

City of Newman Wastewater Collection System Sewer System Management Plan (SSMP)

Prepared for
City of Newman

Prepared by
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Sewer System Management Plan (SSMP) – Goals

Providing quality, safe and reliable sewer service at a reasonable cost is essential to fulfilling the City of Newman’s Public Works’ Mission Statement: “To provide the highest level of service to the residents of Newman while maintaining the community’s infrastructure in the most cost-effective manner possible. We constantly strive to improve our customer service and efficiency.” The City has developed the following goals in an effort to meet the requirements of the Sewer System Management Plan (SSMP) and uphold the mission statement:

- Minimize sanitary sewer overflows.
- Prevent public health hazards.
- Minimize inconveniences by responsibly handling interruptions in service.
- Protect the large investment in collection systems by maintaining adequate capacities and extending useful life.
- Prevent unnecessary damage to public and private property.
- Use funds available for sewer operations in the most efficient manner.
- Convey wastewater to treatment facilities with a minimum of infiltration, inflow, and exfiltration.
- Provide adequate capacity to convey peak flows.
- Perform all operations in a safe manner to avoid personal injury and property damage.
- Minimize impacts on environmentally sensitive waterways, such as the Newman Waste Way and the San Joaquin River.

These goals will provide focus for the City to continue providing high quality service and improving the management, operation, and maintenance of the sanitary sewer system.

Sewer System Management Plan (SSMP) – Organization

INTRODUCTION

An organizational chart, developed within the guidelines of WDR Order No. 2006-003-DWQ, identifies administrative and management positions responsible for implementing the Sewer System Management Plan (SSMP). The organizational chart also includes operations and maintenance personnel that will be involved in developing and implementing the program. In addition to an organizational chart, a chain of communication for reporting SSO events is also required. The chain of communication encompasses all those affected by the SSO event, including the initial receipt of a complaint to the notification of permitting authorities, other agencies, and the public.

A. AUTHORIZED REPRESENTATIVE

1. REGULATORY REQUIREMENT

“The name of the responsible or authorized representative as described in Section J of this Order.”

2. CITY OF NEWMAN’S ORGANIZATIONAL STRUCTURE

The name of the Legally Responsible Official (LRO) is shown in the City of Newman’s Organizational Structure (see Attachment 2-1).

B. NAMES, TELEPHONE NUMBERS AND LINES OF AUTHORITY

“The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation”

2. CITY OF NEWMAN’S ORGANIZATIONAL STRUCTURE

Position titles, names and phone numbers for each staff member responsible for implementing tasks of the City’s SSMP are shown in Attachment 2-1. A brief description of each position’s responsibility, as well as lines of authority, is presented in Attachment 2-1.

C. CHAIN OF COMMUNICATION

1. REGULATORY REQUIREMENT

“The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES))”

2. CITY OF NEWMAN'S ORGANIZATIONAL STRUCTURE

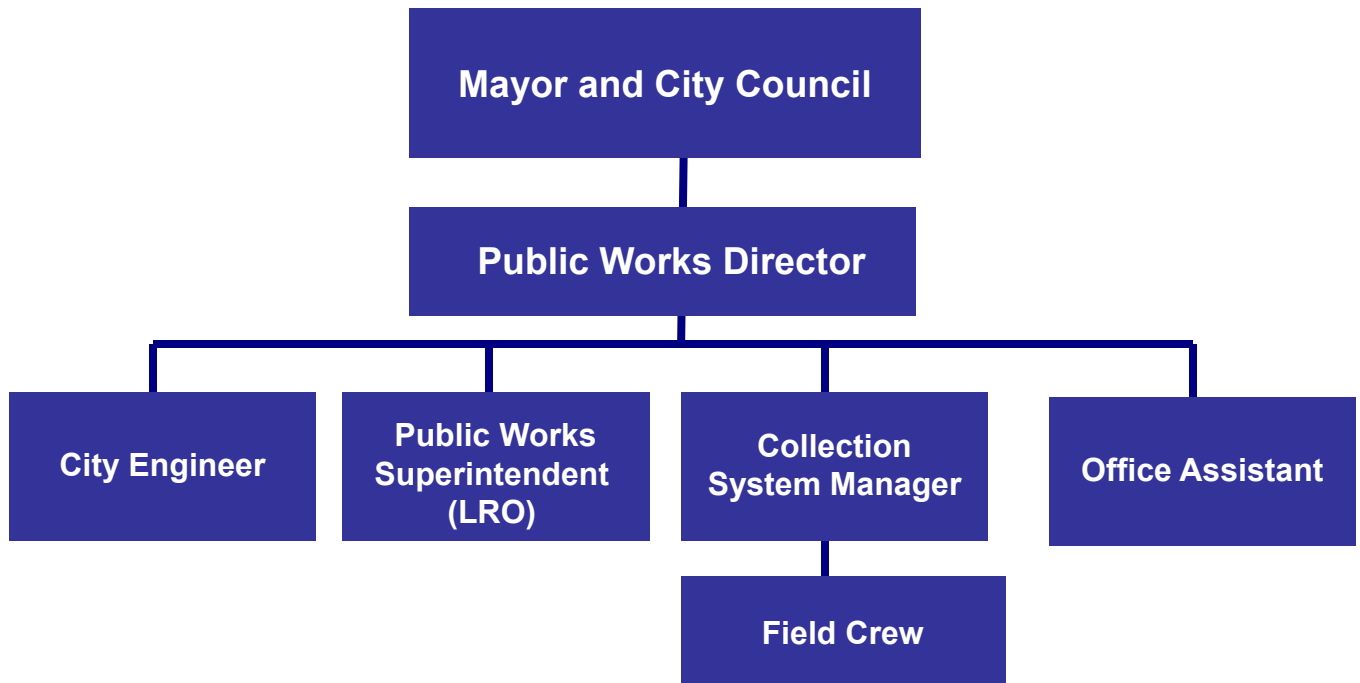
The chain of communication for the City of Newman is outlined in Attachment 2-1.

City of Newman's Organizational Structure

City of Newman

Sewer System Management Plan (SSMP)

Organizational Lines of Authority



Mayor and City Council

- Establishes policy

Public Works Director

- Enforces policy

- Plans strategy

- Authorizes outside contractors to perform services

City Engineer

- Coordinates development and implementation of SSMP

Public Works Superintendent (Legally Responsible Official [LRO])

- Oversees operation of sewer system

- Reports SSOs to Public Works Director

Collection System Manager

- Manages field operations and maintenance activities

- Investigates and reports SSOs

- Heads emergency response

Office Assistant

- Updates City Council

- Administrative implementation

Field Crew

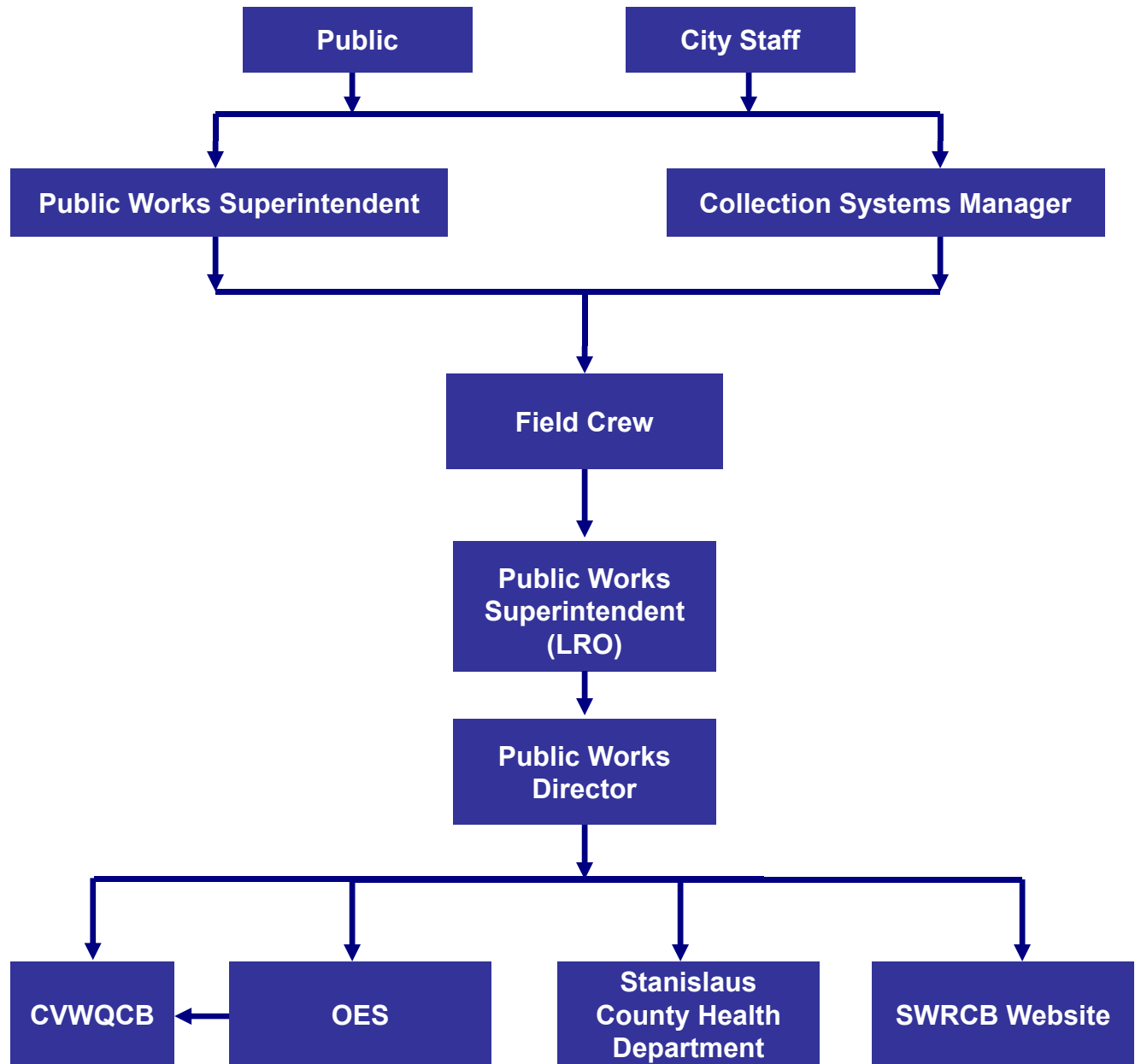
- Staff preventative maintenance activities

- Mobilize and respond to notifications of stoppages

City of Newman

Sewer System Management Plan (SSMP)

Chain of Communication for Reporting SSOs



City of Newman

Sewer System Management Plan (SSMP)

Position Titles, Names, and Phone Numbers

Position	Name	Phone
Mayor	Ed Katen	209-862-2513
City Council Member	Robert Martina	209-862-3930
City Council Member	Roberta Davis	209-675-5677
City Council Member	Nick Candea	925-525-3671
City Council Member	Ted Kelly	209-862-0227
Public Works Director	Garner Reynolds	209-678-0354
City Engineer	Gary Rogers	209-826-5155
Public Works Superintendent	Doug Mutoza (LRO)	209-678-0351
Collection System Manager	Dan Pardo	209-826-0344
Office Assistant	Terry Barques	209-862-4448

County and State Agency Contact Information	
Stanislaus County Health Department, Public Health Services	209-558-7700
CVRWQCB (<i>Central Valley Regional Water Quality Control Board</i>)	916-464-3291
OES (<i>Office of Emergency Services</i>)	800-852-7550
SWRCB Website	http://www.ciwqs/waterboards/ca/gov

Sewer System Management Plan (SSMP) – Legal Authority

INTRODUCTION

Sufficient legal authority must be provided to implement an effective Sewer System Management Plan (SSMP) program. Legal authority can be provided through sewer use ordinances, service agreements, discharge permits, or other legally binding documents. The specific requirements of WDR Order No. 2006-003-DWQ with regard to the Legal Authority are described below. The City of Newman's Legal Authority is defined in Newman City Code Ordinance No. 90-4 (Attachment 3-1).

A. PREVENT ILLICIT DISCHARGES

1. REGULATORY REQUIREMENT

“Prevent illicit discharges into the sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.)”

2. CITY OF NEWMAN'S LEGAL AUTHORITY

Illicit discharges into the City's sanitary sewer system are outlined in Section 4.3 of the City of Newman's City Code Ordinance No. 90-4.

B. PROPER DESIGN AND CONSTRUCTION OF SEWER SYSTEM

1. REGULATORY REQUIREMENT

“Require that sewers and connections be properly designed and constructed”

2. CITY OF NEWMAN'S LEGAL AUTHORITY

Proper design and construction of the City's sewer system and connections are discussed in Section 6.7 of the City of Newman's City Code Ordinance No. 90-4.

C. ENSURE ACCESS

1. REGULATORY REQUIREMENT

“Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency”

2. CITY OF NEWMAN’S LEGAL AUTHORITY

The City of Newman’s Code Ordinance No. 90-4, specifies access to any portion of the City’s system in Section 7.2.4. The City does not specify access to laterals because the City does not own or maintain any portion of the lateral (City owns the mainline sewers only).

D. LIMIT DISCHARGE OF FATS, OILS AND GREASE (FOG)

1. REGULATORY REQUIREMENT

“Limit the discharge of fats, oils and grease and other debris that may cause blockages”

2. CITY OF NEWMAN’S LEGAL AUTHORITY

The discharge of fats, oils and grease (FOG) is limited by the City of Newman’s Code Ordinance No. 90-4, in Section 4.3, number 10 and 20.

E. ENFORCING ORDINANCES

1. REGULATORY REQUIREMENT

“Enforce any violation of its sewer ordinances”

2. CITY OF NEWMAN’S LEGAL AUTHORITY

Enforcement of the City of Newman’s ordinance is outlined in Section 9 of the City of Newman’s City Code Ordinance No. 90-4.

ORDINANCE NO. 90-4

AN ORDINANCE PRESCRIBING RULES AND REGULATIONS UNDER WHICH THE RIGHT TO THE USE OF SEWAGE SERVICES FURNISHED BY THE CITY OF NEWMAN MAY BE ACQUIRED; FIXING THE CHARGES FOR SEWER INSTALLATION AND USE TO BE CHARGED AND COLLECTED BY THE CITY OF NEWMAN; SETTING FORTH THE TIME WHEN CONNECTION TO SAID SEWER SYSTEM SHALL BE MADE; PROVIDING PENALTIES FOR THE VIOLATION THEREOF, AND REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES AND CONFLICT THEREWITH.

The City Council of the City of Newman does ordain as follows:

SECTION 1. PURPOSE

The purpose of this Ordinance is to provide rules and regulations for the use of the City of Newman sewerage system, for connection to the City sewerage system, for industrial and other discharges to the sewerage system, and to establish charges and fees for the use of the sewers.

SECTION 2. DEFINITIONS

The following words and phrases when used in this Ordinance shall have the meanings respectively ascribed to them in this section:

2.1 Authorized Representative of Industrial User: Shall mean (1) a principal executive officer of at least the level of vice-president, if the industrial user is a corporation; (2) principal executive officer or ranking elected official, if the industrial user is a municipality, state, federal, or other

public agency; (3) a general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or (4) a duly authorized representative of the individual designated above, if such representative is responsible for the overall operation of the facilities from which the industrial wastewater originates.

2.2 Boarding House: Shall mean dwelling other than a hotel where lodging or lodging and meals for three (3) or more persons is provided for compensation.

2.3 BOD or Biochemical Oxygen Demand: Shall mean the measure of decomposable organic material in sanitary or industrial sewage as represented by the oxygen utilized over a period of five (5) days at 20° C and as determined by the appropriate procedure in "Standard Methods".

2.4 City: Shall mean the City of Newman, California, or the City Council of Newman, California.

2.5 City Manager: Shall mean the City Manager of the City of Newman, or the person or persons designated by him to administer and enforce the Rules and Regulations of this Ordinance.

2.6 Class I Industrial User: Shall mean an Industrial User who:

- (a) in any one month has an average daily discharge in excess of:
 - (i) 25,000 gallons per day of wastewater or,
 - (ii) 75 pounds per day BOD or,
 - (iii) 75 pounds per day total suspended solids,
- (b) is subject to federal categorical pretreatment standards, or
- (c) has a reasonable potential to adversely affect the operation of wastewater treatment facilities.

2.7 Class II Industrial User: Shall mean an Industrial User who is not classified as a Class I Industrial User.

2.8 Discharger: Shall mean any person that discharges or causes a discharge to a public sewer.

2.9 Dwelling Groups: Shall mean a group of two (2) or more detached or semi-detached, one-family, two (2) family, or multiple dwellings, occupying a parcel of land in one ownership and having any yard or court in common, but not including motels.

2.10 Domestic Wastewater: Shall mean water-borne wastes derived from normal human living processes.

2.11 Effluent: Shall mean the liquid outflow from any facility designed to treat, convey or retain wastewater.

2.12 Hotel: Shall mean any building or portion thereof containing six (6) or more guest rooms, used, designed or intended to be used, let, or hired out to be occupied by six (6) or more individuals for compensation, whether the compensation for hire be paid directly or indirectly.

2.13 Indirect Discharge: Shall mean introduction of pollutants into the wastewater treatment facilities from any non-domestic source regulated under section 307 (b), (c), or (d) of the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.)

2.14 Industrial User: Shall mean any source of industrial wastewater or indirect discharge introduced into the sewerage system or wastewater treatment facilities.

2.15 Industrial Wastewater: Shall mean all water-borne wastes and wastewater of the community excluding domestic wastewater and shall include all wastewater from any producing, manufacturing, processing, institutional, commercial, agricultural, or other operation where wastewater discharged includes significant quantities of wastes of non-human origin.

2.16 Interference: Shall mean a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (1) Inhibits or disrupts the Publicly-Owned Treatment Works (POTW), its treatment processes or operations, or its sludge processes, use or disposal; and
- (2) Therefore is a cause of a violation of any requirement of the POTW's National Pollutant Discharge Elimination System (NPDES) permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Maine Protection, Research and Sanctuaries Act.

2.17 Mobile Home Park: Shall mean land or premises used or intended to be used, let or rented for occupancy by or of trailers or movable dwellings, rooms or sleeping quarters of any kind.

2.18 Motel: Shall mean a group of two (2) or more detached or semi-detached buildings containing guest rooms or apartments and automobile storage space serving such rooms or apartments provided in connection therewith, which group is designed and used primarily for the accommodation of transient passengers.

2.19 Multiple-Dwelling: Shall mean a building or portion thereof used and designed as a residence for three (3) or more families living independently of each other, and doing their own cooking in said building, including apartment houses, apartment hotels and flats, but not including motels.

2.20 New Source: Shall be defined as stated in 40 Code of Federal Regulations (CFR) 403.3 (k) General Pretreatment Regulations for Existing and New Sources.

2.21 NPDES Permit Shall mean a permit issued pursuant to Section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.).

2.22 Pass Through Shall mean a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

2.23 Person: Shall mean any individual, partnership, committee, association, corporation, public agency, United States of America and its agents, or any other organization or group of persons, public or private.

2.24 Publicly Owned Treatment Works or POTW: Shall mean City-owned wastewater treatment facilities.

2.25 Pollutant: Shall mean any constituent or characteristic of wastewater on which discharge limitations may be imposed either by the City or by the regulatory bodies empowered to regulate the City.

2.26 Sanitary Sewage: Shall mean domestic wastewater.

2.27 Sewerage: Shall mean any and all facilities used for collecting, conveying pumping, treating and disposing of wastewater.

2.28 Sewerage System: Shall mean a network of wastewater collection, conveyance, treatment and disposal facilities interconnected by sewers, and owned by the City or a network of wastewater collection and conveyance facilities owned by others.

2.29 Single-Family Dwelling: Shall mean a building containing only one kitchen designed for or used to house not more than

one family, including all necessary employees of such family.

2.30 Standard Methods: Shall mean the current edition of Standard Methods for the Examination of Water and Wastewater as published by the American Public Health Association.

2.31 Total Suspended Solids: Shall mean the insoluble solid matter suspended in wastewater that is separable by laboratory filtration in accordance with the procedure described in "Standard Methods".

2.32 Toxic Material: Shall mean any pollutant or combination of pollutants listed as toxic in regulations promulgated by the administrator of the Environmental Protection Agency under Section 307(a) of the Federal Water Pollution Control Act or other Acts.

2.33 Two-Family Dwelling or Duplex: Shall mean a building containing not more than two (2) kitchens designed and/or used to house not more than two (2) families, living independently of each other, including all necessary employees of each such family.

2.34 Wastewater: Shall mean the water-borne wastes of the community derived from human or industrial sources including domestic and industrial wastewaters.

2.35 Wastewater Treatment Facilities: Shall mean the City facilities for wastewater treatment, sewer laterals and mainlines used for collection of wastewater, and all other properties used for collection, treatment, and disposal of wastewater.

SECTION 3. ADMINISTRATION

Except as otherwise provided herein, the City Manager shall administer, implement, and enforce the provisions of this Ordinance. Any powers granted to or duties imposed upon the City Manager may be delegated by the Manager to persons in the employ of the City.

SECTION 4. USE OF CITY SEWERAGE SYSTEM

4.1 Purpose

The purpose of this Section is to establish rules and regulations concerning use of the City Sewerage System by all dischargers.

4.2 Acceptability of Discharges

The City Manager shall determine the acceptability or unacceptability of any discharge into the system. Such a determination shall be made on the basis of sound engineering and operational evaluations, taking into account all factors pertinent to the effect of the discharge on any part of the system, treatment process, or system effluent.

4.3 Prohibited Use of Sewers

Materials that are unacceptable for discharge to the City sewerage system include, but are not necessarily limited to, the following:

- (1) Materials or substances that would constitute a hazard to life and limb of personnel engaged in inspection, maintenance, and operation of the sewerage system.
- (2) Materials or substances that are toxic as defined by this ordinance.
- (3) Materials or substances in concentrations in excess of limits specified in the Industrial Discharge Permit and set in accordance with this Ordinance.
- (4) Materials or substances that would cause the City to incur excessive expense in the handling and treatment thereof.
- (5) Materials or substances that would be incompatible with the treatment processes or inhibit the performance of the treatment processes at the City treatment facility.

- (6) Discharges of such volume or containing materials or substances in such amounts as to cause Pass Through or Interference as defined in Section 2 of this Ordinance.
- (7) Discharges that, alone or in combination with a discharge or discharges from other sources, would cause violation of any requirement of the City's NPDES permit.
- (8) Discharges that contain medical or infectious wastes.
- (9) Any wastewater having a temperature higher than 104 degrees F (40 degrees C), except, however, a discharger may apply for spike dischargers having a temperature of up to 140 degrees F, upon demonstration that such discharges will not be harmful to the sewer system.
- (10) Any wastewater containing more than 100 ppm by weight of fats, oil and grease, except, however, a discharger may apply for discharges containing up to 200 PPM by weight of food fats and food oils upon demonstration that such discharges will not be harmful to the sewer system.
- (11) Any wastewater containing any gasoline, benzene, naptha, fuel oil or other flammable or explosive liquids, solids or gases; and in no case pollutants with a closed cup flashpoint of less than one hundred forty (140) degrees Fahrenheit (60 degrees C), or pollutants which cause an exceedance of 10 percent of the Lower Explosive Limit (LEL) at any point within the POTW.
- (12) Any discharge containing any garbage that has not been ground by household type or other suitable garbage grinders, or any solids which will not pass through a screen with openings of one-twentieth of an inch (1/20") square.
- (13) Any discharge containing any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch, manure, or any other solids or viscous substances capable of causing obstructions or other interferences with proper operation of the sewerage system.
- (14) Any discharge having a pH lower than 4.5 or higher than 10.0 or having any other corrosive property capable of

causing damage or hazards to structure, equipment or personnel of the sewer system.

- (15) Any discharge containing toxic or poisonous substances in sufficient quantity to injure or interfere with any wastewater treatment process, to constitute hazards to humans or animals, or to create any hazard in waters which receive treated effluent from the wastewater facilities.
- (16) Any discharge containing noxious or malodorous gases or substances capable of creating a public nuisance; including pollutants which result in the presence of toxic gases, vapors, or fumes;
- (17) Any discharge containing solids of such character and quantity that special and unusual attention is required for their handling.
- (18) Any wastewater containing color which is not removed in the treatment processes.
- (19) Any discharges containing any radioactive wastes or isotopes.
- (20) Any wastewater containing substances in excess of the quantities listed in Table I entitled "Constituent Limits," or other materials, including, but not limited to, ammonia, biochemical oxygen demand, total suspended solids, oil or grease of animal or vegetable origin, total dissolved solids, and phenolic compounds in quantities that may cause or are found to cause problems or interference in the wastewater treatment facilities.
- (21) Any water discharged for the purpose of diluting industrial wastewater as a partial or complete substitute for adequate treatment to achieve compliance with the Constituent Limits listed in Table 1 or pretreatment

standards imposed by the City or by state or federal regulatory bodies.

(22) Any discharge containing an electrical conductivity greater than 4000 microhms/CM, except, however, a discharger may apply for discharges having an electrical conductivity greater than 4000 microhms/CM upon demonstrating that such discharges will not be harmful to the sewer system.

(23) Any discharger may apply for modified discharge standard upon demonstrating that such discharges will not be harmful to the sewer system.

4.4 Accidental Release of Unacceptable Substances

There shall be no connection to the system from any vessel, tank, container, or receptacle of any kind used to receive, hold, store or in any other way handle any toxic or deleterious materials or substances, the discharge of which is prohibited by these regulations. Persons who, in the course of their business or otherwise transport, store, receive, ship, or in any other way handle or process any such materials or substances shall take precautions to prevent accidental spillage of such substances to any connection of the system by way of floor drains, basins, catch basins, down spouts, gutters, manholes, or any other connection.

In the event of any accidental release to the system of any unacceptable discharge as determined in accordance with this ordinance, the discharger shall notify the City Manager immediately, and in no case later than one hour following such a discharge. Costs resulting from such a discharge shall be charged to the Discharger.

SECTION 5. CONNECTION TO CITY SEWERAGE SYSTEM

5.1 Purpose

The purpose of this Section is to describe the requirements for connection to the City sewerage system and extension of the system to areas outside the City.

5.2 Connection to City Sewerage System Required.

Every building or structure in the City in which plumbing fixtures are installed shall be connected to the City sewer system where a public sewer is available. This requirement shall apply to any building or structure existing at the time of the effective date hereof, and well as any building or structure thereafter constructed.

A public sewer is available for the purposes of this Section when such public sewer or any building or any exterior drainage facility connected thereto is located within two hundred feet (200') from any proposed building or exterior drainage facility on any lot or premises which abut and can be served by such public sewer.

Every building or structure connected to a septic tank at the time a public sewer becomes available, as defined above, shall be connected to the public sewer within five (5) years from the effective date hereof. Every building or structure hereafter erected at a time when a public sewer is not available shall be connected to the public sewer within five (5) years after the public sewer becomes available.

Buildings or structures connected to septic tanks in territory not located within the City limits at the effective date hereof, but which territory is subsequently annexed to the City, shall be connected to the public sewer within five (5) years from the effective date of the annexation, or within five (5) years after the public sewer becomes available, whichever occurs later.

Buildings or structures connected to septic tanks which experience failure as determined by the City Manager within the five-year grace periods stated in the previous two paragraphs shall be connected to the public sewer immediately.

5.3 Areas Outside City Limits

The City will be required to furnish sewer service outside the City limits only insofar as the City Council decides it is practicable to do so, and only insofar as said service will not overtax the capacity of the City sewerage system. In such cases, the City will furnish such service only upon the payment of such fees provided in this ordinance and further provided that the applicant for said services shall be required to pay for the extension of the public sewer to and across the street frontage of the property served to the sewer connection of the applicant.

5.4 Extension of Public Sewers Outside City

Any applicant for City sewer service outside the City limits shall, at his own expense, install a sewer main of not less than eight inches (8") inside diameter from the nearest existing public sewer at a point extending across the front of said applicant's property; provided, however, that for good cause shown, the City Council may, in writing, allow said main to be smaller than eight inches (8") inside diameter. All sewer extensions shall be installed to City Standards.

The total cost of an eight inch (8") line shall be paid by the applicant, provided that the pro rata cost to intervening properties under other ownerships shall be returned to the applicant at the time said intervening property owners request permission to hook up to the sewer, and also providing such requests are within ten (10) years from the date of the original applicant's request.

Whenever an applicant requests sewer service from the City, and should it be deemed necessary by the City Manager because of potential development of the applicant's property, intervening property or property more distant from the City, to require a sewer larger than eight inches (8"), the same may be required by the City, and the excess costs of the larger sewer over the cost of an eight-inch (8") sewer shall be paid by the City.

The City shall make all public sewer extensions and sewer services after the effective date hereof, except in the case of subdivisions for which a tentative map is filed. In all such subdivisions, the subdivider shall extend the public sewer and make the house sewer services from the public sewer at his own expense, subject to provisions of Section 6.7.

SECTION 6. RULES AND REGULATIONS

6.1 Purpose

The purpose of this Section is to define miscellaneous rules and regulations for the use of the City sewerage system.

6.2 Compliance

No person shall discharge or allow the discharge of or dump sanitary sewage or other waste materials into the sewerage system of the City except in compliance with the terms of and upon payment of the fees provided in this ordinance.

6.3 Non-gravity Flow into Sewers

In the event that sewage cannot be handled by natural gravity flow, the person herein known as the "applicant" making a request for sewer service, shall be required to pay for and have installed, such mechanical devices, approved by the City Council, as are necessary to evaluate the flow of sewage to a point at which it will flow into the City sewerage system. It shall be a condition of furnishing the sewer services that the applicant shall dedicate all right, title and interest to said mechanical devices to the City and the City will maintain, care for and operate said mechanical devices after installation and acceptance by the City.

6.4 Connection of Property Outside City Limits

No person shall connect property outside the corporate limits of the City to the City's sewerage system without first obtaining the consent of the City Council and paying the fees and charges imposed by the City. Any such person shall, by Agreement, be made subject to this ordinance and any permits or orders issued thereunder, including enforcement provisions. In considering applications for furnishing sewer services to property located outside the corporate limits of the City, the City Council may impose such reasonable conditions to the granting of such privilege as it deems to be in the best interests of the City, taking into consideration the fact that the sewerage system is designed primarily to serve property within the corporate limits of the City.

6.5 House Sewer Connections

All persons shall keep their house sewer connections in good order at their own expense and shall be liable for damages which may result from their failure to do so.

6.6 Discharge to Storm Drain System

It shall be unlawful for any person to discharge or allow the discharge of sanitary sewage into the storm drain system or into any pipeline, either private or public, which leads into the storm drain system. In the event, that sanitary sewage connections exist, or in the future are discovered to exist, which discharge into the storm drain system, they shall immediately be disconnected and the cost thereof shall be paid for by the owner and/or user of such connection.

6.7 Supervision of Connections

All sewer service connections and all work contemplated by this ordinance and materials used shall be done in accordance with the plans and specifications of the ordinances and regulations of the City of Newman, and subject to the inspection and approval of the City Engineer of the City of Newman.

6.8 Discharge of Septage

Septic tank cleaning and service firms shall not discharge any septage into the sewerage system of the City without first obtaining a permit therefor from the Director of Public Works and upon payment of the fee provided.

6.9 No User Shall Supply Services

No sewer user using sewer services supplied by the City shall supply any other person with said sewer service, or allow any other person the use of such sewer service from said sewer user's sewer connection, or permit a further connection to be made to said sewer user's connection of his or any other premises.

6.10 Service to Public Entities

Notwithstanding any other provisions of this chapter, the City Council shall have the power to establish, by agreement or ordinance, the rate or rates to be charged for furnishing sewer services to governmental agencies, political subdivisions, public corporations, City, County, public districts, the State of California, or the United States of America, or any department or agency of any thereof, at rates different from those herein set

forth and on a basis that is fair and equitable to all the parties concerned.

6.11 Discharge of Drainage Water

No person shall discharge or cause to be discharged, any rain water, storm water, ground water, street drainage, subsurface drainage, yard drainage, including evaporative-type air cooler discharge water, into any sewerage facility which is directly or indirectly connected to the sanitary sewerage facilities of the City of Newman.

SECTION 7. INDUSTRIAL WASTEWATER DISCHARGES

7.1 Industrial Discharge Permits

7.1.1 Permits Mandatory

No person may discharge any industrial wastewater to City sewerage facilities without an Industrial Discharge Permit. The Permit shall be in one of two classifications depending on the quantity and quality of wastewater to be discharged. The two Permit classifications are:

- (1) Class I Permit - required for all Class I dischargers as defined in Section 2.6;
- (2) Class II Permit - required for all Class II dischargers as defined in Section 2.7.

7.1.2 Permit Application

Dischargers seeking an Industrial Discharge Permit shall complete the appropriate application form available at the office of the City Manager. The completed application form, supplementary information, and an application fee must be submitted to the office of the City Manager at least ninety (90) days prior to the intended date for initiating new discharge or the expiration date of existing permits. No application shall be considered complete without the applicable application fee.

The application may require the following information:

- (1) Name, address, and Standard Industrial Classification (SIC) number of applicant and plant;
- (2) Maximum average daily flow based on 30 day (monthly) average;
- (3) Average and thirty minute peak wastewater flow rates, including daily, monthly and seasonal variations if any;
- (4) Time and duration of wastewater discharge;
- (5) Daily maximum and average concentration and mass discharge of wastewater constituents including monthly and seasonal variations, if any;
- (6) Site plans, floor plans, mechanical and plumbing plans and details to show sampling locations and all sewers and sewer appurtenances by size, location and elevation;
- (7) Description of activities, facilities and plant process on the premises including all materials, process and types of materials which are or could be discharged;
- (8) Each product produced by type, amount, and rate of production;
- (9) Number and type of employees, and hours of work;
- (10) Any other information as may be deemed by the City Manager to be necessary to evaluate the data furnished by the discharger;
- (11) New Class I Dischargers shall submit, as part of their application, a baseline report in accordance with 40 CFR part 403.12 and amendments thereto.

The City Manager will evaluate the data furnished by the discharger and may require additional information. After evaluation and approval of the data furnished, the City Manager will determine:

(1) For Class I Dischargers

- (a) the allowable daily maximum and 30 day (monthly) average daily flow in gallons per day,
- (b) the allowable daily maximum and 30 day (monthly) average daily mass discharge of BOD and total suspended solids in pounds per day,
- (c) the allowable maximum concentration or mass discharge limits for other wastewater constituents as set forth in this ordinance or applicable state or federal regulations.

(2) For Class II Dischargers

- (a) the maximum daily flow in gallons per day,
- (b) the allowable maximum limit for wastewater constituents as set forth in this ordinance.

The City Manager may issue a wastewater discharge permit subject to terms and conditions as provided herein.

7.1.3 Terms and Conditions

All Industrial Discharge Permits shall be expressly subject to all provisions of this Ordinance and all rates and charges established by the City. All permits shall be valid for three years and must be renewed prior to the expiration date in accordance with section 7.1.2.

Class I Industrial Discharge Permits shall contain the following terms:

- (1) The allowable daily maximum and 30 day (monthly) average daily flow in gallons per day,
- (2) The allowable daily maximum and 30 day (monthly) average daily mass discharge of BOD and total suspended solids in pound per day,
- (3) the allowable maximum concentration or mass discharge limit for other wastewater constituents as set forth in

this ordinance or applicable state or federal regulations.

Class II permits shall contain the following terms:

- (1) the allowable daily maximum flow,
- (2) the allowable maximum limit for wastewater constituents as set forth in this ordinance.

Industrial Discharge Permits may contain any or all of the following conditions:

- (1) Limits on rate and time of discharge or requirements for flow regulation and equalization.
- (2) Requirements for inspection and sampling facilities, including City access to such facilities.
- (3) Monitoring program with may include: Sampling locations; frequency and method of sampling; number, types and standard of tests; and establishing a reporting schedule.
- (4) Submission of technical reports or discharge reports.
- (5) Maintenance of monitoring data and plant records relating to wastewater discharges, as specified by the City Manager, and affording City access thereto.
- (6) Requirements for pretreatment of wastewater prior to discharge, including a compliance schedule for installation and successful operation of facilities.
- (7) Other conditions as deemed appropriate by the City Manager to insure compliance with this Ordinance or the terms and conditions of the Permit.

7.1.4 Change of Permit Terms and Conditions

The City may change the terms and conditions of a wastewater discharge permit, including changing the allowable limits on wastewater constituent concentration from time to time as circumstances may require. The City shall allow a discharger reasonable time to comply with any City required changes in the permit.

7.1.5 Permit Transfer

Permits are issued to a specific user for a specific operation, or discharge at a specific location. However, a permit may be reassigned or transferred to a new owner and/or operator with prior approval of the City Manager.

- (1) Permittees wishing to transfer their permits must give at least thirty (30) days advance notice to the City Manager.
- (2) The notice must include a copy of a written agreement between the transferor and the transferee which contains:
 - (a) A specific date on which the transfer is to occur,
 - (b) The responsibilities and liabilities of each party subsequent to the transfer.
- (3) The City Manager, within twenty (20) working days of receiving the permit transfer request, will respond to the parties in writing. In the event the City Manager denies the request, the new owner/operator must submit a permit application in accordance with this Ordinance and may not discharge into the sewerage system until it has received a final permit.

7.1.6 Suspension of Permit

The City Manager may suspend a Permit for a period not to exceed forty-five (45) days when such suspension is necessary to stop discharge which presents an imminent hazard to the public health, safety or welfare, to the local environment, or the City's sewerage system. Any discharger notified of a suspension of his permit shall immediately cease and desist the discharge. If the discharger fails to comply voluntarily with the suspension order, the City Manager shall take such steps as are reasonably necessary to insure compliance with Section 9.

7.1.7 Revocation of Permit

The Council may revoke a Permit upon a finding that a discharger has:

- (1) Violated any provision of this ordinance or any terms and conditions of the Permit.
- (2) Failed to factually report the wastewater constituents and characteristics of his discharge.
- (3) Failed to report significant changes in operations or wastewater constituents and characteristics.
- (4) Refused reasonable access to the discharger's premises for the purpose of inspection or monitoring.
- (5) Failed to pay fees and charges for use established pursuant to this regulation.
- (6) Failed to comply with monitoring and reporting requirements.

No revocation shall be ordered until a hearing has been held by the Council. At the hearing, the discharger may appear personally or through counsel, cross-examine witnesses, and present evidence on his own behalf. Notice of the hearing, and a description of the issues to be considered, shall be given to the discharger at least ten (10) days prior to the date of the hearing.

Any discharger whose Permit has been revoked shall immediately stop all discharges of liquid-carried wastes covered by the Permit. The City Manager may disconnect or permanently block from the City sewers any discharger whose Permit has been revoked if such action is necessary to insure compliance with the order of revocation.

7.2 Wastewater Source Control Requirements

In order to effectively administer and enforce the provisions of these regulations, the City Manager may require any

discharger to comply with any or all of the following requirements:

7.2.1 Reports The City Manager may require reports, including but not limited to the following:

- (1) Baseline reports shall be submitted as part of the Permit application by any new Class I sources. Baseline reports shall contain the information set forth in and be prepared in accordance with CFR 40 Part 403.12 (b) and amendments thereto.
- (2) Compliance progress reports and a 90-day compliance report shall be required for all Class I users required to construct and operate pretreatment facilities. All compliance reports shall be prepared in accordance with CFR 40 part 403.12 (c) and (d) and amendments thereto.
- (3) Periodic reports on continued compliance or discharge reports will be required for all Industrial Users. The required frequency of submission and content of discharge reports shall be determined by the City Manager and shall be made a condition of the Discharge Permit. The minimum frequency for submission of discharge reports for a Class I User shall be twice per year.
- (4) Questionnaires
- (5) Technical Reports
- (6) Special monitoring reports
- (7) Treatability study reports

When a report filed by a person pursuant to this section is not adequate in the judgment of the City Manager, he may require such person to supply such additional information as the City Manager deems necessary.

If an Industrial User subject to the reporting requirements in this section monitors any pollutant more frequently than required by the City, using the procedures prescribed in Section

7.2.2, the results of this monitoring shall be included in the report.

All reports submitted to the City Manager pursuant to this Ordinance or Discharge Permit issued by the City Manager shall be signed by an Authorized Representative of the Industrial User and shall contain the following certification statement:

"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."

7.2.2 Monitoring Programs

Monitoring programs for the purpose of measuring flow rates, flow volumes, BOD, total suspended solids and such other wastewater characteristics as deemed appropriate may be required as a condition of the Industrial Discharge Permit to demonstrate compliance with the provisions of this Ordinance or the Permit. All analyses of industrial wastewater shall be performed by a state-certified laboratory approved by the City Manager. All sampling and analyses shall be performed according to appropriate procedures contained in 40 CFR Part 136 and amendments thereto.

Sampling and flow measurement equipment shall be approved by the City Manager and installed at the expense of the User. The sampling, analysis, and flow measurement procedures, equipment,

and results shall be subject at any time to inspection by the City. Sampling and flow measurement facilities shall be such as to provide safe access to authorized City personnel.

Measurements to verify the quantities of waste flow and waste constituents reported by Industrial Users may be conducted on a random basis by personnel of the City. Costs of the measurement shall be borne by the discharger.

7.2.3 Record Keeping

Any Industrial User shall maintain records of all information resulting from any monitoring activities required by this Ordinance or Discharge Permit. Such records shall include for all samples:

- (1) The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;
- (2) The dates analyses were performed;
- (3) Who performed the analyses;
- (4) The analytical techniques/methods used;
- (5) The results of such analyses;
- (6) A proper chain of custody form document when the samples are released and who has possession of the samples at all times; and
- (7) Any Industrial User shall be required to retain for a minimum of 3 years any records of monitoring activities and results (whether or not such monitoring activities are required by this Ordinance or Permit and shall make such records available for inspection and copying by the City or any regulatory body empowered to regulate the City. This period of retention shall be extended during the course of any unresolved litigation regarding the Industrial User or City when requested by federal or state regulatory bodies empowered to regulate the City.

7.2.4 Access and Inspection Facilities

The City shall have, at all times, free access to the premises of any user of the City sewerage facilities, for the purpose of inspecting, sampling, or testing the discharge for compliance with the provisions of this Ordinance, or Permit. When necessary, the City Manager may require the discharger to install a suitable inspection chamber to facilitate observation, sampling, and measurement of the discharge. The chamber shall be installed at the User's expense, and in accordance with plans approved by the City Manager.

7.2.5 Pretreatment Facilities

Pretreatment systems or devices may be required by the City Manager to treat wastewater prior to discharge to the community sewer when it is necessary to restrict or prevent the discharge to the community sewer of wastewater having strength in violation of the prohibitions or exceeding the limits established by this Ordinance, or to distribute wastewater discharges over a period of time.

All pretreatment systems or devices shall be approved by the City Manager but such approval shall not relieve a discharger of the responsibility for taking all steps necessary to comply with wastewater limitations established by the City. The City Manager may impose a compliance schedule for the installation and successful operation of required pretreatment facilities which may be required as a Permit condition. All required pretreatment equipment shall be installed and operated at the discharger's expense. In addition, any extraordinary administrative or investigative expenses incurred by the City as the result of the installation and use of pretreatment facilities shall be charged to the discharger.

7.2.6 State and Federal Standards

State or federal requirements and limitations on discharges shall apply in any case where they are more stringent than the requirements and limitations of this ordinance. These shall include Federal Categorical Pretreatment Standards for a particular industrial subcategory as set forth in 40 CFR Subchapter N or 40 CFR Parts 401-471.

7.3 Notification of Changed Discharge

All Industrial Users shall promptly notify the City Manager in advance of any substantial change in the volume or character of pollutants in their discharge. No person shall discharge industrial wastewater in violation of the terms and conditions set by the Industrial Discharge Permit. Any User desiring to change the nature of the discharge or alter the pretreatment process after a Permit has been issued shall obtain a new Permit for the altered discharge before making the change.

7.4 Notice of Potential Problems

All Industrial Users shall notify the City Manager immediately of all discharges, including slug loadings, that could cause problems to the wastewater treatment facilities.

SECTION 8. SERVICE CHARGES AND FEES

8.1 Service Charges

8.1.1 Purpose of Sewer Service Charges

For the purpose of providing funds for payment at or before maturity of the principal of and interest on all sewer revenue bonds heretofore and hereinafter issued by the City for the purpose of the acquisition, construction and completion of improvements to the sewage treatment and disposal system, and for the purpose of defraying the cost of maintenance and operation of the sewage treatment and disposal system, there are hereby levied and assessed upon all premises having or required hereby to have

any sewer connections with or discharging, or required hereby to discharge, sewage into or through the sewer system, monthly sewer service charges for the services and facilities for the treatment and disposal of sewage furnished or available to such premises by the sewage treatment and disposal system, such charges to be payable as this Ordinance hereinafter sets forth.

8.1.2 Establishment of Rates

Rates to be charged and collected and terms, provisions, and conditions to be effective respecting such rates for sewer service supplied by the City shall be as fixed and established by the City Council from time to time and the Service Charge Rate Schedule shall become an attachment of this Ordinance. This provision is in addition to and not by way of derogation of any other remedies or procedures available to the City pursuant to any law or regulation or by any of the provisions of this Ordinance.

Service charges for residential dischargers shall be based on a fixed monthly rate calculated to recover the dischargers share of all capital and operating and maintenance costs.

Service charges for Industrial Users shall be based on a combination of fixed rates calculated to recover the User's share of fixed capital and operation and maintenance costs including but not limited to the costs for capital reserve fund, debt service, labor, maintenance, vehicles, and equipment replacement and a variable rate calculated monthly to recover the User's share of variable operating cost including, but not limited to, the costs for power and chemicals.

8.1.3 Industrial User Surcharge

If a Class I Industrial User exceeds the limits prescribed in the Industrial Discharge Permit for average daily flow or mass discharge of BOD or total suspended solids, or other specified constituent, the User will be assessed a surcharge fee. The surcharge fees are based on the variable portion of the monthly

service charge as set forth in the Service Charge Rate Schedule attached to this Ordinance.

A surcharge of 300 percent of the variable monthly charge for the amount in excess of the discharge limits will be assessed. Separate surcharges will be assessed for each violated parameter (flow, BOD, suspended solids or other specified constituent) and for each occurrence of violation. Surcharge fees are additive to the normal monthly charges which are calculated based on the Service Charge Rate Schedule. Surcharges are in addition to any civil or criminal penalties which may be imposed as a result of non-compliance.

Payment of the surcharge does not relieve the User from its obligation to comply with all provisions of this Ordinance and the Industrial Discharge permit. Exceeding the limits prescribed in the permit constitutes a violation of the Permit and the City shall seek remedies for non-compliance in accordance with the procedures and policies set forth in Section 9. Refusal to pay the assessed surcharge shall constitute a separate violation of the Ordinance subject to the enforcement procedures set forth in Section 9.

8.1.4 Billing and Payments

The regular billing for sewer service charges shall be monthly. If the bill is not paid within fifteen days from the due date, the same shall be considered delinquent.

As an alternative to any of the other procedures herein provided, the City may bring an action against the person or persons who occupied the premises, or who requested the connection to the sewer system, or if no such request was made, then to the owner of record of such premises, when the service was rendered for the collection of the amount of delinquent rate and all penalties and costs of collection including a reasonable attorneys' fee.

Upon delinquency, the City may, upon ten days' notice, order the user to disconnect his premises from the City's facilities.

Premises to which charges have become delinquent may be disconnected by the City if the user fails to comply with the order to disconnect. The City Manager shall estimate the cost of disconnection of such premises and the cost of reconnection and such user shall deposit the cost as estimated, before such premises are reconnected to the sewer system.

During the period of non-connection or disconnection, habitation of such premises by human beings shall constitute a public nuisance, whereupon the City Council shall cause proceedings to be brought for the abatement of the occupancy of said premises by human beings. In such event, a reasonable attorney's fee shall become due as a penalty for non-payment.

Following the preparing and filing of a written report, where required, the giving of notice of such report or of such schedule of fees and charges and the hearing thereon, the amounts of such fees, charges and interest shall constitute a lien against the lot or parcel of land against which levied or imposed.

8.2 Connection Fees

8.2.1 Purpose of Connection Fees

All new residential dischargers to the sewerage system shall be assessed a connection fee for the purpose of recovering the portion of capital and fixed operation and maintenance costs allocated to future residential dischargers.

New Industrial Users or existing Industrial Users who have been permitted an increase in their allowable limits for flow, BOD or total suspended solids shall be assessed a connection fee to recover the User's share of capital cost of the wastewater treatment facilities.

8.2.2 Establishment of Connection Fees

Connection fees to be assessed new residential dischargers shall be fixed and established by the City Council from time to time and the Connection Fee Schedule shall become an attachment to this Ordinance.

Connection fees for commercial and Industrial Users and method of payment shall be negotiated. The fee shall be in proportion to use and shall be based on the allowable average daily flow and daily mass discharge of BOD and total suspended or other constituent as deemed appropriate by the City Manager.

8.3 Change of Service Charges and Fees

The City Council reserves the right to change the schedule of sewer service charges and other charges and fees from time to time as necessary to the proper operation, maintenance, repair, replacement and expansion of the City's wastewater treatment facilities.

8.4 Other Industrial User Fees

For the purpose of defraying the costs of the Industrial User pretreatment program, the following additional fees shall be assessed of Industrial Users:

- (1) Fees for monitoring, inspection and surveillance of the industrial discharge shall be negotiated at the time and Industrial Discharge Permit is issued, based on the quantity and characteristics of the discharge.
- (2) Industrial Discharge Permit application fees shall be established by the City Manager. The City Manager may from time to time revise the fee as future processing costs increase.

SECTION 9. ENFORCEMENT AND PENALTIES

The City Manager shall enforce the provisions of this Ordinance, including requirements established or permits issued hereunder, as provided herein.

9.1 Enforcement Procedures

9.1.1 Notice of Violation

Whenever the City Manager finds that any person has violated, is violating, or is threatening to violate, this Ordinance, or any prohibition, limitation or requirement contained herein or the provisions of an Industrial Discharge Permit, the City Manager shall serve upon such person a written notice stating the nature of the violation and providing a reasonable time, not to exceed ten consecutive normal working days, for the satisfactory correction thereof.

9.1.2 Compliance Order

When noncompliance can not be resolved without construction, repair, or process changes, the City Manager may issue a Compliance Order directing the discharger to achieve or restore compliance in accordance with a time schedule set by the City Manager which specifies actions the discharger shall take and milestones which he shall meet to correct the violation. The discharger shall be required to submit compliance progress reports to the City Manager. Any failure to comply with an approved time schedule shall likewise be deemed a violation of this article.

9.1.3 Cease and Desist Orders

If the violation is not corrected by timely compliance with the notice of violation, the City Manager may issue an order to cease and desist and direct that those persons not complying with such prohibitions, limits, requirements, or provisions to

- (1) comply forthwith,
- (2) comply in accordance with a time schedule set by the City Manager, or

- (3) in the event of a threatened violation, take appropriate remedial or preventative action.

9.1.4 Show Cause Order

If the violation is not corrected by timely compliance with the orders issued pursuant to Sections 9.1.2 and 9.1.3 the City Manager may issue a Show Cause order requiring those persons in noncompliance to show cause before the City Council why service should not be terminated. A notice shall be served on the offending party, specifying the time and place of a hearing to be held by the City Council regarding the violation, and directing the offending party to show cause before the Council why an order should not be made directing the termination of service or other disciplinary action. The notice of the hearing shall be served personally or by certified mail at least ten (10) days prior to the date of the hearing.

9.1.5 Appeals

Any industrial discharger whose discharge has been determined by the City to be unacceptable in accordance with this ordinance or who disagrees with any other determination of the City hereunder may apply to the City Council for a review in accordance with this Ordinance. Within fifteen (15) days of the notice of determination or order issued under this Ordinance, the discharger may file with the City Council an appeal of the determination or order, and request a public hearing.

Within thirty (30) days of the request for a public hearing, the City Council shall give notice to the discharger of the time and place for the hearing, at least ten (10) days before the date set for the hearing. At the hearing, the discharger may appear personally or through counsel, cross-examine witnesses, and present evidence in his own behalf. The City Council shall confirm or revoke the determination or order, following presentation of all evidence.

9.2 Criminal Penalties

Any person who intentionally or negligently discharges wastewater in any manner, in violation of this Ordinance or Industrial Discharge Permit or order issued here under by the City Manager, is guilty of a misdemeanor.

9.3 Civil Enforcement Remedies and Penalties

The City may pursue any of the alternative civil remedies herein against any discharger who violates the provisions of this Ordinance or any Permits or orders issued thereunder.

- (1) Damage to Facilities. When the discharge of wastewater causes an obstruction, damage, or other impairment to City wastewater treatment facilities, the City Manager may assess a charge against the discharger for the work required to clean or repair the facility, and add such charge to the discharger's sewage disposal charge.
- (2) One Thousand Dollar Per Day Fine. Any person who violates any provisions of this Ordinance or any Permit or order issued thereunder may be liable civilly in a sum not to exceed One Thousand Dollars (\$1,000.00) for each day in which such violation occurs. Such penalties shall be imposed on a strict liability basis without regard to intent or negligence on the part of the discharger.

The City attorney, upon request of the City Council, shall petition the Superior Court to impose, assess, and recover such sums.

- (3) Injunction. Whenever a discharge of wastewater is in violation of the provisions of this Ordinance or Permits issued thereunder, the City may petition the Superior Court for the issuance of a preliminary or permanent injunction, or both, as may be appropriate, restraining the continuance of such discharge.

- (4) Termination of Service. The City may terminate or cause to be terminated sewage disposal or water service to any premise if a violation of any provision of this Ordinance pertaining to control or discharge of wastewater is found to exist. This provision is in addition to other statutes, rules or regulations authorizing termination of service for delinquency in payment, or for any other reason.

9.4 Public Notification

A list of all Industrial Users who were subject to enforcement proceedings during the twelve (12) previous months shall be published annually by the City in the largest daily newspaper published within its service area or the local newspaper designated by the City to publish the City's legal notices.

SECTION 10. SEVERABILITY

If any provision, paragraph, word, section, or article of this ordinance is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections, and articles shall not be affected and shall continue in full force and effect.

SECTION 11. REPEALING

Ordinances Nos. 82-8 and 85-9 of the City of Newman are hereby repealed.

This Ordinance shall take effect thirty (30) days after its final passage and prior to the expiration of fifteen (15) days thereof shall be published once in The West Side Index, a legal newspaper of general circulation printed and published in the City of Newman, California.

SECTION 12. EMERGENCY ORDINANCE

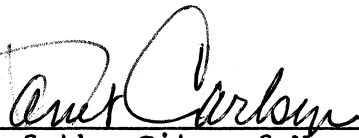
The City Council of the City of Newman finds that this Ordinance is necessary for the immediate preservation of the public peace, health, safety and general welfare of the City of Newman in that The State Water Quality Control Board requiring the City of Newman to adopt a revised sewer ordinance incorporated certain required changes not later than July 1, 1990. In order to comply with this order and not face substantial fines for its violation, this Ordinance shall take effect immediately.

Introduced at a regular meeting of the City Council of the City of Newman held on the 26th day of June, 1990, by Councilman Rodriguez, and seconded by Councilman Rose, and upon roll call, adopted by the following vote:
regular meeting of said City Council held on the 26th day of June, 1990, by the following vote:

AYES: COUNCILMEN: Dompe, Rodriguez, Crow, Rose, Mayor Carlsen
NOES: COUNCILMEN: None
ABSENT: COUNCILMEN: None

APPROVED:

ATTEST:



Mayor of the City of Newman



City Clerk of the City of Newman

I hereby certify that the foregoing is a full, correct and true copy of an ordinance passed by the City Council of the City of Newman, a Municipal Corporation of the County of Stanislaus, State of California, at a regular meeting held on June 26, 1990, and I further certify that said ordinance is in full force and has never been rescinded or modified.

DATED: 1990.

City Clerk

TABLE 1**CONSTITUENT LIMITS**

<u>Parameter (units)</u>	<u>Sample Location</u>	<u>Measurement Frequency</u>	<u>Sample Type³</u>
Flow (gpd)	See note ¹	Continuous	Meter ²
BOD (mg/L)	See note ¹	1/Week	24-h Composite
Electrical conductivity (micromho/cm)	See note ¹	1/Week	24-h Composite
pH (S.U.)	See note ¹	1/Week	Grab
Oil and grease	See note ¹	1/Month	24-h Composite
TSS (mg/L)	See note ¹	1/Month	24-h Composite
Arsenic (mg/L)	See note ¹	1/Year	24-h Composite
Cadmium (mg/L)	See note ¹	1/Year	24-h Composite
Calcium (mg/L)	See note ¹	1/Year	24-h Composite
Copper (mg/L)	See note ¹	1/Year	24-h Composite
Cyanide (mg/L)	See note ¹	1/Year	24-h Composite
Lead (mg/L)	See note ¹	1/Year	24-h Composite
Magnesium	See note ¹	1/Year	24-h Composite
Mercury (mg/L)	See note ¹	1/Year	24-h Composite
Nickel (mg/L)	See note ¹	1/Year	24-h Composite
Selenium (mg/L)	See note ¹	1/Year	24-h Composite
Silver (mg/L)	See note ¹	1/Year	24-h Composite
Sodium (mg/L)	See note ¹	1/Year	24-h Composite
Organic priority pollutants (EPA 624 and 625)	See note ¹	1 Time ⁽⁴⁾	24-h Composite

¹ [The permit writer needs to include a diagram or narrative description of sample location(s).]

² Daily flows are to be recorded from the permittee's flow meter.

³ Definitions of sample types can be found in Part 6 Section A.10 of this permit.

⁴ Screening for organic priority pollutants using EPA methods 624 and 625 is to be included in the initial Discharge Report. Regular monitoring for specific organic compounds may be required depending on the results of the initial screening.

Sewer System Management Plant (SSMP) – Operation and Maintenance Program

INTRODUCTION

A collection system needs to be properly operated and maintained. The Sewer System Management Plan (SSMP) requires that the following elements (and person or position responsible) of the municipality's operation and maintenance (O&M) program be addressed:

- Maintain an up-to-date map of the collection system.
- Perform routine O&M activities, including regularly scheduled maintenance and cleaning with more frequent maintenance and cleaning in known problem areas. The O&M activities should be listed within a system that tracks work orders and can assess the effectiveness of the program.
- Develop and implement short and long-term rehabilitation and replacement plans.
- Provide training on a regular basis for O&M staff.
- Keep an inventory of general and critical equipment and replacement parts.

The specific requirements of WDR Order No. 2006-003-DWQ with regard to the Operation and Maintenance Program are described below.

A. UP-TO-DATE MAP

1. REGULATORY REQUIREMENT

“Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities”

2. CITY OF NEWMAN'S MAP

The City currently has two hardcopy maps, one showing the sanitary sewer system and the other showing the City's storm water infrastructure. Each O&M staff member has a copy of the sanitary sewer system and storm water system map in their maintenance vehicle. The City also has a GIS database of the sanitary sewer infrastructure and is developing a GIS database of the storm drain system. This database will allow the City to easily maintain an up-to-date map of the sewer system showing manholes, gravity sewers, force mains, pump stations, and storm water collection system.

B. ROUTINE PREVENTIVE OPERATION AND MAINTENANCE ACTIVITIES

1. REGULATORY REQUIREMENT

“Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders”

2. CITY OF NEWMAN’S ROUTINE PREVENTIVE OPERATION AND MAINTENANCE ACTIVITIES

As presented in Attachment 4-1, the City of Newman has a comprehensive Preventative Maintenance (PM) program which documents routine operation and maintenance activities. This program includes a system that schedules preventative maintenance activities and also targets known problem areas, which need more frequent maintenance. The City has pump station and manhole maintenance checklists and an established means to acquire funding, by 2011, to hire a subcontractor to perform CCTV inspection on all sewer lines in the city over 20 years old. These elements have been compiled into a formal PM program, which also includes written instructions for managing and tracking operation and maintenance practices, and Standard Operating Procedures (SOPs) for sewer system appurtenances.

C. REHABILITATION AND REPLACEMENT PLAN

1. REGULATORY REQUIREMENT

“Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockage due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-and long-term plans plus a schedule for developing the funds needed for the capital improvement plan”

2. CITY OF NEWMAN’S REHABILITATION AND REPLACEMENT PLAN

The City recently completed a Wastewater Collection System Master Plan, which outlines short- and long-term improvements to increase the capacity of the existing system. In addition, the City has identified improvement projects that address the condition of the system. City staff has prioritized these projects and completed a capital improvement plan which includes funding mechanisms such as rate increases, capital sewer fees, and CBDG funding. The City of Newman’s Rehabilitation and Replacement Plan is described in Attachment 4-2.

D. TRAINING

1. REGULATORY REQUIREMENT

“Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained”

2. CITY OF NEWMAN’S TRAINING

The City has a weekly training program. This training program, outlined in Attachment 4-3, has been updated to include annual training goals and methods for assessing the effectiveness of the training programs. The City’s training program applies to operation and maintenance staff and any contractors who perform O&M activities on the system.

E. EQUIPMENT INVENTORY

1. REGULATORY REQUIREMENT

“Provide equipment and replacement part inventories, including identification of critical replacement parts”

2. CITY OF NEWMAN’S EQUIPMENT INVENTORY

This portion of the SSMP requirements does not specifically apply to the City of Newman. The critical parts identified within the City’s collection system are components of the City’s lift stations. The lift stations contain either Smith and Loveless or Flygt pumps and are maintained by manufacture representatives. If a lift station needs repair, a representative is on-call 24 hours a day to provide service. Each vendor has access to all needed replacement parts and is qualified to perform any repair. The City’s operation and maintenance staff members are not confined space training and, therefore, cannot perform any major pump repairs. All critical and replacement parts for the City’s lift stations are provided by the lift station manufacture and no inventories of major replacement parts are kept on-site by the City. Parts needed for minor lift station maintenance such as: tubing, solenoids, gaskets and electrodes are kept on-site and stocked based on each lift station’s maintenance records.

Attachment 4-1

City of Newman
Routine Preventive Operation and Maintenance Activities

Routine Preventive Operation and Maintenance Activities

A formalized scheduling system for routine operation and maintenance (O&M) activities for the City of Newman's wastewater collection system is not necessary. As a general practice, the City's collection system O&M staff inspects each of the City's lift stations seven days a week; inspects collection system manholes in the older portions of the system and "hot spot" areas every Thursday; and performs mainline flushing when necessary. These routine inspections are performed in the same manner week after week.

COLLECTION SYSTEM

Every Thursday, the City's O&M staff inspects manholes in the older portions of the city and "hot spot" areas as identified by maintenance records, input from residents and lift station flow readings. Each manhole lid is removed and the O&M staff observes the flow rate, water level and structural condition of the manhole. If the flow rate seems too slow or the water level is increasing, the O&M staff checks downstream manholes for possible blockages. If a blockage is found, the inspecting staff members immediately flush the line and inspect downstream manholes to ensure the blockage has been removed. Standard Operating Procedure (SOP) for Sewer Cleaning is discussed in Appendix A-1.

LIFT STATION

In the morning, seven days a week, each of the City's lift stations are inspected to ensure that each pump is operating properly and the wastewater in the wet well is within expected levels (see Appendix A-3 for a list of routine of inspections). If a lift station requires minor maintenance, O&M staff will perform the maintenance as described in the City's Standard Operating Procedure (SOP) for Lift Station Maintenance (Appendix A-2). If a lift station requires repair or major service, the City contacts the lift station vendor representative, who is on-call 24 hours a day.

"PROBLEM AREAS" OPERATION AND MAINTENANCE ACTIVITIES

A formalized procedure for scheduling O&M activities for "problem areas" is not necessary. The City of Newman's O&M staff inspects all of the system's lift stations seven days a week and inspects manholes in the older and "hot spot" areas of the system every Thursday. The "problem areas" are known and inspected every week. If a problem, such as a blockage, is discovered by the O&M staff, the staff members will immediately begin flushing the line. Once the blockage has been removed, the maintenance activity will be reported on the City of Newman Sewer Machine Log form (Appendix B-2) and entered into the City's IWORQ Database. "Problem Areas" can be queried and reports generated by the IWORQ Database. The City uses IWORQ to summarize the most problematic areas of the collection system which then become prioritized into the City's five-year Capital Improvement Plan (Appendix C).

City of Newman Rehabilitation and Replacement Plan

Rehabilitation and Replacement Plan

SYSTEM DEFICIENCIES

SEWER MAINS - CAPACITY

The City of Newman recently completed a wastewater collection system master plan which analyzed the system's ability to accommodate existing and future developments at a design storm condition. A dynamic hydraulic model was used to assess the capacity of all sewer mains with a diameter of 8-inches and larger under a 10-year, 6-hour design storm for the following development phases: 1) existing development, 2) build-out of the City Limits, and 3) near-term developments. Additional build-out of the Primary and Secondary Spheres of Influence (SOIs) were not modeled within the existing sewer system infrastructure. Complete build-out of the Primary and Secondary SOIs would exceed the available capacity of the existing infrastructure, so new sewer trunks were recommended to provide conveyance for flows from these developments. Refer to SSMP Element 8, Attachment 8-1, for more detailed information.

During modeling of these various development scenarios, capacity-related bottlenecks were discovered and a summary of recommended system improvements included:

- Existing Development – Upsize pipeline from manhole D-1303 to manhole D-1302 from 6 to 8-inch.
- Build-out of City Limits – Install a 12-inch flap gate on the Yancey Pump Station overflow/relief line at manhole A-103.
- Near-term Developments – Upsize pipelines from manhole D-1300 to D-100 from 12 to 15-inch.

SEWER MAINS - CONDITION

In addition to capacity-related deficiencies, the City's collection system has condition-related deficiencies. Based on routine inspection by operation and maintenance (O&M) staff and reports generated by the I-WORQ Database, the City prioritizes sewer lines in need of repair. Generally, these segments of the collection system are older portions of the system which are deteriorating and have alignment defects such as sags.

Starting in 1995, the City required all new sewer main and lateral installation to be pressure tested, ball and mandrel inspected and visually inspected using closed-circuit television (CCTV) equipment before acceptance of newly installed infrastructure. Besides these new installation inspection requirements, the City does not currently perform CCTV inspection on the existing system or have a standard system for rating and assigning system defects. The determination to repair a sewer line is based on the frequency of I-WORQ reports generated for a particular sewer line and any input from visual inspections by O&M staff. The City is in the process of budgeting

funds to start an annual CCTV inspection program targeted at older and “problem areas” of the system. This inspection program is anticipated to begin in 2011. To accompany CCTV inspection, a sewer line defect and rating system is being developed. An example of the sewer line and manhole defect and rating systems are presented in Tables 1 and 2.

Table 1
Sewer Line Defect Coding and Condition Rating

Defect	Rating
CP – Cracked Pipe	3 = Repair; High Priority
GR – Grease	2 = Repair; Low Priority
IF – Infiltration	1 = Defect exists, but does not require repair
RJ – Root at Joint	
RS – Root at Service	
SG – Sag	
DB – Debris	
OJ – Offset Joint	
PT – Protruding Lateral	

Table 2
Manhole Defect Coding and Condition Rating

Defect	Rating
OF – Offset Frame	3 = Repair; High Priority
RM – Root Manhole	2 = Repair; Low Priority
CW – Channel Work	1 = Defect exists, but does not require repair

Once CCTV inspections begin in 2011, the defect coding and rating systems in Tables 1 and 2 will be used to determine priority of condition-related issues within the collection system.

LIFT STATIONS - CAPACITY

None of the City’s existing lift stations showed any capacity-related deficiencies during modeling of existing and future developments.

LIFT STATIONS - CONDITION

As described in Attachment 4-1 (City of Newman Preventive Operation and Maintenance Activities), City staff visually inspects every lift station seven days a week. General maintenance, as described in the Standard Maintenance Procedure (SMP) for Lift Station Maintenance (Appendix A-3), is performed on an as-needed basis by City staff. Any major repair work needed for a lift station is performed by the station vendor representative. Based on City lift station inspection records, no condition-related issues existing in any of the City’s lift stations.

PRIORITIZATION OF SYSTEM DEFICIENCIES

SEWER MAINS

Sewer mainline deficiencies are prioritized based on most immediate need of repair. The capacity-related deficiencies outlined in the master plan are recommended for existing and future developments. The only recommended improvement for the existing level of development is the upsizing of the pipe line from manhole D-1303 to D-1302. In addition, this recommended improvement is based on the occurrence of a 10-year, 6-hour design storm. As development expands, the recommended improvements for the various development scenarios will be scheduled in the City's Five Year Capital Improvement Program.

The condition-related deficiencies are prioritized based on O&M staff inspection and maintenance records which are stored in the City's IWORQ Database. When developing the City's Five Year Capital Improvement Program, the Collection System Supervisor evaluates the most frequently flushed lines and generates a report from IWORQ.

Prioritization of both capacity and condition-related deficiencies are summarized in the City of Newman's Five Year Capital Improvement Program (Appendix C).

LIFT STATIONS

No capacity or condition-related deficiencies are currently present. If condition-related deficiencies are discovered, the City will assign prioritization based on weekly inspection records and reports generated from the IWORQ database. The age, capacity and location of each lift station will also be considered when prioritizing repairs.

REHABILITATION AND REPLACEMENT PROJECTS

SHORT-TERM PROJECTS

The City of Newman recently replaced several blocks of old, deteriorated segments of sewer lines in the downtown portion of the City. These segments included:

Table 1
Recently Completed Sewer Line Replacement Projects

Project	Location	Improvement
1A	Along Main Street between Mariposa Street and Kern Street	New 8-inch VCP
1B	Along P Street between Mariposa Street and Kern Street	New 6-inch VCP
2A	Along S Street between Yolo Street and Mariposa Street	New 6-inch VCP
2B	Along T Street between Yolo Street and Mariposa Street	New 6-inch VCP
3A	Along P Street between Fresno Street and Merced Street	New 6-inch VCP
3B	Along Q Street between Fresno Street and Merced Street	New 6-inch VCP
4A	Along P Street between Stanislaus Street and Inyo Avenue	New 6-inch VCP
4B	Along Q Street between Stanislaus Street and Inyo Avenue	New 6-inch VCP

The next areas scheduled for replacement include:

Table 2
Sewer Line Replacement Projects Scheduled for 2009

Project	Location	Improvement
5A	Along L Street between Driskell Avenue and Tulare Street	New 6-inch VCP
5B	Along M Street between Driskell Avenue and Tulare Street	New 6-inch VCP
6A	Along L Street between Tulare Street and Fresno Street	New 6-inch VCP
6B	Along M Street between Tulare Street and Fresno Street	New 6-inch VCP

In addition to sewer line improvements, the City is planning on enhancing their lift stations by installing a Supervisory Control and Data Acquisition (SCADA) system. The SCADA system will monitor station operations such as: wet well levels, pump on/off levels and run times. If an irregularity in normal operation is detected, the SCADA system will notify City staff. Having this early-warning alert system will provide an additional safeguard against SSOs related to lift station failure. As shown in the City of Newman Five Year Capital Improvement Program (Appendix C), installation of the SCADA system is scheduled for the 2009/2010 fiscal year.

LONG-TERM PROJECTS

In addition to the short-term projects described above, the City of Newman has outlined upcoming improvement projects in their Five Year Capital Improvement Program (Appendix C). This program outlines each improvement project for the next five years, including the schedule, cost and funding source for each project.

Training Program

TRAINING PROGRAM

The City of Newman's training program includes weekly safety meetings, vendor training on routine lift station inspection (as described Appendix A-3, City of Newman Standard Maintenance Procedure for Lift Station Inspection) and on-the-job training. On-the-job training includes manhole inspection, sewer line flushing, traffic control, and proper response to sanitary sewer overflows (SSOs). All operation and maintenance (O&M) staff are cross-trained in performing each of these maintenance activities.

ANNUAL TRAINING GOALS

The City has recently adopted a set of annual training goals for each member of the collection system operation and maintenance (O&M) staff, and these goals include:

- 40 hours of Safety Training.
- 10 hours of vendor training for routine lift station inspection and maintenance.
- 20 hours of Overflow Emergency Response Training.
- 12 hours of Continuing Education Units (CEU) for O&M staff who maintain certifications.
- New Employees – 3 months of on-the-job training before allowed to perform maintenance activities unassisted.

MEASURING EFFECTIVENESS

The effectiveness of each training goal will be measured to ensure compliance, and provide input to expand or reduce the City's training goals.

- Safety Training effectiveness will be measured by the number of accidents reported during each year.
- Lift station inspection and maintenance training will be measured by tracking the frequency and duration of lift station downtime.
- Overflow Emergency Response Training will be measured by documenting the response time and cleanup time for each SSO.

City of Newman
Standard Operating Procedure (SOP) for Sewer Cleaning

Standard Operating Procedure (SOP) for Sewer Cleaning

PURPOSE

The Standard Operating Procedure (SOP) for cleaning of gravity sewer lines is to provide a procedure for maintenance staff to follow to ensure proper and effective cleaning of lines.

REQUIRED EQUIPMENT AND TOOLS

1. Personal protective equipment (Tyvek^(R) suit, hardhat, steel toed boots, gloves, eye/face protection, hearing protection)
2. Proper safety cones, flagging, signs or other traffic control devices
3. Combination flushing
4. Cleaning nozzle
5. Manhole hook or pick-axe
6. Measuring wheel
7. Disinfectant

REQUIRED FORMS

1. City of Newman Public Works Work Order (Appendix B-1)
2. City of Newman Sewer Machine Log (Appendix B-2)

PROCEDURES OF SEWER CLEANING CREW

PRIOR TO ARRIVING AT THE JOBSITE

1. Plan sewer cleaning work to start in the downstream area and move upstream.
2. If possible, plan to clean each sewer segment from the downstream manhole.
3. Fill the water tank on the flushing truck.

AT THE JOBSITE

1. Wear proper personnel protective equipment.
2. Determine and confirm the location of upstream and downstream manholes for each segment cleaned.

3. Set up proper traffic control by placing traffic signs, flags, cones and other traffic control devices.
4. Move the flushing truck into the traffic control area and position the hose reel over the manhole.
5. Install the cleaning nozzle on the hose.

CLEANING OPERATION

1. Start the auxiliary engine.
2. Use a guide or roller to lower the hose into the manhole and direct into the sewer line to be cleaned.
3. Start the high pressure pump and set the engine speed to provide adequate pressure for the sewer cleaning operation.
4. Open the water valve and allow the hose to proceed up the sewer line.
5. Allow the hose to proceed to blockage.
6. Observe the nature and quantity of debris pulled back into the manhole.
7. If there is little or no debris, allow the hose to proceed to the upstream manhole.
8. If there is moderate to heavy debris, clean the remaining portion of the sewer in steps.
9. Open the upstream manhole and verify that the nozzle reached or passed the manhole.
10. The sewer line has been adequately cleaned when successive passes with a cleaning nozzle do not produce any additional debris.
11. The dislodged debris is flushed downstream.
12. Flow is checked upstream and downstream of the blockage.
13. Rewind the hose on the reel.
14. Clean the mating surface and close the manhole. Ensure that the manhole is properly seated.
15. Enter the results on the City of Newman Sewer Machine Log.
16. Move the cleaning unit and collect and stow the traffic control equipment.
17. Proceed to the next portion of sewer line to clean.
18. Return to the site approximately 1 hour after cleaning. Inspect the sewer line for debris and check up and downstream flow.

AT THE END OF THE INSPECTION

1. Inspect the equipment and tools for problems.
2. Report any problems with equipment, tools, or portions of sewers that were cleaned during the day to the Supervisor.
3. Turn in all completed City of Newman Public Works Work Orders and City of Newman Sewer Machine Log forms to the Supervisor at the end of the daily inspection.

City of Newman
Standard Operating Procedure (SOP) for Lift Station
Inspection

Standard Operating Procedure (SOP) for Lift Station Inspection

PURPOSE

The Standard Operating Procedure (SOP) for lift station inspection is to provide a procedure for maintenance staff to follow to ensure consistent and complete inspection of each of the City's lift stations.

REQUIRED EQUIPMENT AND TOOLS

1. Proper safety cones, flagging, signs or other traffic control devices
2. Voltage-amp meter
3. Oil and lubricant
4. Miscellaneous sockets and wrenches
5. Personal protective equipment

REQUIRED FORMS

1. City of Newman Wet Well Mounted Pump Station Maintenance Record (Appendix B-3)
2. City of Newman Standard Maintenance Procedure (SMP) for Lift Station Inspection (Appendix A-3)

PRIOR TO ARRIVING TO A LIFT STATION

1. Check vehicle for all required equipment and tools.

AT A LIFT STATION

1. Check lift station for vandalism and any signs of overflows.

INSPECTION OPERATION (above ground pumps only)

1. Check wet well levels.
2. Check pumps for excessive heat and listen for any strange noises.
3. Check pumps for plugging.

4. If pumps are plugged, turn off pump and unplug. May need to change the pump's rotation to unplug.
5. If pumps are running properly, check that gate valve is open.
6. Fill out lift station inspection form.

AFTER INSPECTION

1. Turn in all completed forms to the Supervisor at the end of the daily inspection.

City of Newman
Standard Maintenance Procedure (SMP) for Lift Station
Inspection

Standard Maintenance Procedure (SMP) for Lift Station Inspection

- Inspect pump packing
- Inspect pump seals
- Inspect pump discharge pressure
- Inspect pump bearings
- Check pump motor amperage
- Check pump motor voltage
- Check oil levels and lubrication
- Check pumps are running without excessive heat or vibration
- Check wet well levels are properly set
- Clean wet well and electric control boxes
- Once a year, paint pump and attachments

Appendix B-1

**City of Newman Public Works
Work Order**

City of Newman
Public Works
Work Order

Start Date _____ Location: _____ Work Order Description _____

End Date _____

Employee Name	Time In/Out	Total Time

Work Description:

Materials Used:

**CITY OF NEWMAN
SEWER MACHINE LOG**

MONTH _____

Date	Time In	Time Out	Location	Problem	Work Performed	Initials

***PLEASE NOTE: IF THE SEWER OVERFLOWED, PLEASE FILL OUT THE OVERFLOW REPORT**

**City of Newman
Wet Well Mounted Pump Station
Maintenance Record**

WET WELL MOUNTED PUMP STATION

[illegible]

WET WELL MOUNTED PUMP STATION

[illegible]

WET WELL MOUNTED PUMP STATION

[illegible]

WET WELL MOUNTED PUMP STATION

[illegible]

WET WELL MOUNTED PUMP STATION

[illegible]

WET WELL MOUNTED PUMP STATION

[illegible]

**CITY OF NEWMAN
FIVE YEAR CAPITAL IMPROVEMENT PROGRAM**

Project Number	PROJECT	1	2	3	4	5
		2009-10	2010-11	2011-12	2012-13	2013-14
ADMINISTRATIVE FACILITIES						
	General Plan Update					
AMINISTRATIVE FACILITIES TOTAL		0	0	0	0	0

FIRE DEPARTMENT (Fund 10-22)						
FIRE DEPARTMENT TOTAL		0	0	0	0	0

POLICE DEPARTMENT (Fund 10-21)						
POLICE DEPARTMENT TOTAL		0	0	0	0	0

RECREATION (Fund 10-45)						
RECREATION TOTAL		0	0	0	0	0

GOVERNMENT BUILDING (Fund 10-07)						
	LJ Newman Memorial Building Flooring					
	LJ Newman Memorial Building Bathroom Renovation					
GOVERNMENT BUILDING TOTAL		0	0	0	0	0

STREET MAINTENANCE (Fund 10-33)						
	CNG Flat Bed Dump Truck (CMAQ)	65,000				
	CNG Lift Truck (CMAQ)		125,000			
	2009 Street Maintenance Project	400,000				
	2010 Street Repair Project		30,000			
	2011 FOG Seal Program			50,000		
	Reconstruct Canal School Road			300,000		
	Reconstruct R St. & Stephans St.				500,000	
	2013 Street Repair Project					40,000
STREET MAINTENANCE TOTAL		465,000	155,000	350,000	500,000	40,000

PARKS (Fund 10-44)						
	Howard B. Hill Park Phase 1	200,000				
	Howard B. Hill Park Phase 2					
PARKS TOTAL		200,000	0	0	0	0

CORPORATION YARD (Fund 10-46)						
CORPORATION YARD TOTAL		0	0	0	0	0

SEWER (Fund 60-50)						
	WWTP Effluent Storage Basin Project	800,000				
	WWTP Sludge Removal AB #2	85,000	85,000			
	Additional Irrigation Land at WWTP		3,500,000			
	Develop Additional Farmland			450,000		
	Aeration Basin #3 (Design & Construction)		250,000	4,000,000		
	SCADA System for Lift Stations	100,000				
	Upsize Pipelines on Prince Rd. & R/R Sewer Lines	50,000				
	Upsize Pipelines - Manhole D-1300 to D-100			875,000		
	Replace AB #2 Aerators				65,000	
	Hay Barn/Equipment Storage				48,000	
	Groundwater Monitoring Program	32,000	24,000	24,000	24,000	24,000
	Collection System Assessment Study		40,000			
	Waste Water Master Plan Update				30,000	
	Sewer Rate & Connection Fee Study		50,000			
SEWER TOTAL		1,067,000	3,949,000	5,349,000	167,000	24,000

Storm Drain (Fund)						
	Storm Drain Rate Study	25,000				

	Annual Storm Drain Repairs		25,000	25,000	25,000	25,000
	Storm Drain Master Plan Update				25,000	
	Northside Drain Design					750,000
	Southside Drain Design					1,000,000
	Northeast Industrial Drain Design					250,000
	NPDES Storm Drain Permit		25,000			
STORM DRAIN TOTAL		25,000	50,000	25,000	50,000	2,025,000

Water (Fund 63-56)						
	1,700 gpm Well (Test Hole, Design, & Construction)	200,000	2,000,000		200,000	2,000,000
	1.1 MG Tank and 6,000 gpm Booster Pump Station		250,000	2,500,000		
	Strengthen & Replace Water Mains	50,000	50,000	50,000	50,000	50,000
	Water Rate & Connection Fee Study	40,000				
	Water Master Plan Update				30,000	
	Urban Water Management Plan	70,000				
	Surface Water Rights Assessment/Study	25,000				
	Surface Water Rate Study		50,000			
	Surface Water Feasibility Study			50,000		
	Surface Water Pre-Design Report					75,000
WATER TOTAL		385,000	2,350,000	2,600,000	280,000	2,125,000

MISCELLANEOUS PROJECTS						
	Downtown Plaza Project Phase II	3,000,000				
	Downtown Plaza Project Phase III					
MISCELLANEOUS PROJECTS TOTAL		3,000,000	0	0	0	0

TOTAL ALL FUNDS		5,142,000	6,504,000	8,324,000	997,000	4,214,000
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Sewer System Management Plan (SSMP) – Design and Performance Provisions

INTRODUCTION

As specified in the requirements for a Sewer System Management Plan (SSMP), the design and performance provisions must identify minimum design and construction standards and specifications for the installation of new sewer systems, and for rehabilitation and repair of existing sewers. An effective program that ensures new sewers are properly designed and installed can minimize system deficiencies that could create or contribute to future overflows and/or operations and maintenance problems. Design criteria should include specifications such as pipe materials, minimum sizes, minimum cover, strength, minimum slope, trench and backfill, structure standards, flow factors, and other relevant parameters as necessary. Also, procedures and standards are required for inspecting and testing the installation of new sewers, lift stations, and other facilities and for rehabilitation and repair projects.

The specific requirements of WDR Order No. 2006-003-DWQ with regard to the Design and Performance Provisions are described below. The City of Newman's Design and Performance Provisions for sewer system appurtenances are defined in the City of Newman Design Standards, Section 6 - Sewer (Attachment 5-1).

A. DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS

1. REGULATORY REQUIREMENT

“Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems”

2. CITY OF NEWMAN'S DESIGN AND PERFORMANCE PROVISIONS

Design and construction standards and specifications for the installation of new gravity sanitary sewer mains, service laterals, manholes, lift stations, force mains, and grease interceptors are presented in the City of Newman's Design Standards, Section 6 – Sewer (Attachment 5-1). These standards and specifications are also used for rehabilitation of existing sewer system facilities. Instead of evaluating if a damaged sewer system component is to be rehabilitated or replaces, the City's standard practice is to replace the sewer system component.

B. PROCEDURES AND STANDARDS FOR INSPECTING AND TESTING

1. REGULATORY REQUIREMENT

“Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects”

2. CITY OF NEWMAN’S DESIGN AND PERFORMANCE PROVISIONS

The City of Newman’s Design Standards (Attachment 5-1) also mention procedures and standards for inspecting and testing sewer system components in Specifications 6.17 and 6.18. These inspection and testing standards also apply to replacement projects.

Attachment 5-1

City of Newman
Sewer System Design Standards

SECTION 6 - SEWER

SPECIFICATIONS:

6.1	GENERAL	6-1
6.2	DESIGN SUBMITTALS	6-1
6.3	DESIGN	6-1
6.4	PIPE FOR SEWER MAINS	6-4
6.5	SERVICES	6-4
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6.7	LIFT STATIONS	6-5
6.8	CONTROLS	6-6
6.9	DISCHARGE PIPING	6-7
6.10	FORCE MAINS	6-8
6.11	TRENCH EXCAVATION	6-8
6.12	WATER IN TRENCH	6-9
6.13	LAYING AND JOINTING OF PIPE	6-9
6.14	LATERAL CONNECTIONS	6-9
6.15	BACKFILL	6-10
6.16	CLEANING AND FLUSHING	6-11
6.17	INSPECTION	6-11
6.18	CLOSED CIRCUIT TV INSPECTION	6-11
6.19	GREASE TRAPS	6-12

STANDARD DETAILS:

6A	SANITARY SEWER MANHOLE
6B	SANITARY SEWER DROP MANHOLE
6C	TERMINAL MANHOLE
6D	PAMREX MANHOLE FRAME AND COVER
6E	SANITARY SEWER CLEANOUT
6F	4-INCH SEWER SERVICE
6G	4-INCH SERVICE CLEANOUT
6H	FLEXIBLE WALL PIPE BACKFILL
6I	RIGID WALL PIPE BACKFILL

SECTION 6

SEWER

6.1 GENERAL

These standards apply to all public sanitary sewer facilities designed for installation within a public right-of-way or public utility easement in the City. Except where specifically noted in these standards or as required as part of project approval, all sanitary sewer facilities installed on private property for private use and ownership shall be designed and constructed in accordance with the provisions of the Uniform Plumbing Code, as adopted by the City.

Sanitary sewer lines shall be designed in accordance with acceptable engineering principles, California OSHA Standards and State of California Title 22 requirements, and shall conform to City Standards. Storm water collection facilities shall not be connected to a sanitary sewer line.

6.2 DESIGN SUBMITTALS

Prior to submittal of Improvement Plans for the first stage of construction, a master sanitary sewer plan for the entire development shall be submitted to the City Engineer for review and approval. The plan shall include the following:

- A plan with a scale of 1" to 100' showing the proposed system, preliminary pipe sizes, tributary sub-areas and existing and future tributary areas outside the project area.
- Design flow at major junction points.
- A description and preliminary sketch of any pump stations. This information shall include number and size of pumps, wet well volumes and operating levels.

6.3 DESIGN

Unless specific sanitary sewer discharges are required or approved by the City, the following sewage discharges shall be used for design of residential developments:

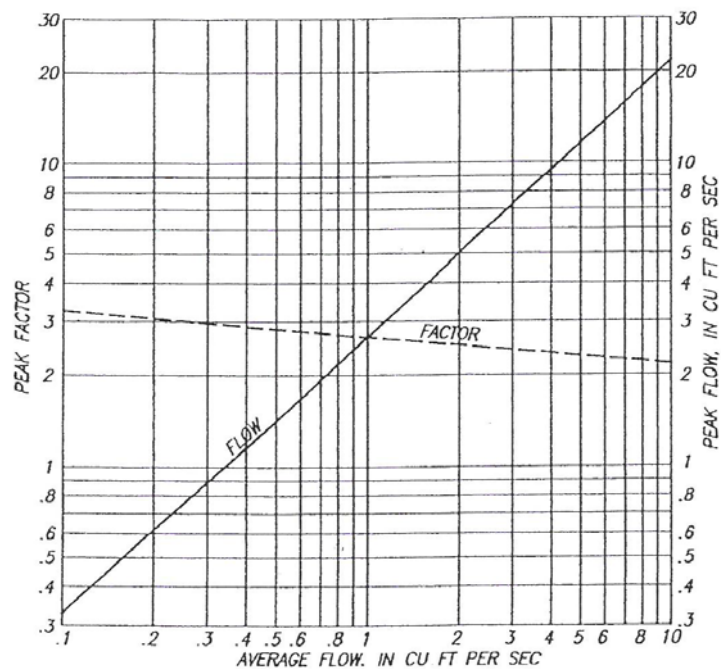
Residential Development	Average Flow
Single Family - Detached	300 gpud
Single Family - Attached	300 gpud
Multi Family - 2-4 Units	250 gpud
Multi Family - 5 Units or More	200 gpud

gpud = gallons per unit per day

For commercial, industrial and other types of development, anticipated sewage discharges shall be determined using typical discharge information from similar facilities.

Peak flow shall be obtained by multiplying the average flow by the peaking factor. The peaking factor is 3.0 for commercial flows and 2.0 for industrial flows.

Peaking factors for residential flow shall be selected from the following figure based upon total upstream average flow.



Sewer lines shall be sized to carry the peak design flow at less than 80% pipe capacity based on Manning's equation using an "n" value of 0.013.

Sanitary sewer calculations shall be submitted to the City Engineer for review.

The minimum size pipe used for gravity sanitary sewer mains shall be 6 inches in diameter.

Minimum slopes for sewer lines are as follows:

Diameter (inches)	Minimum Slope (ft/ft)
6	.0049
8	.0034
10	.0025
12	.0019
15	.0014
18	.0011
21	.0009
24	.0008

The above slopes are intended to provide velocities of not less than 2.0 feet per second when flowing half full based on Manning's equation utilizing an "n" value of 0.013.

If it is impractical to meet these velocity standards, the minimum slopes can be waived by the City Engineer.

Maximum velocity shall not exceed 10 feet per second. The slope of sewer lines between manholes shall be constant.

The minimum cover for sanitary sewer lines, unless otherwise approved by the City Engineer, shall be 3 feet 6 inches from the existing or planned final grade, whichever is lower, to the top of the sewer pipe. Where the preceding minimum cover cannot be provided, the City Engineer may require submittal of pipe load calculations and structural design.

When crossing a water main, it is desirable that the sewer line be installed below the water main with a minimum clearance of 12 inches. If the desired clearance cannot be maintained, the sewer line shall be designed in accordance with the requirements of the California Department of Health Services for separation between water mains and sanitary sewers. A minimum vertical clearance of at least 3 inches shall be maintained between a sewer line and a storm drain.

At points of convergence of sewer pipes of the same size, the invert of the incoming pipe shall be a minimum of 0.1 feet higher than the outflowing pipe.

(This 0.1 foot of elevation difference does not apply for laying of pipe through a manhole.) Under no circumstances shall the crown of the incoming pipe be below the crown of the outflowing pipe.

Sanitary sewer pipes shall be placed within street rights-of-way unless placement in an easement is specifically approved by the City Engineer. Alignment shall be parallel to the street centerline whenever possible.

Permanent easements shall be provided for all mains not located in public rights-of-way. The minimum easement width shall be 15 feet. Wider easements may be required by the Director for any lines over 12 inches in width or with an invert elevation 5 feet or greater below ground line. The line shall be located in the center of the easement unless otherwise required by the Director.

A minimum horizontal clearance of 10 feet shall be maintained between sewer lines and water mains, unless otherwise approved by the City Engineer. If the 10 foot separation is waived, the requirements of the California State Department of Health Services for separation between water mains and sanitary sewers shall be adhered to.

6.4

PIPE FOR SEWER MAINS

The following standard pipe materials shall be used for gravity sewer construction and shall conform to the latest edition of American Society of Testing Materials standards (ASTM Standards).

<u>Pipe Material</u>	<u>Standard</u>
PVC (Std. Wall)	ASTM D3034 (SDR 26)
Vitrified Clay	ASTM C700

6.5 SERVICES

In general, only one sanitary service is allowed per parcel served. Additional services may be approved by the City Engineer in order to eliminate the need for on-site lift stations or monitoring requirements.

The minimum diameter for services (sewer laterals) shall be 4 inches.

A sewer lateral installed concurrently with a main sewer shall be of the same type and class of pipe material as the sewer main with the following exception:

- Where cover or water main separation require otherwise.

Sewer laterals shall not be connected to mains that are greater than 12 inches in diameter or to mains with a depth of cover greater than 10 feet.

6.6 MANHOLES

Manholes shall be placed at the intersections of all sewer mains and/or laterals 6 inches in diameter or larger and at sections where changes in slope, pipe size, or pipe alignment occur. In addition, terminal manholes shall be installed at the upstream ends of all mains. (Temporary cleanouts may be utilized at the upstream ends of mains intended for extension if approved by the City Engineer.)

Manholes shall have a maximum spacing of 350 feet on 6 inch and 8 inch mains and 450 feet on mains 10 inches and larger.

Manholes shall have an inside diameter of 4 feet when the largest pipe entering or exiting the manhole is less than 24 inches in diameter. Where the nominal pipe diameter is 24 inches or larger, the inside diameter of the manhole shall be 5 feet.

Drop manholes shall be provided wherever the invert of the incoming pipe is higher than 2 feet above the invert of the out flowing pipe.

All manholes on mains 15 inches and larger shall be polyurethane lined. The lining material shall be a two component polyurethane or polyurethane elastomer with primer. Material shall be Polibrid 670-5 primer with 705 topcoat as manufactured by Polibrid Coatings, Inc. or equal. Minimum dry film thickness shall be 80 mils. Lining shall be installed per manufactures recommendations.

6.7

LIFT STATIONS

Lift stations shall be specifically approved by the City Engineer. Lift stations shall utilize submersible pumps and shall be provided with fencing, paved access as required in Section 7.16 of these standards and potable water for cleaning purposes.

The following criteria shall be used for design:

- Wet well capacity shall be adequate to provide a minimum pump cycle time of 10 minutes.
- Wet wells shall be reinforced concrete with a polyvinyl chloride liner mechanically locked into the wall of the pipe.
- A stainless steel debris basket with a stainless steel slide rail system shall be provided on the influent pipe.

- Aluminum access frames and covers with safety grate/cover such as the FLYGT Safe Hatch or Halliday Products Retro Grate shall be provided on the wet well.
- Two non-clog submersible FLYGT sewer pumps with slide rail systems and a mix flush system. (Slide rails shall be 2-inch schedule 40 steel pipe with stainless steel hardware.) Each pump shall be capable of pumping 100% of the design flowrate.
- A pole mounted yard light.

6.8 CONTROLS

Controls shall be mounted in a deadfront free standing self-contained NEMA 3R steel enclosure with a padlockable door. The control center and all electrical components shall bear the Underwriters Laboratory (UL) label.

An interior dead front aluminum door shall be provided with a continuous aircraft type hinge, shall contain cutouts for mounted equipment, and provide protection of personnel from live internal wiring. A breaker handle shall be provided on the main breaker and cutouts shall be provided on all other breakers to allow operation of breakers without entering the compartment. All control switches, indicator pilot lights, elapsed time meters, controller and other operational devices shall be mounted on the external surface of this door.

All circuit breakers shall be heavy-duty thermal magnetic or motor circuit protectors similar and equal to Square D type FAL. Each motor breaker shall be adequately sized to meet the pump motor operating characteristics and shall have a minimum interrupting capacity of 10,000 amps at 230 vac. Heavy-duty breakers shall individually control the control circuit and the duplex receptacle.

Circuit breakers shall be indicating type, providing "on-off-trip" positions of the operating handle. When the breaker is tripped automatically, the handle shall assume a middle position indicating "trip".

Thermal magnetic breakers shall be quick-make and quick-break on manual and automatic operation and have inverse time characteristics secured through the use of bimetallic tripping elements supplemented by a magnetic trip.

Breakers shall be designed so that an overload on one pole automatically trips and opens all legs.

A main circuit breaker sized for all pumps operating shall be installed in the enclosure.

Each pump shall be provided with the following:

- A motor starter that is NEMA rated sized for the pump horsepower per NEC. The overload heater shall be melting alloy type with protection provided in each power phase. The starter coil shall be replaceable from the front without removal of the starter from its installed position. Overload heaters shall be sized for the full amp draw of the pump motor.
- A three position H-O-A switch. The switch shall be NEMA 4X rated with 10 amp contacts. A position indicating legend plate shall be provided.
- A green run pilot indicator light.
- A run time meter. The meter shall operate on 120 vac, shall indicate in hours (6 digits) and tenths and shall be non-resettable.

A three phase power monitor that will protect the system from over and under voltage conditions shall be installed. The unit shall provide protection for reversed phasing and loss of a phase in addition to the over voltage and under voltage conditions.

The control center shall also have a thermostatic controlled condensation heater and a 120 volt, 15 amp, GFI receptacle.

A UL listed manual generator power transfer switch with a receptacle and closing plug shall be provided to allow connection of an emergency power generator. For 3 phase 240 volt service, the receptacle shall be a Hubbel Model 4100 B9W. For 3 phase 480 volt service, the receptacle shall be a CROUSE HINDS Model AR 2042 S22 M80 receptacle.

The controller shall be a Motor Protection Electronics, Model SC 2000. The water level sensor for pump control shall be as specified by the Director.

6.9 DISCHARGE PIPING

Discharge piping shall be ductile iron. Plastic piping may be allowed below ground, where approved by the City Engineer.

The design velocity in the discharge piping shall not exceed 8 feet per second. All internal piping in the pumping station should be properly anchored and restrained. Expansion joints and flanged connections shall be provided to facilitate dismantling and maintenance of the equipment.

Valving, couplings, and additional flanges as required for proper operation and maintenance of the pumping facilities shall be readily accessible.

6.10 FORCE MAINS

Force main piping shall be sized to provide a minimum velocity of 2 feet per second at the design flowrate of the lift station.

The following standard pipe materials shall be used for force main construction and shall conform to the latest edition of applicable AWWA Standards:

<u>Pipe Materials</u>	<u>Standard</u>
Ductile Iron	AWWA C151
W/Cement Mortar Lining & Seal (std thickness)	AWWA C104
Polyethylene Encasement	AWWA C105
PVC (iron pipe O.D.)	AWWA C900, DR 18 (Class 150) minimum

There are no slope requirements for force mains. However, inverts and pipe slopes shall be shown on the profile sheet of the Improvement Plans.

Force mains shall enter the gravity sewer system through a manhole. The invert of the force main shall be 1 foot above the flow line of the outflow pipe. Cleanouts or automatic air release valves as required by the City Engineer shall be provided.

6.11 TRENCH EXCAVATION

The Contractor shall, prior to beginning construction, obtain from the Division of Industrial Safety the permit required by California Labor Code, Section 6500, and pay any fee charged for such permit. In addition thereto, whenever the work under the Contract involves trench excavation 5 feet or more in depth, the Contractor shall submit for approval to a registered civil or structural engineer representing the City, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer. Nothing in this section shall be deemed to allow the use of shoring, sloping or other protective system less effective than that required by the Construction Safety Orders. Nothing in this section shall be construed to impose tort liability on the City, City Engineer, or any of their officers, agents or employees.

The pipe trench shall be dug with side walls sloped or otherwise supported in a safe manner in accordance with the Department of Industrial Relations, Division of Occupational Safety and Health Administration regulations pertaining to trenching.

Excavated material shall be placed on only one side of the trench unless otherwise directed. Separation distance between piles of excavated material and trench shall be consistent with the Construction Safety Orders.

The alignment and grade for the bottom of the trench shall be properly established before the trench is excavated and shall be approved by the City before the pipe is laid. Trenches shall be true to line and grade, and the bottom shall be even and free from all objectionable material.

6.12 WATER IN TRENCH

When water is encountered in the trench, it shall be removed by draining or by pumping. Should water get into the trench before the pipe is laid, the laying of pipe shall be postponed until the trench has dried sufficiently to provide a firm foundation for the pipe or else, the mud or softer material shall be removed and grade re-established by backfilling and compacting with suitable material as determined by the City.

6.13 LAYING AND JOINTING OF PIPE

Laying and jointing of pipe shall be in accordance with the manufacturer's recommendations and as approved by the City. Joint deflections shall not exceed 80% of the maximum recommendations of the manufacturer.

Where rubber gaskets are used for jointing pipe, a feeler gauge shall be used to check the position of the rubber gasket upon each closure. The interior of the pipe shall be cleared of all debris, and exposed pipe ends shall be closed by a suitable pipe plug when pipe laying is not in progress.

The pipe shall be laid on a trench bottom shaped to provide adequate support of the pipe except at coupling or bell holes. The use of prepared mounds to facilitate laying of the pipe is not approved.

Where pipe is to be encased or have concrete bedding, suitable concrete blocks shall be used to support the pipe in the proper location while placing concrete.

6.14 LATERAL CONNECTIONS

Where 4 inch laterals are constructed concurrently with main sewers, connections shall be made with a regularly manufactured wye branch. If approval is granted, a City approved wye or tee saddle shall be used. Saddles shall have a skirt to prevent the saddle from entering the sewer main beyond the inside surface of the main, and shall be located so the invert of the saddle branch is at the same elevation as the crown of the main sewer. A neat opening shall then be cut in the main sewer which shall form a snug fit with the spigot of the saddle. The saddle shall then be installed

and secured in accordance with the manufacturer's recommendations and, in addition, shall be attached to the main with a minimum of two stainless steel banding straps. The ends of the lateral shall be securely stopped with plugs or caps which can easily be removed without damage to the pipe end. The end of the lateral shall be marked by imprinting an "S" on the curb face over the sewer lateral. All laterals shall be installed prior to air testing.

Lateral connections to existing sewers shall be made at a manhole or wye branch.

Whenever cut-in wyes are utilized that require the usage of rubber couplings, the couplings shall utilize stainless steel shear rings to assist in maintaining proper alignment of the sewer

Where, in the opinion of the Director, it is impractical to connect or to install a wye branch, the connection shall be made by the use of a tee saddle as described above.

Any lateral larger than 4 inches in diameter shall be connected to the main at a manhole.

6.15 BACKFILL

After the sewers and appurtenances have been properly constructed and inspected, the trench shall be backfilled and compacted as shown on Std. Detail 6-H for flexible walled pipe and as shown on Std. Detail 6-I for rigid walled pipe.

Class I or sand backfill material, as applicable, shall be placed simultaneously on both sides of the pipe in maximum 8-inch lifts keeping the level the same on both sides of the pipe. Place backfill to 6 inches minimum above the top of the pipe. Compact each lift to 90% of maximum dry density in accordance with ASTM D 1557.

Subsequent backfill material, to the bottom of the aggregate base, shall be imported material as approved by the City Engineer. Material shall be placed in 8-inch maximum lifts and each lift compacted to the relative density shown on Std. Detail 6-H for flexible walled pipe and as shown on Std. Detail 6-I for rigid walled pipe.

Compaction tests shall be performed on each lift by a testing laboratory approved by the City. The testing laboratory shall be retained by the Developer and all testing expenses shall be paid by the Developer.

6.16 CLEANING AND FLUSHING

After all backfilling is completed and manhole frames and covers set, but prior to placement of paving material, the Contractor shall clean and flush all sanitary sewer mains.

6.17 INSPECTION

PVC sewer pipe shall be tested after cleaning and flushing using a mandrel or other approved testing device. Maximum deflection shall not exceed 5% of the average inside diameter of the pipe.

Any over-deflected pipe shall be re-laid.

Mandrels shall be rigid, nonadjustable, odd-numbering-leg (9 legs minimum), having an effective length not less than its nominal diameter. The minimum diameter of the mandrel at any point along its full length shall be as follows:

<u>Pipe Material</u>	<u>Nominal Size (Inches)</u>	<u>Minimum Mandrel Diameter (Inches)</u>
PVC – ASTM D3034 (SDR26)	6	5.33
	8	7.11
	10	8.87
	12	10.55
	15	12.90

Mandrels shall be fabricated from steel, fitted with pulling rings at each end, and stamped or engraved on some segment, other than the runner, with the pipe material, specifications, nominal size and mandrel O.D.

All sanitary sewer lines shall be pressure tested by a low-pressure air test. Each section of PVC pipe shall be tested in accordance with UNI-B-6. VCP shall be tested in accordance with ASTM C828. Any section of sewer pipe failing the air test shall be repaired and retested until leakage is reduced to acceptable leakage.

6.18 CLOSED CIRCUIT TV INSPECTION

Prior to placing the final street surfacing, the Contractor, will inspect all new sewer systems with a closed circuit television system. This will be done after the pipe has been installed true to the prescribed lines and grades, the trench backfilled and compacted, the manhole and cleanout covers set to proper grade, the roadway subgrade compacted, aggregate subbases and bases placed and compacted, and the sewer system cleaned of all debris.

At the start of each sanitary sewer section, the Contractor shall record the manhole location by street intersections the inspection is beginning and ending at. This information shall appear in typewritten letters on the videotape. A gauge shall be attached to and dragged behind the camera to indicate the depth of any standing water within the line. The gauge shall have a diameter of 10% of the pipe diameter being televised.

Pulling of the camera shall be stopped and locations recorded in typewritten letters on the video tape at the following locations:

- The beginning and ending locations of all areas where the depth of standing water exceeds 10% of the pipe diameter.
- All wye locations.
- Any problem areas.

Camera pulling speed shall not exceed 100 ft. per minute.

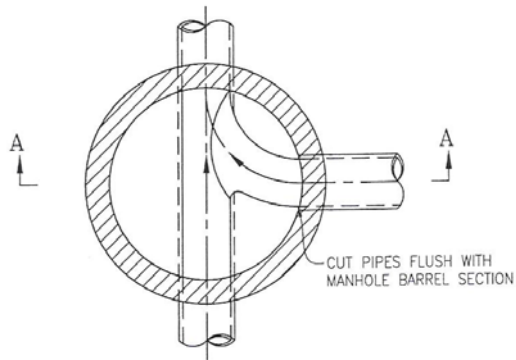
Copies of the videos shall be delivered to the Director for his review. The Contractor shall make all necessary repairs and corrections to the pipeline as required by the Director prior to paving.

6.19 GREASE INTERCEPTORS

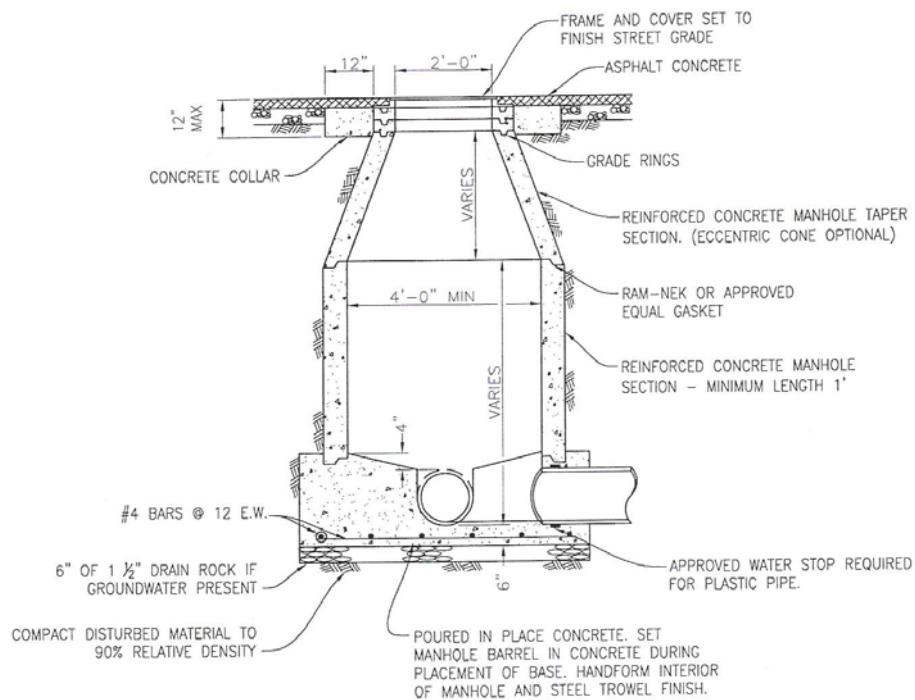
Grease interceptors shall be constructed by the Developer on private property on the sewer service lateral for any facility whose operation will result in oil, grease, sand or other solids being discharged into the City's sanitary sewer system. (Interceptors or provisions to install future interceptors on all commercial/industrial shell buildings are also required.)

Interceptors shall conform to Section 708 and 711 of the Uniform Plumbing Code and Standard Detail 6-J. Interceptors shall be constructed outside the building where they can be easily inspected for proper operation by the City.

For additional information regarding specific requirements of grease interceptor, contact the Director.



PLAN



SECTION "A-A"

CITY OF NEWMAN IMPROVEMENT STANDARDS

SANITARY SEWER MANHOLE

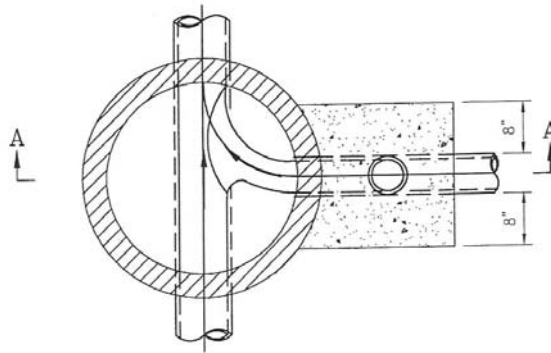


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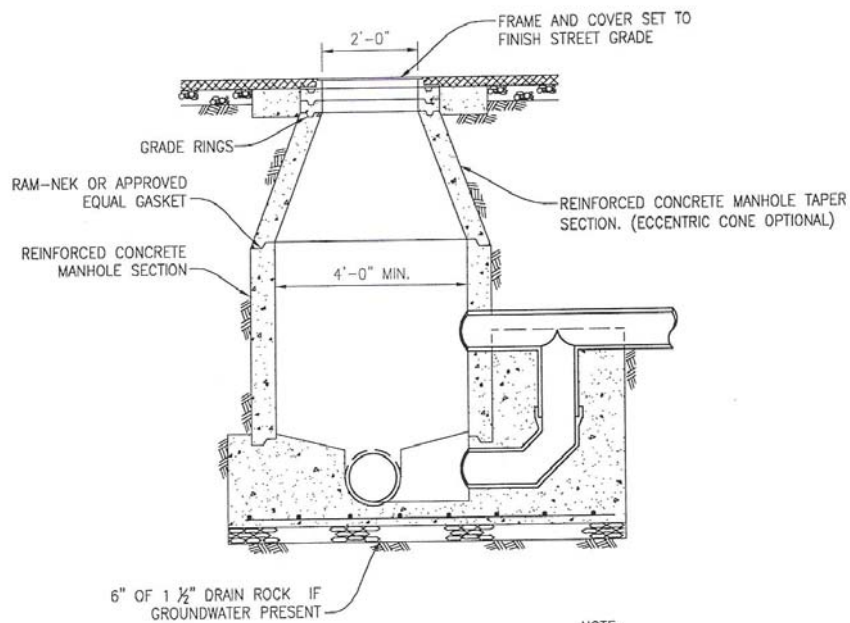
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STD. DETAIL

6 - A



PLAN



SECTION "A-A"

NOTE:
SEE STD. DETAIL 6-A FOR
ADDITIONAL INFORMATION

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CITY OF NEWMAN IMPROVEMENT STANDARDS

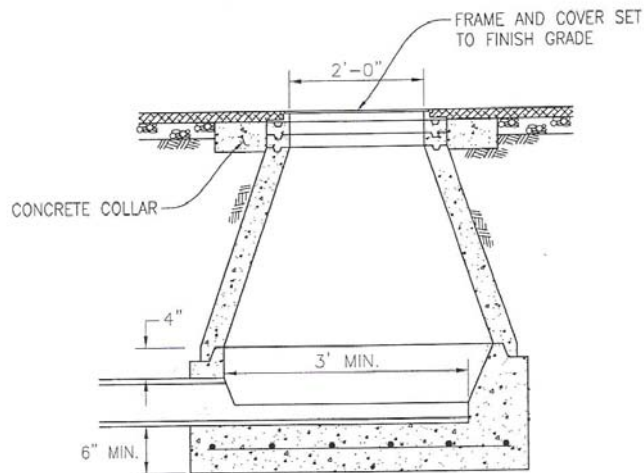
SANITARY SEWER DROP MANHOLE

APPROVED BY:

DATE:

STD. DETAIL

6 - B



MANHOLE SECTION

NOTE:
SEE STD. DETAIL 6-A FOR
ADDITIONAL INFORMATION

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CITY OF NEWMAN IMPROVEMENT STANDARDS

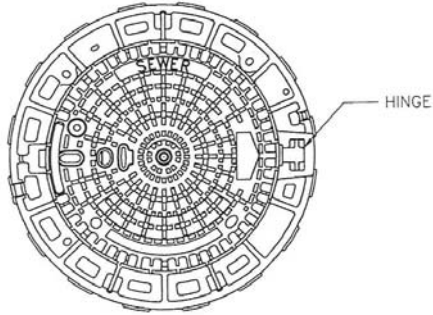
TERMINAL MANHOLE

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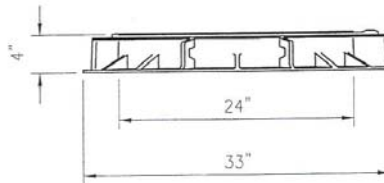
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STD. DETAIL

6 - C



PLAN



ELEVATION

NOTES:

1. CERTAINTED PAMREX MANHOLE FRAME AND COVER SHALL BE UTILIZED.
MINIMUM WEIGHT OF DUCTILE IRON FRAME AND COVER 195 LBS.

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CITY OF NEWMAN IMPROVEMENT STANDARDS

PAMREX MANHOLE FRAME AND COVER

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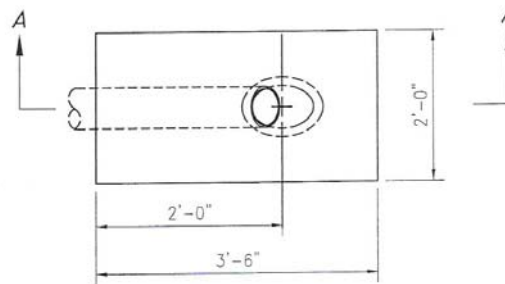
STD. DETAIL

6 - D

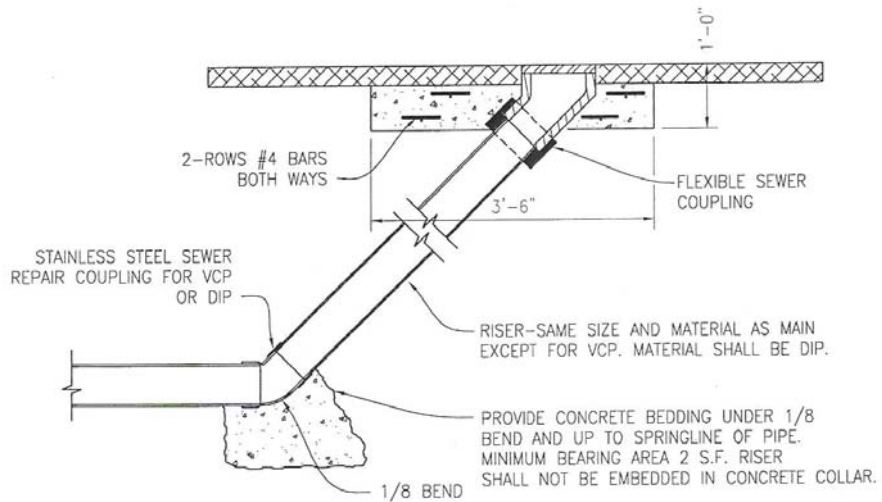
CASTING FRAME AND COVER

6" SOUTH BAY FOUNDRY
NO. SBF 1248 OR EQUAL.

8" SOUTH BAY FOUNDRY
NO. SBF 1247 OR EQUAL.



PLAN



SECTION "A-A"

CITY OF NEWMAN IMPROVEMENT STANDARDS



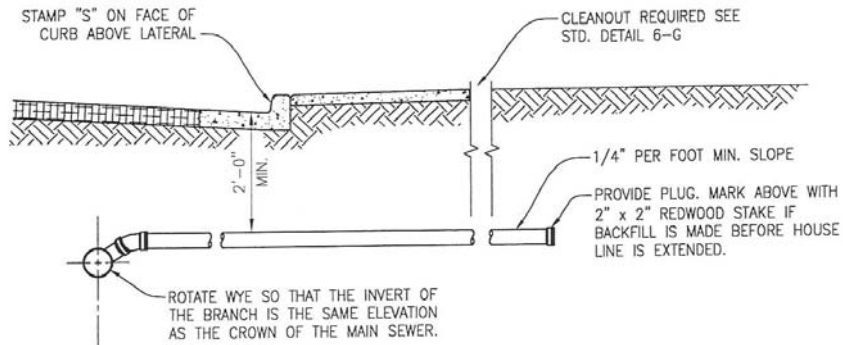
SANITARY SEWER CLEANOUT

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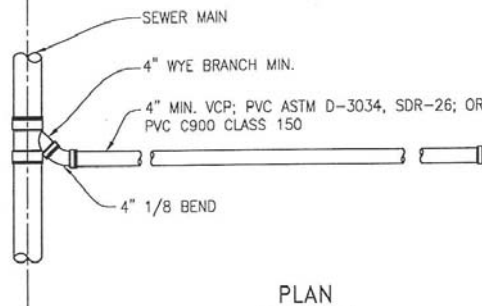
DATE:

STD. DETAIL

6 - E



PROFILE



PLAN

NOTES:

1. LATERALS SHALL HAVE SAME BEDDING & BACKFILL AS SEWER MAIN. TRENCH WIDTH FOR 4-INCH OR SMALLER LINES SHALL BE SUFFICIENT TO ALLOW MECHANICAL COMPACTION OF BACKFILL AROUND CONDUIT.
2. SEWER SERVICE SHALL HAVE A MINIMUM OF 2 FEET COVER AT PROPERTY LINE WHENEVER LATERAL DEPTH AND SERVICE SLOPE OF 1/4 INCH PER FOOT (MIN.) PERMIT. SERVICE SHALL BE DEEP ENOUGH TO SERVE ADJACENT PROPERTY.
3. WHEN THE LATERAL SEWER DEPTH IS SUCH THAT 2 FEET COVER AT PROPERTY LINE CANNOT BE MET, THE LATERAL MUST BE ENCASED IN CONCRETE IN THE TRAVELED RIGHT OF WAY OR PVC PIPE MEETING THE REQUIREMENTS OF AWWA C900 CLASS 150 SHALL BE USED.

CITY OF NEWMAN IMPROVEMENT STANDARDS

4-INCH SEWER SERVICE



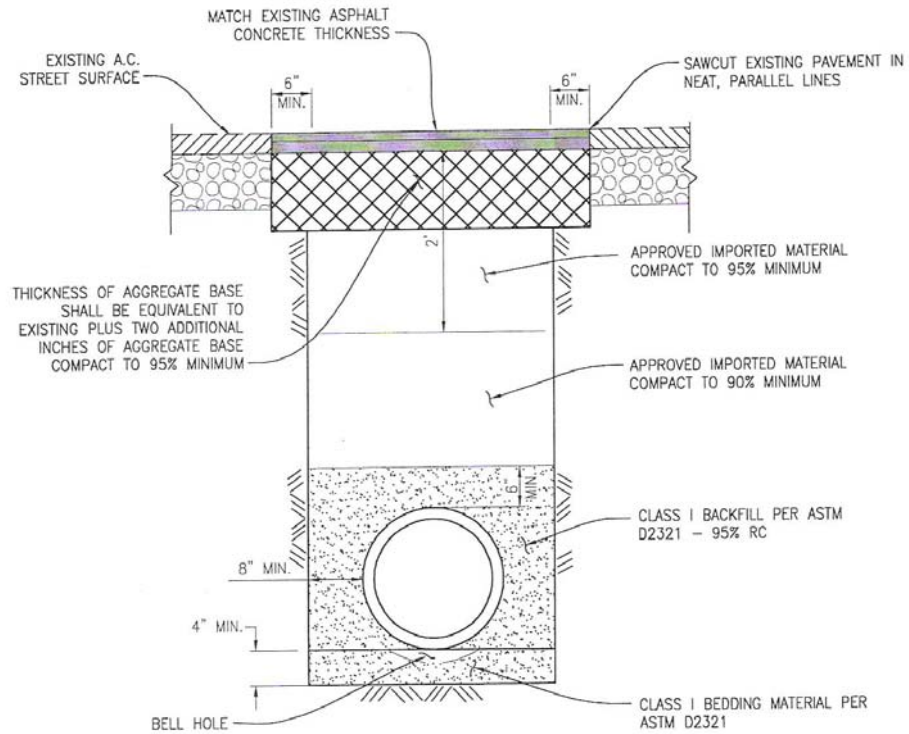
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STD. DETAIL

6 - F





NOTES:

1. IF THE BOTTOM OF TRENCH IS SOFT OR UNSTABLE, IT SHALL BE OVER-EXCAVATED 1 FOOT BELOW GRADE AND BACKFILLED WITH APPROVED IMPORTED MATERIAL.
2. TRENCHES NOT IN PAVED AREAS SHALL BE RESTORED TO MATCH EXISTING SURFACE CONDITIONS.
3. SOIL DENSITIES ARE EXPRESSED AS A PERCENTAGE OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 1557.

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CITY OF NEWMAN IMPROVEMENT STANDARDS

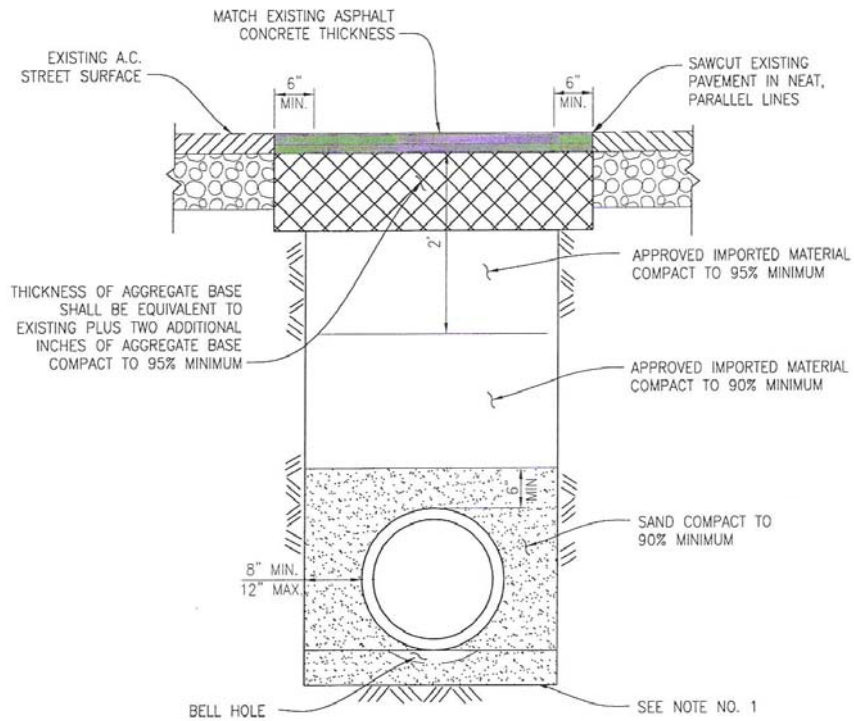
FLEXIBLE WALL PIPE BACKFILL

APPROVED BY:

DATE:

STD. DETAIL

6 - H



NOTES:

- IF BOTTOM OF TRENCH IS SOFT OR UNSTABLE, IT SHALL BE OVEREXCAVATED A MINIMUM OF 1 FOOT BELOW GRADE AND BACKFILLED WITH APPROVED IMPORTED MATERIAL.
 - SAND SHALL CONFORM TO THE FOLLOWING GRADING REQUIREMENTS:
- | SIEVE SIZE | PERCENTAGE PASSING |
|------------|--------------------|
| #4 | 100 |
| #16 | 0-70 |
| #30 | 0-15 |
| #200 | 0-5 |
- TRENCHES NOT IN PAVED AREAS SHALL BE RESTORED TO MATCH EXISTING SURFACE CONDITIONS.
 - SOIL DENSITIES ARE EXPRESSED AS A PERCENTAGE OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 1557.

CITY OF NEWMAN IMPROVEMENT STANDARDS



RIGID WALL PIPE BACKFILL

APPROVED BY:

DATE:

STD. DETAIL

6 - 1

Sewer System Management Plan (SSMP) – Overflow Emergency Response Plan

INTRODUCTION

An Overflow Emergency Response Plan (OERP) provides a standardized course of action to be followed by collection system personnel during a sanitary sewer overflow (SSO) event. An up-to-date OERP is necessary to ensure that a municipality is adequately prepared to respond to an SSO event. The OERP should describe protocols for the response, remediation, and notification of an SSO event under varying scenarios.

The OERP should identify measures to protect the public health and the environment from a broad range of potential collection system failures that could lead to an SSO. The OERP should also include procedures to mitigate the effects of an SSO, when they do occur.

Lastly, to ensure successful implementation of the OERP during an SSO, appropriate staff and contractors should have adequate training.

The specific requirements of WDR Order No. 2006-003-DWQ with regard to the OERP element are described below. The City of Newman's OERP is provided as Attachment 6-1.

A. NOTIFICATION PROCEDURES

1. REGULATORY REQUIREMENT

“Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner”

2. CITY OF NEWMAN'S OVERFLOW EMERGENCY RESPONSE PLAN

Procedures for notifying primary responders and regulatory agencies are described in Section 3 (SSO Reporting) and the SSO Response Flowchart (within Appendix A) of the City of Newman's Overflow Emergency Response Plan (Attachment 6-1).

B. APPROPRIATE RESPONSE TO OVERFLOWS

1. REGULATORY REQUIREMENT

“A program to ensure an appropriate response to all overflows”

2. CITY OF NEWMAN'S OVERFLOW EMERGENCY RESPONSE PLAN

The City of Newman's procedures for responding to SSOs are discussed in Sections 2.2 and 2.3 of the City of Newman's Overflow Emergency Response Plan (Attachment 6-1).

C. NOTIFICATION OF REGULATORY AGENCIES

1. REGULATORY REQUIREMENT

"Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification"

2. CITY OF NEWMAN'S OVERFLOW EMERGENCY RESPONSE PLAN

Procedures for contacting regulatory agencies in the event of an SSO are outlined in Section 3 (SSO Reporting), the SSO Response Flow Chart (within Appendix A), and Appendix B of the City of Newman's Overflow Emergency Response Plan (Attachment 6-1).

D. EMERGENCY RESPONSE PLAN

1. REGULATORY REQUIREMENT

"Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained"

2. CITY OF NEWMAN OVERFLOW EMERGENCY RESPONSE PLAN

Training procedures for staff and contractor personnel on the City of Newman's Overflow Emergency Response Plan are outlined in the City of Newman's Operation and Maintenance Program, Item D.

E. EMERGENCY OPERATIONS

1. REGULATORY REQUIREMENT

"Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities"

2. CITY OF NEWMAN'S OVERFLOW EMERGENCY RESPONSE PLAN

Emergency operations are discussed in Section 2.3 and Appendix B of the City of Newman's Overflow Emergency Response Plan (Attachment 6-1).

F. CONTAIN AND PREVENT OVERFLOWS

1. REGULATORY REQUIREMENT

“A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge”

2. CITY OF NEWMAN’S OVERFLOW EMERGENCY RESPONSE PLAN

The intent of the City of Newman’s Overflow Emergency Response Plan is to contain and prevent SSOs and to minimize their impact on waters of the United States and the environment. Within the Overflow Emergency Response Plan (Attachment 6-1), Sections 2.2, 2.3, 4.2 and 4.3 specifically address containment, prevention, correction and monitoring of SSOs and their potential causes.

City of Newman's Overflow Emergency Response Plan

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City of Newman Overflow Emergency Response Plan

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Section 1

General

1.1 SCOPE

This plan was prepared for the City of Newman (City) as a set of procedures to follow in response to sanitary sewer overflows (SSOs). These procedures apply to all SSO responses within the City.

1.2 OBJECTIVE

The purpose of a sanitary sewer overflow response plan is to minimize the volume of sewer overflows that enter waters of the State (i.e., surface water) and minimize the adverse effects on water quality and beneficial uses. Additionally, this plan will ensure that sanitary sewer overflows are properly identified, responded to and reported to the appropriate regulatory agencies as required by the General Waste Discharge Requirements (WDR), Order 2006-0003 DWQ (the Order) and amendments. The procedures outlined in this plan also include evaluation of SSO response procedures, identification of problem areas, and the cause of overflows.

The basis for using pre-planned procedures in response to SSOs is to ensure that all responses are handled efficiently, effectively, and that all regulatory requirements are met, with the ultimate goal of avoiding and/or minimizing the threat to public health from potential exposure to untreated sewage.

Sanitary Sewer Overflow (SSO) For the purpose of reporting, a Sanitary Sewer Overflow (SSO) is defined as the discharge of any amount of untreated sewage from a collection system before it reaches a wastewater treatment plant. Additionally, any discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act.

Sanitary sewer overflows can occur at many different locations within the wastewater collection system. These locations include, but are not limited to, pump stations, manholes, broken pipes, clean-outs, siphons, air relief valves, and diversion structures. Sanitary sewer overflows can discharge to public and/or private property from a pump station failure, a blocked municipal sewer line, or a block sewer lateral (owned by resident). This response plan will outline SSO response procedures for both private and public sewers.

1.3 PRIORITY OF EFFORT

The priority of work when responding to a sanitary sewer overflow event shall be as follows:

1. Stop the overflow

2. Contain the spill
3. Protect public health
4. Repair the system
5. Clean up the SSO
6. Document and Report the spill.

These efforts will be discussed in more detail, with notation on tasks that are important to note for reporting, in Section 2.

1.4 APPLICABILITY TO WASTEWATER TREATMENT PLANTS

Evolving regulation requires that wastewater treatment plants (WWTP), as part of the Publicly Owned Treatment Works (POTW), comply with the same provisions as collection systems for spills which reach waters of the State or drainage channels. The reporting requirements for WWTP spills are similar to those for collections system spills which reach surface waters and are further described in Section 4. Emergency response procedures for WWTP spills are the same as those performed for collection systems and are described in Section 2.

1.5 SSO RESPONSE KIT

In order to properly document the necessary information of SSOs, an SSO Response Kit shall be kept in all vehicles that may respond to an SSO. Additional backup kits shall be available in the field office. The SSO Response Kits shall contain the following items:

1. Tyvek envelopes (tear and water resistant)
2. SSO Response Kit Instructions
3. One copy of the following forms (found in Appendix A)
 - a. SSO Worksheet
 - b. SSO Response Flowchart
 - c. 4-Laminated Warning Signs "Warning Raw Sewage"
4. One disposable camera

The envelopes shall be stapled closed and used for SSO events only.

Section 2

Emergency Response Procedures

This section outlines the recommended procedures in the event of a sanitary sewer overflow (SSO). These procedures provide City staff with a step-by-step process of how to respond to an SSO.

2.1 RECEIPT OF AN SSO

City staff receives notice of an SSO by two methods: (1) externally by citizen notification, or (2) internally by staff observation. Notification is routed to the Public Works Supervisor or on-call staff. As the call is received, the information should be documented into the SSO Response Worksheet shown in Appendix A. Information contained on this worksheet is necessary for the initial spill report, required by the Regional Water Quality Control Board.

NOTE: Upon notice of the SSO, the first responder must gather the information contained in the SSO Response Worksheet from the citizen or staff who reported the SSO.

2.2 FIRST RESPONDER DUTIES

The first responder is the person who receives the notification of the sanitary sewer overflow. This person is tasked with the duties of properly documenting all aspects of the overflow event, from receipt of the SSO notification to the final clean up and maintenance of the sewer line. The first responder will verify the cause of the overflow, make the initial volume estimate, and determine the SSO Category (Category 1, Category 2 or private spill) for reporting purposes.

Specific actions of the first responder include:

1. Determine the current magnitude of the SSO, contact necessary personnel, and develop an approach to stop, contain, and mitigate the overflow condition (See Response Flow chart in Appendix A).

NOTE: If the SSO appears to be a Category 1 SSO (greater than 1,000 gallons or enters surface water or drainage channel), immediately or no later than one (1) hour of becoming aware of the spill, contact the Director of Public Works. The Director of Public Works or designated representative will handle all notification to regulatory agencies regarding the reportable SSO.

2. Obtain a pre-packaged SSO Response Kit and document information outlined in the SSO Response Worksheet.

3. Locate the SSO by address, cross street, and point of overflow (i.e., manhole, cleanout, pump station, pipe, or inside structure). Take pictures of the overflow, make note of the areas contacted by the overflow, and fill out **Items 3-13** of the SSO Response Worksheet.
4. Should an SSO enter the storm drain system, consult storm drain maps to determine the destination of the overflow. Maps will provide the first responder with possible locations to isolate the overflow within the storm drain system.
5. Obtain basic containment equipment, such as that shown in Section 2.3.2(a), to ensure the overflow does not enter the storm drain system. If the overflow enters the storm drain system, air plugs shall be used to isolate the overflow in a downstream storm drain line as secondary containment.
6. As the crew contains the spill:
 - a. Document the site and overflow conditions
 - b. Estimate the volume entering the storm drain system (if any)
 - c. Evaluate the potential for public exposure and post warnings (located in Appendix A)
 - d. Document related problems, such as, but not limited to:
 - i. Is overflow related to a street collapse?
 - ii. Is overflow related to construction work?
 - iii. Is overflow causing a traffic hazard such as displaced manhole cover or street flooding?
7. Provide final volume and overflow rate estimate using photographs of the overflow and the Volume Calculation Table found in Appendix C.
8. Document the times for all response events (traffic control, sewer diversions, containment, overflow repair, etc.).
9. Submit the completed SSO worksheet to the Public Works Director by:
 - a. 4:00 p.m. if the spill is mitigated during business hours, or
 - b. 10:00 a.m. the following business day if the spill is mitigated after hours.

2.3 RESPONSE CREW DUTIES

Immediate response includes the steps listed below in order of decreasing priority. However, judgment must be used in determining which steps to take first in each particular SSO event. For example, if a simple containment berm would stop the spread of the SSO or prevent it from entering a water body, containment may be a higher priority than immediately trying to stop the SSO.

Duties of the response crew are as follows:

1. **Control Traffic:** Traffic control may be needed immediately to protect the public and maintenance staff responding to the SSO. Immediate traffic control is needed if there is a street collapse, significant depression in the pavement (due to sewer line), a manhole is ajar, or if the overflow causes flooding of the street. Traffic control may also be needed to prevent wastewater from being further disbursed and to protect the maintenance crew

while containing the overflow and removing the blockage. Consider the following when implementing a traffic control plan:

- a. Provide traffic control per Caltrans standards; and
 - b. If necessary, contact the City of Newman Police Department to ensure proper traffic control (Emergency Contact's in Appendix B)
2. **Contain and Stop the Overflow.** If the overflow is downstream of a wastewater pump station and there is an overflow line within the pump station, the pump must be shut down until the overflow is repaired.

Contain or divert sewage whenever possible to prevent entry into a body of water or environmentally sensitive area. Determine if bypass pumping is feasible. If so, staff shall divert flow around the blockage to a downstream manhole.

Rubber mats shall be used to prevent sewer from entering the storm drain system. Containment becomes more difficult if the overflow reaches the storm drain system or drainage way since the overflow can rapidly contaminate receiving waters such as creeks, streams, rivers, and other water bodies. If at all possible, plug the end of the storm drain and/or drainage ditch to prevent the SSO from reaching water ways.

If an SSO occurs during dry weather, the storm drain system can be used to store the overflow only if the storm drain system can be plugged downstream of the overflow. A vacuor truck shall be used to vacuum the contained overflow in the storm drain system. The storm drain system must be decontaminated after the overflow is mitigated. Decontamination shall be done by flushing the exposed section of storm drain system with fresh water until three pipe volumes have been flushed through.

If raw sewage enters a dry stream/creek, determine the end of the contaminated area and construct a sand bag barrier to prevent the SSO from extending further downstream.

The following actions and equipment should be used as basic tools to contain the overflow:

- a. Actions for containing overflows which flow:
 - i. Onto ground:
 - a) Rubber mats at storm drain catch basins or drop inlets.
 - b) Sand bags in gutters or roadside ditches.
 - c) Dig trenches in earth and line with plastic.
 - ii. In a building (private spill):
 - a) Evacuate affected people.
 - b) Sand bag perimeter of spill and line with plastic sheet.
 - c) Avoid electrical shock by turning off power.
 - iii. Into storm drain/drainage way:
 - a) Trace overflow in storm drainage system to downstream end point.
 - b) Plug all affected storm system outlets or block the creek and channels if necessary to contain spill.
 - c) Turn off storm water pump stations.
- b. Required equipment for containing overflows:

- i. Onto ground and in buildings:
 - a) Rubber mats
 - b) Sand bags
 - c) Plastic sheets
 - d) Bypass pumps
 - ii. Overflow into storm drain/drainage way:
 - a) Plugs
 - b) Bypass pumps or trash pumps
 - iii. Overflow at pump station:
 - a) Emergency generator
 - b) Bypass pumps
 - iv. Warning signs to post around contaminated areas
3. **Correct the Cause of the Overflow:** In areas with flat terrain, the cause of the overflow may be located a considerable distance from the actual overflow. During large storms, overflows may occur because of excessive inflow and infiltration (I/I) into the sewer system. I/I can greatly increase the flow in the collection system and cause overflows in pipes that are only partially blocked by roots, grease, or debris. However, during large storms, I/I can cause the flow in the collection system to exceed the hydraulic capacity of the pipes and pump stations. Under these conditions, it may not be possible to stop the overflow until the flows recede. If a measurable rainfall event has passed within 72 hours of the overflow, the intensity and duration of the rainfall event will be noted on the SSO Worksheet for assessment purposes of the line in question.

The following procedures will assist Operation and Maintenance (O&M) staff in isolating the stoppage and returning the line to service.

- a. Location of overflow in/at:
 - i. Sewer main:
 - a) Check flow in manholes.
 - b) Blockages should be downstream of surcharged manholes and upstream of manholes with sluggish or very little to no flow.
 - ii. Service Lateral line:
 - a) Check flow in cleanout. If cleanout does not show an active flow to the street, stoppage is located on private property or in the service lateral.
 - b) Notify property owner to clear stoppage.
 - iii. Pump stations:
 - a) Check alarm system for indication of problem.
 - b) If power failure has occurred, determine if the pump station has an emergency generator. If pump station does not have an emergency generator, then set up a portable generator.
 - c) Check motor amperage and voltages to determine if pumps are operating within normal ranges.
- b. To clear a blockage within a:

- i. Sewer Main:
 - a) Clear the line from the dry manhole side by high pressure cleaning or power rodding equipment.
 - b) Determine the cause of blockage and note cause on the SSO Worksheet.
- ii. Service Lateral line:
 - a) Inform the property owner to hire a plumber to clear the stoppage.
- iii. If the blockage cannot be cleared within 30 minutes:
 - a) Call the Public Work Director.
 - b) Increase containment and/or initiate bypass pumping.
 - c) Perform closed-circuit television (CCTV) inspection to determine problem.
- c. Pump Station:
 - i. If the pump station does not have power, activate emergency generators or portable bypass pumps. If pump station does not have an emergency generator, then set up a portable generator.
 - ii. Check fuel for emergency generator or bypass pumps.
 - iii. If a pump is not operating properly, activate standby pump.
 - iv. Investigate force main for possible damage or blockage.
- 4. **Estimate the Volume.** Coordinate with the first responder to determine the final overflow volume. This volume is recorded on the SSO Worksheet, which is to be included in the final report to regulatory agencies and included in the City's records.
 - a. Estimates of the final overflow rate and total overflow volume can be estimated using one of the methods found in Appendix C.
- 5. **Initiate Cleanup.** Disinfection of contaminated soil or drainage ways will be performed as directed by the appropriate agencies (i.e., Environmental Health Dept., Dept. of Fish and Game). Cleaning of spills occurring in environmentally sensitive areas can, in some cases, cause more damage than good. Call the Department of Environmental Resources for further instructions in these cases. Consult the following steps when cleaning up an SSO:
 - a. Storm drain or drainage way:
 - i. Pump out wastewater.
 - ii. Remove debris.
 - iii. Wash concrete and contain wash water and pump out.
 - iv. Remove contaminated soil/plants.
 - v. Remove all plugs/dams used to contain overflow.
 - b. Street:
 - i. Remove debris.
 - ii. Remove wastewater.
 - iii. Wash pavement and contain wash water.
 - iv. Spray 10% Hypochlorite solution on gutter, street, etc., but not in drop inlet or pipe.

- v. Dump wastewater and wash water at wastewater treatment plant or downstream manhole.
 - c. Stream/Creek
 - i. Remove the SSO from the stream and dispose of the wastewater at the wastewater treatment plant.
6. **Restore operations:** Any sewer lift station or storm drain pump station must be placed back online after sewer flow is restored.
7. **Sample Receiving Water**
- a. Samples will be taken of any contaminated drainage channel, stream, or other water body within 1 hour of the incident or as soon as practicable. Sampling shall be coordinated with the Wastewater Treatment Plant Operator, as needed.
 - b. Sample should be taken upstream, at entry point, and downstream of overflow location, as determined by site-specific conditions. Samples will be taken approximately 50 feet upstream of the contamination and 100 feet downstream of the contamination, as feasible. Document in writing and with photographs the exact location of sampling as required for the reporting.

NOTE: Be specific on the locations of the sample by relating the sample point to a permanent feature or structure. Document the sample locations in writing and with photographs. This information must be given to the first responder or Public Works Director for reporting.
 - c. Sampling and testing will be performed for the fecal coliform, total coliform, ammonia, and BOD.
 - d. Staff will conduct and handle samples in accordance with all applicable sampling protocol (see Appendix B).
 - e. Other samples will be collected as required by the Regional Water Quality Control Board.
 - f. Contact lab personnel and transport sample to laboratory along with appropriate paper work (Emergency Contacts in Appendix B).

SSO Reporting

This section contains the reporting requirements as outlined in the Monitoring and Reporting portion of the Order and procedures the Supervisor (Data Submitter) and/or Legally Responsible Official (LRO) must take to ensure the proper regulatory agencies are contacted within the time frames outlined within the Order. This section is written in a way that allows the LRO to go directly to the Section corresponding to the type of spill (Category 1 or 2) and follow a stepwise procedure through to final reporting.

3.1 SSO REPORTING REQUIREMENTS OVERVIEW

The Order requires all SSO reports to be submitted to an online SSO database. The database is the California Integrated Water Quality System (CIWQS). The information gathered on the SSO Worksheet is the required information needed to submit a complete spill report to the Regional Water Quality Control Board using CIWQS. SSO reporting deadlines vary depending on the type of spill and are further described below. It should be noted that during months which the collection system does not experience any spills, a “No Spill Certification” is required to be reported in CIWQS within 30 days after the end of the month. In the event that the database is not available, the City is required to fax all the requested information to the appropriate Regional Water Quality Control Board office.

The Order establishes three SSO Categories and their reporting requirements, as defined below:

Category 1: A Category 1 spill is defined as all discharges of sewage resulting in a failure in the sanitary sewer system that:

- **Equals or exceeds 1,000 gallons;**

Notification and Reporting timeframe:

- i. Verbal Notification: to OES, Local EHD, Regional Water Quality Control Board **as soon as practicable**
- ii. Initial Reporting: to Regional Water Quality Control Board within **3 days**
- iii. Final Report: within **15 days**

- **Discharges to a drainage channel and/or surface water; or**
- **Discharges to a storm drain that was not fully captured and returned to the sanitary sewer system;**

Notification and Reporting timeframe:

- i. Verbal Notification: to OES, Local EHD, Regional Water Quality Control Board **within 2 Hours**

- ii. Certification: to the Regional Water Quality Control Board within **24 Hours**
- iii. Initial Reporting: to Regional Water Quality Control Board within **3 Days**
- iv. Final Report: within **15 Days**

- **WWTP spill which discharges to a drainage channel and/or surface water.**

Notification and Reporting timeframe:

- i. Verbal Notification: to OES, Local EHD, Regional Water Quality Control Board **within 2 Hours**
- ii. Certification: to Regional Water Quality Control Board with in **24 Hours**
- iii. Final Report: within **5 Days**

Category 2: A Category 2 spill is defined as all other discharges of sewage resulting from a failure in the collection system.

Notification and Reporting timeframe:

- i. Reporting: to Regional Water Quality Control Board using CIWQS within **30 days** from the month in which the spill occurred.

Private Lateral Sewage Discharges (PLSD): Sewage discharges that are caused by blockages or other problems within a privately owned lateral

Notification and Reporting timeframe:

- i. Reporting: Reporting is optional and left to the judgment of the City

After final reporting, and as additional information becomes available (i.e., laboratory data), a revised report should be submitted as soon as possible. SSO reporting should also be made available to local agencies and individuals as the situation dictates. Individuals, departments, and agencies that require reports or that may need to be considered are as follows:

- Internal Managers: Public Works Director, City Manager, and Assistant City Manager.
- Police Department: Roadblock, traffic control, etc.
- Public Services: Close areas such as parks, shopping centers, etc.
- Water Department: Impact on drinking water storage or supply.
- Local residents and businesses that may be impacted.

3.2 CATEGORY 1 NOTIFICATION AND REPORTING PROCEDURES FOR A SURFACE WATER OR DRAINAGE CHANNEL SPILL

Specific information about an SSO event should be collected by the collection system superintendent or on-call personnel. From the initial investigation of the caller's information and site visit of the SSO location, the first responder will determine whether the spill has discharged to surface waters or a drainage channel.

In the event that the spill has reached surface waters or a drainage channel, the following procedures to notify and report the overflow to the proper regulatory authorities are described below.

3.2.1 TWO-HOUR “VERBAL NOTIFICATION”

1. Contact the Public Works Director, Legally Responsible Official (LRO), or Authorized Representative (AR) to give notification that the current SSO event has spilled into the surface waters or drainage channel.
2. Verify that the time between initial SSO notification and LRO/AR notification is within the 2 hour timeline allotted by the Order for this type of spill.
3. Immediately call the Wastewater Treatment Plant Operator and request sampling assistance in accordance to the sampling procedures founding Appendix D.
4. Verbally contact the following agencies within the 2 hour time allotment. (Emergency Contact numbers and phone script are shown in Appendix D.):
 - a. State Office of Emergency Services (OES)
 - b. Stanislaus County Department of Environmental Health
 - c. Central Valley Regional Water Quality Control Board

NOTE: Notify OES, Stanislaus Environmental Health, and the Regional Water Quality Control Board within 2 hours from becoming aware of the spill discharging to surface waters or drainage channel. Be sure to get a control number from each agency. The control number will be required for the 24 hour certification report to the Regional Water Quality Control Board.

3.2.2 24 HOUR “CERTIFICATION”

Within 24 hours from first becoming aware of the spill, a certification must be submitted to the Regional Water Quality Control Board. This certification verifies that the agencies listed in Section 3.2.1 were contacted. Reporting shall be done by calling the Regional Water Quality Control Board at the number shown in Appendix D with the following information gathered from the SSO Worksheet:

- Time the spill was discovered
- Specific location of the spill
- Whether or not the spill entered a surface water
- Estimated volume in gallons (total, amount recovered, and amount entering a surface water)
- Identification of which local health department was contacted
- OES Control Number
- Corrective action taken

- Number of samples taken (if waters were sampled)

3.2.3 THREE-DAY “INITIAL REPORTING”

As soon as possible, but no later than three (3) days from becoming aware of the spill, the LRO or authorized representative must input spill data into CIWQS. The information needed for the initial reporting can be found in Appendix E under Category 1 Initial Reporting.

3.2.4 FIFTEEN-DAY “FINAL REPORTING”

A final report shall be submitted in the online database not later than 15 days from the conclusion of the SSO response and remediation. The final report must be submitted and certified by the LRO. Certification is done by typing in the name of the LRO and clicking on the “Certify” button at the end of the report. The information needed for the final report can be found in Appendix E under Category 1 Final Reporting.

3.3 CATEGORY 1 NOTIFICATION AND REPORTING PROCEDURES FOR WWTP SPILL TO SURFACE WATER OR DRAINAGE CHANNEL

SSO events which reach surface water or a drainage channel, which originate from the wastewater treatment plant (WWTP) will likely be observed by WWTP staff. This person is to call the lead operator and start mitigating the spill. The following procedures to notify and report the overflow to the proper regulatory authorities are described below.

3.3.1 TWO-HOUR “VERBAL NOTIFICATION”

1. Contact the Public Works Director, the Legally Responsible Official (LRO), or Authorized Representative (AR) to give notification that the current SSO event has spilled into the surface waters or drainage channel.
2. Verify that the time between the initial SSO notification and LRO/AR notification is within the 2 hour timeline allotted by the Order for this type of spill.
3. Verify that sampling is being conducted in accordance with the sampling procedures founding Appendix D.
4. Verbally contact the following agencies within the 2 hour time allotment. The Emergency Contact numbers and phone script are shown in Appendix B
 - a. State Office of Emergency Services (OES)
 - b. Stanislaus County Department of Environmental Health
 - c. Central Valley Regional Water Quality Control Board

NOTE: Notify OES, Stanislaus Environmental Health, and the Regional Water Quality Control Board within 2 hours from becoming aware of spill discharging to surface waters or drainage channel. Be sure to get a control number from each agency. The control number will be required for the 24 hour certification report to the Regional Water Quality Control Board.

3.3.2 24-HOUR “CERTIFICATION”

Within 24 hours from first becoming aware of the spill, a certification must be submitted to the Regional Water Quality Control Board. This certification verifies that the agencies listed in Section 3.3.1 were contacted. Certification shall be done by calling the Regional Water Quality Control Board at the number shown in Appendix B with the following information gathered from the SSO Worksheet:

- Time the spill was discovered
- Specific location of the spill
- Whether or not the spill entered a surface water
- Estimated volume in gallons (total, amount recovered, and amount entering a surface water)
- Identification of which local health department was contacted
- OES Control Number
- Corrective action taken
- Number of samples taken (if waters were sampled)

3.3.3 FIVE-DAY “FINAL REPORTING”

As soon as possible, but no later than five (5) days from becoming aware of the spill, the LRO or authorized representative must submit a written report to the Regional Water Quality Control Board via mail or hand delivery. The report is to document the information in Section 3.3.2 and any other reports submitted to the other agencies.

3.4 CATEGORY 1 NOTIFICATION AND REPORTING PROCEDURES FOR A SPILL NOT REACHING SURFACE WATERS

In the event that the spill is greater than 1,000 gallons (>1,000 gallons) and has not reached surface waters or a drainage channel, the following procedures to notify and report the overflow to the proper regulatory authorities are described below.

3.4.1 “VERBAL NOTIFICATION”

1. Contact the Public works Director (LRO) or Authorized Representative (AR) to give notification that the current SSO event is greater than 1,000 gallons in volume.
2. Verbally contact the following agencies using the Emergency Contact numbers and phone script are shown in Appendix B:
 - a. State Office of Emergency Services (OES)
 - b. Stanislaus County Department of Environmental Health
 - c. Central Valley Regional Water Quality Control Board

NOTE: Notify OES, Stanislaus Environmental Health, and the Regional Water Quality Control Board immediately from becoming aware of a Category 1 SSO. Be sure to get a control number from each agency. The control number will be required for the initial report to the Regional Water Quality Control Board.

3.4.2 THREE-DAY “INITIAL REPORTING”

As soon as possible, but no later than three (3) days from becoming aware of the spill, the LRO or authorized representative must input the initial spill data into the CIWQS database. The information needed for the initial reporting can be found in Appendix E under Category 1 Initial Reporting.

3.4.3 FIFTEEN-DAY “FINAL REPORTING”

A final report shall be submitted in CIWQS no later than 15 days from the conclusion of the SSO response and remediation. The final report must be submitted and certified by the Legally Responsible Official (LRO). Certification is done by typing in the name of the LRO and clicking on the “Certify” button at the end of the report. The information needed for the final report can be found in Appendix E under Category 1 Final Reporting.

3.5 CATEGORY 2 NOTIFICATION AND REPORTING PROCEDURES

Category 2 spills are spills that occur as a result of a failure in the collection system other than previously mentioned Category 1 spills. For Category 2 spills, only the local Environmental Health Department must be notified. The following procedures to notify and report the overflow to the proper regulatory authorities are shown below.

3.5.1 “VERBAL NOTIFICATION”

1. The first responder will call the Collection System Supervisor to give notification of the current SSO event.
2. The Collection System Supervisor will immediately contact the Stanislaus County Department of Environmental Resources (SCDER). Contact numbers and phone scripts are shown in Appendix B

3.5.2 “FINAL REPORTING”

Category 2 reporting shall be submitted in CIWQS no later than 30 days following the month in which the spill occurred. For example, a spill which occurred in January will be reported no later than March 1st. The report must be submitted and certified by the Legally Responsible Official (LRO). Certification is done by typing in the name of the LRO and clicking on the “Certify” button at the end of the report. The information needed for the final report can be found in Appendix E under Category 2 Reporting.

3.6 PRIVATE LATERAL SPILL NOTIFICATION AND REPORTING PROCEDURES

Sewage discharges that meet the criteria for Private Lateral sewage discharges may be reported on CIWQS based by City discretion. If a Private Lateral sewage discharge is recorded in the database, the City must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the City) should be identified.

Record Keeping

A record of all SSOs shall be kept on file to document the process of every SSO Response. These records will provide the Public Works Director with a means to evaluate the performance of the collection system, the City's SSO response procedures, and identify areas in need of rehabilitation or replacement. Additionally, as a component of compliance with the Order, these records shall be kept and made available to the Regional Water Quality Control Board upon request.

4.1 STATE MANDATED RECORD KEEPING

The Order requires that individual SSO records be maintained by the City for a minimum of five (5) years from the date of the SSO. This period may be extended if SSO records are requested by a Regional Water Quality Control Board Executive Officer. All records shall be made available for review upon State or Regional Water Quality Control Board staff's request.

Outlined in the Order is the Monitoring and Reporting Program (MRP), which includes the following requirements for record keeping:

1. Individual SSO records shall be maintained by the City for a minimum of five (5) years from the date of the SSO. This period may be extended if SSO records are requested by a Regional Water Quality Control Board Executive Officer.
2. SSO records shall be made available for review upon State or Regional Water Quality Control Board staff's request.
3. SSO monitoring instruments and devices used by the City to conduct water quality monitoring for SSOs shall be properly maintained and calibrated to ensure continued accuracy.
4. The City shall retain records of all SSOs, such as, but not limited to and when applicable:
 - a. Record of Certified Report, as submitted to CIWQS.
 - b. All original recordings for continuous monitoring instrumentation.
 - c. Service call records and complaint logs of calls received by the City.
 - d. SSO calls.
 - e. SSO records.

- f. Steps that have been (and will be) taken to prevent an SSO from recurring, including a schedule to implement the steps.
 - g. Work orders, work completed, and any other maintenance records from the previous five (5) years, which are associated with responses and investigations of system problems related to SSOs.
 - h. A list and description of complaints from customers and others for the previous five (5) years.
 - i. Documentation of performance and implementation measures for the previous five (5) years.
5. If water quality samples are required by Environmental Health, State Law, or if voluntary monitoring is conducted as result of an SSO, records of monitoring information shall include the following:
 - a. The date, exact place, and time of sampling or measurements.
 - b. Individual(s) who performed the sampling or measurements.
 - c. The date(s) analyses were performed.
 - d. The laboratory that performed the analyses.
 - e. The analytical technique or method used.
 - f. The results of such analyses.

4.2 SSO INVESTIGATION

All SSOs should be thoroughly investigated by the Collection System Supervisor to determine the cause of the overflow. This information will determine if additional maintenance is needed or if repair/replacement is required.

The procedures for investigating an SSO are:

- Review the incident/overflow report.
- Interview responding crew members.
- Review past maintenance records.
- Review past CCTV records.
- Conduct new CCTV inspection (if necessary).
- Evaluate all information and determine necessary course of action to avoid future SSOs.
- Create a special layer within the City Map to mark the location of each SSO.
- Document results of investigation and implement necessary course of action within the appropriate plans (Rehabilitation & Replacement Plan, O&M Plan, CIP etc.).

4.3 POST SSO DEBRIEFING

Every SSO is an opportunity to thoroughly evaluate the City's response and reporting procedures. Each overflow event is unique, with its own elements and challenges that might include volume, location, terrain, and time of day.

As soon as possible after major SSO events, all of the participants, from the person who received the call to the last person to leave the site, should meet to review the procedures used. The participants should discuss what worked and where improvements could be made in responding to and mitigating future SSO events. The results of the debriefing should be recorded and tracked to ensure the action items are completed. These records shall be attached to the SSO Report.

Appendix A

SSO Response Forms

City of Newman
SSO Response Kit

SSO Response Kit Instruction

The SSO Response Kit contains the supporting items necessary to properly document a sanitary sewer overflow. This kit assumes that the responder is fully aware of his/her duties and has read and understands the standards of reporting required of the General Waste Discharge Requirements (GWDR).

This Kit is equipped with the following (if any form is missing open an additional kit):

- ☐ This instruction sheet
- ☐ SSO Response Flowchart
- ☐ SSO Response Worksheet
- ☐ 4 - Laminated "Warning Raw Sewage" Signs (English/Spanish)
- ☐ Emergency Contacts List

STEP 1	Remove the forms titled "SSO Response Worksheet" and "SSO Response Flowchart" from this packet and follow the instructions located in the: City of Newman Overflow Emergency Response Plan
STEP 2	Using the disposable Camera in this envelope, take pictures of affected and unaffected areas <u>before and after</u> cleanup
STEP 3	Complete the SSO Response Worksheet
STEP 4	PLACE THE FOLLOWING IN THE ENVELOP AND FORWARD TO THE PUBLIC WORKS DIRECTOR: ☐ Completed SSO Response Worksheet ☐ Any other documentation you may have made ☐ Documentation of any notifications you made ☐ Disposable Camera

City of Newman
SSO Response Worksheet

SSO RESPONSE WORKSHEET

SANITARY SEWER OVERFLOW (SSO) FIELD REPORT FORM

ALL ITEMS MUST BE COMPLETED

1. Customer Service Call Number: _____
2. Call Received From: _____
3. Report Filled Out By: _____ Phone Number: (____)____-_____
4. Date Received: ____/____/____ (MM/DD/YY) Time Received: ____:____ (24-Hour Time)
5. Overflow Street Location: _____
6. GPS Coordinates- Lat. _____, Long. _____
(If the overflow did not occur at a street location, then use other identifiers)
7. Overflow Start: Date: ____/____/____ (MM/DD/YY) Time: ____:____ (24-Hour Time)
(if the overflow was on-going when discovered, and subsequent investigation found a different overflow start date and time, this information shall be revised by submittal of updated overflow report forms.)
8. Arrived On-Site Time: ____:____ (24-Hour Time)
9. Overflow End: Date: ____/____/____ (MM/DD/YY) Time: ____:____ (24-Hour Time)
10. Estimated Overflow Flow Rate (Initial/Final): _____ (gallons per minute)
(use the 'Rate of Over Chart' when giving estimates overflow flow rate)
11. Total Overflow Volume: _____ (gallons)
Provide diagrams and/or photographs of spill incident. Include details that will help explain how overflow volume was determined:
12. Overflow volume recovered: _____ (gallons)
13. Overflow volume released to receiving waters: _____ (gallons)
14. Overflow Location Sanitary Sewer Structure Identification Number: _____

City of Newman
SSO Response Worksheet

15. Describe steps taken to mitigate the SSO: _____

16. Overflow Cause – (Circle One)

Roots	Grease	Line Breaks	Infiltration
Rocks	Debris	Blockage	Vandalism
Flood Damage	Manhole Failure	Power Failure	Construction
Other	Unknown		

17. Overflow Cause – Detailed Description _____

18. Was there measurable precipitation during the 72-hour period prior to the overflow?
(Y or N) ____

19. Did the overflow enter a storm drain and was not fully captured? (Y or N) ____
If 'Yes' describe _____

20. Did the overflow reach surface waters other than a storm drain? (Y or N) ____
If 'Yes' continue with number 22. If 'No' skip to number 24.

21. Name or description of initial receiving waters. (if none, enter none)

22. Name or description of secondary receiving waters. (if none, enter none)

City of Newman
SSO Response Worksheet

23. If the overflow did not reach surface waters, describe the final destination of the overflow. _____

24. Notification:

Agency	Date	Time	Control Number
OES			
RWQCB			
Stanislaus County, DER			
Other			

27. Posting:

- a. Were signs posted to warn of receiving water contamination? (Y or N) ____
(DER will make the decision on whether to post signs or not.)
- b. If posted, list the location(s) of posting:

28. Were samples of the contaminated receiving waters obtained? (Y or N) ____

29. If samples were obtained list the location(s) in relation to point of entry. _____

30. If samples were obtained who obtained the samples and when. _____

31. Identify which regulatory agency received copies of the sample results:

City of Newman
SSO Response Worksheet

32. Additional Remarks:

33. Cost Recovery

Was the SSO from a private system or caused by an outside agency, contractor, or person? (Y or N) _____. (if 'Yes', continue filling in as much information as possible.)

☐ The SSO was from a private system.

☐ The SSO was caused by an activity being performed by an outside:

☐ Agency ☐ Contractor ☐ Person ☐ Other _____

Name of complex, agency, contractor or person: _____

Address of complex, agency, contractor or person: _____

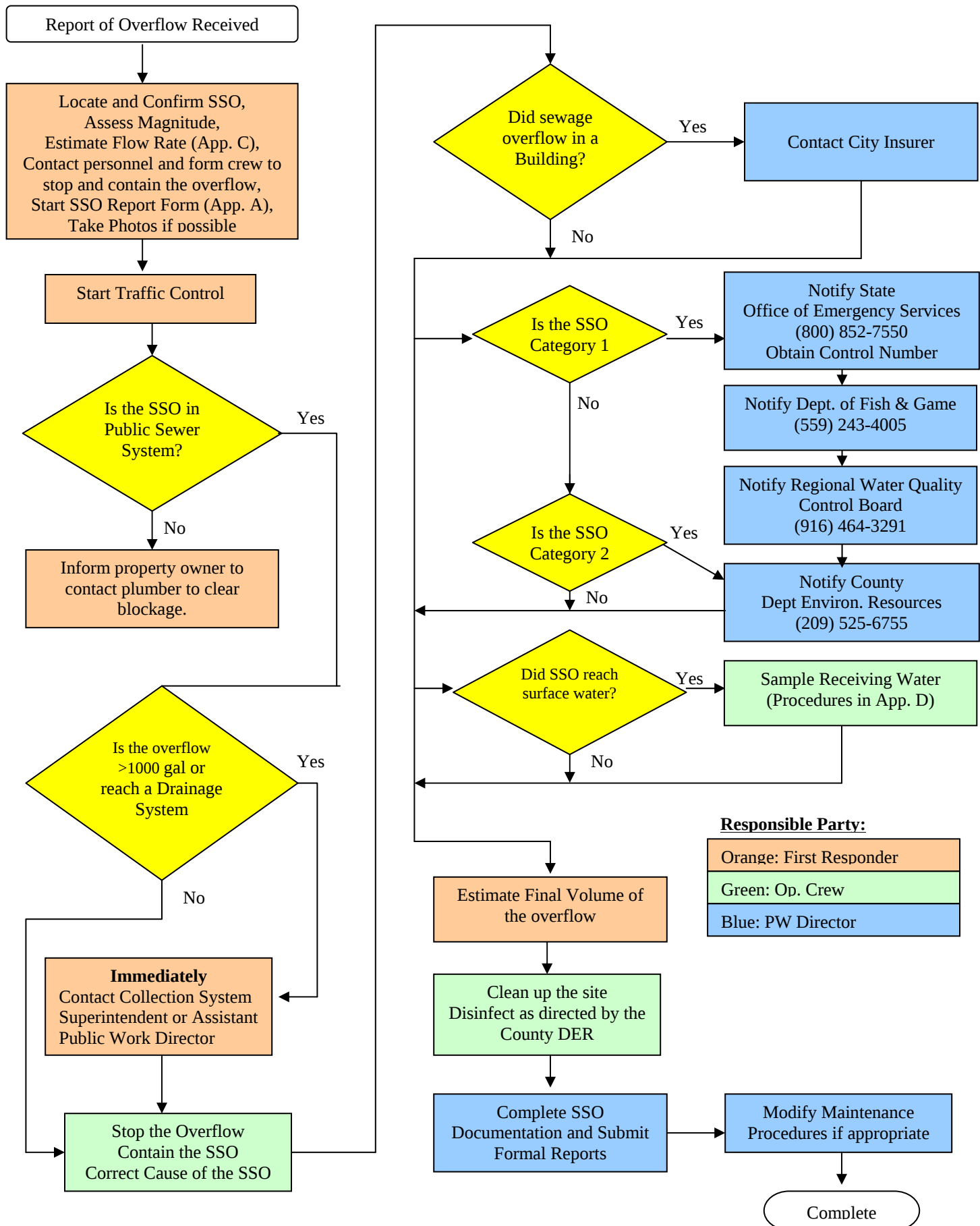
Name of insurance company, agents name and phone number if know:

Name of person providing information: _____

Name and phone number of any witness: _____

City of Newman

SSO Response Flowchart



-- CAUTION --

RAW SEWAGE

AVOID CONTACT!

FOR FURTHER INFORMATION CONTACT
THE CITY OF NEWMAN PUBLIC WORKS DEPARTMENT AT (209) 862-4448.

-- PELIGRO --

Aguas Residuales

**EVITE EL
CONTACTO!**

PARA MAS INFORMACIÓN, LLAME
AL CITY OF NEWMAN PUBLIC WORKS DEPARTMENT A (209) 862-4448.

