limits in its wastewater discharges permit as forth in Exhibit I, attached hereto.
3. Therefore, to ensure that (Industry) is brought into compliance with its permit limits at the earliest possible date, IT IS HEREBY AGREED AND ORDERED, BETWEEN (Industry) AND THE PUBLIC WORKS DIRECTOR FOR THE CITY OF ARVIN, THAT (Industry) SHALL:
   a. By (date), obtain the services of a licensed professional engineer specializing in wastewater treatment for the purpose of designing a pretreatment system that will bring (Industry) into compliance with its wastewater discharge permit.
   b. By (date) submit plans and specifications for the proposed pretreatment system to the City for review.
   c. By (date) achieve compliance with the limits set forth in Exhibit 1.
   d. (Industry) shall pay (fine amount) per day for each and every day it fails to comply with the schedule set out in items a-d above. The (fine amount) per day penalty shall be paid to the City of Arvin through the Public Works Director within five days of being demanded by the City.
4. In the event (Industry) fails to comply with any of the deadlines set forth, (Industry) shall, within one (1) working day after expiration of the deadline, notify the City in writing. This notice shall describe the reasons for (Industry's) failure to comply, the additional amount of time needed to complete the remaining work, and the steps to be taken to avoid future delays. This notification in no way excuses (Industry) from its responsibility to meet any later milestones required by this Consent Order.
5. Compliance with the terms and conditions of the Consent Order shall not be construed to relieve (Industry) of its obligation to comply with its wastewater discharge permit, which remains in full force and effect. The City reserves the right to seek any and all remedies available to it under Section 13.08 of the City's Pretreatment Ordinance for any violation cited by this order.
6. Violation of this Consent Order shall constitute a further violation of the City's Pretreatment Ordinance and subjects (Industry) to all penalties described by Section 13.08 of the Pretreatment Ordinance.
7. Nothing in this Consent Order shall be construed to limit any authority of the City to issue any other orders or take any other action which it deems necessary to protect the wastewater treatment plant, the environment or the public health and safety.

SIGNATORIES

FOR (Industry) _____ Date_____

FOR CITY OF ARVIN_____ Date_____
Public Works Director

CITY of ARVIN

Industrial Pretreatment
200 Campus Drive

Arvin, California 93203

IN THE MATTER OF
SHOW CAUSE ORDER
(Name of Industry) Permit Number_____
(Address)

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Pretreatment Department, under Section 13.08 of the Pretreatment Ordinance. This order is based on findings of violation of the conditions of the wastewater discharger permit issued under Section 13.08.103 of the City's Pretreatment Ordinance.

FINDINGS

1. (Industry) discharges non-domestic wastewater containing pollutants into the sanitary sewer system of the City of Arvin (hereafter, "City").
2. (Industry) is a "significant industrial user" as defined by Section 13.08.XXX of the City's Pretreatment Ordinance.
3. (Industry) was issued a wastewater discharge permit on (date) that contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the sanitary sewer.
4. Pursuant to the ordinance and the above-referenced permit, data is routinely collected or submitted on the compliance status of (Industry).
5. This data shows that (Industry) has violated its wastewater discharge permit in the following manner:
   a. (Industry) has violated its permit limits for parameter(s) in each sample collected between (date), and (date) for a total of 24 separate violations of the permit.
   b. (Industry) has failed to submit a periodic compliance report due (date).
   c. All of these violations satisfy the City's definition of significant violations.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS, (Industry) IS HEREBY ORDERED TO:

1. Appear at a meeting with the Public Works Director to be held on (date), at (time) at City Hall in Council's Chambers on the 2nd floor.
2. At this meeting, (Industry) must demonstrate why the City should not pursue a judicial enforcement action against (Industry) at this time.
3. This meeting will be closed to the public.
4. Representatives of (Industry) may be accompanied by legal counsel if they so choose.
5. Failure to comply with this order shall also constitute a further violation of the Pretreatment Ordinance and may subject (Industry) to civil or criminal penalties or such other appropriate enforcement response as may be appropriate.
6. This order, entered this (date), shall be effective upon receipt by (Industry).

Signed _____ Date: _____
Public Works Director

CITY of ARVIN

Industrial Pretreatment
200 Campus Drive

Arvin, California 93203

IN THE MATTER OF
(Name of Industry)
(Address)

Compliance Order
Permit #_____

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Pretreatment Department, under Section 13.08 of the City's Pretreatment Ordinance. This order is based on findings of violation of the conditions of wastewater discharge permit issued under Section 13.08.103 of the City's Pretreatment Ordinance.

FINDINGS

1. (Industry) discharges non-domestic wastewater containing pollutants into the sanitary sewer system of the City of Arvin (hereafter, "City").
2. (Industry) is a "significant industrial user" as defined by Section 13.08.XXX of the City's Sewer Use Ordinance.
3. (Industry) was issued a wastewater discharge permit on (date) that contains prohibitions, restrictions, and other limitations on the quality of the wastewater it discharges to the sanitary sewer.
4. Pursuant to the ordinance and the above-referenced permit, data is routinely collected or submitted on the compliance status of (Industry).
5. This data shows that (Industry) has violated its wastewater discharge permit in the following manner:
   a. (Industry) has violated its permit limit for (parameter) in each sample collected between (date, and (date), for a total of (#) separate violations of the permit.
   b. (Industry) has failed to submit all periodic compliance reports due since (date).
   c. All of these violations satisfy the City's definition of significant violation.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS, (Industry) IS HEREBY ORDERED TO:

1. Within 180 days, install pretreatment technology that will adequately treat (Industry's) wastewater to a level that will comply with its wastewater discharge permit.
2. Within five days, submit all periodic compliance reports due (date).
3. Within 10 days, pay to City of Arvin, a fine of (amount) for the above-described violations in accordance with Section 13.08 of the Pretreatment Ordinance.
4. Report, on a monthly basis, the wastewater quality and corresponding flow and production information as described on page __ of the wastewater discharge permit for a period of one year from the effective date of this order.
5. All reports and notices required by this order shall be sent, in writing, to the following address: Pretreatment Coordinator, City of Arvin, Arvin, California 93203.
6. This Order does not constitute a waiver of the wastewater discharge permit, which remains in full force and effect. The City of Arvin reserves the right to seek any and all remedies available to it under Section 13.08 of the Pretreatment Ordinance for any violation cited by this order.
7. Failure to comply with the requirements of this Order shall constitute a further violation of the Sewer Use Ordinance and subject (Industry) to civil or criminal penalties or such other appropriate enforcement response as may be appropriate.
8. This order, entered this (date), shall be effective upon receipt by (Industry).

Signed_____ Date:_____
Public Works Director

CITY of ARVIN

Industrial Pretreatment
200 Campus Drive

Arvin, California 93203

Termination of Wastewater Discharge

Date of Notice _____

Business or Individual _____

Address _____

Person Contacted/Title _____

City Pretreatment Ordinance Section Violation _____

Results of Analysis _____

Due to the serious nature of your violation, the City of Arvin is ordering you to immediately stop the discharge of the effluent (in violation), and to eliminate any further industrial discharging by 5:00 pm _____ 19 _____.

In the event of your failure to voluntarily comply with this suspension order, the City shall take such steps as deemed necessary, including, but limited to, immediate severance of your sewer connection to prevent or minimize damage to our POTW system or endangerment to any individuals.

_____ Refused to sign ____ (initials)
Signature of person contacted

_____
Signature of City Representative

cc: