



# **CUPERTINO SANITARY DISTRICT**

## SEWER SYSTEM MANAGEMENT PLAN

# AUGUST 2012

Cupertino Sanitary District Sewer System Management Plan (08/01/2012) Page 1



# **EXECUTIVE SUMMARY**



## **Document Version Control**

This Sewer System Management Plan (SSMP) is a living document that is anticipated to change over time. This version control sheet is intended to support Cupertino Sanitary District's efforts to keep the copies of the SSMP that have been assigned to District Staff current. Please contact Nichol Bowersox prior to making copies for use by others, initiating changes, or for information regarding the current version of this document.

SSMP Copy Number: \_\_\_\_\_

This copy assigned to:\_\_\_\_\_

Telephone No.:

SSMP Section	Original Version Date	Current Version Date
Introduction		
1. Goals	July 2008	July 2012
2. Organization	July 2008	May 2012
3. Legal Authority	July 2008	July 2012
4. O&M Program	July 2008	July 2012
5. Design and Performance Provisions	July 2008	September 2011
6. Overflow Emergency Response Plan	July 2008	July 2012
7. FOG Control Plan	July 2008	September 2011
8. System Evaluation and Capacity Assurance Plan	July 2008	September 2011
9. Monitoring, Measurement, and Program Modifications	July 2008	January 2012
10. SSMP Program Audit	July 2008	January 2012
11. Communications Plan	July 2008	September 2011



#### INTRODUCTION

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2006-0003: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. The GWDR prohibits sanitary sewer overflows (SSOs), requires reporting of SSOs using the statewide electronic reporting system, and requires the preparation of an SSMP.

This SSMP is also required by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Requirements are outlined in the Sewer System Management Plan Development Guide dated July 2005 by the RWQCB in cooperation with the Bay Area Clean Water Agencies (BACWA).

This document has been prepared with the awareness that the District is one of a number of stakeholder agencies within a local watershed area of Santa Clara County each accountable by permit to the State Water Resources Control Board under the Clean Water Act. These stakeholders include:

- San Jose/Santa Clara Water Pollution Control Plant
- Santa Clara Valley Water District
- Cities of Cupertino, Saratoga, Sunnyvale, Santa Clara, Los Altos and San Jose.
- Santa Clara County Roads and Airports and Public Works Departments

Other stakeholders include the Santa Clara County Environmental Services Department, Department of Fish and Game and several privately organized environmental groups.

This SSMP includes the elements required by both the SWRCB and RWQCB, and is organized following the SWRCB outline. Both SWRCB and RWQCB requirements are addressed in each element. Each requirement is shown as stated in the SSO-WDR and the RWQCB SSMP Development Guide.

#### **BACKGROUND INFORMATION**

Cupertino Sanitary District is a separate governmental entity established as a Special District of the State of California. Being an independent special district, the District has a Board of Directors elected from the constituency within its Service Area Boundary. The District was formed in 1956 to provide sewer services for the residents of areas within the cities of Cupertino, Los Altos and Saratoga and unincorporated areas within their spheres of influence.

The District lies within the watershed basins of Stevens Creek, a habitat of steelhead trout, and Calabasas Creek both of which lead to San Francisco Bay. Tributaries to Calabasas Creek are seasonal creeks which include, Rodeo Creek and Regnart Creek.

The District provides sewage collection, treatment and disposal services for these areas comprising approximately 15 square miles with a population of over 50,000 residents and more

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 4



than 20,000 homes and businesses. The District owns and manages more than one million lineal feet of sewer mains, 500,000 lineal feet of sewer laterals and seventeen pump stations. The collected wastewater from all areas is conveyed to the San Jose/Santa Clara Water Pollution Control Plant through mains and interceptor lines shared with the both the Cities of San Jose and Santa Clara per a joint use agreement.

## **REQUIRED ELEMENTS OF AN SSMP**

In summary, the required elements of an SSMP include:

- Collection System Management Goals
- Organization of Personnel, including Chain of Command and Communication
- Overflow Emergency Response Plan
- Fats, Oils and Grease Control Plan
- Legal Authority for permitting flows in the system, inflow/infiltration control as well as enforcement of proper design, installation, testing standards and inspection requirements for new and rehabilitated sewers
- Measures and activities to maintain the wastewater collection system
- Design and Construction Standards
- Capacity Management
- Monitoring, Measurement and Program Modifications
- Periodic SSMP audits and implementation of program improvements
- Communication Programs

#### **DEFINITIONS, ACRONYMS, AND ABBREVIATIONS**

**Best Management Practices (BMP)** – Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into the garbage can and dry wiping dishes and utensils prior to washing.

*California Emergency Management Agency (Cal EMA)* – Refers to the agency responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities within the state. The agency was created in 2008, superseding both the Office of Emergency Services (OES) and Office of Homeland Security (OHS).

#### Calendar Year (CY)

*California Integrated Water Quality System (CIWQS)* – Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

*Capital Improvement Program (CIP)* – Refers to the document that identifies planned capital improvements to the District's sanitary sewer system.

*Certification of SSO Reports* – The SWRCB requires the Legally Responsible Official (LRO, defined below) to login to CIWQS within a given time period to electronically sign submitted

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 5



reports thereby stating that to the best of his/her knowledge and belief, the information submitted is true, accurate, and complete.

*Closed Circuit Television (CCTV)* – Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

County Health – Refers to the Santa Clara County Public Health Department

*Environmental Protection Agency (EPA)* – Refers to the United States Environmental Protection Agency

*Environmental Services Department (ESD)* – Refers to the Environmental Services Department of the City of San Jose.

*Fats, Oils, and Grease (FOG)* – Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

*First Responder* – Refers to the District employee who provides the District's initial response to a sewer system alarm, emergency, or other event.

*Field Report* – Refers to the Sanitary Sewer Overflow Report, a document used to provide the basis for entering an overflow report into CIWQS

#### Fiscal Year (FY)

*Force Main* – Refers to a pressure sewer used to convey wastewater from a pump station to the point of discharge.

Gallons per Acre per Day (GPAD)

Gallons per Day (gpd)

Gallons per Minute (gpm)

*General Waste Discharge Requirements (GWDR)* – Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, as revised on February 20, 2008.

*Geographic Information System (GIS)* – Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

*Global Positioning System (GPS)* – Refers to the handheld unit used to determine the longitude and latitude of sanitary sewer overflows for use in meeting the CIWQS Online SSO Reporting System reporting requirements. Google maps can be used in lieu of a GPS unit to obtain this information.

Cupertino Sanitary District	
Sewer System Management Plan	



*House Connection Sewer (Upper Lateral)* – Refers to that portion of the horizontal sewer piping from the building or structure to the property line of the public right of way or easement.

*Infiltration/Inflow (I/I)* – Refers to water that enters the sanitary sewer system from storm water and groundwater that increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through the soil. Inflow enters the sanitary sewer system without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

*Lateral* – See sewer service lateral

*Legally Responsible Official (LRO)* – Refers to the individual who has the authority to certify reports and other actions that are submitted through the Online SSO Reporting System.

*Manhole* (MH) – Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Millions of Gallons per Day (MGD)

Monitoring, Measurement, and Program Modification (MMPM)

National Pollutant Discharge Elimination System (NPDES)

Not Applicable (NA)

*Notification of an SSO* – Refers to the time at which the District becomes aware of an SSO event through observation or notification from the public or other source.

Office of Emergency Services (OES) - See California Emergency Management Agency

**Online SSO Reporting System** – Refers to the California Integrated Water Quality System (CIWQS)

**Operations and Maintenance (O&M)** 

Overflow Emergency Response Plan (OERP)

*Pipeline Assessment and Certification Program (PACP)* – Refers to the program developed by the National Association of Sewer Service Companies (NASSCO) for standardizing sewer pipe condition evaluation and reporting results of CCTV inspections.

*Preventive Maintenance (PM)* – Refers to the maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, inspections)



*Private Lateral Sewage Discharges* – Sewage discharges that are caused by blockages or other problems within a privately owned sewer service laterals.

*Property Damage Overflow* – Property damage overflows refers to a sewer overflow or backup that damages private property.

*Public Sewer* – As stated in the District Operations Code, this refers to any mainline sewer constructed in any street, highway, alley, place or right of way dedicated for public use.

**Regional Water Quality Control Board (RWQCB)** – Refers to the San Francisco Regional Water Quality Control Board – Region 2

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

- 1. Overflows or release of untreated or partially treated wastewater that reach waters of the United States;
- 2. Overflows or release of untreated or partially treated wastewater that do not reach waters of the United States and;
- 3. 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.

*Sanitary Sewer System* – Refers to the portion of the sanitary sewer facilities that are owned and operated by Cupertino Sanitary District. The sanitary sewer system consists of collection sewers, trunk sewers, and pressure sewers (force mains).

*Sensitive Area* – Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.).

*Sewer Service Lateral* – *F*or the purposes of this SSMP, the sewer service lateral includes both the upper lateral (house connection sewer) and the lower lateral (sewer lateral).

*Sewer Lateral (Lower Lateral)* – Refers to the portion of the pipe between the house or building on private property and the sewer main, including the connection to the sewer main. The property owner is responsible to repair any failure or damage in the sewer lateral, including the connection to the sewer main; unless it is determined that another party caused the failure or damage.

#### Sewer System Management Plan (SSMP)

#### Santa Clara County Public Health Department (County Health)

*Standard Operating Procedures (SOP)* – Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the sanitary sewer system.



*State Water Resource Control Board (SWRCB)* – Refers to the State Water Resources Control Board and staff responsible for protecting the State's water resources.

Surface Waters – See waters of the State

## System Evaluation and Capacity Assurance Plan (SECAP)

*Trunk Sewer or Main Interceptor System – Th*e terms trunk sewer, gravity trunk line, and main interceptor sewer are used interchangeably to refer to the main branches of the sanitary sewer system, which carry flows from the collector sewers to the treatment plant.

*Volume Captured* – The amount of spilled sewage that is returned to the sanitary sewer system. When recording the volume that is captured, the volume of water used for flushing and/or cleaning should not be included.

*Water Body* – A water body is any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

*Waters of the State* – Waters of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sanitary sewer system and that portion of the storm drain is cleaned.

*Work Order (WO)* – Refers to the document (paper or electronic) that is used to assign work and to record the results of the completed work.



#### **ELEMENT 1: GOALS**

#### **SWRCB Requirements:**

The goal of the Sewer System Management Plan (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.

#### **RWQCB Requirements:**

Each wastewater collection system agency shall, at a minimum, develop goals for the Sewer System Management Plan as follows:

- To properly manage, operate, and maintain all parts of the wastewater collection system
- To provide adequate capacity to convey peak flows
- To minimize the frequency of SSOs
- To mitigate the impact of SSOs

The purpose of the SSMP is to provide guidance to the District in the operation, management and maintenance of its sewer collection system in order to comply with the SWRCB Order No. 2006-003 DWQ and RWQCB requirements outlined in the Sewer System Management Plan Development Guide. The District is charged with the responsibility of collection of sewage waste within its service boundaries and conveyance to the San Jose/Santa Clara Water Pollution Control Plant. The District's goal is to carry out maintenance and operation of the sewer collection system with no adverse impact to the public health or environment.

The provisions of the SSMP were developed and updated to ensure that the District is able to meet its goals by:

- Implement a collection system maintenance program to minimize the frequency of sanitary sewer overflows.
- Respond to sanitary sewer overflows quickly and mitigate the impact of the SSO.
- Mitigating the impact of sewer overflows that do occur as well as follow up investigations to identify the cause of the overflow event and using that information to either adjust the maintenance schedule or schedule a repair/replacement.
- Properly managing, operating and maintaining all elements of the wastewater collection system to better allocate resources and manpower.
- Cost effectively minimize infiltration/inflow (I/I) and analyze the existing capacity and developing a plan to provide adequate capacity for future development and to convey peak dry weather flows.
- Develop and maintain design construction standards and specifications for the installation and repair of the collection system and its associated infrastructure.
- Maintain comprehensive and up-to-date maps of wastewater collection system.
- Coordinate with the Cities of Cupertino, Saratoga, and Los Altos to maintain storm water maps.
- Provide training on a regular basis for staff in collection system maintenance and operations.

(08/01/2012) Page 10

Cupertino Sanitary District	
Sewer System Management Plan	



- Encourage and support participation in the quarterly meetings with the neighboring collection system agencies and the partners to the wastewater treatment plant.
- Maintain a Fats, Oils, and Grease (FOG) program to limit fats, oils, and grease, and other debris that may cause blockages in the sewage collection system.
- Develop a closed-circuit televising (CCTV) program for the collection system.

The District has implemented policies and procedures for the systematic inspection and continued maintenance of its infrastructure and engages contracted, competent, trained personnel to carry out the scheduled tasks. The District personnel and contractors are utilizing the procedural training available through organizations such as California Association of Sanitation Agencies (CASA) and California Water Environment Association (CWEA).

#### ELEMENT 2: ORGANIZATION



#### **SWRCB Requirements:**

The Sewer System Management Plan (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 Health 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).

#### **RWQCB Requirements:**

Each wastewater collection system agency shall, at a minimum, provide information regarding organization

- Identify agency staff responsible for implementing, managing, and updating the SSMP
- Identify chain of communication for responding to SSOs
- Identify chain of communication for reporting SSOs

The District Organization Chart is attached and indicates the chain of responsibility for the management, operation and maintenance of the District's collection system. Mark Thomas and Company Inc. is the Manager-Engineer for the District by contract.

Richard Tanaka, District Manager-Engineer (408) 253-7071 Steven Machida, Deputy District Manager-Engineer (408) 253-7071 Nichol Bowersox, Senior Project Engineer (408) 230-3194

#### Chain of Communication for Reporting SSOs:

- Cupertino Sanitary District (408) 253-7071; after business hours/holidays (408) 299-2507 receives call of SSO from public or other agency.
- First Responder dispatched to spill site requests Response Crew to meet at scene
- SSO report form completed by First Responder with GPS Coordinates to define location
- SSO form forwarded to Nichol Bowersox, Senior Project Engineer, (408) 230-3194
- Nichol Bowersox inputs SSO into statewide SSO database via CIWQS website.

#### Authorized Representative

The District's Authorized Representative in all sanitary sewer system matters is Nichol Bowersox, Senior Project Engineer. Ms. Bowersox is authorized to submit verbal, electronic, and written spill

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 12



reports to the RWQCB, SWRCB, County Health, and Cal EMA. Steven Machida, as the District's designated Legally Responsible Official (LRO), is authorized to certify electronic spill reports submitted to the SWRCB.

#### **Responsibility for SSMP Implementation**

Ms. Bowersox is responsible for developing, implementing, and maintaining all elements of the District's SSMP.



# Organization Chart Cupertino Sanitary District 2012





ANITARY DISTRICT

Cupertino Sanitary District Sewer System Management Plan

S.\SSMP All Districts/CuSD SSMP/CuSD SSMP 2012

(08/01/2012) Page 15



## ELEMENT 3: LEGAL AUTHORITY

#### **SWRCB Requirements:**

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.

#### **RWQCB Requirements:**

Each wastewater collection system agency shall, at a minimum, describe its legal authority through sewer use ordinances, service agreements, or other legally binding procedures to:

- Control infiltration/inflow (I/I) from satellite wastewater collection systems and laterals.
- Require proper design and construction of new and rehabilitated sewers and connections.
- Require proper installation, testing, and inspection of new and rehabilitated sewers.

The Cupertino Sanitary District Board of Directors has the power to enact ordinances and other legally binding instruments to regulate usage and prevent discharges to protect and foster human health and the environment. The powers of and the execution of Legal Authority provided by and through the governing body of the Cupertino Sanitary District (District) and directed by the District Manager, for sewer use, services, construction, permits and procedures are applicable to all industrial, business or residential entities and are cited in the General Regulations, Chapter IV, Article 1 Sections 4100 - 4105 of the District Operations Code, April 17, 1996, by Ordinance No. 84.

The specific purpose of the Cupertino Sanitary District Operations Code is to:

- 1. Prevent illicit discharges into its wastewater collection system and limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages:
  - A. Chapter V Construction of Sewers Article 1, General Regulations, Sections 5100 5110 and Article 2, Construction of Sewers by others Laterals, Sub-main or Main Sewers Sections 5200 5207.
  - B. Illegal Discharges Chapter VI Use of Sewers, Article 2, Sewer Use Regulations; Section 6203 Protection from Accidental Discharge and Section 6231 Federal Pretreatment Regulations.



- C. Permits and Fees Chapter VIII, Article 1, Connection Permit, Section 8100 8105; Article 3, Lateral Sewer Permit and Fees 8300 8302; and Chapter VI, Article 3, Waste Water Discharge Permits, Sections 6300 6306; Chapter VII, Sewer Service Charges, Sections 7000 7008, and Chapter VIII, Connection Fees, Sections 8200 8206.
- D. Enforcement Chapter X, Section 10000 10008; Chapter VI, Article 3, Wastewater Discharge Permits
   Sections, 6300 - 6306; Section 10009 – 10010 Civil Liabilities.
- 2. Require that construction design for new and rehabilitated sewers and connections are properly designed and constructed:
  - A. Chapter V, Construction of Sewers by Others –Article 2, Authorization, Section 5200 and Section 5201, Request for Authorization, Section 5202 Plans, Profiles and Specifications.
  - 3. Require proper installation, inspection and testing of new and rehabilitated sewers and connections:
    - A. Chapter V, Construction of Sewers, Article 1 General Regulations, Section 5104 Inspections;
       Section 5106 Condemned Work

Section 5106, Condemned Work...

B. Chapter XI, Miscellaneous Provisions, Section 11000 – Powers and Authorities of Inspectors.

#### CHAPTER IV GENERAL REGULATIONS

#### Article 1 GENERAL REQUIREMENTS AND PROCEDURES

#### 4100. CONNECTION TO SEWER:

All new buildings within the District shall connect to the District sewer system and all land development projects shall include provisions for future buildings to connect to the District's sewer system. An individual side sewer shall be provided for each building, except that when a building is located in the rear of another building on an interior lot, permission may be granted by the District to connect both buildings to the same side sewer, provided the buildings are under the same ownership and it would not be possible for the buildings to become vested under separate ownership.

Notwithstanding the provisions hereof, single family residential units with common walls, condominium, stock cooperative, community apartment or other similar improvement which entitles owners of interests therein to occupy independent ownership interests and to make joint use of utility and other services, which may be provided by facilities owned in common,



may, upon issuance of a permit authorizing such common use by the District Engineer, be permitted to maintain a common side sewer or sewers only in the case of multi-story structures.

#### 4101. CLEANOUTS:

All side sewers shall be provided by the connector, with a cleanout raised to grade at the point where the building sewer joins the lateral sewer. All cleanouts shall meet the Standard Specifications of the District and shall be watertight and maintained by the connector.

#### 4102. PLUMBING TOO LOW:

In all buildings in which there are plumbing fixtures at an elevation too low to permit drainage by gravity from said fixtures to the public sewers, the sewage from said fixtures shall be lifted by artificial means and discharged to the public sewer at the owner's expense. In all buildings where the floor elevation is below the rim elevation of the nearest upstream manhole, provisions for a backflow protective device shall be made in accordance with Section 4105. A backflow protective device shall also be installed in side sewers wherever and whenever the District may deem advisable.

#### 4103. MAINTENANCE OF SIDE SEWERS:

It shall be the responsibility of the connector to maintain the side sewer, except that if a cleanout is provided pursuant to Section 4101 hereof, the District will maintain the lateral sewer portion of the side sewer. In the event of a stoppage in the lateral sewer which is caused by the connector, said connector shall reimburse the District for expenses incurred in clearing the stoppage.

Where a side sewer provides service to more than one unit or dwelling unit in a development with common walls, condominium, stock cooperative, community apartment or other similar improvements, the obligation to maintain the side sewer shall be in the homeowners' association or other entity responsible for the maintenance of the property and facilities owned in common.

#### 4104. WORK ABOUT EXISTING SEWERS:

Any person who undertakes to pave, resurface, grade or do any work on any street that contains District sewers shall not cover up or conceal any manhole, or structure or their covers, and every care must be used to protect them. In the event said work results in damage to, or a change of grade in the area of the manhole or structure, the person performing the work shall be responsible, at his own expense, for repairing or modifying the manhole or structure to meet the new grade. Before any work is performed upon District manholes or structures, the District Manager shall be contacted and all work shall be done under the direction of the District Engineer, and in accordance with District standards.

#### 4105. SEWAGE BACKFLOW PROTECTIVE DEVICES:



To assist in the protection of health and property, the District shall require a backflow valve or overflow device to be installed in the house sewer serving any building where the lowest floor elevation (containing plumbing fixtures) will be less than one (1) foot above the rim of the nearest upstream manhole or flushing inlet.

When an overflow device is installed, the elevation of discharge of said installation shall be at least one (1) foot below the lowest floor elevation containing a plumbing fixture.

#### Article 2 <u>PURCHASING OF SUPPLIES AND EQUIPMENT</u>

#### 4200. POLICIES AND PROCEDURES:

The District shall adopt policies and procedures for the purchase of supplies and equipment in accordance with the requirements of Article 7, of Chapter 5, of Part 1, of Division 2, of Title 5 of the Government Code of the State of California, and all such purchases shall be in accordance with such adopted policies.

#### 4201. AVAILABILITY OF POLICIES AND PROCEDURES:

The policies and procedures to be adopted by District hereunder shall be by means of a written rule or regulation, copies of which shall be available for public distribution.

#### 4202. PURCHASES BY DEPARTMENT OF GENERAL SERVICES:

Notwithstanding the adoption of such policies and procedures by District, the District may request the State Department of General Services to make purchases of materials, equipment or supplies on its behalf in accordance with the provisions of Section 14814 of the Government Code of the State of California.

# Article 3 <u>ANNEXATION AND/OR REORGANIZATION REQUIREMENTS</u>

#### 4300. CONDITIONS:

The owners of property to be annexed to the District shall, as a condition precedent thereto, pay to the District the following sums:

- A. **Processing Costs** The actual cost, where applicable, of preparation of maps, legal descriptions, publication charges, and any and all other direct or indirect charges applicable to the annexation and/or reorganization.
- B. Acreage Fee \$630.00 Per Acre.



PROVIDED that in the event that not more than one single family residential structure is to be constructed and connected to District's sanitary sewage system on any lot or property having an area in excess of one acre, such acreage fee shall not exceed the fee for one acre.

#### 4301. PAYMENT OF PROCESSING COSTS AND FEES:

An amount equal to the estimated processing costs (4300a) shall be paid to the District at the time a request for annexation is filed with the District Manager. The acreage fee (4300b) shall be paid prior to the time the certificate of completion is recorded by the Local Agency Formation Commission.

#### 4302. ADJUSTMENT OF COSTS AND FEES:

The District Board reserves the right to adjust the above costs and fees or provide for additional terms and conditions at or before any meeting or public hearing on any annexation and/or reorganization.

#### CHAPTER V CONSTRUCTION OF SEWERS

#### Article 1 GENERAL REGULATIONS

#### 5100. CONTRACTOR'S REGISTRATION:

It shall be unlawful for any person to install or construct any sewer for connection to, or make connection to, the District sewer system in a street within the District, who is not a master plumber or contractor, whichever is applicable, licensed under the State Contractor's License Law. All such contractors must register with the District Manager prior to commencing or carrying out any such work within the District.

#### 5101. CONTRACTOR'S INSURANCE:

All such Contractors shall maintain such insurance as will protect them from claims under the Worker's Compensation Act and from any other claims for damages for personal injury, including death, which may arise from their operations in the District, whether such operations be by themselves or any subcontractor or anyone directly or indirectly employed by either of them. Certification of such insurance shall be filed with the Manager and shall be subject to his approval.

The certificate of such insurance provided for shall show extension of coverage to the Cupertino Sanitary District, its officers, agents, and employees and to all other local agencies and others as determined by the Manager.



The Contractor shall take out and maintain during the life of the contract Worker's Compensation Insurance for all persons whom he may employ directly or through subcontractors in carrying out the work.

The Contractor shall procure and maintain Insurance for Public Liability, including accidental death, and Property Damage in amounts not less than \$1,000,000 and shall require all Subcontractors, whether primary or secondary, if any, to procure and maintain Public Liability, including accidental death, and Property Damage Insurance in amounts not less than \$500,000.

Each and every policy of insurance shall be noncancellable for a period of not less than thirty five (35) days after written notice has been received by the Insured.

Such insurance is to be maintained in effect for a minimum of one (1) year after the acceptance of the work.

#### 5102. FAITHFUL PERFORMANCE AND LABOR AND MATERIAL BONDS:

All contractors or installers shall file with the District Manager a Faithful Performance Bond and a Labor and Material Bond, each in the amount of 100% of the contract for District let jobs and 100% of the District Engineer's estimate for installer let contracts. Said Bonds are to be on forms provided or approved by District, and to remain in effect for a minimum of one year after acceptance of work and are not to be cancelled until released by the District.

#### 5103. EXCAVATION PERMITS AND BONDS THEREFOR:

No excavation for sewers shall be made in any street within the District until an excavation permit has been issued therefor by the agency or governmental department having jurisdiction thereover and evidence of the issuance thereof submitted to the District Manager. Application for said permit shall be made at the office of the District Manager, and shall be accompanied by a bond in an amount and in the form approved by the District Manager.

#### 5104. INSPECTIONS:

No sanitary sewer construction work shall be conducted within the Sanitary District without the presence of the District Engineer or his representative, unless permission has been granted to proceed in his absence.

No construction shall be covered until it has been inspected and approved by the District Engineer. After approval, the contractor shall backfill any trench without delay and restore the surface to its original condition. Construction that has been covered without approval of the District shall, at the District's request, be uncovered for inspection. In all cases where inspection is required the contractor shall give at least two (2) working days advance notice to the District Engineer stating the time when work will start.

#### 5105. **RESPONSIBILITY FOR DEFECTS:**



All persons performing work connected with this District shall be held strictly responsible for any and all acts of agents, subcontractors, and employees in connection with said work.

Said person, upon being notified in writing by the District Manager of any defects arising from construction or of any violation of the provisions of this Code, shall take immediate steps to correct such defect or violation.

#### 5106. CONDEMNED WORK:

In the event any construction, when inspected by the District, is found to be unsatisfactory, the Contractor shall make necessary repairs to place the construction in acceptable condition.

#### 5107. LIABILITY:

The District, its officers, agents and employees shall not be liable for personal injury or loss of life or damage to any property consequent to the performance of any of the herein described work by any such contractor or installer. The contractor or installer shall save the District, its officers, agents and employees free and harmless from any such liability imposed by law upon the District, its officers, agents and employees, including all costs, expenses, fees and interest incurred in legal defense of any action to enforce such liability or in the enforcement of this provision. Contractor or installer shall be solely liable for any defects in the performance of his work, or any failure which may develop therein.

#### 5108. STANDARD SPECIFICATIONS:

Minimum standards for the construction of sewers within the District shall be in accordance with the Standard Specifications heretofore or hereafter adopted by the District, copies of which are on file in the District office. The District may permit modifications or may require higher standards where unusual conditions are encountered.

"As-built" drawings in the number required by the District Manager and showing the actual location of all mains, structures, Y's, laterals and cleanouts shall be filed with the District before final acceptance of the work.

#### 5109. MASTER PLAN:

The District has adopted an official Master Plan for trunk systems within the District, which is on file in the office of the District Engineer. Said Master Plan is hereby referred to and made a part of this Code by reference.

#### 5110. COMPLIANCE WITH REGULATIONS:

Any person constructing a sewer within a street shall comply with all applicable laws pertaining to the installation of sanitary sewers and any related activities such as but not limited

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 22



to cutting of pavement, opening, barricading, lighting and protection of trenches, backfilling and repaving thereof and shall obtain all permits and pay all fees required by the department having jurisdiction prior to the issuance of a permit by the District. Any person requesting a permit shall also comply with all applicable CEQA laws and guidelines, , and shall make all deposits required and pay all fees which may be established by the District to process applications to comply with said Act.

#### Article 2 CONSTRUCTION OF SEWERS BY OTHERS LATERAL, SUB-MAIN OR MAIN SEWERS

#### 5200. AUTHORIZATION:

Authorization to construct sewers and connect to the sewer system must be obtained from the District.

### 5201. **REQUEST FOR AUTHORIZATION:**

Request for authorization is to be made in the office of the District Manager. All construction shall be in accord with the Standard Specifications and Master Plan of the District.

### 5202. PLANS, PROFILES AND SPECIFICATIONS:

Plans, profiles and specifications for main or sub-main sewers shall be prepared at the expense of the installer, by a civil engineer licensed in the State of California and said plans, profiles and specifications shall be approved by the District Board. Plans for individual lateral sewer construction may be prepared by the applicant and approved by the District Manager.

#### 5203. PAYMENT OF FEES:

An installer shall pay in advance all necessary plan checking and inspection fees. The District shall have the right to charge, and the installer shall pay, the necessary administrative and engineering fees incurred by the District for work performed.

#### 5204. CONTRACT FOR CONSTRUCTION:

The installer shall call for his own bids, and let his own contracts, but he shall not let any such contracts until after receiving written approval of the plans and specifications from the District.

#### 5205. AGREEMENT:

An installer shall, prior to construction, enter into an agreement with the District covering, but not limited to, the following:



- A. Construction of sewers in accordance with approved Plans, Profiles and Specifications.
- B. Obtaining of necessary rights-of-way and easements, and granting same to District.
- C. Payment for all costs involved, including any and all incidental costs in connection therewith, due to said construction.
- D. Transfer of Title to all sewers and appurtenances to District.
- E. Indemnification of the District per Section 5107.
- F. The furnishing of required Bonds in accordance with Section 5102.
- G. Payment of all fees, including plan checking and inspection.
- H. Such other matters that the District may require.

### 5206. LATERAL SEWERS:

Lateral sewers must be constructed to serve each parcel of land or building in the development. House sewers shall not be connected to these lateral sewers until permits for connection have been issued by the District Manager.

#### 5207. OVERSIZE AND OFF-TRACT SEWERS:

Oversize and off-tract sewers may be required by the District to comply with the Master Plan. In this event, consideration will be given to a reimbursement agreement for excess costs. (See Chapter IX)

### CHAPTER VI USE OF SEWERS

#### Article 1 <u>PURPOSE</u>

#### 6100. **PURPOSE**:

The purpose of the Provisions of this Chapter is to:

A. Provide for and regulate the disposal of sanitary sewage into the sanitary sewer system of the District in such manner and to such extent as is reasonably necessary to maintain and increase the ability of such system to handleand dispose of sanitary sewage;



- B. Provide for and regulate the disposal of industrial wastes into the sanitary sewer system of the District in such manner and to such extent as may be reasonably necessary to maintain and increase the ability of such system to handle and dispose of industrial waste without decreasing the ability of said system to handle and dispose of all sanitary sewage;
- C. Prevent the introduction of pollutants into the sanitary sewer system which will pass through the treatment works of the San Jose/Santa Clara Water Pollution Control Plant or otherwise be incompatible with such works or interfere with the ability of the Plant to treat, discharge and recycle wastewater, or to use or dispose of Plant bio-solids;
- D. Improve opportunities to recycle and reclaim treated effluent and wastewater sludge;
- E. Protect the physical structures of said sewerage system and the efficient functioning of its component parts;
- F. Protect the District and its personnel, and preserve and protect the health, safety and comfort of the public;
- G. To enable the District to comply with all applicable and compatible laws, rules, regulations and orders of the State of California and of the United States;
- H. Provide for the charging and collection of various fees and other charges reasonably necessary for the acquisition, construction, reconstruction, maintenance and operation of the sanitary sewer system.
- I. Protect the environmental health of San Francisco Bay.

#### Article 2 SEWER USE REGULATIONS

#### 6200. LIMITATIONS ON POINT OF DISCHARGE:

No person shall discharge any substances directly into a manhole or other opening in a District sewer other than through a District-approved sewer connection.

#### 6201. DISCHARGE INTO STORM DRAIN PROHIBITED:

It shall be unlawful to discharge any sewage, industrial waste or other polluted waters into any storm drain or natural outlet or channel without a valid NPDES permit.

#### 6201.1. REGULATION OF TRUCKED OR HAULED WASTE:

No person shall cause, allow, or permit to be discharged into the sanitary sewer system

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 25



any trucked or hauled waste, except at a site specifically designated in a wastewater discharge permit or a receiving station permit.

#### 6202. PUBLIC NUISANCE:

The discharge of unscreened garbage, fruit, vegetable, animal or other solid industrial wastes into any part of the sanitary sewer system, in violation of any provision of this Operations Code, is hereby declared to be a public nuisance.

#### 6203. PROTECTION FROM ACCIDENTAL DISCHARGE:

- A. Each industrial user shall provide protection from accidental discharge of prohibited materials or other wastes regulated by this chapter into either the storm sewer or sanitary sewer systems.
- B. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the industrial user's expense.
- C. All industrial users shall notify the District and the Environmental Services Department by telephone or in person within one (1) hour of becoming aware of accidentally discharging wastes of reportable quantities as determined in 40 CFR 117 or discharge of any substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261, to enable countermeasures to be taken by the city to minimize damage to the sanitary sewer system, plant, treatment processes, and the receiving waters. If hazardous waste is discharged, industrial user shall be subject to all requirements in 40 CFR 403.12(p).
- D. Telephone notification shall be followed, within five (5) days of the date of occurrence, by a detailed written statement furnished to both the District and the Environmental Services Department describing the causes of the accidental discharge and the measures being taken to prevent future occurrences.
- E. Notification to the District and the Environmental Services Department will not relieve industrial users of notification requirements under any other federal, state or local law, nor of liability for any expense, loss or damage to the sanitary sewer system, Plant or treatment process or receiving waters or for any fines or penalties imposed on the city on account thereof under applicable provisions of state or federal law.
- F. All permitted facilities must maintain a spill control plan for protection against accidental discharges, including but not limited to, berming of chemicals and waste materials. The review of such plans and procedures shall not relieve the industrial user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of this Code or other state or federal regulations.



G. This plan must be reviewed and revised as needed within thirty (30) days after an accidental discharge has occurred or as required by the Director.

#### 6204. **PRETREATMENT BY OWNER:**

Whenever deemed necessary by the District Manager or the Director, the owner of any private premises shall, at his own expense, provide such treatment or take such other measures as shall be required in order to reduce objectionable characteristics contents or rate of discharge of waters or wastes being deposited in the sanitary sewer system so that the same may be received therein without any damage to the sanitary sewer system or any undue interference with its operation and without any hazard of any kind to humans or animals.

#### 6205. MONITORING FACILITIES:

- A. The District Manager or the Director may require any discharger to the Sanitary Sewer System to construct, at the Industrial User's own expense and at an approved location, monitoring facilities to allow inspection, sampling, and flow measurement of the building Sewer or internal drainage systems.
- B. The monitoring facilities, sampling, and measurement equipment and access thereto shall be maintained at all times in a safe and proper operating condition at the expense of the discharger.
- C. Any required monitoring facilities shall be specified in the Wastewater Discharge Permit issued pursuant to this Chapter.
- D. Dischargers shall retain sufficient wastewater in their sample box at all times to allow sample collection representative of the last wastewater discharge.

#### 6206. STORM AND OTHER WATERS:

- A. No person shall discharge, cause, allow or permit any storm water, surface water, groundwater, subsurface drainage, or roof to be discharged into the Sanitary Sewer System or any part thereof without a wastewater discharge permit.
- B. A Wastewater Discharge Permit for the discharge of, ground water, subsurface drainage, surface water, roof water, or stormwater shall only be issued if there is no reasonable alternative method for disposal of such water.
- C. If permitted, discharge of ground water, subsurface drainage, surface water, roof water, or stormwater shall be subject to all applicable requirements of this Operations Code, including but not limited to the payment of applicable permit fees and such terms and conditions as the



District Manager or the Director may impose in the Wastewater Discharge Permit.

#### 6207. COOLING AND UNPOLLUTED WATER:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof any unpolluted cooling water or unpolluted industrial process water.

#### 6208. OBSTRUCTING OR INJURIOUS SUBSTANCES:

No person shall discharge, or cause, allow, or permit to be discharged, thrown, or deposited into the sanitary sewer system or any part thereof, or into any plumbing fixture or private sewer or drain connected either directly or indirectly to the sanitary sewer system, any substance of any kind whatsoever tending to obstruct or injure the sanitary sewer system, or to cause a nuisance or hazard, or which will in any manner interfere with the proper operation or maintenance of the sanitary sewer system.

#### 6208.1. COPPER-BASED CHEMICAL COMPOUNDS:

- A. No person shall discharge, or cause, allow or suffer to be discharged, any chemical compound containing greater than five percent (5%) copper by weight, to control roots or for any other purpose into the sanitary sewer system or any part thereof, or into any plumbing fixture or sewer which discharges, either directly or indirectly, into the sanitary sewer system.
- B. No person shall display in any public place any chemical compound containing greater than five percent (5%) copper by weight, to control roots or for any other purpose, without first providing clear and reasonable written warning that discharge of said compound into the sanitary sewer system or any part thereof, or into any plumbing fixture or sewer or drain which discharges, either directly or indirectly, into the sanitary sewer system is prohibited by ordinance of the Cupertino Sanitary District.
- C. For the purposes of this Section, warning may be provided by posting a decal, placard or sign at the point of display of the compound. Any warning given under this Section shall be reviewed and must be approved by the District Manager.
- D. For purposes of this Section only, public place shall be defined as any building or area (including, without limiting the generality of the foregoing, any store or business establishment) where copper based chemical compounds may be viewed and obtained by members of the general public."

#### 6209. FLAMMABLE OR EXPLOSIVE SUBSTANCES:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 28



sewer system any gasoline, benzene, naphtha, fuel oil, or any flammable liquid, solid, vapor, or gas or other substance, including but not limited to any substance having a closed cup flash point of less than one hundred forty degrees Fahrenheit (140oF) or sixty degrees Centigrade (60oC), using the test methods specified in Section 261.21 of Title 40 of the Code of Federal Regulations.

#### 6210. HOT SUBSTANCES:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof, any liquid, solid, vapor, gas, or thing having or developing a temperature of 150°F or more, or which may cause the temperature at the sewage treatment plant to exceed 104°F.

#### 6210.1. TOXIC GASES, VAPORS OR FUMES:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system any substance of any kind whatsoever which results in the presence of toxic gases, vapors or fumes within the system in a quantity that may cause acute health and/or safety problems for workers in the sanitary sewer system.

#### **6211. GREASE:**

- A. No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system any liquid or other waste containing Grease in excess of 150 parts per million by weight.
- B. No Person shall discharge, cause, allow, or permit any Grease discharge from a Food Service Establishment into the sanitary sewer system, unless such discharge has first been processed through an approved Grease Control Device.
- C. No person shall discharge, cause, allow, or permit to be discharged any Yellow Grease, or any waste or mixed material mixed with Yellow Grease, into the sanitary sewer system from a Food Service Establishment. No Yellow Grease from a Food Service Establishment shall be mixed with Grease Trap or Grease Interceptor waste.

#### 6212. SOLID OR VISCOUS MATTER:

No person shall discharge, deposit or throw, or cause to be discharged, deposited, or thrown into the sanitary sewer system or any part thereof, any ashes, cinders, pulp, paper, sand, cement, mud, straw, shavings, metal, glass, rags, feathers, tar, asphalt, resins, plastics, wood, animal hair, paunch manure, or any heavy solid or viscous substance capable of causing obstruction to the flow in the sanitary sewer system or any part thereof, or which would interfere with the proper operation of the sewage treatment plant or the treatment of sewage or industrial wastes.



#### 6213. CORROSIVE MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid, solid, vapor, gas, or thing having a pH lower than six (6) or equal to or greater than twelve and one-half (12-1/2) or having any other corrosive property capable of causing damage or hazard to the sanitary sewer system or any part thereof, or to any personnel operating, maintaining, repairing, or constructing said sanitary sewer system or any part thereof, or working in or about said system.

#### 6214. INTERFERING SUBSTANCES:

A. No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any industrial waste containing any of the following toxic substances exceeding the concentrations set forth below:

Toxic Substance	Standard Discharger Maximum Allowable Concentration	Low Flow Discharger Maximum Allowable Concentration
Antimony	5.0 mg/l	5.0 mg/l
Arsenic	1.0 mg/l	1.0 mg/l
Beryllium	0.75 mg/l	0.75 mg/l
Cadmium	0.7 mg/l	0.7 mg/l
Chromium, Total	1.0 mg/l	1.0 mg/l
Copper	2.3 mg/l	2.7 mg/l
Cyanides	0.5 mg/l	0.5 mg/l
Lead	0.4 mg/l	0.4 mg/l
Mercury	0.010 mg/l	0.010 mg/l
Nickel	0.5mg/l	2.6 mg/l
Phenol & derivatives	30.0 mg/l	30.0 mg/l
Selenium	1.0 mg/l	1.0 mg/l
Silver	0.7 mg/l	0.7 mg/l
Zinc	2.6 mg/l	2.6 mg/l

B. No person shall discharge, cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof, any toxic or poisonous substances or any other pollutant, including biochemical oxygen demand, in sufficient quantity to injure or cause an interference with the sewage treatment process or pass through the plant, or in sufficient quantity to constitute a hazard to humans or animals, or in sufficient quantity to create a hazard for humans, or aquatic life in any waters receiving effluent from the sanitary sewer system, or which may create a hazard in the use or disposal of sewage sludge.



- C. All samples, both grab and composite, shall demonstrate compliance with the above limits.
- D. Any industrial user that violates any of the interfering substances limits must resample and submit sample reports for all pollutants in violation of any applicable permit limits or any other pollutants as required by the Director within thirty (30) days of becoming aware of the violation.

#### 6215. **PROHIBITION ON USE OF DILUTING WATERS:**

No Industrial User shall ever increase the use of process water, or in any way use diluting waters as a partial or complete substitute for adequate treatment, or to meet local limits or achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement.

#### 6216. SUSPENDED SOLIDS; DISSOLVED MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle, process or treat such matter at the sewage treatment plant.

#### **6217**. **NOXIOUS OR MALODOROUS MATTER:**

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any solid, liquid, vapor, gas, or thing which is so malodorous or noxious that their discharge into the sanitary sewer system would cause a public nuisance.

#### 6218. **RADIOACTIVE MATTER:**

No person shall discharge, cause, allow, or permit to be discharged, any radioactive waste into the sewer system, except, that:

- A. Persons authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials may discharge, cause to be discharged, or permit to be discharged such wastes, provided that such wastes are discharged in strict conformance with the California radiation control regulations (California Code of Regulations, Title 17, Chapter 5, Subchapter 4), and federal regulations and recommendations for safe disposal of such wastes; and
- B. The persons acting does so in compliance with all applicable rules and regulations of all other regulatory agencies having jurisdiction over such discharges.

Page 31

#### 6219. **COLORED MATTER:**



No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any wastewater with objectionable color not removed in the treatment process such as, but not limited to, dye wastes and vegetable tanning solutions.

#### 6220. GARBAGE:

No person shall discharge, deposit, or throw, or cause, allow or permit to be discharged, deposited, or thrown into the sanitary sewer system of the District, or any part thereof, any garbage, or any fruit, vegetable, animal or other solid material from any food-processing plant or other industrial plant or retail grocery store, irrespective of whether or not the same shall have been first passed through a mechanical grinder, and no person shall install, operate, use or maintain upon the premises of any food processing plant, or any other industrial plant or retail grocery store, any mechanical grinder or waste grinder that is connected directly or indirectly to the sanitary sewer system of the District, or any part thereof.

No person shall discharge, deposit, or throw, or cause, allow or permit to be discharged, deposited; or thrown into the sanitary sewer system or any part thereof, any garbage or fruit, vegetable, animal or other solid kitchen waste material resulting from the preparation of any food or drinks, in any dwelling, restaurant, or eating establishment, unless the same shall have first been passed through a mechanical garbage or waste grinder in conformance with the applicable provisions of the Plumbing and Electrical Codes of the entity having jurisdiction thereover.

#### 6221. INSTALLATION OF GREASE CONTROLDEVICES:

- A. Any Food Service Establishment, or other type of business or establishment where Grease or other viscous, obstructing, or objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a Grease Control Device and related plumbing of a size and design approved by the District Manager.
  - 1. Grease Interceptors shall meet the following minimum requirements:
    - a. Designed retention time of no less than 30 minutes.
    - b. The effluent from the device must flow through an approved sample box.
    - c. Installed per manufacturer's specifications.
    - d. At least two (2) manholes, situated so all standpipes can be fully observed, and all internal surfaces can be reached, without confined space entry.
    - e. Double-sweep clean-outs, on the interceptor inlet and sample box outlet.



- f. Shall meet the specifications and be constructed in accordance with the provisions of the applicable building codes.
- 2. Grease Traps shall meet the following minimum requirements:
  - a. No injection port for chemicals or bacteria.
  - b. Installed per manufacturer's specifications.
  - c. Appropriate flow restrictors, whether integral or external to the device, must be installed.
  - d. Shall meet the specifications and be constructed in accordance with the provisions of the applicable building codes.
- 3 .Mechanical Grease Removal Devices shall be installed in accordance with manufacturer's specifications.
- B. Each grease removal device shall be so installed and connected that it shall be at all times easily accessible for inspection, sampling, cleaning and removal of Grease, and other matter from all surfaces.
- C. A Grease Control Device should be situated on the discharger's premises except when such a location would be impractical or cause undue hardship on the discharger. The District may, subject to the issuance of an encroachment permit by the entity having jurisdiction thereover, allow the device to be installed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
- D. Waste discharge from fixtures and equipment in establishments which may contain Grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary waste through the Grease Control Device when approved by the District Manager provided, however, that toilets, urinals, wash basins, and other fixtures containing fecal material shall not flow through the grease removal device.

#### 6221.1. MAINTENANCE AND OPERATION OF GREASE CONTROL DEVICES

A. Grease Control Devices shall be maintained in efficient operating condition by periodic removal of the accumulated Grease. The use of chemicals, bacteria, enzymes or other additives that have the effect of emulsifying or dissolving Grease is prohibited unless specifically authorized by the District Manager in writing. No accumulated grease shall be introduced into any drainage piping or public or private sewer.



- B. Grease Control Devices shall be cleaned on a sufficient frequency to prevent objectionable odors, surcharge of the Grease Control Device, or interference with the operation of the sanitary sewer system
  - 1. Grease Traps shall be cleaned at least once every thirty (30) days.
  - 2. Grease Interceptors shall be cleaned once every ninety (90) days.
  - 3. Mechanical Grease Removal Devices must be maintained in a manner and frequency consistent with manufacturer specifications and guidance.
  - 4. Grease Control Devices shall be cleaned when their last chamber is filled to twenty-five percent (25%) or more of capacity with Grease or settled solids. Grease Interceptors with a sample box shall be cleaned immediately when grease is evident in the sample box.
  - 5. Grease Control Devices shall be cleaned by being pumped dry and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles, and tees. No water removed from the device during cleaning shall be returned to the Grease Control Device.
- C. The District Manager may grant an exception to the requirements of subsections B.1 and B.2 where the District Manager finds, based on evidence presented by the discharger, that a less frequent cleaning schedule will be sufficient to assure that not more than twenty-five percent (25%) of the capacity of the Grease Control Device will be filled with Grease or settled solids.
- D. All dischargers shall implement Best Management Practices in their operations to minimize the discharge of Grease to the sanitary sewer system.
- E. Dischargers shall maintain records on site for a period of at least 3 years as follows:
  - 1. Dischargers with an installed Grease Control Device shall maintain records showing that the Grease Control Device has been properly maintained and cleaned as required by subsections A and B; and
  - 2. Food Service Establishments shall maintain records showing the following related to all Grease hauled off site: date and time material removed off site; volume removed; hauler name: truck license number, type of Grease removed, and final destination of material collected.
- F. Abandoned grease removal devices shall be emptied and filled as required for abandoned septic tanks.



#### 6222. SCREENED INDUSTRIAL WASTES:

- A. No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any garbage, or any fruit, vegetable, animal, or other solid industrial wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products, unless such wastes have first been passed through screens having openings not exceeding 1/32 of an inch in dimension, provided that the District Manager, by written permission, may authorize the discharge into the sanitary sewer system of such wastes if they are first passed through screens having larger openings if the District Manager is satisfied that such larger openings will provide screening efficiency and effectiveness equal or better than that provided by the above-specification openings of 1/32 of an inch in dimension.
- B. Each person who discharges, or causes, allows, or permits to be discharged into the sanitary sewer system or any part thereof, any such wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products, shall install within or upon his premises from which such wastes are discharged, before such discharge of such wastes is made into said sanitary sewer system or any part of such system, and thereafter maintains in good operating order, screens as hereinabove specified and appurtenances thereto, including but not limited to all necessary conveyors and elevators, all in sufficient quantity and of sufficient size and quality to continuously and effectively screen not less than 100% of the peak hydraulic and solids loading imposed on such screens and appurtenances during any processing period.
- C. No person shall discharge any such screened wastes into said sanitary sewer system, or any part of said system, unless and until he shall obtain from the District a Wastewater Discharge Permit granting approval to do so. The District Manager may require such a person to provide to the District Manager a report prepared by a registered professional engineer which shows, to the satisfaction of the District Manager, that the provisions of this chapter have been complied with by such person before the Wastewater Discharge Permit is granted, and in no event shall the District Manager issue such Permit until he is satisfied that the provisions of this Section have been complied with by such person. The District Manager shall not issue such Permit if any such wastes cannot be processed successfully by the physical and biological processing units of the Water Pollution Control Plant.
- D. Any and all equipment, sewers, pipelines, or other facilities capable of discharging any garbage, fruit, vegetables, animal, or other solid industrial wastes resulting from the processing, packing, or canning of fruits, vegetables, or other foods or products, into said sanitary sewer system or any part thereof, before such wastes have been screened as required by paragraph (a) above, shall be locked, closed and sealed by the District Manager or his authorized representative. Each person operating such equipment, sewers, pipelines, or other facilities shall install



therein, at his own expense and cost, such valves or other devices or modifications thereto, as may be necessary to enable the District Manager to carry out the provisions of this paragraph (d). No person shall break any such lock or seal, and no person shall discharge, or cause, allow or permit to be discharged into any such equipment, sewers, pipelines, or other facilities capable of discharging such industrial wastes into said sanitary sewer system or any part thereof, any unscreened industrial wastes without first having been issued a Wastewater Discharge Permit.

- 6223. REPEALED.
- 6224. REPEALED.
- 6225. REPEALED.
- 6226. REPEALED.
- 6227. REPEALED.
- 6228. REPEALED.
- 6229. REPEALED.
- 6230. REPEALED.

#### 6231. FEDERAL PRETREATMENT REGULATIONS:

No Industrial User shall discharge, cause, allow or permit a discharge, into the Sanitary Sewer System in violation of any federal or state regulation regulating discharges by such Users, including but not limited to the Federal Pretreatment Regulations found in Title 40 of the Code of Federal Regulations.

#### 6232. DISPOSAL OF UNACCEPTABLE WASTE:

A "California Hazardous Waste Manifest" form must be completed for material disposed of at a Class 1 dump site and a copy furnished to the District Manager upon request.

#### 6233. **RESPONSIBILITY:**

The primary responsibility for enforcement of the provisions of this Code shall be vested in the District Manager or agents of the District as he shall designate and, provided further, that field inspectors or other employees of the District and the San Jose/Santa Clara Water Pollution Control Plant are hereby authorized to act as agents of the District for and on behalf of the District Manager, with the power to inspect and issue notices for violations of this Code.

#### 6233.1. RECORD KEEPING:

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 36


All Industrial Users subject to the reporting requirements of this chapter shall retain and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this chapter, and any additional records of information obtained pursuant to monitoring activities undertaken by the Industrial User independent of such requirements. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any enforcement action concerning the industrial user, or where the industrial user has been specifically notified of a longer retention period by the Director.

# 6234. FALSIFICATION OF INFORMATION:

No connector shall knowingly make any false statement, representation, record, report, plan or other document or knowingly tamper with or render inaccurate any monitoring device or equipment installed or operated pursuant to this Ordinance or of any permit issued under this Title. In addition to any punishment or remedy provided by law, any such falsification or tampering shall be grounds for revocation of any permit issued under this Code.

## 6235. **POWER TO INSPECT:**

- A. The District Manager and the Director and other duly authorized employees and agents of the district or the City of San Jose bearing credentials and identification shall have the right to access upon all properties for the purpose of inspecting any sewer connection, including all discharge connections of roof and surface drains and plumbing fixtures; inspecting, observing, measuring, photographing, sampling, and testing the quality, consistency, and characteristics of sewage and industrial wastewaters being discharged into any public sewer; and inspecting and copying any records relating to quantity and quality of wastewater discharges, including but not limited to water usage and effluent discharged, chemical usage, and hazardous waste records.
- B. The District Manager may terminate service or revoke the permit of any person who has discharged wastewater to the sanitary sewer system and has unreasonably refused access to the district.

#### 6236. CONNECTION OF SWIMMING POOLS AND EQUIPMENT:

Connection of swimming pools and swimming pool equipment to sanitary sewers shall not be permitted unless and until a permit from the District is obtained therefor. A permit giving permission for connection of the pool or equipment shall require that they be separated from the sewer by an air gap and a sump. The maximum size discharge out of the sump is to be 2-1/2 inch I.D. pipe.

The District Manager may, as a condition of such permit, include therein any requirements which in his opinion are necessary for the protection of the District or its inhabitants.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 37



# 6237. FIXER SOLUTION PROHIBITION:

No person shall discharge, cause, allow, or permit Fixer Solution to be discharged into the sanitary sewer system without prior pretreatment to meet all applicable limits.

## 6238. INSTALLATION AND MAINTENANCE OF AMALGAM SEPARATORS:

- A. Except as provided in subsections B and C below, no person shall discharge, cause, allow or permit any discharge to the sanitary sewer system from a dental vacuum system, unless such discharge has first been processed through an Amalgam Separator.
- B. For each dental vacuum system installed prior to July 1, 2009, an Amalgam Separator shall be installed on or before December 31, 2010. No dental vacuum system shall be installed on or after July 1, 2009 without an Amalgam Separator. Proof of certification and installation records shall be submitted to the District Manager within thirty (30) days of installation.
- C. A dental vacuum system may be operated without an Amalgam Separator provided that the system is not used in connection with the removal or placement of fillings that contain Dental Amalgam more than three (3) days per calendar year and the system is used exclusively by the following types of dental practices:
  (1) Orthodontics; (2) Periodontics; (3) Oral and maxillofacial surgery; (4) Radiology; (5) Oral pathology or oral medicine; (6) Endodontistry and prothodontistry.
- D. Amalgam Separators shall be maintained in accordance with manufacturer recommendations. Installation, certification, and maintenance records shall be maintained for minimum of five (5) years and available for immediate inspection upon request by the District Manager or designee during normal business hours.

## Article 3 WASTEWATER DISCHARGE PERMITS

#### 6200. LIMITATIONS ON POINT OF DISCHARGE:

No person shall discharge any substances directly into a manhole or other opening in a District sewer other than through a District-approved sewer connection.

#### 6201. DISCHARGE INTO STORM DRAIN PROHIBITED:

It shall be unlawful to discharge any sewage, industrial waste or other polluted waters into any storm drain or natural outlet or channel without a valid NPDES permit.

# 6201.1. **REGULATION OF TRUCKED OR HAULED WASTE:**



No person shall cause, allow, or permit to be discharged into the sanitary sewer system any trucked or hauled waste, except at a site specifically designated in a wastewater discharge permit or a receiving station permit.

# 6202. **PUBLIC NUISANCE:**

The discharge of unscreened garbage, fruit, vegetable, animal or other solid industrial wastes into any part of the sanitary sewer system, in violation of any provision of this Operations Code, is hereby declared to be a public nuisance.

# 6203. PROTECTION FROM ACCIDENTAL DISCHARGE:

- A. Each industrial user shall provide protection from accidental discharge of prohibited materials or other wastes regulated by this chapter into either the storm sewer or sanitary sewer systems.
- B. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the industrial user's expense.
- C. All industrial users shall notify the District and the Environmental Services Department by telephone or in person within one (1) hour of becoming aware of accidentally discharging wastes of reportable quantities as determined in 40 CFR 117 or discharge of any substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261, to enable countermeasures to be taken by the city to minimize damage to the sanitary sewer system, plant, treatment processes, and the receiving waters. If hazardous waste is discharged, industrial user shall be subject to all requirements in 40 CFR 403.12(p).
- D. Telephone notification shall be followed, within five (5) days of the date of occurrence, by a detailed written statement furnished to both the District and the Environmental Services Department describing the causes of the accidental discharge and the measures being taken to prevent future occurrences.
- E. Notification to the District and the Environmental Services Department will not relieve industrial users of notification requirements under any other federal, state or local law, nor of liability for any expense, loss or damage to the sanitary sewer system, Plant or treatment process or receiving waters or for any fines or penalties imposed on the city on account thereof under applicable provisions of state or federal law.
- F. All permitted facilities must maintain a spill control plan for protection against accidental discharges, including but not limited to, berming of chemicals and waste materials. The review of such plans and procedures shall not relieve the industrial user from the responsibility of modifying the facility as necessary to



provide the protection necessary to meet the requirements of this Code or other state or federal regulations.

G. This plan must be reviewed and revised as needed within thirty (30) days after an accidental discharge has occurred or as required by the Director.

## 6204. **PRETREATMENT BY OWNER:**

Whenever deemed necessary by the District Manager or the Director, the owner of any private premises shall, at his own expense, provide such treatment or take such other measures as shall be required in order to reduce objectionable characteristics contents or rate of discharge of waters or wastes being deposited in the sanitary sewer system so that the same may be received therein without any damage to the sanitary sewer system or any undue interference with its operation and without any hazard of any kind to humans or animals.

## 6205. MONITORING FACILITIES:

- A. The District Manager or the Director may require any discharger to the Sanitary Sewer System to construct, at the Industrial User's own expense and at an approved location, monitoring facilities to allow inspection, sampling, and flow measurement of the building Sewer or internal drainage systems.
- B. The monitoring facilities, sampling, and measurement equipment and access thereto shall be maintained at all times in a safe and proper operating condition at the expense of the discharger.
- C. Any required monitoring facilities shall be specified in the Wastewater Discharge Permit issued pursuant to this Chapter.
- D. Dischargers shall retain sufficient wastewater in their sample box at all times to allow sample collection representative of the last wastewater discharge.

#### 6206. STORM AND OTHER WATERS:

- A. No person shall discharge, cause, allow or permit any storm water, surface water, groundwater, subsurface drainage, or roof to be discharged into the Sanitary Sewer System or any part thereof without a wastewater discharge permit.
- B. A Wastewater Discharge Permit for the discharge of, ground water, subsurface drainage, surface water, roof water, or stormwater shall only be issued if there is no reasonable alternative method for disposal of such water.
- C. If permitted, discharge of ground water, subsurface drainage, surface water, roof water, or stormwater shall be subject to all applicable



requirements of this Operations Code, including but not limited to the payment of applicable permit fees and such terms and conditions as the District Manager or the Director may impose in the Wastewater Discharge Permit.

# 6207. COOLING AND UNPOLLUTED WATER:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof any unpolluted cooling water or unpolluted industrial process water.

# 6208. OBSTRUCTING OR INJURIOUS SUBSTANCES:

No person shall discharge, or cause, allow, or permit to be discharged, thrown, or deposited into the sanitary sewer system or any part thereof, or into any plumbing fixture or private sewer or drain connected either directly or indirectly to the sanitary sewer system, any substance of any kind whatsoever tending to obstruct or injure the sanitary sewer system, or to cause a nuisance or hazard, or which will in any manner interfere with the proper operation or maintenance of the sanitary sewer system.

# 6208.1. COPPER-BASED CHEMICAL COMPOUNDS:

- A. No person shall discharge, or cause, allow or suffer to be discharged, any chemical compound containing greater than five percent (5%) copper by weight, to control roots or for any other purpose into the sanitary sewer system or any part thereof, or into any plumbing fixture or sewer which discharges, either directly or indirectly, into the sanitary sewer system.
- B. No person shall display in any public place any chemical compound containing greater than five percent (5%) copper by weight, to control roots or for any other purpose, without first providing clear and reasonable written warning that discharge of said compound into the sanitary sewer system or any part thereof, or into any plumbing fixture or sewer or drain which discharges, either directly or indirectly, into the sanitary sewer system is prohibited by ordinance of the Cupertino Sanitary District.
- C. For the purposes of this Section, warning may be provided by posting a decal, placard or sign at the point of display of the compound. Any warning given under this Section shall be reviewed and must be approved by the District Manager.
- D. For purposes of this Section only, public place shall be defined as any building or area (including, without limiting the generality of the foregoing, any store or business establishment) where copper based chemical compounds may be viewed and obtained by members of the general public."

# 6209. FLAMMABLE OR EXPLOSIVE SUBSTANCES:



No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system any gasoline, benzene, naphtha, fuel oil, or any flammable liquid, solid, vapor, or gas or other substance, including but not limited to any substance having a closed cup flash point of less than one hundred forty degrees Fahrenheit (140oF) or sixty degrees Centigrade (60oC), using the test methods specified in Section 261.21 of Title 40 of the Code of Federal Regulations.

# 6210. HOT SUBSTANCES:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof, any liquid, solid, vapor, gas, or thing having or developing a temperature of 150°F or more, or which may cause the temperature at the sewage treatment plant to exceed 104°F.

## 6210.1. TOXIC GASES, VAPORS OR FUMES:

No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system any substance of any kind whatsoever which results in the presence of toxic gases, vapors or fumes within the system in a quantity that may cause acute health and/or safety problems for workers in the sanitary sewer system.

#### **6211. GREASE:**

- A. No person shall discharge, or cause, allow, or permit to be discharged into the sanitary sewer system any liquid or other waste containing Grease in excess of 150 parts per million by weight.
- B. No Person shall discharge, cause, allow, or permit any Grease discharge from a Food Service Establishment into the sanitary sewer system, unless such discharge has first been processed through an approved Grease Control Device.
- C. No person shall discharge, cause, allow, or permit to be discharged any Yellow Grease, or any waste or mixed material mixed with Yellow Grease, into the sanitary sewer system from a Food Service Establishment. No Yellow Grease from a Food Service Establishment shall be mixed with Grease Trap or Grease Interceptor waste.

#### 6212. SOLID OR VISCOUS MATTER:

No person shall discharge, deposit or throw, or cause to be discharged, deposited, or thrown into the sanitary sewer system or any part thereof, any ashes, cinders, pulp, paper, sand, cement, mud, straw, shavings, metal, glass, rags, feathers, tar, asphalt, resins, plastics, wood, animal hair, paunch manure, or any heavy solid or viscous substance capable of causing obstruction to the flow in the sanitary sewer system or any part thereof, or which would interfere with the proper operation of the sewage treatment plant or the treatment of sewage or industrial

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 42



wastes.

#### 6213. CORROSIVE MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid, solid, vapor, gas, or thing having a pH lower than six (6) or equal to or greater than twelve and one-half (12-1/2) or having any other corrosive property capable of causing damage or hazard to the sanitary sewer system or any part thereof, or to any personnel operating, maintaining, repairing, or constructing said sanitary sewer system or any part thereof, or working in or about said system.

#### 6214. INTERFERING SUBSTANCES:

A. No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any industrial waste containing any of the following toxic substances exceeding the concentrations set forth below:

Toxic Substance	Standard Discharger Maximum Allowable Concentration	Low Flow Discharger Maximum Allowable Concentration
Antimony	5.0 mg/l	5.0 mg/l
Arsenic	1.0 mg/l	1.0 mg/l
Beryllium	0.75 mg/l	0.75 mg/l
Cadmium	0.7 mg/l	0.7 mg/l
Chromium, Total	1.0 mg/l	1.0 mg/l
Copper	2.3 mg/l	2.7 mg/l
Cyanides	0.5 mg/l	0.5 mg/l
Lead	0.4 mg/l	0.4 mg/l
Mercury	0.010 mg/l	0.010 mg/l
Nickel	0.5mg/l	2.6 mg/l
Phenol & derivatives	30.0 mg/l	30.0 mg/l
Selenium	1.0 mg/l	1.0 mg/l
Silver	0.7 mg/l	0.7 mg/l
Zinc	2.6 mg/l	2.6 mg/l

B. No person shall discharge, cause, allow, or permit to be discharged into the sanitary sewer system or any part thereof, any toxic or poisonous substances or any other pollutant, including biochemical oxygen demand, in sufficient quantity to injure or cause an interference with the sewage treatment process or pass through the plant, or in sufficient quantity to constitute a hazard to humans or animals, or in sufficient quantity to create a hazard for humans, or aquatic life in



any waters receiving effluent from the sanitary sewer system, or which may create a hazard in the use or disposal of sewage sludge.

- C. All samples, both grab and composite, shall demonstrate compliance with the above limits.
- D. Any industrial user that violates any of the interfering substances limits must resample and submit sample reports for all pollutants in violation of any applicable permit limits or any other pollutants as required by the Director within thirty (30) days of becoming aware of the violation.

## 6215. PROHIBITION ON USE OF DILUTING WATERS:

No Industrial User shall ever increase the use of process water, or in any way use diluting waters as a partial or complete substitute for adequate treatment, or to meet local limits or achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement.

## 6216. SUSPENDED SOLIDS; DISSOLVED MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle, process or treat such matter at the sewage treatment plant.

# 6217. NOXIOUS OR MALODOROUS MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any solid, liquid, vapor, gas, or thing which is so malodorous or noxious that their discharge into the sanitary sewer system would cause a public nuisance.

#### 6218. RADIOACTIVE MATTER:

No person shall discharge, cause, allow, or permit to be discharged, any radioactive waste into the sewer system, except, that:

- A. Persons authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials may discharge, cause to be discharged, or permit to be discharged such wastes, provided that such wastes are discharged in strict conformance with the California radiation control regulations (California Code of Regulations, Title 17, Chapter 5, Subchapter 4), and federal regulations and recommendations for safe disposal of such wastes; and
- B. The persons acting does so in compliance with all applicable rules and regulations of all other regulatory agencies having jurisdiction over such discharges.



# 6219. COLORED MATTER:

No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any wastewater with objectionable color not removed in the treatment process such as, but not limited to, dye wastes and vegetable tanning solutions.

# 6220. GARBAGE:

No person shall discharge, deposit, or throw, or cause, allow or permit to be discharged, deposited, or thrown into the sanitary sewer system of the District, or any part thereof, any garbage, or any fruit, vegetable, animal or other solid material from any food-processing plant or other industrial plant or retail grocery store, irrespective of whether or not the same shall have been first passed through a mechanical grinder, and no person shall install, operate, use or maintain upon the premises of any food processing plant, or any other industrial plant or retail grocery store, any mechanical grinder or waste grinder that is connected directly or indirectly to the sanitary sewer system of the District, or any part thereof.

No person shall discharge, deposit, or throw, or cause, allow or permit to be discharged, deposited; or thrown into the sanitary sewer system or any part thereof, any garbage or fruit, vegetable, animal or other solid kitchen waste material resulting from the preparation of any food or drinks, in any dwelling, restaurant, or eating establishment, unless the same shall have first been passed through a mechanical garbage or waste grinder in conformance with the applicable provisions of the Plumbing and Electrical Codes of the entity having jurisdiction thereover.

# 6221. INSTALLATION OF GREASE CONTROLDEVICES:

- A. Any Food Service Establishment, or other type of business or establishment where Grease or other viscous, obstructing, or objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a Grease Control Device and related plumbing of a size and design approved by the District Manager.
  - 1. Grease Interceptors shall meet the following minimum requirements:
    - a. Designed retention time of no less than 30 minutes.
    - b. The effluent from the device must flow through an approved sample box.
    - c. Installed per manufacturer's specifications.
    - d. At least two (2) manholes, situated so all standpipes can be fully observed, and all internal surfaces can be reached, without confined space entry.



- e. Double-sweep clean-outs, on the interceptor inlet and sample box outlet.
- f. Shall meet the specifications and be constructed in accordance with the provisions of the applicable building codes.
- 2. Grease Traps shall meet the following minimum requirements:
  - a. No injection port for chemicals or bacteria.
  - b. Installed per manufacturer's specifications.
  - c. Appropriate flow restrictors, whether integral or external to the device, must be installed.
  - d. Shall meet the specifications and be constructed in accordance with the provisions of the applicable building codes.
- 3 .Mechanical Grease Removal Devices shall be installed in accordance with manufacturer's specifications.
- B. Each grease removal device shall be so installed and connected that it shall be at all times easily accessible for inspection, sampling, cleaning and removal of Grease, and other matter from all surfaces.
- C. A Grease Control Device should be situated on the discharger's premises except when such a location would be impractical or cause undue hardship on the discharger. The District may, subject to the issuance of an encroachment permit by the entity having jurisdiction thereover, allow the device to be installed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
- D. Waste discharge from fixtures and equipment in establishments which may contain Grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary waste through the Grease Control Device when approved by the District Manager provided, however, that toilets, urinals, wash basins, and other fixtures containing fecal material shall not flow through the grease removal device.

# 6221.1. MAINTENANCE AND OPERATION OF GREASE CONTROL DEVICES

A. Grease Control Devices shall be maintained in efficient operating condition by periodic removal of the accumulated Grease. The use of chemicals, bacteria, enzymes or other additives that have the effect of emulsifying or dissolving



Grease is prohibited unless specifically authorized by the District Manager in writing. No accumulated grease shall be introduced into any drainage piping or public or private sewer.

- B. Grease Control Devices shall be cleaned on a sufficient frequency to prevent objectionable odors, surcharge of the Grease Control Device, or interference with the operation of the sanitary sewer system
  - 1. Grease Traps shall be cleaned at least once every thirty (30) days.
  - 2. Grease Interceptors shall be cleaned once every ninety (90) days.
  - 3. Mechanical Grease Removal Devices must be maintained in a manner and frequency consistent with manufacturer specifications and guidance.
  - 4. Grease Control Devices shall be cleaned when their last chamber is filled to twenty-five percent (25%) or more of capacity with Grease or settled solids. Grease Interceptors with a sample box shall be cleaned immediately when grease is evident in the sample box.
  - 5. Grease Control Devices shall be cleaned by being pumped dry and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles, and tees. No water removed from the device during cleaning shall be returned to the Grease Control Device.
- C. The District Manager may grant an exception to the requirements of subsections B.1 and B.2 where the District Manager finds, based on evidence presented by the discharger, that a less frequent cleaning schedule will be sufficient to assure that not more than twenty-five percent (25%) of the capacity of the Grease Control Device will be filled with Grease or settled solids.
- D. All dischargers shall implement Best Management Practices in their operations to minimize the discharge of Grease to the sanitary sewer system.
- E. Dischargers shall maintain records on site for a period of at least 3 years as follows:
  - 1. Dischargers with an installed Grease Control Device shall maintain records showing that the Grease Control Device has been properly maintained and cleaned as required by subsections A and B; and
  - 2. Food Service Establishments shall maintain records showing the following related to all Grease hauled off site: date and time material removed off site; volume removed; hauler name: truck license number, type of Grease removed, and final destination of material collected.



F. Abandoned grease removal devices shall be emptied and filled as required for abandoned septic tanks.

## 6222. SCREENED INDUSTRIAL WASTES:

- A. No person shall discharge, or cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any garbage, or any fruit, vegetable, animal, or other solid industrial wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products, unless such wastes have first been passed through screens having openings not exceeding 1/32 of an inch in dimension, provided that the District Manager, by written permission, may authorize the discharge into the sanitary sewer system of such wastes if they are first passed through screens having larger openings if the District Manager is satisfied that such larger openings will provide screening efficiency and effectiveness equal or better than that provided by the above-specification openings of 1/32 of an inch in dimension.
- B. Each person who discharges, or causes, allows, or permits to be discharged into the sanitary sewer system or any part thereof, any such wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products, shall install within or upon his premises from which such wastes are discharged, before such discharge of such wastes is made into said sanitary sewer system or any part of such system, and thereafter maintains in good operating order, screens as hereinabove specified and appurtenances thereto, including but not limited to all necessary conveyors and elevators, all in sufficient quantity and of sufficient size and quality to continuously and effectively screen not less than 100% of the peak hydraulic and solids loading imposed on such screens and appurtenances during any processing period.
- C. No person shall discharge any such screened wastes into said sanitary sewer system, or any part of said system, unless and until he shall obtain from the District a Wastewater Discharge Permit granting approval to do so. The District Manager may require such a person to provide to the District Manager a report prepared by a registered professional engineer which shows, to the satisfaction of the District Manager, that the provisions of this chapter have been complied with by such person before the Wastewater Discharge Permit is granted, and in no event shall the District Manager issue such Permit until he is satisfied that the provisions of this Section have been complied with by such person. The District Manager shall not issue such Permit if any such wastes cannot be processed successfully by the physical and biological processing units of the Water Pollution Control Plant.
- D. Any and all equipment, sewers, pipelines, or other facilities capable of discharging any garbage, fruit, vegetables, animal, or other solid industrial wastes resulting from the processing, packing, or canning of fruits, vegetables, or other foods or products, into said sanitary sewer system or any part thereof, before such



wastes have been screened as required by paragraph (a) above, shall be locked, closed and sealed by the District Manager or his authorized representative. Each person operating such equipment, sewers, pipelines, or other facilities shall install therein, at his own expense and cost, such valves or other devices or modifications thereto, as may be necessary to enable the District Manager to carry out the provisions of this paragraph (d). No person shall break any such lock or seal, and no person shall discharge, or cause, allow or permit to be discharged into any such equipment, sewers, pipelines, or other facilities capable of discharging such industrial wastes into said sanitary sewer system or any part thereof, any unscreened industrial wastes without first having been issued a Wastewater Discharge Permit.

- 6223. REPEALED.
- 6224. REPEALED.
- 6225. REPEALED.
- 6226. REPEALED.
- 6227. REPEALED.
- 6228. REPEALED.
- 6229. REPEALED.
- 6230. REPEALED.

# 6231. FEDERAL PRETREATMENT REGULATIONS:

No Industrial User shall discharge, cause, allow or permit a discharge, into the Sanitary Sewer System in violation of any federal or state regulation regulating discharges by such Users, including but not limited to the Federal Pretreatment Regulations found in Title 40 of the Code of Federal Regulations.

#### 6232. DISPOSAL OF UNACCEPTABLE WASTE:

A "California Hazardous Waste Manifest" form must be completed for material disposed of at a Class 1 dump site and a copy furnished to the District Manager upon request.

#### 6233. **RESPONSIBILITY:**

The primary responsibility for enforcement of the provisions of this Code shall be vested in the District Manager or agents of the District as he shall designate and, provided further, that field inspectors or other employees of the District and the San Jose/Santa Clara Water Pollution Control Plant are hereby authorized to act as agents of the District for and on behalf of the

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 49



District Manager, with the power to inspect and issue notices for violations of this Code.

# 6233.1. RECORD KEEPING:

All Industrial Users subject to the reporting requirements of this chapter shall retain and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this chapter, and any additional records of information obtained pursuant to monitoring activities undertaken by the Industrial User independent of such requirements. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any enforcement action concerning the industrial user, or where the industrial user has been specifically notified of a longer retention period by the Director.

# 6234. FALSIFICATION OF INFORMATION:

No connector shall knowingly make any false statement, representation, record, report, plan or other document or knowingly tamper with or render inaccurate any monitoring device or equipment installed or operated pursuant to this Ordinance or of any permit issued under this Title. In addition to any punishment or remedy provided by law, any such falsification or tampering shall be grounds for revocation of any permit issued under this Code.

# 6235. POWER TO INSPECT:

- A. The District Manager and the Director and other duly authorized employees and agents of the district or the City of San Jose bearing credentials and identification shall have the right to access upon all properties for the purpose of inspecting any sewer connection, including all discharge connections of roof and surface drains and plumbing fixtures; inspecting, observing, measuring, photographing, sampling, and testing the quality, consistency, and characteristics of sewage and industrial wastewaters being discharged into any public sewer; and inspecting and copying any records relating to quantity and quality of wastewater discharges, including but not limited to water usage and effluent discharged, chemical usage, and hazardous waste records.
- B. The District Manager may terminate service or revoke the permit of any person who has discharged wastewater to the sanitary sewer system and has unreasonably refused access to the district.

# 6236. CONNECTION OF SWIMMING POOLS AND EQUIPMENT:

Connection of swimming pools and swimming pool equipment to sanitary sewers shall not be permitted unless and until a permit from the District is obtained therefor. A permit giving permission for connection of the pool or equipment shall require that they be separated from the sewer by an air gap and a sump. The maximum size discharge out of the sump is to be 2-1/2 inch I.D. pipe.



The District Manager may, as a condition of such permit, include therein any requirements which in his opinion are necessary for the protection of the District or its inhabitants.

# 6237. FIXER SOLUTION PROHIBITION:

No person shall discharge, cause, allow, or permit Fixer Solution to be discharged into the sanitary sewer system without prior pretreatment to meet all applicable limits.

#### 6238. INSTALLATION AND MAINTENANCE OF AMALGAM SEPARATORS:

- A. Except as provided in subsections B and C below, no person shall discharge, cause, allow or permit any discharge to the sanitary sewer system from a dental vacuum system, unless such discharge has first been processed through an Amalgam Separator.
- B. For each dental vacuum system installed prior to July 1, 2009, an Amalgam Separator shall be installed on or before December 31, 2010. No dental vacuum system shall be installed on or after July 1, 2009 without an Amalgam Separator. Proof of certification and installation records shall be submitted to the District Manager within thirty (30) days of installation.
- C. A dental vacuum system may be operated without an Amalgam Separator provided that the system is not used in connection with the removal or placement of fillings that contain Dental Amalgam more than three (3) days per calendar year and the system is used exclusively by the following types of dental practices:
  (1) Orthodontics; (2) Periodontics; (3) Oral and maxillofacial surgery; (4) Radiology; (5) Oral pathology or oral medicine; (6) Endodontistry and prothodontistry.
- D. Amalgam Separators shall be maintained in accordance with manufacturer recommendations. Installation, certification, and maintenance records shall be maintained for minimum of five (5) years and available for immediate inspection upon request by the District Manager or designee during normal business hours.

## CHAPTER VII SEWER SERVICE CHARGES

# **7000. GENERAL**:

There is hereby levied and assessed upon each premise which is discharging sewage that ultimately passes through the sanitary sewer system of the District, a service charge as provided in this Chapter. The service charge for each Single Family Unit shall be as specified as Section 7001; the service change for each of the particular Units listed in Section 7002 shall be as specified therein; and the service charge for all other Units shall be as specified in Section 7003.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 51



# 7001. CHARGE FOR SINGLE FAMILY UNITS:

Each Single Family Unit (as defined in Section 2066.B) shall be charged Three Hundred Thirty Dollars (\$330.00) per year.

#### 7002. CHARGES FOR PARTICULAR UNITS:

A. Each Unit (as defined in Section 2066.A) of the particular uses listed below shall be charged Five Dollars Eight and 7/100<sup>ths</sup> Cents (\$5.087) per year, plus an additional annual service charge per hundred cubic feet (HCF) of sewage discharged, to be determined by the District Manager in accordance with the annual use of water by each Unit times the applicable rate to be determined by the District Manager as follows:

Type of Use:	Service Charge:
Auto Repair Shops & Service Stations	\$2.745 /HCF
Car Washes	\$2.293 /HCF
Domestic Laundry	\$2.473 /HCF
Machinery Manufacturers	\$4.020 /HCF
Motels or Hotels without Food Service	\$2.799 /HCF
Motels or Hotels with Food Service	\$4.700 /HCF
Retirement Homes with	
Common Dining Facilities	\$5.289 /HCF
Convalescent Hospitals	\$2.653 /HCF
Printing Plants	\$4.729 /HCF
Restaurants	\$5.732 /HCF
Retail or Professional Office	\$2.519 /HCF
Schools, Colleges, Day Care Facilities	\$3.577 /HCF

- B. <u>Minimum Charge</u>: In no event shall the annual service charge levied upon any Unit of the uses listed in Paragraph A above, be less than seventy-five percent (75%) of the service charge for a Single Family Unit, as set forth in Section 7001 of this Chapter.
- C. Where different types of Units are serviced by the same water meter, the District Manager shall estimate the quantity of discharge material produced by each type of Unit and calculate the additional service charge applicable to each type of Unit based upon the estimated discharge from that Unit.
- D. Whenever the District Manager determines that a Unit has been inappropriately classified as one of the types listed in Paragraph A of this Section, the District Manager may reclassify such Unit to another of the types listed in Paragraph A of this Section or require that the annual service charge for such Unit be calculated in accordance with the provisions of Section 7003 of this Chapter. Any increase or decrease in the annual service charge for the affected Unit resulting from the



re-classification shall be prospective only and implemented on the next regular billing by the District for annual sewer charges. No discharger shall be entitled to a retroactive refund of charges paid, or liable for payment of additional charges, for any period prior to the effective date of the reclassification.

#### 7003. **CHARGES FOR ALL OTHER UNITS**

- For each Unit not listed in Section 7002, the annual service charge shall be the A. sum of the annual Capital Cost Recovery Charge and the annual Maintenance and Operation Cost Recovery Charge, as determined by the District Manager, calculated as follows:
  - Capital Cost Recovery Charge: 1.

Infiltration/Inflow (I/I)	\$5.087 per year for each unit; plus
Flow	\$219,368.533 per year for each million gallons per day of sewage treatment plant capacity required to treat the sewage discharged from the Unit into the sanitary sewer system; <i>plus</i>
Biochemical Oxygen Demand (BOD)	\$32,033.373 per year for each thousand pounds per day of sewage treatment plant capacity required to remove the biochemical oxygen demand contained in sewage discharged from the Unit into the sanitary sewer system; <i>plus</i>
Suspended Solids (SS)	\$29,613.240 per year for each thousand pounds per day of sewage treatment plant capacity required to remove the suspended solids contained in the sewage discharged from the Unit into the sanitary sewer system; <i>plus</i>
Ammonia (NH3)	\$97,206.267 per year for each thousand pounds per day of sewage treatment plant capacity required to remove ammonia contained in the sewage discharge from the Unit into the sanitary sewer system.
Operation and Maintenand	ce Cost Recovery Charge

#### 2. Taimtenance Cost Recovery Charge.

Flow

\$1,909.893 for each million gallons per year of sewage discharged from the Unit into the sanitary sewer system; plus



Biochemical Oxygen Demand (BOD)	\$217.427 for each thousand pounds per year of biochemical oxygen demand discharged from the Unit into the sanitary sewer system; <i>plus</i>
Suspended Solids (SS)	\$283.933 for each thousand pounds per year of suspended solids discharged from the Unit into the sanitary sewer system; <i>plus</i>
Ammonia (NH3)	\$2,344.28 for each thousand pounds per year of ammonia discharged from the Unit into the sanitary sewer system.

- B. In determining the Capital Cost Recovery Charge and the Operation and Maintenance Cost Recovery Charge, the District Manager may utilize information on the content of discharges from particular Units provided by the treatment Plant, or other source of information deemed by the District Manager to be appropriate, or actual grab samples of such discharges taken by the District, or any combination thereof. The District Manager is authorized to modify the annual service charge from time to time, based upon such information and samples; *provided, however*, any increase or decrease in the annual service charge shall be prospective only and implemented on the next regular billing by the District for annual service charges. No discharger shall be entitled to a retroactive refund of charges paid, or liable for payment of additional charges, for any period prior to the effective date of the modification.
- C. Where multiple Units having different flow content are serviced by the same water meter, the District Manager shall allocate the Capital Cost Recovery Charge and the Operation and Maintenance Cost Recovery Charge between each individual Unit based upon his estimate of the discharge material produced by each Unit.

#### 7004. UNMETERED AND METERED WASTES:

When rates are herein specified to be in accordance with the use of water, all such premises shall be separately metered. Where such metering is not provided, or for newly constructed units, the District Manager shall make a reasonable estimate of the volume of water consumed to be used as a basis for sewer service charges.

The District Manager may meter the sewer line, and if the results differ from that used as a basis for sewer service charges for the previous billing, the user will be charged for any excess usage or credited for any overpayments. The new billing will be adjusted to conform to the actual metering.

#### 7005. WHEN SERVICE CHARGES ARE DUE:



All accounts are due and payable in advance at the office of the District Manager on the first day of July of each year. Billings will be sent by the District Manager. Bills are sent as a courtesy and failure to receive a bill does not relieve owner of responsibility to pay or of penalties levied for non-payment.

# 7006. ALTERNATE METHOD OF BILLING AND COLLECTING RATES AND CHARGES:

The District may elect to use the tax roll on which general District taxes are collected for the collection of current or delinquent rates and charges, including fees, tolls, rates, rentals or other charges for services and facilities furnished by it. In such case, proceedings therefor shall be had as now or hereafter provided in Article 4, Chapter 6, Part 3, Division 5 of the Health and Safety Code of the State of California.

This method shall not apply to public property or other property which, in the opinion of the District Manager, cannot be conveniently handled by this method.

# 7007. PAYMENT OF SERVICE CHARGES, NEW CONNECTIONS:

- A. <u>Definition of Building Official</u>. As used in this Section, the term "building official" means the city or county official having authority to issue certificates of occupancy or final inspection approvals for newly constructed improvements.
- B. <u>Commencement Date for Service Charges</u>. In the case of new connections to the sanitary sewer system for which a connection permit is issued pursuant to Chapter VIII, sewer service charges shall commence on the date a certificate of occupancy is issued by the building official for the newly constructed improvements on the property, or, if no certificate of occupancy will be issued, the date on which final inspection approval is granted by the building official for such improvements (the "Commencement Date").
- C. <u>Initial Payment</u>. At the time the District is requested by the building official to grant a clearance for issuance of a certificate of occupancy or final inspection approval, the District shall collect from the permittee the amount of sewer service charges that will become due from the expected Commencement Date referred to in Paragraph (b) above to the next billing in which sewer service charges can be included on the tax roll or billed to the owner, as determined by the District Manager. No clearance shall be granted until such charges are paid in full.
- D. <u>Refund of Overpayment</u>. In the event of a delay of 30 days or greater by the building official in issuing the certificate of occupancy or final inspection report occurring after the District has collected the initial payment of sewer service charges pursuant to Paragraph (c) above, and evidence of such delay having been presented to the satisfaction of the District Manager, then the District Manager shall refund to the permittee that portion of the service charges attributable to the



period between the expected Commencement Date and the actual Commencement Date.

E. <u>Delayed Collection of Initial Payment</u>. In the event the building official issues a certificate of occupancy or final inspection approval without the District having first collected the initial payment of sewer service charges in accordance with Paragraph (c) above, then upon discovery of the actual Commencement Date, the District shall be entitled to bill to the permittee or add to the tax roll, or both, any sewer service charges accruing between the actual Commencement Date and the next billing in which sewer service charges can be included on the tax roll or billed to the owner, as determined by the District Manager.

## 7008. DELINQUENT SERVICE CHARGES:

- A. Accounts Billed By District Manager Shall become delinquent two calendar months from and after the date that they have become due and payable. A penalty equal to 100% of the monthly service charge may be charged for each calendar month, or portion thereof, that the account remains delinquent. If an account is delinquent more than 120 days, service may be disconnected. The District may collect unpaid sewer service charges by suit, in which event it shall have judgment for the cost of suit and reasonable attorneys' fees.
- B. Accounts Billed by Tax Roll Are Subject to the same penalty as prescribed by law for General Taxes.

# **7009. APPEALS:**

Any decision or determination made by the District Manager pursuant to this Chapter may be appealed by the discharger to the District Board by filing a notice of appeal with the District Clerk. The notice shall set forth the grounds of the appeal and shall be accompanied by such information and documents the discharger desires to submit to the District Board in support of the appeal. An appeal shall not operate as a stay on the decision of the District Manager that is the subject of the appeal and such decision shall be effective and enforced at the same time and in the same manner as if no appeal therefrom had been filed.

#### CHAPTER VIII PERMITS AND FEES

## Article 1 CONNECTION PERMIT

#### 8100. CONNECTION PERMIT:

No one shall connect a house sewer to the District sewer system without obtaining a sewer connection permit from the District Manager.



### 8101. CONNECTION PERMIT FEES:

Each connector, other than those connectors covered under Section 8102, shall pay a fee of Seventy-Five Dollars (\$75.00) to District for issuing each connection permit, which fee shall include the inspection of the connection of the house sewer to the lateral sewer.

# 8102. CONNECTION PERMIT FEE - CITY OF CUPERTINO:

Each connector within the City of Cupertino shall pay fees to District as follows:

- A. Permit Fee Seventy-Six Dollars (\$76.00) for the issuing of each connection permit, which shall include the inspection of the connection of the house sewer to the lateral sewer.
- B. Backflow Protective Device Inspection Fee One Dollar and Fifty Cents (\$1.50) providing a backflow protective device is required to be installed in accordance with Section 4105, said fee shall be for the inspection of the backflow protective device.

# 8103. TIME LIMITATION ON CONNECTION PERMIT:

In the event connection to the sewer is not made within six (6) months for an existing building and one (1) year for new construction from the date the connection permit is issued, said permit may become void and, if voided, the total amount paid for said permit and any sewer service charges collected will be forfeited to the District, and a new permit will be required before connection is made.

#### 8104. **PERMIT ISSUANCE:**

The District Manager and Engineer shall issue all permits under this Chapter. However, the District Manager and engineer shall not issue any permit which, in his opinion, will cause the District to exceed its ability to treat adequately the wastewater that would result from the issuance of such a permit. Any refusal to issue any permit under this Chapter is subject to the Appeals Procedure provided for in Chapter XI of this Code.

#### 8105. SUSPENSION OR REVOCATION OF PERMITS:

If the permit holder fails or refuses to comply with any provision or condition of the permit, this Code, the rules and regulations of the District and orders of the District Manager and Engineer, or the rules and regulations of a municipal, county, state or federal agency, the District Manager and Engineer shall have the authority to suspend the permit by giving written notice of the suspension to the permit holder, stating that the permit is suspended, the reasons for the suspension, and the effective date of suspension. The suspension continues until the permit holder removes the grounds for suspension, but in no event shall the suspension be in effect for longer than 6 months from its effective date. All orders of suspension are subject to the appeals procedures provided for in Chapter XI of this Code.

Cupertino Sanitary District Sewer System Management Plan (08/01/2012) Page 57



If any of the grounds for a suspension continue during the period of the suspension, and, in the opinion of the District Manager and Engineer, are likely to continue past the termination date of the suspension; he may give written notice to the permit holder specifying the time and place of a hearing before the Sanitary Board to consider revocation of the permit. Said notice shall be given at least ten (10) days prior to said hearing, served in the manner prescribed in Section 1006 of the Operations Code and shall include the grounds for the proposed revocation.

Upon a finding that any of the grounds specified in the notice are true, the Sanitary Board may revoke the permit.

## Article 2 CONNECTION FEES

## 8200. FRONT-FOOTAGE AND ACREAGE FEES:

For all residential, commercial, industrial, schools and other like structures, or developments shall be paid by connectors and installers in each Zone of this District as defined in Section 3002 of this Code as follows:

- Zone 1 \$16.50 per front foot and \$910.00 per acre.
- Zone 2 \$19.80 per front foot and \$1,040.00 per acre, except that where a sewer is installed to serve only one side of the street, such charge shall be \$39.60 per front foot and \$1,040.00 per acre.
- Zone 3 \$19.80 per front foot and \$1,170.00 per acre, except that where a sewer is installed to serve only one side of the street, such charge shall be \$39.60 per front foot and \$1,170.00 per acre.
- Zone 4 \$23.10 per front foot and \$1,300.00 per acre, except that where a sewer is installed to serve only one side of the street, such charge shall be \$46.20 per front foot and \$1,300.00 per acre.

Provided that in the event that not more than one single family residential structure is to be constructed and connected to District's sanitary sewage system on any lot or parcel of property having an area in excess of one acre, such acreage fee to be collected in each Zone, as hereinabove provided shall not exceed the fee for one acre.

