

SEWER SYSTEM MANAGEMENT PLAN (SSMP)

MAY, 29 2009



**CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
WASTEWATER DIVISION**

"Environmental excellence through innovation and collaboration."

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Acronym List

ABS – Acrylonitrile-butadiene-styrene
CADME – Computer Aided Design, Mapping and Engineering
CCTV – Closed Circuit Television
CIP – Capital Improvement Project
CIWQS – California Integrated Water Quality System
FCE – Final Chlorinated Effluent
FOG – Fats, Oils, and Grease
I/I – Inflow or Infiltration
KSA – Knowledge, Skills, and Abilities
MGD – Million Gallons per Day
MSDS – Material Safety Data Sheets
NOI – Notice of Intent
NPDES – National Pollutant Discharge Elimination System
POTW – Publicly Owned Treatment Works
PPE – Personal Protective Equipment
QA/QC – Quality Analysis/Quality Control
PVC – Polyvinyl Chloride
RMC – Riverside Municipal Code
RRWQCP – Riverside Regional Water Quality Control Plant
SCADA – Supervisory Control and Data Acquisition
SSMP – Sewer System Management Plan
SSO – Sanitary Sewer Overflow
VCP – Vitrified Clay Pipe
WDR – Waste Discharge Requirements

Introduction

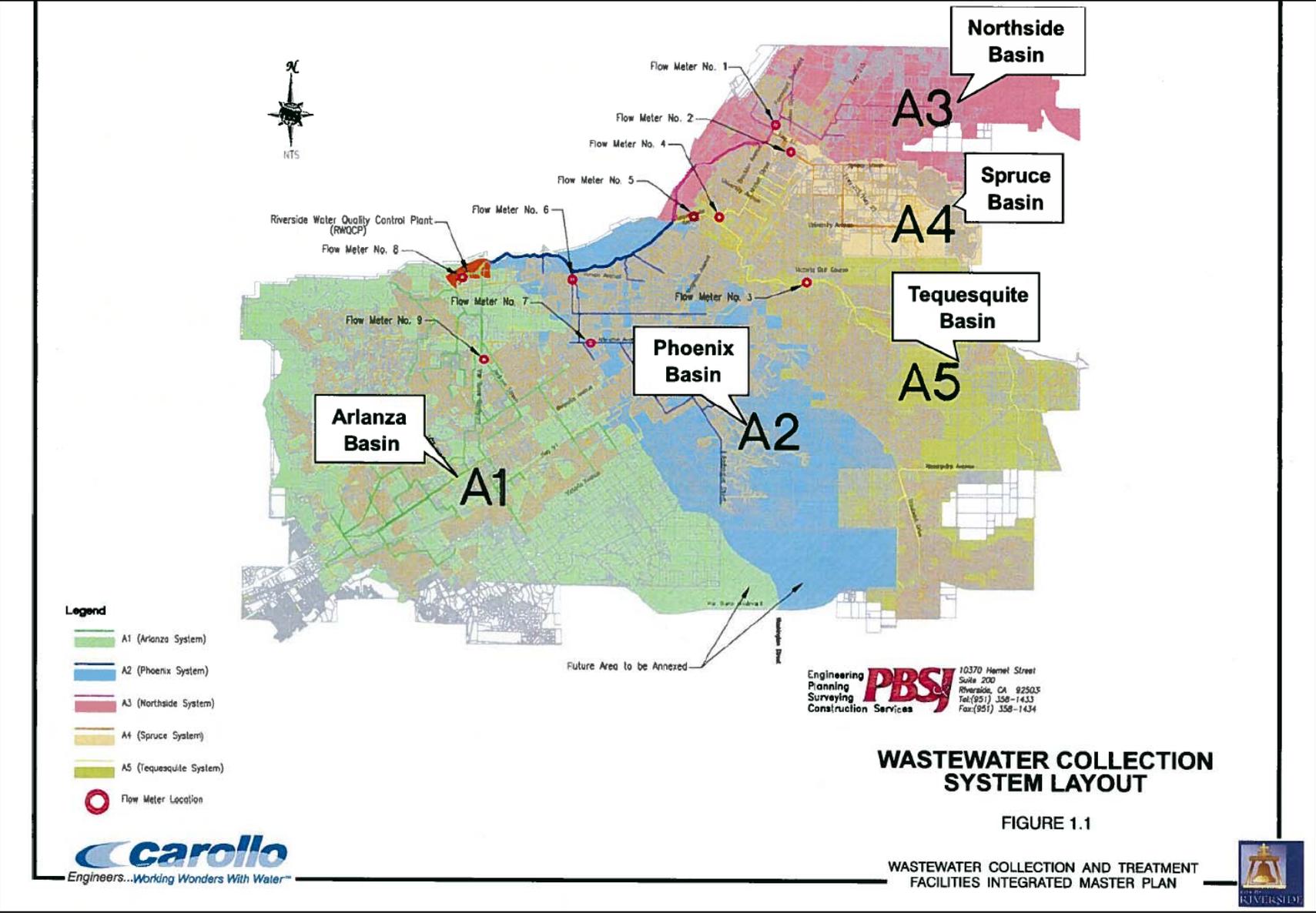
The City of Riverside (City) owns and operates a separate sanitary sewer collection system (collection system) dating back to the late 19th century. Through the years, many of the old sewer lines and manholes have been replaced or repaired with modern materials and technology. The collection system currently consists of 820 miles of sewer lines made of various materials including vitrified clay pipe (VCP), terra cotta glazed pipe, ductile iron pipe, and plastic pipe (PVC, ABS). There are seventeen City owned sewer lift stations ranging in capacity from 0.2 to 4.0 million gallons per day (mgd). All but one of the very small lift stations are connected by telemetry to the operations control center at the City Regional Water Quality Control Plant (hereinafter called the Publicly Owned Treatment Works (POTW)) for continuous monitoring of station activities. In addition to the wastewater from the City's collection system, the City also provides wastewater treatment services for the community services districts of Edgemont, Jurupa, and Rubidoux.

On May 2, 2006, the State Water Resources Control Board adopted Order No. 2006-0003 which created the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This order requires all owners of separate sanitary sewer collection systems to submit a Notice of Intent (NOI) to apply for coverage under this new Order. The City applied for inclusion in the NOI on October 13, 2006. On January 18, 2007, the City became registered in the State Water Resources Control Board's SSO database: California Integrated Water Quality System (CWIQS). One required element of the Waste Discharge Requirements (WDR) is the Sewer System Management Plan (SSMP). The SSMP provides methods for the City to identify, create, and incorporate a multitude of best management practices and procedures to maintain a sound collection system infrastructure.

The SSMP contains eleven elements with various required dates for completion.

1. Goals
2. Organization
3. Legal Authority
4. Operations and Maintenance Programs
5. Design and Performance Standards
6. Overflow Emergency Response Plan
7. Fats, Oils, and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement, and Plan Modifications
10. SSMP Program Audits
11. Communication Program

City of Riverside Wastewater Collection System Layout



WASTEWATER COLLECTION SYSTEM LAYOUT

FIGURE 1.1

WASTEWATER COLLECTION AND TREATMENT FACILITIES INTEGRATED MASTER PLAN



Engineering Planning Surveying Construction Services **PBSI** 10370 Hemet Street Suite 200 Riverside, CA 92503 Tel:(951) 358-1433 Fax:(951) 358-1434



Section I. Goals

The City's SSMP contains policies, procedures and related information about the City's owned and operated collection system. This SSMP is a document subject to modifications with many of the elements requiring daily data input and analysis and periodic changes to reflect the improvements in the management, operation, and maintenance of the collection system. The SSMP is designed to assist and direct the City in identifying and correcting deficiencies in the collection system. The main areas of program implementation are sewer line cleaning and video inspection, sanitary sewer overflow (SSO) response and mitigation, agency notification, and fats, oils, and grease (FOG) program to reduce or eliminate the discharge of FOG to the sewer, capital projects to replace and/or repair and expand the sewer collection system, employee training, and public awareness campaigns.

The goals of the City's SSMP include:

1. Reduction of SSOs.
2. Effectual management, operation, maintenance, and improvement of the collection system.
3. Provide notifications and reports to all required regulatory agencies in a timely manner.
4. Appropriate mitigation of the effects of SSOs.
5. Public education outreach program to increase awareness for private lateral maintenance and repairs, SSO reporting, and FOG related issues and how they can impact the collection system.

Section II. Organization

Facility Name: Riverside Regional Water Quality Control Plant (RRWQCP)

Address: 5950 Acorn St. Riverside, CA 92504

Phone: (951) 351-6140, Fax (951) 687-6978

The RRWQCP is part of the City’s Public Works Department, Sewerage Systems Division. The Sewerage System Division has six sections: Administration, Operations, Laboratory, Environmental Compliance, Collection Systems, and Maintenance.

The Legally Responsible Official for the SSMP is: Mr. Craig Justice, Wastewater Systems Manager

Table 1 lists the management positions and phone numbers responsible for implementing the sections of this SSMP:

Table 1: Management Position Information

Position	Phone Number
City Attorney	(951) 826-5567
Public Works Director	(951) 826-5568
Public Works Safety Officer	(951) 826-5103
Deputy Public Works Director, City Engineer	(951) 826-5575
Public Works Principle Engineer, Sewer Design	(951) 826-5348
Principle Engineer, RRWQCP	(951) 351-6176
Wastewater Systems Manager	(951) 351-6183
Wastewater Operations Manager, Operations and Collection System	(951) 351-6170
Wastewater Operations Manager, Environmental Compliance and POTW Maintenance	(951) 351-6089
Wastewater Operations Manager, Regulatory Compliance and Laboratory	(951) 351-6080
Environmental Compliance Supervisor	(951) 351-6011
Wastewater Operations Superintendent	(951) 351-6276
Collection Systems Supervisor	(951) 351-6195
Laboratory Manager	(951) 351-6016

The Sewer Systems Division’s complete organizational chart is found in **Appendix A**. The flow chart for responding to an SSO is found in **Appendix B**.

Table 2 lists the SSMP elements and the staff responsible for these SSMP elements.

Table 2: SSMP Tasks and Responsible Positions

Element	Responsible Staff
I. Goals a. Goal Statement	Wastewater Systems Manager, Wastewater Operations Managers
II. Organization a. Name of the Responsible or authorized representative(s) b. Names and telephone numbers of management, administrative, and maintenance positions c. Chain of communication for reporting SSOs	Wastewater Systems Manager, Wastewater Operations Manager (Compliance and Regulatory Permits)
III. Legal Authority a. Prevent illicit discharges to the collection system b. Require that sewers and laterals be properly designed and constructed c. Ensure access to the collection system d. Limit discharge of FOG and other debris that may cause blockages e. Enforcement of Ordinance	City Attorney, Public Works Director, Wastewater Systems Manager, Wastewater Operations Managers (Compliance and Regulatory Permits, Environmental Compliance and POTW Maintenance, and Operations and Collections System), Public Works Principle Engineer, Sewer Design Environmental Compliance Supervisor, Senior Environmental Compliance Inspectors, Environmental Compliance Inspectors
IV. Operations and Maintenance Program a. Maintain current map of collection system and storm drain system b. Describe routine and preventative operation and maintenance of collection system c. Develop a rehabilitation and replacement plan. (See SSMP Plan Chapter specifics) d. Develop and implement a training program e. Provide equipment and training parts inventories	Public Works Principle Engineer, Sewer Design, Wastewater Operations Manager (Operations and Collection Systems), Collection Systems Supervisor Wastewater Collections Scheduler, Sr. Wastewater Collection System Technician, Wastewater Collections System Crew Leaders, Wastewater Collections System Technicians, Wastewater Mechanical Supervisor Fleet Operations Manager
V. Design and Performance a. Design, construction and specification standards for installation and rehabilitation of new and existing sewers. b. Procedures and standards for the inspection of new or rehabilitated sewers and appurtenances.	Deputy Public Works Director/City Engineer, Public Works Principle Engineer, Sewer Design, Principle Engineer-RRWQCP, Wastewater Operations Manager (Operations and Collection Systems)
VI. Overflow Emergency Response Plan a. Notification procedures for regulatory agencies b. Response and mitigation procedures c. Staff and contractor training d. Emergency operations e. Containment and monitoring plans	Public Works Safety Officer, Wastewater Systems Manager, Wastewater Operations Managers, Wastewater Operations Superintendent, Environmental Compliance Supervisor, Environmental Compliance Inspectors, Laboratory Manager, Collection System Supervisor, Sr. Wastewater Collection System Technician, Wastewater Collections System Crew Leaders, Wastewater Collections System Technicians, Senior Operators, Operations Dispatchers

Table 2: SSMP Tasks and Responsible Positions, continued

Element	Responsible Staff
<p>VII. Fats, Oils, and Grease (FOG) Control Program</p> <ul style="list-style-type: none"> a. Identification of "hot spot" areas of collection system b. Identification of food service businesses in "hot spot" areas of collection system c. Administrative controls (permits) for potential grease dischargers d. Requirement to install grease removal equipment e. Encouragement to use BMPs to reduce grease discharges f. Periodic inspections g. Enforcement actions h. Public Education 	<p>Wastewater Operations Managers (Environmental Compliance and Collection Systems), Environmental Compliance Supervisor, Senior Environmental Compliance Inspectors, Environmental Compliance Inspectors, Wastewater Collections Scheduler, Sr. Wastewater Collection System Technician, Wastewater Collections System Crew Leaders, Wastewater Collections System Technicians</p>
<p>VIII. System Evaluation and Capacity Assurance Plan</p> <ul style="list-style-type: none"> a. Capacity evaluation b. Identification of capacity needs c. Project schedule 	<p>Public Works Principle Engineer, Sewer Design Wastewater Systems Manager, Wastewater Operations Manager (Operations and Collection Systems), Collection Systems Supervisor</p>
<p>IX. Monitoring, Measurement, and Plant Modifications</p> <ul style="list-style-type: none"> a. Maintain records and data b. Monitor implementation of SSMP c. Assess the success of preventive maintenance program. d. Update program elements e. Identify and track SSO trends 	<p>Wastewater Systems Manager, Wastewater Operations Managers (Environmental Compliance, Collection Systems, Regulatory Compliance and Permits) Collection Systems Supervisor, Environmental Compliance Supervisor, Wastewater Collections Systems Scheduler</p>
<p>X. SSMP Program Audits</p> <ul style="list-style-type: none"> a. Person responsible for the Audit b. Scope of the Audit c. Audit work product d. Schedule for the Audit, minimum every two years 	<p>Wastewater Operations Managers (Environmental Compliance, Collection Systems, Regulatory Compliance and Permits), Collection Systems Supervisor, Environmental Compliance Supervisor, Wastewater Collections Scheduler</p>
<p>XI. Communication Program</p> <ul style="list-style-type: none"> a. Notification that an SSMP is being prepared. Website use is suggested 	<p>Wastewater Operations Managers (Environmental Compliance, Collection Systems, Regulatory Compliance and Permits), Environmental Compliance Supervisor, Collection Systems Supervisor, Public Works Administration Analysts</p>

Section III. Legal Authority

This section describes the means the City uses to legally enforce different components of this SSMP. The City's legal authority is contained in several documents and codes that enable designated personnel to protect the collection system against harmful wastewater discharges or activities, storm water infiltration and inflows (I/I) and ensures sewers, sewer appurtenances and lateral connections are properly designed and constructed. The following is a discussion of those legal authorities.

(a) Illicit discharges are prohibited from entering into the City's collection system by Riverside Municipal Code (RMC) Section 14.12.335 PROHIBITED WASTE DISCHARGES and 14.12.345 LIMITATIONS ON WASTEWATER STRENGTH (**Appendix C**). These sections have prohibitions against the discharge of any material or waste that could harm the collection system, POTW and/or jeopardize the safety of the City's collection system personnel.

(b) Sewers and sewer connections are required to meet the criteria contained in the Public Works Department's "Criteria for Sewer Facility Design", City Standard Drawings for Sewer Line Construction, Greenbook Standard Specifications for Public Works Construction, latest edition, and the latest City approved edition of the Uniform Plumbing Code (**Appendix E**).

(c) The City has secured sewer easements to ensure access for maintenance, inspection, or repairs of City owned collection systems on private property and for portions of the lateral owned or maintained by the City. The City has a variety of methods for obtaining easements to construct and maintain sewer lines through private property:

1. Acquisition of the easement through voluntary purchase from the owner.
2. Acquisition through condemnation for a sewer line easement.
3. As a condition of development, the property owner is requested to dedicate or grant an easement to the City for sewer line installation.

These easements permit the City to conduct periodic and scheduled sewer line cleaning to prevent SSOs.

If the City is unable to obtain an easement from the property owner, or is otherwise prevented from entering onto private property to maintain its sewer line through the easement, and a problem arises with the sewer line, the City, through its Code Enforcement Division, has the authority to order the house to be vacated due to the lack of sewer services rendering the dwelling uninhabitable.

(d) The Riverside Municipal Code, Chapter 14.12 (**Appendix C**) has several sections that prohibit or limit the discharge of fats, oils, greases and other debris that may cause blockages in the collection system. These sections are:

1. § 14.12.255 GRAVITY SEPARATION INTERCEPTORS
2. § 14.12.260 INTERCEPTOR REQUIREMENTS
3. § 14.12.270 INTERCEPTOR MAINTENANCE
4. § 14.12.275 RESTAURANTS

- 5. § 14.12.305 USE OF AND DAMAGE TO CITY EQUIPMENT OR FACILITIES
- 6. § 14.12.335 PROHIBITED WASTE DISCHARGES
- 7. § 14.12.345 LIMITATIONS ON WASTEWATER STRENGTH
- 8. § 14.12.360 PRETREATMENT OF INDUSTRIAL WASTEWATER
- 9. § 14.12.375 PROHIBITED DISCHARGE OF RECOVERED PRETREATMENT WASTE

- (e) The City has the authority to restrict or prohibit the discharge of storm water into the collection system. This authority is granted in RMC Section 14.12.385 STORMWATER DIVERSION (**Appendix C**).
- (f) The City’s Public Works Director has designated the City’s Environmental Compliance Section (ECS) with authorization to enforce RMC Chapter 14.12 pursuant to RMC Section 14.12.200. The ECS may seek penalties and remediation actions against users found in violation of RMC Chapter 14.12 and any permits or control documents issued pursuant to RMC Chapter 14.12. (**Appendix C**)

The ECS has a federally approved pretreatment program that uses an Enforcement Response Plan (ERP), (**Appendix D**) for guidance in the implementation of enforcement actions for violations of RMC Chapter 14.12. (**Appendix C**).

Section IV. Operations and Maintenance Program

The City’s geographical and service area information is in the following table. This information is used as part of the POTW and collection system design. As the City expands, these numbers will dictate how much expansion is necessary for the POTW and collection system.

Table 3: City Service Area Characteristics

Characteristic	Quantity
Service Area	87.4 sq miles, 55,936 acres
Population	287,820
Annual Average Precipitation	13 inches
Residential Sewer Connections	84,831
Commercial/Industrial Sewer Connections	3,403

The Operations and Maintenance Program for the City’s collection system addresses six critical areas to ensure satisfactory performance. These areas are: treatment facilities; access, inspection and maintenance; collection system maps; rehabilitation and replacement; safety and training; and equipment.

A. Treatment Facilities

The City owns and operates a fully tertiary POTW with the following specifications as of May 2009:

1. Design capacity = 40 million gallons per day (MGD)
2. Average Daily Flow = 33 MGD
3. Average Dry Weather Flow = 33 MGD

B. Access, Inspection and Maintenance

The collection system has approximately 20,000 manholes and no air vacuum relief valves. There are no combined storm/sanitary sewers in the City’s collection system. Tables 4-6 use data from FY 2005-2006 and represent the baseline condition that was used in developing this SSMP. Future audits will generate data that will amend these figures.

Table 4: Types of Sewers, Age of System and Pump Stations

	Gravity Sewers	Force Mains	Pump Stations
Length/Quantity	834 miles	6 miles	17
0 – 25 years old, %	20	20	20
26 – 50 years old, %	20	80	80
51 – 75 years old, %	50		
> 76 years old, %	10		

Number of inverted siphons = 21

Table 5: Sewer Pipe Diameters

Pipe Diameter	Gravity Sewer %	Gravity Sewer, Miles	Force Main %	Force Main Miles
8 inches or less	81	664	44.85	3.4
9 - 18 inches	11.7	96	20.45	1.55
19 – 36 inches	6.6	54	34.7	2.63
> 36 inches	<1.0	<1	0	0

Table 6: Sewer Pipe Materials

Pipe Material	Gravity Sewer %	Force Main %
Polyvinyl Chloride (PVC), Plastic	9	44.9
Vitrified Clay Pipe (VCP)	70	0
Ductile Iron	1	55.1
Terra Cotta Glazed Pipe	20	0

The Collection Systems Section budget has four primary maintenance functions. Table 7 lists the maintenance functions and the percent of the collection system budget allocated to that function.

Table 7: Budgeted Collection System Maintenance Functions

Function	Budget %
Predictive Maintenance	5
Preventive Maintenance	82
Corrective Maintenance	10
Emergency Maintenance	3

B.1. Sewer Lift-Stations

The City currently operates and maintains seventeen (17) sewer-lift stations (Table 8) and each station has a Standard Operating Procedures manual, including emergency response procedures that are updated annually. The Wood Road pump station and Pierce Street Pump Station are the largest pump stations at 1 MGD and 4 MGD, respectively. The SOP manuals for both stations are complete. The City conducts annual training to insure that there are sufficient personnel to operate and maintain the pump stations. Sixteen of the pump stations have telemetry communication to the POTW Operations Center to indicate high wet well conditions. Wood Road and Pierce St. have the most sophisticated alarm notification equipment and are the only stations with on-site backup power generators. When power outages occur at Wood Road and Pierce St., the backup generators engage and supply power to the stations. The Wood Road Pump Station was completely redesigned and rebuilt in 2007 with backup power, backup pumping capabilities, and emergency bypass capabilities. The emergency bypass capability allows the backup pumps to continue pumping to the station’s sewer force main in the event of a pump station failure.

Table 8 Sewer Pump Stations

Pump Station	Backup Power	Auxiliary Power Port	Telemetry
Fairgrounds			√
Dexter			√
Crest and Ontario			√
Wood Road	√		√
Pierce Street	√		√
Rivercrest			
University Knolls			√
Western			√
Lakewood (Mission Grove)			√
Arlington and Fairhaven			√
MLK		√	√
MLK II		√	√
Apostle		√	√
JFK		√	√
Garden Hills		√	√
Bryant Park		√	√
Atherton		√	√

Six of the stations have auxiliary power ports for connection to a portable generator. For these six stations, a portable generator is brought on site if the power loss is for an extended period. In all instances, if power is lost and if the station(s) cannot pump the wastewater, then several vacuum truck companies are called to pump the station's wet well until the station is returned to normal operation.

At all stations the pumps are staggered between lead and lag positions. The height of the wet well engages pump operations to either cycle on (at high levels) or cycle off (at low levels). All pump stations have a minimum of two pump motors. These pumps are rotated in the lead and lag positions to insure operation integrity. Should the second pump be required for operation, the station electronics will automatically engage the second pump. All of the stations have adequate dry or wet weather capacity.

All sewage pump stations are inspected at least daily to every other day. The large stations, Wood Road and Pierce Street are inspected daily. Operations logs are kept for the large stations and daily sheets are created for the smaller stations. The daily inspections are conducted Monday through Friday with one to two employees with average annual labor hours ranging from 2,394 to 4,788 hours. Two of the pump stations have effluent flow monitoring: Wood Road and Pierce St. The effluent flow meter and all other meters at the pump stations are calibrated as often as is necessary to insure accuracy.

To ensure proper operation of the (17) Wastewater Division sewage lift stations periodic assessment are completed. The latest assessment is enclosed as **Attachment F**. City staff conducted site visits and reviewed existing design and operational information to identify infrastructure, mechanical equipment, electrical, and controls systems that are in need of replacement, or upgrading to newer technology. Information from the assessment is used to determine capital improvements and projects. Needed improvements are either completed by City staff or programmed into the City CIP program as appropriate.

B.2. Sewer Cleaning

The City's Collection Systems Section performs a variety of sewer cleaning activities to ensure the reliable performance of the City's sewer collection system. The goal of the section is to have the City's entire sewer collection system cleaned every 18 months. With this goal, the City's intention is to have 66.7% of the entire system cleaned in 12 months. This may be accomplished by the use of three two person crews cleaning 4,700 feet per day per crew for an eight hour day or 5,225 feet per day per crew for a nine hour day. For the most efficient and effective cleaning, the water use is 0.75 gallons per foot.

The Collection Systems Section maintains a computer relational database asset management system that manages all of the collection system maintenance. The maintenance areas are:

1. Routine cleaning
2. Preventive cleaning and maintenance
3. Repairs
4. High frequency cleaning and maintenance
5. Roach control

6. Closed Circuit Televisions (CCTV) Inspection

- a. New lines for acceptance
- b. Quality control inspection after a line cleaning
- c. Routine line inspection for collection system survey and assessment

A computer based work order system is used to generate the work orders for sewer line cleaning. The entire City has been divided into 32 cleaning area maps. Each area is comprised of sewer lines that drain into a common trunk sewer line. These areas have scheduled cleaning activities including: routine, preventive, and high frequency (**Appendix G**). The criteria used to create the work orders are: scheduled or need based. The scheduled cleaning is based upon the date last cleaned. The goal is to have the entire City sewer system cleaned in 18 months so the last cleaned date is typically 18 months prior to the current date. The last cleaned date could also change depending upon need based cleaning, e.g. to remove a blockage. An example of a need based work order would be to raise manholes to grade after a street paving project.

At the beginning of each day the collection crews are given a packet of work orders. Each time a section of sewer is cleaned, the Collection crew(s) complete a cleaning record for that section of sewer including:

- Date and time of the cleaning
- Method of cleaning
- Identity of the cleaning personnel
- Cause of any stoppages
- Location of stoppage or routine cleaning activity
- Any further actions that are necessary or taken

When the job has been completed, the collection crew writes their findings on the work order and all the completed work orders are returned at the end of the day along with a daily route record that records the statistics for the day, e.g. line footage cleaned, CCTV footage, etc. The information contained in the work orders and daily route records are entered into the database. If a job performed found more work that is necessary, then an additional work order is automatically created for distribution the following day. This style of information processing ensures that the field crews are provide with the most current information about the collection system. The field crews work order findings are also automatically uploaded into the CADME sewer mapping system on a daily basis. This enables trends to be determined for a wide variety of sewer problems, e.g. roots, grease accumulations, hydraulic restrictions and surcharge conditions. The information from the work orders also determines if an area is in need of high frequency cleaning due to periodic obstructions, e.g. roots, grease. These records have been maintained since 1997.

One of the goals of the Collection Systems Section is to reduce the number of sanitary sewer overflows (SSOs). The Collection Systems Section has several activities and programs that contribute to the reduction of SSOs:

- 1) A sewer inspection program that documents chronic sewer problems and makes recommendations for increased cleaning frequencies. These sites are added to the high frequency cleaning list that is given the highest priority for sewer cleaning;
- 2) A root control program. There is no chemical usage. The program consists of physically

removing the roots when discovered in the sewer lines. If a sewer line is known to be prone to harmful root growth, then that section of sewer line is added to the high frequency cleaning list. If the roots are from a City tree, discussions are conducted with the Public Works Landscape Division for the removal of the tree.

3) The Environmental Compliance Section has a Fats, Oil, and Grease (FOG) program (**Appendix H**) to combat harmful accumulations of FOG that can lead to SSOs. The Collection Systems Section's CCTV of the sewer collection system is a valuable component of the FOG program and, in many instances, is the first piece of evidence necessary to take enforcement action against the user causing the accumulation of FOG in the sewer.

4) The City's CADME system has the capability to plot the SSOs that occur in the City's collection system and on private property. These SSOs are plotted based upon geographical location noted by address, if possible. The sewer line affected is identified and the cause of the blockage is provided.

5) The Environmental Compliance section and Public Works Department competes public education activities to educate the public on FOG reduction and private lateral maintenance. These activities are discussed in the **Communication Section XI**.

B.3. Manhole Inspection and Assessment

The City's Collection Systems Section inspects manholes as part of the routine cleaning activities. If deficiencies are found, then a work order is created to correct the problem. When the manholes and sewer lines are inspected the following observations are recorded:

- Conditions of the manhole frame and cover
- Evidence of surcharge
- Evidence of vandalism
- Offsets or misalignments
- Details of the primary cause of cracks or breaks in the manhole or pipe, including blockages
- Presence of significant corrosion
- Necessary repairs
- Manhole identifying number and location
- Wastewater flow only if surcharged or backed up
- Presence of infiltration, location, and estimated quantity
- Accumulations of grease, debris, or grit

If the observed conditions require repairs a work order is generated and submitted with the daily route record.

B.4. Sewer Line Video Inspection (CCTV)

The City's Collection Systems Section crews perform closed circuit television (CCTV) inspections of the City's sewer lines and private development sewer lines. The City crews are trained in the use of the equipment and a written manual is also available. A sample of CCTV inspection can be found in **Appendix I**. The video inspections address the following:

- Pipe size, type, length, and joint spacing
- Distances are recorded
- Structural deficiencies
- Corrosion
- Inflow/Infiltration (I/I)
- Illegal connections
- Slope of pipe
- CCTV operator name
- Cleanliness of the line
- Location and identification of the line and manholes being examined

Once the CCTV examination is completed, the sewer line is rated based upon the defects discovered during the video examination. The codes used in the report are explained in the manual(s). Historical video inspection data shows that FOG (35%), roots (25%), pipe condition (15%) and debris (10%) represent the largest percentage of defects that cause SSO. These four together accounts for 85% of the defects found.

All sewer repairs are CCTV inspected subsequent to the completion of the repair. In addition, lateral connections to the City's main line are CCTV inspected. If defects are discovered, then the property owner is notified. A private plumbing contractor may also perform lateral inspections as part of a contract or at the owner's request.

C. Collection System Maps (CADME)

System Mapping is a means to provide access to sewer plans, drawings, and electronic records. Several media are used to accomplish these tasks, including paper blueprints, and cut sheets, electronic storage and retrieval in the City's CADME system, and a central computer system that electronically stores all architectural, engineering, and construction drawings (blueprints). All historical blueprints and archived blueprints have been digitally stored. All new construction and new blueprint submittals are digitally stored when received. All paper originals are stored in a fireproof archive vault. The City's Public Works' Engineering Division maintains paper and electronic copies of sewer blueprints and cut sheets.

The Public Works Department maintains a computer CADME system. This program has many data "layers" that can be applied to a single map request, including sewer line location, type, size, and length. When the collection crews discover differences with the field conditions and the computer information, the differences are recorded and a work order submitted to revise the computer record.

The following information is contained in either the computer or paper record.

- Drawing scale
- North arrow
- Date map was drafted
- Property lines
- Landmarks (water bodies, streams, roads, etc.)
- Manholes and other access points

- Location of building laterals
- Street names
- SSOs occurrences
- Force Mains
- Pump Stations, both sewer and storm drain
- Main, trunk, interceptor and force main sewer lines
- Easement lines and dimensions
- Pipe material
- Pipe diameter
- Slope
- Manhole rim elevation
- Manhole coordinates
- Manhole invert elevations
- Distance between manholes
- Sewer line invert elevations
- Storm Drains
- Storm drain catch basins

All manholes have a unique identifying number on the CADME system and the sewer line between manholes is identified by pipe size and material, length between manholes and upper and lower elevations.

D. Customer Service Requests

The City has implemented a central call-in system called “3-1-1 One Call Does it All”. Anyone having difficulties with a City service can call dial 311 within the City limits and be instantly connected to the City’s call center, 24 hours per day and seven days per week. If a call received involves a sewer related problem, then the call center electronically notifies the Sewer Division’s Central Dispatch. This system creates an accountability trail for the call with date and time received, when the call was dispatched, investigation results, actions taken, and disposition of the call. In addition to the 311 system, the Sewer Division may receive sewer problem calls directly and the Collection System personnel may also accept service requests from City customers (**Appendix J**). These service requests describe sewer problems the customer is having or has observed. These problems could be related to the homeowner’s private lateral, foul odors, or problems with a City sewer line. When a service request call is received the 311 call center is notified and a service request is created. The information contained in the request generally includes:

- City personnel who received the complaint or request
- Nature of the complaint or request
- To whom the follow-up action was assigned
- Date of the complaint or request
- Date the complaint or request was resolved
- Name, address, and telephone number of the complainant or requestor
- Location of the complaint or request
- Date the follow-up action was assigned
- Cause of the problem

- Investigation findings
- Corrective actions taken

If the sewage spill occurs inside of a home or business and has been caused by a City collection system problem, then the City's Risk Management Division assumes control of the cleanup. In most all cases, the outdoor exposed impervious surface areas that were contacted with sewage are disinfected with a 5%, by volume, solution of sodium hypochlorite bleach and the disinfection wash water is recovered by hydrovac truck and returned to the collection system. If the sewer spill is caused by a private sewer lateral problem, then the resident or occupant is given a City private sewer lateral policy letter and maintenance brochure (**Appendix K**) and told to call a plumber to correct the problem. In both cases, the City's collection system personnel will remain on scene to remove any spilled sewage from leaving the property until the problem is corrected.

The Collection System personnel respond as soon as the call is received during working hours. After hours, the standby crew responds and arrives at the treatment plant to assemble the necessary equipment and vehicles within thirty minutes of notification and is on scene of the complaint within one hour of the original call. The goal for resolution of each service request is to have all matters related to the service request concluded by day's end. The Collection System Section generally resolves 98% of all service requests within the stated timeframes.

The City's CADME system has the capability to plot the SSOs that occur in the City's collection system and on private property. These SSOs are plotted based upon geographical location noted by address, if possible. The sewer line affected is also provided.

E. Rehabilitation and Replacement Plan

The City has influent flow monitoring at the POTW. However, there is no permanent in-line flow measurement equipment placed in the collection system. The City's Public Works Engineering Division has completed a flow capacity model for the entire collection system. The model examines current wastewater flows and projected flows through the year 2025 to coincide with the City's new general plan. The current wastewater flows were used as a calibrating baseline for the capacity model. This capacity model is the most critical criteria in establishing the priority for sewer line rehabilitation or replacement. Public Works Engineer reviews the capacity model with projected growth for residential, commercial, and industrial development and determines which sewer lines have under-capacity or sufficient capacity. Those with insufficient capacity are then rated for priority based upon sewer pipe capacity. Those that have 90% or more are given the highest priority for sewer line rehabilitation or replacement and the projects are scheduled accordingly. A more detailed discussion of the sewer line rehabilitation or replacement program is found in **Section VIII System Evaluation and Capacity Assurance Plan**.

The Collection Systems Section's database is another valuable tool to assess the condition of the City's sewer lines and the need for rehabilitation or replacement. This database tracks the condition of the sewer lines, e.g. structural, corrosion, I/I, vandalism, roots, grease, etc., and provides a history of the conditions. This history allows for preventive and predictive maintenance and further enhances Public Works Engineering planning for sewer line rehabilitation or replacement.

In the event new industries or businesses are proposed for a certain section of the City and those

industries or businesses will discharge a large amount of wastewater that was not previously accounted for in the capacity modeling, then a capacity analysis would be required for the downstream collection system to determine if adequate sewer capacity exists.

The POTW does experience some inflow and intrusion (I/I) during periods of wet weather. The I/I is due, in part, to submerged manholes, rising groundwater and manhole covers being askew or opened by others. Studies completed based on historical flow data have calculated the POTW dry and wet weather peaking factors at approximately 1.1 and 1.9 respectively.

The POTW has several flow meters located within its wastewater collection system. These include:

- Edgemont, measures the sewer flow from the Edgemont Community Services District
- Jurupa, measures the sewer flow from the Jurupa Community Services District
- Rubidoux, measures the sewer flow from the Rubidoux Community Services District
- Riverside (Plant One) measures the wastewater influent from the eastside of the City
- Arlington/Arlanza (Plant Two) measures the wastewater influent from the westside of the City.
- FCE, measures the Final Chlorinated Effluent to the Santa Ana River
- Recycled Water, measures the amount of recycled water distributed to end users.

All of these flow meters are checked daily. The checks include totalizer readings and clearing any debris. The in-plant flow meters are connected to the SCADA system for automatic data logging.

The POTW personnel do not have or maintain a rain gauge, but does have access to rainfall data through the local newspaper and online sources, e.g. National Oceanic and Atmospheric Agency, NOAA.

The City's collection system does have I/I concerns from abovementioned sources. If the rain event does not last long and the amounts are low to moderate, less than two inches in 24 hours, the collection system has the capacity to "store" the additional volume without a serious SSO threat. If rainfall amounts are substantial, one-half inch to one inch per hour for several hours, then the SSO risk potential increases.

The Collection crews are constantly evaluating the City's sewer system as part of their daily work routine. While cleaning and video inspecting the sewer system, the crews make discoveries that aid in the rehabilitation and replacement program. Problems that have been detected include: cracked pipes, structural failures, and surcharge conditions. All of the problems found are entered into the database and tracked for future rehabilitation and replacement. These problem discoveries are communicated to Public Works Engineering for evaluation and possible inclusion in the CIP project list. If a discovered problem is severe enough, e.g. imminent pipe failure, then this is immediately communicated to Public Works Engineering. Public Works Engineering will then orchestrate the repair of the problem by reviewing what is necessary to repair the problem, research the funds required to remedy the problem and selecting appropriate contractors to repair the problem.

F. Training

The City's Sewerage Systems Division has several formal trainings to enhance and improve job

knowledge, skills, and abilities (KSAs). The division’s mission, goals, and policies are reflected in the training. Approximately 95% of all employees attain their training requirements during any given year. There are mandatory regulatory training requirements for the following:

- SSO/Emergency Response
- CPR/First Aid
- Cranes
- Forklifts
- Hazardous Materials
- Lockout/Tagout
- Confined Spaces
- General Safety - PPE
- Traffic Control
- Pipe Repair
- Public Relations
- Pump Station Operations and Maintenance
- CCTV and trench/shoring

The City uses the California Water Resources Control Board mandatory certification program for wastewater operators. The City also requires the possession of a voluntary certification obtained from the California Water Environment Association for many positions at the POTW, including the Collection Systems Section. These certifications range from entry level, Grade I to management, Grade IV positions. The certifications may be obtained in a variety of disciplines, in addition to Collection System Maintenance.

All employees in the division are evaluated annually for performance. On-the-job-training is critical for many specific activities of some positions in the Division. Specifically, the collection system personnel receive on-the-job-training for the use of various kinds of sewer cleaning equipment and devices. Demonstrations, drills, and periodic testing are used to evaluate the skill sets of the employees.

Table 11 lists an approximation of the various trainings used in the Division for Collection System personnel.

Table 9: Training Methods

Training Method	Percentage
Manufacturer	5
On-the-job	80
In-House Classroom	10
Industry-wide	5

G. Safety

The City’s Human Resources Department is responsible for the creation and implementation of a City-wide safety policy. The Public Works Department also has a Safety Officer that oversees the safety program for the Sewer Systems Division. The City has an internet based safety training program call Target Safety with safety courses that all division employees are required to complete.

Specific safety programs and policies are subsequently created to meet the specific needs of the various City departments, divisions, and sections. The Sewer Systems Division has many written safety policies and procedures:

- Lockout/tagout
- Material Safety Data Sheets (MSDS)
- Chemical Handling
- Confined Spaces permit program
- Trench and excavations safety (taken from the City's Public Utilities Department)
- Pathogen training
- Traffic control and work site safety

Each written safety policy and/or procedure has an annual review date.

The Sewer System Division has a computer safety database that is used to record and schedule the safety related activities of the employees. The database has records of trainings, injuries, and certifications. The database can be used to schedule training events for required training, e.g. first aid/CPR, confined spaces, and 24 hour HazMat. The database is also used to determine the lost-time injury rate. In addition to the safety database, the City has developed computer on-line safety courses specific to a particular class of employees. Employees are granted the time to go on-line to receive the required training.

In addition to the written safety policies and procedures, the City maintains a stock of safety items and personal protective equipment, PPE. The individual sections in the Sewer Systems Division also maintain safety equipment and PPE that are specific for their uses. The following is a list describing the equipment and PPE available.

- Rubber/disposable gloves, e.g. latex and nitril
- Confined space ventilation equipment
- Hard hats, safety glasses, rubber boots
- Antibacterial soap and first aid kits
- Tripods or non-emergency rescue equipment
- Fire extinguishers
- Equipment to enter manholes
- Portable crane/hoist
- Atmospheric testing equipment and gas detectors
- Oxygen sensors
- H₂S monitors
- Full body harnesses
- Protective clothing
- Traffic/public access control equipment
- 5-minute escape breathing devices
- Life preservers for lagoons and aeration basins
- Fiberglass and/or wooden ladders for electrical work
- Methane gas or optical vector (OVA) analyzer
- Lower explosion limit (LEL) metering

- Cellular phones

H. Equipment and Replacement Parts

The Collection Systems Section has a fleet of vehicles for the care and maintenance of the sewer collection system. Significant investment has been made over the past few years to upgrade equipment to the latest technology. To assist with maintenance of private laterals a lateral cleaning machine has been purchased. Below is the listing:

- Two (2) high pressure hydro trucks and one high pressure hydro trailer have sewer line cleaning capabilities.
- Eight (8) hydrovac trucks have high pressure sewer line cleaning and vacuum capabilities.
- Two CCTV vans have the ability to video inspect laterals and sewer lines from three to thirty-six inches. These vans are equipped with all the necessary video equipment to create the sewer video in a DVD format.
- One (1) mongoose hydro-jetter for private lateral cleaning.
- Two (2) 10-yard dump trucks
- Two (2) steak-bed utility trucks
- Two (2) backhoe loaders
- Two (2) bobcat loaders
- One (1) Safety utility trailer
- One(1) one pole camera that is used to probe manholes and look upstream and downstream in the sewer from a manhole location.

The Sewerage Systems Division maintains most of the expendable parts for the hydro and hydrovac trucks. These parts include: nozzles, whip hoses, reel hose, and high pressure valves. Some of the collection crew members are certified to perform high pressure hose repairs. All other repairs are performed at the City's vehicle maintenance facility, including scheduled preventive maintenance.

Section V. Design and Performance Provisions

The Public Works Department, Engineering Division is responsible for the capital sewer projects that include repair, replacement and new installation of sewer line(s) and sewage lift-stations.

Design Criteria and Standard Construction Design

The City uses two primary resources to design and review sewer construction drawings. These are:

1. City Standard Drawings for sewer line construction
2. Greenbook Standard Specifications for Public Works Construction, latest edition.

Sewer Construction Design Review

The City's Standard Drawings and Greenbook are used to review sewer line construction blueprints. The procedures for reviewing sewer project designs are contained in the City's

“Criteria for Sewer Facility Design” (**Appendix E**).

POTW Staff Involvement in Sewer Construction Design Review

The personnel at the City’s POTW are involved in the sewer design review process by being able to provide historical and current use information for the engineering group. This information is valuable in the design of sewer lines and appurtenances to insure that the project will meet expectations. The Collection Systems crews’ work orders are processed daily and may reveal capacity problems, structural problems, and inflow and infiltration problems. These problems are then communicated via email, meetings, or memorandums to the engineering division for consideration in sewer design, construction, and rehabilitation.

Testing and Inspection Procedures

The City uses the Greenbook, Section 306, UNDERGROUND CONDUIT CONSTRUCTION, to obtain procedures for inspecting and testing new and rehabilitated sewer projects, both during and after construction. The methods used are video inspection with inclinometer, air test, and water tightness.

Public Works Inspection Personnel

The City’s Public Works Department has nine Public Works Inspectors and one supervisor. These personnel inspect all sewer construction job sites both during and after the constructions are completed. These inspectors insure that the project is built according to approved plan specifications. These inspectors

Inflow and Infiltration Manhole Evaluation

The new manholes that are installed are visually inspected to determine if there are any conditions of inflow or infiltration (I/I). Video pole cameras are used to view areas not easily discernable with the eye. This activity is particularly important in areas with traditionally shallow groundwater tables and if groundwater is detected in the construction trenches during the project life. The Collection System crews will also note any I/I observed during routine sewer line cleaning or video inspection.

Closed Circuit Television (CCTV) Inspection

All new sewer projects are CCTV inspected after completion. This includes all private sewer systems in commercial projects. The video inspection and inclinometer testing determines if the private sewer systems were built according to design and that all construction debris has been removed from the sewer line(s).

Private Sewer Service Lateral Design and Inspection

The City uses the Greenbook, City Standard drawings, and the Uniform Plumbing Code to detail the specifications and construction for private sewer lateral design and construction. The City

requires that like materials must be used when making a lateral connection to the City's sewer collection system. The installation is reviewed by the Building Division Inspectors from the Planning Department. The City also distributes a Sewer Lateral Responsibilities and Repairs policy and procedures (**Appendix J**). This document details the private sewer lateral owner's responsibilities. The owner is responsible for the sewer lateral from the point of origin on their property to their property line with the City pursuant to RMC 14.08.020.

Standardizations of Equipment and Sewer System Components

The City strives to standardize the equipment used in the sewer systems and the component parts to the sewer system. The criteria used for this standardization comes from the City's "Criteria for Sewer Facility Design" and the City's Standard Drawings book. Standardization of the equipment and components serves to improve the operations, repair, and maintenance of the sewer system by eliminating dissimilar sewer system components and materials.

There are four types of sewer pipeline construction projects, each with a public notification process.

The types of construction and notifications are:

1. City constructed within an existing street to either replace a deteriorated existing line or improve capacity. The adjacent residents are notified by door hanger or letter at least one week before the start of construction;
2. City constructed not within an existing street or easement. Residents and property owners are notified of the proposed project, by letter, during the environmental impact report (EIR) process. Affected property owners would be contacted again by letter to enable the City to purchase any easements necessary to complete the project(s);
3. A sewer line constructed by an assessment district. Assessment district(s) are formed upon request of the property owners and this usually takes about six months to several years to complete. The assessment district formation begins with conversations between neighbors and then through several written correspondences. When the assessment districts are established, contact is made, and project information is provided to the affected homeowners in the assessment district; and
4. Developer constructed. Property owners adjacent to a new development are contacted by letter during the entitlement process. The notification could be made from six months to several years in advance of construction. The notification is more about the overall development project rather than directed at the sewer system construction.

If the sewer line project will affect an individual property, then the owner is notified by letter with a follow-up by personal contact, in most cases. Usually the affect to a property is related to an easement acquisition as discussed in Item 2 above.

Section VI. Overflow Emergency Response Plan

The City's Wastewater Division has an Incident Response Procedure (**Appendix L**) that provides

specific instructions for responding to SSOs. These SSOs can be Category 1, greater than 1,000 gallons and any spill of any amount that reaches a drainage channel, surface water or the waters of the United States, Category 2, less than 1,000 gallons with no impact on drainage channels, surface waters or waters of the United States and Category 3, private sewer systems and laterals.

Tracking SSOs

The tracking of Sanitary Sewer Overflows (SSOs) is accomplished by the City’s SSO procedures, the CADME system, a computer relational database, and several Excel spreadsheets. In the past five years there have been 493 SSOs with 28 of those being over 1,000 gallons, or 5.68%. All of the SSOs that occur in the City are documented, regardless of volume, location, owner caused or City caused. This tracking also includes basement backups. Table 12 lists the sewer components and what percentage of the total SSOs in the last five years, 2003 – 2007, inclusive, that came from these components.

Table 10: SSO Locations

Components	Percent of Total SSOs 2003 – 2007
Manholes	30
Main and Trunk Sewers	1
Pump Stations	1
Lateral and Branch Sewers	68

SSO causes are defined as follows:

- Debris Accumulation means a solid material separate from roots and grease, e.g. paper, cloth, rags, fecal material, etc.
- Root Intrusion means roots that have entered the sewer or lateral from slip joints and pipe cracks or defects
- Structural deficiencies means a physical problem with the sewer line or sewer lateral, e.g. pipe collapse, corrosion, fractures, etc., or sewer lift station, including electrical problems that lead to an SSO.
- Vandalism means any material maliciously deposited in the sewer, lateral, or surface area by persons that causes harm or destruction to the sewer line or lateral or cause a public nuisance or hazard.
- Blowovers means vacuum pressure created in the sewer lateral line when the sewer line is cleaned. If the hydrovac hose is brought back too quickly, then vacuum pressure is created in the sewer lateral line. As the end of the hose passes a lateral, the vacuum pressure is released up the lateral and this forces wastewater to come out of drains and toilets in the building or residence.
- Excessive Infiltration and Inflow (I/I) means water entering the sewer system either by high ground water or a rain event. If the I/I is more than the capacity of that the sewer line can convey, then an SSO occurs.
- Fats, Oil and Grease (FOG) means the fats, oils, and grease that are discharged to the sewer from cooking and dishwashing and related activities that cause an SSO.

Table 13 lists the seven causes of SSOs and the percent of each for the total SSOs in 2003-2007.

Table 11: SSO Causes

Causes	Percent of Total SSOs 2003 – 2007
Debris Accumulation	46.9
Root Intrusion	19.97
Structural deficiencies	15.97
Fats, Oil, and Grease	6.8
Blowovers	5.07
Vandalism	3.9
Excessive Infiltration and Inflow	1.4

Table 14 lists the SSO release areas and the percentages each area contributed to the total SSOs for 2003-2007.

Table 12: SSO Release Areas

Location	Percent of Total SSOs 2003 – 2007
Soil	50
Dwellings and Basements	<1
Paved Areas	48
Surface Waters	1
Coastal, Ocean, Beaches	0

Table 15 lists the total number of SSOs, by year, for 2003-2007, the source of the SSO, and how many SSOs were greater than 1,000 gallons.

Table 13: SSO Totals

Year	SSOs	City	Owner	SSOs > 1000 gals
2003	83	N/A	N/A	5
2004	117	N/A	N/A	6
2005	92	35	57	7
2006	92	54	38	6
2007	97	37	60	4
Total	481			28

Section VII. Fats, Oils, and Grease (FOG) Control Program

The discharge of fats, oils, and grease (FOG) from animal and vegetable sources can create sewer line stoppages that result in sanitary sewer overflows (SSOs). Two main sources of FOG discharges are from the restaurant industry and similar facilities (e.g. cafeterias, penal institutions, schools, colleges, and universities with food services, and commercial kitchens) and residential users. The FOG discharges may be a result of poor housekeeping practices at restaurants and from poorly informed decisions by residential users. The result is the same: SSOs.

The City has over 800 restaurants and similar sites. Approximately sixty-three percent of these sites have grease interceptors ranging in size from 750 to 10,000 gallons. The City uses many activities, or elements, to control and prevent the discharge of FOG to the City’s sewer collection system. The

City's FOG Control Program is in **Appendix H**. These program elements include:

1. Site inspections
2. Public education and outreach. **Attachment H** includes the program Fat-Free Sewer brochure and FOG education utility billing insert.
3. Collection system cleaning and assessments
4. Collection system and sewer lateral closed circuit television (CCTV) inspection
5. Enforcement actions by the Environmental Compliance Section (ECS)
6. Grease interceptor retro fits
7. Training

Section VIII. System Evaluation and Capacity Assurance Plan

The City retained the services of PBS&J Engineering in 2002 to evaluate the hydraulic condition of the sewer collection system. PBS&J conducted the sewer capacity work from 2002 to 2006. In 2006 the information was compiled into a Sewer Collection System Master Plan and used as the basis for both short and long-term capital improvement planning. The 2006 Sewer Collection System Master Plan has been used integrated into the City's 2008 Integrated Wastewater Collection and Treatment Facilities Master Plan. This integrated plan is the basis for CIP planning for both the collections and POTW based on the City General Plan through 2025.

The 2006 Sewer Collection System Master Plan evaluated several meter locations to assess the trunk sewer system within the respective study area. The data collected was entered into a computer modeling simulation analysis software. This modeling involved evaluation of available capacity in the existing sewer system using current and future growth conditions. Deficiencies in the collection system were identified by the model and a prioritized list of capital projects was generated for the particular study area.

The City's Capital Improvement Project list for the collection system addresses capacity problems, pump stations, and rehabilitation as a result of the collection system evaluation that was included in the 2006 Sewer Collection System Master Plan. The City also uses the Collection Systems crews to identify sewer lines that are damaged or otherwise need repairs. The Engineering Division meets with the Collection System supervisor and a priority repair plan is created. The Collection System sewer crews complete point repairs and smaller scale line repair projects.

On an annual basis the Sewer Collection CIP program is updated and approved by the City Council as part of the fiscal year City Budget process. From 2003 to 2008 a total of twenty-seven (27) projects were completed or started with six (6) of the projects specifically for pump station improvements and/or replacements; thirteen (13) projects are for sewer line replacement; five (5) projects are to increase capacity of existing sewer lines; and three (3) are for miscellaneous improvements. The capital investment by the City to complete these projects is approximately \$34

million.

The FY 08-09 annual budget CIP program is shown in **Attachment M**. The CIP program represents about a \$40 million planned investment for sewer collection system improvements. These improvements reflect needed infrastructure to support the 2008 Integrated Wastewater Collection and Treatment Facilities Master Plan.

The City's sewer CIP projects are entirely self-supporting through the Sewer Enterprise Fund and funded by residential, commercial, industrial, and Community Service Districts sewer service charges (**Attachment M**). Also providing additional sources of funding are: fees collected from new developments; bond sale proceeds; interest; and low interest loans for specific projects from the State Revolving Fund Loan program. The City's CIP projects have four categories: Plant Capacity/Replacement; Compliance with Regulations; Co-generation; and Collection System Projects.

In November 2008 the City Council approved adjustments to the City sewer service rate fee schedule starting in July 2009. The sewer service fees were based on the needed cost of service to support both operation and maintenance and needed capital improvements to the sewer collection system to implement the 2008 Integrated Wastewater Collection and Treatment Facilities Master Plan.

Section IX. Monitoring, Measurement, and Plan Modifications

The Collection System Section and the Operations Section maintain computer databases that store information about sewer cleaning, SSO incidents and reporting, sewer assessments, service calls, work orders, and performance measures. The Collection System Section computer software tracks time, expenditures, and performance for a wide variety of parameters. These reports are created on a weekly basis and provide an excellent means to assess performance for completion of works orders, footage of sewer line cleaned and video examined, QA/QC video after line cleaning, roach control, new line inspections, lateral locating, construction assistance, service requests, stand by calls, and spill response. An example of this report can be found in **Appendix G**. The results of the Collection System crews' daily route records are entered into a computer database. This computer database has the ability to automatically update the CADME sewer maps to depict trouble spots in the sewer system.

The Operations database has a module for recording and reporting SSOs. This database provides summary and detailed reports for the SSOs including causes, responsibilities, responses, volumes, recovery volumes, and mitigation measures. This database also generates the fax form for reporting the SSO to the California Regional Water Quality Control Board, Riverside County Department of Environmental Health, and the Riverside County Flood Control District and the certification report sent to the Regional Board. Examples of an SSO summary report, detailed report, fax report, and certification statement are found in **Appendix N**.

The summary SSO report is used to assess the overall success of the preventive maintenance program. These reports are printed and posted on a monthly basis for review by the Collection Systems crew so they can judge how effective their work activities have been. If production measures start to decline and performance decreases, then actions can be taken to make the

necessary adjustments to return the performance to an acceptable level. Another report that is posted is the Collection System Monthly Report (**Appendix G**). This report details the year to date (YTD) work performed compared to the expected work required to achieve the goals. This allows the Collection System's crews the opportunity to see how their work is progressing on a weekly basis. If performance starts to decline, then actions can be taken to return the performance to an acceptable level. These actions include: training, coaching, counseling, and discipline.

The City has enrolled into the California Integrated Water Quality System (CIWQS) as required by the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-2003). All SSO occurrences, as required by the regulations, are submitted using the California Integrated Water Quality System (CIWQS). These include the City sanitary sewer system/agency characteristics, collections system questionnaire and spill SSO reports as they occur and require notification to CIWQS.

Historical trends of SSO that have occurred show that roots, grease, debris and pipe condition are the main causes of SSOs within the City sewer collection service area. These categories account for approximately 85% of all SSOs. Of the spills that occur, approximately 60% are SSOs related to private sewer laterals problems and 40% occur within the City owned and operated sewer collection system.

Section X. SSMP Program Audits

The use of program audits is a valuable tool to assess the performance of the elements of the SSMP and to determine if any improvements or changes must be made. Two types of program audits will be used: monthly and annually. Both of these audits will be conducted by the POTW Supervisor and Management staff that has oversight of the Collection Systems and Regulations and Permits. The monthly audits will focus on the achievement, year to date (YTD) of established goals: line cleaning, video inspections, service requests, work orders, and SSO responses, mitigation and reporting. The monthly audits are used to ensure that the performance of the Collection System crews will result in achievement of the goals. The monthly audit process allows for corrections and improvements to ensure that the annual goals are achieved.

The annual audit will be completed at year end and coordinated with the Sewer Enterprise Fund budget process. The annual audit will focus on achievement of the set annual goals described below. Based on the analysis program changes will be made which may include purchasing capital equipment, recommending city policy changes or adjustments to the sewer collection CIP program.

1. To minimize the frequencies of SSOs from the City's collection system.
2. To effectively manage, operate, maintain, and improve the City's collection system, including a review of the CIP projects.
3. To provide notifications and reports to all required regulatory agencies in a timely manner.
4. To effectively mitigate the effects of any SSO that may occur.
5. To provide public education to increase awareness of FOG issues and how they impact the collection system.

Section XI. Communication Program

The Sewer Division has several means and programs to communicate the elements of the SSMP to the public. These are described below.

Direct Mailings

The Environmental Compliance Section developed a utility billing insert and brochure entitled, "CITY OF RIVERSIDE Responsibilities of Homeowners for Maintenance of Household Plumbing and Sewer Lateral Maintenance and Repairs." This brochure explains: what is a sewer lateral, care of sewer laterals, root intrusion problems explanation, cautions about not pouring fats, grease, and oil (FOG) down the drains, and reporting Sanitary Sewer Overflows (SSOs). The brochure encourages residents to be active participants in the SSMP by accurately reporting any suspected SSO, whether in City facilities or private (homes and businesses).

Public Works Web Site

The Public Works web site is used to communicate the SSMP and associated documents to the public that has access to the internet. This website provides general and detailed information about the SSMP. An outline of the SSMP is posted with links to the pdf versions of the SSMP, Pretreatment Ordinance (Riverside Municipal Code Chapter 14.12.), Enforcement Response Plan, and the Fats, Oil, and Grease (FOG) program. The website also allows the public to make comments about the SSMP and any element of the SSMP.

Sewer Benefit Program

In November 2008, the City approved a Sewer Benefit Program. The program is scheduled to be initiated in July 2009. The Sewer Benefit Program goal is to educate the public and business in the community to reduce flow and/or intensity of discharge into the sewer collection system. It is hoped the program will result in water conservation and environmental benefits through the reduction of water and pollutants to the sewer collection system.

The program will be initiated through two components. The first is an ongoing public awareness campaign targeting residential, commercial, institutional and industrial customers. The second is implementation of a financial incentive program for commercial, institutional and industrial customers. The incentive is to install technology to reduce the volume and/or loading from the business to the sewer collection system. Successful implementation and demonstration of the technology will result in a proportional reduction in the business sewer service charges.

Pharmaceutical Disposal Program

The City of Riverside (City) developed and implemented a proper pharmaceutical disposal outreach program, "No Drugs Down the Drain," to educate the service area customers on the impacts these products may have on water quality and the environment. The program, formally launched in May 2008, was unique in that it targeted the audience in both their homes and at distribution sites. Additionally this effort included a tool to capture data to measure and quantify effectiveness. Highlights included mailing out over 120,000 educational postcards to homes,

setting up over 70 point of purchase displays at distribution sites, hosting a take back event where over 200 lbs of unused pharmaceutical were collected, and a decrease in people dumping medications in to the sanitary sewer system as reported in surveys.

The goal of the project was to educate the public on the adverse impacts, to water quality and the environment, associated with dumping unwanted/unused pharmaceuticals into the sanitary sewer system via drains and toilets, and to provide safe alternatives for their disposal. The project objectives included: (1) identifying the locations of the major pharmaceutical distributors in the City; (2) developing effective tools to educate pharmaceutical distributors and the end users; (3) coordinating efforts with other agencies implementing like programs; (4) conducting a feasibility assessment to determine the resources needed for city sponsored collection events (a take back event was held); and (5) quantifying the effectiveness of the outreach program.

Overall the campaign was a success as reported by City staff, residents, businesses, pharmaceutical distributors, and the data collected.

Personal Contact

The City's collection crews respond to all SSOs and are the first means of communication regarding prevention of SSOs and preventive maintenance for the homeowner and business owner. If a residential lateral is the cause of the SSO, then the City's private lateral sewer policy is given to the homeowner and an explanation of what needs to be done to correct the problem. The homeowner then calls a private plumber to make the necessary repairs or corrections. As a courtesy, the City crews will clean the sewer line that services the area to insure that there are no obstructions causing the private lateral problem.

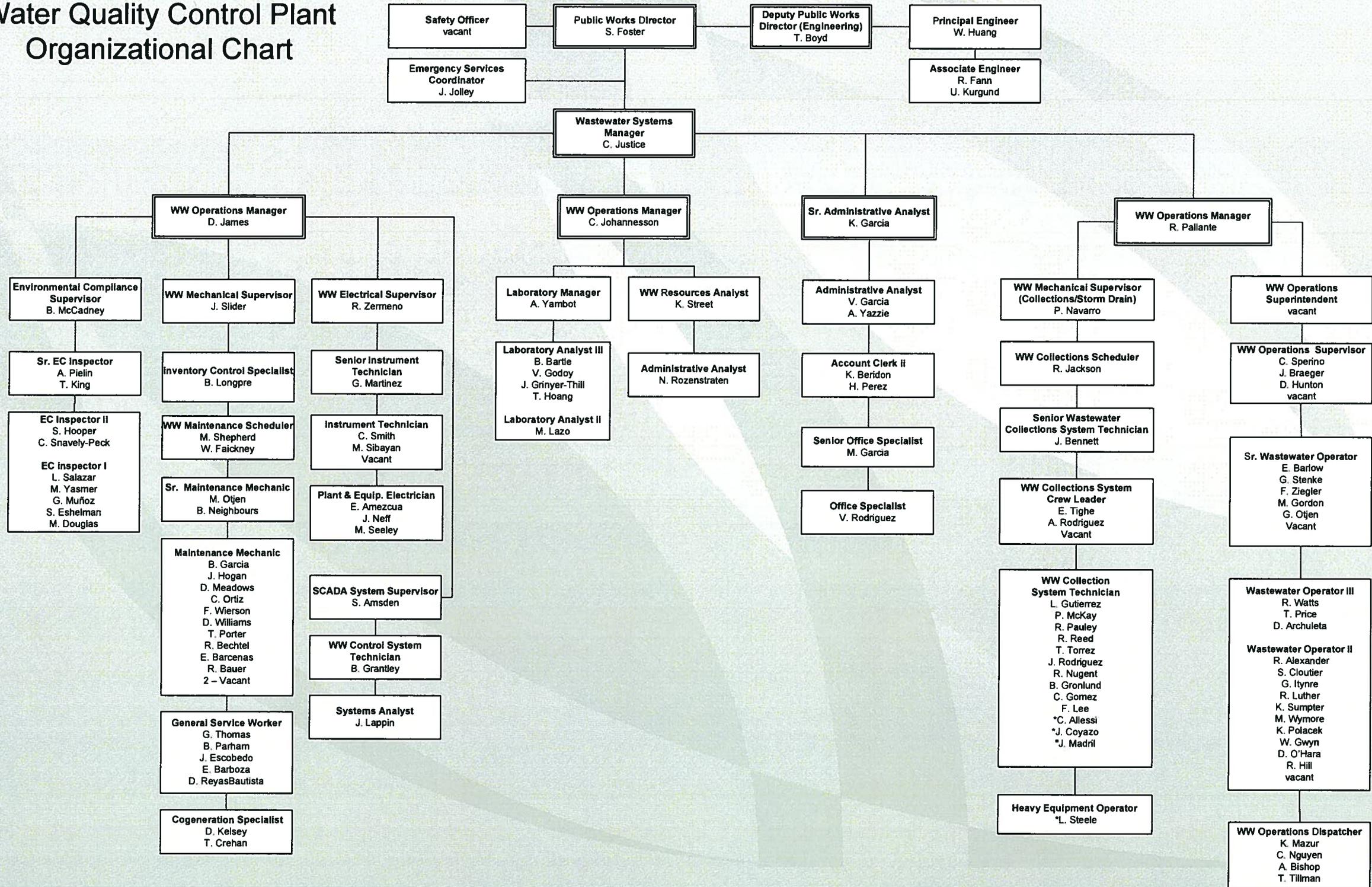
The City's Environmental Compliance Section interacts with the commercial and industrial businesses, including restaurants. Inspections are conducted at restaurants to ensure that grease interceptors, sewer laterals, and outdoor areas are properly maintained. The inspectors use the inspection as an opportunity to communicate laws, regulations, and policies that impact the industry or commercial business. These laws include the FOG program, NPDES Storm Water Permit requirements, the SSMP, and good housekeeping practices. The inspectors are able to deliver program information in the form of brochures and other printed material, in both English and Spanish.

City Call Center

The City created a Call Center to enable the residents of the City to call one number, (951) 826-5311 to report any problem with anything related to City services. This number is frequently used to report SSOs and the report generated from the Call Center service request order (SRO) has a chronological events feature that allows the dispatched to accurately report the information and events of the SSO.

APPENDIX A
RWQCP Organizational Chart

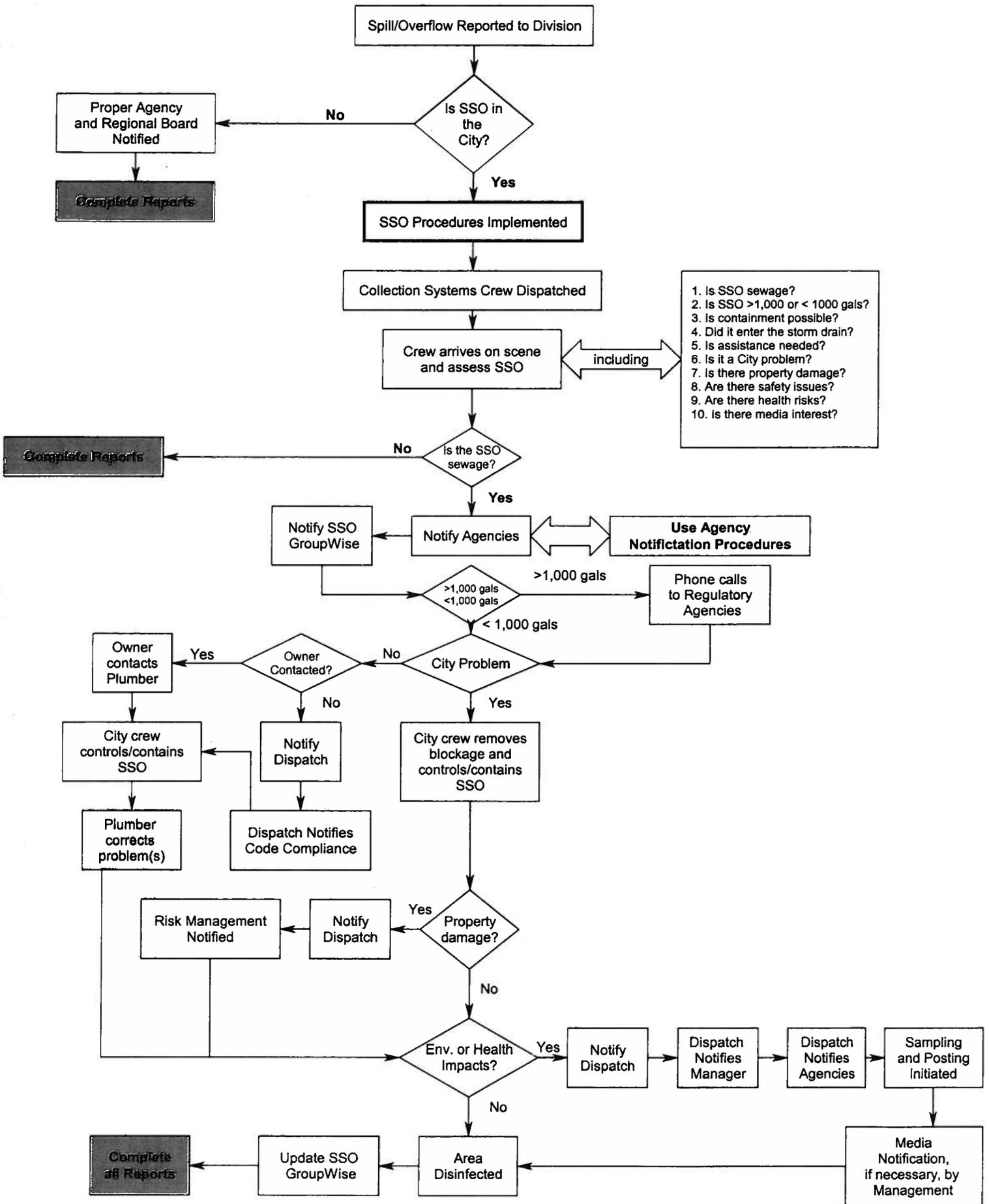
Water Quality Control Plant Organizational Chart



APPENDIX B

Incident Response Flow Chart

City of Riverside SSO Response Flow Chart



Attachment B

APPENDIX C

Sewer Municipal Code

Chapter 14.12

DISCHARGE OF WASTES INTO THE PUBLIC SEWER AND STORM DRAIN
SYSTEMS

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- 14.12.120 Definitions.
- II. General Provisions
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I. Preamble - Definitions

Section 14.12.110 Purpose--Implementation of Regional Board Resolution.

The sewer system of the County of Riverside through Riverside County Service Area ("CSA") 152-C and through agreement with the City of Riverside discharges treated effluent from the City of Riverside's Regional Water Quality Control Plant into permeable soil structures and surface waters of the State, in particular the Santa Ana River. The chemical nature of this effluent affects the quality of water flowing in the receiving stream as well as the quality of

underground waters in the vicinity.

The California Regional Water Quality Control Board, Santa Ana Region, hereinafter called the "Regional Board" has established discharge limitations for the chemical content of sewage effluent discharged by the City. These limitations are set forth from time to time in duly enacted resolutions and orders of the Regional Board.

In order to conform to such sewage effluent discharge limitations and requirements, the City must regulate the discharge of waste to the POTW and the flow of waste into its storm drain system.

A. This Chapter shall provide for the regulation of wastewater discharge in accordance with the Federal Government's objectives of general pretreatment regulations as stated in Section 403.2 of Title 40 of the Code of Federal Regulations (CFR) which are for the following purposes:

1. To prevent the introduction of pollutants into the City's publicly owned treatment works (POTW) which will interfere with the operation of the POTW, including interference with its use or disposal of municipal biosolids;

2. To prevent the introduction of pollutants into the POTW which will pass through the treatment works, inadequately treated, to the receiving waters or otherwise be incompatible with such works;

3. To improve opportunities to recycle and reclaim municipal and industrial wastewater and biosolids;

4. To enable the City to comply with its NPDES Permit conditions, biosolids use and disposal requirements, and any other federal or state laws to which the POTW is subjected;

5. To enable the City to control the privileges to any use of the POTW; and

6. To protect and preserve the health and safety of the citizens and personnel of the City and the Community Services Districts.

B. This Chapter shall apply to all users of the POTW. This Chapter authorizes:

1. The issuance of Industrial User Permits;

2. Monitoring, compliance, and enforcement activities;

3. Administrative review procedures;

4. Industrial waste plan check review services;

5. User reporting requirements;

6. The establishment of fees; and

7. The equitable distribution of costs resulting from the program established herein. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

14.12.120 Definitions.

Unless the context specifically indicates otherwise, the meaning of the terms used in this Chapter shall be as follows:

1. Analytical Methods means the sample analysis techniques prescribed in 40 CFR Part 136. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods, approved by the City, or any other applicable sampling and analytical procedures, including procedures suggested by the City or other parties as approved by the EPA.

2. Authorized Representative means:

A. A responsible corporate officer, if the user is a corporation, of the level of president, secretary, treasurer, or vice president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation;

B. A general partner, managing member or proprietor if the user is a partnership, limited liability company or sole proprietorship respectively;

C. If the user is a federal, state, or local government facility: a director, highest appointed official, employee designated to oversee the operation and performance of the activities of the government facility, or his or her designee.

D. A duly Authorized Representative of the individual designated in paragraph A., B. or C. If the person is a manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental law and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

3. Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 14.12.335 of this Chapter. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. POTWs may develop BMPs, which shall be considered local limits and Pretreatment Standards for the purposes of this Ordinance.

4. Biochemical Oxygen Demand (BOD) means the quantity of oxygen, expressed in mg/L, required to biologically oxidize material in a waste sample measured under standard laboratory methods of five days at twenty degrees Centigrade.

5. Bypass means the intentional diversion of waste streams from any point of a user's pretreatment facility.

6. Categorical Industrial User means all industrial users subject to National Categorical Pretreatment Standards promulgated by the EPA in accordance with Sections 307 (b) and (c) of the Clean Water Act (33 U.S.C. Sec.1317 et seq.), and as listed by the EPA under the appropriate subpart of 40 CFR Chapter I, Subchapter N.

7. Certification Statement means the following text from 40 CFR Part 403.6(a)(2)(ii):
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

8. Chemical Oxygen Demand (COD) means the quantity of oxygen, expressed in mg/L required to chemically oxidize material in a waste sample or wastewater sample, under specific conditions of an oxidizing agent, temperature, and time.

9. City Attorney means the City Attorney for the City or an authorized representative, deputy, or agent appointed by the City Attorney.

10. Class I User means an industrial user with an annual average industrial wastewater discharge of twenty-five thousand gallons or more per day; a Significant Industrial User; and a Categorical Industrial User which has a federally regulated process wastestream discharge.

11. Class II User means an industrial user with an annual average industrial wastewater discharge between ten thousand and twenty-four thousand nine hundred ninety-nine gallons per day.

12. Class III User means an industrial user with an annual average industrial wastewater discharge between one and nine thousand nine hundred ninety-nine gallons per day where the industrial discharge has a reasonable potential for adversely affecting the POTW's operation or violating any pretreatment standard, prohibition, or requirement of this Chapter.

13. Class IV User means any industrial or Categorical Industrial User that has a manufacturing or production process or procedure that generates wastewater and/or waste and that wastewater and/or waste is not discharged to the POTW due to the user's reclamation, recycling, segregation, and/or off-site site disposal of the wastewater and/or waste; or a user subject to categorical pretreatment standards under 40 CFR Part 403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) and has: 1) consistently complied with all applicable categorical Pretreatment Standards and Requirements; 2) has submitted a certification statement required by 40 CFR Part 403.12(q) together with any additional information necessary to support the certification statement; and 3) has never discharged any untreated concentrated wastewater.

14. Class V User means an industrial user that has a temporary need to discharge wastewater to the POTW. The temporary period shall be from one to one hundred eighty days.

15. Class VI User means an industrial user that hauls wastewater by truck or other means from septic tanks, cesspools, seepage pits, and private disposal systems.

16. Collection Agency means a public agency with which the City has an interjurisdictional agreement addressing that agency's sewage collection and discharge to the City for transmission, treatment, and disposal.

17. Collection System means all pipes, sewers and conveyance systems conveying wastewater, owned and maintained by either the City or by tributary Community Services Districts contracting with the City for sewer service, but not including sewer lateral line connections.

18. Combined Wastestream Formula means the formula, as outlined in the general pretreatment regulations of the Clean Water Act, 40 CFR 403.6(e), for determining wastewater discharge limitations for Categorical Industrial Users whose effluent is a mixture of regulated, unregulated, and dilution wastewater as defined in the formula.

19. Community Services District means the Edgemont Community Services District, Jurupa Community Services District, Rubidoux Community Services District, or any other district which contracts with the City for sewer service.

20. Compliance Schedule means a time schedule enforceable under this Chapter containing increments of progress, i.e. milestones, in the form of dates. These milestones shall be for the commencement and/or completion of major events leading to the construction and operation of additional pretreatment facilities or the implementation of policies, procedures or operational management techniques required for the user to comply with all applicable federal, state or local environmental regulations which may directly or indirectly affect the quality of the user's wastewater effluent.

21. Composite Sample means a series of grab samples of equal volume taken at a predetermined time or flow rate for a predetermined period of time, which are combined into one sample.

22. Confined Space, pursuant to California Code of Regulations, Title 8, Section 5157, Subsection b, means a space that:

A. Is large enough and so configured that a person can bodily enter and perform assigned work;

B. Has limited or restricted means for entry or exit (for example, tanks vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and

C. Is not designed for continuous occupancy by a person.

23. Conventional Pollutants means BOD, COD, total suspended solids, pH, fecal coliform, oil and grease, total nitrogen and such additional pollutants as are now or may be in the future specified and controlled in the City's NPDES permit for its POTW where said POTW has been designed and used to reduce or remove such pollutants.

24. Cooling Water means all water used solely for the purpose of cooling a

manufacturing process, equipment, or product.

25. De Minimus User means any user whose industrial wastewater discharge is less than one hundred gallons per day and is not regulated by a federal categorical pretreatment standard or Industrial User Group Permit.

26. Dilution means the increase in use of process water or any other means to dilute a wastestream as a partial or complete substitute for adequate treatment to achieve discharge requirements.

27. Director means the Public Works Director of the City or an authorized representative, deputy, or agent appointed by the Public Works Director.

28. Domestic Septic Wastes means all domestic wastes contained in septic tanks, cesspools, seepage pits, holding tanks and private disposal systems.

29. Domestic Wastewater means wastewater from private residences and wastewater from other premises resulting from the use of water for personal washing, sanitary purposes or the discharge of human excrement and related matter. Domestic wastewater when analyzed by standard methods shall contain no more than two hundred fifty-nine mg/L of total suspended solids, two hundred twenty-eight mg/L of BOD and four hundred fifty-five mg/L of COD.

30. Effluent means treated wastewater flowing from treatment facilities, a POTW, or a user's pretreatment equipment.

31. Emergency means facts or circumstances that the City reasonably determines create an imminent threat of harm to public health or safety, the environment or the POTW.

32. EPA means the United States Environmental Protection Agency.

33. Federal Categorical Pretreatment Standard means the National Pretreatment Standards, established by the EPA, specifying quantities or concentrations of pollutants or pollutant properties which may be discharged or introduced into the POTW by existing or new industrial users in specific industrial categories established as separate regulations under the appropriate subpart of 40 CFR Chapter I, Subchapter N.

34. Good Faith means the user's honest intention to remedy noncompliance together with actions that support the intention without the use of enforcement actions by the City. Examples of these intentions are improved housekeeping practices or the installation of pretreatment equipment to reduce or eliminate pollutants.

35. Grab Sample means an individual sample collected over a period of time not exceeding fifteen minutes.

36. Gravity Separation Interceptor means an approved wastewater detention device, equipment or appurtenance and is designed to remove floatable and settleable material by means of gravity and the solubility of the waste in water from industrial wastewater prior to discharge to the POTW and may include but not be limited to grease interceptors, hydromechanical grease interceptors, grease traps, and sand/oil interceptors.

37. Hazardous Substance means any substance capable of creating imminent endangerment to health or the environment.

38. Heating Water means all water used solely for the heating of a manufacturing process, equipment, or product.

39. Industrial User means all persons, entities, public or private, industrial, commercial, governmental, or institutional which discharge or cause to be discharged, industrial wastewater and waterborne waste into the POTW, or stores waste or wastewater on site for treatment and/or subsequent disposal, and includes Mobile Pressure Washers and Liquid Waste Haulers.

40. Industrial User Permit means a permit, issued by the Public Works Director, regulating the terms and conditions under which an Industrial User may discharge any non-domestic waste to the POTW.

41. Industrial Wastewater means all water containing wastes of the community, excluding domestic wastewater, and includes all wastewater from any producing, manufacturing, processing, institutional, governmental, commercial, restaurant, service,

agricultural or other operation. Industrial wastewater may also include cooling tower and boiler blowdown water, potable water treatment wastewater and chemical toilet wastewater if the wastewater contains levels of pollutants above the wastewater discharge limitations established by this Chapter. Any wastewater that is hauled by truck, rail or other means, and discharged into the sewerage system, shall be considered industrial wastewater, regardless of the original source.

42. Infectious Waste means all disease-containing wastes that normally cause, or significantly contribute to the cause of increased morbidity or mortality of human beings.

43. Interference means any discharge from a user which, alone or in conjunction with a discharge or discharges from other sources both: inhibits or disrupts the POTW, treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the City's NPDES permit including an increase in the magnitude or duration of violation) or of the prevention of biosolids use or disposal in compliance with Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly known as the Resource Conservation and Recovery Act (RCRA)), and state regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act, and any amendments to these Acts or regulations.

44. Ion Exchange Water Softener means a water conditioning apparatus that is designed to remove hardness or other impurities from a user's potable water supply through chemical, not physical means.

45. Liquid Waste Hauler means any person engaged in the truck hauling of liquid wastes from septic tanks, seepage pits, cesspools, or any other private disposal system.

46. Local Limits means specific prohibitions, Best Management Practices or pollutant limitations or pollutant parameters which are developed by the City in accordance with 40 CFR 403.5(c).

47. Lower Explosive Limit (LEL) means the minimum concentration of combustible gas or vapor in the air that will ignite if an ignition source is present.

48. Mass Emission Rate means the rate of pollutant discharge in pounds per day to the POTW.

49. May means permissive.

50. mg/L means milligrams per liter.

51. Milestone means a time-based increment of progress in a compliance schedule, not to exceed nine months. Milestones may be set for construction, operations, repairs, the creation of policies and procedures, or other aspects of pretreatment and discharge.

52. Mobile Pressure Washer means non-residential user of mobile pressure washing equipment to wash or rinse motor vehicles, machinery, buildings, windows, paved areas, sidewalks, parking lots, and outdoor eating areas, etc.

53. Monitoring/Production Information Order (MPIO) means an Administrative Order requiring an industrial user to determine the concentration or mass emission of pollutants in its industrial wastewater discharge, for each day in a fourteen consecutive calendar day period that industrial wastewater is discharged to the POTW, and to provide that data and wastewater discharge flow data for that period.

54. Monthly Average means the average of daily measurements over a calendar month as calculated by adding all the daily measurements taken during the calendar month and dividing that sum by the sum of the number of daily measurements taken in the calendar month.

55. New Source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307 (c) of the Federal Clean Water Act, which will be applicable to such source if such standards are thereafter promulgated in accordance with that Section, provided that:

A. The building, structure, facility or installation is constructed at a site at which no other source is located; or

B. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

C. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source may be considered.

56. NPDES Permit means the then effective National Pollutant Discharge Elimination System Permit issued by the California Regional Water Quality Control Board establishing the Waste Discharge and Producer/User Reclamation Requirements for the Riverside Regional Water Quality Control Plant or storm water requirements for the City's Municipal Separate Storm Sewer System.

57. NSIU means a Non-Significant Industrial User that does not require a Class I-VI Industrial User Permit or is not considered a restaurant.

58. Non-Significant Categorical Industrial User means a user subject to categorical pretreatment standards under 40 CFR Part 403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) and has: 1) consistently complied with all applicable categorical Pretreatment Standards and Requirements; 2) has submitted a certification statement required by 40 CFR Part 403.12(q) together with any additional information necessary to support the certification statement; and 3) has never discharged any untreated concentrated wastewater.

59. Oil and Grease means any of the following in part or in combination:

A. Petroleum derived products, e.g., oils, fuels, lubricants, solvents, cutting oils;

B. Vegetable derived products, e.g., oils, shortenings, water soluble cutting oils; or

C. Animal derived products, e.g., fats, greases, oils, lard.

60. Pass Through means any discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, causes a violation of any requirement of the NPDES Permit, including an increase in the magnitude or duration of a violation.

61. Permit-Required Confined Space pursuant to California Code of Regulations, Title 8, Section 5157, Subsection b means a confined space that has one or more of the following characteristics:

A. Contains or has the potential to contain a hazardous atmosphere;

B. Contains a material that has the potential for engulfing an entrant;

C. Has an internal configuration such that an entrant could be trapped or and tapers to a smaller cross-section; or

D. Contains any other recognized serious safety or health hazard.

62. Person means any individual, firm, company, association, society, general or limited partnership, limited liability company, trust, corporation, governmental agency or group, and includes the plural as well as the singular.

63. Pollutant means conventional pollutants, domestic wastewater, hazardous substances, infectious waste, slug discharges, dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, medical waste, heat, rock, sand, cellar dirt and industrial, municipal, and agricultural waste.

64. Pollutant Exceedance Fee means a fee in addition to the sewer service charge, which is charged on those users whose wastewater discharge pollutants exceed permitted pollutant levels for COD or total suspended solids.

65. Publicly Owned Treatment Works or POTW means a wastewater treatment plant, e.g., the RRWQCP. This definition includes the collection system, within the City and the Community Service Districts, which is the sewers, pipes and other conveyances of wastewater to a treatment plant, except for private sewer lateral connections. It also includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes.

66. Pretreatment means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of the pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by any other means, except dilution.

67. Pretreatment Waste means waste removed by pretreatment.

68. Qualified Professional means a person qualified by education, training, or experience to evaluate and assess pollutant discharges and violations of this Chapter.

69. RCRA means the Resource Conservation and Recovery Act and its Regulations as contained in 40 CFR Part 260-266 and 270.

70. Restaurant means all retail establishments selling prepared foods and drinks for consumption on or off the premises; including lunch counters and refreshment stands. Retail establishments, lunch counters, and drinking places selling prepared food and drink as a subordinate service incidental to their primary operations, and institutional facilities (e.g. schools, hospitals, jails, prisons, and juvenile halls), which serve food on the premises shall also be considered restaurants.

71. Shall means mandatory.

72. Self-monitoring means wastewater samples taken by a user or the user's contracted laboratory, consultant, engineer, or similar entity.

73. Sewer Lateral Line means the wastewater collection pipe extending from the premises where the wastewater is generated to the premises' property line.

74. Significant Industrial User (SIU) means all Categorical Industrial Users and any user which discharges one or more of the following:

A. Industrial wastewater at an average rate of at least twenty-five thousand gallons per day (gpd) to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

B. A process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the City's POTW; or

C. Wastewater that the Director requires to be controlled by a Class I Industrial User Permit.

75. Significant Noncompliance means any violation meeting one or more of the following criteria:

A. Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements for the same pollutant parameter during a six consecutive month period exceed by any magnitude a numeric pretreatment standard or requirement, including instantaneous limits;

B. Technical review criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements for the same pollutant parameter during a six consecutive month period exceed the product of a numeric pretreatment standard or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);

C. Any other violation of a numeric pretreatment standard or requirement (including narrative standards and Best Management Practices) determined by the City to cause, in whole or in part: POTW damage, interference, or pass through; danger to POTW personnel; or the

public health, safety and welfare;

D. Any discharge of a pollutant posing imminent danger to human health or welfare, or to the environment, or resulting in the City's exercise of its emergency authority to stop or prevent such a discharge;

E. Failure to meet, within ninety days after the scheduled date, a compliance schedule Milestone;

F. Failure to provide, within forty-five days of the scheduled date, any required reports such as baseline monitoring reports, compliance reports, and self-monitoring reports;

G. Failure to pay, within thirty days, all application, permit, or enforcement fees;

H. Failure to accurately report non-compliance; or

I. Any other violation(s), which may include failure to implement required Best Management Practices, which the City believes will adversely affect the City's pretreatment program.

76. Single Pass Cooling Water means water that is used solely for the purpose of cooling and is used only once before being discharged.

77. Single Pass Heating Water means water that is used solely for the purpose of heating and is used only once before being discharged.

78. Slug Discharge means any discharge of wastewater of a non-routine, episodic nature including but not limited to an accidental spill, or a non-customary batch discharge which could damage, interfere with, or pass through the POTW or otherwise violate this Chapter, local limits, permit conditions, or other regulations.

79. Storm Drain means a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, cross gutters, storm water pump and lift stations, parking lots, paved areas, streets, and natural water courses used to collect and direct storm water to a receiving body of water or aquifer recharge basins.

80. Storm Water means water flowing or discharged as a result of rain, snow, or other precipitation.

81. Temporary User means any user granted temporary permission under a Class V Industrial User Permit to discharge unpolluted water or wastewater to the sewer system.

82. Total Suspended Solids means the total amount of residue retained by laboratory filtration and dried at 103-105 degrees C.

83. Total Toxic Organics (TTO) means the sum of all quantifiable values greater than 0.01 mg/L of the regulated toxic organic compounds which are found in the user's industrial wastewater discharge.

84. Unpolluted Water means cooling and heating water, single pass cooling and heating water, air conditioning condensate, ice melt, condensate, landscape irrigation, crop irrigation, rain water, and other water not containing any pollutant, or water whose discharge would not otherwise violate any receiving water quality standards.

85. Upset means an exceptional incident which causes temporary and unintentional non-compliance with the discharge limitations or prohibitions applicable to a user or the POTW.

86. User means any person, public or private, residential, industrial, commercial, governmental, or institutional which discharges or causes to be discharged wastewater or waterborne waste to the POTW or storm drain.

87. Waste means any discarded solid, semi-solid, liquid, or gaseous material. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6398 §1, 1997; Ord. 6232 §2 (part), 1995)

II. General Provisions

Section 14.12.200 Administration.

A. Rules. The Director may adopt rules consistent with this Chapter for the

administration of the wastewater system. Those rules may include, but shall not be limited to, discharge limitations, pretreatment requirements, standards for wastewater, sewer connections, and implementation of Federal Water Pollution Control and Clean Water Act standards.

B. General Powers of the Director. Except as otherwise provided herein, the Director shall execute the provisions of this Chapter. The Director may delegate powers or duties to persons acting in the beneficial interest or employ of the City, but shall remain responsible. In addition to the authority to prevent or eliminate discharges through enforcement of discharge limitations and prohibitions, the Director shall have the following authorities:

1. Protect the health or welfare of the community. The Director, after informal notice to the affected user, may immediately and effectively stop or prevent any discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater collection system, whenever the discharge reasonably appears to present an imminent danger to the health or welfare of the community;

2. Protect the environment or the POTW. The Director, after written order to the user, may stop or prevent any discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater system, whenever such discharge presents or may present an imminent and substantial danger to the environment or threatens to damage or interfere with the operation of the POTW; and

3. The discharges referred to in subdivisions 1 and 2 above may be stopped or prevented without regard to the compliance of the user with other provisions of this Chapter.

C. Specific Powers of the Director. The Director may take any of the following actions to prevent the actual or threatened discharge of polluted wastewater to the POTW:

1. Stop or prevent the discharge of such wastewater;

2. Require the user to demonstrate that process modifications will reduce or eliminate the pollutant or substance so that the discharge will not violate this Chapter;

3. Require treatment to reduce or eliminate the pollutants so that the discharge will not violate this Chapter;

4. Require the user to pay Industrial User Permit fees, inspection fees and any additional cost or expense incurred by the City by excess pollutant loads discharged to the POTW, or imposed fines, penalties or legal expenses, and attorneys fees;

5. Obtain timely and factual reports from the person responsible for such discharge; and

6. Take any other action to achieve the purposes of this Chapter. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.205 Notice.

Notices and orders under this Chapter shall be deemed served if given to user as follows:

A. Correctly addressed, postage pre-paid and deposited in the United States mail, or personally delivered; or

B. To user or user's authorized representative at user's address as listed in user's permit, or application for a permit, or user's facility that is subject of the notice or order; and

C. Shall be deemed received on the date personally delivered or on the third day after deposit in the United States mail as provided in this Section. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.210 Confidentiality.

Information submitted by the user to the City pursuant to this Chapter may be claimed as confidential by the user. Any such claim must be asserted at the time of submission by placing the words "Confidential Business Information" on each page containing such information. If no claim is made at the time of submission, the City may make the information available to the

public without further notice. Sample data obtained by either the user or the City shall not be considered confidential. Production-related information used to calculate mass-based discharge limitations or required to develop an Industrial User Permit shall not be considered confidential information. Confidential information may be made available, upon request, to governmental agencies for enforcement or judicial purposes related to this Chapter, the NPDES Permit or the pretreatment program, and as required by state or federal law. In the event of a conflict between this Section and the Public Records Act or Freedom of Information Act, those acts shall prevail. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.215 Inspection.

A. The Director may inspect any user facilities to ascertain whether the requirements of this Chapter are being met. Persons on the premises shall allow the Director ready access at all reasonable times to all parts of the premises for the purpose of inspection, photography or electronic image recording, sampling, and records examination of any facility, equipment (including monitoring and pollution control equipment), practices or operations regulated or required by an Industrial User Permit or other control document, RMC Chapter 14.12, or the City's NPDES Storm Water Permit.

B. The user shall ensure that there is always a person on site, during normal business hours, that has knowledge of the user's processes and activities to accompany the Director during the inspection.

C. The user shall provide immediate access when the Director believes an emergency exists, regardless of the hour of the day.

D. All pretreatment equipment shall be immediately accessible at all times for inspection. At no time shall any material, debris, obstacles or obstructions be placed in such a manner that will prevent immediate access to the pretreatment equipment.

E. No person shall interfere with, delay, resist or refuse entrance to the Director when attempting to inspect any facility involved with a discharge into the City's POTW or storm drain.

F. The user shall make all necessary arrangements with the user's security personnel so that, upon presentation of suitable identification, personnel from the City will be permitted to enter, without delay, for the purpose of performing their specific responsibilities.

G. The user shall make all records required to be kept under the provisions of this Chapter available for copying by the Director. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.220 Inspection Warrants.

If the Director is refused inspection access to a building, structure, or property, or any part thereof, the Director may obtain an inspection warrant pursuant to Code of Civil Procedure Section 1822.50 et seq. No warrant is required in the event of an emergency threatening the public health or safety or the City's POTW. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.225 Monitoring.

A. At the direction of the Director, any user discharging wastewater into the POTW may be required to install sampling station(s) or measuring device(s) to measure the quality and quantity of wastewater discharged or to obtain samples. Measuring devices may include, but are not limited to: flow meters and recorders, pH meters and recorders, electrical conductivity meters and recorders, process water meters, and automatic wastewater samplers.

B. The sampling station and/or measuring device shall be provided by the user in compliance with this Chapter and all applicable building, plumbing, and construction codes. The City may require that the measuring devices have a security closure that can be locked with a

City lock. Construction shall be completed within a reasonable time as required in written notification from the Director.

C. The Director may temporarily install upon the user's property devices to conduct wastewater sampling, compliance monitoring or metering operations.

D. No user shall interfere with, delay, resist, or refuse entrance to authorized City personnel installing wastewater monitoring equipment on the user's property. Any permanent or temporary obstruction prohibiting direct access to the sampling station or measuring device shall be immediately removed by the user or property owner at the written or verbal request of the Director and shall not be replaced.

E. The sampling station or measuring devices shall be maintained for continuous sampling or metering. The measuring devices shall be calibrated as often as necessary to ensure accurate measurements according to manufacturer's specifications. All maintenance and calibration work shall be performed at the user's expense.

F. All users that self-monitor shall have all samples collected and analyzed according to 40 CFR 403.12(b)(5).

G. All user sampling and analysis must comply with 40 CFR Part 403.12(b)(5). The laboratory must be certified by the State of California, Department of Health Services as being competent to perform the pollutant analyses requested, shall perform all laboratory analyses and must be acceptable to the Director. All samples must have the following information:

1. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;

2. The dates the analyses were performed;

3. Who performed the analyses;

4. The analytical techniques/methods used;

5. The results of such analyses;

6. A copy of the laboratory sample analysis sheet; and

7. The user's completed monitoring report form.

H. All users required to install and maintain measuring devices shall immediately report the failure of such devices. The immediate notification shall be by telephone call, telefax transmission, electronic report, personal visit, or a hand-delivered notification to the City's Environmental Compliance Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the Director documenting the dates, times, and cause of the failure, and the corrective actions taken.

I. Any wastewater samples taken from a user's approved or designated sampling location shall be considered representative of the wastewater discharged to the POTW. For users that have interceptors, but no approved or designated sampling location, the last chamber of the interceptor shall be the designated sampling location.

J. All users required to self-monitor shall report to the Director pollutant violations from any required wastewater sample within twenty-four hours of becoming aware of the violation. The reporting may be by telephone call, telefax transmission, electronic report, or a personal visit to the City's Environmental Compliance Office. The violation report shall contain the date and time of the sample, the daily discharge flow for the sample, possible explanations for the violation, and the date scheduled for the required resample. Failure to report pollutant violations as stated is a violation of this Chapter and may subject the user to enforcement actions.

K. All users required to take daily twenty-four hour readings of their wastewater effluent flow shall notify Director of exceedance of its permitted flow within twenty-four hours of discovering the exceedance by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered notification, to the City's Environmental Compliance Office or file a monthly report indicating the days of the month when the permitted flow was exceeded and the reason for the exceedance. The monthly report shall be submitted to the City's Environmental Compliance Office by the fifth business day following the end of the preceding month. The flow

exceedance notice shall have the total flow, date of the violation, the reason for the flow exceedance, and the name of the person reporting the flow exceedance. Failure to report such flow exceedance is unlawful and may subject the user to enforcement actions.

L. All users with a discovered pollutant violation shall resample their wastewater discharge for that pollutant. This mandatory resampling is independent of any other wastewater sampling requirement. User shall submit the laboratory results from the resamples, all required forms and a written explanation detailing the cause(s) and correction action(s) of the violation to the Director no later than forty-five calendar days after the user discovers or becomes aware of the violation. Failure to submit the laboratory results and all required documents within the forty-five-day requirement shall result in Significant Noncompliance for the user and the issuance of a Notice of Violation to the user.

M. All users whose wastewater discharge is monitored by the City shall be responsible for all resampling requirements contained in Subsection L of this Section when a pollutant violation is detected. The City shall notify the user of the resampling requirements by a telephone call, telefax transmission, or personal visit within seventy-two hours of confirming a pollutant violation.

N. All users which desire to conduct their own wastewater sampling shall submit a written plan describing the equipment used, equipment cleaning methodology, employee training, sample preservation methods, and chain of custody procedures. The user's wastewater sampling plan must be approved by the Director prior to the implementation of the plan. Any sample taken by a user without an approved plan or from an unapproved laboratory shall not be valid and may subject the user to enforcement actions.

O. All users shall report all additional non-permit required samples or monitoring results with fifteen calendar days of receiving the sample or monitoring results.

P. All permitted users that take more than one grab sample in a single calendar day to demonstrate compliance with oil and grease shall also comply with the following conditions:

1. A minimum of four grab samples separated by a minimum of two hours each shall be taken in a single calendar day;

2. Each individual oil and grease grab sample shall be analyzed separately and the analytical results from each sample shall be averaged;

3. No single oil and grease grab sample shall exceed the user's permitted limit by more than forty percent; and

4. The average result from all individual oil and grease grab samples taken in a single calendar day shall not exceed the user's permitted limit. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.230 Record Keeping.

All users shall keep records of waste hauling, reclamations, wastewater pretreatment, monitoring device recording charts and calibration reports, effluent flow, and sample analysis data, on the site of the wastewater generation. All these records are subject to inspection and copy by Director. All records must be kept on the site of the wastewater generation for a minimum period of three years. The record retention period may be extended beyond three years in the event criminal or civil action is taken or an extensive user history is required. Records required by company or corporate policy to be kept off-site shall be telefaxed or submitted electronically to the Environmental Compliance Office within seventy-two hours of the records request. Failure to submit the records as required is a violation of this Chapter and may result in enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.235 Flow Measurement.

Any industrial user who discharges twenty-five thousand gallons per day or more of industrial wastewater, or as required by the Director, shall install a continuous monitoring flow meter capable of measuring the industrial user's entire industrial wastewater discharged to the POTW. The user shall record and log the flow on a daily basis. The flow meter shall conform to standards issued by the Director. The user shall report the flow meter type and size to the Director before installation. The flow meter shall be equipped with a non-resetting flow totalizer and a paper chart recorder that records the time, day, date and volume of discharge. All flow meters shall be calibrated as often as necessary to ensure accuracy of the actual flow discharged, within plus or minus five percent. All flow meter installations shall have the flow meter size, type, totalizer units, and flow multipliers posted in a conspicuous place near the flow meter recorder. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.240 Infectious Waste Disposal.

A. No user that generates liquid infectious waste other than domestic wastewater shall discharge to the POTW without first obtaining written permission from the Director. Such a user shall submit a written request to the Director that shall include:

1. The source and volume of the infectious waste;
2. The procedures and equipment used for waste disinfection; and
3. Employee training procedures for the legal disposal of infectious waste.

B. If the Director believes that the waste would not be completely disinfected, the Director shall issue a written denial to the user and state the reasons for the denial. This denial shall be issued within thirty days from receipt of the written request.

C. If the Director believes that complete disinfection of the waste can be achieved prior to discharge of the waste to the POTW, then a conditional approval may be granted for the disposal of the waste. A letter of approval shall be sent to the user within thirty days of receipt of the written request.

D. If the user is granted permission for disposal, the user:

1. Shall completely disinfect the liquid waste prior to discharge to the POTW as outlined in the approval letter;
2. Shall not dispose of solid infectious waste to the POTW, including hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature, or any portions of the human or animal anatomy whether whole, part, or ground; and
3. Shall be subject to periodic inspections to verify that all disinfection methods, procedures, and practices are being performed. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.245 Water Softeners.

A. No user shall install, replace, enlarge, or use any regenerative-type water softener unless the apparatus complies with the following conditions:

1. The apparatus is a self-generating water softener;
2. The brine solutions generated during the backwash cycles of the water softener shall be segregated from the fresh water rinses for disposal to a legal brine disposal site;
3. The backwash equipment shall be equipped with an electrical conductivity controlled discharge valve that controls the wastewater discharge to the POTW. This valve shall be calibrated to control and prevent any discharge of wastewater that exceeds the maximum total dissolved solids concentration established by resolution; and
4. The user shall maintain the electrical conductivity controlled discharge valve in proper operating conditions at all times. In the event of a valve failure, the user shall immediately cease the regeneration discharge and immediately notify the Director of the failure by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered

notification, to the City's Environmental Compliance Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the Director documenting the dates, times, and cause of the failure, and the corrective actions taken.

B. Pursuant to California Health and Safety Code Sections 116775-116795, no residential water softening or conditioning appliance may be installed except in the following circumstances:

1. The regeneration is performed at a nonresidential facility separate from the location of the residence where such appliance is used; or

2. The regeneration discharges to the waste disposal system of the residence where such appliance is used and the following conditions are satisfied:

a. The appliance activates regeneration by demand control;

b. An appliance installed on or after January 1, 2000, shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than three thousand three hundred fifty grains of hardness removed per pound of salt used in generation. An appliance installed on or after January 1, 2002, shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than four thousand grains of hardness removed per pound of salt used in generation;

c. The installation of the appliance is accompanied by the simultaneous installation of the following softened or conditioned water conservation devices on all fixtures using softened or conditioned water, unless such devices are already in place or are prohibited by local and state plumbing and building standards or unless such devices will adversely restrict the normal operation of such fixtures:

i. Faucet flow restrictors.

ii. Shower head restrictors.

iii. Toilet reservoir dams.

iv. A piping system installed so that untreated (unsoftened or unconditioned) supply water is carried to hose bibs and sill cocks which serve water to the outside of the house, except that bypass valves may be installed on homes with slab foundations constructed prior to the date of installation; or condominiums constructed prior to the date of installation; or otherwise where a piping system is physically inhibited.

C. The certification required under Subsection B of this Section shall be provided by the new user of the appliance and shall be completed by a contractor having a valid Class C-55 water conditioning contractor's license or Class C-36 plumbing contractor's license and filed with the City's Building Division. The certification form shall contain all of the following information:

1. Name and address of homeowner;

2. Manufacturer of the water softening or conditioning appliance, model number of the appliance, pounds of salt used per regeneration, and salt efficiency rating at the time of certification;

3. Manufacturer of the water-saving devices installed, model number, and number installed; and

4. Name, address, and the specialty contractor's license number of the C-55 and C-36 licensee making the certification.

D. Any person installing or operating a water conditioning apparatus of any kind shall make such apparatus accessible to the Director for inspection at reasonable times.

E. Notwithstanding Subdivision 2 of Subsection B. of this Section, the City may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if Director makes all of the following findings:

1. The POTW is not in compliance with the terms of its NPDES permit;

2. Limiting the availability or installation of the appliances is the only available means of achieving compliance with waste discharge requirements issued by the Regional Board; and

3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible.

F. Notwithstanding Subdivision 2 of Subsection B of this Section, the City may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if Director makes all of the following findings:

1. The POTW is not in compliance with water reclamation requirements, or a master reclamation permit, issued by the California Regional Water Quality Control Board pursuant to Article 4 (commencing with § 13520) of Chapter 7 of Division 7 of the Water Code;

2. Limiting the availability or prohibiting the installation of the appliances is the only available means of achieving compliance with the water reclamation requirements or the master reclamation permit issued by the Regional Board; and

3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.250 Drain Screen Requirements.

Any user that has floor drains, floor sinks, drains, mop sinks, can washes or any other drain designed to convey wastewater to the sewer system, shall have a screen in place in said drains capable of excluding all particles greater than three-eighths of an inch in any dimension. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.255 Gravity Separation Interceptor.

No user that operates or maintains a facility for the servicing or repair of roadway machinery, industrial transportation equipment, motor vehicles, public or private transportation vehicles, and any other facility as required by the Director, shall discharge wastewater to the POTW without a gravity separation interceptor ("interceptor") that complies with all of the requirements of Sections 14.12.255 through 14.12.270. Domestic wastewater shall not be allowed to pass through the interceptor. The Director shall determine the interceptor's operational fluid capacity. The interceptor shall have a minimum operational fluid capacity of not less than one hundred gallons, and shall be designed to retain any material that will float or any material that will settle and shall meet all the requirements of Section 14.12.260 of this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.260 Interceptor Requirements.

A. The interceptor shall be watertight, structurally sound, durable, and shall have a minimum of two chambers, excluding sample box if so equipped, with a separate ring and cover for each chamber. The sample box, if the interceptor is so equipped, shall also have a separate ring and cover. All rings shall be affixed to the interceptor to insure a gas and watertight seal.

B. Each interceptor cover shall expose and provide access to each chamber's inlet tee, outlet tee, and/or mid-wall tee.

C. All interceptor chambers shall be immediately accessible at all times for inspection, sampling, cleaning, and maintenance. The user shall provide a separate ring and cover for each separate interceptor chamber, including sample box and any additional covers to insure adequate cleaning and inspection capabilities. All rings shall be affixed to the interceptor to insure a gas and watertight seal. At no time shall any material, debris, obstacles or other obstructions be placed in such a manner that will prevent immediate access to the interceptor.

D. Any interceptor legally and properly installed before the effective date of this Chapter shall be acceptable as an alternative to the interceptor requirements of this Chapter providing that the interceptor shall be effective in removing floatable and settleable material and shall be immediately accessible for inspection, sampling, cleaning, and maintenance.

E. All drains and openings connected to an approved gravity separation interceptor shall be equipped with screens or devices which will exclude from the wastewater discharge all material and particles with a cubic dimension greater than three-eighths of an inch in any dimension.

F. All gravity separation interceptors shall be equipped with an influent tee extending no more than six inches below the operating fluid level of the interceptor. The interceptor shall also have tees extending to within twelve inches of the bottom at the exit side of each chamber in the interceptor, including the final chamber. In a case where a manufacturer's engineered interceptor design is contrary to this requirement, the Director shall review the design and either approve or deny an exemption to this requirement.

G. All interceptors shall be equipped with a sample box or sample wye as determined by the Director.

H. No user shall install or use any elbows or tees in any interceptor sample box.

I. No user shall install any interceptor, sample box, or sample wye in a confined space or a permit-required confined space.

J. At all times, all drain lines leading to the interceptor shall be kept free of any debris or material that may cause a drain line blockage.

K. If the Director finds, either by engineering knowledge or by observation, that an interceptor is incapable of adequately retaining floatable and settleable material in the wastewater flow, is structurally inadequate, or is undersized for the facility, the Director may reject such interceptor and declare that the interceptor does not meet the requirements of this Section. The user shall thereupon be required to, modify or repair the interceptor, or install an adequate interceptor, acceptable to the Director at the user's expense. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.265 Standard Interceptor Designs.

The Director shall maintain a file, available to the public, of suitable interceptor designs. This file shall be for informational purposes only and is not an endorsement of any kind. Installation of an interceptor of a design shown in this file, or of any design meeting the size requirements set forth in this Chapter, shall not subject the City to any liability for the adequacy of the interceptor under actual conditions of use. The user and property owner shall not be relieved of the responsibility for keeping floatable and settleable material out of the POTW. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.270 Interceptor Maintenance.

A. Any person who owns or operates an interceptor shall properly maintain it at all times. The interceptor shall be cleaned as often as necessary to ensure that sediment and floating materials do not accumulate to impair the efficiency of the interceptor and odors do not cause a public nuisance. An interceptor is not considered to be properly maintained, if for any reason the interceptor is not in good working condition or if the operational fluid capacity has been reduced by more than twenty-five percent by the accumulation of floating material, sediment, oil or grease, or other liquids that have limited or no solubility in water.

B. The use of chemicals, enzymes, proteins or other materials to emulsify, suspend, or dissolve oil and grease is prohibited. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.

C. No user shall use any microbiological product in a grease interceptor that was not specifically designed to use such microbiological agents to metabolize fats, oils, and greases. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.

D. When an interceptor is cleaned, the entire contents of the interceptor from all chambers and sample box shall be removed. The removed sediment, solids, liquid and floating material shall not be reintroduced or decanted into the interceptor, sample box, sewer cleanout, other interceptor or other unlawful opening of a collection system or private sewer systems and shall be lawfully disposed of other than to the private sewer systems, POTW or storm drain, and shall not be reintroduced into the interceptor or discharged into another interceptor at another location not designed and permitted to accept such waste. The City's grease wastewater receiving station is an authorized disposal site at the City's treatment plant for disposal of grease interceptor wastewater from authorized companies.

E. If the interceptor is not maintained adequately, then the interceptor shall be resized and the user shall install one that is effective in accomplishing the intended purpose, or the City may require a mandatory pumping schedule for the interceptor. Failure to pump the interceptor as required is a violation of this Chapter and may subject the user to enforcement action.

F. The owner and lessee, sub-lessee, proprietor, operator and superintendent of any facility, required to install an interceptor or use an existing interceptor are individually and severally liable for any failure to properly maintain such interceptor. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.275 Restaurants.

A. No person who owns, operates, or maintains a restaurant (restaurant user) shall discharge wastewater from such restaurant to the POTW without first receiving a written determination from Director, and complying with such determination, of the POTW interceptor requirements. Restaurant users shall complete and submit a Wastewater Discharge Survey Form and conditional waiver to the Director for review of interceptor requirements. Within ten business days of receipt of the Wastewater Discharge Survey Form, Director shall notify such restaurant user of Director's determination whether an interceptor is required prior to discharge into the POTW. It is unlawful for any restaurant user notified by the Director as needing an interceptor to discharge restaurant wastewater into the POTW without use of a grease interceptor.

B. The Director shall calculate the size of the interceptor in accordance with the Uniform Plumbing Code, Appendix H until January 1, 2008, and Chapter 10, Table 10-3 thereafter, as adopted by the City, provided that any restaurant determined to require an interceptor of more than one hundred gallons and less than seven hundred fifty gallons shall install a minimum seven hundred fifty gallon interceptor. The Director's determination shall consider the type of restaurant, the condition of the collection system serving the restaurant, and the possible adverse affects caused by the restaurant's wastewater discharge.

C. Any restaurant user required to install an interceptor shall direct all wastewater and waste from floor drains, floor sinks, sinks, waste container wash racks, dishwashers, mop sinks, utility sinks and garbage grinders through an approved interceptor complying with this Chapter. The user shall keep all domestic wastewater from restrooms, showers, drinking fountains, and condensate (i.e., ice melt, air conditioning condensate) separate from the restaurant wastewater until the restaurant wastewater has passed through all interceptors, pretreatment equipment, devices, or monitoring stations.

D. All restaurant users shall separate, to the maximum extent practicable, all fats, oils, and greases from the restaurant wastewater for off-site disposal. Each restaurant user shall store these separated wastes in accordance with all applicable laws, rules, policies and regulations, including the Riverside County Department of Environmental Health and this Chapter.

E. All floor sinks, floor drains, and drains shall be equipped with screens or devices that shall exclude from the wastewater discharged all particles larger than three eighths of an inch in any dimension.

F. Any restaurant user required to install an interceptor shall maintain the interceptor in accordance with Section 14.12.270. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.280 Prohibited Restaurant Surface Discharges.

A. No restaurant user shall discharge any wastewater to a storm drain, service dock areas, parking lot, or ground. All wastewater generated by restaurants, including trash enclosure wash/rinse water and drive through wash/rinse water, shall be disposed of to sewer through an approved gravity separation interceptor, or a sample station connected to sewer, or hauled off-site and disposed of at a legal disposal site.

B. If a restaurant has a blocked sewer lateral or failed sewage pumping device which causes the discharge of wastewater to the storm drain, service dock areas, parking lot, drive through areas, or ground, the restaurant user shall immediately cease all activities causing that discharge. Failure to comply with this requirement shall be considered a violation of this Chapter and shall subject the restaurant user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.285 Conditional Waivers.

Notwithstanding Section 14.12.275 Subsection B, the Director may conditionally waive the interceptor requirements for any restaurant user determined in the Director's discretion not to pose adverse effects on the POTW. The Director may revoke such conditional waiver and require the installation of an appropriately sized grease interceptor for the following reasons:

- A. Changes in menu;
- B. Falsification of information submitted in the City's wastewater discharge survey form;
- C. Changes in operating hours;
- D. Changes in maximum seating capacity;
- E. Changes in maximum meals served per peak hour;
- F. Changes in equipment used;
- G. Changes in the nature of the wastewater discharged as determined by random and scheduled wastewater sampling and analyses; or
- H. Any overflows caused by the restaurant user's wastewater discharge. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.290 Wastewater Discharge Survey.

The Director may require a non-residential user that has a sewer connection to the POTW or a storm drain connection to the City's storm drain system to complete a Wastewater Discharge Survey. The purpose of the survey is to gather information to determine if an Industrial User Permit or other control document is necessary and to provide current information about the user. Failure to complete and return a required survey may subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 § 2 (part), 2002; Ord. 6232 § 2 (part), 1995)

Section 14.12.295 Liquid Waste Haulers.

A. It is unlawful for any Liquid Waste Hauler to discharge to the City's designated disposal site without a current City Liquid Waste Hauler's permit, a current City business license, Riverside County Department of Environmental Health Liquid Waste Hauler Permit, and decal, or to otherwise fail to comply with the provisions of this Chapter. The City shall only

accept domestic wastewater from Liquid Waste Haulers. No other waste shall be accepted or discharged to the City's POTW. No truck or trailer vacuum tank that exceeds 6,000 gallons in volume shall be permitted unless the truck or trailer has been modified to only contain 6,000 gallons of total volume at all times.

B. No person shall violate any term or condition of a City Liquid Waste Hauler Permit, Liquid Waste Hauler Permit conditions may include, but are not limited to, the following:

1. Liquid Waste Hauler's obligation to comply with all permit terms and conditions;
2. Liquid Waste Hauler's obligation to comply with the terms of this Chapter;
3. Liquid Waste Hauler's obligation to comply with the Riverside County Health Department's applicable rules and regulations regarding cleanliness and sanitary conditions;
4. Restrictions on operating hours for City's designated disposal site;
5. The revocation, suspension, or placement on probation of the permit and imposition of other enforcement actions against the Liquid Waste Hauler for violation of the permit terms or conditions, or of this Chapter;

6. Record keeping and reporting requirements;

7. The obligation to notify the Director immediately of any unusual circumstances observed during liquid waste pumping operations;

8. Compliance with all applicable California Motor Vehicle Codes; and

9. Other conditions, limitations or prohibitions deemed appropriate by the Director.

C. The City's RWQCP is the only designated Liquid Waste Haulers disposal site.

D. No person shall be issued a City Liquid Waste Hauler Permit without first:

1. Paying all applicable Liquid Waste Hauler Permit fees, established by resolution of the City Council; and

2. Completing and submitting to the City an application for a City Liquid Waste Hauler Permit signed under penalty of perjury certifying that the following information provided by Liquid Waste Hauler is true and correct:

a. Name, address, and phone number of the Liquid Waste Hauler;

b. Number of vehicles (vehicles include trucks, tankers and trailers), gallon capacity, license plate number, registered owner's name, and make and model, of each vehicle operated by the Liquid Waste Hauler for the purpose of hauling liquid wastes;

c. Name of the Liquid Waste Hauler's authorized representative;

d. Name and policy number of the Liquid Waste Hauler's insurance carrier and bonding company, if applicable;

e. The number of the current permit issued to the Liquid Waste Hauler by the Riverside County Department of Environmental Health for transportation and disposal of liquid wastes; and

f. Such other information as may be required by the Director.

E. City issued Liquid Waste Hauler Permits shall be valid for one to three years, and the Director may impose additional, or modify or delete permit terms and conditions at any time during the duration of the permit.

F. Liquid wastes disposed at the City's designated disposal site shall be subject to inspection, sampling and analysis to determine compliance with all applicable provisions of this Chapter by authorized personnel who may perform or supervise such inspection, sampling and analysis at any time before or during the delivery of the liquid waste. If the City finds the wastes do not comply with this Chapter, the Liquid Waste Hauler shall pay the City for all of the City's costs associated with such inspection, sampling, and analysis, and any other fees, charges or penalties assessed by the Director.

G. No Liquid Waste Hauler shall discharge or cause to be discharged into the City's designated disposal site any material defined as hazardous by RCRA.

H. If the City determines the wastes contain hazardous substances, then the Liquid Waste Hauler shall remain at the City's designated disposal site until the hazardous substances

is transferred to a waste hauler lawfully authorized to transport and dispose of the hazardous substances. The Director may notify the appropriate law enforcement agency of all violations of this Section.

I. All liquid waste manifest forms shall be completed in full and signed by the Liquid Waste Hauler, and signed by the Director, before any load is discharged into the City's designated disposal site.

J. Providing false information to the City in any permit application, hauler's report or manifest, or correspondence is a violation of this Chapter.

K. Liquid Waste Haulers shall retain all reports and records required to be retained by this Chapter for a minimum of three years and shall make such reports and records immediately available to the City upon request.

L. A Liquid Waste Hauler shall pay all fees, charges and penalties imposed by the Director pursuant to this Chapter within thirty days of receiving notice to pay such fees, charges, or penalties.

M. Only domestic liquid wastes, from septic tanks, seepage pits, cesspools, or any other similar receptacles, that contain no industrial waste, shall be disposed of at the City's designated disposal site.

N. Any Liquid Waste Hauler that hauls both industrial wastes and domestic wastes shall remove all industrial waste contamination from the interior of the vacuum tank prior to loading any domestic wastes into such tank.

O. Liquid Waste Haulers are prohibited from discharging industrial waste into the POTW. No Liquid Waste Hauler shall mix industrial waste and domestic wastes to discharge the mixture to the City's designated disposal site.

P. Any Liquid Waste Hauler seeking to discharge to the City's designated disposal site shall first certify under penalty of perjury as to the origin of the wastes and shall provide documentation as to the address of any location(s) where the Liquid Waste Hauler obtained the wastes.

Q. If the wastes hauled by a Liquid Waste Hauler are found unacceptable for discharge into the POTW, the Liquid Waste Hauler shall dispose of the wastes at a legal disposal site. The Liquid Waste Hauler shall provide the City with a true and correct copy of the waste hauler's manifest documenting the legal disposal of the rejected wastes within fourteen calendar days from the date the wastes were rejected by the City.

R. No Liquid Waste Hauler shall mix or dilute any rejected load in order to achieve compliance with this Chapter without prior written authorization from the Director.

S. No Liquid Waste Hauler shall dispose of any rejected load into any septic tank, cesspool, seepage pit or similar devices, any grease interceptor or trap, any storm drain, or the POTW except as authorized in writing by the Director.

T. The Director may deny a Liquid Waste Hauler Permit for any of the following reasons:

1. The applicant knowingly falsified information on the application or any document required by the application;

2. The applicant's previous Liquid Waste Hauler Permit was suspended or otherwise revoked and the condition upon which such action was taken still exists; or

3. The applicant is not current on all disposal and permit-related reports and charges.

U. If an application is denied, then the Director shall notify the applicant in writing of such denial and the appeal procedures. The notification shall state the grounds for such denial and any actions required for the applicant to obtain a permit.

V. All Liquid Waste Hauler Permits issued may be revoked, suspended or placed on probation up to one year upon a finding by the Director that any of the following facts exist:

1. The permittee failed to display the authorization document upon request;

2. The permittee has changed, altered or otherwise modified the face of a permit or authorization document without the permission of the Director;
 3. The permittee has violated any term or condition of the permit;
 4. The permittee has falsified any application, record, report or monitoring results required to be maintained, has failed to make them immediately available to the Director upon request, or has withheld required information;
 5. The permittee failed to stop immediately the discharge from his or her truck into the designated disposal facilities of the City upon the order of any authorized Public Works Department employee;
 6. The permittee discharged or attempted to discharge hazardous substances into the designated disposal site;
 7. The permittee failed to comply with the terms of Subsection H of this Section;
 8. The permittee discharged or attempted to discharge industrial waste into the designated disposal site;
 9. The permittee has repeatedly filed documents with falsified or incorrect information;
 10. The permittee has discharged or attempted to discharge waste to the City's designated disposal site, that has been previously rejected by another regulatory agency, municipality, or entity having authority to grant permission for the disposal of the waste, and has failed to notify the Director of the rejected status of the waste;
 11. The permittee has done physical violence or harm to any City employee; or
 12. The permittee has made threatening remarks or threatening acts toward any City employee.
- W. Any Liquid Waste Hauler Permit which has been revoked, suspended or placed on probation pursuant to this Section may be reinstated upon a finding by the Director that the condition which resulted in such revocation, suspension or probation no longer exists.
- X. Upon Director's determination of a violation of this Chapter, the Liquid Waste Hauler shall be subject to the enforcement actions set forth in this Section and Part IV of this Chapter, and to such enforcement actions contained in the Liquid Waste Hauler Permit as necessary to protect the POTW, the public, the environment or City employees.
- Y. Any authorized POTW employee can order a Liquid Waste Hauler to immediately stop their discharge. The order shall be based on the employee's professional judgment that the discharge may violate this Chapter, threaten or harm the POTW, its employees, the public, or the environment.
- Z. Liquid Waste Hauler Permits are exclusive to that permittee. Transfer or assignment of a permit is prohibited and will void the current permittee's permit. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.300 Mobile Pressure Washers.

All Mobile Pressure Washers shall obtain an authorization certificate and/or permit from the City before conducting business within the City's jurisdiction. Failure to obtain authorizations and/or a permit from the City prior to operating in the POTW service area is a violation of this Chapter and may subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.305 Use of or Damage to City Equipment or Facilities.

A. No person shall use, enter, break, damage, destroy, uncover, deface or tamper with any temporary or permanent structure, equipment, or appurtenance which is part of the POTW without prior written approval by the Director.

B. Any person who discharges or causes the discharge of any wastewater or pollutant which detrimentally effects the POTW, sludge, or causes any other damage, including subjecting the City to any fines or penalties, shall be liable to the City for all damages and

costs incurred by the City, including administrative expenses. The City shall calculate its administrative expenses as ninety percent of the cost of repairs and personnel time expended by the City to remedy such damages and costs. All charges shall be payable to the City within thirty days of invoicing by the City. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; §2 Ord. 6232 § 2 (part), 1995)

Section 14.12.310 Spill Notification.

All users shall notify the City immediately upon occurrence of an accidental discharge of substances prohibited by Sections 14.12.280, 315, 335, 375, and 400 of this Chapter (a "spill") or any slug discharges that may enter the POTW or storm drain, storm water channel, or natural water course. During normal business hours, M-F 7:30 a.m. to 4:30 p.m., the City shall be notified by telephone at (951) 351-6145. After 4:30 p.m. M-F, on all holidays and weekends, the City shall be notified by telephone at (951) 351-6140. The notification shall include the date, time and location of the discharge, type of waste, including concentration and volume, and corrective actions taken. This notification does not relieve the user from any other reporting requirements of any other laws. Within five calendar days following a spill or slug discharge, the user shall submit a detailed written report to the City including:

- A. A description and cause of the event, and the impact on the user's compliance status;
- B. The location, type, concentration, and volume of the spill or slug discharge;
- C. The duration of the event including exact dates and time of noncompliance, and if noncompliance continues, the time by which compliance is reasonably expected to be achieved;
- D. The description of the remediation or cleanup methods and disposal; and
- E. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such upset, slug load, accidental, negligent, or intentional spill or other conditions of noncompliance. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.315 Surface Discharge Prohibitions.

A. No person shall discharge or cause to be discharged onto the ground, into any permeable sump, pit, or well, storm drain, surface, pipe or waterway leading to a storm drain, whether currently carrying water or not, any pollutant or wastewater which could:

1. Impair the useful function of the storm drain;
2. Cause undue storm drain maintenance expense to the City or other public agency;
3. Create a public nuisance or public hazard;
4. Pollute natural surface or subsurface waters; or
5. Violate any regulation, order, or requirement of the Regional Board, including NPDES Non-Point Source (Storm Water) Permit requirements.

B. Any person violating Subsection A of this Section shall be liable to the City for all damages and costs incurred by the City, including administrative expenses and fines. The City shall calculate its administrative expenses as ninety percent of the cost of repairs and personnel time expended by the City to remedy such damages and costs. All charges shall be payable to the City within thirty days of invoicing by the City.

C. Any person who has violated Subsection A of this Section shall submit a written report of the incident within five business days to the Director. The written report shall include a description of the circumstances causing the discharge, the quantity and qualities of the pollutant(s) discharged the methods of cleanup and disposal, and the corrective measures taken to prevent a reoccurrence. (Ord. 7032 §2, 2009; Ord. 6637 §2, 2002; Ord. 6398 §2 (part), 1997; Ord. 6232 §2 (part), 1995)

Section 14.12.320 Point of Discharge Limitation.

No person shall discharge any wastewater directly into a manhole or other opening in a collection system other than through an approved building sewer connection without prior written permission from the Director. This prohibition shall not apply to authorized City personnel carrying out their duties. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.325 Time Limits.

Any time limit provided in any written notice or any provision of this Chapter may be extended only by a written directive of the Director and upon a showing of good cause from the user. (Ord. 7032 §2, 2009; Ord. 6637 § 2 (part), 2002; Ord. 6232 § 2 (part), 1995)

III. Industrial Waste**Section 14.12.330 Separation of Domestic and Industrial Waste.**

Any user who discharges industrial wastewater to the POTW shall keep domestic wastewater separate from all industrial wastewater until the industrial wastewater has passed through all required pretreatment equipment or devices, or the user's industrial wastewater sample point(s). For existing Categorical Industrial Users which cannot separate the domestic wastes from the industrial wastes prior to a permitted sampling point, the combined waste stream formula shall be applied to determine applicable discharge limitations. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.335 Prohibited Waste Discharges.

Except as provided herein, no person or user shall discharge or cause to be discharged any of the following to the POTW:

A. Any earth, sand, rocks, ashes, cinders, spent lime, stone, stone cutting dust, carbon fines, ion-exchange resin fines, gravel, plaster, concrete, glass, metal filings, metal or plastic objects, garbage, grease, viscera, paunch manure, bones, hair, hides, or fleshings, whole blood, feathers, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt residues, residues from refining or processing fuel or lubrication oil and similar substances, or solid, semi-solid or viscous material in quantities or volume which may obstruct, either partially or completely, the flow of sewage in the collection system or any object which may cause the blockage, either partially or completely, of a sewer or sewage lift pump, or interfere with the normal operation of the POTW.

B. Any compound which will produce noxious odors in the sewer or wastewater treatment facilities.

C. Any portions of human or animal anatomy whether whole, part, or ground.

D. Any solids, liquids, gases, devices, or explosives which by their very nature or quantity are or may be, sufficient either alone or by interaction with other substances or sewage to cause fire or explosion hazards, exceed ten percent of the LEL at the point of discharge or in the collection system, or in any other way create imminent danger to the City's wastewater personnel or POTW, the environment or public health.

E. Any wastewater or material with a closed cup flash point of less than one hundred forty degrees Fahrenheit or sixty degrees Celsius using the test methods specified in 40 CFR 261.21.

F. Any overflow from a septic tank, facility wastewater holding tank, cesspool or seepage pit, or any liquid or sludge pumped from a septic tank, facility wastewater holding tank, cesspool or seepage pit, except as permitted by the Director.

G. Any discharge from the wastewater holding tank of a recreational vehicle, trailer, bus and other vehicle, except as may be permitted by the Director.

H. Any storm water, groundwater, street drainage, subsurface drainage, yard drainage or runoff from any field, roof, yard, driveway or street. The Director may approve, on a temporary basis, the discharge of such water only when no reasonable alternative method of discharge is available.

I. Any substance or heat in amounts that will inhibit biological activity in the City's POTW resulting in interference or which will cause the temperature of the sewage in any public sewer to be higher than one hundred forty degrees Fahrenheit. In no case shall any substance or heat be discharged to the sewer that will raise the treatment plant's influent higher than one hundred four degrees Fahrenheit (forty degrees Celsius).

J. Any radioactive waste in excess of federal, state or county regulations.

K. Any material or quantity of material that will cause:

1. Damage to any part of the POTW;
2. Abnormal maintenance of the POTW;
3. An increase in the operational costs of the POTW;
4. A nuisance or menace to public health;
5. Interference or pass through in the treatment plant, its treatment processes, operations, sludge processes, use or disposal; or
6. A violation of the NPDES permit.

L. Any quantities of herbicides, algaecides, or pesticides that could cause interference or pass-through at the treatment plant or interfere with the City's biosolids reclamation or pose any danger to POTW employees.

M. Any petroleum oil, non-biodegradable cutting oil, or mineral oil derived products exceeding City's local limits.

N. Any material or quantity of material(s) which may cause abnormal sulfide generation.

O. Any water or wastewater used to artificially raise the industrial user's discharge rate or added for the purpose of diluting wastes that would otherwise exceed applicable permitted discharge limitations.

P. Any wastewater having a corrosive property capable of causing damage to the POTW, equipment, or structures, or harm to POTW personnel. However, in no case shall wastewater be discharged to the City's POTW with a pH below 5.0, or greater than 11.5, or which changes treatment plant influent pH to above 8.0 or below 6.5.

Q. Any substance that will cause discoloration of the POTW's effluent.

R. Any unpolluted water, including cooling water, heating water, storm water, subsurface water, single pass cooling water, and single pass heating water. The Director may approve, on a temporary basis, the discharge of such water only when no reasonable alternative method of discharge is available. The user shall pay all applicable user charges and fees.

S. Any substance which may cause the POTW's effluent or any other product such as residues, sludge, or scums to be unsuitable for reclamation or reuse or which will interfere with any of the reclamation processes. This includes any material which will cause the sludge at the POTW to violate sludge use or disposal regulations developed under the Federal Clean Water Act, 33 USCA, Section 1251 et seq., or any regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, 42 USCA, Section 6901, et seq.; Clean Air Act, 42 USCA, Section 7401, et seq.; Toxic Substance Control Act, 15 USCA, Section 2601, et seq., or any other applicable state regulations.

T. Any hazardous substance which violates the objectives of the General Pretreatment Regulations (40 CFR 403), this Chapter, or any statute, rule, regulation or chapter of any public agency having jurisdiction over the discharge.

U. Any material in excess of the quantities established by resolution.

V. Any discharge from a material processing tank or vessel. These shall include, but not be limited to, all wash tanks, chemical conversion tanks, acid and alkali tanks, lubricating tanks, condensate water from dry cleaning equipment, fruit and vegetable wash and treatment tanks, and any other tank or vessel containing a material which would not meet the pollutant discharge limitations.

W. Any radiator fluid or coolant, cutting oil, water soluble cutting oil, or water-based solvent.

X. Any photo processing waste from developing or fixing solutions not in compliance with local limits or Industrial User Group Permits.

Y. Any pharmaceutical waste except those liquids containing only saline solutions, lactate, nutrients such as glucose (e.g. D5W), vitamins, and added salts such as potassium and/or other electrolytes.

Z. Any chemicals or materials that will cause excessive foaming in the POTW. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.340 Swimming Pool Discharge Requirements.

Discharges from swimming pools, wading pools, spas, whirlpools, therapeutic pools and landscape ponds shall be discharged to the following locations in compliance with Section 14.12.315 of this Chapter and under the following conditions:

1. Surface discharge and/or storm drain, requiring that the chlorine residual is less than 0.1 mg/L; or

2. Sanitary sewer if such discharge to surface or storm drain would create a public nuisance or hazard or violate any regulation, order, or requirement of the Regional Board, including NPDES Non-Point Source (Storm Water) Permit requirements. User shall first obtain permission from the City prior to discharging any of these waters to the City's sanitary sewer. Permission may be granted by the Director if the discharge will not cause a hydraulic overload condition in the area's sewer lines; or

3. Pumped out and hauled off to a legal treatment and/or disposal site if the water is found to have hazardous levels of chemicals, elements, or materials. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.345 Limitation on Wastewater Strength.

No person shall discharge industrial wastewater to the POTW unless the wastewater conforms to this Chapter. Discharge limitations shall be revised and adopted by resolution of the City Council as necessary to ensure the POTW's compliance with the NPDES Permit. For Categorical Industrial Users, the City may exercise one or more of the following options:

A. Where a categorical pretreatment standard is expressed in terms of either the mass or the concentration of a pollutant in wastewater, the Director may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c);

B. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the Director shall impose an alternate limit using the combined wastestream formula; and

C. A variance from a categorical pretreatment standard may be issued if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.350 Local Limits.

A. The Director shall develop and implement specific prohibitions, pollutant limitations, pollutant parameters and Best Management Practices (BMPs) ("local limits"). These local limits

are necessary to assure compliance with the City's NPDES permit, including preventing pass through, interference, or impacts to biosolids reclamation or reuse. These local limits may be continually developed as necessary and adopted by resolution after public notice to affected persons or users.

B. The local limits may be allocated among industrial user classes or individual users as uniform concentration limits, or as the ratio of the total mass per user, or as a selected industry reduction, or by such other method considering factors such as persistence of the pollutant, equity, treatment feasibility, economic feasibility, and economics of scale, pollution prevention and waste minimization measures, anticipated growth and enforcement feasibility.

C. User-specific allocations at current loadings may be created for public health facilities which provide a life saving service or procedure, so long as the pollutant discharged would not contribute to pass-through, interference or other violation of the City's NPDES permit.

D. Pollutant allocations may be granted to Class III or Class V users on a case-by-case basis based upon the POTW's excess treatment capacity for the pollutant requested. These limits shall be based upon the pounds of pollutant(s) discharged and the impacts on the treatment capabilities of the POTW. If the permit is issued for more than one year, a pollutant review will take place annually to determine the POTW's excess treatment capacity for those permitted pollutants. A review may be conducted at any time if the Director finds that the permittee's wastewater discharge has adversely affected the POTW, has caused a rise in that pollutant of more than 20%, or has caused interference, pass through, or violations of the POTW's NPDES permit.

E. When categorical pretreatment standards are expressed only in terms of pollutant concentrations, a Categorical Industrial User may request that the City convert the concentration limits to an equivalent mass limits. To be eligible for equivalent mass limits, the Categorical Industrial User must comply with the requirements in 40 CFR Part 403.6(c)(5)(i-iv). (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.355 De Minimus Categorization.

Any user whose industrial wastewater discharge is less than one hundred gallons per day and is not regulated by a federal categorical pretreatment standard or Industrial User Group Permit may be classified in the Director's discretion as a De Minimus User and shall not be subject to permitting standards or local limits provided that such industrial wastewater discharge is not a hazardous substance, does not contribute to interference or pass through violations at the POTW or violations of the NPDES permit, and does not cause detrimental effects or damage to the POTW, or cause a threat of harm to City personnel, the public, or the environment. De Minimus user status shall terminate upon violation of this Section, or upon written notice to such discharger of Director's determination that such discharger no longer satisfies the criteria of this Section. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.360 Industrial Wastewater Pretreatment.

All users shall:

- A. Provide wastewater pretreatment, as required, to comply with this Chapter;
- B. Achieve compliance with all applicable federal categorical pretreatment standards, as contained in 40 CFR Chapter I, Subchapter N, and local limits, whichever are more stringent, within the time limitations as specified by the federal pretreatment regulations;
- C. Pre-treat wastewater to a level acceptable to the Director and provide, operate, and maintain all necessary equipment, systems, and devices at the user's expense;
- D. Provide detailed plans to the Director for review and approval showing the pretreatment equipment, systems, devices and operating procedures before the beginning of any construction or installation of any equipment. The review of such plans and operating

procedures shall not relieve the user from the responsibility of pre-treating wastewater to produce an effluent acceptable to the Director under the provisions of this Chapter;

E. No user shall install pretreatment equipment, systems or devices in a confined space or a permit-required confined space.

F. Whenever deemed necessary, the Director may require users to restrict their wastewater discharge, relocate and/or consolidate points of discharge, separate domestic waste streams from industrial waste streams, and other such conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this Chapter; and

G. Notify the Director of any pretreatment equipment failure within twenty-four hours of discovering the failure. The notification shall be made by a telephone call, telefax transmission, electronic report, personal visit or hand delivered notification, to the City's Environmental Compliance Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the Director documenting the dates, times, and cause of the failure, and the corrective actions taken. Failure to provide this notification is a violation of this Chapter and may subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.365 Unauthorized Monitoring and Pretreatment Equipment Modifications.

No user shall knowingly falsify, tamper with, or render inaccurate any monitoring device or any pretreatment equipment or device. Such falsification, tampering, or inaccuracy shall be considered a violation of this Chapter and shall subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.370 Pretreatment Equipment Bypass.

A. No user shall bypass any pretreatment equipment or device unless the bypass: (i) is necessary to prevent loss of life, personal injury or severe property damage, is not necessitated by some fault of the user, and is the only feasible alternative; or (ii) does not cause local limit violations and is necessary to perform essential maintenance insuring adequate operation of the pretreatment equipment or device.

B. All users shall comply with the following bypass notification requirements:

1. Anticipated bypass: The user shall submit a written notice to the Director at least ten days before the date of the scheduled bypass; or

2. Unanticipated bypass: The user shall notify the Director immediately upon learning that any pretreatment equipment or device has been bypassed. The user shall submit a written report to the Director within five business days after the bypass. The report shall include:

a. A description of the bypass, the cause of the bypass, and the duration of the bypass;

b. If the bypass was corrected; and

c. Actions taken or proposed to reduce or prevent a reoccurrence of the bypass. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.375 Prohibited Discharge of Recovered Pretreatment Waste.

No person shall discharge waste recovered from pretreatment equipment, systems, or devices into any sewer opening or any drains or other openings leading to any sewer without authorization and permits from a regulatory agency having jurisdiction over the discharge of the waste. All recovered pretreatment waste shall be disposed of in accordance with all applicable federal, state, county, and local laws and regulations. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.380 Dilution Prohibited as a Substitute for Treatment.

A. No industrial user shall increase the use of water, or in any other manner attempt, to dilute a wastewater discharge as a partial or complete substitute for adequate treatment to achieve compliance with this Chapter and the industrial user's permit, or to establish an artificially high flow rate for permitted mass emission rates or permitted flow amounts.

B. If an industrial user is found to be using dilution to comply with this Chapter and/or the user's Industrial User Permit, then the City may impose mass limitations to determine compliance with wastewater discharge limitations. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.385 Storm Water Diversion.

A. All users having outdoor areas which allow wastewater and storm water to enter a common opening also connected to the collection system shall install and maintain, at the user's expense, a storm water diversion valve in the common opening.

B. The storm water diversion valve design and use shall be reviewed and approved by the Director prior to installation.

C. The valve shall allow wastewater to enter the collection system during dry weather and prevent storm water from entering during periods of inclement weather.

D. Unless permitted to do so in accordance with Subsection F. of this Section, no user shall allow wastewater and storm water to mix.

E. During periods of inclement weather, the user shall immediately suspend all outdoor wastewater generating activities and divert all storm water to a storm drain.

F. If the discharge of storm water would create a pollution threat to surface or subsurface waters, the user may make application to the Director requesting that the storm water be discharged to the POTW. Approval of a storm water discharge to the POTW shall be based on:

1. Hydraulic capacity of the collection system;
2. Hydraulic capacity of the treatment plant;
3. Total volume of storm water to be discharged in a twenty-four hour period;
4. A demonstrated need to discharge storm water to the POTW to prevent surface and subsurface water contamination; and
5. A good faith effort made by the user to prevent the pollution of storm water by industrial waste and waste generated by the user. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.390 Industrial User Modifications.

All permitted industrial users shall report proposed changes in their operations in writing to the Director for approval thirty calendar days before those changes are implemented. For the purposes of this Section "changes" shall include any of the following:

A. A sustained twenty percent increase or decrease in production capacity or wastewater discharge;

B. Additions, deletions or changes to processes or equipment; or

C. Experimentation with new processes, materials, chemicals and/or equipment that may affect the wastewater discharged. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.395 Spill Containment System.

Spill containment systems, as may be required, shall conform to requirements established by the Director. These requirements may include but are not limited to the following:

A. No spill containment system shall allow incompatible substances to mix in the event of container failures and thereby create a hazardous or toxic substance.

B. Spill containment systems shall consist of dikes, walls, barriers, berms, or other devices designed to contain spillage of the liquid contents of containers.

C. Spill containment systems shall be constructed of materials that are impermeable and non-reactive to the liquids being contained.

D. Spill containment systems shall conform to local regulations and policies as to percent containment, container type, size, outdoor covering, and the length of time spilled material may remain in the spill containment system.

E. At no time shall a user use a spill containment system for any storage other than from a spill.

F. All users shall keep the spill containment system free of accumulated liquid and debris. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.400 Slug Discharges.

No user shall discharge or caused to be discharged any slug load of materials, chemicals, products, or waste into the POTW. Any user discharging a slug load of materials, chemicals, products or waste into the POTW to avoid sewer service charges for the treatment violates this Chapter and may subject the user to enforcement actions. Any slug load that damages the POTW is a major violation. Slug loads that do not damage the POTW may be a minor violation. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.405 Facility Waste Management Plan.

All permitted industrial users shall develop and maintain a Facility Waste Management Plan (FWMP). The FWMP shall consist of the following applicable documents:

A. Toxic Organic Management Plan (TOMP) is required of all Categorical Industrial Users permitted to submit the TOMP in lieu of required pollutant monitoring.

B. Slug Discharge Prevention Control Plan (SDPCP) is required of all industrial users which have batch discharge provisions, stored chemicals or materials, or the potential for a slug discharge which, if discharged to the POTW or storm drain system, would violate this Chapter. The SDPCP shall contain:

1. Description of discharge practices, including non-routine batch discharges;
2. Description of all stored chemicals;
3. Procedures to immediately notify the City of any slug discharge, including any discharge prohibited under Section 14.12.335;
4. Procedures to provide a written follow-up notification within five calendar days;
5. Procedures to prevent accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, plant and site run-off control, worker training, building of spill containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response; and

6. Procedures to notify the City immediately of any changes in the facilities that may affect the potential for a slug discharge.

C. Pretreatment Systems Operations and Maintenance Manual shall be submitted by all industrial users that operate and maintain pretreatment equipment.

D. Hazardous Materials and Hazardous Waste Management Plan is required of all industrial users that use, possess, or generate hazardous substances. The City's Fire Department-required Business Emergency Plan may be substituted for this management plan.

E. Waste Minimization/Pollution Prevention Plan (WM/PPP) is required of any industrial user:

1. For whom the Director has determined such WM/PPP is necessary to achieve a water quality objective;
 2. Determined by the California State Water Quality Control Board (“State Board”) to be a chronic violator, and the State Board, Regional Board or the City determines that pollution prevention (as defined in Water Code Section 13263.3(b)) could assist; and
 3. That significantly contributes, or has the potential to significantly contribute, to the creation of a toxic hot spot as defined in Water Code Section 13391.5.
- F. A WM/PPP shall include all of the following:
1. An analysis of the pollutants, as directed by the State Board, Regional Board, or the City, that the user discharges to the POTW, the sources of the pollutants, and a comprehensive review of the processes that generate and discharge the pollutants.
 2. An analysis of the effectiveness of pollution prevention, including any innovative and alternative technologies and possible adverse environmental impacts resulting from the use of those methods.
 3. A detailed description of the tasks and schedules required to investigate and implement the pollution prevention techniques.
 4. A statement of the discharger’s pollution prevention goals and strategies, including priorities for short-term and long-term action.
 5. A description of the discharger’s existing pollution prevention methods.
 6. A statement that the discharger’s existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified, and information that supports that statement, to the satisfaction of City.
 7. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the discharger is subject to that act.
 8. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.
 9. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the discharger for implementation.
- G. Any person who fails to complete a pollution prevention plan required by the City, submits a plan that does not comply with this Section, or fails to implement a plan required by the City, shall be liable to the City for any civil penalty assessed administratively by the City or by a court in accordance with this Chapter.
- H. The City shall not include a WM/PPP in any local limits or permit issued by the City. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.410 Categorical Pretreatment Standards.

A. The federal categorical pretreatment standards found in 40 CFR Chapter I, Subchapter N are hereby incorporated into this Chapter by reference. It is unlawful for any Categorical Industrial User to discharge wastewater to the POTW in violation of federal categorical pretreatment standards or any limitation in this Chapter or that user’s permit. Where there is more than one limitation for a pollutant, the more stringent limitation shall prevail. Compliance with federal categorical pretreatment standards for existing sources subject to such standards or for existing sources, which hereafter become subject to such standards, shall be achieved within three years following promulgation of the standards unless a shorter compliance time is specified in the standards or by the Director. New sources shall install, have in operating condition and “start-up” all pretreatment equipment to insure compliance before beginning any discharge. New sources must meet all applicable pretreatment standards within the shortest feasible time, not to exceed ninety days.

B. The City may authorize a Categorical Industrial User to forego sampling of a pollutant regulated by a federal categorical pretreatment standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the wastewater discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. This authorization is subject to the following conditions:

1. The City may authorize a waiver where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical standard and otherwise includes no process wastewater.

2. The monitoring waiver is valid only for the duration of the effective period of the Industrial User's Permit, and in no case shall exceed five years. The Industrial User must submit a new request for the waiver with each permit renewal.

3. In making a determination that a pollutant is not present, the Industrial User must provide data from a least one sampling of the facility's process wastewater prior to any treatment at the facility that is representative of all wastewater from all processes.

4. The request for a monitoring waiver must be signed by the Industrial User's authorized representative and include the certification statement, Section 14.12.120(7).

5. Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.

6. Any grant of the monitoring waiver by the City will be incorporated into the Industrial User's Permit. All data and information to support the City granting the waiver will be maintained for three years after the expiration of the waiver.

7. Upon approval of the waiver and incorporation into the Industrial User's Permit, the Industrial User must certify on each report submitted with the following statement, that there has been no increase in the pollutant in its wastestream due to the activities at the Industrial User's facility:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of [list pollutant(s)] in the wastestream due to the activities at the facility since filing the last quarterly report."

8. In the event that a waived pollutant is found to be present or is expected to be present based on changes that occur in the Industrial User's operations, the Industrial User must immediately notify the City and resume quarterly monitoring of the waived pollutant.

9. This waiver provision does not supersede certification processes and requirements established in categorical pretreatment standards, except as otherwise specified in the categorical pretreatment standard. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.415 Commercial/Industrial Tenant Occupancy Notification.

Pursuant to 40 CFR 403.8(f)(2)(i) all owners of multiple tenant commercial/industrial developments within the POTW service area shall submit, upon request by the Director, a current list of tenants. This list shall provide the name, address, unit space designation and type of business activity for each tenant space in the development. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.420 Notice of Potential Problems to Director.

All users shall immediately notify the Director of all wastewater discharges that could adversely affect the POTW or storm drain, including any slug discharges. Wastewater

discharges that may adversely affect the POTW include, but are not limited to, acids, alkalis, oils, greases, high strength organic waste, salt, hazardous substances and waste, colored wastes, and batch discharges. The notification shall be made by a telephone call, telefax transmission, electronic report, personal visit or hand delivered notification, to the City's Environmental Compliance Office. Within five calendar days after discovery of the discharge, the user shall submit a written report to the Director documenting the dates, times, and cause of the failure, and the corrective actions taken. Failure to provide this notification is a violation of this Chapter and may subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.425 Written Responses and/or Reports.

All users required to provide a written report, or response to any correspondence, order, or notice from the Director shall do so in accordance with the date and requirements specified in the correspondence, order, or notice. Failure to provide the written response or report by the date requested shall constitute a violation of this Chapter and may subject the user to enforcement actions. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6223 §2 (part), 1995)

Section 14.12.430 Falsifying Information.

No person shall knowingly make any false statement, representation, or certification in any record, correspondence, or other document submitted or required to be maintained under this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.435 Wastewater Discharge Authorization Certificate (WDAC).

Any non-residential user desiring to discharge wastewater to the City's POTW, that does not qualify for an Industrial User Permit, Industrial User Group Permit, or De Minimus Category and whose wastewater shall not have an adverse affect on the City's POTW, may be required to obtain a WDAC from the Director. WDACs shall not be issued to categorical industrial users. WDACs may be issued for indefinite time periods, subject to periodic review and reconsideration by the Director. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.440 Industrial User Group Permits.

Certain classes of industrial users, as determined by the Director, may be eligible to participate in an Industrial User Group Permit. Permittees within this designation shall share a common business identification as defined by the Federal North American Industry Classification System ("NAICS") code book. Industrial users permitted by this group permit shall abide by general permit conditions specific for that particular group being permitted. These permit conditions shall be established by the Director. (Ord. 7032 §2, 2009; Ord. 6377 §2(part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.445 Industrial User Permits.

A. It is unlawful for any Class I, II, III, IV, V, or VI industrial user to connect or discharge to the POTW without a valid Industrial User Permit. It is unlawful for any Class III industrial user to connect or discharge to the POTW without a valid Industrial User Permit, WDAC, or Industrial User Group Permit, as determined by the Director based upon the industrial user's potential effect on the POTW. Issuance of any such permit or WDAC shall not vest any right in a user to continue connection or discharge to the POTW beyond the express terms of the permit or WDAC.

B. Plans and building permits for Class I, II, IV, V, or VI Industrial User Permits and those users designated by the Director shall not be approved by the Director for any sewer

connection which will convey industrial wastewater to the POTW unless the user has first obtained an Industrial User Permit, or the user has received written permission from the Director after agreeing in writing not to discharge industrial wastewater until an Industrial User Permit has been obtained.

C. Users required to obtain an Industrial User Permit shall complete and file with the Director a permit application form provided by the Director and shall pay all applicable fees within thirty days of invoicing by the City. The application form may require applicant's submission of any or all of the following:

1. Name, address, and location (if different from the site address);
2. NAICS number under the Federal North American Industry Classification System, Office of Management and Budget, 1997, as amended;
3. EPA hazardous waste generator's number;
4. Wastewater samples analyzed for specified pollutants by a State certified laboratory in accordance with the methods published by EPA in 40 CFR Part 136 and amendments thereto;
5. Time and duration of the wastewater discharges;
6. Average and maximum daily wastewater flow rates, including any seasonal variation of all waste streams discharged;
7. A list of all environmental control permits held;
8. A written statement from the property owner or landlord, if different from the industrial user, agreeing to the industrial user's activities, manufacturing processes, and chemical and material storage;
9. Site plans, floor plans, mechanical and plumbing plans with details to show all sewers, sewer connections, pretreatment equipment, systems and devices, production areas and all areas of wastewater generation;
10. A description of operations including the nature, average rate of production, and NAICS code of the operation(s) carried out by the industrial user, and a schematic process diagram that indicates points of discharge to the POTW;
11. Flow measurement information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process waste streams and other waste streams as necessary to allow use of the combined waste stream formula;
12. Measurement of pollutants identifying the National Categorical Pretreatment Standard applicable to each regulated process, with the results of sample analyses identifying the nature and concentration (or mass where required) of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration or daily maximum and average mass shall be reported. All analyses shall be performed in accordance with the techniques prescribed in 40 CFR Part 136;
13. Certification statement, as set forth in 40 CFR Part 403.6(a)(2)(ii), executed by an authorized representative of the industrial user and prepared by a qualified professional, indicating whether or not pretreatment standards (categorical and local) are being met on a consistent basis. If not, the industrial user shall state if additional operation and maintenance or additional pretreatment equipment is necessary to achieve compliance with pretreatment standards and requirements;
14. Best Management Practices necessary to comply with this Chapter; and
15. Any other information as may be necessary for the Director to evaluate the permit application.

D. Within forty-five days after receiving the completed application and all required supporting information, the Director shall evaluate the application and information furnished by the applicant. The Director shall issue the permit, if the Director believes that sufficient and accurate information has been provided by the applicant in the permit application and the Director finds that all of the following conditions are met:

1. The proposed discharge of the applicant is in compliance with the prohibitions and limitations of this Chapter;

2. The proposed operation and discharge of the applicant would not interfere with the normal and efficient operation of the POTW;

3. The proposed discharge, operation or business activity of the applicant shall not result in a violation by the City of the terms and conditions of its NPDES permit or cause a pass through of any toxic materials to the environment or the POTW sludge; and

4. The applicant has paid all applicable Industrial User Permit fees.

E. The Director may suspend the permit application process if the user's business will not be operational and no wastewater is planned for discharge at the conclusion of the application review process. The user must notify the Director at least fourteen calendar days before starting business activities and wastewater discharge.

F. If the Director determines that the proposed discharge will not be acceptable, the Director shall disapprove the application and shall notify the applicant in writing, specifying the reason(s) for denial and the applicable appeals process under Section 14.12.570 APPEALS.

G. Industrial User Permits shall be subject to all provisions of this Chapter and all other applicable regulations, charges and fees established by the City Council of the City of Riverside or the Riverside County Board of Supervisors resolution. Permits may include one or more of the following:

1. The unit charge or schedule of user charges and fees for the wastewater discharged to the POTW as established by ordinance or resolution;

2. Schedule of penalties for noncompliance as established by resolution;

3. Limitations on the average monthly and maximum daily wastewater pollutants and mass emission rates for pollutants;

4. Limitations on the average monthly and maximum daily wastewater flow rates;

5. Requirements for the submittal of a Facility Waste Management Plan;

6. Requirements for the submittal of daily, monthly, annual and long term production rates;

7. Requirements for reporting changes and/or modifications to equipment and/or processes that affect the quantity or quality of the wastewater discharged;

8. Requirements for installation and maintenance of monitoring and sampling equipment and devices;

9. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate spill containment devices;

10. Requirements to comply with Best Management Practices and periodic written documentation that the Best Management Practices are being implemented and the affects on compliance;

11. Specifications for monitoring programs which may include: sampling location(s); frequency of sampling; pollutant violation notification and resampling requirements; number, types and standards for tests; reporting schedules; TTO monitoring; and self-monitoring standard operating procedures (SOPs);

12. Requirements for reporting flow exceedances and pollutant violations;

13. Consent to the City's entry onto the user's premises to assess compliance by inspection, photography, electronic image recording, records examination, sampling, and monitoring;

14. Compliance schedules. Compliance schedule progress reports, as required, shall be submitted every thirty days during the time the compliance schedule is in force, including a final compliance report at the conclusion of the compliance schedule. The industrial user shall state whether or not compliance was achieved for the increment of progress to be met on such a date. If progress cannot be achieved, the industrial user shall state the reasons for the delay

and the steps to be taken to return to the dates originally established in the compliance schedule;

15. Modified compliance schedules if pretreatment standards compliance cannot be met on a consistent basis. A modified compliance schedule shall provide the shortest possible time for the industrial user to provide additional pretreatment and/or operations and maintenance to achieve compliance, and may contain milestones;

16. Requirements for submission of technical or discharge reports, Baseline Monitoring Reports (BMR), compliance reports, and reports on continued compliance;

17. Reports on compliance with federal categorical pretreatment standards deadlines. All Categorical Industrial Users shall submit reports to the Director containing the information described in this Section as required by the permit. For existing Categorical Industrial Users, the report shall be submitted within ninety days following the date for final compliance with applicable categorical pretreatment standards. For new Categorical Industrial Users, the report shall be due thirty days following the commencement of wastewater discharge into the POTW. These reports shall contain long-term production rates and actual production during the wastewater sampling periods;

18. All Significant and Categorical Industrial Users shall submit progress reports on compliance every six months. These reports shall include effluent sample analyses with the pollutant names and concentration or masses; average and maximum daily wastewater flows for all regulated processes and total flow for the reporting period; average and maximum daily production rates; and total production rate for the reporting period;

19. All required reports: BMRs, compliance reports, periodic reports on continued compliance, and sample data submittals, must be signed by an authorized representative of the user;

20. All reports required by this Section must have an accompanying certification statement by a qualified professional stating whether the pretreatment standards are or are not being met as set forth in 40 CFR Section 403.12(b)(6);

21. Requirements for maintaining and retaining all records relating to the wastewater monitoring, sample analyses, production, waste disposal, recycling, and waste minimization as specified by the Director;

22. Requirements for notification of slug or accidental discharges and significant changes in volume or characteristics of the pollutants discharged;

23. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and this Chapter; and

24. Other conditions as deemed appropriate by the Director to ensure compliance with this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.450 Permit Duration.

Industrial User Permits shall be issued for a specified time period, not to exceed three years. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.455 Duty to Comply.

All users that have been issued an Industrial User Permit, Industrial User Group Permit, WDAC, or De Minimus categorization have a duty to comply with all conditions and limitations in these control documents ("control documents"). Any user failing to comply with the requirements of such user's control documents shall be subject to administrative, civil or criminal enforcement actions in accordance with this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.460 Permit Renewal.

All users shall submit a completed Industrial User Permit application, required monitoring information or production reports, and any other information required for permit renewal a minimum of ninety calendar days prior to the expiration of the existing Industrial User Permit. All users shall pay all applicable permit fees no later than thirty calendar days after invoicing by the City. If the Director fails to notify a user of Director's decision to issue or not issue a renewed permit prior to the expiration date of the current permit, the user's timely submission of a completed application and all other required information and reports shall automatically extend the permit for up to thirty working days until the actual permit can be issued or denied. Any discharge of industrial wastewater to the POTW with an expired Industrial User Permit shall be a violation of this Chapter and subject the user to enforcement action. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.465 Permit Modifications.

A. The Director may modify the Industrial User Permit terms and conditions as follows:

1. To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
2. To address significant alterations or modifications to the user's operation, processes, or wastewater volume or character since the time of the Industrial User Permit issuance;
3. For a change in the POTW that requires either a temporary or permanent reduction or elimination of the permitted discharge;
4. If the permitted wastewater discharge poses a threat to the POTW, city personnel, residents, or receiving waters;
5. For violation of any term or condition of the Industrial User Permit;
6. For misrepresentations or failure to fully disclose all relevant facts in the Industrial User Permit application or in any required reporting;
7. To correct typographical or other errors in the Industrial User Permit; or
8. For other reasons as the Director deems necessary.

B. City shall notify the user of any proposed permit changes at least thirty calendar days prior to the effective date of the changes. Any modifications in the permit shall include a reasonable time schedule for compliance. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.470 Permit Transfer.

Each Liquid Waste Hauler Permit, Industrial User Permit, WDAC, or Industrial User Group Permit is issued to a specific user for a specific operation for a specified time. Any assignment, transfer or sale of any permit to a new owner, new user, different premises, or different use is prohibited and is a violation of this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.475 Fees and Charges.

The City is authorized to impose fees and charges to recover the costs of its pretreatment program. These fees and charges are exclusive to this Chapter and are separate from all other fees or costs. The amount of these fees and charges and method of implementation may be established by resolution of the City Council. The City may assess fees and charges to recover the costs for:

A. Developing, implementing, and operating the City's pretreatment program and this Chapter;

B. Monitoring, inspection, surveillance procedures and laboratory costs;

C. Reviewing plans and construction inspections;

- D. Industrial User Permit application review;
- E. Industrial User Permit, Industrial User Group Permit, and WDAC issuance;
- F. Enforcement actions;
- G. Liquid Waste Hauler's permit issuance;
- H. Temporary user permit issuance;
- I. Exceeding conventional pollutant limitations in the Industrial User Permit or other applicable pollutant limitations. These fees shall be based on the POTW costs of operations, maintenance and treatment for the pounds of COD and Total Suspended Solids;
- J. Non-residential user sewer service fees shall be assessed considering the following conditions:
 - 1. All non-residential users that discharge any volume of wastewater to the POTW that has amounts of Chemical Oxygen Demand (COD) or Total Suspended Solids (TSS) greater than or equal to the average amounts of COD or TSS normally found in twenty-five thousand gallons of domestic sewage shall be designated "Large Industrial Users" and shall pay monthly sewer service fees based on the industrial user sewer rates established periodically by resolution. The non-residential user will be qualified as a Large Industrial User if two or more of the qualifying criteria are met, i.e. COD, TSS, or total wastewater discharged. The Large Industrial User sewer rates shall be based upon the City's costs for providing services and treatment for the total volume of wastewater discharged and for the pounds of COD and TSS contained in the wastewater discharged.
 - 2. All non-residential users that discharge any volume of wastewater to the POTW that has amounts of COD, TSS less than the average amounts of COD, TSS normally found in twenty-five thousand gallons of domestic sewage, shall be designated "commercial users". These commercial users shall pay monthly sewer service fees based upon the commercial sewer use rates established periodically by resolution. The commercial sewer use rates shall be based on the costs for providing services and treatment for the amounts of COD, TSS and gallons of wastewater discharged. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.480 Assessment of Permit Fees and Charges.

Permit fees for multi-year permits shall be payable in advance for the entire term of the permit, as invoiced by the City's Finance Department. If a permit is terminated prior to thirty calendar days after the date of issuance, then the Director shall refund fifty percent of the original permit fee to the user, less any fees, charges or penalties owing to the City provided that no refund shall be made to a permit holder which is in violation of this Chapter or permit at any time prior to such termination. After a permit has been issued thirty days or more, all fees for that permit are non-refundable. No permit application fee shall be refundable at any time. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.485 Payment of Fees, Charges and Penalties; Late Payment.

Unless otherwise specified, all fees, charges and penalties imposed pursuant to this Chapter are due and payable within thirty calendar days after the date of the notice or invoice from the City. Users who fail to pay any required fee, charge or penalty by the due date shall pay a fifty percent surcharge in addition to the original fee, charge or penalty. The City shall give notice to a user of any permit termination associated with the unpaid amounts and such permit will be automatically revoked on the thirtieth day after the date of such notice if the amount due is not paid in full. The Director shall refer the unpaid amount to the City's Finance Department for collection. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

IV. Enforcement

Section 14.12.490 Failure to Comply.

Failure to comply with this Chapter, or any Section, Subsection, or part of this Chapter, is a violation of this Chapter and may be punished by administrative, civil, and/or criminal penalties. The remedies available under this Chapter are in addition to all other remedies available under the law. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.495 Enforcement Response Plan (ERP).

The City shall use an Enforcement Response Plan (ERP), as required by 40 CFR 403.8(f)(5), and adopted by resolution of the City Council, to guide the City in imposing progressive enforcement actions against users and persons in noncompliance with this Chapter. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.500 Administrative Violations.

There is hereby established a class of violations to be known as Administrative Violations that are further subdivided into minor and major administrative violations as follows:

- A. Minor Administrative Violations include, but are not limited to, the following:
 1. Submission of incomplete reports or questionnaires;
 2. Failure to submit reports by the scheduled due date;
 3. Failure to respond to questionnaires;
 4. Missing a compliance date without proper prior notification to the City;
 5. Failure to conduct sampling when required;
 6. Failure to notify the Director of a violation of a permit condition within twenty-four hours after discovery of the violation; or
 7. Failure to pay all required fees, penalties and charges within thirty calendar days from the due date.
- B. Major Administrative Violations include, but are not limited to, the following:
 1. Failure to notify the Director of a slug discharge immediately after discovery of said discharge;
 2. Failure to respond, by a given date, to letters requiring responses or to administrative orders;
 3. Missing a compliance date by more than thirty calendar days;
 4. Falsification of documents or attempting to mislead City officials in any manner whatsoever;
 5. Failure to cooperate with City officials exercising their authority under this Chapter, including monitoring and inspection activities;
 6. A pattern of minor administrative violations;
 7. Failure to provide the City with access to user's premises for the purpose of inspection, photography, electronic image recording, monitoring, or sampling;
 8. Failure to produce records as required;
 9. Failure to accurately report noncompliance;
 10. Failure to submit required reports (self-monitoring, one hundred eighty-day baseline monitoring report, ninety-day compliance report, Compliance Schedule progress reports) or submitting such reports more than forty-five calendar days late;
 11. Failure to pay charges pursuant to Section 14.12.460 of this Chapter, permit application fees, permit renewal fees, and Civil Penalties within sixty calendar days after the due date; or
 12. Failure to pay all other required fees, penalties, and charges within sixty calendar days after the due date.

C. Upon notice of appropriate mitigating circumstances and consistent with applicable federal and state laws, the Director has sole discretion to treat a major administrative violation as a minor administrative violation, or a pattern of minor administrative violations with aggravating circumstances as individual major administrative violations. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.505 Violations of Discharge Limitations.

A. There is hereby established a class of violations to be known as discharge violations that are further subdivided into minor and major discharge violations as follows:

1. Minor discharge violations are those that, either alone or in combination with similar user discharge violations, pose, as determined by the Director, no significant threat to the public health, safety or welfare, the environment, the POTW, the beneficial use of the biosolids or to any City employee or contractor.

2. Major discharge violations include, but are not limited to, the following:

a. Significant Noncompliance;

b. Discharge violations which, either alone or in combination with similar discharges pose, as determined by the Director, a significant threat to the public health, welfare or safety, the environment, the safe and efficient operation of the POTW, the beneficial use of biosolids or to any POTW employee or contractor, or cause or contribute to additional treatment costs incurred by the City or a violation of the NPDES permit, or cause or contribute to pass-through, interference, or other known damages;

c. Discharging regulated pollutants to the POTW without a current discharge permit;

d. A pattern of minor discharge violations;

e. Failure to correct a minor discharge violation within a specific time period as directed by the Director;

f. Tampering with or purposely rendering inaccurate any monitoring device, method or record required to be maintained pursuant to this Chapter;

g. Intentional discharge of a prohibited waste by a Liquid Waste Hauler into the POTW; or

h. Discharging wastewater without a valid Industrial User Permit after notification.