Emergency Contact Numbers and Phone Script

Emergency Contact's

2 Hour Notification:

For the following agencies provide the following preliminary information:

1. Caller name
2. Caller agency
3. Caller telephone number
4. Date and time of sewer overflow
5. Location of sewer overflow (street address, city and county)
6. Affected body of water (if any)
7. Volume
8. Flow rate
9. Duration

The Following phone script may be used when:

This is (Name) from the City of Newman. I have a sewage report to make. The City has experienced a sewer line blockage, resulting in a discharge of raw sewage. The blockage occurred at (time, date, exact location). The quantity spilled was approximately (# of gallons). The City's maintenance crew was dispatched to the site at (time) to clean up the spill. Clean up operations were/will be completed by date/time.

<i>Office of Emergency Services (OES)</i> (!!! Be sure to obtain and record an OES spill control number)	(800) 852-7550
<i>Central Valley Regional Water Quality Control Board (Regional Board):</i>	Ph: (916) 464-3291 Fax: (916) 464-4645
<i>California Department of Fish and Game (In case of a fish kill)</i>	(559) 243-4005
<i>Stanislaus County Department of Environmental Resources (SCDER)</i>	(209) 525-6755
<i>Stanislaus County Health Department, Public Health Services</i>	(209) 558-7700

Coordinating Agencies

Police Department	(800) 273-4911
Fire Department	(209) 678-0357
Geoanalytical Laboratories	(209) 572-0900
Modesto Bee	(209) 776-4233
Merced Sun Star	(209) 722-1511
<i>City Contacts</i>	
Public Works Director	Garner Reynolds (209) 678-0354
Public Works Superintendent	Doug Mutoza (LRO) (209) 678-0351
Collection System Manager	Dan Pardo (209) 678-0344
Wastewater Treatment Plant Supervisor	Lance Perry (209) 678-0350

Volume Calculation Methods

Methods for Estimating Spill Volume

A variety of approaches exist for estimating the volume of a sanitary sewer spill. This appendix documents the three methods that are most often employed. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available.

Method 1: Eyeball Estimate

The volume of small spills can be estimated using an “eyeball estimate”. To use this method imagine the amount of water that would spill from a bucket or a barrel. A bucket contains five gallons and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained spills up to approximately 200 gallons.

Method 2: Measured Volume

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

Step 1 Sketch the shape of the contained sewage (see Figure A).

Step 2 Measure or pace off the dimensions.

Step 3 Measure the depth at several locations and select an average.

Step 4 Convert the dimensions, including depth, to feet.

Step 5 Calculate the area in square feet using the following formulas:

Rectangle: Area = length (feet) x width (feet)

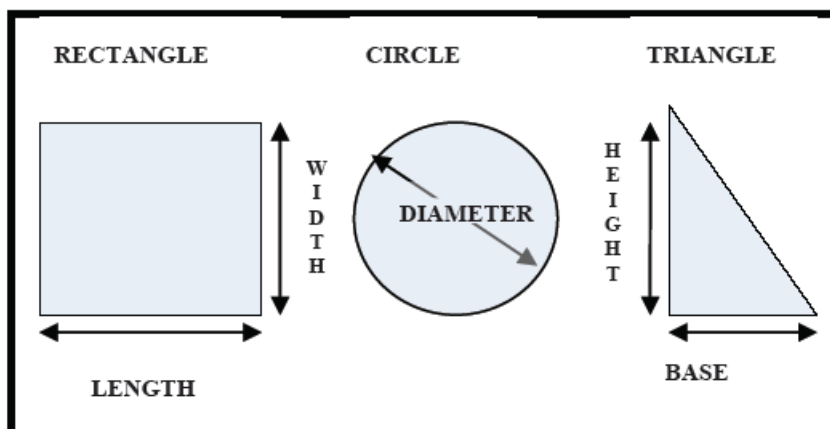
Circle: Area = diameter (feet) x diameter (feet) x 0.785

Triangle: Area = base (feet) x height (feet) x 0.5

Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.

Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons.

Figure A: Common Shapes and Dimensions used for Estimating Spill Size



Method 3: Duration and Flow Rate

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flow rate. The methods of estimating duration and flow rate are:

Duration

The duration is the elapsed time from the time the spill started to the time that the flow was restored.

Start time: The start time is sometimes difficult to establish. Here are a few approaches:

- Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
- Conditions at the spill site change over time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. From a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process.
- It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case, the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows (in excess of capacity) will occur only during, and for a short period after, heavy rainfall.

End time: The end time is usually much easier to establish. On-site field crews observe the “blow down” that occurs when the blockage has been removed.

Flow Rate

The flow rate is the average flow that left the sewer system during the time of the spill. Two common ways to estimate the flow rate are described below:

1. San Diego Manhole Flow Rate Chart: This chart, on page C-4, shows sewage flowing from manhole covers at a variety of flow rates. The observations of the field crew can be used to select the appropriate flow rate from the chart. If possible, photographs are useful in documenting the basis for the flow rate estimate.

2. Counting Connections: Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or eight to ten gallons per hour per connection.

For example:

$$\begin{aligned} & 22 \text{ upstream connections} \times 9 \text{ gallons per hour per connection} \\ & = 198 \text{ gallons per hour} \div 60 \text{ minutes per hour} \\ & = 3.3 \text{ gallons per minute} \end{aligned}$$

Spill Volume

Once duration and flow rate have been estimated, the volume of the spill is the product of the duration (in hours or days) and the flow rate (in gallons per hour or gallons per day).

For example:

Spill Start Time = 11:00

Spill End Time = 14:00

Spill Duration = 3 hours

3.3 gallons per minute x 3 hours x 60 minutes per hour = 594 gallons



City of San Diego
Metropolitan Wastewater Department

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division
(619) 654-4160



5 gpm



25 gpm



50 gpm



100 gpm



150 gpm



200 gpm



225 gpm



250 gpm



275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the city of San Diego's water department.

Surface Water Sampling Procedures

Surface Water Sampling Instructions:

1. Assemble Field Sampling Kit.
2. Add ice to an ice chest to ensure the samples are at approximately 4°C.
3. Determine and photograph the spill point of entry into the surface waters. Make sure to reference the entry to a permanent physical feature.
4. Proceed to sample at:
 - a. 50 ft upstream from the point of entry (first sample).
 - b. 100 feet downstream of point of entry.
5. Samples shall be taken well away from the bank and at a point where water is visibly moving.
6. Remove the seal from the coliform sample container and remove the cap. It is important that nothing touch the inside of the container or cap, as this may contaminate the bottle.
7. Cap the bottle and label as “Upstream” along with the date and time of sample.
8. Take an additional reference sample for ammonia at the upstream location. This sample container contains a preservative, DO NOT RINSE THE BOTTLE OUT!
9. Photograph the sampling point and note this information on the SSO Worksheet.
10. Repeat steps 5 through 9 for the downstream samples and label as “Downstream” along with the date and time of sample.
11. Place all samples in the cooler.
12. Complete the Chain of Custody and contact the Local State Certified laboratory for the delivery of the samples.
13. Depending on the magnitude of the spill, continued downstream sampling may be required until downstream results are consistent with upstream results.

Sampling Kit consists of the following:

- Cooler with ice packs or ice
- Chain of Custody
- 2 Total/Fecal Coliform sample bottles (100 ml sterilized)
- 2 ammonia nitrogen sample bottles (1 pint bottle preserved with H₂SO₄)
- Latex gloves
- Safety glasses
- Sample labels
- Water-proof pen
- Disposable camera

Appendix E

Spill Reporting Checklist

Spill Reporting Checklist by Category:

Category 2 Spill: (All spills other than Category 1)	
a) Latitude and longitude of the location of SSO.	☐
b) Applicable Regional Board, i.e. identify the region in which the SSO occurred.	☐
c) County where SSO occurred.	☐
d) Whether or not the SSO entered a drainage channel and/or surface water.	☐
e) Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system.	☐
f) Estimated SSO volume in gallons.	☐
g) SSO source (manhole, cleanout, etc.).	☐
h) SSO cause (mainline blockage, roots, etc.).	☐
i) Time of SSO notification or discovery.	☐
j) Estimated operator arrival time.	☐
k) SSO destination.	☐
l) Estimated SSO end time.	☐
m) SSO Certification. Upon SSO Certification, the CIWQS database will issue a Final SSO Identification (ID) Number.	☐

Private Lateral Sewage Spill: (Reporting is optional)	
a) All information listed above (if applicable and known).	☐
b) Identification of sewage discharge as a private lateral sewage discharge.	☐
c) Responsible party contact information (if known).	☐

Category 1 Spills:	
Initial Reporting Checklist: Initial 3 day report requirements for Category 1 spills are the same as those for Category 2 spills (except for item “k” above) and include the following items listed below.	
a) All information listed for Category 2 SSOs, except for SSO destination.	☐
b) Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain.	☐
c) Estimated SSO amount recovered.	☐
d) Response and corrective action taken.	☐
e) If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, select NA.	☐
f) Parameters that samples were analyzed for (if applicable).	☐
g) Identification of whether or not health warnings were posted.	☐
h) Beaches impacted (if applicable). If no beach was impacted, select NA.	☐
i) Whether or not there is an ongoing investigation.	☐
j) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps.	☐
k) OES control number (if applicable).	☐
l) Date OES was called (if applicable).	☐
m) Time OES was called (if applicable).	☐
n) Identification of whether or Stanislaus County Department of Environmental Resources (SCDER) Officers were called.	☐
o) Date SCDER Officer was called (if applicable).	☐
p) Time SCDER Officer was called (if applicable).	☐

A final certified report must be completed through the CIWQS database, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an appendix, at any time.

Sewer System Management Plan (SSMP) – FOG Control Program

INTRODUCTION

If determined necessary, a robust fats, oils, and grease (FOG) source control program is required for the Sewer System Management Plan (SSMP). The FOG control program is required to include legal authority to prohibit and enforce grease discharges (as from restaurants), require installation of grease removal devices, provide design standards and maintenance requirements for the grease removal devices, establish Best Management Practice (BMP) requirements, and establish record keeping and reporting requirements for grease producing facilities. The FOG control program is also required to establish legal authority to inspect and enforce the requirements of the program, as well as provide sufficient staff to perform these tasks. Finally, the FOG program shall develop an outreach program to educate the public on proper disposal of fats, oils and grease.

The City of Newman does not currently have a formal FOG control program and does not have a problem with FOG or sanitary sewer overflows (SSOs) related to FOG. Since the City of Newman believes that the discharge of FOG is not a problem, WDR Order No. 2006-003-DWQ requires the City to provide justification that a FOG program is not needed. This justification is provided below.

A. FOG CONTROL PROGRAM

1. REGULATORY REQUIREMENT

“Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system.”

2. CITY OF NEWMAN

The City of Newman has eight (8) grease producing facilities, all of which are restaurants. These restaurants have grease traps which prevent the discharge of FOG to the sewer system and are monitored by the Stanislaus County Health Department. In addition, the City of Newman’s City Code Ordinance No. 90-4, Section 4.3, number 10, limits the amount of FOG to be discharged

into the sewer system. There is no record of enforcing this portion of the ordinance on any of the City's eight grease producing facilities for violation of FOG discharge.

The City of Newman's sanitary sewer staff observe a residual amount of FOG in the sewer system. This small amount of FOG in the City's sewer system is removed during routine cleanings and does not accumulate enough to cause blockage or FOG related SSOs.

B. SUMMARY

The City has determined that a formal FOG Control Program is not need at this time, based on the fact that the City of Newman has:

- Relatively few significant sources of FOG,
- Monitored grease removal devices on all potentially significant FOG producing facilities,
- A City ordinance to limit FOG discharge,
- Routine cleaning to prevent accumulation of any FOG that does enter the sewer system, and
- Not experienced any FOG related SSOs.

Sewer System Management Plan (SSMP) – System Evaluation and Capacity Assurance Plan (SECAP)

INTRODUCTION

The wastewater collection system should be evaluated to determine where hydraulic deficiencies exist. Based on the hydraulic deficiencies, a capital improvement plan (CIP) should be developed and implemented to ensure adequate capacity for dry and wet weather flow conditions.

Capacity enhancement measures should establish short- and long-term actions to correct each identified hydraulic deficiency. Short- and long-term actions should include alternative analyses, a prioritization of recommended projects, an implementation schedule, and source of funding.

A. EVALUATION

1. REGULATORY REQUIREMENT

“Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limited capacity) and the major sources that contribute to the peak flows associated with overflow events.”

2. CITY OF NEWMAN SECAP

The City of Newman’s recently adopted master plan (City of Newman Wastewater Collection System Master Plan) included dynamic hydraulic modeling of the existing sewer system under dry and wet weather flows. A 10-year, 6-hour design storm was used in modeling the peak wet weather flow conditions. The hydraulically deficient segments of the City’s system, under peak wet weather conditions, are summarized in Attachment 8-1 (City of Newman Wastewater Collection System Master Plan, Executive Summary).

B. DESIGN CRITERIA

1. REGULATORY REQUIREMENT

“Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria.”

2. CITY OF NEWMAN SECAP

The City's Design Standards (see Element 6, Attachment 6-1) describe the requirements for the design of sewer mains, service laterals, lift stations and force mains.

C. CAPACITY ENHANCEMENT MEASURES

1. REGULATORY REQUIREMENT

"The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding."

2. CITY OF NEWMAN SECAP

The executive summary of the City of Newman's Wastewater Collection System Master Plan (Attachment 8-1) identifies areas of the existing sewer system which need capacity improvements to meet peak flows from a 10-year, 6-hour design storm. In addition, this master plan also includes the necessary system capacity improvements to meet projected growth within the City Limits, Primary and Secondary Sphere of Influence (SOI). A capital improvement plan (CIP) for the existing and future capacity needs for the City is outlined in Attachment 8-1. The improvements suggested in this CIP are prioritized based on their needs to meet existing and future peak wet weather flows (based on the selected 10-year, 6-hour design storm). For example, the existing system capacity needs are recommended first, followed by improvements to provide capacity for build-out of the City Limits, Primary and Secondary SOIs.

In addition to the capacity-related improvements outlined in Attachment 8-1, the City has developed a five-year capital improvement program, which includes capacity and condition-related improvements. This program outlines improvements to the City's sewer system on an annual basis and specifies funding sources for these improvement projects. Refer to Appendix C of Element 4 ("Operation and Maintenance Program") for the City of Newman Five Year Capital Improvement Program.

D. SCHEDULE

1. REGULATORY REQUIREMENT

"The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A)-(C) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14."

2. CITY OF NEWMAN SECAP

The City of Newman has completed all portions of the capital improvement program as described in (A)-(C) above. Each component of the capital improvement program (system capacity evaluation, design criteria, and system-wide improvement projects) will be updated as needed or along with the remainder of the City's SSMP on a five-year basis.

Attachment 8-1

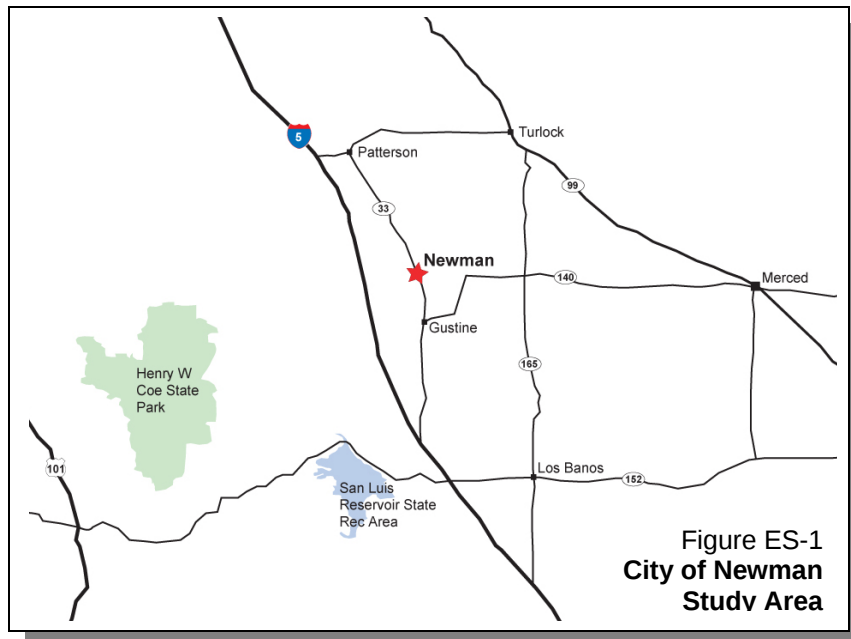
**City of Newman
Wastewater Collection System Master Plan
(Executive Summary)**

Executive Summary

The City of Newman (City) Wastewater Collection System Master Plan (Master Plan) is intended to provide guidance to the City on their existing wastewater collection system capacity. It also includes options for providing additional capacity for potential future development identified in the *City of Newman 2030 General Plan* (General Plan) (Design, Community & Environment, April 2007). Specific objectives of the Master Plan include:

- Evaluation of the capacity of the existing wastewater collection system.
- Identification of capital improvements needed to correct any identified existing deficiencies.
- Identification of capital improvements needed to accommodate future development (Primary and Secondary Spheres of Influence (SOIs)).

In addition, in May 2006, the California State Water Resources Control Board (SWRCB) issued statewide general waste discharge requirements (WDRs) for all publicly owned sanitary sewer systems greater than one mile in length. With the adoption of new WDRs, municipalities are now required to document system capacities and maintenance procedures to minimize overflows and failures. A key element of the WDR is the completion of a Sewer System Management Plan (SSMP). Within the SSMP, municipalities are required to complete a System Evaluation and Capacity Assurance Plan (SECAP). The SECAP determines where hydraulic deficiencies exist and outlines a capital improvement program to ensure adequate capacity for dry and wet weather flow conditions. This Wastewater Collection System Master Plan provides the City with a plan that is consistent with its new General Plan as well as fulfills the requirements of the SSMP and SECAP.



ES.1 PROJECT OVERVIEW

The City of Newman is located in the western portion of the Central Valley, at the southern border of Stanislaus County, near Merced County (Figure ES-1). The City's existing wastewater collection system covers an area of approximately 1,000 acres and provides service to over 10,000 residential, commercial, and industrial users (Figure ES-2). The wastewater generated by these users is collected and conveyed to the City's wastewater treatment plant (WWTP) by over 34 miles of sewer pipelines, force mains, and seven active pump stations.

Wastewater collection system capacity was assessed using a dynamic flow routing model, Wallingford Software's *InfoWorks*. The dynamic model simulates backwater, looped connections, surcharging, and pressure flow that may occur within the City's collections system and is considered the one of the most sophisticated means to assess sewer system capacity. The *InfoWorks* model simulates sewer system hydraulic response during peak flow events resulting from a combination of peak diurnal sanitary flows (the peak wastewater flow from residences and businesses throughout the day), groundwater infiltration, and rainfall dependent infiltration and inflow (extraneous flow entering the system during or directly after a rain event).

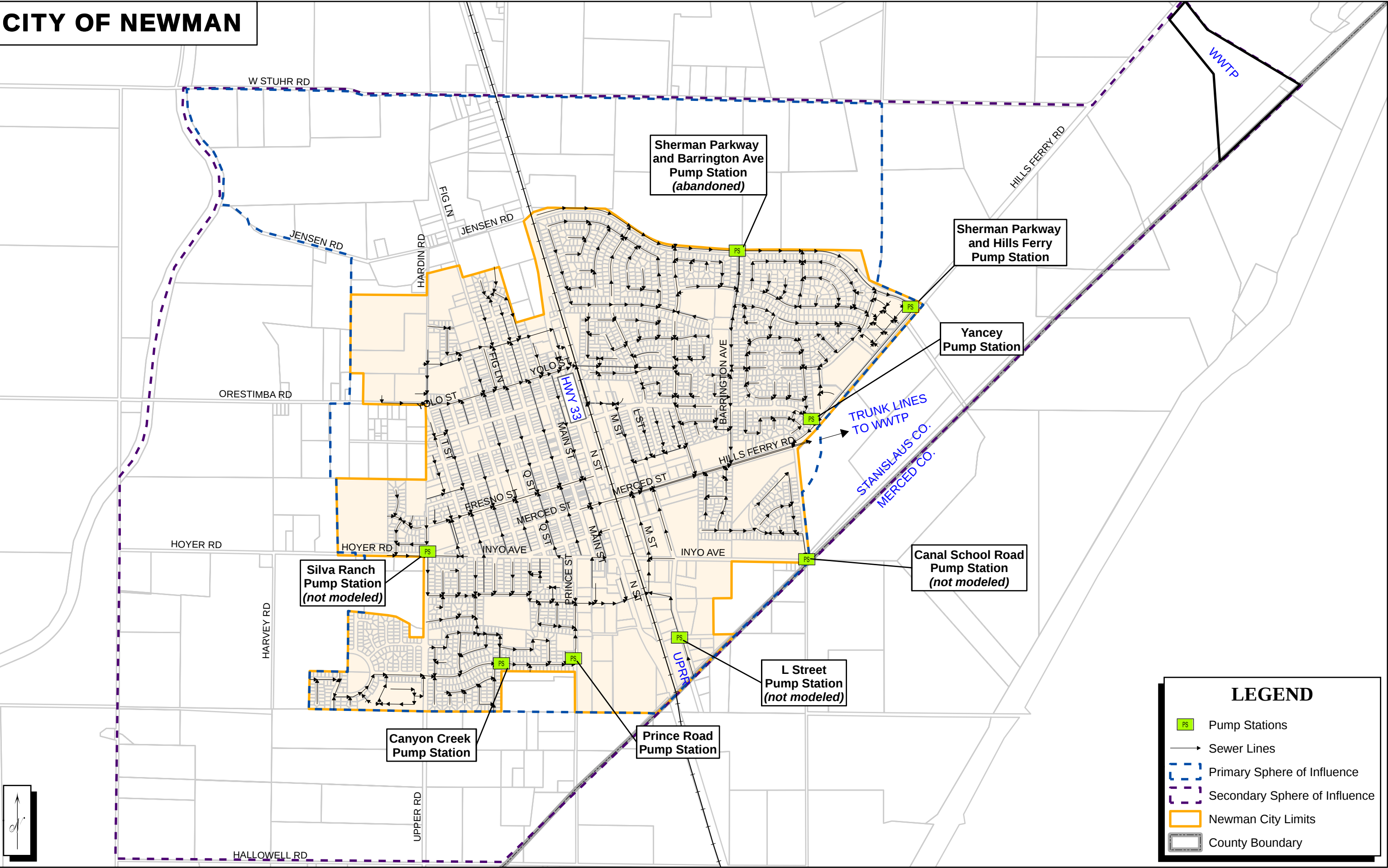
Design storms are developed from statistical analysis of local precipitation records and represent the distribution of rainfall depths over a time increment for a given storm duration and frequency. Design storms are selected based on the level of protection desired for the wastewater collection system while considering the likelihood of the event. Wastewater flows resulting from a 10-year frequency storm occurring over a 6-hour period (10-year, 6-hour design storm) were identified as a minimum City design service objective. Capacity improvements are recommended to provide adequate system capacity to convey peak flows during a 10-year 6-hour storm.

Wastewater collection systems can generally accommodate some degree of surcharging during peak flow conditions. However, once a manhole surcharges, it takes very little extra flow for an overflow to occur. Criteria for acceptable levels of maximum surcharging were developed with input from City staff. These criteria are presented in Table ES-1. These levels were used as criteria in evaluating capacity in flow limited segments of sewer pipelines in all modeled scenarios.

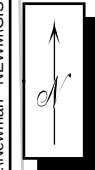
Table ES-1
City of Newman
Acceptable Manhole Surcharging
During Design Storm (10-year, 6-hour) Conditions

Manhole Depth ^(a)	Acceptable Level of Manhole Surcharging
Less than 4 feet	None
4 feet to 7 feet	Not to exceed 2 feet below ground surface
7 feet and greater	Not to exceed 4 feet below ground surface
^(a) Manhole depth as measured from the crown of the pipe to the rim of the manhole.	

CITY OF NEWMAN



M:\Newman - NEWMMGISMap - MXD\Collection System - cdy\Report Figures\Final\Figure ES-2 Existing Wastewater Collection System_11-10-08-CDY_Final



ES.2 STUDY CONCLUSIONS

The Newman collection system was modeled and analyzed at a 10-year, 6-hour design storm for the existing level of development, build-out of the City Limits, and build-out of the City Limits plus near-term future development. In addition, the ability of the collection system to accommodate interim and long-term system needs from the Primary and Secondary SOIs was evaluated and plans were developed for serving these areas.

ES.2.1 EXISTING CONDITIONS

Under existing conditions, a 10-year, 6-hour design storm is predicted to generate a peak flow of 4.6 million gallons per day (Mgal/d). (Average flow is currently 1.1 Mgal/d.) This peak flow is predicted to cause several capacity bottlenecks and some manhole surcharging. However, only one pipeline (downstream of the Prince Street Pump Station – manhole D-1303 to D-1302) was predicted to exceed the surcharging criteria outlined in Table ES-1.

ES.2.2 BUILD-OUT OF CITY LIMITS

Build-out of the City Limits is assumed to occur when all the currently vacant parcels within the City Limits have been developed. With the addition of peak flows from infill developments, the peak flow at the system's outfall during the 10-year, 6-hour design storm event was estimated to be 5.0 Mgal/d. This peak flow resulted in an increase in capacity-limited pipelines and more manhole surcharging. The predicted surcharged locations during a 10-year, 6-hour design storm at build-out of City Limits are shown in Figure ES-3. In this scenario, two pipeline segments (downstream of the Prince Street Pump Station – manhole D-1303 to D-1302 and Hills Ferry Road – manhole A-103 to A-100) were predicted to exceed the surcharging criteria outlined in Table ES-1.

ES.2.3 BUILD-OUT OF CITY LIMITS + NEAR-TERM FUTURE DEVELOPMENT

The existing system was modeled under 10-year, 6-hour design storm conditions at build-out of the City Limits plus known near-term new development. Examples of developments within the Primary and Secondary SOIs that may develop within 3 to 5 years are identified as Area 1 and Area 2 in Figure ES-4. Because of the proximity of these areas to the existing wastewater collection system and the potential for their near-term growth, the ability of the existing collection system to handle the peak flow from these areas was simulated. With the addition of flows from Area 1 and Area 2, the peak flow at the system outfall was estimated at 5.7 Mgal/d. The areas impacted by the addition of flow from these areas are shown in Figure ES-4. Several areas were impacted by the addition of flow from Area 1. Surcharging in many of these sections is due to bottlenecks beginning at Merced Street. A profile of the surcharging downstream of the assumed addition of Area 1 to the existing system is shown in Figure ES-5. For Area 2, capacity exists in the main pipeline along Sherman Parkway. However, the pump station at Sherman Parkway and Hills Ferry Road, as well as pipelines at the discharge of the force main from this pump station, do not have the capacity to accommodate this property.

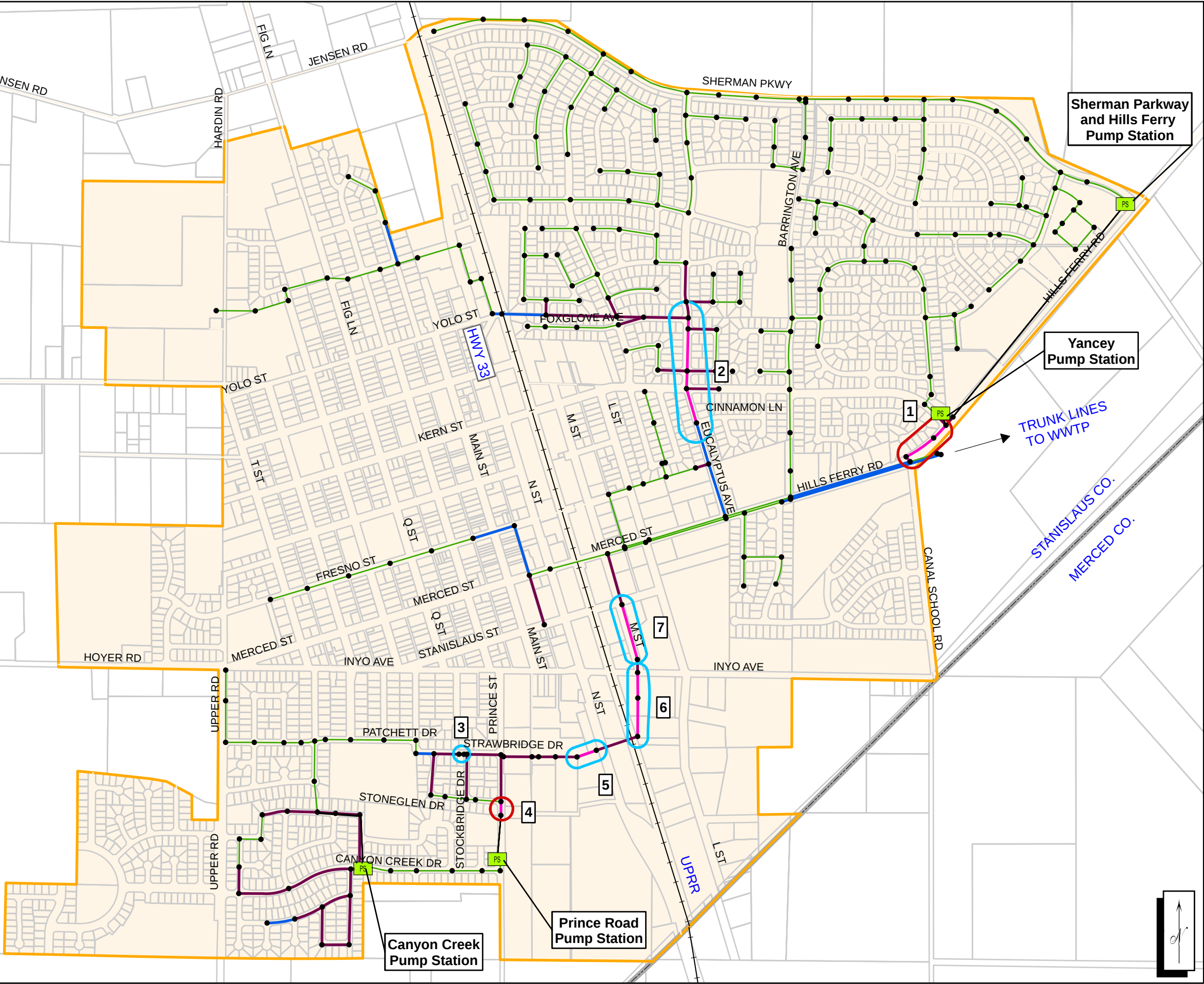
CITY OF NEWMAN

M:\Newman - NEWMMGIS\Map - MXD\Collection System - cdy\Report Figures\Final\Figure ES-3 Build-out of City Limits Model Results - 10-year, 6-hour Design Storm - 11-10-08-CDY_Final

- [1] Hills Ferry Road from Driskill Avenue to Merced Street (Manhole A-103 to A-100)
- [2] Eucalyptus Avenue from Foxglove Avenue to Cinnamon Lane (Manhole B-160 to B-120)
- [3] Intersection of Strawbridge Drive and Stockbridge Drive (Manhole D-1600 to D-1500)
- [4] Intersection of Stoneglen Drive and Prince Street, downstream of Prince Street pump station (Manhole D-1303 to D-1302)
- [5] Southwest of the intersection of Highway 33/N Street and Inyo Avenue (Manhole D-800 to D-700)
- [6] South of the intersection of Inyo Avenue and M Street (Manhole D-600 to D-400)
- [7] M Street from Inyo Avenue to Stanislaus Street (Manhole D-300 to D-200)

LEGEND

- Modeled Manholes
- Newman City Limits
- County Boundary
- Surcharged Pipe Segments**
 - Within Capacity Criteria in Table 6-1
 - Exceeds Capacity Criteria in Table 6-1
- Pipe Segments**
 - Force Main
 - Pipes Without Capacity Issues
 - 80% to Full Capacity
 - Affected by Issues Downstream or at Capacity
 - Surcharge/Over Capacity



CITY OF NEWMAN

- [1] Hills Ferry Road from Driskill Avenue to Merced Street (Manhole A-103 to A-100)
- [2] Driskill Avenue at the Yancey Pump Station (Manhole A-104 to A-104a)
- [3] Intersection of Strawbridge Drive and Stockbridge Drive (Manhole D-1600 to D-1500)
- [4] Intersection of Stoneglen Drive and Prince Street, downstream of the Prince Street Pump Station (Manhole D-1303 to D-1302)
- [5] Intersection of Strawbridge Drive and Prince Street (Manhole D-1300 to D-1200)
- [6] South of the intersection of Highway 33/N Street and Inyo Avenue to the intersection of Inyo Avenue and M Street (Manhole D-800 to D-400)
- [7] M Street from Inyo Avenue to Merced Street (Manhole D-300 to D-100)
- [8] Eucalyptus Avenue from Foxglove Avenue to Cinnamon Lane (Manhole B-160 to B-120)