#### 8201. ADJUSTMENTS IN FRONT FOOTAGE:

Will be as follows:

A. Corner Lots - Will be given up to 125 foot corner credit along the long side when computing front footage fees.



B. Irregular Shaped Lots - Will be given special consideration when computing front footage fees.

#### 8202. ADDITIONAL RESIDENTIAL UNIT OR DWELLING UNIT FEES:

Additional residential unit or dwelling unit fees shall be paid by all persons connecting to the District sewer, in addition to fees to be paid pursuant to Section 8200 of this Code, for each residential unit or dwelling unit as defined in Section 2045(a) and 2045(b) of this Code in each Zone of this District as defined in Section 3002 of this Code as follows:

- A. For any and all residential uses including multiple unit residential buildings, townhouse, condominium, planned unit development, cluster development or similar type residential development, motel, hotel, court, auto court, trailer court, mobile home park, cabana, boarding houses, rest homes, dormitories, and similar type residential developments having a density in excess of three and one-half (3-1/2) units or dwelling units per acre:
  - Zone 1 \$325.00 for each unit or dwelling unit exceeding 3-1/2 units per acre.
  - Zone 2 \$355.00 for each unit or dwelling unit exceeding 3-1/2 units per acre.
  - Zone 3 \$390.00 for each unit or dwelling unit exceeding 3-1/2 units per acre.
  - Zone 4 \$420.00 for each unit or dwelling unit exceeding 3-1/2 units per acre.

For hotels and motels, additional unit or dwelling unit fees in an amount equal to two-thirds (2/3) of those hereinabove set forth Shall be paid for each unit or dwelling unit exceeding 3-1/2 units per acre.

B. In any case, where the unit or additional unit fees to be paid is not hereinabove established, such fees shall be determined by the District Board.

#### 8203. ADDITIONAL COMMERCIAL/INDUSTRIAL DENSITY FEE:

Additional density fees shall be paid by all persons connecting to the District sewer system, in addition to fees to be paid pursuant to Section 8200 of this Code, for each commercial or industrial building, in each zone of this District as defined in Section 3002 of this Code, as follows:

A. For the initial connection to the sanitary sewer system of any and all commercial or industrial uses:



- Zone 1 \$1.44 per gallon per day for each gallon of sewage discharge exceeding 1,120 gallons per day per acre.
- Zone 2 \$1.58 per gallon per day for each gallon of sewage discharge exceeding 1,120 gallons per day per acre.
- Zone 3 \$1.73 per gallon per day for each gallon of sewage discharge exceeding 1,120 gallons per day per acre.
- Zone 4 \$1.87 per gallon per day for each gallon of sewage discharge exceeding 1,120 gallons per day per acre.
- B. For any change in use of any and all commercial or industrial connections that result in an increase of sewage discharge:
  - Zone 1 \$1.44 per gallon per day for all or any portion of the increased sewage discharge which shall exceed a total sewage discharge of 1,120 gallons per day per acre.
  - Zone 2 \$1.58 per gallon per day for all or any portion of the increased sewage discharge which shall exceed a total sewage discharge of 1,120 gallons per day per acre.
  - Zone 3 \$1.73 per gallon per day for all or any portion of the increased sewage discharge which shall exceed a total sewage discharge of 1,120 gallons per day per acre.
  - Zone 4 \$1.87 per gallon per day for all or any portion of the increase sewage discharge which shall exceed a total sewage discharge of 1,120 gallons per day per acre.
- C. The District Manager and Engineer shall determine the per day estimated gallons of sewage to be discharged to the District sewer system for computing the fees under this Section.

#### 8204. HOMESTEAD AGREEMENT:

Fees for property included in the Homestead 1956-1 Agreement shall be the same as provided for in this Article, except where conflicting provisions are contained in said Agreement, as amended, in which case the terms of said Agreement shall prevail.

# 8204.1. SPECIAL EQUALIZATION CHARGES:

Except as otherwise provided for the reimbursement of excess costs in Chapter IX hereof, in addition to any other rates or charges established by the ordinances, rules and regulations of the District, there shall be collected, prior to the issuance of a permit for connection to the

Cupertino Sanitary District	
Sewer System Management Plan	



sanitary sewerage system of the District, such Special Equalization Charges as may be specified by resolution of the District Board in order to establish conditions of equality between the installers of sewerage facilities and those benefiting from but not participating in the cost of such facilities. When Special Equalization Charges are deemed necessary and appropriate by the District Board, a Special Benefit Zone shall be established which shall define the area of properties that may reasonably be expected to benefit from the construction of specific sewerage facilities which have been or are to be constructed. The boundaries of each Special Benefit Zone and the amount of Special Equalization Charges to be levied therein shall be established by resolution of the District Board.

# 8205. PAYMENT OF CONNECTION FEES:

- A. Connector Fees due and payable by a connector shall be paid prior to the issuance of a connection permit.
- B. Installer Fees dues and payable by an installer shall be paid prior to execution of the Installer's Agreement by the District.

# 8206. CREDIT FOR CONNECTION FEES PAID UNDER AN ASSESSMENT DISTRICT:

- A. Partial Payment Any property located within an assessment district which has been assessed for indirect or future benefits shall be given credit for said assessment on the fees provided for in Section 8200 above.
- B. Full Payment Any property located within an assessment district which was assessed a sum equal to the full. and complete benefit to said property shall be given full credit for fees provided for in Section 8200 above.

#### Article 3 LATERAL SEWER PERMIT AND FEES

#### 8300. LATERAL SEWER PERMIT:

Each connector shall obtain a lateral sewer permit from the District Manager before a sewer connection permit can be issued, except when there is an existing lateral sewer that was assessed against the property under a local improvement district, or installed by an installer as part of the development of that parcel of land.

# 8301. LATERAL SEWER PERMIT FEES:

For each lateral sewer permit issued there will be a charge of Three Hundred Dollars (\$300.00) for issuing the permit and inspection of the construction.

# 8302. LATERAL SEWER FEES (EXISTING DISTRICT-OWNED LATERAL SEWER):



When the connector's property has a lateral sewer that was constructed to serve said property, but paid for by the District, the connector shall reimburse the District for said lateral sewer as follows:

- A. Permit Fee Per Section 8301.
- B. Construction Charge Equal to the per-foot charge paid by the District for said lateral times one-half the width of the street (60 foot maximum street) in which the lateral sewer is constructed.
- C. "Y" Connection The cost of the "Y" connection to the branch or main sewer.
- D. Encroachment Permit As charged by Local Agency.

#### Article 4 ENVIRONMENTAL QUALITY ACT - FEES

#### 8400. FEES AND DEPOSITS - ENVIRONMENTAL QUALITY ACT:

Where District is the Lead Agency or a responsible agency for any project under CEQA, the person or persons beneficially interested shall deposit with District the estimated cost of District preparation of materials, reports and the making of evaluations of the proposed project as estimated by the District Engineer. Should the amount of deposit be inadequate to meet the District's costs as Lead Agency or as a responsible agency involved in providing consultation to the Lead Agency as required by law, District shall, prior to completion of the District's evaluation of the proposed project, notify the person or persons beneficially interested of the amount necessary to complete the review of the proposed project which shall be immediately deposited with District. Should there be a surplus remaining in the deposit following completion of the District's evaluation of the project, the surplus shall be returned to the person or persons making such deposit.

## CHAPTER IX REIMBURSEMENT OF EXCESS COSTS

#### 9000. EXCESS COSTS:

Excess costs equal the sum of the following:

- A. <u>Oversizing</u> The difference between the estimated cost of installing the size of line required to serve the installer's needs (8-inch minimum) and the actual cost of installing a larger line, where a line of greater than the size line required to serve the installer's needs, was installed by installer at the direction of the District.
- B. <u>In Tract</u> One-half the cost of installing an 8-inch line or 6-inch line and appurtenances depending upon which size is installed by installer along the

Cupertino Sanitary District Sewer System Management Plan (08/01/2012) Page 62



boundary line of property of installer where a sewer line has been installed by installer along said boundary, and is subject to probable future use by connectors other than installer.

C. <u>Off Tract</u> - One hundred percent (100%) of the costs of installing all sewer lines and appurtenances beyond the property line of installer where sewer lines have been extended wholly outside the property of installer and are subject to probable future use by connectors other than installer.

# 9001. APPROVAL OF EXCESS COSTS; CREDIT THEREOF TO REIMBURSEMENT ACCOUNT:

District shall have the right to audit the excess costs submitted by installer, and to approve for reimbursement only so much thereof as it determines to be just and reasonable. District's determination of such excess cost as herein provided shall be final and conclusive. Such excess cost, if any, shall be computed when said line is completed by installer and accepted by District, and said amount shall be credited in the name of the installer to the installer's Reimbursement Account for the segment or segments of the sewerage system constructed by installer.

# 9002. SOURCE OF REIMBURSEMENT FUNDS:

- A. <u>Oversizing (In-Tract and Off Tract)</u> Upon acceptance of the oversize lines by the District, the District will deposit in the Installer's Reimbursement Account the excess costs involved in installing oversize lines as described in Section 9000(a).
- B. <u>In-Tract and Off Tract Sewers</u> Funds for reimbursement of in-tract and off-tract sewers as described in Sections 9000 (b) and 9000(c) shall be obtained from future connections to said sewers (front-foot charges collected in accordance with Section 8200) and from no other source.

# 9003. DISBURSEMENT FROM REIMBURSEMENT ACCOUNT:

Semi-annually all fees credited to each installer's reimbursement account shall be disbursed to installers.

# 9004. TERMINATION OF RIGHT TO REIMBURSEMENT:

The installer shall be carried on said Reimbursement Account until one of the following shall first occur:

A. <u>Total Reimbursement</u> - Disbursement to Installer of an amount equal to total excess costs approved by District.



- B. <u>Expiration of Agreement</u> The lapse of ten (10) years from date of acceptance of Transfer of Title by District and District shall not be responsible for advising installer of the expiration date.
- C. <u>Withdrawal</u> The withdrawal of said sewer lines, or of the property sewered thereby from said Sanitary District. District shall be under no obligation to inform installer of such withdrawal.

Upon occurrence of (b) or (c) above, District shall succeed to the reimbursement credit to the installer, and shall be entitled to all payment due thereon.

## CHAPTER X ENFORCEMENT

# **10000. VIOLATION:**

Any person found to be violating any provision of this Code or any other ordinance, rule or regulation of the District shall be served by the Manager or other authorized person with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. Said time limit shall not be less than two nor more than seven working days. The offender shall, within the period of time stated in such notice, permanently cease all violations. All persons shall be held strictly responsible for any and all acts of agents or employees done under the provisions of this Code or any other ordinance, rule or regulation of the District. Upon being notified by the Manager of any defect arising in any sewer or of any violation of this Code, the person or persons having charge of said work shall immediately correct the same.

#### **10001. PUBLIC NUISANCE:**

Continued habitation of any building or continued operation of any industrial facility in violation of the provisions of this Code or any other ordinance, rule or regulation of the District is hereby declared to be a public nuisance. The District may cause proceedings to be brought for the abatement of the occupancy of the building or industrial facility during the period of such violation.

# **10002. DISCONNECTION:**

As an alternative method of enforcing the provisions of this Code or any other ordinance, rule or regulation of the District, the Manager shall have the power to disconnect the user or subdivision sewer system from the sewer mains of the District. Upon disconnection the Manager shall estimate the Cost of disconnection from and reconnection to the system, and such user shall deposit the cost, as estimated, of disconnection and reconnection before such user is reconnected to the system. The Manager shall refund any part of the deposit remaining after payment of all costs of disconnection.



#### **10003. PUBLIC NUISANCE, ABATEMENT:**

During the period of such disconnection, habitation of such premises by human beings shall constitute a public nuisance, whereupon the District shall cause proceedings to be brought for the abatement for the occupancy of said premises by human beings during the period of such disconnection. In such event, and as a condition of reconnection, there is to be paid to the District a reasonable attorney's fee and cost of suit arising in said action.

# **10004. CORRECTION OF VIOLATION:**

In order to enforce the provisions of this Code or any other ordinance, rule or regulation of the District, the District may correct any violation. The cost of such correction may be added to any sewer service charge payable by the person violating this Code or any other ordinance, rule or regulation, or the owner or tenant of the property upon which the violation occurred, and the District shall have such remedies for the collection of such costs as it has for the collection of sewer service charges. The District may also petition the superior court for the issuance of a preliminary or permanent injunction, or both, as may be appropriate, restraining any person from the continued violation of any ordinance of the District.

## 10005. SUSPENSION OF SERVICES:

When deemed necessary by the District Manager for the preservation of public health or safety or for the protection of public or private property, he may suspend sewer service to any person or persons using the sanitary sewer system in a manner or way as to endanger the public health or safety or public or private property, and in this regard sever from the public sewer all pertinent connections thereto. If such endangerment shall be imminent, then the District Manager may act immediately to suspend sewer service after notice to said person or persons."

#### **10006. MEANS OF ENFORCEMENT ONLY:**

The District hereby declares that the foregoing procedures are established as a means of enforcement of the terms and conditions of this Code or any other ordinances, rules and regulations, and not as a penalty.

#### **10007. MISDEMEANOR:**

Section 6523 of the Health and Safety Code of the State of California provides that a violation of a regulation or ordinance of a district is a misdemeanor punishable by imprisonment in the county jail not to exceed 30 days, or by a fine not to exceed One Thousand Dollars (\$1,000), or by both. Each and every connection or occupancy in violation of the ordinances and regulations of the District shall be deemed a separate violation and each and every day or part of a day a violation of the ordinance or regulation continues shall be deemed a separate offense hereunder and shall be punishable as such.

# **10008. PRETREATMENT OF INDUSTRIAL WASTE:**



Section 54739 of the Government code of the State of California provides that the District may require any of the following:

- A. Pretreatment of any industrial waste which the District determines is necessary in order to meet standards established by the federal or California state government or other regulatory agencies or which the District determines is necessary in order to protect the treatment works or the property and efficient operation thereof or the health or safety of its employees or the environment.
- B. The prevention of the entry of such industrial waste into the collection system and treatment works.
- C. The payment of excess costs to the system for supplementary treatment plants, facilities, or operations needed as a result of allowing the entry into the collection system and treatment works of such industrial waste.

The provisions of Section 54739 shall be in addition to other requirements provided for in the rules, regulations and ordinances of the District.

# **10008.1 PUBLICATION OF USERS IN SIGNIFICANT NONCOMPLIANCE:**

The Director is authorized to publish annually, a list of the significant industrial users which, at any time during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements. The term significant noncompliance is defined in the Code of Federal Regulations, 40 CFR 403.8.

# 10009. CIVIL LIABILITY:

Section 54740 of the Government Code of the State of California provides:

- A. Any person who violates any requirement adopted or ordered by the District pursuant to paragraph (1) or (2) of subdivision (a) of Section 54739 of said Government Code may be civilly liable in a sum not to exceed Twenty-Five Thousand Dollars (\$25,000.00) a day for each violation.
- B. The District may petition the superior court to impose, assess and recover such sums. In determining the amount, the court shall take into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs, and corrective action, if any, attempted or taken by the discharger.
- C. Remedies hereunder are in addition to and do not supersede or limit any and all other remedies, civil or criminal, but no liability shall be recoverable hereunder for any violation for which liability is recovered under Section 54740.5 of said Government Code.



# 10010. LIABILITY FOR VIOLATION:

Any person violating any of the provisions of this Code or any other ordinances, rules or regulations of the District shall become liable to the District for any expense, loss or damage occasioned by the District by reason of such violation.

# CHAPTER XI MISCELLANEOUS PROVISIONS

## **11000. PROTECTION FROM DAMAGE:**

No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the District's sewage works. Any person violating this provision shall be subject to the penalties provided by law.

#### 11001. POWERS AND AUTHORITIES OF INSPECTORS:

The officers, inspectors, manager and any duly authorized representative of the District shall wear or carry an official badge of office or other evidence establishing his position as such and upon exhibiting the proper credentials and identification shall be permitted to enter in and upon any and all buildings, industrial facilities and properties for the purpose of inspection, reinspection, observation, measurement, sampling, testing or otherwise performing such duties as may be necessary in the enforcement of the provisions of this Code and any other ordinances, rules and regulations of the District.

#### **11002. RELIEF ON APPLICATION:**

When any person, by reason of special circumstances, is of the opinion that any provision of this Code is unjust or inequitable as applied to his premises, he may make written application to the Board, stating the special circumstances, citing the provisions complained of, and requesting suspension or modification of that provision as applied to his premises.

If such application be approved, the Board may, by resolution, suspend or modify the provision complained of, as applied to such premises, to be effective as of the date of the application and continuing during the period of the special circumstances.

#### **11003. RELIEF ON OWN MOTION:**

The Board may, on its own motion, find that by reason of special circumstances any provision of this regulation and Code should be suspended or modified as applied to a particular premise and may, by resolution, order such suspension or modification for such premises during the period of such special circumstances, or any part thereof; provided that no relief as to

Cupertino Sanitary District Sewer System Management Plan (08/01/2012) Page 67



provisions imposed upon the District by higher authority may be granted by the Board hereunder without the consent of the higher authority having jurisdiction thereover.

The District hereby declares that the foregoing procedures are established as a means of enforcement of the terms and conditions of this Code or any other ordinances, rules and regulations, and not as a penalty. The Government Code of the State of California, Health and Safety Code of the State of California, Code of Federal Regulations, City Health Department, County Health Department, Environmental Protection Agency, Civil Code of the State of California, Codes are referenced within the District's Operations Code.

The primary responsibility for enforcement of the provisions of this Code is vested in the District Manager or District agents as designated, field inspectors or other representatives of the District and the San Jose/Santa Clara Water Pollution Control Plant authorized to act on behalf of the District Manager, having the power to inspect and issue notices for violations.



#### **ELEMENT 4: OPERATIONS AND MAINTENANCE PROGRAM**

#### **SWRCB Requirements:**

The Sewer System Management Plan (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 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 sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive 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 of ranking the condition of the 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 replacements plan should include a capital improvement plan that addresses proper management and protection of 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.

#### **<u>RWQCB Requirements:</u>**

<u>Collection System Map</u> – Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities.

<u>Resources and Budget</u> - Each wastewater collection system agency shall allocate adequate resources for the operation, maintenance, and repair of its collection system.

<u>Prioritized Preventive Maintenance</u> – Each wastewater collection system agency shall prioritize its preventive maintenance activities.

<u>Scheduled Inspections and Condition Assessment</u> - Each wastewater collection system agency shall identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them.



<u>Contingency Equipment and Replacement Inventories</u> - Each wastewater collection system agency shall provide contingency equipment to handle emergencies, and spare/replacement parts intended to minimize equipment/facility downtime.

<u>Training</u> – Each wastewater collection system agency shall provide training on a regular basis for its staff in collection system operations, maintenance, and monitoring.

<u>Outreach to Plumbers and Building Contractors</u> – Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.</u>

The District's Operation and Maintenance Program is essential to the fulfillment of the District's mission to serve the customers within its service area while reducing the occurrence of SSOs and mitigating their impact.

The District's sewage flows are collected by the District's approximately 290 miles of service laterals and mains and then transmitted through joint use mains, interceptors and trunk lines by contractual agreement with the Cities of Santa Clara and San Jose to their Regional Water Pollution Control Plant for treatment and disposal.

Costs of wastewater treatment and disposal are based upon the terms of a Master Agreement between the Cities of San Jose and Santa Clara, owners of the Water Pollution Control Plant, and Cupertino Sanitary District, dated March 1, 1983. The Master Agreement provides for treatment capacity rights and a proportionate shared ownership interest in the treatment plant and appurtenant lands. The Master Agreement was first amended December 17, 1985 to reapportion tributary capacities due to increased total capacity of the treatment plant. A second amendment to the agreement was entered into December 4, 1995 responding to State imposed limits of treated flows into the bay, establishing a water reclamation program to reuse the excess treated flows and establishing basis of determining the proportionate share of the tributary agencies for the obligation bonds raised by the cities for the construction and expansion of the treatment facility to satisfy state and federal permit requirements.

The District's management is provided by contractual agreement with Mark Thomas & Company Inc., a private consultant responsible for day-to-day administration and oversight of the District's facilities and operations. Repairs and maintenance activities are provided as scheduled or needed with outside contractors and overseen by Mark Thomas and Company field inspection personnel.

Outside Contractors providing routine maintenance and emergency response services are required by the District's Operations Code to be registered annually with the District providing evidence of current insurance coverage in force at the limits set forth by the District. In addition, current workman's compensation insurance coverage must be verified prior to authorization for a contractor to perform District work in the public right of way. The contractors must also demonstrate professionalism and competency to carry out the assigned tasks of maintenance and repairs of the District's facilities. A contractor's safety record is considered as well as observed safe practices and well established workmanlike performance.



Maintenance activities are overseen by District staff and findings of existing condition of sewer mains are logged and evaluated on a priority of needed attention or repair. Attention can range from increased frequency of cleaning to video inspection to determine extent of needed spot repairs or eventual replacement of a significant section of sewer main. Mains found to be significantly in disrepair or undersized are placed on a prioritized list on the District's Capital Improvement Program to be rehabilitated by pipe-bursting or replacement to increase capacity, eliminate sources of I & I and/or improve integrity of the system.

The major elements of the District's Operation and Maintenance Program are:

- 1. Collection System Mapping
- 2. Description of Existing Facilities
- 3. Computerized Sewer Management System
- 4. Annual Routine Maintenance
- 5. Rehabilitation and Replacement Plan
- 6. Capital Improvement Program
- 7. Staff Training and Certification
- 8. Maintenance Equipment

#### 1. Collection System Mapping

The District's map records consist of three systems:

- a) **County Assessor Maps with Sewer Service Information Delineated -** Records of permitted, connected parcels are keyed to the County's Assessor Maps which are utilized to show addresses and permit numbers issued. These are electronically retained and updated annually to keep current with ongoing record map changes within the District's Service Area. The maps also include schematic diagrams of the District's mains and service laterals with references for users to As-Built map sources.
- b) Hard Copy and Electronic Assessment diagrams for Local Improvement District projects, 1 thru 15, (all completed prior to 1980) and the associated As-built plans. Maps of other District funded projects, Federally funded Trunk Lines, rerouting of mains and trunk lines due to freeway construction projects, I 280 and 85, and the District's outfall interceptor through Santa Clara leading to the San Jose/Santa Clara WPCP are also maintained at the service counter and are accessible electronically as well. Subdivision Maps and associated developer installed As-built plans are maintained as the balance of the District's infrastructure construction history and are also available electronically.
- c) 500 scale maps that show the total boundaries of the areas served and the related Service Area Boundaries established by LAFCO. The District's conversion to a website accessible, GIS compatible, database for public access to maps and District records online is a work in progress. The District's 100 scale maps are ACAD generated and includes scale, north arrow, date of last version, service area boundaries, property lines, manholes and other access points, street names, force mains, pump station, main,



trunk, easement lines and dimensions, pipe ids, pipe diameter, and flow direction. Sanitary sewer laterals are not included in the maps due to visibility issue.

The City of Cupertino has provided the storm sewer base map for the City of Cupertino. The storm sewer base map from the City of Saratoga has not been made available to the District at this time.




# **Cupertino Sanitary District Pump Station Locator**





# 2. Description and Inventory of Existing Facilities

The District provides sewage collection, treatment and disposal services for these areas comprising approximately 15 square miles with a population of over 50,000 residents and more than 20,000 homes and businesses. The District maintains approximately 194.5 miles of sewer mains (4"-27" gravity and force mains), 100 miles of sewer laterals and seventeen pump stations. The collected wastewater from all areas is conveyed to the San Jose/Santa Clara Water Pollution Control Plant through mains and interceptor lines shared with the both the Cities of San Jose and Santa Clara per a joint use agreement.