B. Upon notice of appropriate mitigating circumstances, the Director has sole discretion to treat a major discharge violation as a minor discharge violation. The Director also has sole discretion to treat a pattern of minor discharge violations with aggravating circumstances as individual major discharge violations. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.510 Unclassified Violations.

For any violation by any user or person that is not classified herein, or for the violation of any rule or regulation promulgated hereunder, the Director shall have the discretion to treat such violation as a minor or major violation and to exercise enforcement authority accordingly. In exercising this enforcement authority, the Director shall consider the magnitude of the violation, its duration, and its effect on receiving waters, the POTW, the POTW's biosolids, the health and safety of City employees, contractors, users, and the general public. The Director shall also evaluate the user's or person's compliance history, good faith, and any other factors the Director deems relevant. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.515 Separate Violations.

Each violation of this Chapter may be charged as a separate violation for each day the same violation exists. Each wastewater pollutant violation is considered an individual violation

for each pollutant in violation for each day in violation. (Ord. 7032 §2, 2009; Ord. 6377 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.520 Administrative Orders.

The Director may require compliance with this Chapter and any permit or order issued under this Chapter by issuing Administrative Orders that are enforceable in a court of law, or by directly seeking court action. The Director may use Administrative Orders, either individually, sequentially, concurrently, or in any order for one or more violations as appropriate for the circumstances. Administrative Orders include, but are not limited to the following:

A. Stop Work Order.

The Director may issue a written Stop Work Order to any person engaged in doing or causing to be done new construction, tenant improvements, alterations, or additions relative to the City's pretreatment program if:

1. City permits have not been obtained;
2. Work has begun without prior written approval by the Director; or
3. Violations of this Chapter are found at the site of the new construction, tenant improvements, alterations, or additions. Any person served a Stop Work Order pursuant to this Section shall immediately stop such work until written authorization for such work is issued by the Director.

B. Correction Notice.

The Director may issue a correction notice for minor violations noted during an inspection of the user's facility. Extensions may be granted to a user who fails to correct minor violations required by a correction notice, upon a showing of good cause, where "good cause" means an unforeseeable and unavoidable event or series of events, over which user had no control that prevented or significantly impaired the user's ability to comply with the correction notice.

C. Written Warning.

The Director may issue a written warning to notify a user of a minor violation or any violation that has not been corrected as required by a correction notice. The written warning shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required.

D. Monitoring/Production Information Order (MPIO).

The Director may issue an MPIO when two consecutive violations for the same pollutant are detected in City or user samples, when a pattern of wastewater pollutant non-compliance has been detected or when inconsistent wastewater pollutant compliance had resulted in Significant Non-Compliance. The MPIO shall be used to determine if discharge compliance has been achieved or if a detected violation is consistent. The MPIO shall require the user to sample the user's wastewater discharge for the pollutant(s) in violation and record the daily effluent wastewater flow for all days within a fourteen consecutive day period that industrial wastewater is discharged to the POTW. Production information shall be required of all Categorical Industrial Users which have production based discharge limits. The user required to conduct an MPIO shall comply with all the instructions given in the MPIO.

E. Notice of Violation (NOV).

An NOV shall be issued to a user for a violation of a written warning, stop work order, Industrial User Permit, of this Chapter, an MPIO that has resulted in Significant Non-Compliance or any other violation that has resulted in Significant Non-Compliance. The recipient shall pay an NOV fee as established by resolution. The Director may serve the user with a written NOV personally or by certified mail. The NOV shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required. The NOV shall require the user to respond in writing to the Director, within ten calendar days from the date of service of the NOV, with a written explanation of or response to

the violation(s) and a plan for the satisfactory correction or prevention thereof, including specific required actions. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV.

F. Violation Meeting.

A violation meeting shall be required of all users who have failed to achieve compliance after the issuance of an NOV or at the conclusion of an MPIO that has resulted in significant noncompliance. This meeting shall be for the City to draft a consent order or compliance order or for the user to propose solutions, request time extensions, draft a compliance schedule, or file an appeal. Any user for whom a violation meeting is scheduled shall pay the City a violation meeting fee in an amount as established by resolution.

G. Consent Order.

The Director may, at any time after finding a violation of this Chapter, enter into an agreement with the violating user known as a consent order. Such agreement may be a compliance schedule with milestones, other specific actions to be taken by the user to correct or prevent the noncompliance within a specified time period, payment of damages, consent order fees, penalties, or other remedies. The consent order is developed between the user and the City. A consent order has the same force and effect as any other administrative order issued pursuant to this Chapter. Any user subject to a consent order shall pay the City a consent order fee as established by resolution.

H. Compliance Order.

1. The Director may issue a compliance order for a violation of this Chapter, the user's Industrial User Permit, or an order issued thereunder. Compliance orders shall specify the provisions violated and the facts constituting the violation(s), and direct that adequate treatment be installed and operated by a specified time period. Compliance orders may also contain such other requirements as the Director deems appropriate to assure timely compliance with this Chapter, such as installation of pretreatment technology, additional self-monitoring or management practices, adherence to a compliance schedule, submission of action plans, and appearance by the user at a specific time and place for a compliance meeting, or other measures necessary to achieve and maintain compliance. Compliance orders are developed without user comment. A user subject of a compliance order shall pay a compliance order fee as established by resolution.

2. If no public hearing on the violation has been previously conducted, the alleged violating user may either submit a written explanation or other response to the compliance order or request that the Director conduct either an informal meeting or a hearing. Such submission or request shall be in writing and filed with the Director no later than ten calendar days after service of the compliance order. The submission or request shall not stay the compliance order.

I. Civil Penalty Order.

A civil penalty order may be issued to assess penalties and any other costs incurred by the City in the investigation, monitoring, legal assistance, enforcement, cleanup or repair caused by the user's violation. The civil penalty order may be included with any other administrative order.

J. Cease and Desist Order.

A cease and desist order shall be issued by the Director to any user or person whose violation of this Chapter, Industrial User Permit, or any order issued under this Chapter, poses a threat to the POTW, storm drain, personnel, environment or the public. A cease and desist order may also be issued by the Director to a user who continues to discharge industrial wastewater to the City's POTW without a valid Industrial User Permit. The Director may issue a cease and desist order immediately upon discovering any such violation and direct a user or person in noncompliance to take such appropriate remedial or preventive actions as Director deems are needed to eliminate a continuing or threatened violation, including stopping operations and terminating the discharge. Such cease and desist order shall include the

provision violated and the facts constituting the violation. A user subject to a cease and desist order shall pay City a cease and desist order fee as established by resolution.

K. Show Cause Order.

The Director may set a hearing requiring a user to show cause why the City should not take a proposed enforcement after issuance and conclusion of a consent order, compliance order, or cease and desist order. The hearing shall be held before the enforcement action is executed. The hearing shall follow written procedures established by the Director, maintained for public review in the office of the Director, and provided to the user together with the hearing notice. The hearing procedures shall provide the user with notice and an opportunity to be heard, and may include the following:

1. Appearance by the user to show cause to the Director why a proposed enforcement action should not be taken;

2. The hearing shall be open to the public;

3. A notice of the hearing and order shall be served on the user specifying the time and place for the hearing; the proposed enforcement action and the reasons for such action, the alleged violation and the facts supporting the violation, and a request that the user show cause why the proposed enforcement action should not be taken;

4. The Director shall permit the user to respond to the notice and order, to present evidence and argument on all relevant issues, and to conduct cross-examination of any witnesses necessary for the full disclosure of the facts;

5. The Director may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek subpoenas from the appropriate court to compel the presence of witnesses;

6. The testimony taken shall be under oath and recorded, with a transcript prepared and provided to any person upon payment of the usual charges for such transcript;

7. The notice of the hearing and the order to show cause shall be served upon the user personally or by registered or certified mail (return receipt requested) at least fifteen calendar days prior to the hearing; except that the Director may set an earlier date for the hearing at the user's request. Such notice may be served on any authorized representative of the user;

8. Upon review of the evidence, the Director shall make written findings of fact and decision in the nature of an order, which shall be served upon user; and

9. The City may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as noticed. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002; Ord. 6232 §2 (part), 1995)

Section 14.12.525 Permit Revocation.

The Director may revoke any Permit if the user violates any provision of this Chapter or the Permit. Those violations include but are not limited to: falsification of information; denial of the right of entry when conditioned in the Permit; user's failure to re-apply for a Permit or request a required permit modification; user's failure to pay required permit fees or charges; or user's discharge in violation of this Chapter. Validity of a Permit shall be conditioned upon industrial user's compliance with this Chapter. The Director may revoke the Permit upon a minimum notice of fifteen calendar days when the Director finds that user violated any provision of this Chapter or Permit. Within the fifteen days prior to the intended permit revocation, the Director shall make a hearing available to the industrial user. All costs for Permit revocation and reissuance will be paid by the user. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.530 Termination of Service.

The Director may immediately order a user to cease discharge of wastewater to the POTW, and may suspend wastewater disposal and treatment service to stop an actual or

threatened discharge that presents or may present an imminent danger to the health or welfare of persons or to the environment, causes interference or pass-through, causes the City to violate its NPDES permit, or if the user has failed to obtain a valid Permit. If the user fails to voluntarily comply with the suspension order, the Director may take such steps as deemed necessary, including severing a sewer connection, to prevent damage to the POTW, or danger to any person or the environment. All costs for terminating or reestablishing sewer service shall be paid by the user. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.535 Notice Publication.

The names of all significant industrial users which are found to be in significant noncompliance with this Chapter shall be published at least annually in a newspaper(s) of general circulation that provides meaningful public notice within the City, in accordance with 40 CFR 403.8(f)(2)(vii). The names of all industrial users shall also be published whose violation of a pretreatment standard or requirement or whose discharge that the City determines has:

- A. Caused, alone or in combination with other discharges, interference or pass-through at the POTW, including endangering the health of POTW personnel or the public;
- B. Posed imminent danger to human health, welfare or to the environment or resulted in the City exercising its emergency authority to stop or prevent a harmful discharge; or
- C. Adversely affected the operation or implementation of the City's Pretreatment Program, including violation(s) of Best Management Practices. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.540 Civil Penalties.

A. Any user violating any provision of this Chapter, user's permit, or administrative order shall be liable to the City for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the City. In addition to these penalties and damages, the Director may order user to pay the City's costs, including reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including, but not limited to, sampling, monitoring, laboratory costs and inspection expenses.

B. Upon petition by the Director, through the City Attorney, an award of such penalties, damages and costs shall be ordered against such user by an appropriate court in the County of Riverside. In determining the amount of such penalties, damages and costs, the court shall take into account all relevant circumstances, including but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through a user's violation, corrective actions by a user, the compliance history of the user, good faith efforts to restore compliance, threat to human health, to the environment and to the POTW, and any other factor as justice requires. The purpose of any civil penalty is to encourage compliance and remedy unquantified damage to the POTW and environment, and not to impose criminal sanctions or retribution.

C. If any user discharges wastewater to the POTW contrary to the provisions of this Chapter, federal or state pretreatment requirements, or any order of the City or permit issued under this Chapter, the Director through the City Attorney may commence an action for appropriate legal and/or equitable relief in the appropriate court in the County of Riverside. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.545 Criminal Penalties.

A. Any user which willfully or knowingly violates any provision of this Chapter, or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand dollars or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean

Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient Chapter provision. A user shall be guilty of a separate violation for each day a violation of any provision of this Chapter or Industrial User Permit is committed or continued by such user.

B. Any user that willfully or knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this Chapter or the user's Industrial User Permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Chapter shall, upon conviction, be guilty of a misdemeanor punishable by a fine of not more than one thousand dollars per violation per day or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient Chapter provision. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.550 Probationary Periods.

A user issued a written warning may be placed on probation for up to six months. A user issued a Notice of Violation may be placed on probation for up to twelve months. If the user commits the same violation within the probationary period, more severe enforcement may follow. Violations committed after the probationary period, will be treated as a new violation for purposes of enforcement. Repeated same violations can only be granted two probationary periods. If the same violation occurs after two consecutive probationary periods accompanying either a written warning or a notice of violation, more severe enforcement may follow. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.555 Remedies Nonexclusive.

The remedies in this Chapter are non-exclusive. The Director may take any, all, or any combination of these remedies against a noncompliant user. Enforcement of Chapter violations will generally be in accordance with the City's Enforcement Response Plan. The Director, however, may take alternative actions against a user as circumstances warrant. The Director may also take multiple enforcement actions against a user. (Ord. 7032 §2, 2009; Ord. 6637 §2 (part), 2002)

Section 14.12.560 Judicial Collection.

After an order making any monetary amount owing under this Chapter has become final, or after a court in an action has entered a final judgment in favor of the City, the Director through the City Attorney may initiate a civil action, if not earlier filed as a part of the judicial review, in the appropriate court to recover such amount plus prevailing interest from the date of the final order or the date of the final judgment, as the case may be. In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any user who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in this Section shall be required to pay to the City, in addition to such amount and interest, the City's attorneys' fees and costs, including filing fees, process service fees for collection proceedings and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. Such nonpayment penalty shall be in an amount equal to twenty percent of the aggregate amount of such person's penalties and nonpayment penalties that are unpaid as of the beginning of such quarter. (Ord. 7032 §2, 2009)

Section 14.12.565 Damage to Facilities or Interruption of Normal Operations.

When a user's discharge causes an obstruction, damage, interference, pass-through or otherwise adversely impacts the POTW, the Director may assess a charge, including administrative costs attributable thereto, against the user for costs incurred by the City for extra monitoring, investigation, quantifiable damages and work required to clean, repair and resume

normal operations. A ninety percent administrative fee shall be added to the direct charges. Unless appealed as provided herein, such charge shall be payable by the user within thirty calendar days of being notified of such charge and is subject to collection by civil suit or other procedures provided in this Chapter. (Ord. 7032 §2, 2009)

Section 14.12.570 Appeals.

A. Any user affected by and dissatisfied with any decision, order, Industrial User Permit, or enforcement action under this Chapter may file an appeal with the Director requesting reconsideration. The appeal must be in writing, detail the facts supporting the user's disagreement, and submitted within ten calendar days of receiving notice of the matter to be appealed. The Director shall decide the matter and issue a written decision within ten calendar days of receiving the appeal. Submitting an appeal does not automatically suspend any obligations or enforcement.

B. If the appellant is not satisfied with the Director's decision, then the appellant may, within ten calendar days after receiving the Director's decision, file a written appeal with the City Council, lodging such appeal with the City Clerk along with an appeals fee of one hundred dollars. The City Council will hear the appeal within thirty calendar days of filing or the next regularly scheduled meeting. The City Council will normally make a ruling on the appeal within 15 days of the hearing.

C. That the degree of protection shall be commensurate with the degree of hazard City Council's final ruling shall be deemed the City's final decision on the matter. No person may obtain judicial review of any decision, order, or enforcement action by the City under this Chapter without first having exhausted his or her administrative remedies set forth in this Section. (Ord. 7032 §2, 2009)

Section 14.12.575 Alternative Enforcement Procedures.

The Director may also seek penalties, payments, and liens on a user's property as provided in Government Code Sections 54739 et seq. (Ord. 7032 §2, 2009)

Section 14.12.580 Invalidity.

If any provision of this Chapter or the application thereof to any user or circumstance is held invalid, the remainder of this Chapter and the application of such provision to other users or circumstances shall not be affected thereby. (Ord. 7032 §2, 2009)

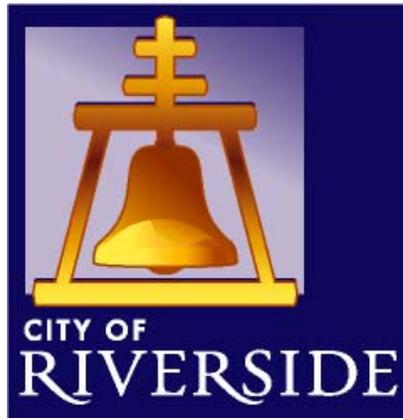
Section 14.12.585 Interpretation - Intent.

All the provisions of this Chapter are to be reasonably interpreted. The intent herein is to recognize that there are varying degrees of hazard to the POTW, the POTW's sludge, storm drain, personnel, environment and the public, and to apply the principle that the degree of protection shall be commensurate with the degree of hazard. (Ord. 7032 §2, 2009)

APPENDIX D

Enforcement Response Plan

City of Riverside



Public Works Department

Environmental Compliance Section

Pretreatment Program

Enforcement Response Plan

October 28, 2008

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Introduction

The City of Riverside's Environmental Compliance Section implements an approved Pretreatment Program as required by the City's NPDES Permit No. CA0105350 and 40 CFR Part 403.8(f)(5)(i-iv). The program's legal authority and enforcement capabilities are codified in Chapter 14.12 of Riverside Municipal Code (RMC) and associated resolutions dealing with fees, charges, pollutant limitations, and user permits. The primary purpose of the City's Pretreatment Program is to protect the City's POTW collection system, storm drain system, and personnel from harmful or detrimental wastewater discharges and accidental and negligent spills of industrial, commercial and hazardous waste and to insure the beneficial recycling and reclamation of wastewater and biosolids. The City accomplishes these tasks by permitting, inspecting, monitoring industrial users, taking appropriate enforcement actions and data management.

The Public Works Director (Director) oversees the pretreatment program. The City Attorney's Office advises on legal issues and reviews regulations and enforcement documents. Authorized representatives of the Director include, but are not limited to: the Wastewater Systems Manager, Wastewater Operations Manager, Environmental Compliance Supervisor, and the Environmental Compliance Inspectors.

Enforcement actions are progressive in nature and will escalate commensurate with the violation and response from the industrial user (IU). Assistance in the preparation of major violation civil enforcement responses is provided by the City Attorney's Office. The City is also able to refer violations for enforcement to the California Regional Water Quality Control Board, Santa Ana Region. State of California criminal enforcement responses may be taken by either: 1) the Riverside County District Attorney's office with assistance from the City and the Riverside County Department of Environmental Health; or 2) the California Regional Water Quality Control Board, Santa Ana Region using the California State Attorney General. Federal criminal enforcement responses may be taken by the United States Environmental Protection Agency, Criminal Investigation Division using the United States Department of Justice with support from the City's Environmental Compliance Section, Public Works Department, and City Attorney's Office.

The City uses permitting, inspection, wastewater monitoring, and public education to implement the requirements of the City's Pretreatment Program. The City has a permitting system for industrial users (IU) and liquid waste haulers. The various permits include Class I-VI Users, (Liquid Waste Haulers (LWH) are Class VI users), De Minimums Categorization, Wastewater Discharge Authorization Certificates (WDACs), and Group Permits. The City uses inspection, surveillance and monitoring activities to detect noncompliance at IU sites. Follow-up inspections are used to verify compliance with discovered violations. Inspection and monitoring activities are conducted in a scheduled and unscheduled manner. The majority of the inspections and monitoring visits are unannounced in order to provide a more realistic representation of business and production activities and wastewater discharge characteristics. The equipment used for these activities include:

- Portable automatic wastewater samplers with discrete or composite bottles
- Portable automatic wastewater samplers with pH and electrical conductivity meters that have computer data logging and data downloading capabilities
- Gas detectors
- Hand held electrical conductivity meters and pH meters
- Portable recording flow meters
- pH indicator strips
- Sulfide test kits
- Digital cameras and video cameras
- Various computers systems and software

Inspection results, complaints, sample results, correspondence, and other data collected and generated by the Pretreatment Program are managed in accordance with the City's records retention policy and by a computerized relational database management system and a manual file system. Original paper documents for Class I-VI permitted are maintained in a secure file room. All other paper records for non-permitted users, Group Permits, WDACS, De Minimus Permits, are kept in file cabinets. Pursuant to City procedures, the records retention period for paper records is seven years, unless otherwise directed by civil or criminal investigations or court order. All documents, written or electronic are managed in accordance with the City's records retention policy. User blueprints, schematics, agreements, and plot plans are maintained for the life of the permit or non-permitted file.

Definitions

Unless otherwise defined herein, definitions of terms related to the Pretreatment Program, Industrial User Permits and this Enforcement Response Plan shall be those set forth in RMC Chapter 14.12 regulating the discharge of wastes into the sewer and storm drain systems of the City.

Administrative Order (AO) means an enforcement action authorized by RMC Section 14.12.520, which directs Industrial Users to undertake corrective actions or cease specified activities to correct violations.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in RMC Section 14.12.335. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

Categorical Pretreatment Standards means those final regulations promulgated and adopted by the Federal Environmental Protection Agency (EPA) containing pollutant discharge limits and prohibitions (as outlined in 40 CFR 403.6 and 40 CFR, Chapter I, Subchapter N) for each identified Standard Industrial Classification (S.I.C.), North American International Coding System (NAICS) or subcategory.

Categorical User means all industrial user categories subject to National Categorical Pretreatment Standards listed by the United States Environmental Protection Agency under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

Chapter 14.12 means Chapter 14.12 of the RMC as it currently exists and as hereafter amended.

City means the **City of Riverside**.

Code of Federal Regulations (CFR) means the codification of the general and permanent rules published in the United States Federal Register by the Executive departments and agencies of the Federal Government, including the Environmental Protection Agency.

Collection Agency means the City, or a public agency that the City has an interagency agreement covering the collection of sewage within such agency and the discharge of such collected sewage into the City's sewer system for transmission, treatment, and disposal.

Collection System means all wastewater conveyance systems owned and maintained by the City and tributary community services districts contracted to the City for sewer service, excluding sewer service lateral line connections.

Compliance Order means a time schedule issued to an Industrial User by the City which specifies actions called milestones to be taken by the Industrial User to correct violations of the Industrial User's wastewater discharge permit or RMC Chapter 14.12.

Consent Order means a time schedule agreed upon between the City and an Industrial User that specifies corrective actions called milestones to be taken by the Industrial User to correct violations of the Industrial User's Wastewater Discharge Permit or RMC Chapter 14.12.

Control Authority means the City.

De Minimus User means any user whose industrial wastewater discharge is less than 100 gallons per day and is

not regulated by a federal categorical pretreatment standard and may be classified in the Director's discretion as de minimus and shall not be subject to permitting standards or local limits provided that such industrial wastewater discharge is not a hazardous substance, does not contribute to interference or pass through violations at the POTW or violations of the NPDES permit, and does not cause detrimental effects or damage to the City's collection system or POTW, or cause a threat of harm to City personnel, the public, or the environment.

Director means the Public Works Director of the City or an authorized representative, deputy, or agent appointed by the Public Works Director.

Discharge Requirements means the specific numerical limits, prohibitions, and reporting requirements as contained in an Industrial User Permit and RMC Chapter 14.12.

Dry Categorical User means Categorical Industrial Users which have no wastewater discharges to the City's collection system that are regulated by National Categorical Pretreatment Standards contained in 40 CFR Parts 405-471 and amendments thereto. These IUs shall not be considered Significant Industrial Users as defined by 40 CFR Part 403.

Enforcement Compliance Schedule Agreement (ECSA) means the written agreement between the City and an industrial user that contains a compliance schedule to correct the industrial user's violations of RMC Chapter 14.12.

Enforcement Policy means the current methods as outlined in the City's Enforcement Response Plan and utilized by the City to gain compliance from Industrial Users for violations of wastewater discharge permit conditions or RMC Chapter 14.12.

Facility Waste Management Plan means a written plan required by the City of all permitted Industrial Users including, as necessary: a Toxic Organic Management Plan; a Spill Prevention Control Plan; a Pretreatment System Operations and Maintenance Manual; and a Management of Hazardous Materials and Hazardous Waste Plan.

40 CFR means Title 40 of the Code of Federal Regulations relating to the protection of the environment.

Group Permit means a control document issued to a group of industrial users that shall share common business identification as defined by the Federal NAICS codebook. Group permits shall not be issued to Categorical Users or Dry Categorical Users.

Industrial User (IU) means all persons and entities, public or private, industrial, commercial, governmental, or institutional which discharge or cause to be discharged, wastewater and waterborne waste into the collection system of the City or Collection Agency, or City POTW treatment plant, including liquid waste haulers.

Interference means any discharge from any User which, alone or in conjunction with discharges from other sources, inhibits or disrupts the City's collection system, treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the City's NPDES Permit (as per 40 CFR 403.3).

Liquid Waste Hauler (LWH) means any person engaged in the truck hauling of liquid wastes from gravity separation interceptors, septic tanks, seepage pits, cesspools, or any other private disposal system.

May means permissive.

Major Violation means those violations that involve an Administrative Orders (RMC Section 14.12.520 D-K), Civil/Criminal Penalties, Legal Action, Industrial User Permit Revocation, Termination of Service, or result in Significant Noncompliance.

Minor Violation means those violations that involve the issuance of correction notices or written warnings and cause no harm to the POTW or environment or endanger the public or City employees.

Pass-Through means the discharge of pollutants through the POTW in quantities or concentrations that are a cause, in whole or in part, of a violation of any requirement of the City's NPDES Permit (pursuant to 40 CFR 403.3).

Person means any individual, firm, company, association, society, general or limited partnership, limited liability company, trust, corporation, governmental agency or group, and includes the plural as well as the singular.

Pollutant means any component or characteristic of wastewater or waterborne waste that is regulated by an effluent discharge limitation or prohibition imposed by either the City or other regulatory agencies.

Pretreatment means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to discharge of the wastewater into the City's collection system. The reduction or alteration may be accomplished by physical, chemical or biological processes, process changes, waste minimization, or other legal means designed to remove or reduce pollutants in a wastestream, but not by dilution.

Pretreatment Facility means any structures, equipment, devices or processes for the reduction, elimination, or alteration of pollutants and/or flow control of wastewater prior to discharge to a collection system.

POTW means a **Publicly Owned Treatment Works** of the City and includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial waste of a liquid nature. The POTW includes sewers, pipes and other conveyances only if they convey wastewater to the City's POTW treatment plant.

POTW Treatment Plant means that portion of the City's POTW which is designated to provide treatment (including recycling and reclamation) of municipal sewage, permitted liquid waste hauler wastewater, or other wastewater authorized for delivery to the City's POTW treatment plant.

RMC means the **Riverside Municipal Code**

Shall means mandatory.

Significant Non-Compliance (SNC) means any Industrial User with violations that meet one or more of the following criteria:

- a) Chronic violations of wastewater discharge limits, which are defined as those in which sixty-six percent or more of all of the measurements taken during a consecutive six month period exceed (by any magnitude) the a numeric pretreatment standard, local limit, or requirement, including instantaneous limits;
- b) Technical Review Criteria (TRC) violations, which are defined as those in which thirty-three

percent or more of all of the measurements taken during a consecutive six month period equal or exceed the product of the numeric pretreatment standard, local limit, or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, COD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);

- c) Any other violation of a pretreatment standard or requirement, including daily maximum, long-term average, instantaneous limit or narrative standard that the City determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
- d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or the environment, or has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge;
- e) Failure to meet, within ninety days after the schedule date, a compliance schedule milestone contained in an Administrative Order or enforcement order for starting construction, completing construction, or attaining final compliance;
- f) Failure to provide required reports such as baseline monitoring reports, 90 day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within forty-five days of the due date;
- g) Failure to pay, within 30 days, all applicable industrial user application, permit, and enforcement penalty fees.
- h) Failure to accurately report non-compliance;
- i) Any other violations or group of violations that the City determines will adversely affect the operation and implementation of the City's pretreatment program.

Significant Industrial User (SIU) means all industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; any industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the City's POTW (excluding sanitary, noncontact cooling water and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the City's POTW; or is designated by the City as such on the basis that the industrial user has a reasonable potential for adversely affecting the City's POTW operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8).

Standard Operating Procedure (SOP) means an internal written procedure for the management and interpretation of the City's pretreatment program and is maintained in the City's Environmental Compliance Section Office of the Public Works Department.

Spill Containment means a protection system installed by an Industrial User to prevent the commingling of incompatible materials and/or accidental discharge of prohibited and/or incompatible pollutants to the collection system or storm drain.

Storm Drain means a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, cross gutters, storm water pump and lift stations, parking lots, streets, and natural water courses used to collect and direct storm precipitation and surface runoff to a receiving body of water or underground aquifer recharge basins.

User means any person or entity, public or private, residential, industrial, commercial, governmental, or institutional which discharges or causes to be discharged, wastewater or water borne wastes into the collection system of the City or a Collection Agency.

Waste means any and all discarded materials, liquid, solid, semi-solid, gaseous or radioactive.

Wastewater means any combination of waste and water, whether treated or untreated, discharged into or permitted to enter the collection system or storm drain of the City or a Collection Agency.

Wastewater Discharge Authorization Certificates (WDACS) are issued to any non-residential user desiring to discharge wastewater to the City's POTW, that does not qualify for an Industrial User Permit, Group Permit, or De Minimus Category and whose wastewater shall not have an adverse affect on the City's POTW. WDACs shall not be issued to categorical industrial users. WDACs are issued for indefinite time periods, subject to periodic review and reconsideration by the Director.

Waste Minimization means a written summary of practices and site-specific technical and economic information used for selecting appropriate techniques to reduce the production of wastes.

Responsible Personnel

The City has nine personnel positions that have a role in the implementation of the City's Pretreatment Program. The following is a listing and description of those positions. Those positions with an "*" are authorized representatives of the Public Works Director.

1. **City Attorney** is collectively comprised of attorneys employed by the City Attorney's Office that provide legal guidance and assistance to the staff of the Environmental Compliance Section on matters of enforcement actions, permits, and regulations.
2. **Public Works Director** is the individual responsible for the activities of all divisions and sections in the City's Public Works Department.
3. **Wastewater Systems Manager** is the individual responsible for all the activities and personnel in the City's Sewerage Systems Division.
4. **Wastewater Operations Manager** is the individuals responsible for all the activities and personnel in the Environmental Compliance Section of the Sewerage Systems Division.
5. **Environmental Compliance Supervisor** is the individual responsible for the activities and personnel of the Environmental Compliance Section of the Sewerage Systems Division, including quality assessment and quality control (QA/QC) of pretreatment program activities, regulatory reporting and interaction and enforcement actions.
6. **Senior Environmental Compliance Inspector** is the individual responsible for assisting the Environmental Compliance Supervisor as required. This individual is responsible for all the activities of the Environmental Compliance Inspectors I and II; managing and performing the activities of the Liquid Waste Hauler Permit Program; plan check reviews; IU Permitting; Enforcement Responses F, H-K, and M; and conducts training for the Environmental Compliance Section and Environmental Compliance Inspectors.
7. **Environmental Compliance Inspector II** is the position responsible for all the activities of the Environmental Compliance Inspector I plus inspections of Class I-IV permitted industrial users and Enforcement Response G. This individual may also be assigned to the activities of plan check, IU permitting and training Environmental Compliance Inspectors I,
8. **Environmental Compliance Inspector I** is the individual responsible for the inspection of Class III industrial users, group permits, WDAC, and De Minimus users, non-significant industrial users (NSIUs), and restaurants; conducting wastewater monitoring activities; responding to complaints; conducting sewer rate reviews and sewer use studies; enforcement responses A-E; and database data input.

Enforcement Responses and Responsible City Personnel

The City has codified certain enforcement responses in Riverside Municipal Code Chapter 14.12 that are escalating in nature. Eight personnel positions in the City are designated with authority to use these enforcement responses pursuant to RMC Section 14.12.200(B). Administrative Orders pursuant to RMC Section 14.12.520 are issued and enforced by the Public Works Director, or designee, with preparation and consultation assistance from the City Attorney's Office. The following is a summary of the enforcement responses and the personnel positions that are responsible for the specific enforcement response.

Enforcement Response

- | | |
|---|--------------------------------------|
| A. Phone Call | K. Compliance Order |
| B. Stop Work Order | L. Civil Penalty Order |
| C. Correction Notice | M. Cease and Desist Order |
| D. Written Warning | N. Show Cause Order |
| E. Informal Meeting | O. Industrial User Permit Revocation |
| F. Senior Mitigation Meeting | P. Termination of Service |
| G. Monitoring/Production Information Order (MPIO) | Q. Civil Penalties |
| H. Notice of Violation | R. Criminal Penalties |
| I. Violation Meeting | S. Probation |
| J. Consent Order | T. Publication |

Personnel

- | | |
|--|--|
| 1. City Attorney | 6. Senior Environmental Compliance Inspector |
| 2. Public Works Director | 7. Environmental Compliance Inspector II |
| 3. Wastewater Systems Manager | 8. Environmental Compliance Inspector I |
| 4. Wastewater Operations Manager | |
| 5. Environmental Compliance Supervisor | |

Table 1 Enforcement Response Personnel

Enforcement Response	Authorized Personnel
A. Phone Call	2,3,4,5,6,7,8
B. Stop Work Order	5,6,7,8
C. Correction Notice	5,6,7,8
D. Written Warning	5,6,7,8
E. Informal Meeting	5,6,7,8
F. Senior Mitigation Meeting	5,6
G. Monitoring/Production Information Order	5,6,7
H. Notice of Violation*	1,2,3,4,5,6
I. Violation Meeting*	1,2,3,4,5,6
J. Consent Order*	1,2,3,4,5,6
K. Compliance Order*	1,2,3,4,5,6
L. Civil Penalty Order*	1,2,3,4,5
M. Cease and Desist Order*	1,2,3,4,5,6
N. Show Cause Order*	1,2,3,4,5
O. Industrial User Permit Revocation*	1,2,3,4,5
P. Termination of Service*	1,2,3,4,5
Q. Civil Penalties*	1,2,3,4,5
R. Criminal Penalties	1,2,3,4,5
S. Probation*	1,2,3,4,5,6
T. Publication*	2,3,5,6

* these enforcement actions are created with the advisement of the City Attorney's Office.

Enforcement Responses and Uses

A. Phone Calls are used to quickly communicate with a user to clarify issues, provide information, and remind users of due dates. Substantive phone calls are documented with a written memo to the user's file. Substantive phone calls may include those that provide information for permits, enforcement responses, violations, complaints, and sample results.

B. Correction Notice and Extensions. A Correction Notice is given to a user to require correction of minor violations noted during an inspection of the user's facility. A compliance time extension may be granted to a user who fails to correct a minor violation required by a Correction Notice, upon showing of good cause by such user. "Good Cause" means an unforeseeable and unavoidable event or series of events, over which the user had no control and which prevented or significantly impaired the user's ability to comply with the correction notice. A copy of the Correction Notice is given to the IU at the conclusion of the inspection. Extensions can be given at the compliance follow-up inspection or by letter. The IU is given a copy of the extension at the conclusion of the inspection.

C. Written Warning is issued to notify a user of a minor violation and any violation that has not been corrected as required by a correction notice. The Written Warning shall state the provision(s) violated and the facts alleged to constitute the violation, and may include any proposed corrective actions or monitoring to be required. These warnings can be documented in a written inspection report at the time of the inspection. A copy is given to the industrial user (IU) at the conclusion of the inspection. A compliance date for the violation is included on the inspection report. The compliance time can range from immediate to 30 days depending on the severity of the violation. The inspector writing the Written Warning shall use best professional judgment in establishing compliance dates. Follow-up inspections shall be used to verify compliance on the due date stated in the inspection report. A Written Warning may also be sent to the IU within 5 days after the inspection.

D. Informal Meeting is used to bring the user and the City into discussions to clarify any issue(s) related to the user's violation, permit, or conditions levied upon the user by the City. This meeting is for informational purposes only and does not carry any penalties.

E. Senior Mitigation Meeting may be used by the Environmental Compliance Supervisor or a Senior Environmental Compliance Inspector or when a user has been issued a Written Warning and has failed to achieve compliance. The purpose of the meeting is to discuss with the user their violation(s) and the potential consequences for not achieving compliance after the issuance of a Written Warning. This meeting provides an opportunity to educate the user about their violation(s) and affords an opportunity to present potential mitigative options to the user to achieve compliance before a Notice of Violation is issued.

F. Stop Work Order is issued to any person engaged in doing or causing to be done new construction, tenant improvements, alterations, or additions relative to the City's pretreatment program if:

1. City permits have not been obtained; or
2. Work has begun without prior written approval by the Director; or
3. Violations of this Chapter are found at the site of the new construction, tenant improvements, alterations, or additions. Any user served a Stop Work Order pursuant to RMC Chapter 14.12, shall immediately stop such work until written authorization for such work is issued by the Director.

G. Monitoring/Production Information Order (MPIO) is issued to a user when two consecutive violations

for the same pollutant are detected in City wastewater discharge samples, user samples or both. The MPIO is used to determine if discharge compliance has been achieved or if a detected violation is consistent. The MPIO requires a user to sample the user's wastewater discharge for the pollutant(s) in violation and record the daily effluent wastewater flow for all days with a fourteen consecutive day period that industrial wastewater is discharged to the City's POTW. Production information is required of all categorical users that have production-based wastewater discharge standards. If oil and grease is a pollutant required by the MPIO, then the user shall take four grab samples for oil and grease in a twenty-four hour period on the same calendar day. Each sample shall be separated by a minimum of two hours. The four oil and grease samples shall be analyzed separately and the sample analytical results averaged for the purpose of reporting. The user shall be responsible for all costs incurred with the sampling, analysis, collection, and submittal of information.

H. Notice of Violation (NOV) is issued to a user for violation of a Written Warning, Stop Work Order, Industrial User Permit, RMC Chapter 14.12, an MPIO that has resulted in significant noncompliance (SNC), major violations, or any other violation that has resulted in SNC. When the Director is made aware of the user's violation(s), the Director may serve personally or by certified mail upon said user a written NOV. The NOV shall state the provision(s) violated and the facts alleged to constitute the violation, and may include any proposed corrective actions or monitoring to be required. The NOV requires a user to respond in writing to the Director, within ten calendar days from the date of receipt of the NOV, with a written explanation of or response to the violation(s) and a plan for the satisfactory correction or prevention thereof, including specific required actions. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV. The user also has ten calendar days to appeal any findings made or actions required by the NOV. The NOV shall have a monetary penalty according to the enforcement penalty schedule (Table 2).

I. Violation Meeting is required of all users who have failed to achieve compliance after the issuance of an NOV, at the conclusion of an MPIO that has resulted in significant noncompliance, or after a pattern of violations has been discovered. This meeting shall be for the City to draft a consent order or compliance order or for the user to propose solutions, request time extensions, draft a compliance schedule, or file an appeal. The Violation Meeting shall have a monetary penalty according to the enforcement penalty schedule (Table 2).

J. Consent Order is a written agreement between the City and a violating user and may be issued at any time after finding a violation of RMC Chapter 14.12. Such agreement may be in the form a compliance schedule with milestones, other specific actions to be taken by the user to correct or prevent the noncompliance within a specified time period, payment of damages, monetary penalties, fines, or other remedies. No milestone in the Consent Order shall exceed nine months in length. The Consent Order is developed between the user and City personnel authorized for this activity (Table 1). The minimum elements of an Enforcement Compliance Schedule Agreement (ECSA) generally are:

1. Hiring a consultant by the IU to identify the problems causing the violations and submitting the consultant's report.
2. Design and submittal by the IU of all pretreatment systems, equipment, facilities, and procedures to correct violations.
3. Review of the IU's submittals by the Environmental Compliance Section and other relevant City Departments.
4. Hiring of contractors by the IU.
5. IU obtains all necessary permits.

6. All necessary equipment is ordered by the IU and construction begins.
7. Construction is completed by the IU.
8. IU employees are trained by the IU.
9. An MPIO is conducted by the user, if the violations were due to permit discharge violations.
10. IU achieves compliance.

Written progress reports are required from the IU throughout the term of the ECSA. The minimum reporting frequency is every 30 days. A Consent Order has the same force and effect as any other administrative order issued pursuant to this RMC Chapter 14.12 and shall have a monetary penalty according to the enforcement penalty schedule (Table 2).

K. Compliance Order shall be issued to a user that has violated or continues to violate this Chapter, the user's industrial user permit, or order issued thereunder. The City may issue a compliance order to the user responsible for the violation(s) that shall specify the provisions violated and the facts constituting the violation(s). The Compliance Order shall direct adequate treatment facilities, devices, or other related appurtenances be installed and properly operated by qualified personnel for a specified time period. The Compliance Order is developed and written by City personnel authorized for this activity (Table 1) without input from the IU. The purpose of the Compliance Order is to compel uncooperative or non-compliant IUs to achieve compliance. Compliance Orders may also contain other requirements, as deemed reasonably necessary and appropriate, to assure timely compliance with RMC Chapter 14.12. and correct the noncompliance. Such Compliance Order may require the installation of pretreatment technology, additional self-monitoring or management practices, compliance schedule with milestones, submission of action plans, appearance by the user at a specific time and place for a compliance meeting, or other measures necessary to achieve and maintain compliance. At no time, shall a Compliance Order contain a milestone that exceeds nine months in duration. The Compliance Order shall have a monetary penalty according to the enforcement penalty schedule (Table 2).

If no public hearing on the alleged violation(s) has been previously conducted, the alleged violating user may either submit a written explanation or other response to the Compliance Order or request that the Director conduct either an informal meeting or a hearing. Such submission or request shall be in writing and filed with the Director no later than ten calendar days after receipt of the Compliance Order. The submission or request shall not stay the Compliance Order.

L. Civil Penalty Order is issued to a user to assess penalties authorized by Sections 14.12.540 or 14.12.565 of RMC Chapter 14.12 and any other costs incurred by the City in the investigation, monitoring, legal assistance, enforcement, cleanup or repair caused by the user's violation. The Civil Penalty Order may be included with any other administrative order. The amounts of penalties are determined by the seriousness of the violation(s). Any user violating any provision of this Chapter, permit term or condition, or administrative order shall be liable to the City for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the City pursuant to RMC Section 14.12.540(A).