LEGEND

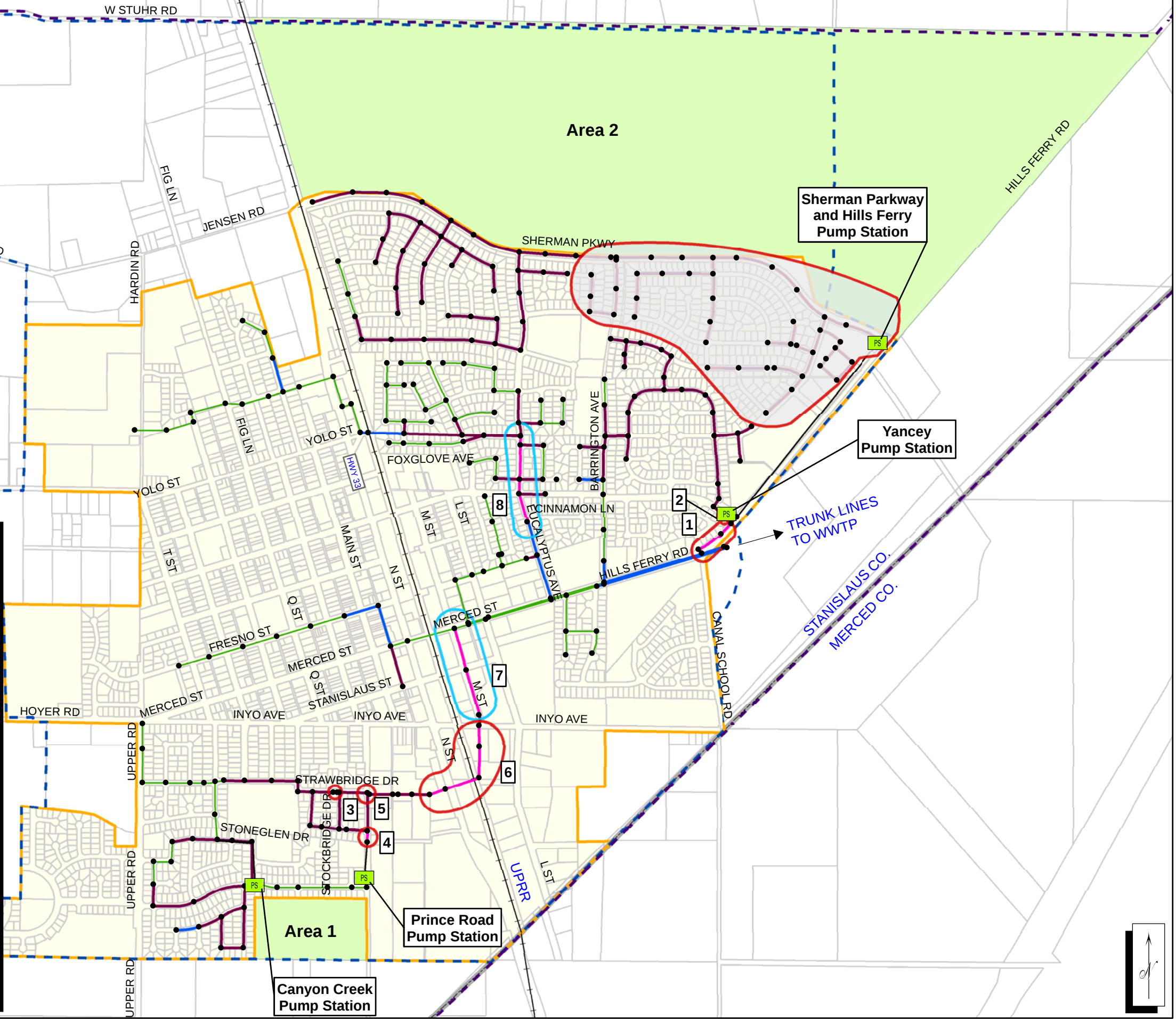
- Modeled Manholes
- Newman City Limits
- Primary SOI
- Secondary SOI
- County Boundary
- Near-Term Development Areas

Surcharge

- Within Capacity Criteria in Table 6-1
- Exceeds Capacity Criteria in Table 6-1
- Impacted by Downstream Pump Station with Limited Capacity

Pipe Segments

- Force Main
- Pipes Without Capacity Issues
- 80% to Full Capacity
- Affected by Issues Downstream or at Capacity
- Surcharged/Over Capacity



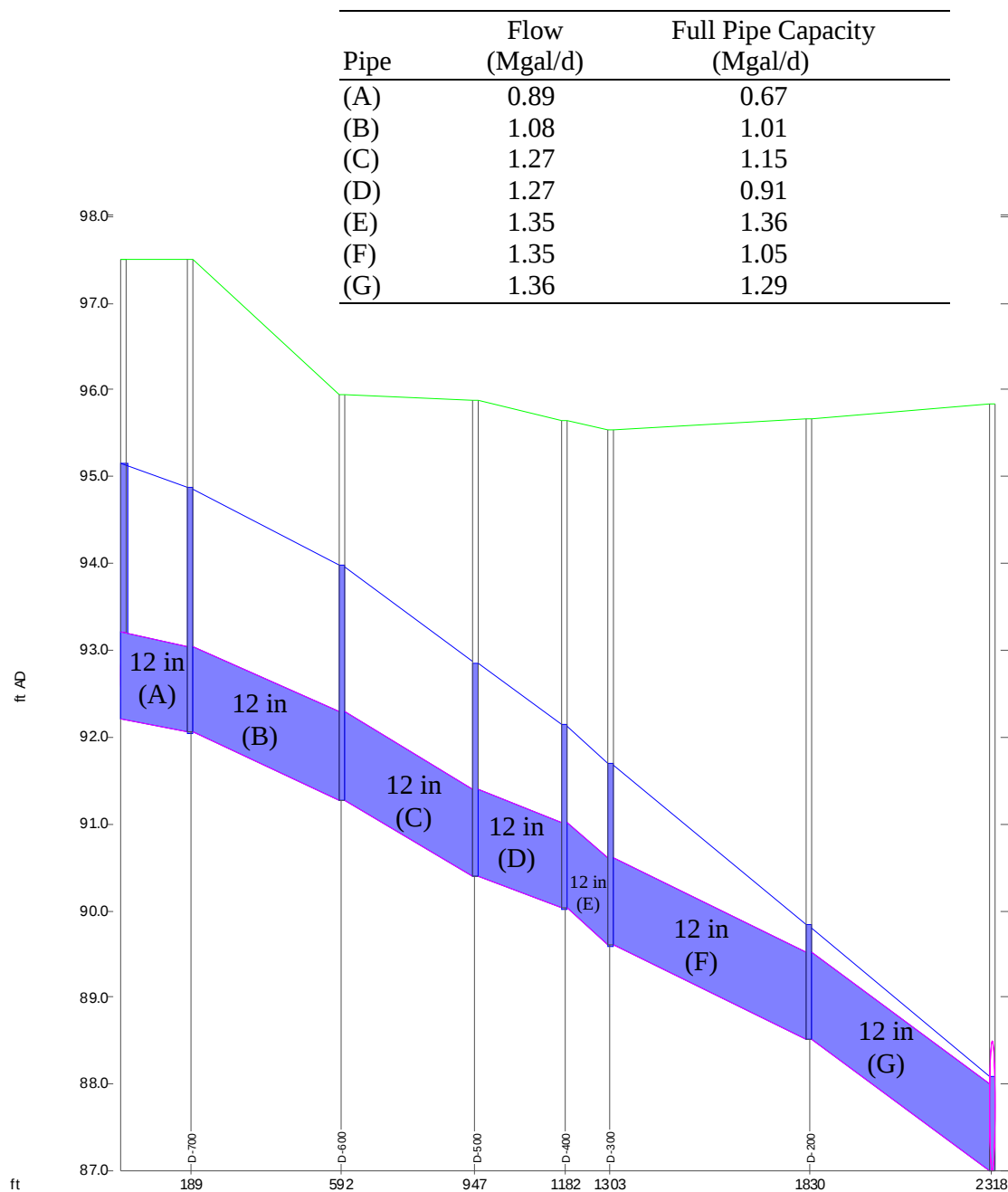


Figure ES-5
City of Newman
Build-out of City Limits + Near-Term Development – 10-year, 6-hour Design Storm
Profile of Surcharged Sewer Segment from Highway 33/N Street to Inyo Avenue
and M Street (Manhole D-800 to D-100)

ES.3 RECOMMENDED CAPITAL IMPROVEMENT PROJECTS

Recommended capital improvement projects and planning level cost estimates for the following scenarios are discussed below:

1. Accommodating build-out of the City Limits in the existing system.
2. Accommodating near-term development and interim solutions for future development areas in the Primary SOI, prior to construction of new large trunk sewers.
3. Providing long-term service for build-out areas (Primary and Secondary SOIs).

Prior to implementing any mitigation strategies or improvements, it is highly recommended that surveys be performed to confirm existing inverts, rims, and slopes.

ES.3.1 EXISTING COLLECTION SYSTEM AT BUILD-OUT OF CITY LIMITS

During a 10-year, 6-hour design storm at the existing level of development, the only pipeline predicted to exceed recommended capacity criteria is the pipeline segment downstream of the Prince Street Pump Station. To provide adequate protection during a design level storm, it is recommended that this pipeline (manhole D-1303 to D-1302) be upsized from 6-inches to 8-inches in diameter.

At build-out of the City Limits, the relief line at the Yancey Pump Station (on Hills Ferry Road from Driskill Avenue to Merced Street) is also predicted to be an area of concern. Flow from the discharge of the outfall of the Sherman Parkway and Hills Ferry Pump Station force main appears to enter the Yancey Pump Station overflow/relief line. This results in excessive pumping at the Yancey Pump Station and surcharging, which exceeds capacity criteria. To alleviate this condition, it is recommended that a 12-inch flap gate be installed at the discharge of the relief line at manhole A-103. The flap gate would prevent flow from entering the overflow line, while allowing the overflow line to discharge into the downstream sewer.

Recommended improvements and costs are summarized in Table ES-2. It is highly recommended that improvements be implemented only subsequent to detailed surveying of these areas.

Table ES-2
City of Newman
Recommended Improvements and Preliminary Costs for
Existing System Deficiencies at Build-out of the City Limits

Improvement Description	Cost, \$ ^(a)
Improvement #1 - Upsize Pipeline (Manhole D-1303 to D-1302) from 6-inch to 8-inch	\$23,500
Improvement #2 - Install 12-inch Flap Gate at Yancey Pump Station	\$10,000
Estimating Contingency (30%)	\$10,000
SUBTOTAL – CONSTRUCTION COSTS (rounded)	\$43,500
Design/Administration (10%)	\$4,300
TOTAL (rounded)	\$48,000

^(a) January 2008 Costs; ENRCCI = 8,090.

ES.3.2 INTERIM CAPACITY PLAN

Through the modeling process, it was determined that the City of Newman's existing wastewater collection system does not have the capacity to handle wastewater flows from build-out of the Primary and Secondary SOIs. Serving all of these areas will require the construction of two large trunk sewers. Building large trunk sewers involves long-term planning, which makes these sewers unavailable to development occurring within the next few years. Therefore, interim solutions for serving some potential near-term development areas with existing infrastructure were identified. All the interim solutions provided assume that the improvements recommended previously for the existing system deficiencies have been completed.

Future development areas within the Primary SOI may require interim capacity prior to construction of large trunk sewers, depending on the timing of development. To serve peak flow from future developments, the available capacity, as well as the most capacity limited pipelines for each major route, is shown in Figure ES-6. The capacity shown is available for interim use by future development, including Areas 1 and 2. To confirm available capacity, it is recommended that prior to allowing developments to connect to the existing system, a more detailed analysis and surveying of the impacted pipelines be performed.

Area 1

To accommodate Area 1 (located just south of the City Limits) in the existing collection system, the pipe sections from manhole D-1300 to manhole D-100 (approximately 3,027 linear feet) will require upsizing from a 12-inch to a 15-inch diameter pipeline. This upsizing will increase pipe capacity and reduce manhole surcharging, relieving the overall capacity issues in this pipeline. A preliminary cost estimate for this project is provided in Table ES-3.

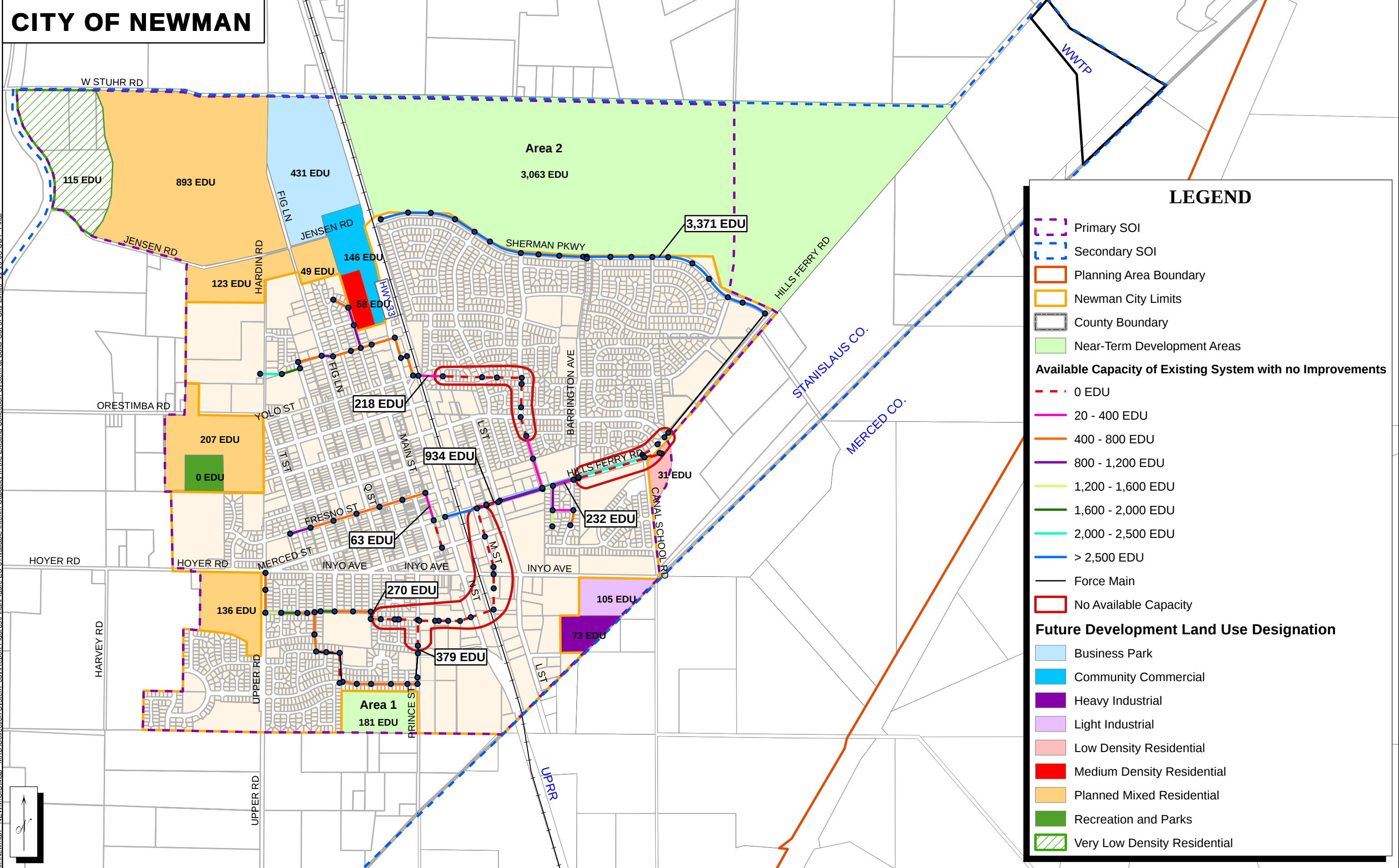


Table ES-3
City of Newman
Preliminary Cost Estimate for Interim Capacity Plan -
Accommodating Area 1 in Existing System

Improvement Description	Cost, \$ ^(a)
Upsize Pipeline (Manhole D-1300 to D-100) from 12-inch to 15-inch	\$605,000
Optional Improvement – Replace Manholes D-1300 to D-100	\$260,000
Estimating Contingency (30%)	\$260,000
SUBTOTAL – CONSTRUCTION COSTS (rounded)	\$1,250,000
Design/Administration (10%)	\$113,000
TOTAL (rounded)	\$1,240,000

^(a) January 2008 Costs; ENRCCI = 8,090.

Area 2

According to modeling results, sufficient capacity exists in the pipeline on Sherman Parkway to accommodate Area 2. However, this development cannot be accommodated in the remainder of the existing system without upgrades to the pump station at Sherman Parkway and Hills Ferry Road and upsizing of the pipeline downstream of the pump station outlet. Although the Sherman Parkway and Hills Ferry Road Pump Station may have enough capacity to be used on an interim basis, any additional flow downstream of the pump station outlet will cause an exceedance in the capacity criteria. For any of Area 2 to be accommodated in the existing system, the upgrades and upsizing mentioned above would need to be implemented, or the pipeline from Sherman Parkway would need to be extended east of Hills Ferry Road to the main trunk lines. Further analysis is recommended prior to implementation of either of these strategies.

ES.3.3 LONG-TERM SYSTEM NEEDS

The existing wastewater collection system cannot accommodate all flows from future development areas without significant improvements throughout the system. Such improvements would be costly and require major construction in high population areas, such as downtown. Therefore, a plan for serving build-out areas in the SOIs with new trunk sewers to the WWTP was developed.

To serve the wastewater needs for anticipated development areas within the Primary and Secondary SOIs, two new trunk lines are proposed. Preliminary routes are presented in Figure ES-7. A northern trunk would collect wastewater north of Hoyer Road and a southern trunk would collect wastewater south of Hoyer Road. This alignment would allow the majority of the flow in future areas to be accommodated by gravity. For developments south of Hoyer Road, a new sewer trunk could be routed along the southern boundary of the City Limits and then northeast along the Stanislaus/Merced County boundary to eventually discharge at the WWTP. For developments north of Hoyer Road, flows could be routed north along the western edge of the City Limits and then roughly east along East Stuhr Road to the WWTP.

CITY OF NEWMAN

LEGEND

Primary SOI

Secondary SOI

City Limits

County Boundary

Planning Area Boundary

Proposed Trunk Lines

12" diameter

15" diameter

18" diameter

21" diameter

Future Development Areas

Business Park

Community Commercial

Heavy Industrial

Light Industrial

Low Density Residential

Medium Density Residential

Planned Mixed Residential

Recreation and Parks

Very Low Density Residential

The map displays the City of Newman and its surrounding areas, including Stanislaus County and Merced County. It shows the proposed build-out trunk lines for Primary and Secondary Sanitary Outfall Interceptors (SOIs). The map includes various colored zones (P-1 to P-13, S-1 to S-9) and labels for roads, railroad crossings, and the wastewater treatment plant (WWTP). The map also shows the city limits, county boundaries, and planning area boundaries. The legend provides a key for the symbols and colors used on the map.

ECO:LOGIC Engineering
City of Newman Collection System Master Plan

Figure ES-7
Preliminary Routes of Proposed Build-Out Trunk Lines for Build-out of Primary and Secondary SOIS

It should be noted that both of these proposed trunk line routes would need to cross the Union Pacific Railroad, which would require the acquisition of easements. In addition, trunk sewer capacity was calculated assuming that Area 2 would be accommodated in the existing pipeline along Sherman Parkway, with one of the improvements identified above being constructed.

A preliminary cost estimate to construct trunk sewers to accommodate the Primary and Secondary SOIs is provided in Table ES-4.

Table ES-4
City of Newman
Preliminary Cost Estimate for Build-out of Primary and Secondary SOIs -
Proposed New Trunk Sewers

Improvement Description	Cost, \$ ^(a)
Build-out Trunk Sewer – North Route	\$6,000,000
Build-out Trunk Sewer – South Route	\$7,300,000
Estimating Contingency (30%)	\$4,000,000
SUBTOTAL – CONSTRUCTION COSTS (rounded)	\$17,300,000
Design/Administration (10%)	\$1,700,000
TOTAL (rounded)	\$19,000,000

^(a) January 2008 Costs; ENRCCI = 8,090.

Sewer System Management Plan (SSMP) – Monitoring, Measurement, and Program Modifications

INTRODUCTION

During implementation of the SSMP program, the program elements should be monitored for their effectiveness. If the elements are not effective, the program elements should be modified or updated to increase their effectiveness.

A. MAINTAIN INFORMATION

1. REGULATORY REQUIREMENT

“Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities”

2. CITY OF NEWMAN’S PROGRAM

The City will track the following information to measure the effectiveness of its SSMP program:

- Number of SSOs (per 100 miles of mainline per year)
- Cause of each SSO (debris, pipe failure, capacity, lift station failure)
- Average SSO volume (gallons)
- Average response time to SSO
- Percentage of spill contained compared to total volume of spill
- Percentage of total spill discharged to surface water
- Percentage of Category 1 spills

B. MONITOR SSMP IMPLEMENTATION

1. REGULATORY REQUIREMENT

“Monitor the implementation and, when appropriate, measure the effectiveness of each element of the SSMP”

2. CITY OF NEWMAN’S PROGRAM

For each of the 11 elements of the SSMP, the City has developed a set of performance measures that will be used to evaluate the effectiveness of each element. Table 9-1 outlines each element and its corresponding performance measures.

Table 9-1
Performance Measures for Each SSMP Element

SSMP Element	Performance Measures
Goal	No measures needed
Organization	No measures needed
Legal Authority	No measures needed
Operation and Maintenance Program	▪ Number and volume of SSOs ▪ Cause of SSOs ▪ Number of repeat SSOs (based on location) ▪ Number of SSOs due to lift station failure
Design and Performance Provisions	No measures needed
Overflow Emergency Response Plan	▪ Average response time ▪ Percentage of spill contained compared to total volume of spill
FOG Control Program	No measures needed (FOG not a problem)
System Evaluation and Capacity Assurance Plan	▪ Number of SSOs due to capacity limitations
Monitoring, Measurement, and Program Modifications	No measures needed
SSMP Program Audits	▪ Date of most recently completed SSMP audit
Communication Program	No measures needed

C. PREVENTATIVE MAINTENANCE PROGRAM

1. REGULATORY REQUIREMENT

“Assess the success of the preventative maintenance program”

2. CITY OF NEWMAN’S PROGRAM

The performance measures used to evaluate the success of the City’s preventative maintenance program are outlined in Table 9-1 under the “Operation and Maintenance Program” element.

D. UPDATE ELEMENTS

1. REGULATORY REQUIREMENT

“Update program elements, as appropriate, based on monitoring or performance evaluations”

2. CITY OF NEWMAN’S PROGRAM

Based on evaluations of the performance measures in Table 9-1, the City can update and modify SSMP elements as necessary.

E. SSO TRENDS

1. REGULATORY REQUIREMENT

“Identify and illustrate SSO trends, including: frequency, location and volume”

2. CITY OF NEWMAN’S PROGRAM

As a requirement of WDR 2006-0003, the City reports monthly to the State Water Quality Control Board (SWQCB) using the California Integrated Water Quality System (CIWQS). The City is required to complete a monthly report if an SSO occurs or not. If an SSO occurs, the City reports the volume, location and cause of the spill. In addition to tracking SSOs with monthly reports on CIWQS, the City also monitors SSO trends using its IWORQ database.

Sewer System Management Plan (SSMP) – SSMP Program Audits

INTRODUCTION

Internal audits should be performed at a frequency of every two years or less, as appropriate. The internal audits will assess the effectiveness of the SSMP. These audits are also intended to identify and correct any deficiencies within the SSMP.

A. SSMP PROGRAM AUDITS

1. REGULATORY REQUIREMENT

“As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.”

2. CITY OF NEWMAN’S SSMP PROGRAM AUDIT PROCEDURES

The City’s focus is to continue to provide high quality service to its customers by improving the management, operation, and maintenance of the sanitary sewer system. The development and maintenance of the SSMP will provide direction for the City to effectively reduce and prevent SSOs. To maintain an effective SSMP, the City will perform audits and updates, ranging from quarterly to every other year, of the SSMP elements. A schedule for SSMP evaluation is as follows:

- Quarterly Evaluation – The Collection System Supervisor will review and update the City organization chart to include: current staff, contact information, position titles, and chain of communication. In addition, any staff training needs or goals will also be reviewed.
- Annual Evaluation – Each year, City staff will update the five year capital improvement program to include any additional improvement projects.
- Bi-annual Audits – Every other year, City staff will evaluate the effectiveness and compliance of each SSMP element and document the findings in a report. These bi-annual audit reports will be filed under Attachment 10-1.

The criteria for bi-annual audits and SSMP updates will be based on the performance measures outlined in Table 9-2 of Element 9. The bi-annual reports will include the following:

- Review of progress made since implementation of SSMP, or previous audit updates
- Review of performance measures outlined in Element 9
- Evaluation of implementation and overall effectiveness of each SSMP element
- Summary of changes and updates to SSMP
- Identification of any needed improvements
- Description of plan for correcting any deficiencies in SSMP

In addition to bi-annual audits, the City's SSMP will be reviewed and updated every five years, as required in subsection D.14 of WDR 2006-0003. This reoccurring review process will provide an opportunity for the City to perform a more comprehensive review of the effectiveness and compliance of the SSMP, which may result in modifications to the plan. If any significant changes are made to the SSMP, re-certification by the City Council is required

Attachment 10-1

City of Newman
Bi-annual SSMP Audit Reports

Sewer System Management Plan (SSMP) – Communication Program

INTRODUCTION

As part of developing and implementing the SSMP, a public outreach program will be established to inform the public of the process, and provide a means of incorporating public input into the SSMP development.

A. COMMUNICATION PROGRAM

1. REGULATORY REQUIREMENT

“The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented. The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.”

2. CITY OF NEWMAN’S COMMUNICATION PROGRAM

The City of Newman will communicate regularly with the public on the development, implementation, and performance of the SSMP using the following outreach methods:

- City of Newman’s website (<http://www.cityofnewman.com>),
- Quarterly notices and comment forms (as part of residents’ sewer bills), and
- Bi-weekly City Council meetings.

Opportunities for public comment, regardless of the outreach method, will be available to the residents of Newman. For residents preferring the convenience of digital media, the City maintains a website which provides the latest city-wide announcements, information on the various city departments, City Council agendas and meeting minutes, and additional information for residents. The City will post the final, council-adopted SSMP on the website and provide a means for informing the public on SSMP activities and incorporating public comment.

For residents who do not have access to the City’s website, quarterly SSMP updates and comment forms will be included in residents’ sewer bills. Another option for residents to be informed and able to comment on the City’s SSMP will be through public meetings. Currently, the City has bi-monthly City Council meetings which will provide a more personal forum for discussion and comment on the progress of the City’s SSMP. Lastly, hardcopies of the City’s

SSMP will be available for public review and comment. One copy will be at City Hall and an additional copy will be at the City of Newman Water Department Office.

Additional regulatory requirements call for the City to communicate with tributary and/or satellite systems. Because the City of Newman does not have any tributary or satellite systems, it does not have to meet this requirement.

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003-DWQ**

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS**

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. 2006-0003-DWQ, are necessary to assure compliance with these waste discharge requirements (WDRs).
10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

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

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:

- a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
- b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
- c) Establish consistent and uniform requirements for SSMP development and implementation;
- d) Provide statewide consistency in reporting; and
- e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. 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.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities” as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
 - (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey 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.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.
4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. 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.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.
2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.
3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.
6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and
 - Inflow and infiltration prevention and control to the extent practicable.
 - (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

- (vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.
7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
 - (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
 - (iii) Cleanup of debris at the overflow site;
 - (iv) System modifications to prevent another SSO at the same location;
 - (v) Adequate sampling to determine the nature and impact of the release; and
 - (vi) Adequate public notification to protect the public from exposure to the SSO.
8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) **Goal:** The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.
- (ii) **Organization:** The SSMP must identify:
 - (a) The name of the responsible or authorized representative as described in Section J of this Order.
 - (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
 - (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).
- (iii) **Legal Authority:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:
 - (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

- (b) Require that sewers and connections be properly designed and constructed;
 - (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
 - (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
 - (e) Enforce any violation of its sewer ordinances.
- (iv) **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
 - (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
 - (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
 - (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

(v) **Design and Performance Provisions:**

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(vi) **Overflow Emergency Response Plan** - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure an appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

- (vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
 - (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
 - (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
 - (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
 - (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
 - (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
 - (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.
- (viii) **System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:
- (a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

- (b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
 - (c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
 - (d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.
- (ix) **Monitoring, Measurement, and Program Modifications:** The Enrollee shall:
- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
 - (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
 - (c) Assess the success of the preventative maintenance program;
 - (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
 - (e) Identify and illustrate SSO trends, including: frequency, location, and volume.
- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

- (xi) **Communication Program** – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
Design and Performance Section D 13 (v)				
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

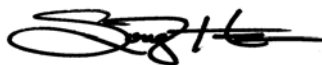
The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

STATE WATER RESOURCES CONTROL BOARD

MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ 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 No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director, and may include a reduction or increase in the monitoring and reporting.

A. SANITARY SEWER OVERFLOW REPORTING

SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
 - A. Equal or exceed 1000 gallons, or
 - B. Result in a discharge to a drainage channel and/or surface water; or
 - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

SSO Reporting Timeframes

4. Category 1 SSOs – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local

County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.
7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

Mandatory Information to be Included in SSO Online Reporting

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

9. Category 2 SSOs:
 - A. Location of SSO by entering GPS coordinates;
 - B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
 - C. County where SSO occurred;
 - D. Whether or not the SSO entered a drainage channel and/or surface water;
 - E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;

- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- I. Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination;
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

11. Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
- C. Estimated SSO amount recovered;
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- I. Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. OES control number (if applicable);
- L. Date OES was called (if applicable);
- M. Time OES was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant to California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services
Phone (800) 852-7550

2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.
3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

B. Record Keeping

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.
3. All records shall be made available for review upon State or Regional Water Board staff's request.
4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:
 - a. Record of Certified report, as submitted to the online SSO database;
 - b. All original recordings for continuous monitoring instrumentation;
 - c. Service call records and complaint logs of calls received by the Enrollee;
 - d. SSO calls;
 - e. SSO records;
 - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
 - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
 - h. A list and description of complaints from customers or others from the previous 5 years; and
 - i. Documentation of performance and implementation measures for the previous 5 years.
6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical technique or method used; and,
- f. The results of such analyses.

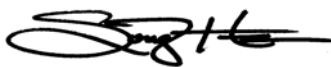
C. Certification

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held on May 2, 2006.



Song Her
Clerk to the Board

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER NO. WQ 2008-0002-EXEC

ADOPTING AMENDED MONITORING AND REPORTING REQUIREMENTS FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER
SYSTEMS

The State of California, Water Resources Control Board (State Water Board) finds:

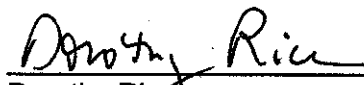
1. The State Water Board is authorized to prescribe statewide general waste discharge requirements for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code 13263, subdivision (i).
2. The State Water Board on May 2, 2006, adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ, pursuant to that authority.
3. The State Water Board on May 2, 2006, adopted Monitoring and Reporting Requirements to implement the General Waste Discharge Requirements for Sanitary Sewer Systems.
4. State Water Board Order No. 2006-0003-DWQ, paragraph G.2., and the Monitoring and Reporting Requirements, both provide that the Executive Director may modify the terms of the Monitoring and Reporting Requirements at any time.
5. The time allowed in those Monitoring and Reporting Requirements for the filing of the initial report of an overflow is too long to adequately protect the public health and safety or the beneficial uses of the waters of the state when there is a sewage collection system spill. An additional notification requirement is necessary and appropriate to ensure the Office of Emergency Services, local public health officials, and the applicable regional water quality control board are apprised of a spill that reaches a drainage channel or surface water.
6. Further, the burden of providing a notification as soon as possible is de minimis and will allow response agencies to take action as soon as possible to protect public health and safety and beneficial uses of the waters of the state.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Resolution No. 2002-0104 and Order No. 2006-0003-DWQ, the Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems No. 2006-0003-DWQ is hereby amended as shown in Attachment A, with new text indicated by double-underline.

Dated:

February 20, 2008


Dorothy Rice
Executive Director

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ (AS REVISED BY ORDER NO. WQ 2008-0002-EXEC)

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 No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director, and may include a reduction or increase in the monitoring and reporting.

NOTIFICATION

Although State and Regional Water Board staff do not have duties as first responders, this Monitoring and Reporting Program is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board.
2. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

A. SANITARY SEWER OVERFLOW REPORTING

SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
 - A. Equal or exceed 1000 gallons, or
 - B. Result in a discharge to a drainage channel and/or surface water; or
 - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

2. Category 2 – All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

SSO Reporting Timeframes

4. Category 1 SSOs – Except as provided above, all SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements are in addition to do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

5. Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
6. Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.
7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in

accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

Mandatory Information to be Included in SSO Online Reporting

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

9. Category 2 SSOs:

- A. Location of SSO by entering GPS coordinates;
- B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
- C. County where SSO occurred;
- D. Whether or not the SSO entered a drainage channel and/or surface water;
- E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- I. Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination;
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

10. Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

11. Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
- C. Estimated SSO amount recovered;
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- I. Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. OES control number (if applicable);
- L. Date OES was called (if applicable);
- M. Time OES was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

Office of Emergency Services
Phone (800) 852-7550

2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.
3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

B. Record Keeping

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

[2. Omitted.]

3. All records shall be made available for review upon State or Regional Water Board staff's request.
4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:
 - a. Record of Certified report, as submitted to the online SSO database;
 - b. All original recordings for continuous monitoring instrumentation;
 - c. Service call records and complaint logs of calls received by the Enrollee;
 - d. SSO calls;
 - e. SSO records;
 - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
 - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
 - h. A list and description of complaints from customers or others from the previous 5 years; and
 - i. Documentation of performance and implementation measures for the previous 5 years.
6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical technique or method used; and,
 - f. The results of such analyses.