	Feet	Miles
4" Pipe	1036.4	0.2
6" Pipe	291485.7	55.2
8" Pipe	591692.1	112.1
10" Pipe	50428.6	9.6
12" Pipe	40197.8	7.6
14" Pipe	2704.6	0.5
15" Pipe	25122.1	4.8
16" Pipe	496.5	0.1
18" Pipe	3569.2	0.7
21" Pipe	1466	0.3
24" Pipe	434.3	0.1
27" Pipe	5620.9	1.1
Force Main	12617.6	2.4
Total	1026871.8	194.5
Manholes	3794	
FI	266	
	40 active, 16	
SmartCovers	inactive	
Siphons	16 (8 pairs)	

#### 3. Computerized Sewer Management System

The District's DOS SIMMS database has been converted to MS Access (CupMan) and is updated continually. Work orders are generated on the database and maintenance operation and scheduling is developed using the database information. The primary functions of the District's database are:

• Maintain service request and maintenance history information for each individual collection system asset.



- Produce and regularly update the maintenance schedule based on feedback information from the cleaning operations.
- Generate reports that support data analysis and decision-making.
- Provide documentation for use in regulatory compliance reporting.
- Indicate line segment or structures that may be candidates for replacement or rehabilitation under the capital improvement program.

#### 4. Operation and Maintenance Program

#### a) <u>Resources and Budget</u>

The District's adopted budget for FY 2012/2013 is shown below.

Account Name	Number	Amount budgeted
OPERATING EXPENSES		
Directors Fees	41030	\$40,000.00
Gasoline, Oil & Fuel	41060	\$5,000.00
Insurance	41070	\$150,000.00
Memberships	41080	\$30,000.00
Office Expense	41090	\$10,000.00
Operating Supplies	41100	\$5,000.00
<b>Contractual Services:</b>		
Outfall Maintenance	41113	\$125,000.00
T.P. Oper. & Maint.	41114	\$4,337,243.00
Professional Services:		
Management Services	41121	\$405,000.00
Engineering Services	41122	\$465,000.00
Legal	41124	\$35,000.00
Audit	41125	\$12,000.00
Printing & Publications	41130	\$30,000.00
Repairs & Maintenance	41150	\$1,500,000.00
Travel & Meetings	41170	\$35,000.00
Utilities	41190	\$75,000.00
<b>Refunds &amp; Reimbursements:</b>		
Miscellaneous	41201	\$10,000.00
Connection Fees	41202	\$5,000.00
Checking & Inspection	41203	\$5,000.00
Emergency Funds	48000	\$250,000.00
Consolidated Election	48001	\$250,000.00

#### TOTAL OPERATING EXPENSES

\$7,779,243.00

CAPITAL EXPENSES

Sewer Construction

\$900,000.00



T.P. & Outfall Capital Improvements	46042	\$1,706,622.58
Equipment	46043	\$150,000.00

#### TOTAL CAPITAL EXPENSES

\$2,756,622.58

AL EXPENSES		<u>\$10,535,865.5</u>
Account Name	Account Number	Amount budgeted
OPERATING		
Service Charges	31010	\$9,178,026.6
Permit Fees	31020	\$5,000.0
Acreage	31031	\$5,000.0
Front Footage	31032	\$5,000.0
Addional Dwelling	31033	\$10,000.0
Addtional Density	31034	\$450,000.0
Checking & Inspection Fees	21050	\$200,000.0
Annexation	32010	\$2,500.0
Interest	32050	\$90,000.
Miscellaneous	32091	\$5,000.0
Lateral Construction	32093	\$5,000.0
Mann Drive	32094	\$0.0
TOTAL OPERATING REVENUE		\$9,955,526.0
Revenue Transfer		\$0.0
TOTAL DEVENUE		\$0.055.5764

#### b) Annual Routine Maintenance Schedule

The District Routine Maintenance Cycle goal is to clean all sewer mains every three years. System-wide cleaning is scheduled by zones. All completed sewer cleaning is recorded in the District database.

Scheduled maintenance of the pump stations is also performed to increase pump station reliability and efficiency. All stations are visited weekly to assess the condition of the pumps (check for leaks and proper function) and wet wells. Periodic vactoring of the wet wells to remove grease blankets is performed to extend the performance life of the pumps.

The District ordinance allows for servicing of lower laterals for properties that have accessible District standard property line clean outs and laterals that have

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 76



historical blockage data. The laterals are serviced annually and inspected immediately to determine eligibility for repair or replacement.

# c) Annual Routine Maintenance Prioritization List

The annual maintenance program prioritization is based on the following factors of the sanitary sewer collection system:

- I. **Structural Condition** The District is implementing a pipeline assessment program using CCTV inspections to analyze the areas that require a higher maintenance frequency. Pipeline sections are eligible for repair or replacement based on the NASSCO PACP classifications. Frequency of maintenance is returned to the normal cycle once the pipeline has been repaired or replaced.
- II. **Root Control** Established neighborhoods and pipe segments located within easements with a history of root intrusion are maintained with power rodding and high pressure rodding cleaning. Pipeline assessment and history analysis will determine the frequency of the maintenance for these lines.
- III. Grease Conditions Sewers with a history of repeated calls for grease stoppages are maintained at a frequency that is intended to prevent repeat stoppages or SSOs. The District not only performs maintenance of these lines, but we work closely with the Environmental Services Department of the City of San Jose in the implementation of the Fats, Oils, and Grease (FOG) reduction program by educating food establishments on Best Management Practices.

# 5. Rehabilitation and Replacement Program

The District is implementing a condition assessment and CCTV inspection program along with a flow monitoring study to prioritize long-term rehabilitation and replacement sanitary sewer main projects. These projects are programmed into the Capital Improvement Program (CIP) once the list if established.

The condition assessment and prioritization is as shown below:

# a) Sewer Main Condition Assessment and Prioritization

The District is implementing a sewer main condition assessment program which consists of CCTV inspection of the District trunk lines within the District boundary. The inspection is used to forecast the overall condition of the sanitary sewer system and to identify the level of effort and budget required to maintain and improve the sanitary sewer system. This goal of this program is to CCTV all sewer mains within 5 years.



Sewer mains will be prioritized for replacement or rehabilitation based on the NASSCO PACP rating as a result of the CCTV inspection.

#### b) Lower Lateral Condition Assessment and Prioritization

The District has been implementing a lower lateral condition assessment program which consists of CCTV inspection of the District-maintained lower laterals that have a service history or has been inspected for a property line cleanout installation within the District boundary.

Lower laterals will be prioritized for replacement or rehabilitation based on the NASSCO LACP rating as a result of the CCTV inspection.

#### c) Manhole Condition Assessment and Prioritization

The District is implementing a manhole condition assessment program which consists of visual inspection of the District manhole during the preventive maintenance of the sewer mains.

Manholes will be prioritized for replacement or rehabilitation based on the NASSCO MACP rating as a result of the visual inspection.

#### d) Sewer Force Main Condition Assessment and Prioritization

The District is evaluating options for the condition assessment of sewer force mains within the District boundary. An analysis will be prepared and presented for discussion and further evaluation.

The District also utilizes the operation maintenance records as a key indicator to develop a priority list for the CIP plan. Identified structural deficiencies are high priority items and areas with a high risk of overflows are ranked higher on the project's priority list.

The District has established an annual Sewer Main Rehabilitation and Replacement Project as part of the annual CIP for the rehabilitation and replacement for short-term sewer projects. The District has also established an additional Sewer Replacement reserve fund for long-term sewer projects that will be identified after further analysis.

# 6. Capital Improvement Program

The majority of funds in the Sanitary Sewer System CIP are used to construct sewer improvement projects. Construction projects in the Proposed CIP meet one of two goals:

- 1. Enhance sewer capacity to meet economic development;
- 2. Rehabilitate existing sewers, with higher priority given to those with extensive, severe deterioration.



A project that will enhance capacity and rehabilitate existing sewers is considered a rehabilitation project.

# Inflow and Infiltration (I&I) Reduction Program

The District is developing an Inflow and Infiltration (I&I) Reduction Program. The program is intended to rehabilitate portions of the sewer system where the groundwater, storm water, and other sources of water enter the sewers.

#### CAPITAL IMPROVEMENT PROGRAM CUPERTINO SANITARY DISTRICT

Priority	Project Type	Project Name	Amount	Location	Project Description
1	PUMP STATION	Homestead 1 Pump Station Rehabilitation	\$150,000	Homestead Road	Remove and replace pumps, valves and piping in the dry well.
2	MAIN AND LATERALS	Replacement of Sewer Mains/Laterals	\$300,000	Various Locations Identified by Video Inspection	This project will replace sections of mainline sewers that are discovered to be deficient during the course of video inspection. This could also included upsizing of pipes in areas that are not in conformance to current District standards. The projects could include open cut, pipe burst or bore and jack construction methods.
3	SYSTEM	District-Wide Flow Study	\$150,000	Districtwide	Conduct a flow study of the District sewer system based on sewer sheds. The study will identify areas with potential wet weather issues. Additional analysis will be necessary to identify the causes of these issues. Recommendations for repairs and rehabilitation of the mains and laterals will be developed and incorporated into future CIP programs.
4	RESERVE	Infrastructure Replacement Reserve Fund	\$300,000	Districtwide	Infrastructure replacement reserve fund (25% Depreciated Value of \$12M over 10 Years)
	FY 20	12-13 CIP TOTAL :	\$900,000		

# 7. Staff Training and Certification

The District uses a combination of in-house classes, on-the job training, conferences and seminars, and other training opportunities to train its sanitary sewer staff. Staff regularly participates in technical seminars, conferences, and meetings with the following:

- 1. California Water Environment Association (CWEA)
- 2. Bay Area Clean Water Agencies (BACWA)
- 3. California Association of Sanitation Agencies (CASA)

All personnel are provided copies of the Standard Operating Procedures and trained on every piece of equipment assigned for the task including but not limited to:

- 1. SSO and Backup Response
- 2. Sewer Cleaning Equipment O&M
- 3. Pump Station O&M
- 4. CCTV Operation and Maintenance
- 5. Lock Out/Tag Out

On-the job training is also received through mentoring by senior staff. Regular safety trainings are held to develop and maintain qualified staff.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 79



The CWEA Technical Certification Program provides certification in a variety of wastewater disciplines to promote and enhance the education and effectiveness of the wastewater professional. The District encourages its maintenance staff to obtain CWEA certification to demonstrate their level of competency in the area of collection system maintenance. By providing adequate staff training and establishment of certain grade level requirements as a condition of career advancement, the District reinforces the importance it places on certification.

Staff Member	Title	CWEA Certification	NASSCO	Confined Space	Traffic Control	CPR/First Aid/AED
Richard Tanaka	District Manager/Engineer					
Steve Machida	Deputy District Manager/Engineer					
Nichol Bowersox	Senior Project Engineer	Collection System Grade 1 and Grade 4	PACP, LACP, MACP	Yes	Yes	Yes
Tony J. Soares	Sewer Inspector			Yes	Yes	Yes
Joe Pressnell	Sewer Inspector		PACP, LACP, MACP	Yes	Yes	Yes
Tony M. Soares	Sewer Inspector		PACP, LACP, MACP	Yes	Yes	Yes
Chien Vu	Senior Design Technician					

# 8. Equipment

The District owns portable pumps, portable generators, generator trucks, trash pumps, and a push-cam CCTV. Replacement of equipment and spare parts for emergencies are addressed as needed.



# ELEMENT 5: DESIGN AND PERFORMANCE STANDARDS

#### **SWRCB Requirements:**

- 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.

#### **<u>RWQCB Requirements:</u>**

Each wastewater collection system agency shall identify procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances; and for rehabilitation and repair projects.

#### **Design Guidelines**

The District has established minimum standards for construction of public sanitary sewers in the development of the District's Standard Details that are intended to aid consulting engineers, developers, others doing work in the City on public sanitary sewer projects. The District Standard Details are as follows:

- Manhole
- Flushing Inlet
- Concrete Encasement
- Lateral Sewer Boring & Jacking
- Lateral Sewer
- Synthetic Rubber Wedged Insert Tee
- Banded Wye Installation
- Welded Wye Installation
- Backflow Prevention Device Installation
- Property Line Cleanout for Lateral Sewer
- Trench Details
- Property Line Cleanout with Pump Connection

The District's Standard Specifications are being updated since its preparation in 1989 to include materials and practices of design and construction that are recognized as industry standard. The following sections will be included in the updated District Standard Specifications:

- Work Contracted by Others General Conditions
- Materials
- Construction Procedure

The District's Specifications and Construction Details are required on improvement plans submitted for approval by the District Manager and eventual acceptance by the Board.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 81



The District does not provide design standards for pump stations or force main designs. These types of facilities are typically designed by specifically for certain conditions.

The complete District Standard Details and Specifications are available at the District's internet website in Adobe PDF format at <u>http://cupertinosanitarydistrict.com/docs/docs.htm</u>. These documents can also be obtained from the District office at 20863 Stevens Creek Blvd. Suite 100, Cupertino CA 95014.

#### **Sanitary Sewer Design Procedures**

The District Sanitary Sewer Design Procedure was prepared in 1989. Since then, the Design Procedure has been followed by District staff for in-house and consultant designed projects. Additional design procedures include:

- Preliminary Engineering includes planning, scheduling, budgeting, requesting for services or information from utility companies, material testing, survey, hydraulic analysis, preliminary design, and environmental clearance applications such as exemption, negative declaration, and/or EIR.
- Initial Design and Plan Check Distribution for review to utility companies, impacted agencies and involved departments and divisions including material testing lab, survey, and City Public Works Departments.
- Final Design includes property acquisition, request for insurance specification, request for encroachment permits, construction quantities and cost estimates, preparation of final plans and specifications, final review and approval, and bid and award.

The procedure ensures the continued communication, coordination, and collaboration with the involved parties during the design review process.

# Other Design Standards Used

When alternative techniques for pipeline rehabilitation are used on an existing system, the design must conform to ASTM and appropriate industry standards. Some of the potential techniques that may be considered for District rehabilitation are:

- Cured-in Place Pipe Lining
- Sliplining
- Fold and Form Lining
- Spirally Wound Pipe Lining
- Directional Drilling
- Pipe Bursting
- Micro-tunneling

The engineering analysis during the design phase must include factors such as:

• Pipe size, length, and depth



- Existing pipe condition
- Capacity requirement
- Access conditions
- Right of way requirements
- Soil condition and cover
- Groundwater conditions
- Project locations
- Traffic conditions
- Environmental impacts

# **Inspection Guidelines**

The District has prepared sewer inspection guidelines for the following

- Lateral Maintenance Inspection
- Trunk Main Maintenance Inspection
- Pump Station Maintenance Checklist
- Final Inspection for Property Line Cleanout and CCTV
- Inspection Checklist for Sewer Lateral Capping
- Pre and Post Construction Checklist and Punch List
- Contract Change Orders
- Reporting and Documentation
- Miscellaneous and testing

# **Construction Management**

The District's construction management includes continuous onsite inspection. Inspections are performed during the progress of the work and at the completion of construction. All acceptance testing for gravity sewers must be performed in the presence of the District sewer inspectors. The project will not be accepted unless all results of the testing of sewers meet the requirements of the project plans and specification and/or the established standards. If the acceptance testing fails, the District will require the contractor to submit a repair plan and conduct the repair per the approved repair plan. Acceptance testing is performed again until the testing results meet the District's requirement.

A full-time District sewer inspector is assigned to CIP projects, wherein the inspector will follow the project until its acceptance. Inspectors are under the supervision of District Manager-Engineer and should report any discrepancy directly to their supervisor. All communications between the contractor and District Manager-Engineer should be through the project inspector.

The inspector will mark any changes to the design plan in his/her working plan set and specifications. After the project is accepted by the Board, the inspector will provide the working plans to the engineer for the marking of the "record-drawings" by updating all changes from the original plan drawing.



#### ELEMENT 6: OVERFLOW EMERGENCY RESPONSE PLAN

#### **SWRCB Requirements:**

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 Sewer System Management Plan (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 Statesand 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.

#### **<u>RWQCB Requirements:</u>**

Each wastewater collection system agency shall develop an overflow emergency response plan with the following elements:

- Notification Provide SSO notification procedures.
- Response Develop and implement a plan to respond to SSOs.
- Reporting Develop procedures to report and notify SSOs per SSO Monitoring and Reporting Program.
- Impact Mitigation Develop steps to contain wastewater, to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs.

#### Sewer Overflow Response Plan

#### I. SSO Detection/Notification

- A. Public Observation
- B. Receipt of a Pump Station Alarm



C. City Staff Observation

# II. SSO Response and Procedure

- A. Safety
- B. Initial Response
- C. Containment
- D. Restore Flow
- E. SSO Volume Estimation
- F. Estimating of Recovery Volume of Spilled Sewage
- G. Cleanup
- H. Public Notification
- I. Water Quality Sampling and Testing

# III. Weekly SSO Meetings (Failure Analysis Investigation)

# IV. SSO Documentation and Reporting

- A. SSO Categories
- B. Internal SSO Reporting Procedures
- C. External SSO Reporting Procedures
- D. Internal SSO Documentation
- E. External SSO Record Keeping Requirements

# V. Equipment

- A. Closed Circuit Television (CCTV) Inspection Unit
- B. Camera
- C. GPS (Global Positioning System) Unit
- D. Portable Generators, Portable Pumps, Piping and Hoses

# VI. SSO Response Training

- A. Initial and Annual Refresher Training
- B. SSO Response Drills
- C. SSO Training Record Keeping
- D. Contractors Working on District Facilities

# INTRODUCTION

The purpose of this Overflow Emergency Response Plan is to provide Standard Operating Procedures (SOPs) for an orderly and effective response to Sanitary Sewer Overflows (SSOs). This plan provides courses of actions for SSO detection and notification, response, containment, volume estimation, recovery, clean up, analysis, documentation, and reporting.



#### I. SSO Detection/Notification

#### A. Public Observation

Public observation is the most common way that the District is notified of blockages and spills. Contact information for reporting sewer spills and backups are in the phone book and on the District's website: <u>www.cupertinosanitarydistrict.com</u>. The public is instructed to call the District offices at (408) 253-7071 between 8:00 am and 5:00 pm. County Communication at (408) 299-2507 dispatches sewage related called to the first responder after hours, weekends, and holidays.

When a report of a sewer spill or backup is made, District staff receives the call, takes the information from the caller, and fills out the first section of a Service Request.

The person who receives the call will verbally communicate the service request to the Sewer Inspector for follow up.

#### **B.** Receipt of Pump Station Alarm

Pump Station alarms are considered high priority events that warrant prompt response.

#### C. District Personnel Observation

District personnel conduct periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District personnel who in turn response to emergency situations. Work orders are issued to correct non-emergency conditions.

#### **II. SSO Response and Procedures**

#### A. Safety

The first responder if responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work to protect and restore public health, environment, and property from sewage spill events.

There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards for that particular sewer task. In such cases, it would be appropriate to take the time to identify hazards, discuss safety issues, consider the order of work, and check safety equipment before starting the job.

#### **B.** Initial Response



All sanitary sewer system calls require a response to the reported location of the event in an attempt to minimize or eliminate an overflow. The first responder must arrive at the site of the reported problem immediately and visually check for potential sewer stoppages or overflows.

**<u>Response Time</u>** – It is the goal of the District to respond to an SSO within 30 minutes of the first call during regular business hours (Monday thru Friday between 8:00 am and 5:00 pm), and within 60 minutes after hours and during weekends and holidays.

# First Responder's (First Person at SSO site) Role is to:

- Identify and clearly assess the affected area and extent of spill and note arrival time at spill site.
- Establish perimeters and control zones with traffic cones, barricades, vehicles, or terrain.
- Document conditions upon arrival with photographs.
- Promptly notify the Authorized Representative in the event of a major SSO or when the spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed, and request additional resources (e.g. people, equipment, etc.)
- Contain and control the sewage discharged to the maximum extent possible.
- Make every effort to prevent the discharge of sewage into waterways.
- Restore the flow as soon as practicable and contact the caller for additional information. Depending on the situation, utilize the combination sewer cleaning truck and/or spill response vehicle.
- Return the spilled sewage to the sewer system.
- Restore the area to its original condition (or as close as possible).

<u>Note:</u> Containment is a higher priority than restoring flow, but this depends on the circumstances.

- If the problem is in a private sewer lateral and the flow has entered public right of way, then the first responder should:
  - Request the resident to cease activities that are causing continuation of the sewer spill (e.g. flushing toilets, washing laundry, etc.)
  - Request the resident to call a plumber to correct the problem with their lateral and stand by until the plumber arrives.
  - Contain any spilled sewage that has entered the public right of way and return it to the sanitary sewer system.

# C. Containment

Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:



- Small Spills (Less than 50 gallons) proceed with clearing the blockage.
- Moderate or large spill (50 gallons to 999 gallons) where containment is anticipated to be simple proceed with containment measures.
- Moderate or large spills where containment is anticipated to be difficult (greater than 1000 gallons) proceed with clearing the blockage however, call for additional assistance after 15 minutes without clearing the blockage and implement containment measures.

The first responder should also attempt to contain as much of the spilled sewage using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drain facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure/pump station.

#### **D.** Restore Flow

Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream.

If blockage cannot be cleared within a reasonable time (15 minutes), or the sewer facility requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact the Authorized Representative, other employees, contractors, and equipment suppliers.

# E. SSO Volume Estimation

A variety of approaches exist for estimating the volume of a sanitary sewer spill. It should be noted that the person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available. Below are three commonly used methods:

- 1. <u>Eveball Estimate</u> 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 5 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 100 gallons.
- 2. <u>Measured Volume</u> 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.
- 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 to gallons.
- 3. <u>Duration and Flowrate</u> Calculating the volume of spills greater than 1000 gallons, 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. Duration time for an SSO does not include the time required to perform cleaning efforts.

**Flow Rate:** The flow rate is the average flow that left the sewage system during the time of the spill. The Manhole Flow Rate Chart is used to estimate the manhole overflow rate. Photographs showing the actual measurement should be taken in documenting the basis for the flow rate estimate.

**<u>SSO Start Time:</u>** The start time is sometime difficult to establish. Below are suggestions for determining spill start times:

 Nearby Witnesses: Witnesses can be used to establish start time. Contact and interview the reporting party, nearby residents, business owners or any witnesses that may have observed the incident. Inquire as to their observations. Spills that occur in public right 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.



- Site Conditions: 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. After 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 information. Taking photographs to document the observations can be helpful if questions arise later in the process.
- Accounting for Flow Variations: 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.
- **Spill Volume/Flow rate**: Start time can be calculated using estimated flow rate and estimated spill volume. District personnel will use the Manhole Flow Rate Chart to estimate the flow rate and to estimate the spill volume using approved methodology (please see method 2 calculation above). The start time then is calculated by using both the estimated flow rate and the estimated spill volume.

**<u>SSO Stop Time:</u>** The stop time is usually much easier to establish. The stop time is determined when field crews confirm that the SSO has stopped. This typically is the time when the blockage has been removed.