M. Cease and Desist Order is issued to any user or person whose violation of RMC Chapter 14.12, industrial user permit, or any order issued under RMC Chapter 14.12, poses a threat to the City's collection system, storm drain, POTW, personnel, environment or the public. A Cease and Desist Order may also be issued to users who continue to discharge industrial wastewater to the City's POTW without a valid industrial user permit. A Cease and Desist Order may be issued immediately upon discovering any such violation and direct those users or

persons in noncompliance to take such appropriate remedial or preventive action as may be deemed necessary to eliminate a continuing or threatened violation, including halting operations and terminating a discharge. Such Cease and Desist Order shall include the provision violated and the facts constituting the violation. A Cease and Desist Order shall have a monetary penalty according to the enforcement penalty schedule (Table 2).

N. Show Cause Order is a hearing requiring a user to show cause why a proposed enforcement action should not be taken by City shall be conducted prior to City's imposition of such enforcement action against a user failing to achieve compliance with this Chapter or user's industrial user permit, after issuance and conclusion of a consent order, compliance order, or cease and desist order. The Show Cause Hearing shall have a monetary penalty according to the enforcement penalty schedule (Table 2). The Show Cause Hearing shall be conducted pursuant to such written procedures as established by the Director from time to time, maintained for public review in the office of the Director, and provided to a user at the time of notice of such hearing. Such procedures shall provide user with notice and an opportunity to be heard, and may include the following procedures:

1. A Show Cause Order, issued by the Director, shall order the violating user to appear at a show cause hearing to show cause to the Director why a proposed enforcement action should not be taken;
2. The Show Cause Hearing shall be public;
3. A notice of the Show Cause Hearing and the Show Cause Order shall be served on the user specifying the time and place for the public hearing; the proposed enforcement action and the reasons for such action, including any alleged violation and the facts constituting the violation, and a request that the user show cause why the proposed enforcement action should not be taken;
4. The Director shall permit the alleged violating user to respond to the notice and order, to present evidence and argument on all relevant issues, and to conduct cross-examination of any witnesses necessary for the full disclosure of the facts;
5. The Director may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek from the appropriate court the issuance of subpoena to compel the presence of prospective witnesses;
6. The testimony taken shall be under oath and recorded, with a transcript prepared and provided to any person upon payment of the usual charges for such transcript;
7. The notice of the hearing and the order to show cause shall be served upon user personally or by registered or certified mail (return receipt requested) at least fifteen calendar days prior to the hearing; except that the Director may set an earlier date for the hearing if the user requests the earlier date. Such notice may be served on any authorized representative of the user;
8. Upon review of the evidence, the Director shall make written findings of fact and decision in the nature of an order, which shall be served upon user; and
9. City may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as noticed.

O. Industrial User Permit Revocation. The Director may revoke any industrial user permit if the user is in violation of any provision of this Chapter or the industrial user permit. These violations include but are not limited to: falsification by user of information required by this Chapter; user's denial to the City of the right of entry when conditioned in the industrial user permit; user's failure to re-apply for an industrial user permit or request a required permit modification; user's failure to pay required permit fees or charges; or user's discharges in violation of this Chapter. Validity of the industrial user permit shall be conditioned upon industrial user's compliance with the provisions of this Chapter. The Director may revoke the industrial user permit upon a minimum notice of fifteen calendar days when the Director finds that user violated any provision of this Chapter or industrial user permit. Within the fifteen days prior to the intended permit revocation, the Director shall make a hearing available to the industrial user. All costs for industrial user permit revocation and reissuance will be paid by the user.

P. Termination of Service. The Director may immediately order a user to cease discharge of wastewater to City's collection system and POTW, and may suspend wastewater disposal and treatment service for such user in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons or to the environment, or causes interference to the POTW or City's collection system, or causes the City to violate any condition of its NPDES permit, or if the user has failed to obtain a valid industrial user permit. If the user fails to comply voluntarily with the suspension order, the Director shall take such steps as deemed necessary, including immediate severance of the sewer service lateral connection, to prevent or minimize damage to the POTW or collection system, or endangerment to any person or the environment. All costs for terminating service shall be paid by the user. All costs for reestablishing service shall be paid by the user.

Q. Civil Penalties

- A. Any user violating any provision of this Chapter, user's permit, or administrative order shall be liable to the City for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the City pursuant to RMC Section 14.12.540(A). In addition to these penalties and damages, the Director may order user to pay City's costs, including reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including, but not limited to, sampling, monitoring, laboratory costs and inspection expenses.
- B. The Director shall petition an award of such penalties, damages and costs against such user by an appropriate court in the County of Riverside. In support of such petition and as a basis to determine the amount of such penalties, damages and costs, the Director shall cite to the court all relevant circumstances, including but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through a user's violation, corrective actions by a user, the compliance history of the user, good faith efforts to restore compliance, threat to human health, to the environment and to the POTW, and any other factor as justice requires. The purpose of any civil penalty is to encourage compliance and remedy unquantified damage to the POTW and environment, and not to impose criminal sanctions or retribution.
- C. If any user discharges wastewater into the City's collection system or POTW contrary to the provisions of this Chapter, federal or state pretreatment requirements, or any order of the City or permit issued under this Chapter, the Director may commence an action for appropriate legal and/or equitable relief in the appropriate court in the County of Riverside.

R. Criminal Penalties

- A. Any user which willfully or knowingly violates any provision of this Chapter, or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand dollars or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and amendments thereto, and shall apply to the exclusion of any other more lenient Chapter provision. A user shall be guilty of a separate violation for each day a violation of any provision of this Chapter or industrial user permit is committed or continued by such user.
- B. Any user that willfully or knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this Chapter or the user's industrial user permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Chapter shall, upon conviction, be guilty of a misdemeanor punishable by a fine of not more than one thousand dollars per violation per day or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and amendments thereto, and shall apply to the exclusion of any other more lenient Chapter provision.
- C. Any user that is discovered having committed violations of the Federal Clean Water Act, 33 U.S.C. 1251, et seq. may be referred to the United States Environmental Protection Agency – Criminal Investigations Division and the United States Department of Justice for investigation and criminal prosecution.

S. Probation. A user issued a Written Warning may be issued a maximum six-month probationary period for the violation stated in the written warning. All users issued a Notice of Violation may be issued a maximum twelve-month probationary period for the violation stated in the notice of violation. If the user commits the same violation within the probationary period, then enforcement will be escalated to the next appropriate level. If the user commits the same violation after the end of the probationary period, then the violation will be treated as a new violation for purposes of enforcement. Repeated same violations will only be granted two probationary periods. If the same violation occurs after two consecutive probationary periods for either a Written Warning or a Notice of Violation, then the enforcement actions will be escalated to the next appropriate level.

T. Publication. The names of all significant industrial users which are found to be in significant noncompliance with this Chapter shall be published at least annually in a newspaper(s) of general circulation that provides meaningful public notice within the City, in accordance with 40 CFR 403.8(f)(2)(vii). The names of all industrial users shall also be published whose violation of a pretreatment standard or requirement or whose discharge that the City determines has:

- A. Caused, alone or in combination with other discharges, interference or pass-through at the POTW, including endangering the health of POTW personnel or the public;
- B. Posed imminent danger to human health, welfare or to the environment or resulted in the City exercising its emergency authority to stop or prevent a harmful discharge; or
- C. Adversely affected the operation or implementation of the City's Pretreatment Program, including violation(s) of Best Management Practices.

All administrative orders, RMC 14.12.520 H-T, are created by the Public Works Director, or designee, with the advisement of the City Attorney's Office. If the user does not comply with the enforcement action, then the City Attorney's office may issue an enforcement action for the administrative order that was issued.

Table 2 lists the monetary penalties the enforcement actions associated for each permit class.

Table 2 Enforcement Penalty Schedule

User Category	NOV	Compliance Order	Consent Order	Cease and Desist Order	Violation Meeting	Show Cause Order
Class I	\$1,000	\$2,000	\$1,000	\$3,000	\$1,000	\$3,000
Class II, LWH	\$500	\$1,000	\$500	\$2,000	\$500	\$2,000
Class III, IV, V, NSIU, Restaurant, Group, De Minimus, WDAC	\$250	\$500	\$250	\$1,000	\$250	\$1,000

Appeals

- A. Any user affected by and dissatisfied with any decision, order, or enforcement action, made by the Director interpreting or implementing the provisions of this Chapter or industrial user permit, with the exception of a Show Cause Order, may file with the Director a written appeal requesting a hearing, reconsideration of such decision, order or enforcement action within ten calendar days from the receipt of the notice of such decision, order or enforcement action. The user shall state in detail the facts supporting the user's request for reconsideration. The Director shall render a ruling on the appeal to the user in writing within ten calendar days from receipt of the appeal. Submission of such a request in no way relieves the user of liability for any violations occurring before or after receipt of decision, order, or enforcement action, nor stays the requirements of achieving or maintaining compliance.
- B. If the Director's ruling on the appeal is unsatisfactory to user, then the user may, within ten calendar days after receipt of notice of the Director's ruling, file a written appeal with the City Council, lodging such appeal with the City Clerk along with an appeals fee of one hundred dollars. The written appeal shall be heard by the City Council within thirty days from the date of filing. The City Council shall make a ruling on the appeal within forty-five days from the date of filing.
- C. City Council's final ruling shall be deemed a final decision, order or action by City which any person adversely affected by such decision, order or action may appeal to the appropriate court in the County of Riverside. No person may obtain judicial review of any decision, order, or enforcement action by City under this Chapter without first having exhausted his or her administrative remedies set forth in this Section.

Inspections

The Environmental Compliance Inspectors are required to know, implement, and enforce a wide spectrum of laws, regulations and policies. The City’s pretreatment program utilizes the skills and abilities of the Environmental Compliance Supervisor and the Environmental Compliance Inspectors (ECI) to conduct inspections. The majority of inspections are random and unannounced. Some inspections are scheduled due to the time required for the inspection or pre-arrangements necessary to insure that a knowledgeable person will be available. The categories of users or events requiring an inspection are: permitted industrial users, non-significant industrial users (NSIUs), restaurants, de-minimus users, group permitted users, WDACs, liquid waste haulers, complaints, sewer rate reviews, plan check, and sewer use verification. The goals of the inspections are to:

1. Protect the City’s POTW from industrial waste discharges that could cause interference, pass through, or interfere with the reclamation of bio-solids;
2. Protect the City’s collection systems from damage or obstructions;
3. Protect the City’s storm drain system from illegal, illicit, or harmful discharges; and
4. Provide the user with regulatory updates and requirements, pollution prevention and waste minimization information, and storm water compliance information.

The Environmental Compliance Section maintains a training manual and a variety of Standard Operating Procedures (SOPs) used to document, train and remind employees of protocols, procedures, and inspection methods. Inspection frequencies are determined by permit class, user designation, user’s inspection/enforcement history, specific inspection need (e.g. permit class, sewer rate review, plan check, etc.). Table 3 lists the category of inspections, minimum inspection frequencies, and personnel authorized to conduct the inspection.

Table 3 Inspection Categories and Personnel

Permit Class	Inspection Frequency	EC Supervisor	Senior EC Inspector	EC Inspector II	EC Inspector I
Class I	4/yr	√	√	√	
Class II	2/yr	√	√	√	*
Class III	2/yr	√	√	√	√
Class IV	2/yr	√	√	√	√
Class V	as needed	√	√	√	
Class VI, LWH	as needed	√	√	√	
NSIU	1-2/yr	√	√	√	√
Restaurant	1-4/yr	√	√	√	√
Group	1-2/yr	√	√	√	√
De Minimus	1 per 2 yr	√	√	√	√
WDAC	1 per 2yr	√	√	√	√
Complaint	as needed	√	√	√	√
Sewer Rate Review	as needed	√	√	√	√
Plan Check	as needed	√	√	√	*
Sewer Use Verification	as needed	√	√	√	√

*** ECI I may conduct these activities providing the requisite training has been completed and the approval of the Environmental Compliance Supervisor has been obtained.**

Permits

The City has developed several means of controlling the discharge of industrial wastewater into the POTW. These are Industrial User Permits Classes I-VI, Group Permits, Waste Discharge Authorization Certificates, and De Minimus Categorizations. The Director issues Industrial User (IU) Permits with specific requirements including, but not limited to: minimum sampling and inspection frequencies, compliance schedules, reporting requirements, specific numerical limits for listed pollutants, and specific limitations for wastewater discharge volume (daily flow). The discharge limits are derived from applicable Federal standards and Local Limits. In the case of Federal categorical IUs whose wastestreams contain regulated, unregulated, and dilute wastestreams, the Combined Wastestream Formula (40 CFR 403.6) is used to determine fixed alternative discharge limits for end-of-pipe discharges. In cases where the Federal fixed alternative limit and the local limit for the same pollutant exist, the more stringent limit shall apply and will be written into the IU's discharge permit. In cases where the Combined Wastestream Formula is not applied, the Federal categorical limit shall apply at the end of process of the regulated wastestream. The IUs are required to sample their wastewater discharges based upon the permit class. The following table describes the permit categories, user designations, and activities that require inspections.

Table 4 Permit Classes and Descriptions

Category	Duration	Description
Class I	1-2 years	Average wastewater discharge > or = 25,000gal/day, SIU, or Categorical User
Class II	1-3 years	Average wastewater discharge >10,000 and <25,000 gallons/day
Class III	1-3 years	Average wastewater discharge > 100 and <10,000 gallons/day
Class IV	1-3 years	Any user that stores hazardous substances on site or has a categorical process with no sewer discharge of categorical wastewater.
Class V	up to 180 days	Temporary User, permit shall be from 1 to 180 days
Class VI	1 year	Liquid Waste Hauler Permit
NSIU	*	Non-Significant Industrial User
Restaurant	*	All food serving establishments
Group	1-3 years	All users sharing a common NAICS identification and agreeing to general permit requirements for that specific business or commercial activity.
De Minimus	3 years	All users with less than one hundred gallons/day of wastewater discharge and are not subject to federal categorical pretreatment standards
WDAC	indefinite	Waste Discharge Authorization Certificate may be issued to any user not regulated by a Class I-VI permit, group permit, or De Minimus permit.
Complaint	n/a	Inspections required in response to complaints received: sewer, odor, or storm drain, including hazardous material spills and sanitary sewer overflows (SSOs).
Sewer Rate Review	n/a	Inspections required in response to user's request for a sewer rate review
Plan Check	n/a	Inspections required in response to new construction and Tenant improvements
Sewer Use	n/a	Inspections required to determine the correct sewer use category

* Those NSIUs and Restaurants qualified for a Group Permit will be issued a Group Permit, all others may be issued a De Minimus or WDAC control document.

The inspection is one method for determining compliance with permit conditions, Riverside Municipal Code Chapter 14.12, applicable regulations and limitations from 40 CFR 403-471, sewer use, and plan check requirements. The inspection is also used to verify compliance after a violation has been discovered. Conducting inspections is not without limitations and guidelines.

Inspection Preparation

According to 40 CFR 403.8 and RMC Section 14.12.215 and 225, the City's inspectors in the Environmental Compliance Section have the authority to inspect, conduct surveillance, and monitor all IUs to determine compliance with permit conditions, Chapter 14.12, and all other applicable standards and regulations independent of information supplied by the IU. The inspector shall gain entry to the IU through the front office, guarded gate, or another pre-arranged agreed upon entry point. At no time shall an inspector enter the property of an IU without first securing the permission of a responsible IU official. The inspector shall provide proper identification (City business card and/or City photo ID) to the IU when claiming to be a City Environmental Compliance Inspector. The IU shall allow the inspector ready access at all reasonable times to all parts of the premises. When an IU has security measures in force, the IU shall make all necessary arrangements to allow ready access of properly identified City Environmental Compliance Inspectors.

Prior to inspecting a permitted IU, the Inspector shall review the IU's file to become familiar with the IU's business activities, processes, and permit conditions (including BMR, TOMP, and other periodically submitted material), any Federal categorical processes or applicable requirements, have a good knowledge of the City's waste discharge ordinance (as contained in Riverside Municipal Code Chapter 14.12) and discuss any pending or anticipated enforcement actions with the Senior Environmental Compliance Inspector or Environmental Compliance Supervisor.

These activities are critical to gaining an understanding of the user's production processes, wastestreams produced, pretreatment methodology, wastewater flow, waste disposal, permit class, and monitoring requirements. The enforcement history provides the inspector with the IU's violation history and focus the inspector to historical problem areas. An understanding of the company's processes and inspection history will add a level of confidence to the inspector that is necessary to adequately complete the inspection.

The Class V permit, or temporary use, inspections are used to verify the information submitted in the permit application with the on-site equipment, conditions, and circumstances. Temporary uses may be necessary for a remediation project lasting less than six months that generates wastewater or one time discharges of large volumes of wastewater.

The Class VI, or liquid waste hauler permit, inspections, entail verification of permit information with the company owner, vehicle inspections for license plate and County permit verification, and load inspections to verify load origination or any attempt to mix loads. Occasionally, joint inspections are conducted with the Riverside County Department Environmental Health at the permittee's truck yard or business office location.

Inspections for complaints entail a review of the site address, area sewers and storm drains, and consultation with a Senior Environmental Compliance Inspector, Environmental Compliance Supervisor, or Collection System Supervisor. Complaint inspections can be from a residential site to a large manufacturing site. Complaints can be initiated due to a spill or intentional discharge of a material or waste. The inspector must have a knowledge of chemistry and many industrial processes, materials, and chemicals in order to assess the proper response for the complaint received. Depending on the nature of the complaint, the inspector may be interfacing with the Regional Board, Riverside County Health Dept., City Fire Department, City Building Division, City Code Compliance, or City Street Division.

Plan Check inspections require a review of the plan check file for the site address and the plan check database for any pretreatment requirements or any other specific requirements for the project. These inspections typically review the construction site with the submitted approved blue prints. Deviations from the approved submitted blue print drawings must have approval from the City Planning Department and Building Division prior to implementation of the change. If any changes have been made without approval or any construction began

without permits, the inspector may issue a Stop Work Order and/or notify the Building Division to take appropriate actions.

The sewer rate review requires research into water use history, the accounts sewer rate, and any file information for the site. Some sewer rate reviews are conducted for a sewer charge adjustment due to a water leak, high landscape water usage, water used in a product, and evaporative processes.

Sewer use verification inspections are generated by the Customer Information System (CIS), requests by users or third parties. These inspections are used to verify the user's sewer use code with the sewer use code assigned by the City's utility billing section.

The inspection activities performed by the City's Environmental Compliance Section comply with the Fourth Amendment to the United States' Constitution which states: "The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

Access to an inspection site must always be done through the main entrance, front door, gate, guarded entrance or other prearranged and approved entry point during normal business hours. The "normal business hours" may be overlooked in the case of emergencies, evasive users, or other unusual circumstances that would warrant an inspection outside of normal business hours. Once contact is made with the user, inspector must:

- 1) Present identification and ask for the person in charge, the known contact, or the authorized representative;
- 2) Clearly explain the purpose of the visit, e.g. inspection pursuant to RMC Chapter 14.12, permit inspection, bi-annual inspection, complaint, spill;
- 3) Ask for permission to begin the inspection.

The consent for inspection must be informed and voluntary. The IU must be clearly informed and understand the need for the inspection. The IU must also freely give consent to inspect the facility. This consent may not be obtained through trickery, deceit, coercion or threats. The absence of a denial of entry can be inferred to be the equivalent of consent.

Access Denial to an Inspector by an IU

An IU must give verbal consent for entry prior to routine inspection and monitoring activities. As long as the inspector is allowed to enter, entry is considered voluntary and consensual, unless the inspector is expressly told to leave the IU's premises. Express consent is not necessary. Absence of express denial can constitute consent. If an inspector has been denied access, the following procedures are to be used, in accordance with the 1978 U.S. Supreme Court decision in Marshall v. Barlow's Inc., 436 U.S. 307 (1978):

1. The inspector is to provide proper identification.
2. The inspector is to tactfully ask the reasons for the denial without using any inflammatory words or statements. Any misunderstandings should be avoided.
3. If entry is still denied, the inspector must leave the premises and contact the Environmental Compliance Supervisor or Senior Inspector for instructions.
4. **Documentation.** The inspector must carefully write down all observations pertaining to the access denial. The minimum information in the documentation must be:
 - a. Exact name and address of the IU involved.
 - b. Exact name and title of person(s) approached, including initial contact with front office

- personnel.
 - c. Name, title, and authority of the person(s) who denied the access.
 - d. Date, time, and detailed reasons for the denial.
 - e. Physical description of the business.
 - f. Any reasonable suspicion that the denial was based on a desire to cover up regulatory or permit violations.
5. Under no circumstances shall an inspector discuss potential penalties or do anything in such a manner that may be construed or conceived as threatening.
 6. If the IU threatens the inspector in any way, verbal or physical, the Inspector shall document the event (date, time, circumstances) and report the event to the Environmental Supervisor. If the physical threat or abuse causes any bodily harm, the City Police Department shall be requested to respond.

If an IU refuses to allow the inspection, then the inspector must advise the IU that the refusal must be reported to the Environmental Compliance Supervisor who will then contact them. Under no circumstances is the inspector to threaten any punishment or retribution for an IU refusing entry. In Marshall v. Barlow's Inc. 436 U.S. 307 (1978), the United States Supreme Court issued a ruling that stated no sanction may be imposed upon an owner who declines to consent to inspection but instead insists upon a warrant.

If, during the inspection, the IU withdraws consent for the inspection and insists that the inspector leave, then the inspector must leave and take the same actions as in the case of entry denial. All evidence, records, written notes, samples and photographs up to the time the consent was withdrawn are legal and may be retained and not surrendered to the IU. In the case of entry denial and withdrawn consent, the inspector must write very detailed and specific observations about the circumstances involved with the entry denial or consent withdrawal. These observations include the name of the contact, what was specifically said, and any observations about the activities surrounding the entry denial or consent withdrawal. The withdrawn consent must be reported immediately to the Environmental Compliance Supervisor or Senior Environmental Compliance Inspector.

Inspection Warrants/Search Warrants

In the event an inspector is denied access or consent is withdrawn, an inspection warrant may be necessary. An Inspection Warrant is a legal remedy used to conduct administrative inspections in the absence of voluntary consent. If the inspector has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate cause to believe that there may be a violation of RMC Chapter 14.12, or that there is a need to inspect or sample the user's facilities as part of a routine inspection and sampling program of the City designed to verify compliance with this Chapter or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the Director may seek issuance of an Inspection Warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the California Code of Civil Procedure and amendments thereto. However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant.

In the event an inspector is denied access or consent is withdrawn and criminal violations are suspected, then the inspector gathers and documents as much information as possible prior to the denial or withdrawn consent and notifies the Environmental Compliance Supervisor of the circumstances. The Environmental Compliance Supervisor then confers with the Wastewater Operations Manager, Wastewater Systems Manager, Public Works Director, and City Attorney's Office for direction. If a search warrant is believed necessary, then the City or the Riverside County District Attorney's Office may obtain the search warrant. The Environmental Compliance Supervisor will then contact the appropriate individuals from City Attorney's Office and/or the District

Attorney's Office and the Riverside County Department of Environmental Health for procedures and instructions.

Elements of a Facility Inspection

When inspecting a user, there are five basic questions that must be asked to determine permit requirements and the impact of the user's discharge on the City's POTW. In addition to the five lead questions, many more questions are asked to clarify and expand the information obtained from the user.

The five questions are:

1. What does the industry make?
2. How does the industry make their product?
3. What wastes are generated by the production of this product?
4. How are the wastes treated prior to disposal?
5. How are the wastes disposed?

Given these five questions, a fairly comprehensive logical subset of questions can be used that will direct the inspector to a thorough examination of the industry or business.

Question #1, What does the industry make?

Subset

1. Is the company a categorical industrial user?
2. When did the company begin business?
3. What is the company's product used for?

Question #2, How does the industry make their product?

Subset

1. Does this company need a wastewater discharge permit?
2. Is the manufacturing process regulated by a categorical standard?
3. What is the production process flow?
 - a. How is the product produced from beginning to end?
 1. Describe each step or phase.
 - b. Can I explain the production processes?
4. What materials and quantities are used to make the product?
 - a. Raw materials
 - b. Hazardous materials
 - c. Chemicals
 - d. Coatings
 1. Paint, solvent or water based
 2. Powder, epoxy based
 3. Anodizing
 4. Phosphate coating
 5. Metal coloring
 6. Corrosion inhibition
5. Is spill containment or material separation necessary?
6. Are all materials and chemicals properly labeled?

7. Does the business have MSD Sheets for all the materials and chemicals used?

Question #3, What wastes are generated by the production of this product?

Subset

1. How much of each waste is generated?
2. Are the wastes hazardous?
 - a. Is the business aware of RCRA requirements?
 - b. Is the business aware of CA Title 22 requirements?
3. Are the wastes reclaimable and recyclable?
4. Are waste minimization and pollution prevention practices and procedures in place?
5. Is the waste stored?
 - a. Is spill containment necessary?
 1. Are incompatible wastes physically separated?
 2. Is the spill containment made of materials resistant to the waste being stored?
 - b. Are the waste storage areas properly labeled?
 1. Are the wastes easily identified?
 - c. Is a spill response plan on site?
 1. Have the employees been trained?
 - d. Is there a slug load control plan?

Question #4, How are the wastes treated prior to disposal?

1. What types of pretreatment are being used?
 - a. Physical
 - b. Chemical
 - c. Biological
2. Are the wastes being treated hazardous?
3. How much pretreatment waste is generated?
4. Do the pretreatment plant operators have sufficient training?
5. Are safeguards in place in the event of a failure in the pretreatment system?
6. Do any of the pretreatment operations require spill containment and segregation?
7. Be able to describe and diagram the pretreatment process from beginning to end.
8. Is the pretreatment in harmony with the pretreatment expectations from the EPA?
 - a. Review development document for the categorical industry.
9. Does the pretreatment system result in consistent compliance with the user's wastewater discharge limitations?
10. Does the pretreatment system generate waste that requires off site disposal?
11. Does the pretreatment system generate reclaimable and recyclable material?
12. Is the pretreatment system designed to significantly reduce or eliminated wastewater discharges to the POTW?
13. What is the condition of the pretreatment equipment?

Question #5, How are the wastes disposed?

Subset

1. Sewer, landfill, recycle, reclamation?

- a. Sewer use fees
- b. Sample location
- c. Effluent monitoring equipment
 1. Flow meter
 2. pH meter
 3. Electrical conductivity meter
 4. Explosimeters
2. Storm drain, illegal connections, buried, mid-night dumping, and clandestine disposal?
 - a. Do you have regulatory and law enforcement agency notification procedures and SOPs?
3. Are the waste disposal manifests available?
 - a. Are the manifests in order?
 - b. Correct dates
 - c. Correct waste identification
 - d. Waste origination
 - e. Waste disposal company identified
 - f. Waste disposal site identified
 - g. Does the delivered waste amount equal the waste amount that was picked up?
 - h. Are the generator's and wastehauler's EPA numbers on the manifest?

This list of questions is by no means an absolute list for all inspection questions. There are as many questions as there are different processes and industries. The point is that the use of these five basic questions can be applied to any inspection. The pretreatment program inspector must be able to answer these basic questions at any inspection conducted.

Storm Water Program Inspections

The Environmental Compliance Section is responsible for the inspection and investigation elements of the City's NPDES Storm Water Permit. These inspections are separate from the pretreatment inspections and are documented on storm water inspection forms. The storm water inspections may be performed by Environmental Compliance Inspectors or the Environmental Compliance Supervisor at all permitted and non-permitted users in the City. Storm water inspections are also conducted in response to complaints received about illegal or illicit discharges to the storm drain. The enforcement actions taken for storm drain violations follow the protocols and procedures for the pretreatment program.

Documentation, Data Collection and Data Management

Documentation

As with all required activities, documentation of inspection activities is critical. The Environmental Compliance Section uses several means to document inspections of users. These are inspection forms, written memos to the user's file, photographs, and field tests for pollutants. The inspection forms are used to document the activities of field inspection personnel. Two of these forms are the Inspection Report (IR) form for permitted companies, NSIUs and restaurants. The permitted companies and NSIUs use the same form. The restaurant IR is the second form and requests information specific for restaurants. Both types of forms are used with the portable field database. The first page of the inspection form is used to identify the user, state inspection findings and list any violations noted during the inspection with the respective required corrective action(s) and due date(s). These forms are completed every time an inspection, visit, or meeting is performed at a permitted user, NSIU, or restaurant, WDAC user, De Minimus user, or Group permit user. Additional forms that are used for other types of inspections are for plan check, sewer rate reviews, complaints and CIS inspections. All the permitted, NSIU,

and restaurant inspection forms are single page forms with duplicates printed for the user. The other forms, i.e. plan check, sewer rate reviews, complaints and CIS, are three layers of NCR paper. The top white page is for the user's file, the middle yellow page is for the inspector, and the last pink page is given to the user at the conclusion of the inspection. Memos are written for the user's files as supplements to the inspection report. Phone conversations and IU personal visits are also documented in a written memo to the user's file.

Photographs are taken occasionally at a user's site to document an activity, violation, pollution equipment, and effluent monitoring equipment locations. Several means are used to obtain a photographic record. These include 35 mm cameras, digital cameras, and video cameras. Prior to any photographic record being obtained during an inspection, the user must be informed and voluntarily grant permission for the use of the photographic device. This permission is not necessary, if photograph authority is granted in either in the user's industrial user permit or Riverside Municipal Code. Failure by a user to allow photography, as permitted or authorized, may be grounds for enforcement actions. Photographic records may be obtained from public access areas near the user's facility without the consent of the user. The photographs taken are labeled with the date and time that the photograph was taken, the IU name and address, location of the photograph, and the name of the Environmental Compliance Inspector that took the photograph.

Field tests for pollutants are obtained by a variety of means. These are: sulfide test kits, pH test strips, portable pH meters, portable electrical conductivity/TDS meters, various heavy metal test kits, and portable gas detectors. The results from these field tests are documented in the inspection reports.

Data Collection

Data is collected from inspection reports, interviews, meetings, phone conversations, electronic means (faxes and e-mails) sample data, digital pictures, videos, and complaint reports. The data can include inspecting findings, sample results from field tests and monitoring samples, photographs, field notes, and interview findings.

Data Management

All data and information gathered by the City's pretreatment program is managed with a relational data base computer system, word processing and spreadsheet software, and a paper file system. The majority of all activities are managed by the relational database. This includes all inspection reports, monitoring reports, enforcement actions, complaints and IU permits. The paper file system is used to store paper forms of permits, inspection reports, monitoring results, memos, correspondence and other miscellaneous reports and billings. The word processing, spreadsheet and other software are used to create permits, flow charts, diagrams, plot plans, aerial photos, store permit information, store digital pictures, enforcement documents, correspondence, memos, and SOPs.

The Environmental Compliance Inspectors are responsible for the majority of the computer data entry into the database. Other database entries are performed by the clerical positions outside the Environmental Compliance Section (e.g. liquid wastehauler manifests). The inspection reports are entered into a portable database in the field. The Environmental Inspector I or II download these reports to the main database to a temporary file at the end of the workday for review by the Senior Environmental Compliance Inspector the next day. After the reviews are complete, the Senior Environmental Compliance Inspector transfers the inspection reports to the main database within one day of the completed review. The computer data entry procedures are contained in several Standard Operation Procedures (SOPs) documents for the Environmental Compliance Section.

The Environmental Compliance Section uses several methods for updating the IU site inventory and tracking

submission of required IU reports. The Environmental Compliance Inspectors on an annual basis research the local phone book for listings of possible new CIUs or SIUs. The City's Data Processing Department provides a Customer Information Systems (CIS) report on a periodic basis. These reports contain new service sites for sewer and water service. The report listing distinguishes between residential and commercial user. This list is reviewed by the Senior Environmental Compliance Inspector in charge of plan check activities. If new commercial accounts are discovered that are not part of the Environmental Compliance Plan Check process, an Environmental Compliance Inspector is sent to the site to deliver an industrial waste survey for the company to complete and return. The survey must be completed and returned within 14 days of delivery. If the IU is identified as requiring an Industrial User Permit, then the Senior Environmental Compliance Inspector responsible for IU permits will initiate the Industrial User Discharge Permit Application process and track the IU's progress toward completing the permit.

The Senior Environmental Compliance Inspector responsible for IU permit processing, is responsible for the tracking of required IU submittals of notices and reports, including Baseline Monitoring Reports (BMR) and 90-Day Compliance Reports, slug load control plans and permit renewal applications. The Senior Environmental Compliance Inspector accesses the IU computer database on a quarterly basis to search for permit expiration dates. Senior Environmental Compliance Inspector then sends out permit renewal applications to the IUs. This is done 45 days prior to the expiration of the permit.

Periodic compliance reports are submitted by the SIUs four times per year. As part of the sample analysis submittal, all IUs are required to complete a City monitoring report form. This form requires: the IU to report the analytical results compared to the permit limits; the reporting of flow data for the sampling period; and the signing of a certified statement acknowledging review of the sample data and possible penalties.

As part of their permit conditions, the IUs are required to notify the City immediately in the event of slug discharges, accidental spills or negligent discharges; within 24 hours for discharge and flow violations; and 30 days prior to any changes in processes or equipment. The Environmental Compliance Inspectors are responsible for insuring that the IUs comply with their permit required reporting of these problems or changes. If violations are found during an inspection or site visit, the Environmental Compliance Inspectors shall document the violation in the field inspection report. The enforcement action taken will depend on the violation, the severity of the violation, and the history of the user.

An enforcement log is kept with compliance dates and is discussed with the Environmental Compliance Section Staff minimally once per week at the Environmental Compliance Section's morning briefing. For violations with due dates, the users have until the end of the day that the correction is due to remedy the violation. A follow-up inspection is conducted the day after the due date. More frequent briefings are conducted as an enforcement action warrants.

All documents, written or electronic are managed in accordance with the City's records retention policy. In addition to the computer systems used for data management, the Environmental Compliance Section uses and maintains a paper file system. All paper documents from the pretreatment program are stored in file cabinets, three ring binders, or archival bins. The file cabinets are used to store paper records for NSIU, restaurants, complaints, sewer rate reviews, plan check, liquid waste hauler pumping receipts, sewer use billings, and the various forms used by the section. The IU permits and Liquid Waste Hauler Permits paper records are kept in a secured file room. The archival bins are used to store past IU permit information. All information associated with an expired permit is placed into an archival bin that are organized alphabetically and kept in a locked storage container. The permit room contains IU permit information for the current permit and one archival binder. The archival container contains permit information up to seven years. All other IU permit information will be destroyed after seven years in accordance with the City's policies and procedures for records retention

and destruction. All IU permit blue prints, schematics, agreements and plot plans will be kept for as long as the permit is valid and as long as the industrial user remains in business.

Response to Violations

One of the responsibilities of the Environmental Compliance Section is to identify instances of noncompliance and to take appropriate enforcement action. Each inspector is trained to select an enforcement response commensurate with the violation detected as listed in the Enforcement Responses in Table 1. A matrix outlining minor and major violations and the corresponding levels of enforcement actions is found in Appendix 1. The inspectors use the following criteria in an effort to objectively evaluate and document instances of non-compliance and determine which level of enforcement action is appropriate.

- 1. Magnitude of the violation.** The severity of the enforcement action depends on the seriousness of the violation and/or harm caused to the City's POTW, personnel, public or the environment. Minor violations are issued correction notices and written warnings; repeat discharge violations are issued an MPIO or a Notice of Violation; repeat non-discharge Ordinance violations are issued a Notice of Violation or a Violation meeting; and chronic violations are issued Consent Orders or Compliance Orders. If an IU has incurred Significant Non-Compliance, as defined, then the enforcement response may include a Notice of Violation, Compliance Order, Cease and Desist Order, Civil Penalty Order, or a Show Cause Hearing.
- 2. Duration of the violation.** The length of time a violation has existed without being corrected will also impact the level of enforcement response. Violations that are not corrected 30 days after the IU has been required to comply shall result in the commencement of escalating enforcement beginning with a Notice of Violation. Reporting violations for Class I users more than 45 days late will result in a Notice of Violation, Significant Non-Compliance (SNC), and publication. Violations that are easily and quickly corrected and are not major violations shall require minimum enforcement (e.g. correction notice or written warning). The longer a discharge violation remains uncorrected shall result in escalated enforcement actions up to and including termination of service and/or civil/criminal prosecution. The longer an RMC violation remains uncorrected shall result in the issuance of a consent or compliance order and civil and/or criminal actions.
- 3. Effect of the violation on compliance with discharge permit.** RMC and discharge violation(s) could place the IU in Significant Non-Compliance (SNC) as defined in 40 CFR 403.8. If SNC is detected, an appropriate Administrative Order is issued and the SIU is published in the area's largest circulating newspaper on an annual basis. If the violation is serious enough, the industrial user permit could be revoked, sewer service terminated, and penalties and fines levied pursuant to RMC Chapter 14.12.
- 4. Effect of the violation on the operation of the POTW and/or the collection system.** If a user's wastewater discharge affects the wastewater treatment ability of the POTW resulting in interference or pass through, the beneficial reuse of POTW sludge, the integrity of the collection system, or threatens the safety of City personnel and the public, then the user will be responsible for all damages incurred, including all penalties and fines that may be imposed on the City by regulatory agencies pursuant to RMC Chapter 14.12. The User will also be issued an Administrative Order commensurate with the violation including permit suspension or revocation, termination of service and civil and/or criminal actions.
- 5. Compliance history of the user.** The level of enforcement is also impacted by the compliance history of the user. A more severe enforcement action is warranted if the industrial user has a history of

violations with ineffective corrections, repeated violations caused by negligence, and willful or negligent disregard for achieving compliance. A good compliance history achieved by the user's conscientious, expeditious, and determined efforts to achieve compliance may warrant a less strict enforcement action.

- 6. Good Faith by the User.** "Good Faith" is defined as the User's honest intention to remedy the noncompliance together with actions that give support to the intention, e.g. expenditures for pretreatment equipment or contracting of consultants to correct the noncompliance. Good Faith will not eliminate the necessity for an enforcement action to correct violation(s) but may have an effect on the severity of the enforcement action taken to achieve compliance.

The Environmental Compliance Section uses a variety of enforcement methods (Table 1) to solicit compliance from industrial users. The Correction Notice and Written Warning are issued to correct minor violations as defined in RMC 14.12. 500 (A)(1-7)). In addition, the Environmental Compliance Inspector may grant a compliance extension for the same minor violation. The Correction Notice has a compliance due date which is left to the discretion of the Environmental Compliance Inspector, generally not to exceed fourteen calendar days.

A Written Warning is given to a user who has failed to comply with a Correction Notice or failed to achieve compliance after one extension of the correction notice, or if the violation warrants the issuance of a Written Warning as the first enforcement response. A compliance extension is given at the discretion of the Environmental Compliance Inspector and shall be used only for good cause for not achieving compliance. An industrial user who simply forgot to correct or respond to the violation is not good cause.

The Written Warning is also used if any application, permit, or required report or correspondence is more than five days late. This Written Warning may be issued in a hand delivered letter by an Environmental Compliance Inspector. If an Environmental Compliance Inspector issues a Written Warning, then the Environmental Compliance Inspector must advise the user that a Notice of Violation may be issued if compliance is not achieved by the date specified in the Written Warning.

At no time shall a Notice of Violation for an uncorrected minor violation be issued without the approval of the Environmental Compliance Supervisor.

The general enforcement progression for observed minor violations by Environmental Compliance Inspectors is Correction Notice, Extension, Written Warning, and Notice of Violation. At no time shall an Environmental Compliance Inspector mention the use of a Notice of Violation for a minor violation without having first issued a Written Warning.

Evaluations of Findings

All inspection reports (IRs) are submitted to a Senior Environmental Compliance Inspector and/or Environmental Compliance Supervisor at the end of the work day. The reports are then reviewed the following day. Questionable findings or actions are reviewed with the Environmental Compliance Inspector I-II or Senior Environmental Compliance for clarification. If the findings in the IR are still unclear, then a follow-up inspection will be conducted by the Environmental Compliance Supervisor to clarify the findings. A follow-up report is used to document the findings in the follow-up inspection and to randomly check the work of the Environmental Compliance Inspectors and Senior Environmental Compliance Inspector. The findings are reviewed with the user and any corrections, clarifications, or additions to inspection findings or previously instigated enforcement actions are made. Finally, a meeting is held with the Environmental Compliance Supervisor and the Environmental Compliance Inspector to review the findings in the follow-up inspection and recommend or require additional training, if necessary.

Wastewater Monitoring

The Environmental Compliance Section conducts wastewater monitoring events for a number of reasons:

1. Required periodic monitoring at permitted Industrial Users
2. Investigations into wastewater discharge violations
3. Special studies to evaluate wastewater sources
4. Sewer service charges
5. To gather evidence in the preparation of a civil or criminal action

The following table lists the minimum sampling frequency for permitted and non-permitted users.

Table 5 Permit Sampling Frequencies

Permit Class or Category	Minimum Sampling Frequency
1	4 per year
2	2 per year
3	as needed
5	as needed
6	as needed
NSIU	as needed
Restaurant	as needed
Group	as needed
De Minimus	as needed
WDAC	as needed
Complaints	as needed

The wastewater monitoring conducted at permitted IUs enables the City to determine compliance with applicable pollutant limitations. These limitations are found in the IU's permit, the City's local limits, applicable federal categorical standards, and applicable State of California standards.

The permitted IU is responsible for all permit required monitoring and all pollutant violation resampling required, both from IU samples and City samples. All resamples are in addition to any other scheduled monitoring. An IU cannot use a subsequent compliant City sample in lieu of a required resample. If two consecutive pollutant violations are detected at an IU, then a Monitoring Information Production Order (MPIO) is issued. An MPIO requires that an IU sample their wastewater discharge for all production days within a 14 consecutive day period and measure the discharge flow every day during the 14 consecutive days that wastewater is discharged to the sewer.