C. Certification

1. All final reports must be certified by an authorized person as required by Provision J of the Order.
2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board. The notification requirements added by Order No. WQ 2008-0002-EXEC will become effective upon issuance by the Executive Director.

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 Board.

A handwritten signature in cursive script, reading "Jeanne Townsend", is written over a horizontal line.

Jeanne Townsend
Clerk to the Board



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Executive Office

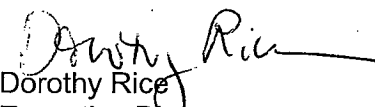
Tam M. Doduc, Chair

1001 I Street • Sacramento, California 95814 • (916) 341-5615
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5621 • <http://www.waterboards.ca.gov>



Arnold Schwarzenegger
Governor

TO: All Dischargers Subject to State Water Board Order No. 2006-0003-DWQ
(Statewide General Waste Discharge Requirements for Sanitary Sewer
Systems)

FROM: 
Dorothy Rice
Executive Director

DATE: February 20, 2008

SUBJECT: AMENDMENT OF MONITORING AND REPORTING REQUIREMENTS FOR
ORDER NO. 2006-0003-DWQ

Please be advised that, as of this date, I have amended the Monitoring and Reporting Requirements for State Water Board General Order No. 2006-0003-DWQ pertaining to Sanitary Sewer Collection Systems. Those amendments are set forth on Attachment A to Order No. WQ 2008-0002-EXEC, a copy of which is attached. The amendments address the time within which a discharger must notify the Office of Emergency Services (OES), local public health officials, and the appropriate regional water quality control board of a spill or overflow that affects a drainage channel or surface water body.

The requirements that have been in effect until today allowed too much time to pass before a report. Further the required report did not apprise the local regional water quality control board of whether the Office of Emergency Services had already received its required notice. The attached amendments add two notification requirements to rectify these problems.

Should you have any questions about these amendments, please contact Eric Maag, Water Resources Control Engineer, at (916) 445-9260.

Attachment

cc: Executive Officers

FACT SHEET

STATE WATER RESOURCES CONTROL BOARD

ORDER NO. 2006-0003

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State Water Resources Control Board (State Water Board) adopted Resolution 2004-80 in November 2004, requiring staff to work with a diverse group of stakeholders (known as the SSO Guidance Committee) to develop a regulatory mechanism to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs). Over the past 14 months, State Water Board staff in collaboration with the SSO Guidance Committee, developed draft statewide general waste discharge requirements (WDRs) and a reporting program. The WDRs and reporting program reflect numerous ideas, opinions, and comments provided by the SSO Guidance Committee.

The SSO Guidance Committee consists of representatives from the State Water Board's Office of Chief Counsel, several Regional Water Quality Control Boards (Regional Water Boards), United States Environmental Protection Agency (USEPA), Region IX, non-governmental environmental organizations, as well as publicly-owned sanitary sewer collection system agencies. The draft WDRs, reporting program, and associated documents result from a collaborative attempt to create a robust and rigorous program, which will serve as the basis for consistent and appropriate management and operation of sanitary sewer systems.

During the collaborative process, several key issues regarding the draft WDRs were identified. These include:

- Is there a need for statewide collection system requirements?
- Should these systems be regulated under a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to the Federal Clean Water Act or under WDRs issued pursuant to the California Water Code (the Porter-Cologne Water Quality Control Act or Porter-Cologne)?
- Should the regulatory mechanism include a prohibition of discharge and, if so, should the prohibition encompass only SSOs that reach surface waters, ground water, or should all SSOs be prohibited?
- Should a regulatory mechanism include a permitted discharge, an affirmative defense, or explicit enforcement discretion?
- Should the regulated facilities include publicly-owned facilities, privately owned facilities, satellite systems (public and private), and/or private laterals?

- Should all SSOs be reported, and if not, what should the reporting thresholds be; and what should the reporting timeframes be?
- How will existing permits and reporting requirements incorporate these new WDRs?
- How much will compliance with these new WDRs cost?

The WDRs and Reporting Program considered the comments of all stakeholders and others who commented on the two drafts circulated to the public. These documents also incorporate legal requirements and other revisions to improve the effectiveness and management of the regulatory program. Following is a discussion of the above issues, comments received on the drafts and an explanation of how issues were resolved.

The Need

As California's wastewater collection system infrastructure begins to age, the need to proactively manage this valuable asset becomes increasingly important. The first step in this process is to have a reliable reporting system for SSOs. Although there are some data systems to record spills and various spill-reporting requirements have been developed, inconsistent requirements and enforcement have led to poor data quality. A few Regional Water Boards have comprehensively tracked SSOs over the last three to five years, and from this information we have been able to determine that the majority of collection systems surveyed have had SSOs within this time period.

Both the San Diego and Santa Ana Regional Water Boards have issued WDRs over the last several years to begin regulating wastewater collection systems in an attempt to quantify and reduce SSOs. In fact, 44 out of 46 collection system agencies regulated by the San Diego Regional Water Board have reported spills over the last four and a half years, resulting in 1467 reported SSOs. Twenty-five out of 27 collection system agencies subject to the Santa Ana Regional Water Board's general WDRs reported SSOs between the years of 1999-2004. During this time period, 1012 SSOs were reported.

The 2004 Annual Ocean and Bay Water Quality Report issued by the Orange County Environmental Health Care Agency shows the number of SSOs increasing from 245 in 1999 to 399 in 2003. While this number indicates a concerning trend, the total annual spill volume from these SSOs has actually decreased dramatically, as has the number of beach closures due to SSOs. It is likely, therefore, that the rise in number of SSOs reflects better reporting, and not an actual increase in the number of SSOs.

This information also suggests that the Santa Ana Regional Water Board's WDRs, which contain sanitary sewer management plan (SSMP) requirements similar to those in the proposed statewide general WDRs, have been effective in

not only increasing the number of spills that are reported but also in mitigating the impacts of SSOs that do occur.

Data supports the conclusion that virtually all collection systems have SSOs and that implementation of a regulatory measure requiring SSO reporting and collection system management, along with required measures to limit SSOs, will greatly benefit California water quality. Implementation of these requirements will also greatly benefit and prolong the useful life of the sanitary sewer system, one of California's most valuable infrastructure items.

NPDES vs. WDRs

Porter-Cologne subjects a broader range of waste discharges to regulation than the Federal Clean Water Act. In general, the Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 U.S.C. §§1311, 1342). Since not all SSOs result in a discharge to surface water, however, not all SSOs violate the Clean Water Act's NPDES permitting requirements. Porter-Cologne, on the other hand, covers all existing and proposed waste discharges that could affect the quality of state waters, including both surface waters and groundwater. (Wat. Code §§13050(e), 13260). Hence, under Porter-Cologne, a greater SSO universe is potentially subject to regulation under WDRs. In addition, WDRs under Porter-Cologne can address both protection of water quality as well as the prevention of public nuisance associated with waste disposal. (*Id.* §13263).

Some commenters contend that because all collection systems have the potential to overflow to surface waters the systems should be regulated under an NPDES permit. A recent decision by the United States Court of Appeals for the 2nd Circuit, however, has called into question the states' and USEPA's ability to regulate discharges that are only "potential" under an NPDES permit. In ***Waterkeeper Alliance v. United States Environmental Protection Agency*** (2005) 399 F.3d 486, 504-506, the appellate court held that USEPA can only require permits for animal feedlots with "an actual addition" of pollutants to surface waters. While this decision may not be widely followed, especially in the area of SSOs, these are clearly within the jurisdiction of the California Water Code.

USEPA defines a publicly owned treatment works (POTW) as both the wastewater treatment facility and its associated sanitary sewer system (40 C.F.R. §403.3(o)¹). Historically, only the portion of the sanitary sewer system that is owned by the same agency that owns the permitted wastewater treatment facility has been subject to NPDES permit requirements. Satellite sewer collection systems (i.e. systems not owned or operated by the POTW) have not been

¹ The regulation provides that a POTW include sewers, pipes, and other conveyances only if they convey wastewater to a POTW.

typically regulated as part of the POTW and, therefore, have not generally been subject to NPDES permit requirements.

Comments were received that argued every collection system leading to a POTW that is subject to an NPDES permit should also be permitted based upon the USEPA definition of POTW. Under this theory, all current POTW NPDES permits could be expanded to include all satellite sewer collection systems, or alternatively, the satellite system owners or operators could be permitted separately. However, this interpretation is not widely accepted and USEPA has no official guidance to this fact.

There are also many wastewater treatment facilities within California that do not have discharges to surface water, but instead use percolation ponds, spray irrigation, wastewater reclamation, or other means to dispose of the treated effluent. These facilities, and their satellite systems, are not subject to the NPDES permitting process and could not be subject to a statewide general NPDES permit. POTWs that fall into this category, though, can be regulated under Porter-Cologne and do have WDRs.

In light of these factors, the State Water Board has determined that the best approach is to propose statewide general WDRs at this time.

Prohibition of Discharge

The Clean Water Act prohibits the discharge of wastewater to surface waters except as authorized under an NPDES permit. POTWs must achieve secondary treatment, at a minimum, and any more stringent limitations that are necessary to achieve water quality standards. (33 U.S.C. §1311(b)(1)(B) and (C)). Thus, an SSO that results in the discharge of raw sewage to surface waters is prohibited under the Clean Water Act.

Additionally, California Water Code section 13263 requires the State Water Board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.

California Water Code section 13050 (m), defines nuisance as anything which meets all of the following requirements:

- a. 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.
- b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

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

Some SSOs do create a nuisance as defined in state law. Therefore, based upon these statutory requirements, the WDRs include prohibitions in Section C. of the WDRs. Section C. states:

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater, which creates a nuisance as defined in California Water Code section 13050(m) is prohibited.

Furthermore, the State Water Board acknowledges the potential for more stringent water quality standards that may exist pursuant to a Regional Water Board requirement. Language included in Section D.2 of the WDRs allows for these more stringent instances.

D. PROVISIONS

2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDRs, superseding the general WDRs, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.

Permitted Discharge, Affirmative Defense, and Enforcement Discretion

Commenters from the discharger community have requested inclusion of an affirmative defense to an SSO on the grounds that certain SSO events are unforeseen and unavoidable, such as SSOs due to extreme wet weather events. An affirmative defense is a mechanism whereby conduct that otherwise violates WDRs or a permit will be excused, and not subject to an enforcement action, under certain circumstances. Since many collection system industry experts believe that not all SSOs may be prevented, given certain circumstances (such as unforeseen vandalism, extreme wet weather, or other acts of God), many

collection system owner representatives believe this should formally be recognized by including an affirmative defense for these unavoidable SSOs.

Previous informal drafts of the general WDRs included affirmative defense language, which was contingent upon appropriate development and implementation of sanitary sewer management plan (SSMP) requirements, as well as a demonstration that the SSO was exceptional and unavoidable. Other stakeholders, including USEPA and the environmental groups opposed the concept of an affirmative defense for SSOs. They argued that its inclusion in the WDRs would undermine the Clean Water Act and inappropriately limit both Regional Water Board and third party enforcement.

After considering input from all stakeholders, and consulting with USEPA, staff is not recommending inclusion of an affirmative defense. Rather, the draft WDRs incorporate the concept of enforcement discretion, and explicitly identify what factors must be considered during any civil enforcement proceeding. The enforcement discretion portion of the WDRs is contained within Sections D. 6 and 7, and is consistent with enforcement discretion provisions within the California Water Code.

Facilities Subject to WDRs

Collection systems consist of pipelines and their appurtenances, which are intended to transport untreated wastewater to both publicly-owned and private wastewater treatment facilities. While wastewater treatment facilities are owned by a wide variety of public and private entities, public agencies (state and federal agencies, cities, counties, and special districts) own the vast majority of this infrastructure.

Collection systems that transport wastewater to POTWs could be grouped into four different categories:

1. Publicly-owned treatment works – pipelines and appurtenances that are owned by a public agency that also owns a wastewater treatment facility;
2. Publicly-owned satellites – pipelines and appurtenances that are owned by a public agency that does not own a wastewater treatment facility; and
3. Private laterals - pipelines and appurtenances that are not owned by a public agency, but rather discharge into one of the above types of facilities.
4. Privately owned treatment works – pipelines and appurtenances that are owned by a private entity, which also owns a wastewater treatment facility (often a septic tank and leach field).

The WDRs require all public agencies, which own wastewater collection systems (category 1 and 2 above) to enroll in the WDRs. Privately owned systems (categories 3 and 4) are not subject to the WDRs; however, a Regional Water

Board may at its discretion issue WDRs to these facilities on a case-by-case or region wide basis.

Collection systems discharging into POTWs (categories 1, 2, and 3) represent, by far, the greatest amount of collection system infrastructure within California. Since regulating private entities (categories 3 and 4) on a statewide basis would be unmanageable and impractical (because of the extremely large number and lack of contact information and other associated records), staff believes focusing on the public sector is the best option for meaningful and consistent outcomes. The legal authority and reporting provisions contained in the WDR do require limited oversight of private laterals (category 3) by public entities. Given this limited responsibility of oversight, public entities are not responsible or liable for private laterals.

State Water Board staff will notify all known public agencies that own wastewater collection systems, regarding their obligation to enroll under these WDRs. However, because of data inaccuracies, State Water Board staff may inadvertently not contact an agency that should enroll in the WDRs or erroneously contact a public agency that does not own a collection system. Staff will make every effort to accurately identify public agencies. In the event that a public agency is overlooked or omitted, however, it is the agency's responsibility to contact the State Water Board for information on the application process. An agency can find the appropriate contact by visiting the State Water Board's SSO homepage at www.waterboards.ca.gov/ss0.

SSO Reporting

SSOs can be distinguished between those that impact water quality and/or create a nuisance, and those that are indicators of collection system performance. Additionally, SSO liability is attributed to either private entities (homeowners, businesses, private communities, etc...) or public entities. Although all types of SSOs are important to track, the reporting time frames and the type of information that need to be conveyed differ.

The Reporting Program and Online SSO Database clearly distinguish the type of spill (major or minor) and the type of entity that owns the portion of the collection system that experienced the SSO (public or private entity). The reason to require SSO reporting for SSOs that do not necessarily impact public health or the environment is because these types of SSOs are indicators of collection system performance and management program effectiveness, and may serve as a sign of larger and more serious problems that should be addressed. Although these types of spills are important and must be regulated by collection system owners, the information that should be tracked and the time required to get them into the online reporting system are not as stringent.

Obviously, SSOs that are large in nature, affect public health, or affect the environment must be reported as soon as practicable and information associated with both the spill and efforts to mitigate the spill must be detailed. Since the Online SSO Database is a web based application requiring computer connection to the internet and is typically not as available as telephone communication would be, the Online Database will not replace emergency notification, which may be required by a Regional Water Board, Office of Emergency Services, or a County Health or Environmental Health Agency.

Incorporating Existing Permits

It is the State Water Board's intent to have one statewide regulatory mechanism that lays out the foundation for consistent collection system management requirements and SSO reporting. While there are a significant number of collection systems that are not actively regulated by the State or Regional Water Boards, some efforts have been made to regulate these agencies on a facility-by-facility or region-by-region basis. General WDRs, individual WDRs, NPDES permits, and enforcement orders that specifically include collections systems are mechanisms that have been used to regulate collection system overflows.

However, because of these varying levels of regulatory oversight, confusion exists among collection system owners as to regulatory expectations on a consistent and uniform basis (especially with reporting spills). Currently, there are a myriad of different SSO reporting thresholds and a number of different spill report repositories. Because of the varying levels of reporting thresholds and the lack of a common database to capture this information, an accurate picture of SSOs throughout California is unobtainable.

In order to provide a consistent and effective SSO prevention program, as well as to develop reasonable expectations for collection system management, these General WDRs should be the primary regulatory mechanism to regulate public collection systems. The draft WDRs detail requirements associated with SSMP development and implementation and SSO reporting.

All NPDES permits for POTWs currently include federally required standard conditions, three of which apply to collection systems. NPDES permits must clarify that the following three conditions apply to that part of the collection system that is owned or operated by the POTW owner or operator. These conditions are:

- Duty to mitigate discharges (40 CFR 122.41(d))
- Requirement to properly operate and maintain facilities (40 CFR 122.41(e))
- Requirement to report non-compliance (40 CFR 122.41(l)(6) and (7))

Understandably, revising existing regulatory measures will not occur immediately. However, as time allows and, at a minimum, upon readopting existing WDRs or WDRs that serve as NPDES permits, the Regional Water Boards should rescind redundant or inconsistent collection system requirements. In addition, the Regional Water Boards must ensure that existing NPDES permits clarify that the three standard permit provisions discussed above apply to the permittee's collection system.

Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, there will be some instances when Regional Water Boards will need to impose more stringent or prescriptive requirements. In those cases, more specific or more stringent WDRs or an NPDES permit issued by a Regional Water Board will supersede this Order. Finding number 11, in the WDRs states:

11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

Cost of Compliance

While the proposed WDRs contain requirements for systems and programs that should be in place to effectively manage collection systems, many communities have not implemented various elements of a good management plan. Some agencies are doing an excellent job managing their collection systems and will incur very little additional costs. Other agencies will need to develop and implement additional programs and will incur greater costs. However, any additional costs that a public agency may incur in order to comply with these General WDRs are costs that an agency would necessarily incur to effectively manage and preserve its infrastructure assets, protect public health and prevent nuisance conditions. These General WDRs prescribe minimum management requirements that should be present in all well managed collection system agencies.

In order to estimate the compliance costs associated with the proposed WDRs, staff analyzed costs associated with implementing the Santa Ana Regional Water Board's general WDRs. Twenty-one agencies, which discharge to Orange County Sanitation District, submitted financial summaries for the last five years, representing both pre- and post-WDRs adoption. Operation and maintenance costs, program development costs, as well as capital improvement costs were

considered and fairly accurately represent what can be expected statewide with the adoption of the General WDRs.

After extrapolating the sample to yield a statewide cost perspective, the projected annual cost of implementing the statewide WDRs is approximately \$870 million. This total represents \$345.6 million in O&M costs and \$524.5 for capital improvement projects.

While this sum is substantial, presenting the costs on a per capita or per household basis puts the figure in perspective. Department of Finance estimated the total population for Californians that may be subject to the WDRs to be 30.3 million persons (1/1/05). Dividing the population by the approximate average household size of 2.5 yields 12 million households. The average household in California is assumed to be 2.5 persons. The increased average annual cost (in order to comply with these WDRs) per person is estimated to be \$28.74 and \$71.86 per household (or \$5.99 per month per household)

Given these average costs there will be some communities that realize higher costs on a per household basis and some that realize less cost. Furthermore, larger communities will probably also realize an economy of scale, which is dependent upon a community's size. While larger communities may see lower costs associated with compliance, smaller communities will probably see a higher cost associated with compliance. Costs for compliance in small communities may be as high as \$40 per month per household.

Sewer System Management Plan (SSMP) – Development Plan and Schedule

1.1 PURPOSE

On May 2, 2006, the California State Water Resources Control Board (SWRCB) issued statewide general waste discharge requirements (WDRs) for all publicly owned sanitary sewer systems greater than one mile in length. Guidelines and requirements for WDRs are described in the State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, herein referred to as WDR 2006-0003. A significant requirement outlined in WDR 2006-0003 is the completion of a Sewer System Management Plan (SSMP).

The purpose of this chapter is to assess the City of Newman's (City) current sewer system management, operation, and maintenance procedures and to recommend actions to produce a complete SSMP in compliance with the WDR requirements. This chapter also fulfills the requirement for an SSMP Development Plan and Schedule as described in WDR 2006-0003.

This document is organized into the following major parts:

- (1) Description of each SSMP element including the minimum requirements discussed in WDR 2006-0003,
- (2) Assessment of the City of Newman's compliance with these requirements for each SSMP element,
- (3) A scope of work for completion of procedure elements the City needs to develop or improve, and
- (4) An implementation schedule for completion of each element.

1.2 SEWER SYSTEM MANAGEMENT PLAN (SSMP) ELEMENTS

The SSMP is a general compilation of information about the management, operation and maintenance of the municipality's sanitary sewer collection system. The SSMP has 11 primary components:

1. Goals
2. Organization
3. Legal Authority
4. Operation and Maintenance Program

5. Design and Performance Provisions
6. Overflow Emergency Response Plan (OERP)
7. Fats, Oil and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan (SECAP)
9. Monitoring, Measurement, and Program Modifications
10. SSMP Program Audits
11. Communication Program

A brief explanation of each of the eleven elements and the minimum requirements as outlined in WDR 2006-0003 is discussed below. The full WDR 2006-0003 is located in Appendix A.

1.2.1 GOALS

Program goals are an important aspect of the SSMP because they provide focus for the municipality's staff to continue to implement improvements in their management of the sanitary sewer collection system. The goals will determine steps that must be undertaken to establish and define the purpose and anticipated results of the program. Goals should reflect performance, safety, customer service, resource use, compliance, and other considerations, including the Sanitary Sewer Overflow (SSO) policy goals of reducing and mitigating the impacts of SSO's.

1.2.2 ORGANIZATION

An organizational chart should be developed that identifies administrative and management positions responsible for implementing the SSMP program. The organizational chart also includes operations and maintenance personnel that will be involved in developing and implementing the program. The employees involved with the SSMP program should be provided with the necessary training required to perform their assigned SSMP duties.

A chain of communication for reporting SSO events is also required. The chain of communication encompasses all those affected by the SSO event, including the initial receipt of a complaint to the notification of permitting authorities, other agencies, and the public.

1.2.3 LEGAL AUTHORITY

Sufficient legal authority must be provided to implement an effective SSMP program. Legal authority can be provided through sewer use ordinances, service agreements, discharge permits, or other legally binding documents.

1.2.4 OPERATIONS AND MAINTENANCE PROGRAM

A collection system needs to be properly operated and maintained. The SSMP requires that the following elements (and person or position responsible) of the municipality's operation and maintenance (O&M) program be addressed:

- Maintain an up-to-date map of the collection system.
- Perform routine O&M activities, including regularly scheduled maintenance and cleaning with more frequent maintenance and cleaning in known problem areas. The

O&M activities should be listed within a system that tracks work orders and can assess the effectiveness of the program.

- Develop and implement short and long-term rehabilitation and replacement plans.
- Provide training on a regular basis for O&M staff.
- Keep an inventory of general and critical equipment and replacement parts.

1.2.5 DESIGN AND PERFORMANCE PROVISIONS

The design and performance provisions should identify minimum design and construction standards and specifications for the installation of new sewer systems, and for rehabilitation and repair of existing sewers. An effective program that ensures new sewers are properly designed and installed can minimize system deficiencies that could create or contribute to future overflows and/or operations and maintenance problems. Design criteria should include specifications such as pipe materials, minimum sizes, minimum cover, strength, minimum slope, trench and backfill, structure standards, flow factors, and other relevant parameters as necessary. Also, procedures and standards are required for inspecting and testing the installation of new sewers, pump stations, and other facilities and for rehabilitation and repair projects.

1.2.6 OVERFLOW EMERGENCY RESPONSE PLAN (OERP)

An Overflow Emergency Response Plan (OERP) provides a standardized course of action to be followed by collection system personnel during an SSO event. An up-to-date OERP is necessary to ensure that a municipality is adequately prepared to respond to an SSO event. The OERP should describe protocols for the response, remediation, and notification of an SSO event under varying scenarios.

The OERP should identify measures to protect the public health and the environment from a broad range of potential collection system failures that could lead to an SSO. The OERP should also include procedures to mitigate the effects of an SSO, when they do occur.

Lastly, to ensure successful implementation of the OERP during an SSO, appropriate staff and contractors should have adequate training.

1.2.7 FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

A robust fats, oils, and grease (FOG) source control program is required for the SSMP. The FOG control program needs to include legal authority to prohibit and enforce grease discharges (as from restaurants), require installation of grease removal devices, provide design standards and maintenance requirements for the grease removal devices, establish Best Management Practice (BMP) requirements, and establish record keeping and reporting requirements for grease producing facilities.

The FOG control program also needs to establish legal authority to inspect and enforce the requirements of the program, as well as provide sufficient staff to perform these tasks.

Finally, the FOG program needs to develop an outreach program to educate the public on proper disposal of fats, oils and grease.

1.2.8 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN (SECAP)

The collection system should be evaluated to determine where hydraulic deficiencies exist. Based on the hydraulic deficiencies, a capital improvement program should be developed and implemented to ensure adequate capacity for dry and wet weather flow conditions.

Capacity enhancement measures should establish short and/or long-term actions to correct each identified hydraulic deficiency. Short and long term actions should include alternative analyses, a prioritization of recommended projects, an implementation schedule, and source of funding.

1.2.9 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

During implementation of the SSMP program, the program elements should be monitored for their effectiveness. If the elements are not effective, the program elements should be modified or updated to increase their effectiveness.

1.2.10 SSMP PROGRAM AUDITS

Internal audits should be performed at a frequency of every two years or less, as appropriate. The internal audits will assess the effectiveness of the SSMP. They are also intended to identify and correct any deficiencies within the SSMP.

1.2.11 COMMUNICATION PROGRAM

As part of developing and implementing the SSMP, a public outreach program should be established to inform the public of the process. The public outreach program will provide a means of incorporating public input into the SSMP development.

1.3 NEWMAN SSMP ASSESSMENT RESULTS

An assessment was conducted on how the City of Newman's current practices comply with the eleven elements described above. Information pertaining to the City's current policies for management, operation and maintenance of their collection system was gathered through the completion of a Collection System Initial Assessment Form. The Collection System Initial Assessment Form was used to evaluate the level to which the City complies with each of the SSMP program elements (Table 1-1). The elements are assessed for level of completion and rated as:

- Completed or nearly completed,
- In-progress,
- Need to be initiated to comply with SSMP requirements.

Table 1-1
City of Newman
SSMP Assessment

Program Element	Program Completed or Nearly Completed	Program In-Progress	Program Needed
1. Goals			X
2. Organization			
a. SSMP Organization Chart		X	
b. Chain of Communication for Reporting SSO Events			X
3. Legal Authority			
a. Illicit Discharges	X		
b. Proper Design and Construction	X		
c. Access for Maintenance, Inspection and Repairs	X		
d. Limit FOG and debris	X		
e. Enforcement	X		
4. Operation & Maintenance Program			
a. Maintain Up-to-Date Map		X	
b. Perform Routine Preventative Maintenance			X
c. Rehabilitation and Replacement Plan			X
d. Training Program		X	
e. Parts & Equipment Inventory			X
5. Design and Performance Provisions			
a. Design and Construction Standards	X		
b. Inspection and Testing Standards	X		
6. Overflow Emergency Response Plan			
a. Notification Procedures			X
b. Overflow Response			X
c. SSO Notification			X
d. Training			
e. Emergency Operations		X	X
f. SSO Mitigation		X	
7. Fats, Oils & Grease (FOG) Control Program			
a. Develop a Public Outreach Program to Promote Proper Disposal of FOG			X
b. Establish a Plan and Schedule for Disposal of FOG Generated within System			X
c. Exercise Legal Authority to Prohibit FOG Discharges			X

Program Element	Program Completed or Nearly Completed	Program In-Progress	Program Needed
d. Require the Implementation of Grease Removal Devices and other BMPs			X
e. Enforce FOG Ordinances and Inspect Grease Producing Facilities			X
f. Identify Problem Areas & Establish Cleaning Schedule			X
g. Source Control Measures			X
8. System Evaluation & Capacity Assurance Plan			
a. Evaluation			X
b. Capacity Enhancement Measures			X
c. Capital Improvement Program Schedule			X
9. Monitoring, Measurement, and Program Modifications			
a. Implementation and Effectiveness of SSMP			X
b. Update SSMP Program Elements			X
c. Identify and Track SSO Trends			X
10. SSMP Program Audits			X
11. Communications Program			X

1.4 NEWMAN SSMP SCOPE OF WORK

As shown in Table 1-1, the City of Newman has several of the SSMP elements either in-place or currently being developed. However, there are also several elements that will need to be developed or added to the programs in order to comply with the minimum SSMP requirements. These program elements are:

- Goals** – The City of Newman will need to develop goals for their collection system which are aimed at the proper management, operation, and maintenance of the sanitary sewer system which result in the prevention of SSOs.
- Organization** – The City currently has an organizational chart, but a documented chain-of-communication for reporting SSOs needs to be developed. In addition, the existing organizational chart should be updated to show lines of authority, identify key staff members who are responsible for implementing various elements of the SSMP, and document the names and contact information for these staff members.
- Legal Authority** – The City of Newman’s legal authority is defined in Newman City Code Ordinance No. 90-4. This ordinance appears consistent with the SSMP requirements; however, the ordinance will be reviewed and updated if necessary.
- Operations & Maintenance Program** – To comply with the requirements established in the WDR, the following improvements are recommended:

- a. Update the City's GIS database to include the existing storm water infrastructure. This database will allow the City to easily maintain an up-to-date map of the sewer system showing manholes, gravity sewers, force mains, pump stations, and storm water collection systems. The City's storm water system needs to be shown on the sewer system map to identify locations where potential SSOs could enter the storm water system.
 - b. Develop a Preventative Maintenance (PM) program to document routine operation and maintenance activities. This program should incorporate a system that schedules preventative maintenance activities and also targets known problem areas, which need more frequent maintenance. Activities of this program include: develop pump station maintenance checklists, establish written instructions for managing and tracking operation and maintenance practices, incorporate internal TV inspection into routine maintenance, implement a manhole inspection and assessment program, and formalize Standard Operating Procedures (SOPs) for sewer system appurtenances.
 - c. Formalize a rehabilitation and replacement plan that identifies and prioritizes deficiencies, establishes a short and long-term schedule, and includes a capital improvement plan.
 - d. Establish a standardized training program for the operation and maintenance of the City's collection system. Develop annual training goals and include methods for assessing the effectiveness of the training programs. Require any contractors who perform operation or maintenance activities on the system, such as internal TV inspection, be properly trained. In addition, the City's Safety Manual should be updated.
 - e. Identify critical equipment and replacement parts and create an inventory of these parts.
5. **Design and Performance Review** – The City of Newman has design and construction standards for installation, rehabilitation, and repair of new and existing sewer systems. The City also has inspection and testing standards for new and existing sewers. These current standards should be reviewed and, if necessary, modified.
6. **Overflow Emergency Response Plan (OERP)** – The City of Newman does not currently have an Overflow Emergency Response Plan (OERP). To be consistent with the SSMP requirements the following improvements are recommended:
- a. Establish procedures for notifying key responders and regulatory agencies in a timely manner.
 - b. Outline methods for ensuring proper response to any SSO.
 - c. Develop procedures for reporting of SSOs that effect public health or discharge into waters of the State to all regulatory agencies and other involved agencies. These procedures should identify the officials who receive immediate notification.
 - d. Produce procedures that guarantee all appropriate staff and contractors are aware of the Overflow Emergency Response Plan and are properly trained on how to respond to SSOs.

- e. Update procedures currently used to address emergency situations such as traffic and crowd control. If applicable, other agencies such as the police and fire departments may take responsibility during these situations.
 - f. Update existing practices which are used to contain and prevent SSOs from discharging into the waters of the United States and limit the impact of any discharge.
7. **Fats, Oils and Grease (FOG) Control Program** – The City of Newman does not currently have a fats, oils and grease (FOG) control program. If the discharge of FOG is not a problem in the City of Newman, the City must provide justification that a FOG program is not needed.
8. **System Evaluation and Capacity Assurance Plan (SECAP)** – The City of Newman does not currently have a System Evaluation and Capacity Assurance Plan (SECAP). However, a capital improvement plan that includes system capacity evaluation, short and long-term solutions for hydraulic deficiencies, and a schedule for completion is currently being developed as part of the City’s Collection System Master Plan.
9. **SSMP Elements 9, 10 & 11** – The last three SSMP elements are focused on measuring and reviewing the effectiveness of an existing SSMP as well as communicating its performance to the public. Once the City of Newman has an implemented SSMP, the requirements for these elements, as outlined in WDR 2006-0003, must be addressed.

1.5 NEWMAN SSMP PROGRAM IMPLEMENTATION SCHEDULE

The SRWCB has provided an initial timeframe upon which to complete each of the program components based on population. For collection systems serving populations between 10,000 and 100,000, the minimum required program implementation schedule, as outlined in WDR 2006-0003, is presented in Table 1-2. The proposed progress schedule for completion of each of the City’s SSMP elements as well as the responsible staff member for each element is also provided in Table 1-2.

Table 1-2
City of Newman
Completion of SSMP Elements Schedule

SSMP Element	WDR Schedule	City of Newman's Schedule	Responsible Staff Member
Application for Permit Coverage	11/02/06	11/02/06	Ernie Garza
Reporting Program	09/02/07	09/02/07	Ernie Garza
SSMP Development Plan and Schedule	11/02/07	11/02/07	Ernie Garza
Goals and Organization Structure	11/02/07	11/02/07	Ernie Garza
Overflow Emergency Response Plan	05/02/09	04/01/09	Ernie Garza
Legal Authority	05/02/09	04/01/09	Ernie Garza
Operation and Maintenance Program	05/02/09	04/01/09	Ernie Garza
FOG Control Program	05/02/09	04/01/09	Ernie Garza
Design and Performance	08/02/09	07/01/09	Ernie Garza
System Evaluation and Capacity Assurance Plan	08/02/09	01/01/08	Ernie Garza
Final SSMP, incorporating all SSMP requirements	08/02/09	07/01/09	Ernie Garza