**Spill Volume Calculation Using Flow Rate:** 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.

Example:	Spill Start Time:	14:00
	Spill Duration:	3 Hours
	Flow Rate:	3.3 gallons per minute

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

# F. Estimating of Recovery Volume of Spilled Sewage

The following methods can be used, depending on the circumstances for estimating recovered sewage volume:

1. **Two Truck Sewage Recovery Method**: The sewage recovery and clean up effort often requires fresh water to clean the affected area or storm pipe lines. The collected liquid in the tank would not represent the actual spill sewage volume if water is introduced for clean up. By using this method, District



inspectors will require the contractor to use two Vactor trucks, one with an empty tank at a downstream collection manhole and one with filled fresh water at an upstream manhole where fresh water is introduced. The total recovered volume will include water and sewage which can be used to calculate the sewage spill volume. The total amount of the collected water less the water introduced would provide the actual sewage spill/recovered.

2. **Pipe Volume Calculation**: Using this method, before vacuuming the sewage from the storm pipe line into a tank, the contractor will block the storm pipe line downstream, video the storm main and measure the level of liquid standing in the pipe. By knowing the pipe size, level of liquid in the pipe, and the length of pipe filled, the spill sewage volume can be calculated.

# G. Clean Up

The recovery and clean up phase begins when the flow has been restored and the spilled sewage has been contained to the extent possible. Clean up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions. The contractor under the direction of the District Inspector shall follow the following guidelines:

# • Hard Surface Areas

- Collect all signs of sewage solids and sewage related material either by hand or with the use of rakes and brooms.
- Wash down the affected area with de-chlorinated fresh water until the water runs clear. They should take all reasonable steps to contain and vacuum up the wastewater which should be returned to the sanitary sewer system.
- Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of disinfectant solution using a hand sprayer.
- Document the volume and application method of disinfectant that was employed.
- Allow the area to dry and repeat as necessary.

# • Landscaped Natural Vegetation

- Collect all signs of sewage solids and sewage related material either by hand or with the use of rakes and brooms.
- Wash down the affected area with clean water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the sewer spill.
- o Either contain or vacuum up the wash water so that none is released.
- Allow the area to dry and repeat as necessary.



# • Natural Waterways

- The Department of Fish and Game should be notified in the event an SSO impacts any creeks or natural waterways. Fish and Game will provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments.
- Clean up should proceed quickly in order to minimize negative impact.

# • Wet Weather Modifications

• Omit flushing and sampling during heavy storm events with heavy runoff where flushing is not required and sampling would provide meaningless results.

# • Follow-Up Activities

- If sewage has reached the storm drain system, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage.
- In the event that an overflow occurs at night, the location should be reinspected first thing the following day. The inspector should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

# H. Public Notification

Post "Raw Sewage" signs and place barricade/cones with caution tape to keep vehicles and pedestrians away from contact with spilled sewage. Do not remove the signs until directed by the Authorized Representative.

Creeks and streams that have been contaminated as a result of an SSO will have signs posted at visible access locations until the County Health Officer has deemed the risk of contamination has subsided to acceptable levels.

Warning signs, once posted, will be inspected every day to ensure that they are still in place.

Major spills may warrant broader public notice. The District Manager-Engineer will authorize contact with local media when significant areas may have been contaminated by sewage.

# I. Water Quality Sampling and Testing

Water quality sampling and testing is required by the GWDR (General Waste Discharge Regulations) whenever spilled sewage enters a surface water to determine



the extent and impact of the SSO. Water quality samples will be taken whenever SSOs enter surface waters.

- The first responder should notify the Environmental Services Department (ESD) to collect samples. Samples should be collected as soon as possible after the discovery of the SSO event.
- The following steps should be taken to collect water quality samples:
  - a) Samples should be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing waters (e.g. creeks).
  - b) Samples should be collected near the point of entry of the spilled sewage and every 100 feet along the shore of stationary water bodies.
- ESD's laboratory will analyze the sample to determine the nature and extent of impact from the discharge. Additional sample will be taken to determine if posting of warning signs should be discontinued. The Basic analyses should include total coliform, fecal coliform, biochemical oxygen demand (BOD), dissolved oxygen, and ammonia nitrogen.

# III. Weekly SSO Meetings (Failure Analysis Investigation)

The objective of the failure analysis investigation is to determine the "primary cause" of the SSO and to identify corrective action/s needed that will reduce or eliminate future potential for the SSO to recur. Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

All relevant participants meet weekly to review the procedures used and to 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.

The investigation should include:

- Reviewing and completing the Sanitary Sewer Overflow Report
- Reviewing past maintenance records
- Reviewing available photographs
- Viewing a CCTV inspection video to determine the condition of the line segment immediately following the SSO and reviewing the inspection reports and logs.
- Reviewing input from District personnel who responded to the spill.

# IV. Weekly SSO Meetings (Failure Analysis Investigation)



All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements.

#### V. Reporting and Documentation Requirements

Reporting and documentation requirements vary based on the type of SSO.

#### A. SSO Categories

The SWRCB has established guidelines for classifying and reporting SSOs. There are two categories of SSOs as defined by the SWRCB:

- **Category 1** All discharges of sewage resulting from a failure in the District's sanitary sewer system that:
  - Have a volume of 1,000 gallons or more; or
  - Result in a discharge to a drainage channel and/or surface water; or
  - Discharge to a storm drain that was not fully captured and returned to the sanitary sewer system.
- Category 2 All other discharges of sewage resulting from a failure in the District's sanitary sewer system are considered to be in this category. Sewage discharges that are caused by blockages or other problems within a privately owned lateral are also considered under Category 2.

# **B.** Internal SSO Reporting Procedures

#### Internal Reporting Category 1 SSOs

- 1. The first responder will immediately respond following the SSO event and notify the Authorized Representative.
- 2. The first responder will fill out the SSO Report Form and make the report available to the Authorized Representative. The Authorized Representative will meet with the District inspector at the site of the SSO event to assess the situation and to document the conditions with photos immediately after the SSO event.
- 3. In the event of a very large overflow or an overflow in a sensitive area, the Authorized Representative will notify the District Manager-Engineer accordingly.

#### Internal Reporting Category 2 SSOs

1. The first responder will immediately respond following the SSO event and notify the Authorized Representative.

# C. External SSO Reporting Procedures



The California Integrated Water Quality System (CIWQS) electronic reporting system will be used for reporting SSO information to the SWRCB when required. If there are no SSOs during the calendar month, the Legally Responsible Officer will certify a no-spill report.

In the event that CIWQS is unavailable, the Authorized Representative will forward all required information to the Region 2 Water Quality Control Board (RWQCB) office in accordance with the time schedules identified above. In such event, the District will submit the appropriate reports using CIWQS as soon as practical.

# **External Reporting Category 1 SSOs**

- 1. Within two hours of being notified of the spill event, the Authorized Representative will notify:
  - Cal EMA (and obtain spill number for use in other reports)
  - Santa Clara Public Health Department
- 2. Within 24 hours of being notified of the spill event, the Authorized Representative will certify to the Region 2 RWQCB that Cal EMA and County Health were notified of the spill event.
- 3. Within 3 business days of being notified of the spill event, the LRO will certify the initial report using CIWQS @ <u>http://ciwqs.waterboards.ca.gov/ciwqs</u>.
- 4. Within 15 calendar days of the conclusion of the SSO response and remediation, the LRO will certify the final report using CIWQS. The LRO will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified.

# **External Reporting Category 2 SSOs**

Within 30 calendar days of being notified of the spill event, the Authorized Representative will submit an electronic report using CIWQS. The LRO will certify the report. The report will include the information to meet the GWDR requirements.

Private Lateral Sewage Discharges – The LRO may report private lateral SSO using CIWQS and specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party, if known.

# **D.** Internal SSO Documentation



# Category 1 and 2 SSOs

The following steps are taken to document both Categories 1 and 2 SSOs for internal documentation (See Attached Forms):

- The first responder will complete the Sanitary Sewer Overflow Report Form and provide copies to the Authorized Representative.
- The Authorized Representative will prepare a file for each individual SSO. The file should include the following information:
  - Initial service call information
  - Sanitary Sewer Overflow Report form
  - Copies of the CIWQS report forms
  - Volume calculation method and estimates
  - Interview information and photographs of the spill event
  - Follow up investigation including CCTV inspection forms and photographs



(6 Page Document) SSO	RESPONSE - FIELD DOCUMENTATION
Call Address: On Service Request	REPORTED BY
Caller Name:	Phone:
Receipt of Call: Date:// Time:	: AM   PM Call Received By:
Call Dispatch://Time:	AM PM Assigned To:
Inspector Arrival Time: Date://	Time::AM □ PM
	SPILL START TIME NOTES
_	If Yes, From: Manhole 🗌 PLCO 🔲 Two-Way C/O 🗌
Caller Interview: Is sewage spilling?	i 🗌 No Inside Building 🗌 🦷 Wet Well 🗌
Time Caller noticed spill:: AM	□PM □N/A
Comments:	
If spill is Yes: Last time Caller observed <u>NO Sp</u>	ill occurring:: 🔲 AM 🔲 PM Date://
Comments:	
Ask Caller to describe spill:	
Suggested Questions: <u>Is it currently spilling</u> ? would you say the wet stain is – compared to yo	How would you compare it to a garden hose running full? How big our driveway? What else can you tell me?
Arrival Time::	
SSO Discovery:	
On Site Interview 1: Name/Address:	
Observation Description:	
	Time Observed Spill: AM PM N/A
On Site Interview 2: Name/Address:	
Observation Description:	
	Time Observed Spill:: AM PM N/A

\*\* Attempts should be made to interview at least two (2) others in addition to the Caller. If nobody is available, document attempts (by address or passer-by) \*\*



(6 Page Document)	SSO RESPONSE - FIELD DOCUMENTATION
	SPILL LOCATION
Observed, Spill from Menhole II	
Clean Out Address	
Comments:	
Building Address	
Comments:	
Spill Destination: Building Pave	ad Surface Storm Sys Curb/Gutter Unpaved Surface Water
Answer these three questions:	
$\frac{\#1}{2}$ - Was it $\geq$ 1,000 gallons? $\frac{\#2}{2}$ - Was there a discharge to a drainage $\frac{\#3}{2}$ - Was there a discharge to storm drain sewer system?	YesNo channel and/or surface water?YesNo 1 pipe that was " <u>NOT</u> " fully captured & returned to the sanitary No

If answer is "yes" to any of the 3 questions above, the SSO is a Category 1.

#### SPILL VOLUME WORKSHEET



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

The following methods and tools are the approved methods. Check all methods and tools that you used:

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



#### (6 Page Document)

#### SSO RESPONSE - FIELD DOCUMENTATION

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

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

<u>Measured Volume Method</u> (this may take several calculation as may have to break down the odd shaped spill to rectangles, circles, and polygons) It is important when guessing depth to measure, if possible in several locations and use an average depth. Use the <u>SSO Volume Estimate by Area Work Sheet</u>, if necessary, to sketch the shapes and show your work.

- 1. Draw a sketch of the spill SSO Volume Estimate by Area Work Sheet.
- Draw shapes and dimensions used on your sketch
   Use correct formula for various shapes
  - Use correct formula for various shapes

     Rectangle

     Circle

     3.14 x R<sup>2</sup> x D

     Polygons see reference chart

    Show formula used

#### Duration and Flow Rate Method worksheet:

Start Date and Time	1.
End Date and time	2.
Total time elapsed of SSO event (subtract line 1 from line 2. Show time in minutes)	3.
Average flow rate GPM (account for diurnal pattern)	4.
Total volume estimate using duration and flow rate method (Line 3 x Line 4)	5.



	550 RESPONSE - FIELD DOCUMENTATION	
	CAUSE OF SPILL	
Spill Cause: <u>Roots</u> Grease	Debris Vandalism Lift Sta. Fail Other	
Spill cause to be determined	ned by CCTV inspection (Attach TV Report to this form)	
Final Cause Determination:		
Follow-up or Corrective Acti	ion Taken:	
	SPILL CONTAINMENT	
Containment Implemented:	: AMPM Date://	
Containment Measures: <u>Plugge</u>	d Storm Drain 🔲 Washed Down 🔲 Vacuum Up Water/Sewage	
Containment Measures: Plugged	A Storm Drain Washed Down Vacuum Up Water/Sewage	
Containment Measures: Plugged	ed Storm Drain 🔲 Washed Down 🔲 Vacuum Up Water/Sewage	
Containment Measures: Plugged	ed Storm Drain Washed Down Vacuum Up Water/Sewage	
Containment Measures: Plugged	ed Storm Drain Washed Down Vacuum Up Water/Sewage	
Containment Measures: Plugger	ed Storm Drain Washed Down Vacuum Up Water/Sewage	
Containment Measures: Plugger	ed Storm Drain Washed Down Vacuum Up Water/Sewage	



#### (6 Page Document) SSO RESPONSE - FIELD DOCUMENTATION

				c	CLEAN U	JP		
Clean Up Begin:			AM	D PM	Date: _	/	_/	 ° (5)
Clean Up Complete:		<u>:</u>	AM	D PM	Date: _	/	_/	
Describe Clean Up Ope	rations:							 
<u></u>								 <u>,</u>

\_Gallons - Estimate Volume of Spill Recovered (do not count wash down water)

#### OTHER IMPORTANT MILESTONES

Contacted Supervisor:		AM	D PM	Date://
Requested Additional EE's/Equip:	<u>.</u>	🗆 AM	D PM	Date://
Requested Additional EE's/Equip:		AM	D PM	Date:///
Requested Additional EE's/Equip:	;	🗆 AM	D PM	Date:///////
Departure Time:		_ 🗌 AM	D PM	Date:///
·		AM	D PM	Date:///////
	i	_ 🗌 AM	D PM	Date:/
	<u>.</u>	_ 🗆 AM	D PM	Date://

#### REPORTING

Report to Cal-EMA: Date:	-	_ AM	PM (Cat.1 On	ly) <b>(800) 852-755</b> 0	By:
Control Number provided by C	al-EMA:				
Name of Person Contacted:				Ś	or Left Message: 🗌
Report to SCVWD Date:	į		M 🗌 PM Phone:	Ву:	
Name of Person Contacted:					or Left Message:

Notes:



6 Page Document)	SSO RESPONSE - FIELD DOCUMENTATION
<u></u>	
<u>р</u>	
47	
** 	
0	
72	
÷	
<u>e</u>	
1 <sub>911</sub>	
21	
<del></del>	
Response Crew:	• •







Instructions: CuSD is using the photos generated from a simulation using the West Valley Sanitation District Manhole Lid since CuSD currently has identical (diameter and weight verified) manhole lids as West Valley Sanitation District:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Do not use these charts if you have a lid that is an odd size or does not match one of the charts. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.



Instructions: CuSD is using the photos generated from a simulation using the West Valley Sanitation District Manhole Lid since CuSD currently has identical (diameter and weight verified) manhole lids as West Valley Sanitation District:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Do not use these charts if you have a lid that is an odd size or does not match one of the charts. If the lid is stuck to the casting or any
- of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture. 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.



# E. External SSO Record Keeping Requirements

The GWDR requires that individual SSO records be maintained by the District for a minimum of 5 years from the date of the SSO. This period may be extended when requested by the Regional Water Board Executive Officer. All records shall be made available for review upon State or Regional Water Board staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- Copy of Certified CIWQS report(s);
- All original recordings for continuous monitoring instrumentation;
- Service call records and complaint logs of calls received by the District;
- SSO calls;
- SSO records;
- Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;
- Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
- A list and description of complaints from customers or others from the previous five years; and
- Documentation of performance and implementation measures for the previous five years.

If the SSO water samples are taken for water quality results, the records of monitoring information shall include the following;

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurement;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical technique or method used; and
- The result of such analyses.

# F. Private Lateral Discharges

The Authorized Representative may report private lateral SSOs using CIWQS at her discretion, specifying that the sewage discharge occurred and was caused by a private line and identifying the responsible party, if known.

# G. No Spill Certification (Monthly)

Within 30 calendar days after the end of each calendar month, if there are no SSOs during the calendar month, the Legally Responsible Officer will submit an electronic report and certification that the District did not have any SSOs.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 104



#### H. CIWQS Not Available

In the event that CIWQS is not available, the Authorized Representative will fax all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the District will submit the appropriate reports using CIWQS as soon as practical.

# VI. Equipment

The District maintains specialized equipment that is required to support this Overflow Emergency Response Plan (OERP) including:

- **A.** Closed Circuit Television (CCTV) Inspection Unit A CCTV Inspection Unit is required to determine the primary cause for all SSOs from gravity sewers.
- **B.** Camera A digital, disposable, or cell phone camera is required to record the conditions upon arrival, during clean up, and upon departure.
- **C. Portable Generators, Portable Pumps, Piping, and Hoses** Portable generators, pumps, piping, and hoses are needed to pump around failed sewers, force mains, or pump stations.

# VII. SSO Response Training

# A. Initial and Annual Refresher Training

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training or as needed on this plan and the procedures to be followed.

# **B.** SSO Response Drills

Periodic training drills will be held to ensure that employees are up to date on the procedures, the equipment is in working condition, and the required materials are readily available. The training drill should cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and lateral blockage). The results and the observations during the drills should be recorded and action items should be tracked to ensure completion.

# C. SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency



response training event will include date, time, content, name of trainer(s), and name of attendees.

# D. Contractors Working on District Sewer Facilities

All contractors working on District sewer facilities will be contractually required to develop a project-specific Overflow Response Plan. All contractor personnel will be required to receive training in the contractor's Overflow Response Plan and to follow it in the event they cause or observe an SSO.



# ELEMENT 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

#### **SWRCB Requirements:**

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.

#### **RWQCB Requirements:**

Each wastewater collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If so, a FOG control program shall be developed as part of the Sewer System Management Plan (SSMP). If an agency determines that a FOG program is not needed, the agency must provide justification for why it is not needed.

Fats, oils, and grease (FOG) are an issue due to their ability to cause sanitary sewer blockages that may result in SSOs from Food Service Establishments (FSE). FOG discharges result from improper management of food waste in residences and commercial FSEs. Cupertino Sanitary District has adopted ordinance language requiring FSEs with grease generating activities to install grease removal devices (GRD).

Cupertino Sanitary District Pretreatment Program works closely with the Watershed Protection Division of the Environmental Services Department (ESD). This division manages the FOG program for ESD.

Cupertino Sanitary District	
Sewer System Management Plan	l



#### **Grease Pretreatment Device Plan Checks**

Watershed Protection staff determines the sizing requirements for all grease removal/pretreatment devices (GRD). Building plans with food service equipment for new construction or remodeling are reviewed and stamped off with any requirements. The plans are reviewed along with a questionnaire filled out by the restaurant representative, and the requirement for a GRD is determined. The District will not approve any tenant improvement plans without the review comments and requirements.

The plan review process also involves a GRD certification. This certification involves the restaurant representative signing an acknowledgement of GRD requirements. The minimum acceptable cleaning frequency for the type of GRD being required, the on-site maintenance of a schedule and instructions for cleaning, and cleaning records and receipts, are some of the requirements acknowledged in the certification.

The size and type of pretreatment device required is determined based upon the facility's potential for discharging grease in the wastewater. The sizing is based on the size of the restaurant, the cooking and cleaning equipment installed, and the number of meals served, are some of the factors considered in order to determine the standard required GRD size. Requirements range from a small grease trap beneath the pot sink to a large in-ground grease interceptor.

Approved grease trap sizes are 40, 50, 70, and 100 pounds. Grease interceptors must be a minimum of 1000 gallons. The District does not permit the use of Power-Operated Grease Removal Devices, Chemicals, Enzymes or Bacteria. Best Management Practices (BMPs) will be reviewed and distributed to restaurant representatives during the plan check, including kitchen practices to minimize the discharge of grease into the sewer system, maintenance tips for grease traps and interceptors, and record keeping requirements. Plumbing inspectors verify the installation and connections of the pretreatment device.

#### **Standard Restaurant Inspections**

Watershed Protection staff inspect all restaurants and other food facilities. Their initial inspection includes determining if the restaurant generates grease, if there is a GRD in place, and reviewing the cleaning records for the GRD, as well as practices used to clean floor mats, vent hoods, and outside areas. Enforcement actions are taken against any restaurant that does not clean their GRD at the minimum set frequency (monthly for grease traps and quarterly for grease interceptors) or keep 3 years of cleaning records. Facilities generating grease are re-inspected periodically (every one to three years), depending on the number of areas of concern observed during the inspection. BMPs are distributed to restaurant operators during the inspections, as appropriate, including kitchen practices to minimize the discharge of grease into the sewer system, maintenance tips for grease traps and interceptors, and record keeping requirements.

#### **Investigation of FOG in Sewer Mains**

Cupertino Sanitary District Inspectors respond to reports from staff or other sources a grease blockage or unusual build-up of grease has taken place in the sanitary sewer. Referral for Watershed Protection investigations are commonly based on the following reasons:

- 1. Excessive grease build up
- 2. Odor complaints


- 3. Request for service
- 4. Blockages due to grease
- 5. Excessive grease evident during preventive maintenance
- 6. Reduced flow
- 7. Video inspection identifies excessive grease
- 8. Litigation

The area upstream of the grease build-up is evaluated for potential sources, and inspections of those sources are performed. The presence and size of GRD are looked at, and GRD cleaning and maintenance records are reviewed. Enforcement action is taken against establishments determined to be causing grease blockages in the sanitary sewer, and additional requirements for cleaning or installation of GRD can be imposed.

## **Participation in Regional Efforts**

Cupertino Sanitary District staff participates on regional committees addressing FOG issues, including the CWEA P3S Committee Grease sub-committee, the Cal FOG efforts underway to share grease related issues state-wide, and the BACWA Collection Systems Committee.

## Outreach

A number of outreach pieces are available to distribute information about FOG issues both in future Annual Reports and on an as needed basis. Grease Management Best Management Practices (6 fact sheets – Grease Trap Maintenance, Grease Interceptor Maintenance, Maintenance Documentation, Power-Operated Grease Removal Devices, Chemicals, Enzymes and Bacteria, Vapor/Ventilation Hood Cleaning, and a poster – Managing Fats, Oils, & Grease, ("It's Easier Than You Think") are available to inspectors and plan check staff to distribute to restaurant owners and operators.

## Legal Authority

- 1. The California Government Code http://www.leginfo.ca.gov/calaw.html
- 2. Cupertino Sanitary District's Operation Code.

http://www.cupertinosanitarydistrict.com.

Cupertino Sanitary District's Operation Code hereinafter "Code" establishes ESD's legal authority to regulate domestic, commercial and industrial discharges to the sanitary sewer system. The sections included here describe Cupertino's ability to regulate the discharge of substances can cause or contribute to blockages of the sanitary sewer system. A full electronic copy of the District Code is available online at <u>http://www.cupertinosanitarydistrict.com</u>. The following excerpts are from the District Code and are applicable to the SSMP.



## **ELEMENT 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN**

#### **SWRCB Requirements:**

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. <u>Evaluation</u>: 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. <u>Design Criteria</u>: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and;
- c. <u>Capacity Enhancement Measures</u>: 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 sizes, 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. <u>Schedule</u>: 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 Sewer System Management Plan (SSMP) review and update requirement as described in Section D.14.

## **RWQCB Requirements:**

<u>Capacity Assessment</u>: Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.

<u>System Evaluation and Capacity Assurance Plan</u>: Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.