Monitoring Personnel

The Environmental Compliance Supervisor and the Environmental Compliance Inspectors are all trained to obtain wastewater samples from industrial users. The Environmental Compliance Inspector I position, however, is assigned this task most frequently. Prior to developing a sampling plan for an IU, sampling personnel review the Standard Operating Procedures for equipment use, sampler cleaning, sample and chain-of-custody forms, and permit monitoring requirements.

Monitoring Plan

The goal of the Environmental Compliance Section is to complete all required quarterly IU monitoring in the first month of each required quarter. This goal requires that sampling personnel review the IU's permit files for required pollutants, sample locations, and any special circumstances or conditions necessary to conduct a monitoring event. A monitoring calendar is created that uses an IU's geographical location as the main criteria for selecting a monitoring day. IUs that are in relatively close proximity are sampled on the same day. A secondary criterion is related to the IUs production schedule. Some IUs have seasonal or production constraints that will dictate the amount of wastewater discharged on any given day. A third criteria used is if the IU has their own monitoring event in place or scheduled for the day the City sampling team arrives, then the City's monitoring event is postponed. Samples taken by the City and the IU on the same day creates several problems. If pollutant violations are detected, then only one day is counted in violation. Repositioning of sampling equipment to accommodate two automatic wastewater samplers can result in a compromised sample or a failed monitoring event. The sampling schedule typically has five to ten calendar days left open at the end of the month to reschedule a monitoring event that failed due to equipment malfunction or same day sampling problems.

Sample Data Management

An Environmental Compliance Inspector initially reviews the received sample data. The samples with pollutant violations are then segregated for priority treatment. Once the monitoring data is reviewed and validated, the results are entered into a computer relational database by an Environmental Compliance Inspector. The goal, after validation, is to enter the sample data into the database within three business days. The IU is notified of a pollutant violation in a City sample within twenty-four hours of confirming the violation by an Environmental Compliance Inspector. The confirmation of a violation entails reviewing the sample result for accuracy, compliance with pollutant holding times and analytical methods, and comparison of suspect violations to past IU sample history. If the result is questionable, then the laboratory is contacted to determine if the sample analysis can be repeated. Once the violation is confirmed, the IU is notified. This is accomplished by sending a resample notification by fax that has the sample date, pollutant violations, and the required due date for resubmitting a resample. A detailed letter is sent by the next business day.

Sample analysis data management is conducted by the Environmental Compliance Supervisor or Environmental Compliance Inspector to insure that sampling enforcement actions are justified. All sample data received from both the IU and the City is reviewed. This review is performed prior to any written response being sent to the industrial user. In order to insure that each sample is reviewed objectively, the following criteria are used:

1. **Submittal Date.** The required sample submittal date and the date the sample was submitted shall be compared. If the submitted sample is more than 45 days past the required due date, a significant noncompliance (SNC) violation has occurred (40 CFR 403.8) and a Notice of Violation is issued by the Senior Environmental Compliance Inspector or the Environmental

Compliance Supervisor. Prior to the 45 day past due date, the Environmental Compliance Inspector II responsible for the IU, shall contact the IU and inquire if the sample has been taken and remind the IU of the due date.

1. **Required Information.** The sample submitted by an IU must have all the information and analyses required by the IU's discharge permit, including flow data. Failure to submit the required information may result in a SNC violation (40 CFR 403.8). A written warning is issued by the Senior Environmental Compliance Inspector for a first time omission of required information. If the IU has a history of not reporting all required information, an NOV is issued by the Senior Environmental Compliance Inspector or the Environmental Compliance Supervisor.
3. **Review of Analytical Data.** The analytical data shall be reviewed for accuracy. The pollutant analyses are reviewed for any signs of abnormalities or inconsistencies. If an inaccuracy is detected with the sample, a review of the analytical calculations or a repeat sample is requested. If the sample's holding time for the requested constituent has expired, a resample of the IU shall be performed. Enforcement action shall be suspended temporarily if the sample results cannot be verified and resampling is performed. A memo to the user's file shall be prepared explaining the need for a resampling.
4. **Database Entry.** After the sample has been verified as a legitimate sample, the sample information is entered into the sample data tracking module and then the results are entered into the sample results database within 3 days of verification by the Environmental Compliance Inspector assigned to this task. The Environmental Compliance Section's computer database management system evaluates the sample results for violations. The same system also compares the results to permitted pollutant limitations and uses past sample results to determine if Chronic or TRC violations exist. If a violation is detected in the sample, a six-month review is requested to check for significant noncompliance (SNC).

Written Notifications shall be sent to the IU after the sample data has been evaluated within five business days.

Pollutant Violation Notification, First Violation. If a pollutant violation is confirmed in a City sample result and the pollutant violation is not the second consecutive violation for the same pollutant, then a resample notification fax is sent to the IU within twenty-four hours. A resample letter shall be sent for the first violation by U.S. mail or hand delivered. An Environmental Compliance Inspector shall prepare the letter within three business days of confirming the violation. If the sample was an IU sample, then the IU shall notify the Environmental Compliance Section within 24 hours of confirming the sample violation. This notification can be accomplished by telephone call, personal visit, fax, or hand delivered letter. Failure of the IU to report a confirmed pollutant violation shall be grounds for enforcement actions. All telephone calls and IU personal visits to report pollutant violations shall be documented by the Environmental Compliance Inspector receiving the report by a written memo to the IU's file.

Resampling Requirements. The IU is required to resample for violations in a City or IU sample and submit the completed results and all monitoring report forms within 30 days of becoming aware of the violation. The resampling is in addition to any other required monitoring. The IU shall not use any required permit sample as a substitute for the resample.

Resample Notifications, Second Violations, MPIO. If an IU or City sample has a second consecutive violation for the same pollutant, then a Monitoring Production Information Order (MPIO) is issued. An MPIO is an

Administrative Order requiring an IU to determine the mass emission or concentrations of pollutants or other conditions specified in the user's permit in their industrial wastewater discharge for all production days within a fourteen consecutive day period and submit production and flow data for each day in that period.

Notification Failures, CIUs and SIUs. If a Categorical or Significant Industrial User fails to notify the Environmental Compliance Section of a pollutant violation within twenty-four hours of confirming the violation, then Significant Noncompliance shall result and a Notice of Violation (NOV) shall be issued to the CIU or SIU. The NOV shall be prepared by a Senior Environmental Compliance Inspector or the Environmental Compliance Supervisor. The NOV shall be hand delivered to the CIU or SIU by an Environmental Compliance Inspector. The resample results and all required forms shall be submitted within thirty days of the issuance of the NOV.

Notification Failures, Non –CIUs and Non-SIUs. For IUs that are not categorical or significant, a Written Warning for the first time failure to roper shall be issued by an Environmental Compliance Inspector. Failure to notify the Environmental Compliance Section after the issuance of a Written Warning shall result in the issuance of a Notice of Violation (NOV). Both the Written Warning and the NOV shall require a resample to be taken and the results submitted within thirty days of the enforcement notice.

Responding to Pollutant Violations During a Sampling Event. If a pollutant violation is detected in an IU's sample during a City sampling event while the inspector is at the IU's site, then the inspector shall contact the IU and review the possible cause(s) for the violation(s). The findings from this investigation shall be contained in an Inspection Report. If hazardous material is being discharged or has been discharged, then the inspector shall immediately notify a Senior Environmental Compliance Inspector or the Environmental Compliance Supervisor. The Senior Environmental Compliance Inspector or the Environmental Compliance Supervisor shall notify the City's collection system supervisor, City Fire Department Hazardous Materials Unit, the Riverside County Department of Environmental Health, Hazardous Materials Division, and the Wastewater Systems Manager. If the hazardous waste is being discharged in view of the inspector, then the inspector shall require that the IU immediately cease and desist all wastewater discharges that contribute to the discharge of the hazardous material to the sewer.

Spills

All spill responses within the City are governed by the City's Incident Response Procedures as contained in the City's Sewer System Management Plan (SSMP). The procedures provide guidance and instructions for responding to a wide variety of spills, including sanitary sewer overflows (SSO), industrial waste, and hazardous waste.

Complaints

The Environmental Compliance Section responds to a wide variety of complaints. By the very name, this work will test interpersonal skills of the inspector. Persons reporting complaints can be quite calm to severely agitated. The person being reported can be humble to extremely angry. Regardless of the temperament of the person, the inspector is to remain professional at all times. If the inspector receives threats, then contact is made with the Environmental Compliance Supervisor. If the inspector receives physical violence, then a request is made to have the City's Police Department respond. The main objective for complaints is to determine if the complaint is valid and, if so, who is responsible and what remedial actions are necessary. The investigative process for all types of complaints is based upon the following questions: What is the source of the complaint? Who is responsible? Do other regulatory agencies need notification? Is a clean up necessary?

The three categories of complaints are sewer, storm drain, and odor. Sewer complaints normally involve a blocked lateral, illegal discharges to sewer, and accidental or negligent discharges to sewer. Complaints received involving the City's sewer lines and/or a sewer lateral are referred to the City's Collection Systems Section. If the Collection System crew suspects an illegal discharge to sewer, then the crew reports the incident to the Environmental Compliance Section for response.

Odor complaints involve a wide range of conditions from sewer odors in a building to "chemical odors." Not everyone perceives an odor in the same manner. What may be objectionable to one person may not be to another. The investigation of odor complaints requires the use of a gas detector and common sense. An inspector is not permitted to enter an area when the gas detector alarms are sounding or if the area is a confined space.

One of the most common odor complaints is a sewer odor in a building. These odors may have their basis in hydrogen sulfide, H₂S. This gas is colorless, heavier than air and extremely deadly in concentrations above 1,000 ppm in air. If the inspector discovers that hydrogen sulfide gases exist in harmful amounts, then the inspector is to leave the area immediately and notify immediately the Environmental Compliance Supervisor or Senior Environmental Inspector, who will then notify the Fire Department.

Other odors may be caused by flammable liquids or gases. When these are encountered, the inspector must leave the area immediately and notify the Environmental Compliance Supervisor or Senior Environmental Compliance Inspector, who will then notify the Fire Department. All potential ignition sources must be eliminated, if possible, without endangering the Environmental Compliance Inspector or the public.

Storm drain complaints typically involve a discharge to the storm drain as defined. The RMC Section 14.12.120(79) defines a storm drain as: "a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, cross gutters, storm water pump and lift stations, parking lots, paved areas, streets, and natural water courses used to collect and direct storm precipitation and surface runoff to a receiving body of water or underground aquifer recharge basins." This is quite a broad base definition and for good reason. Each one of the aforementioned areas can have access to the waters of the United States and therefore, could cause a Regional Board violation. The storm drain complaints must also be reported to the Public Works Department, Administration Division. This division is responsible for the City's NPDES storm water permit.

APPENDIX 1

Escalating Enforcement Actions Matrix

Escalating Enforcement Actions Protocol

The use of the indicated enforcement responses does not limit the enforcement responses to the violation pursuant to RMC Section 14.12.555 REMEDIES NONEXCLUSIVE

All pollutant and Ordinance violations that result in Significant Non-Compliance for Class I Permitted Companies, shall result in the publication of that Class I permitted company pursuant to RMC Section 14.12.535 PUBLICATION NOTICE

RMC Chapter 14.12 Section	Violation Occurrence			Enforcement Response Options
	First	Second	Third	
14.12.215 Inspection				A. Phone Call B. Stop Work Order C. Correction Notice C1. Extensions D. Written Warning E. Informal Meeting F. MPIO G. Notice of Violation H. Violation Meeting I. Consent Order J. Compliance Order K. Civil Penalty Order L. Cease and Desist Order M. Show Cause Order N. IU Permit Revocation O. Termination of Service P. Civil Penalties Q. Criminal Penalties R. Probation S. Publication T. Inspection Warrant
A. Ready access	A,C	D	G,H	
B. Knowledgeable person on site	C	C1,D	G,H	
C. Immediate access during an emergency	G	L	M	
D. Immediate access to pretreatment equipment	C	C1,D	G,H	
E. Interference, delay, refuse - no potential harm	D	G,H	T	
E. Interference, delay, refuse - potential harm	T			
F. Security measures causing delays of inspections	D	G,H	T	
G. Record copying	A,C	C1, D	G,H	
14.12.225 Monitoring				
A. Sampling/monitoring equipment required	D	G,H	J	
B. Sampling security closures	D	G,H	J	
C. City sampling equipment temporary installation	A,C	C1,D	G,H	
D. Monitoring equipment installation interference	D	G,H	J,T	
E. Sampling station/measuring device maintenance	C	C1,D	G,H	
F. Sample collection and analysis methodology	C	D	G,H	
G. Sampling records and information	C	D	G,H	
H. Reporting of monitoring equipment failures	D	G,H	J	
J. Sample violation reporting within 24 hrs	D	G,H	J	
K. Flow exceedance reporting	D	G,H	J	
L.1. IU resampling, IU sample, no harm	C	F,G,H	G,H,I,J	
L.1. IU resampling, IU sample, harm	G,H,L	J	L,N,O	
L.2. Failure to submit resample within 45 days of discovery	G	H	J	
M.1. IU resampling, City sample, no harm	C	F,G,H	G,H,I,J	
M.1. IU resampling, City sample, harm	G,H,L	J	L,N,O	
N. IU self monitoring plan requirements	C	D	G,H	
O. Reporting all non-permit required samples within 15 days	C	D	G,H	
P. O/G sample in a multiple set violates limit by more than 40%	C	F,G,H	G,H,I,J	
P. O/G average in a multiple sample set violates limit	C	F,G,H	G,H,I,J	
14.12.230 Record Keeping	C	C1,D	G	
14.12.235 Flow Measurement	C	C1,D	G	
14.12.240 Infectious Waste Disposal	C	C1,D	G	
14.12.245 Water Softening Restrictions	D	G	J	
14.12.250 Drain Screen Requirements	C	C1,D	G	
14.12.255 Gravity Separation Interceptor	D	G	J	
14.12.260 Interceptor Requirements				
A. Two chamber minimum with separate rings and covers	C	C1,D,E	G,J	
B. Access to each interceptor chamber	C	C1,D,E	G,J	
C. Immediate accessibility to all interceptor chambers	C	C1,D,E	G,J	
D. Effectiveness	C	D,E	G,J	
E. 3/8 inch particle limiting drain screens required	C	C1,D,E	G,J	
F. Tee requirements	C	C1,D,E	G,J	
G. Sample box or wye required	C	C1,D,E	G,J	
H. No elbow or tee in sample box	C	C1,D,E	G,J	
I. Installation in confined spaces prohibited	C	D,E	G,J	
J. Drain lines to interceptor kept clear	C	C1,D,E	G,J	

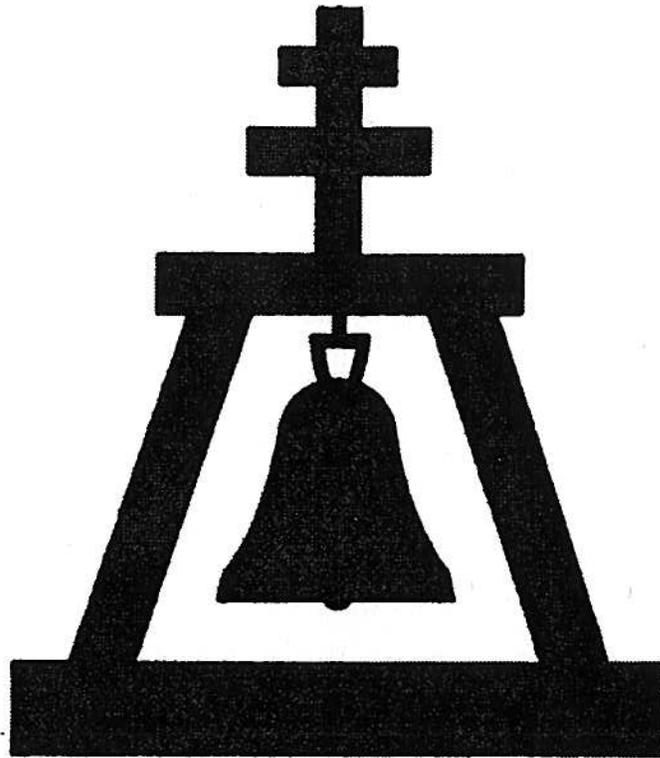
RMC Chapter 14.12 Section	Violation Occurrence			Enforcement Response Options
	First	Second	Third	
K. Inadequate interceptor	C	D,E	G,J	A. Phone Call B. Stop Work Order C. Correction Notice C1. Extensions D. Written Warning E. Informal Meeting F. MPIO G. Notice of Violation H. Violation Meeting I. Consent Order J. Compliance Order K. Civil Penalty Order L. Cease and Desist Order M. Show Cause Order N. IU Permit Revocation O. Termination of Service P. Civil Penalties Q. Criminal Penalties R. Probation S. Publication T. Inspection Warrant
14.12.265 Standard Interceptor Designs	C	D	G	
14.12.270 Interceptor Maintenance				
A. Adequate maintenance, 25% capacity maximum	C	D,G	G,H	
B. Chemical or other materials for emulsification	C	D,G	G,H	
C. Microbiological product use prohibition	C	D,G	G,H	
D. Entire contents of interceptor pumped; Lawful disposal	C	D,G	G,H	
E. Inadequate maintenance; mandatory pumping frequency	D	G	H	
14.12.275 Restaurants				
A. Discharge authorization, survey required	C	D	G	
C. Connections to grease interceptor	C	C1,D	G	
D. Separation of FOG before discharge of wastewater to sewer	C	C1,D	G	
E. 3/8 inch particle limiting drain screens required	C	C1,D	G	
F. Grease interceptor maintenance	C	C1,D,G	G,H	
14.12.280 Prohibited Restaurant Surface Discharges				
A. Wastewater discharges to storm drain	C	C1,D	G	
B. Blocked sewer lateral or sewage lift station failure	D	G	H	
14.12.290 Wastewater Discharge Survey	C	C1,D	G	
14.12.295 Liquid Waste Haulers				
A. Permit required	D	G,H	L	
F. Load inspection and analysis	D	G,N	N	
G. Hazardous waste disposal prohibition	N,P,Q	N,P,Q	N,P,Q	
H. LWH to remain on site if load is hazardous	G,N,Q	G,N,Q	G,N,Q	
I. Completed manifest forms	D	G	N	
J. Falsifying records	G	H	N	
K. Records retention	C	C1,D	G	
L. Payment of fees	N	N	N	
M. Only domestic waste	D	G,N	N	
N. Clean vacuum tanks	D	G,N	N	
O. Prohibition against discharging Industrial Waste or mixing	G	L,N,R	L,N	
P. Waste origination	C	D	G	
Q. Rejected load legal disposal requirements	C	D	N	
R. Adjustment of rejected loads without authorization	C	D	N	
S. Rejected load disposal prohibitions	G,N,Q	G,N,Q	G,N,Q	
Z. Permit transfer prohibited	N			
14.12.300 Mobile Pressure Washers, permit required	C	D	G	
14.12.305 Use of and Damage to City Equipment or Facilities	D,G	K,L,R	P,Q	
14.12.310 Spill Notification, No Harm	D	G	H	
14.12.310 Spill Notification, Harm	G	H	L	
14.12.315 Surface Discharge Prohibitions, no harm	C,D	N,H,R	L,K	
14.12.315 Surface Discharge Prohibitions, harm	C,D,E,G	D,G,R	L,K,Q	
14.12.320 Point of Discharge Limitation	C,D	G,I	J	
14.12.330 Separation of Domestic and Industrial Waste	D	G,H,I	J	
14.12.335 Prohibited Waste Discharges, no harm	C,D,G	D,G,H	G,H,L	
14.12.335 Prohibited Waste Discharges, harm	G,K,L,R	L,N,Q	L,N,Q	
14.12.320 Point of Discharge Limitation	C,D,G	D,G,H	G,H,L	
14.12.330 Separation of Domestic and Industrial Waste	C,D	D,G,H	G,H,L	
14.12.335 Prohibited Waste Discharge	C,D,G	D,G,H	G,H,L	
14.12.340 Swimming Pool Discharge Requirements	C	D	G	
14.12.345 Limitation on Wastewater Strength, no harm	C	D	G	
14.12.345 Limitation on Wastewater Strength, harm	G,K,L,R	L,N,Q	L,N,Q	
14.12.360 Industrial Wastewater Pretreatment				
A. Pretreatment required	D,G,H	J	L,N,O,R	
B. Compliance with Federal and local pollutant limitations	D,G,H	J	L,N,O,R	

RMC Chapter 14.12 Section	Violation Occurrence			Enforcement Response Options
	First	Second	Third	
C. Pretreat wastewater recurring with no harm	D	G	V,J	A. Phone Call B. Stop Work Order C. Correction Notice C1. Extensions D. Written Warning E. Informal Meeting F. MPIO G. Notice of Violation H. Violation Meeting I. Consent Order J. Compliance Order K. Civil Penalty Order L. Cease and Desist Order M. Show Cause Order N. IU Permit Revocation O. Termination of Service P. Civil Penalties Q. Criminal Penalties R. Probation S. Publication
C. Pretreat wastewater recurring with harm	G,H,K	L,N	K,L,O,Q	
D. Detailed pretreatment plans prior to implementation	D	G	I,J	
E. Pretreatment equipment in confined space prohibited	D,E	G,H	I,J	
G. Pretreatment equipment failure notification, no harm	D	G	H	
G. Pretreatment equipment failure notification, harm	G,H,K	L	M,N,Q	
14.12.365 Unauthorized Monitoring and Pretreatment Equipment Modifications, no harm	D	G	L	
14.12.365 Unauthorized Monitoring and Pretreatment Equipment Modifications, harm	D,G	G,H,J	L,M,N,Q	
14.12.370 Pretreatment Equipment Bypass, no harm	D	G	L	
14.12.370 Pretreatment Equipment Bypass, harm	D,G	G,H,J	L,M,N,Q	
14.12.375 Prohibited Discharge of Recovered Pretreatment Waste	D,G	G,H,L	L,K,Q	
14.12.380 Dilution Prohibited as a Substitute for Treatment	D	N,R	J,L	
14.12.385 Stormwater Diversion				
A. Diversion valve required	C,C1	D	G,J	
B. Diversion valve approval prior to installation	B,C	C1,D	G,J	
C. Diversion valve operation	C	C1,D	G	
D. Immediate suspension of outdoor wastewater generating activities during inclement weather	D	G	H,L	
14.12.390 Industrial User Modifications	D	G	H	
14.12.395 Spill Containment System	C,D	C1,E,G,I	H,J	
14.12.400 Slug Discharges, Harm	G,K,L,R	G,H,J,L	L,N,R	
14.12.400 Slug Discharges, No Harm	D	G,H	H,L,N	
14.12.405 Facility Waste Management Plan	C,D	C1,E,G,I	H,J	
14.12.410 Categorical Pretreatment Standards	D,G	G,I	J,L	
14.12.415 Commercial/Industrial Tenant Occupancy Notification	C,D	C1,E,G	G,H	
14.12.420 Notice of Potential Problems, No Harm	D	E,G	G,H	
14.12.420 Notice of Potential Problems, Harm	G,K,L,R	G,H,J,L	L,M,N,Q	
14.12.425 Written Responses	C,D	C1,E,G,I	G,H,J	
14.12.430 Falsifying Information	G	H	Q	
14.12.435 Wastewater Discharge Authorization Certificate	C,E	D,E	G,H	
14.12.440 Industrial User Group Permits	C,E	D,E	G,H	
14.12.445 Industrial User Permits	C,E	D,E	G,H	
14.12.460 Permit Renewal	A,D,E	D,G	G,H,O	
14.12.470 Permit Transfer	N			
14.12.460 Fees and Charges	D	G	J	

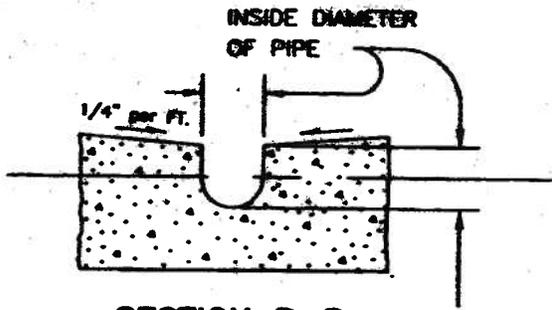
APPENDIX E

Criteria for Sewer Facility Design

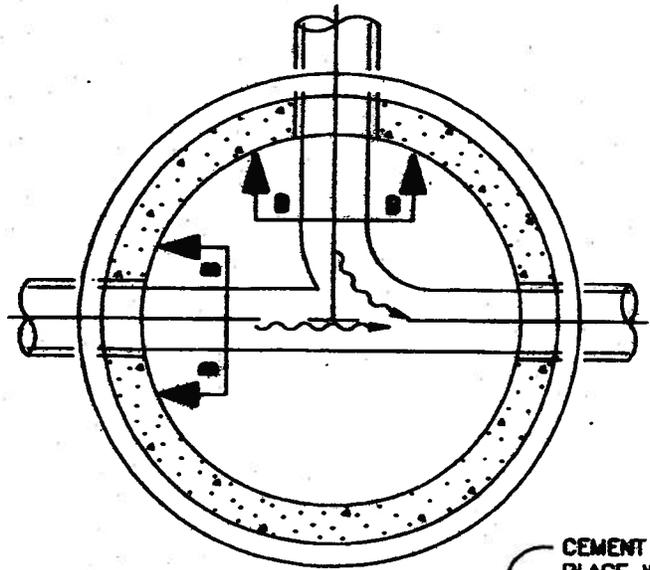
STANDARD DRAWINGS
FOR
CONSTRUCTION



CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC WORKS



SECTION B-B



SECTION A-A

NOTES:

1. All joints shall be set in Class C Portland cement mortar and shall be sack finished.
2. Rings and cones shall be reinforced with #4 round steel wound spirally on 4 centers.
3. Vertical wall of cone shall be on downstream side of manhole.
4. Steps shall be 14" wide stirrup type safety steps. The steps or sockets shall be cast in place at time of manufacture. Steps shall be spaced a maximum of 16" c.c.. Material for steps shall be 1/2" grade 60 steel reinforcing rod coated with polypropylene, ASTM D-4101 or City approved equal.

MANHOLE FRAME AND COVER - ALHAMBRA FOUNDRY: A-149S OR EQUAL APPROVED BY CITY

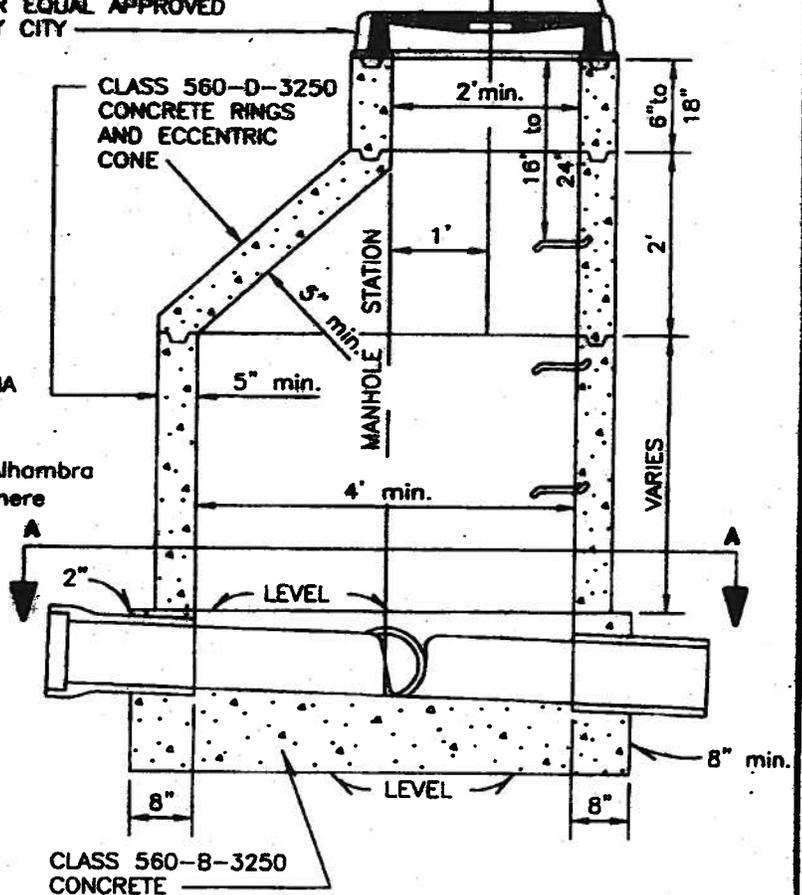
5. The lower portion of the manhole shall be:

Minimum Diameter	Depth (Shelf to cover)
4'	< 15'
5'	>15' and < 25'
6'	>25' and < 30'

A special designed manhole meeting Cal-OSHA specifications will be required for depths greater than 30'.

The frame and cover shall be 3' diameter (Alhambra Foundry: A1251-6 or City approved equal) where the manhole diameter is greater than 4'. A 1' minimum shelf shall be maintained.

6. When manhole is in a street to be paved, manhole frame shall be set after adjacent pavement has been placed. Top shall be flush with pavement.
7. First pipe joint shall be no more than 1' from manhole.
8. At the contractor's option, thickness of manhole wall may be 4-1/8" provided Class 560-D-4000 concrete is used.
9. Cover shall have letter S in center.



APPROVED *Tom Boyd* DATE *12/2/14*
CITY ENGINEER - R.C.E. 36170

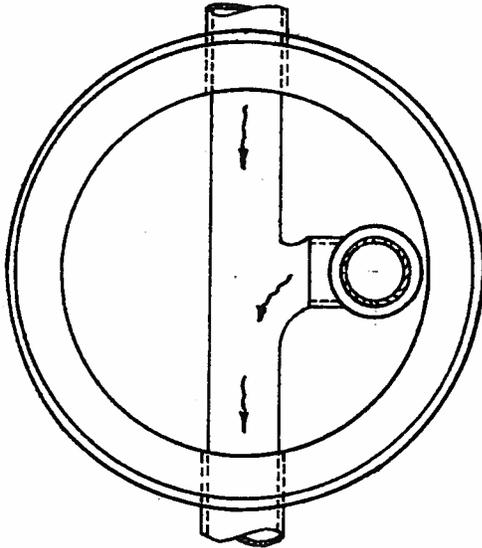
CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

PRECAST CONCRETE
SEWER MANHOLE

STANDARD DRAWING NO.

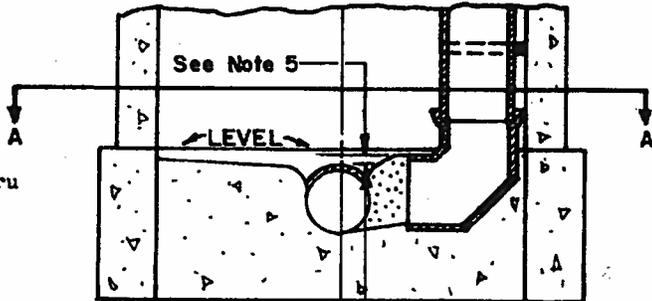
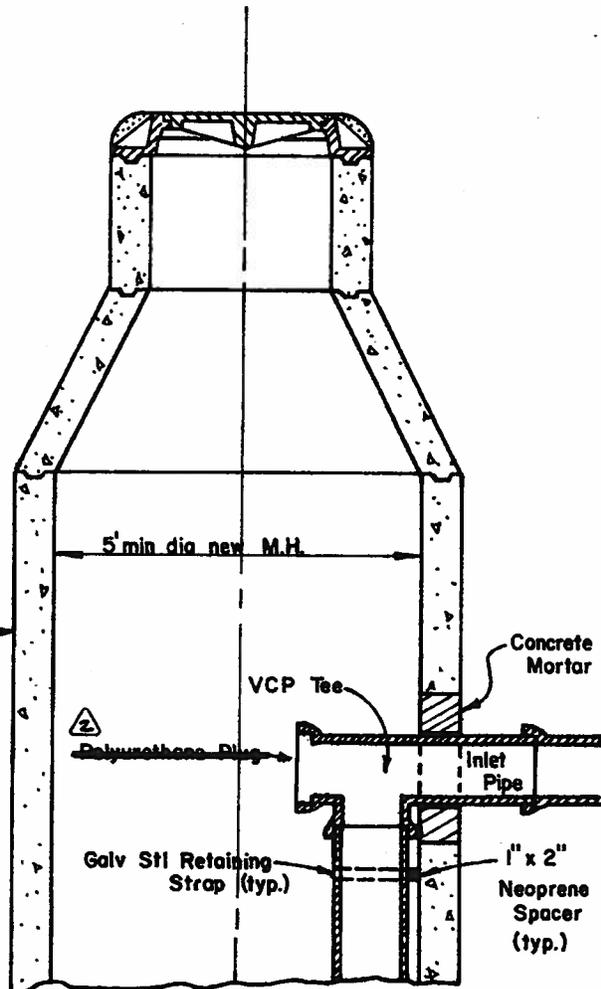
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MARK	REVISION	APPR.	DATE



SECTION A-A

SEE NOTE 9



NOTES

1. Class 560-C-3250 Concrete to be used.
2. Pipe and fittings to be 8" min. inside diameter.
3. If no stubs exist, the manhole is to be broken through and stubs are to be set to grade in concrete.
4. Form a concrete mortar arch around every pipe opening into manhole.
5. Crown of inlet to be 0.10 ft higher than crown of straight-thru sewer unless otherwise noted. Concrete formed invert to be shaped thru existing shelf in a smooth curve to meet existing straight-thru invert.
6. 3.0 ft desirable minimum drop. 1.82 ft absolute minimum.
7. Install neoprene spacers at retaining straps, bells, and between concrete mortar and inlet pipe.
8. Install 2 (two) 1" x 3/8" Galv Stl retaining straps per joint of pipe. Anchor straps to MH shaft with 1 1/2" x 1/4" Galv Stl lag screws and lead anchors.
9. See Std. Dwg. 500 for manhole construction details.

APPROVED

Robert C. Valle

DATE 12/29/84

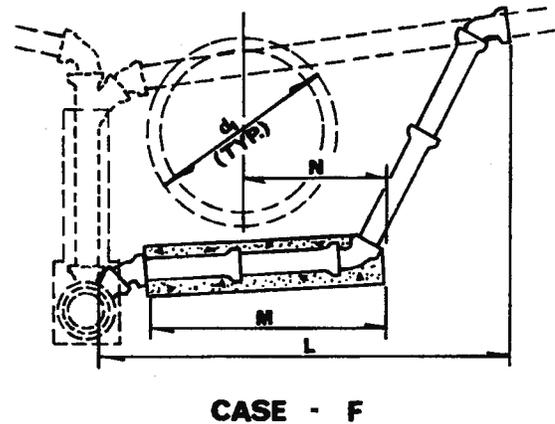
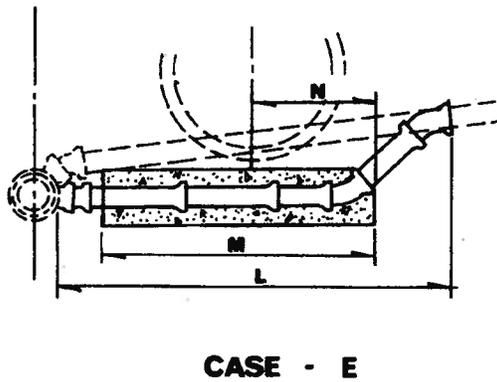
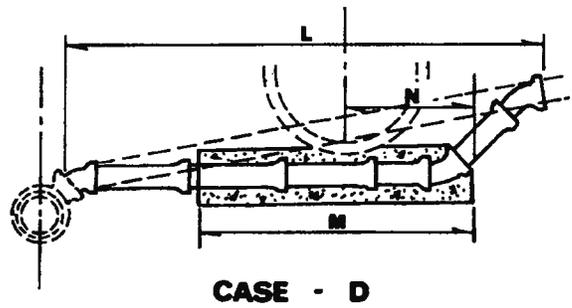
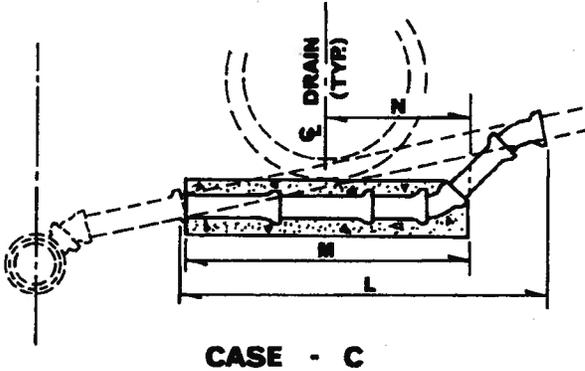
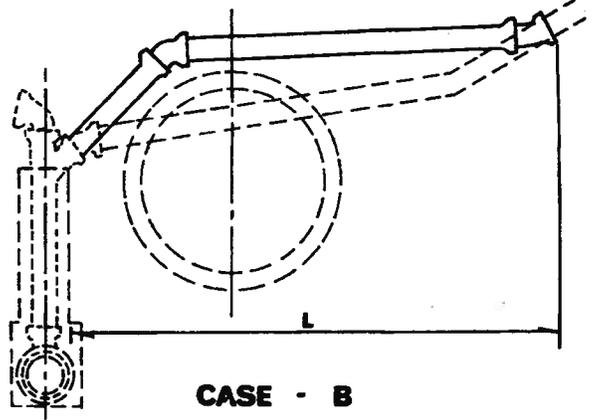
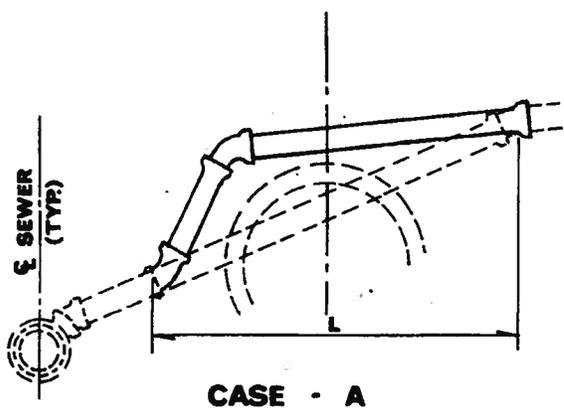
PUBLIC WORKS DIRECTOR - R.C.E. 18793

**CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.**

DROP MANHOLE

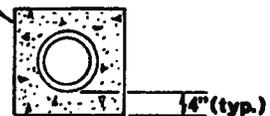
STANDARD DRAWING NO. **503**

▲	ADDED NOTE 9.	WJ	6-12-86
⊘	DELETED PLUS.	TJB	5/25/04
MARK	REVISIONS	APPR.	DATE



SEE SHEET 2 FOR NOTES AND DESCRIPTION OF CASES

Class 420-C-2000 concrete encasement



CROSS SECTION OF CONCRETE REINFORCEMENT FOR PIPE.

26

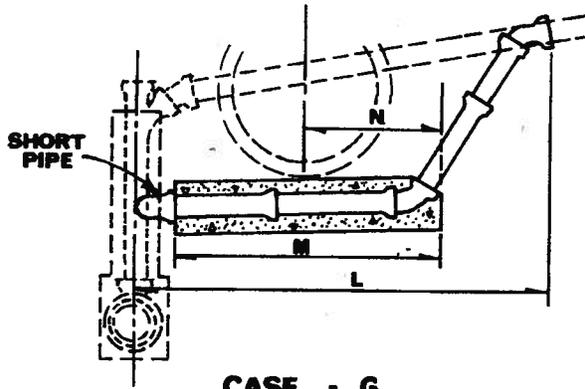
APPROVED: *Robert C. White* DATE *5/29/78*
 PUBLIC WORKS DIRECTOR - R.C.E. 18793

CITY OF RIVERSIDE
 PUBLIC WORKS DEPT. - ENGINEERING DIV.

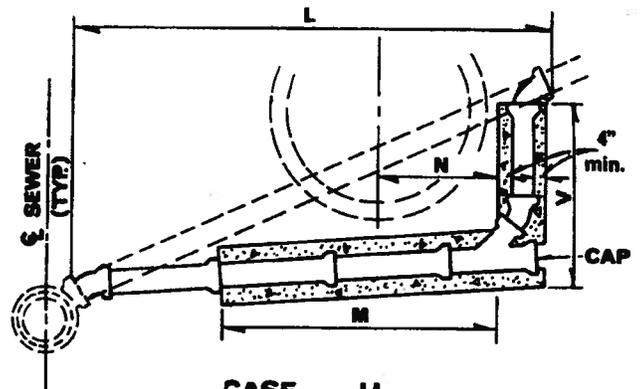
**REMODELING DETAILS
 FOR SEWER LATERALS**

MARK	REVISIONS	APPR.	DATE

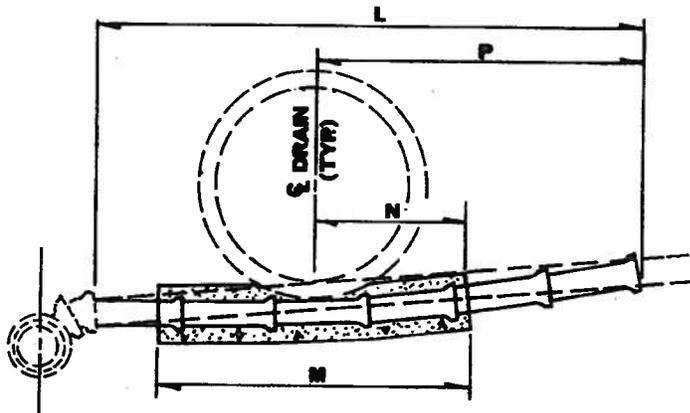
STANDARD DRAWING NO. **554**
 Sheet 1 of 2



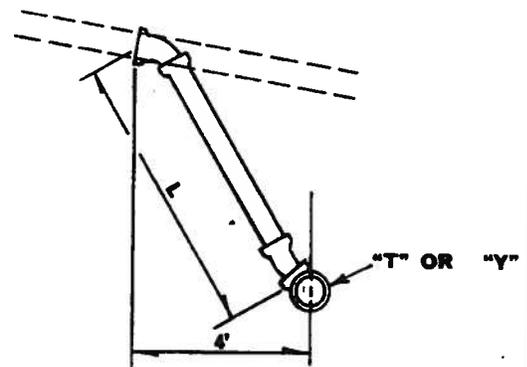
CASE - G



CASE - H



CASE - K



CASE - R

NOTES:

1. These details do not apply to conflicts between sewer laterals and water lines.
2. Existing pipes are indicated by broken lines.
3. Pipes to be constructed are indicated by solid lines.
4. All pipe diameters shall match existing lateral.
5. All bends shall be $\frac{1}{8}$ bends unless specified otherwise.
6. Concrete reinforcement, cross section shown on sheet 1, shall be used on all pipes to be constructed under storm drain, top portion within 1" of storm drain to be omitted.
7. Dimensions:

L is specified on plan as the average total length.
 M = (D + 24") less enough to avoid a fraction of a foot.
 N $\frac{1}{2}$ M, except where specified otherwise on plan.
 P (case K) is specified where L does not extend to the bend.
 V (case H) is specified to the nearest foot and in summary, is itemized as Concrete Reinforcement for 6" pipe.