## (A) Scheduled Inspections and Condition Assessment

Historically, from 1955 to the mid 1990's, an understanding of the serviceability of the District's system was determined from maintenance records. Beginning in 1998, condition assessment of the District's collection system was based on maintenance and repair records confirmed by follow up video inspections. This data was then used to determine frequency of maintenance cycles to schedule, whether annually, as a minimum, or more frequently as dictated by observed conditions. During 2001-2002 the District set an objective to completely inspect all its mains within 5 years. This goal has been delayed somewhat due to scheduling conflicts affecting the

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 110



availability of the CCTV equipment. Approximately 80% of the District's mains have been video inspected to date. The record keeping system has now been upgraded, as well, to become an interactive component of the District's developing GIS asset management program. Also, with the implementation of "Smart Cover" technology, there is the opportunity to obtain "real-time" flow characteristics during dry weather and wet weather peak periods and evaluate comparative readings to determine infiltration - inflow impacts to system capacities.

In 2006, the District implemented a 5-Year CIP which has since been completed. One of the main functions of the CIP is to administer and conduct planning efforts that include capacity and condition assessments along with recommendation and prioritization of sewer repair and rehabilitative construction projects. In addition, the Risk Assessment Plan has been a useful tool to identify those locations where inclusion in the CIP of improvements to the system will eliminate or greatly minimize incidents of SSOs that might flow directly to a creek.

## **Condition Assessment of Pump Stations**

The District's 17 Lift Stations are routinely inspected each week for evidence of any need to change frequency of scheduled maintenance activities. Hours of operation of pumps are checked to discover whether one pump is cycling more frequently than the other, thus indicating possible obstruction or perhaps electrical/mechanical problems. The District has built redundant systems into stations where there is high risk of overflow should there be a power outage or pump failures. The redundant systems range from mobile (and some permanent) standby generators to continue operation of a station in the event of a power outage to a fully independent back-up pump station. Homestead-2 provides the capability of taking Homestead-1 completely off line while servicing or replacing pumps or alternately operating to extend service life of the pumps. The District has recently completed the SCADA conversion for all 17 pump stations. The purpose of the conversion is to enable District personnel to monitor and control the pump station performance remotely.

The District is considering condition assessment alternatives for the all pump stations with prioritization given to the high-risk stations. Staff is evaluating the existing data available and is considering issuing an Request for Qualifications for the Condition Assessment of the Pump Station Facilities.

## (B) Risk Assessment Plan

Another aspect of an agency's system evaluation must include an understanding and awareness of exposure to the potential of sewage overflows entering waterways that lead to receiving waters of fishable creeks and, ultimately for this District, the San Francisco Bay. To address or reduce these potential risks the District's personnel must have knowledge of the locations of drainage channels and storm water collection facilities that are in close proximity to sewer manholes or lift stations. Locations, which are recognized as most vulnerable, are noted on maps of the storm water collection infrastructure and the pertinent sewer system maps.

Next, strategies must be developed to prevent or contain effluents that enter those facilities from reaching a fishable creek or protected habitat in the event of a spill. Effective strategies include

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 111



use of containment devices, installation of by-pass systems, high-water sensing devices and organized mobilization of responders trained to contain the overflow, control the cause and clean-up contaminants.

Prioritization of funding for the implementation of permanent prevention devices must be given to those circumstances where violation of the environment and loss of agency monetary assets due to imposed fines are most at risk. Projects thus identified must be given highest priority in the District's annual CIP allocations.

## (C) Capacity Assurance Plan

The installation of "Smart Cover" sensing devices, intended to alert District staff when high water levels indicate the likelihood of a sewer overflow, has afforded the added benefit of monitoring flow levels at strategic locations in the collection system. By knowing the measured distance of the sensor from the invert elevation of the sewer main, the depth of flow can be derived and the flow capacity determined at any given time. The District currently have forty-six (46) units installed at the most strategic locations in the collection system to provide early warning of an imminent spill. The units will provide data to enable District personnel to study flow characteristics at these locations in both dry and wet weather conditions and will allow the District to confirm adequate sewer system capacity as well as identify any specific high Infiltration and Inflow areas. The flow measurements derived in this manner may be further validated by comparison with flow meter data measured at the District's pump stations.

If necessary to pin point I & I sources, the District shall issue service orders to appropriate companies to perform general I & I reconnaissance work, smoke testing, and sewer and manhole condition assessment for unwanted inflow and infiltration. The sources of inflow may be down spouts, driveway, or yard drains from illegal private property connections. The occasion for groundwater infiltration or sewage ex-filtration in the District's sewer mains and service laterals, due to offsets, separated joints or other structural failure, may be discovered by video inspections, air testing or hydrostatic testing techniques.

As a means of assuring adequate capacity in keeping with the District's Master Plan, staff shall review historic and real time flow monitoring data, engineering/inspection reports, and sewer maintenance records to identify areas of high groundwater infiltration, and rainfall inflow and infiltration. Through flow monitoring data, the District engineer will also identify abnormal sewer flow behavior that might be related to capacity or condition problem. In such case, the District engineer and sewer maintenance staff shall work closely together to find the cause, and develop solutions to correct the condition.



# ELEMENT 9: MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

#### **SWRCB Requirements:**

The Enrollee shall:

- a. Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan (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.

#### **<u>RWQCB Requirements:</u>**

Each wastewater collection system agency shall monitor the effectiveness of each SSMP element and update and modify SSMP elements to keep them current, accurate, and available for audit as appropriate.

The performance criteria that are monitored are:

- Total number of SSOs;
- Number of SSOs for each cause (roots, grease, debris, pipe failure, capacity, pump station failure, and others);
- Portion of sewage contained compared to total volume spilled;
- Volume of spilled sewage discharged to surface water;
- Miles of sanitary sewer lines cleaned.

The SSMP shall be reviewed monthly by the Authorized Representative to insure all the provisions are implemented. The effectiveness shall be discussed during regularly scheduled field inspectors and safety training meetings. These meetings include field inspectors, administrative and engineering staff.

Cause of SSO	Cause of SSO Number Percent of T		nt of Total	
Blockage	Laterals	Mains	Laterals	Mains
Roots	4	10	23.5	58.8
Grease		2		11.8
Debris				
Debris from Laterals				
Vandalism		1		5.9
Animal Carcass				
Construction Debris				
Multiple Causes				



Infrastructure Failure				
Inflow & Infiltration				
Electrical Power Failure				
Flow Capacity Deficiency				
Natural Disaster				
Bypass				
Cause Unknown				
Total	4	13	23.5	76.5

## **SSMP Updates**

The SSMP and its elements shall be updated in accordance with current regulatory guidelines and as a result of monitoring recommendations by District staff. Performance evaluations are on-going because daily operations of the District include all the elements of the SSMP program. The District shall revise and update its CIP program each year to include upgrades to its infrastructure in compliance with SSMP requirements. Allocation of funds for such upgrades shall be identified in the CIP program and annual budget submitted to the District's Board of Directors for approval.

The District will determine the need to update its SSMP more frequently based on the results of the annual audit as required by the RWQCB and the performance of its sanitary sewer system. The process to complete the update will be identified in the event that the District determines that an update is warranted. The update will be completed within one year following identification of the need for an update.

The authority for approval of changes such as employee names, contact information, or minor procedural changes is delegated to the District Manager-Engineer.

## Identify and Illustrate SSO Trends, Including: Frequency, Location, and Volume

SSO reports shall be entered into the District's database in order to analyze SSO trends. The database can create reports as to location, volume, cause, and frequency of SSO events. These reports shall be reviewed by the District Manager-Engineer Staff to determine appropriate maintenance/repair/upgrades to the sewer system, if necessary.



## **ELEMENT 10: SSMP PROGRAM AUDITS**

## **SWRCB Requirements:**

As part of the Sewer System Management Plan (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.

## **<u>RWQCB Requirements:</u>**

Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (if applicable), appropriate to the size of the system and the number of overflows, and submit a report of such audit.

The District shall perform internal audits evaluating its SSMP and its compliance with the SSO-WDR every two years. A report shall be prepared and kept on file at the District office. The report shall include an evaluation of the effectiveness of the SSMP along with recommendations and suggested improvements to the Board of Directors.

The audit shall consist of the following elements:

- Progress made on development of SSMP elements, and where or not the District is on schedule in developing all elements of the SSMP;
- SSMP implementation efforts over the timeframe in question;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting year(s); and
- A description of the additions and improvements planned for the upcoming reporting year(s) with an estimated schedule for implementation.

		YES	NO
EL	EMENT 1 – GOALS		
A.	Are the goals stated in the SSMP still appropriate and accurate?	$\checkmark$	
EL	EMENT 2 – ORGANIZATION		
A.	Is the District Services Key Staff Telephone List current?	$\mathbf{V}$	
B.	Is the Sanitary Sewer Overflow Responder Telephone List current?	$\checkmark$	
C.	Is Figure 1 of the SSMP, entitled "District Organization Chart," current?	$\checkmark$	



		YES	NO	
Л	Are the position descriptions and accurate portrayal of staff	N		
D.	responsibilities?			
Е	Is Table 2 of the SSMP, titled "Chain of Communication for Reporting	N		
2.	and Responding to SSOs," accurate and up-to-date?			
	A. The District Services Key Staff Telephone List was updated on S	Septem	ber 5,	
		•		
	B. The Sanitary Sewer Overflow Responder Telephone List was	update	ed on	
	September 5, 2011. C. Figure 1 "District Organization Chart?" is currently being undeted			
	C. Figure 1, "District Organization Chart", is currently being updated.			
	D. Stall responsibility is accurately outlined. F. Table 2 "Chain of Communication for Paparting and Pasnonding	to SSI	De" is	
	being undated	10 55	05 15	
EL	EMENT 3 – LEGAL AUTHORITY			
Doe	es the SSMP contain excernts from the current Cupertino Sanitary District Or	eration	\$	
Coc	le documenting the District's legal authority to:		3	
Δ	Prevent illicit discharges?	$\mathbf{\nabla}$		
11.				
В.	Require proper design and construction of sewers and connections?	$\mathbf{\overline{A}}$		
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	$\checkmark$		
-		Ŋ		
D.	Limit discharges of fats, oil and grease?	M		
E.	Enforce any violation of its sewer ordinances?	$\mathbf{\nabla}$		
The	e SSMP contains the actual sections of the District's Operations Cod	e. Sind	ce the	
Dis	trict is a tributary agency with flows treated at the San Jose/Santa	Clara V	Water	
Pol	lution Control Plant, the District makes every effort to have consistent o	ordinan	ces as	
rela	ited to the pretreatment and enforcement programs managed by the	City o	of San	
Jos	e			
EL	EMENT 4 – OPERATIONS AND MAINTENANCE			
	Collection System Maps			
A.	Does the SSMP reference the current process and procedures for	$\mathbf{N}$		
	maintaining the District's wastewater collection system maps?			
В.	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?	$\mathbf{\nabla}$		
The	e SSMP updates the wastewater collection system maps (DWG file)	as addi	tional	
infr	infrastructure inventory and repairs are completed. The maps delineate mains,			
manholes, flushing inlets, pump stations, Smartcover units, direction of flow, and				
ease	easements.			
	Resources and Budget			
	Does the District allocate sufficient funds for the effective operation,			
С.	maintenance and repair of the wastewater collection system and is the	$\checkmark$		
	current budget structure documented in the SSMP?			
The	The District's Expense and Revenue Budgets are included in the SSMP. The allocated			



YES NO

fun	funds for District Operation, Maintenance, and Repair Activities are reviewed annually					
dur	during the budget setting process. Adjustments are made based on the effectiveness of					
the	current O&M program as well as field inspections/observations.					
	Prioritized Preventive Maintenance	[	Γ			
D.	Does the SSMP describe current preventive maintenance activities and the	$\mathbf{\nabla}$				
	system for prioritizing the cleaning of sewer lines?					
	Based upon information in the Annual SSO Report, are the District's					
E.	preventive maintenance activities sufficient and effective in minimizing	$\checkmark$				
	SSOs and blockages?					
The	e District's SSMP was updated to provide additional detail on th	e prev	entive			
ma	intenance activities and prioritization of sewer cleaning activities. The	District	t is re-			
eva	luating the current preventive maintenance activities and prioritizat	ion of	sewer			
clea	ning based on the Annual SSO Report for 2011.					
The	e Annual Report shows an increase in SSO events and a decrease	in tota	I SSO			
vol	ume. The number of lateral SSOs indicate the effectiveness of the cu	irrent l	lateral			
ass	essment and maintenance program. The increase in the main line SSO e	events c	caused			
by	root intrusion is being evaluated and the District is considering develo	oping a	more			
agg	ressive root control program and/or adjusting the frequency of th	e sewe	r line			
clea	ining schedule. The District will continue to monitor the effectiveness of	the pro	ogram			
on	a quarterly basis and make adjustments as necessary.					
	Scheduled Inspections and Condition Assessments	[	Γ			
	Is there an ongoing condition assessment program sufficient to develop a					
F.	capital improvement plan addressing the proper management and	$\mathbf{\nabla}$				
- •	protection of infrastructure assets? Are the current components of this					
	program documented in the SSMP?					
The	e District is implementing the newly adopted Mainline Assessment and	Replac	ement			
Pro	gram for gravity mains. The program was developed to asses	is the	aging			
infi	astructure and to provide a standardized approach to the repla	icemen	t and			
reh	abilitation of District assets. The SSMP outlines the goals and obje	ectives	of the			
pro	gram and the District.					
	Contingency Equipment and Replacement Inventory	[	Γ			
~	Does the SSMP list the major equipment currently used in the operation					
G.	and maintenance of the collection system and document the procedures of					
	inventory management?					
H.	Are contingency equipment and replacement parts sufficient to respond to	$\mathbf{\nabla}$				
	emergencies and properly conduct regular maintenance?					
The	The SSMP lists the major equipment currently used in the operation and maintenance					
of the collection system and indicates that parts and equipment are replaced on an as-						
needed basis. The District has agreements with vendors assuring a prompt response for						
par	parts and services in emergency situations.					
l raining						
I.	Is the training calendar current?	$\mathbf{\nabla}$				
J.	Does the SSMP document current training expectations and programs within the District's Wastewater Division?	$\checkmark$				



YES NO

The District's training calendar is being updated based on the certifications and training seminars provided to the field personnel. The updated SSMP includes a short discussion					
on t	the training expectations and programs available to field personnel.				
	Outreach to Plumbers and Building Contractors				
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	V			
The SSMP does include an outreach program effort to plumbers and building					
contractors under Element 11: Communication Program.					
		YES	NO		

EL	EMENT 5 – DESIGN AND PERFORMANCE STANDARDS		<u></u>	
	Does the SSMP contain current design and construction standards for the			
Δ	installation of new sanitary sewer systems, pump stations and other			
11.	appurtenances and for the rehabilitation and repair of existing sanitary			
	sewer systems?			
-	Does the SSMP document current procedures and standards for inspecting			
В.	and testing the installation of new sewers, pumps, and other	$\checkmark$		
	appurtenances and the rehabilitation and repair of existing sewer lines?			
The	e updated SSMP contains the current design and construction st	tandarc	ls for	
inst	allation of District standard facilities. Additional discussion can be foun	d in El	ement	
3:	Legal Authority. The updated SSNP also goes into detail about	the cu	irrent	
pro FI	Cedures and standards for inspection of new and renadilitated sewer line	25.		
EL.	EMENT 0 – OVERFLOW AND EMERGENCY RESPONSE PLAN			
۸	boes the District's Sanitary Sewer Overnow and Backup Response Fran	N		
А.	reporting of sonitary sewer overflows (SSOs)?			
	Are District staff and contractor personnel appropriately trained on the	Ĩ		
В.	procedures of the Sanitary Sewer Overflow and Backup Response Plan?	$\checkmark$		
	Considering performance indicator data in the Annual SSO Report, is the			
C.	Sanitary Sewer Overflow and Backup Response Plan effective in handling	$\mathbf{\nabla}$		
	SSOs in order to safeguard public health and the environment?	_		
The	e District's Sanitary Sewer Overflow and Backup Response Plan wa	s upda	ted to	
bet	ter detail the procedures for emergency response, notification, and	reporti	ing of	
SSC	Ds. Reporting notifications were updated to show that Category 1 SSC	)s need	to be	
rep	orted to CalEMA.			
Dis	trict personnel and contractors have been trained to implement the SO	RP as s	shown	
on	the current SSMP. Response, notification, and record keeping training	gs and	drills	
are conducted periodically to correct deficiencies and to determine if adjustments are				
necessary to increase the effectiveness of the program.				
EL	<u>EMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRA</u>	M	n	
А	Does the Fats, Oils, and Grease (FOG) Control Program include efforts to	N		
11.	educate the public on the proper handling and disposal of FOG?			
	Does the District's FOG Control Program identify sections of the			
В.	collection system subject to FOG blockages, establish a cleaning schedule	$\checkmark$		
1	and address source control measures to minimize these blockages?		l	



		YES	NO
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District's FOG Control Program?	A	
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	V	
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system	A	

The FOG Control program is currently being administered by the City of San Jose Pretreatment Program. The District has made efforts in the past to educate the public on the proper handling and disposal of FOG by including this subject in the annual report.

The District, in cooperation with the City of San Jose, monitors the areas of high grease incidences and has an established cleaning schedule to minimize SSOs caused by grease blockages. The District's Operations Code includes an extensive discussion on grease removal devices, BMPs, record keeping and reporting requirements and the legal authority to implement and enforce the FOG control program. This can be found in Element 3: Legal Authority.

The Annual SSO Report 2011 indicates that there were two SSOs that resulted from grease blockages with no net increase or decrease from the previous year. The District will continue to monitor the SSO cause trends and make adjustments as necessary to the cleaning and maintenance schedule.

EL	EMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE	PLAN	
A.	Does the Cupertino Sanitary District Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	V	
B.	Does the District's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	V	
The existing District's sewer master plan identifies no deficiencies in the system or capacity enhancement needs at this time. The District's sewer master plan is based on the current Citywide Master Plans for both the City of Cupertino and Saratoga.			

The District's Capital Improvement Plan is evaluated annually during the budget analysis process to identify and prioritize both short and long-term improvements.

		YES	NO	
EL	EMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM			
	MODIFICATIONS			
Δ	Does the SSMP accurately portray the methods of tracking and reporting	<u></u>		
л.	selected performance indicators?			
D	Is the District able to sufficiently evaluate the effectiveness of SSMP	N		
D.	elements based on relevant information?	V		
The	The SSMP accurately portrays the methods of tracking and reporting performance			

The SSMP accurately portrays the methods of tracking and reporting performance indicators are outlined in the Annual SSO Report and available on the CIWQS website.



YES NO

The	District is able to use these performance indicators along	with	field	
inspection/observation data to determine the effectiveness of the SSMP elements. The				
District will continue to utilize the existing performance indicators and will make				
adjustments as necessary.				
ELEMENT 10 – SSMP AUDITS				
Δ	Will the SSMP Audit be submitted with the SSO Annual Report to the Regional Water Board by March 15 <sup>th</sup> of the year following the end of the	ব	]	
11.	calendar year being audited?			
The SSMP Audit is included as an attachment to the SSO Annual Report for 2011.				
ELEMENT 11 – COMMUNICATION PROGRAM				
A.	Does the District effectively communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback?	A		



#### **ELEMENT 11: COMMUNICATION PROGRAM**

#### **SWRCB Requirements:**

Each enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its Sewer System Management Plan (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.

#### <u>Communications with and outreach to residential, commercial, and industrial customers</u> <u>and the general public</u>

Cupertino Sanitary District's communications program involves mailing, emailing, and posting on the District's website SSMP components and other related information for input by the public as well as dissemination of important SSMP requirements. The District also conducts extensive public outreach and education to residents and businesses related to sanitary sewer overflows, preventing grease blockages and Best Management Practices for the handling of grease waste. Links to such information are located on the District's website where the public and District customers are encouraged to view. Additional links such as the Association of Bay Area Governments' (ABAG) "Sewer Smart," the Santa Clara Valley Water District's "Best Management Practices" for storm water discharges, and the District's Standard Design Details are available for residential and commercial customers.

The District annually mails informational flyers to all residential and business property owners and tenants describing the negative impacts of discharging fats, oil, and grease (FOG) into the sanitary sewer system. In areas where sewer overflows are attributed to FOG, the District inspectors canvass the vicinity with notifications to residents and businesses to reinforce the message to avoid pouring these items down sewer drains.

The District disseminates information, in meetings and/or by mailings to land developers, consultant engineers, and plumbing contractors regarding the need and methods to reduce SSOs. The District has communicated with the Cities of San Jose and Cupertino and solicited input regarding the SSMP requirements with an emphasis on design and construction practices and devices that prevent sewer overflows or backflows into residential or commercial uses.

#### Communication with other local sanitary sewer agencies

The District is a tributary agency to the City of San Jose's and City Santa Clara's Water Pollution Control Plant. Other tributary agencies include the City of Milpitas, West Valley Sanitation District, County Sanitation District No. 2-3, Burbank Sanitary District, and the Sunol Sanitary District. Collectively, these agencies along with the District have been included in a communication program initiated by the City of San Jose to establish a collaborative approach during the development and implementation of, and future improvements, to the SSMP.

Cupertino Sanitary District	(08/01/2012)
Sewer System Management Plan	Page 121



Regularly scheduled meetings have been established on a quarterly basis to discuss common issues and provide support during the SSMP development process as well as working to establish a collaborative response to SSOs that occur between the service boundaries of two or more agency's jurisdictions.

Wastewater collection agencies share the same watershed basins with storm water collection agencies or cities and Santa Clara Valley Water District. Since all are subject to State WDR and/or NPDES permitting, it is imperative that open communication be maintained which acknowledges a partnership of stakeholders with the common interest of keeping the South Bay, creeks and their tributaries free of pollutants. Specifically, this District shares the Watershed Basins, geographically defined by Stevens Creek, Regnart Creek and Calabazas Creek, with the Cities of San Jose, Santa Clara, Cupertino, Sunnyvale, Saratoga, Los Altos, Santa Clara County and the Santa Clara Valley Water District.

The District has developed a Risk Assessment Plan which identifies areas most vulnerable to impacting receiving waters within the watershed in the event of an SSO. Steps have been proposed to contain overflows, divert by cross-connections and use sensing devices to alert District personnel when flow levels rise prior to reaching the surface. These measures provide additional time to respond and eliminate blockages before they become a major spill event. The sensing devices also will alert when there is an intrusion into a manhole in a remote or vulnerable location where unlawful grease dumping or vandalism can occur.

The District will be communicating with the above agencies to note the identified areas at risk in the event of SSOs and working to develop strategies for joint response, when practical, to contain and prevent SSOs from reaching fishable creeks or receiving waters to the Bay.

## **Communication with other local Watershed Stakeholders**

California Water/Wastewater Agency Response Network (CalWARN) was established with a mission to support and promote statewide emergency preparedness and mutual assistance for member public and private water and wastewater utilities, has been active for approximately 12 years. The organization is divided into six regions within the state. Cupertino Sanitary District is within Coastal OES Region II. Of the tributary agencies to San Jose-Santa Clara WPCP only the Cities of Milpitas and Santa Clara are currently members of CalWARN. Within Santa Clara County the City of Sunnyvale, California Water Service Company, San Jose Water Company, San Jose Municipal Water System and Santa Clara Valley Water District are also members. Membership in this organization of all the tributary agencies and others having common watershed interests, would be a first step toward accomplishing the stated objectives above described and is encouraged. Additional information for CalWARN can be found at its website www.calwarn.org.