8. New connection to main line shall conform to standard drawing no. 582.
9. Joints shall be type D, F, or G per the latest approved edition of Standard Specifications for Public Works Construction.

CASES:

- A. Above Drain to House Connection - Specials required: 2 $\frac{1}{8}$ Bends.
 - B. Above Drain to Chimney - 2 $\frac{1}{8}$ Bends.
 - C. Below Drain to House Connection - 2 $\frac{1}{8}$ Bends.
 - D. Below Drain to "Y" - 3 $\frac{1}{8}$ Bends.
 - E. Below Drain to Flat Saddle - 3 $\frac{1}{8}$ Bends, 1 Saddle.
 - F. Below Drain to Saddle - 3 $\frac{1}{8}$ Bends, 1 Saddle.
 - G. Below Drain to Chimney - 2 $\frac{1}{8}$ Bends.
 - H. Below Drain to "Y" - 3 $\frac{1}{8}$ Bends, 1 "Y".
 - K. Below Drain to House Connection, Slope slightly modified.
 - R. Connection with New Sewer - 2 $\frac{1}{8}$ Bends with "Y".
 - 1 $\frac{1}{8}$ Bend with "T".
10. Material used for replacement segment shall be the same as the material used for the existing lateral. *de*

APPROVED: *Robert C. White* DATE *6/29/78*
 PUBLIC WORKS DIRECTOR - R.C.E. 18793

CITY OF RIVERSIDE
 PUBLIC WORKS DEPT. - ENGINEERING DIV.

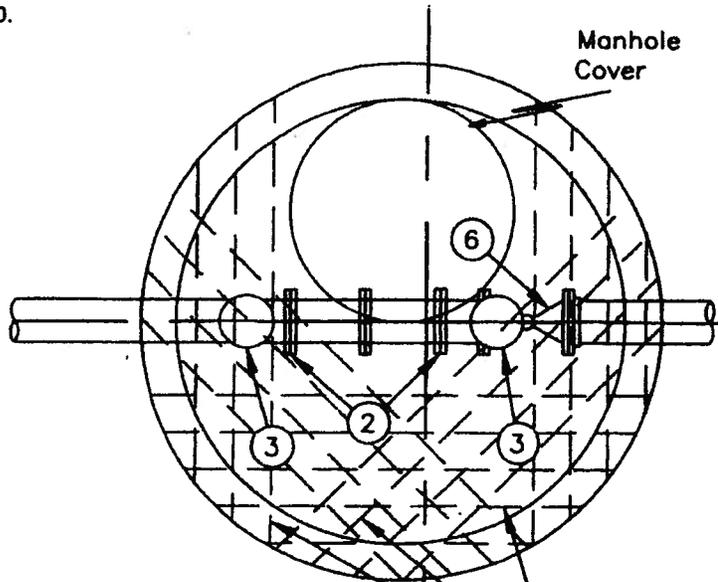
REMODELING DETAILS
 FOR SEWER LATERALS

△	ADDED NOTE 10.	TCS	7/14/78
MARK	REVISIONS	APPR.	DATE

STANDARD DRAWING NO.

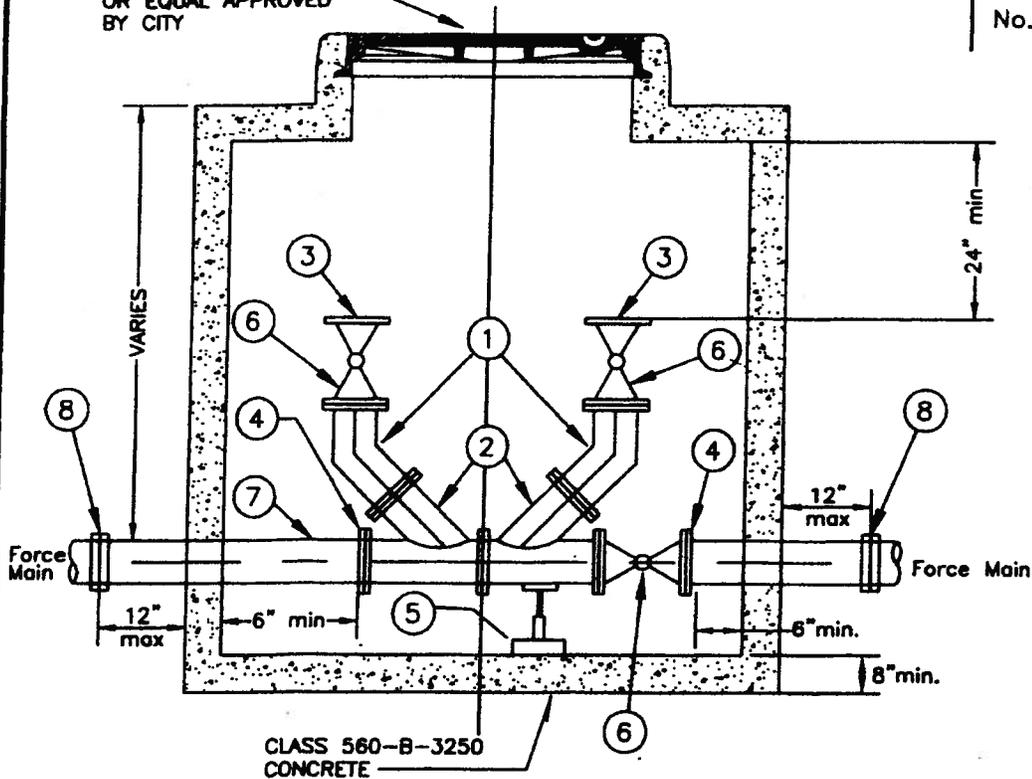
554
 Sheet 2 of 2

- ① Flanged cast iron 45° elbow. Class 150.
- ② Flanged cast iron 45° WYE. Class 150.
- ③ Cast iron reducing flange. Class 150, W/2" Threaded plug.
- ④ Threaded Class 150 Flange.
- ⑤ Pipe support. See Detail Sheet 2.
- ⑥ Flanged plug valve. Class 150.
- ⑦ Ductile Iron pipe to match diameter of Force Main.
- ⑧ Dresser Style 253 Coupling



MANHOLE FRAME AND COVER - ALHAMBRA FOUNDRY: A-1251-6 OR EQUAL APPROVED BY CITY

All Steel Reinforcement No.4 - 4" O.C.



APPROVED *Shaw-Bed* DATE *5/15/04*
CITY ENGINEER-R.C.E. 36170

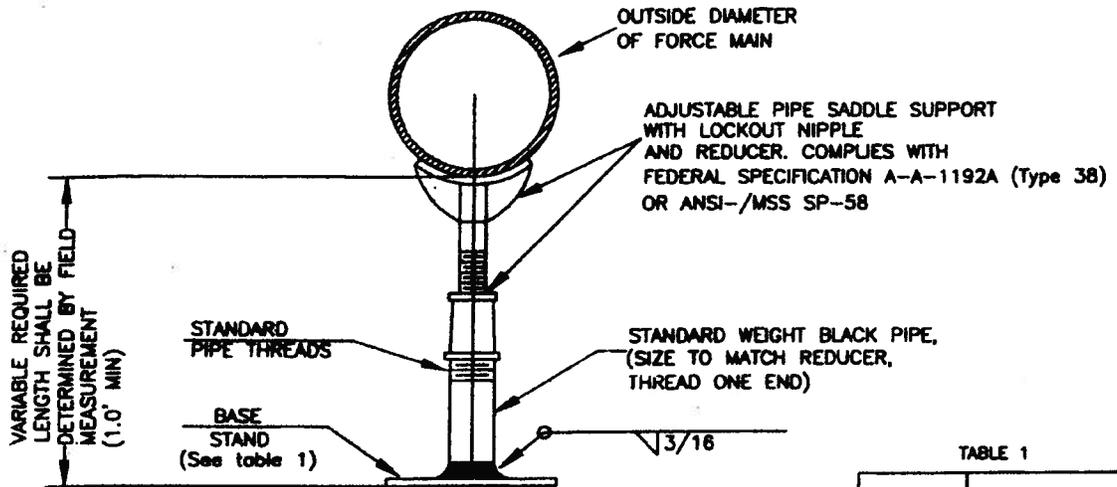
CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

PRECAST CONCRETE
FORCE MAIN CLEANOUT

STANDARD DRAWING NO. 559

Sheet 1 of 2

MARK	REVISION	APPR.	DATE



PIPE SUPPORT DETAIL
NTS

GENERAL NOTES:

1. All fittings shall be same size as the force main.
2. Steps shall be 14" wide stirrup type safety steps. The steps or sockets shall be cast in place at time of manufacture. Steps shall be spaced a maximum of 16" c.c. Material for steps shall be 1/2" grade 60 steel reinforcing rod coated with polypropylene, ASTM D-4101 or City approved equal.
3. Diameter of force main cleanout shall be determined by force main size as in the following table.

Force Main	Manhole Size
4"	72"
6"	72"
8"	78"
10"	84"

4. When force main cleanout is in a street to be paved, manhole frame shall be set after adjacent pavement has been placed. Top shall be flush with pavement.
5. At the contractor's option, thickness of manhole wall may be 4-1/8" provided Class 560-D-4000 concrete is used.
6. Cover shall have letter S in center.

TABLE 1

Force Main	Steel Plate Size
4"	1/2" x 12" x 12"
6"	1/2" x 18" x 18"
8"	5/8" x 18" x 18"
10"	3/4" x 24" x 24"

APPROVED *[Signature]* DATE *5/2/04*
CITY ENGINEER - R.C.E. 36170

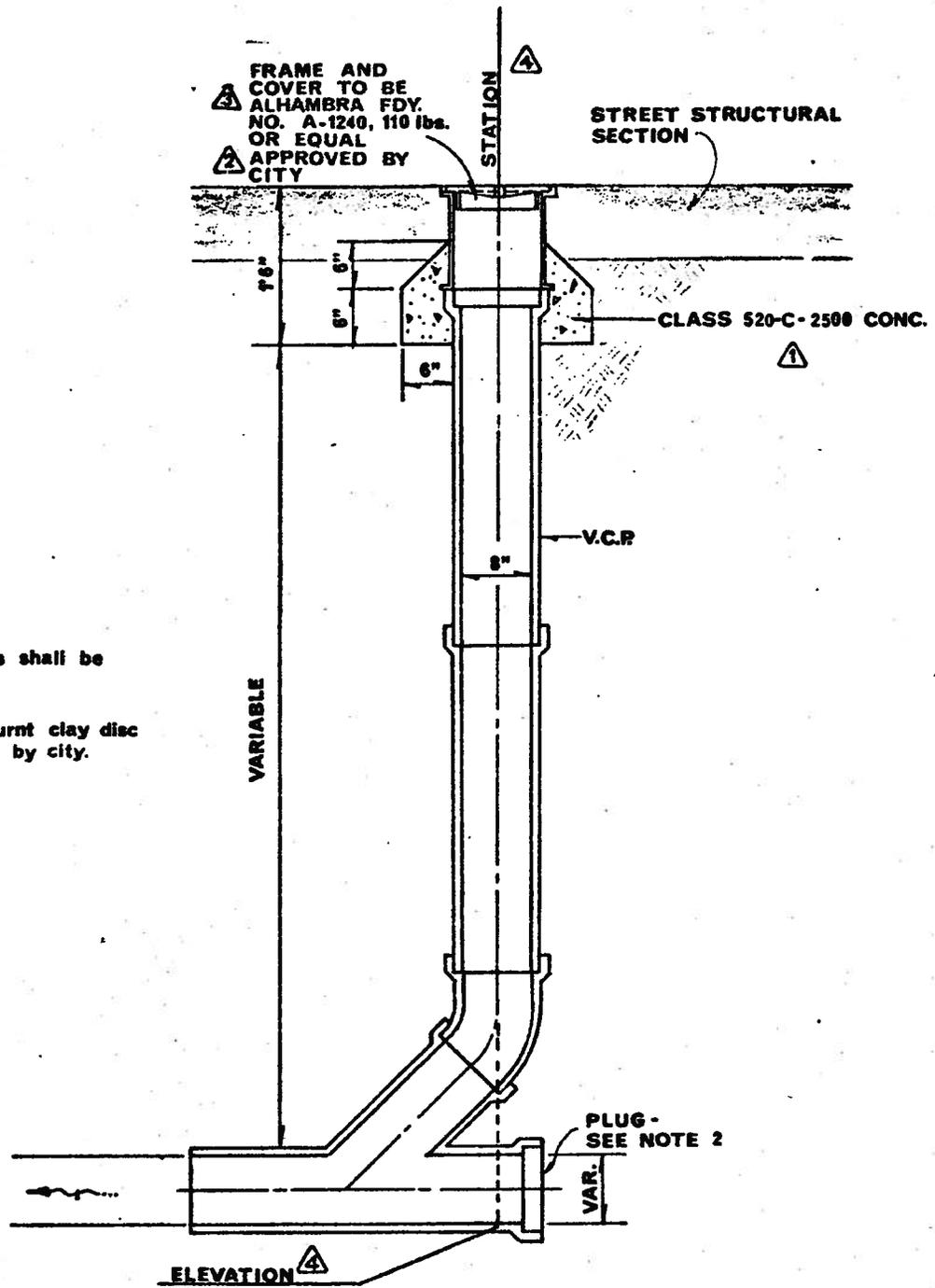
CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

PRECAST CONCRETE
FORCE MAIN CLEANOUT

STANDARD DRAWING NO. **559**

Sheet 2 of 2

MARK	REVISION	APPR.	DATE



NOTES:

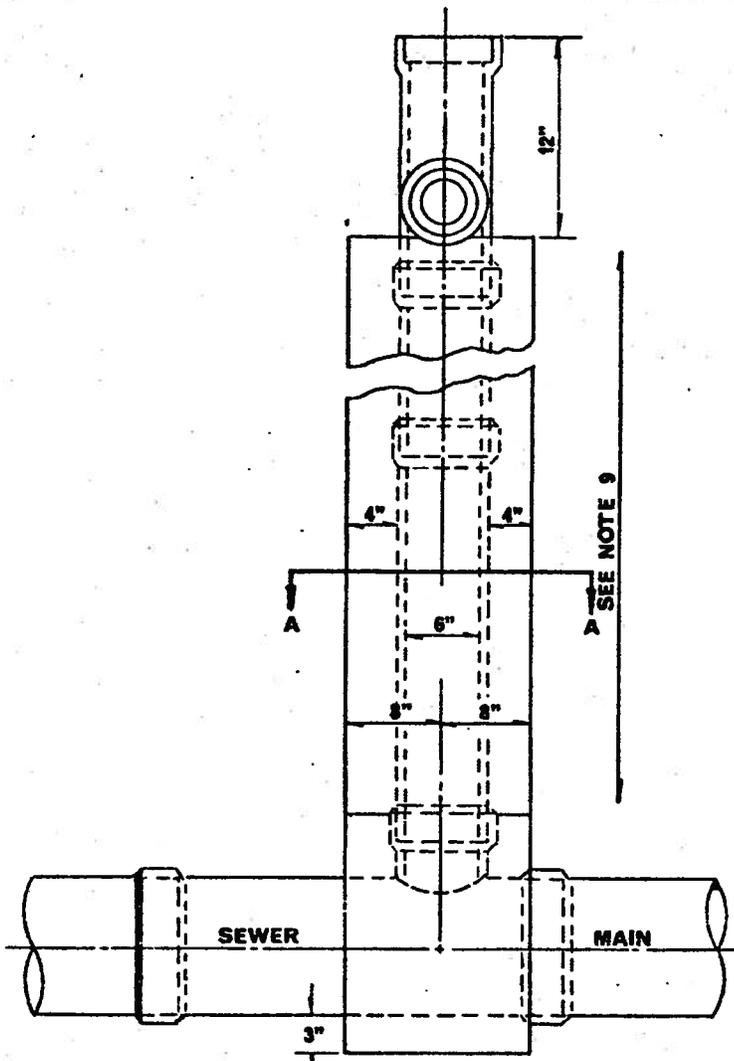
- 1. Type F or G joints shall be used.
- 2. Plug stub with burnt clay disc or equal approved by city.

APPROVED <i>[Signature]</i> DATE <u>9-10-23</u>	
PUBLIC WORKS DIRECTOR - R.C.E. 8134	
△	concrete class revision <i>[Signature]</i> 7-13-22
△	defined approval <i>[Signature]</i> 4-7-22
△	Changed Riverside Fdy to Alhambra <i>[Signature]</i> 7-7-22
△	Added Station & Elevation <i>[Signature]</i> 10-26-22
MARK	REVISIONS APPR. DATE

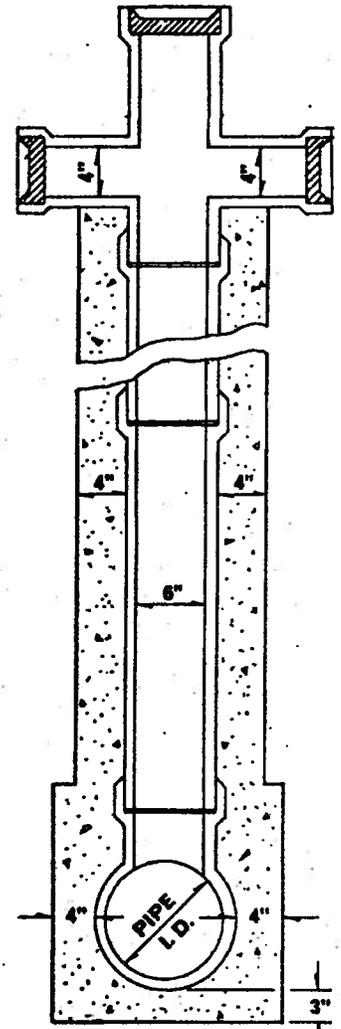
CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

SEWER CLEANOUT

STANDARD DRAWING NO. **560**



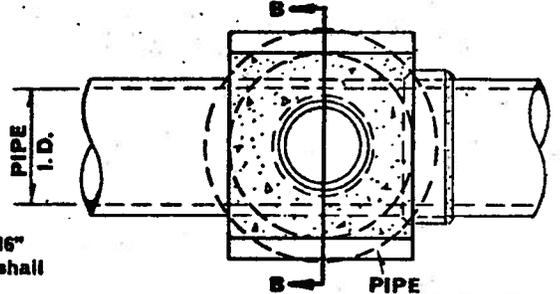
ELEVATION



SECTION B-B

NOTES:

1. The upper end of the chimney pipe shall be 5' below the grade of the lower curb, unless otherwise specified
2. Where one or two house connections are to be joined to the chimney pipe use a double "T" branch. Where three house connections are to be joined use double "T" branch and one single tee.
3. Face "T" toward property to be served.
4. When there is material difference in elevation of property on either side of the main line sewer, disregard note 3 and face "T" branch toward the lower side of the street.
5. 16" irrigation type pipe or circular encasement with a minimum diameter of 16" may be used in lieu of concrete encasement shown here. Pipe encasement shall be filled with concrete.
6. Pour base against firm undisturbed soil.
7. Top of chimney and "T's" not used shall be plugged with manufactured plug.
8. Class 520-C-2500 concrete to be used.
9. In lieu of encased V.C.P. contractor may install cast iron pipe with encasement only around the main line tee.



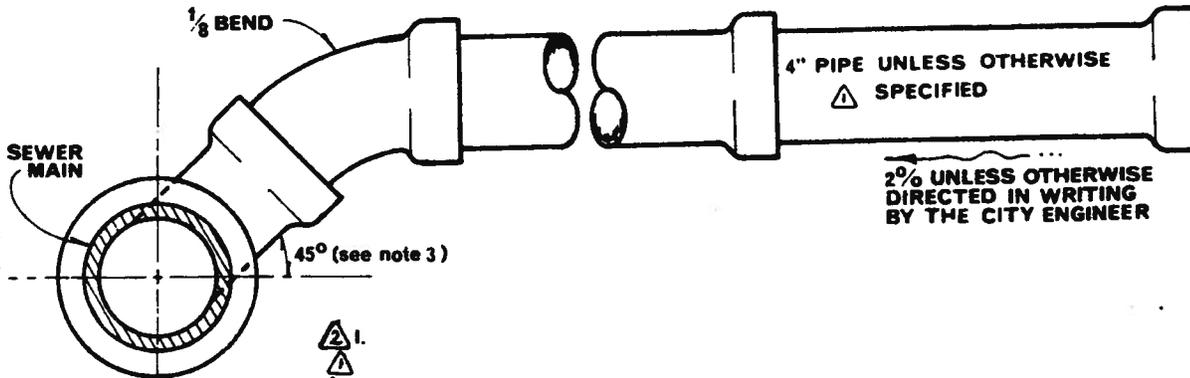
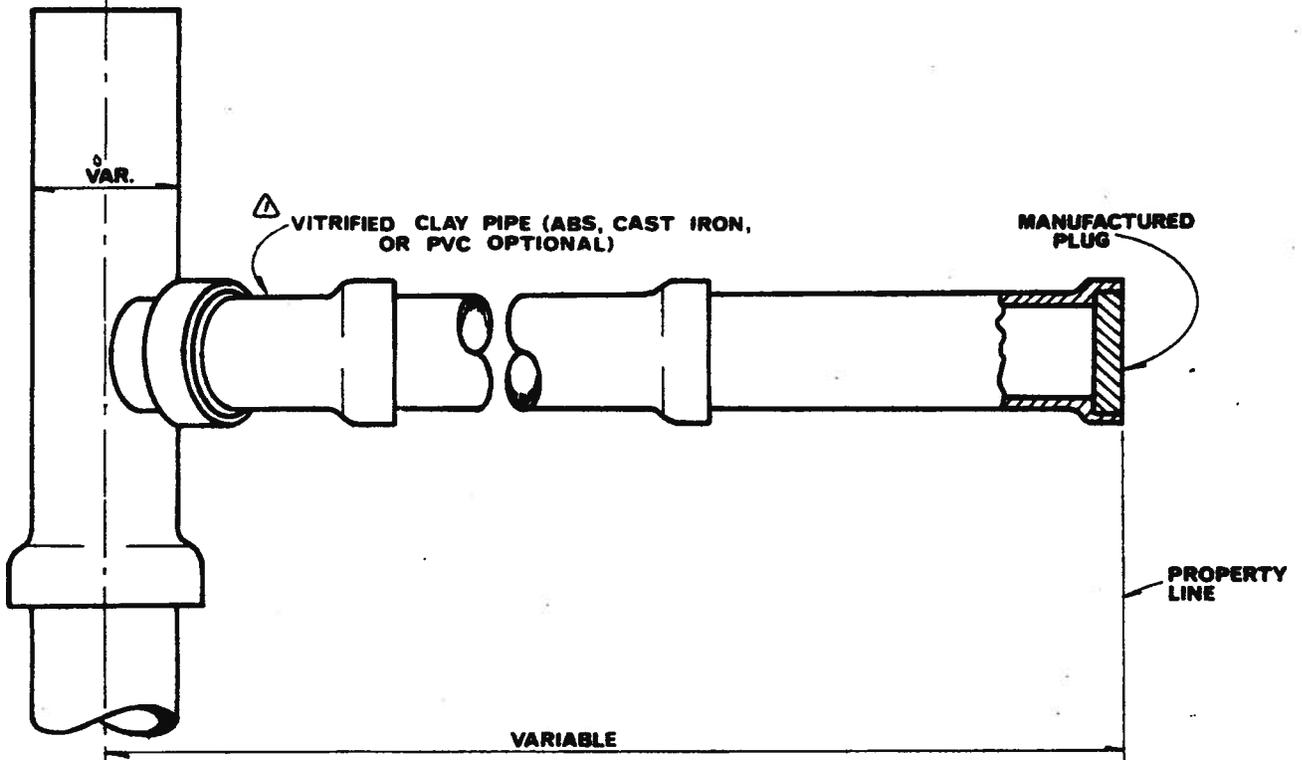
SECTION A-A

APPROVED <i>Robert C. Adams</i> DATE 7/14/78		PUBLIC WORKS DIRECTOR - R.C.E. 18793	
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

STANDARD CHIMNEY PIPE

STANDARD DRAWING NO. **561**



- 1.
- 2.

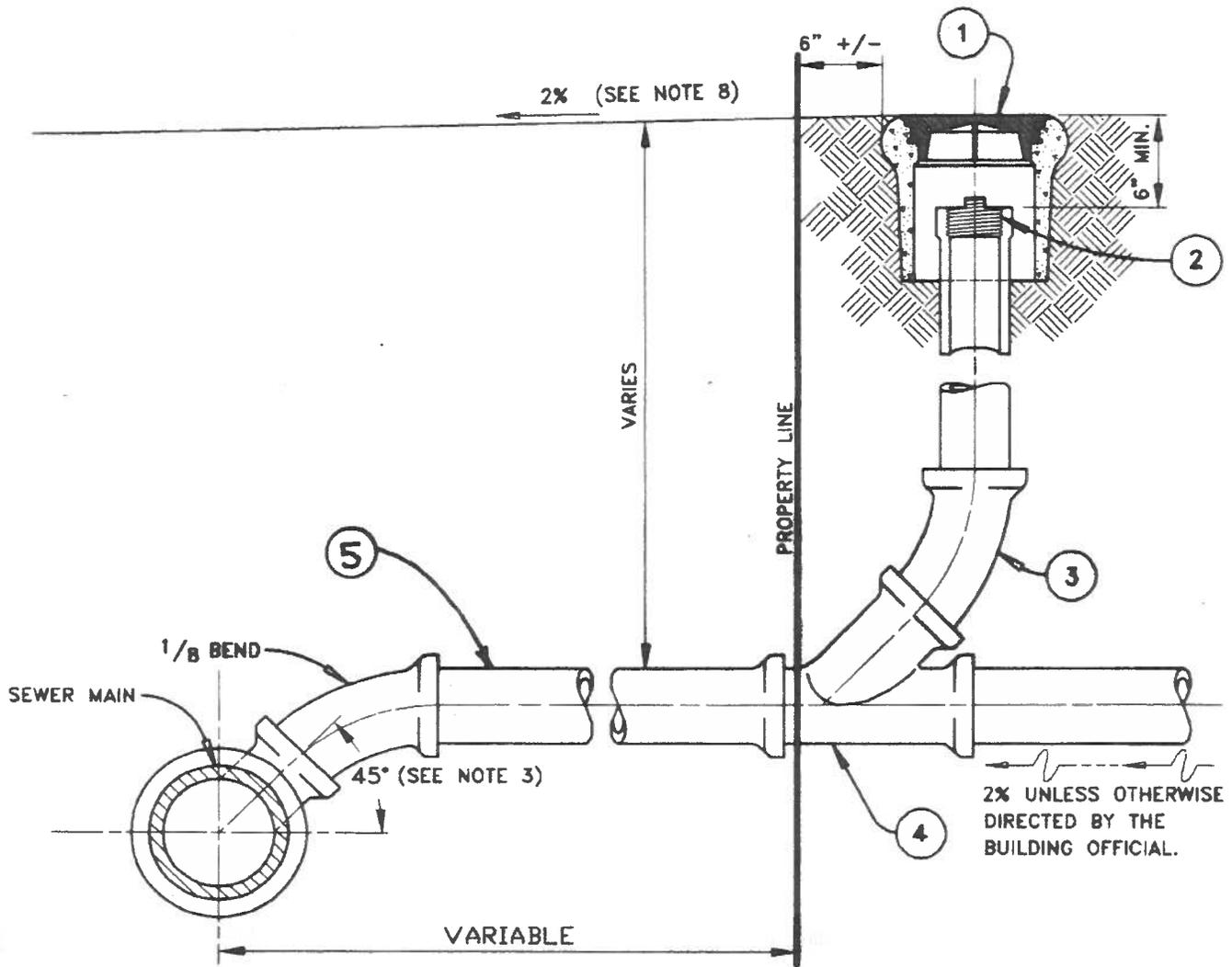
- 3. Tees or Wyes less than 6' deep shall be laid flat.
- 4. Minimum depth of lateral at curb line and at property line to be determined in the field.
- 5. Where lateral is constructed under an existing curb, the contractor shall chisel the letter "L" into the curb face directly above the lateral. "L" to be 1 1/2" high and 3/16" deep.
- 6. Backfill over laterals to be compacted by tamping only.
- 7. For connection to mains less than 12" make connections Wye, Tee, or Saddle Tee.
- 8. For connection to mains 12" or larger make connections with cored hole and Saddle Tee.

APPROVED	DATE 1/11/78
PUBLIC WORKS DIRECTOR - R.C.E 18793	
CHANGED NOTE 1; ADDED NOTE 2. ABS & PVC OPT. 4" PIPE LABEL. ADDED NOTE 7; NOTE 8.	1/12/74
DELETED NOTES 112.	3.25.90
MARK	REVISIONS
	APPR. DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.

SEWER LATERAL

STANDARD DRAWING NO. **562**



MATERIALS

- ① BROOKS #1-RT VALVE BOX OR EQUAL. (MARKED SEWER)
- ② THREADED CAP WITH SQUARE NUT.
- ③ MINIMUM 3" SEWER PIPE.
- ④ WYE PER UNIFORM BUILDING CODE.
- ⑤ MATERIAL USED FOR LATERAL BETWEEN THE SEWER MAIN AND PROPERTY LINE SHALL BE THE SAME AS SEWER MAIN.

NOTES:

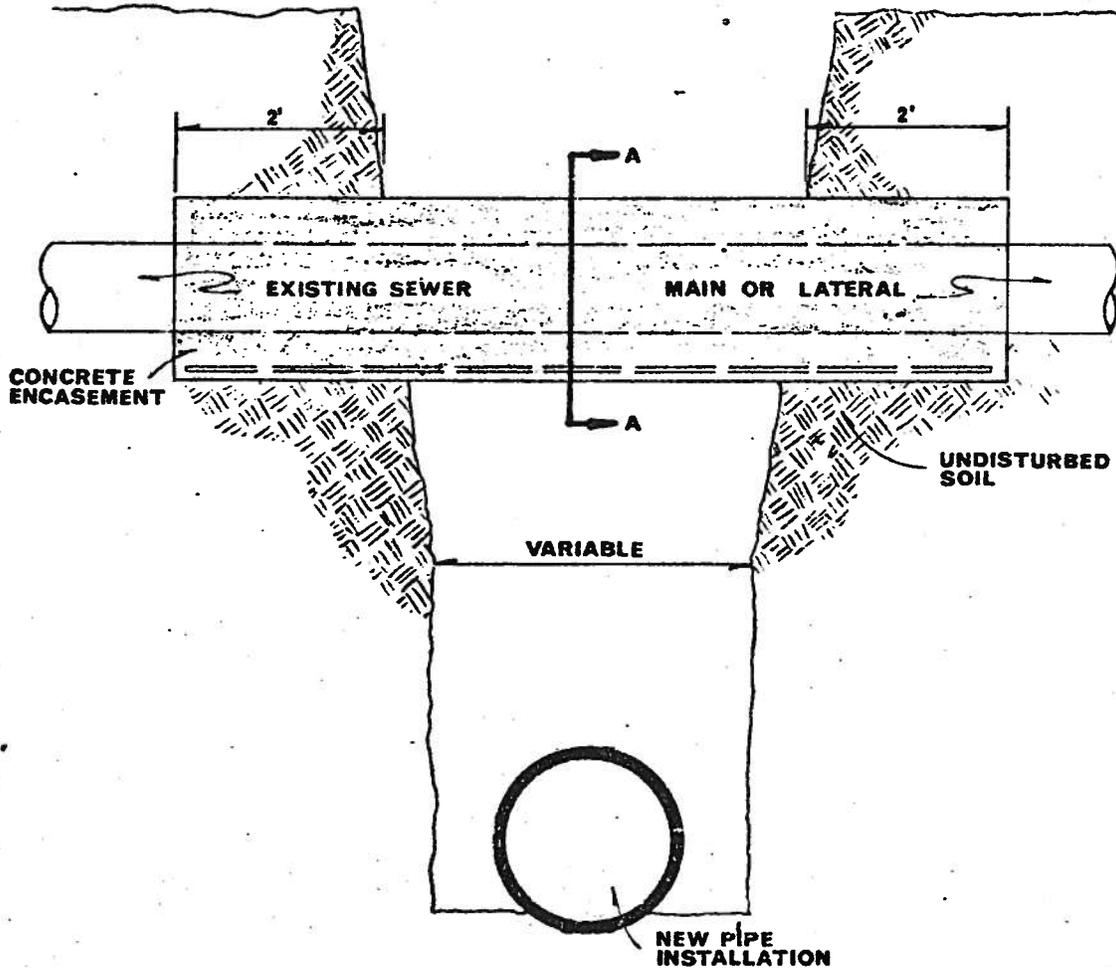
- 1. PLACE CLEANOUT INSIDE PRIVATE PROPERTY.
- 2. LID MUST BE CAST IRON FOR LOCATING PURPOSES AND MARKED SEWER.
- 3. TEES OR WYES LESS THAN 6' DEEP SHALL BE LAID FLAT.
- 4. MINIMUM DEPTH OF LATERAL AT CURB LINE AND PROPERTY LINE TO BE DETERMINED IN THE FIELD.
- 5. BACKFILL OVER LATERALS TO BE COMPACTED BY TAMPING ONLY.
- 6. FOR CONNECTIONS TO MAINS LESS THAN 12" MAKE CONNECTIONS WITH WYE OR TEE.
- 7. FOR CONNECTIONS TO MAINS 12" OR LARGER MAKE CONNECTIONS WITH CORED HOLE AND SADDLE TEE.
- 8. GRADE PARKWAY AT 2% TOWARDS CURB OR BACK OF SIDEWALK OR AS DIRECTED BY THE ENGINEER.
- 9. WHERE LATERAL IS CONSTRUCTED UNDER AN EXISTING CURB, THE CONTRACTOR SHALL CHISEL THE LETTER "L" INTO THE CURB FACE DIRECTLY ABOVE THE LATERAL. "L" TO BE 1-1/2" HIGH & 3/16" DEEP.

APPROVED <i>Alan Byrd</i> DATE 6/27/06		CITY ENGINEER - R.C.E. 38170	
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

SEWER LATERAL with PL C.O.

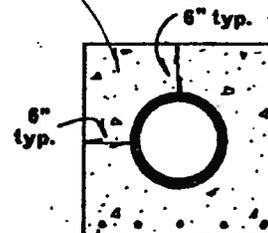
STANDARD DRAWING NO. 562A



NOTES:

1. Encasement shall be required for trench width 2' or greater.
2. A sewer lateral may be replaced with cast iron pipe in lieu of encasement. The cast iron pipe shall have the same diameter as the existing lateral and the length shall be the same as would have been required for encasement. Cast iron pipe shall not be used on sewer mains.
3. Reinforcing steel may be omitted if trench width is less than 3'.
4. For sewer pipe crossings of less than 3' over a water main see P.U.D. Water Division Std. Dwg. No. CWD-021.

▲ CLASS 520-C-2500
CONCRETE
ENCASEMENT



SECTION A-A

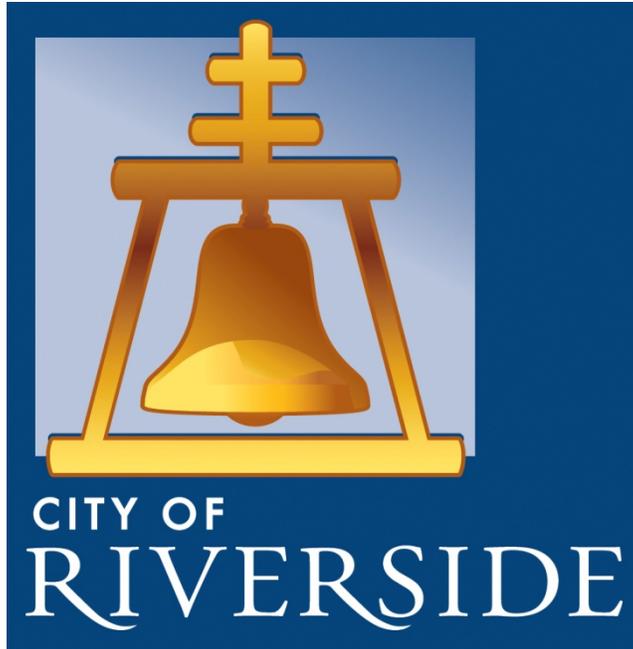
APPROVED	<i>J. Martinez</i>	DATE	7-6-73
	PUBLIC WORKS DIRECTOR - R.C.E. 8134		
▲	revised concrete class		7-13-78
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPT. - ENGINEERING DIV.
SEWER PIPE ENCASEMENT
ACROSS TRENCHES

STANDARD DRAWING NO. **564**

APPENDIX F

Wastewater Lift-station Assessment



**City of Riverside
Public Works Department
Wastewater Division**

**Regional Water Quality Control Plant
Wastewater Lift Station Assessment**

January 2009

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Summary

The purpose of this document is to provide a preliminary assessment of the Wastewater Division sewage lift stations. RWQCP staff conducted site visits and reviewed existing design and operational information to identify infrastructure, mechanical equipment, electrical, and controls systems that are in need of replacement, or upgrading to newer technology.

The RWQCP currently operates and maintains seventeen (17) wastewater lift stations throughout the city. Four of these lift stations are dry well type stations, the remaining stations are submersible duplex stations. Many of these stations have reached their useful life expectancy. The stations range in age from 1966 to 2006. Because of growth within the City, it is believed many of the station wet wells are now undersized for the amount of sewage flowing to the stations. All of these factors, mechanical condition, age and potential undersized wet wells increase the risk of station failures that can cause a sanitary sewage spill (SSO).

This report evaluates each of the seventeen (17) lift stations and provides recommendations to improve reliability and address deficiencies. Some of the improvements may be completed by RWQCP staff and some will need to be completed as part of a construction contract due to complexity of the work.

Five of these stations have been identified as priority stations that should be replaced and modernized because they are considered the highest risk for failure and SSO. These five stations should be programmed into the Sewer Division CIP program and be replaced in the next three (3) years. The remaining twelve (12) sewage lift-stations should be evaluated for replacement over the next seven (7) years. The objective is to replace all of the needed sewage lift-stations with modern systems over the next ten (10) years. A goal with the 5 priority stations should be the creation of a duplex submersible sewage lift-station standard design for both City and developer constructed stations. The five stations in order of priority are as follows:

1. Crest and Ontario
2. Western
3. Arlington & Fairhaven
4. Lakewood / Darkwood
5. Fairgrounds

Acknowledgments

This document was created through a collaborative effort of the RWQCP maintenance, SCADA, electrical, instrumentation and collections Sections.

CREST & ONTARIO WASTEWATER LIFT STATION, COL-WLS-004

The Crest & Ontario wastewater lift station is located at 7120 Crest Avenue. This is one of the thirteen duplex submersible stations. This station is approximately twenty five years old, it was installed in 1983.



Current conditions of infrastructure at the station are as follows: The concrete slab at the station is cracking and uneven. The wet well is not much more than a manhole with pumps, the cover is only twenty four inches in diameter. The integrity of the concrete wet well is also unknown. The valve vault cover is also only twenty four inches in diameter, making access to piping and valves limited, the integrity of the valve vault concrete walls and cover is unknown. The integrity of the buried suction piping, and discharge piping is also unknown.

Current conditions of the mechanical equipment at the station are as follows: The station has two Wemco submersible five horse power submersible pumps; each pump is rated for two hundred twenty gallons per minute at thirty feet of total dynamic head. The two submersible pumps discharge into a four inch hose connected to discharge piping. The discharge valves in the valve vault probably will not close due to lack of use. The City of Riverside has purchased a spare submersible pump for this station to keep two pumps operating as much as possible.

Current conditions of electrical equipment are as follows: The two, five horse power single phase two hundred thirty volt, capacitor start submersible motors have been problematic throughout the years. The control / breaker panel is located above ground; the panel is corroding from the gasses that come through the conduits.

Current conditions of the control and SCADA are as follows: The station is controlled with floats and relays. There are four floats to control the station: pump

on, second pump on, high wet well, and off. The SCADA system has alarms for: site entry, AC power, and high wet well. SCADA reports the runtime and motor starts for each pump set.

Recommendations: A flow study should be performed to determine the actual flow to the station: or if the sewer could be rearranged to flow gravity. A completely new submersible duplex station should be designed with four hundred and eighty volt three phase power; submersible pumps installed on guide rails with discharge elbow, and an emergency pipe connection installed on discharge piping. Enlarge wet well and valve vault lids for ease of access for pump removal and valve changes and valve maintenance; replace concrete slab. Upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system. Install a receptacle and tie switch for emergency generator power.

Improvements for Crest & Ontario Wastewater Lift Station

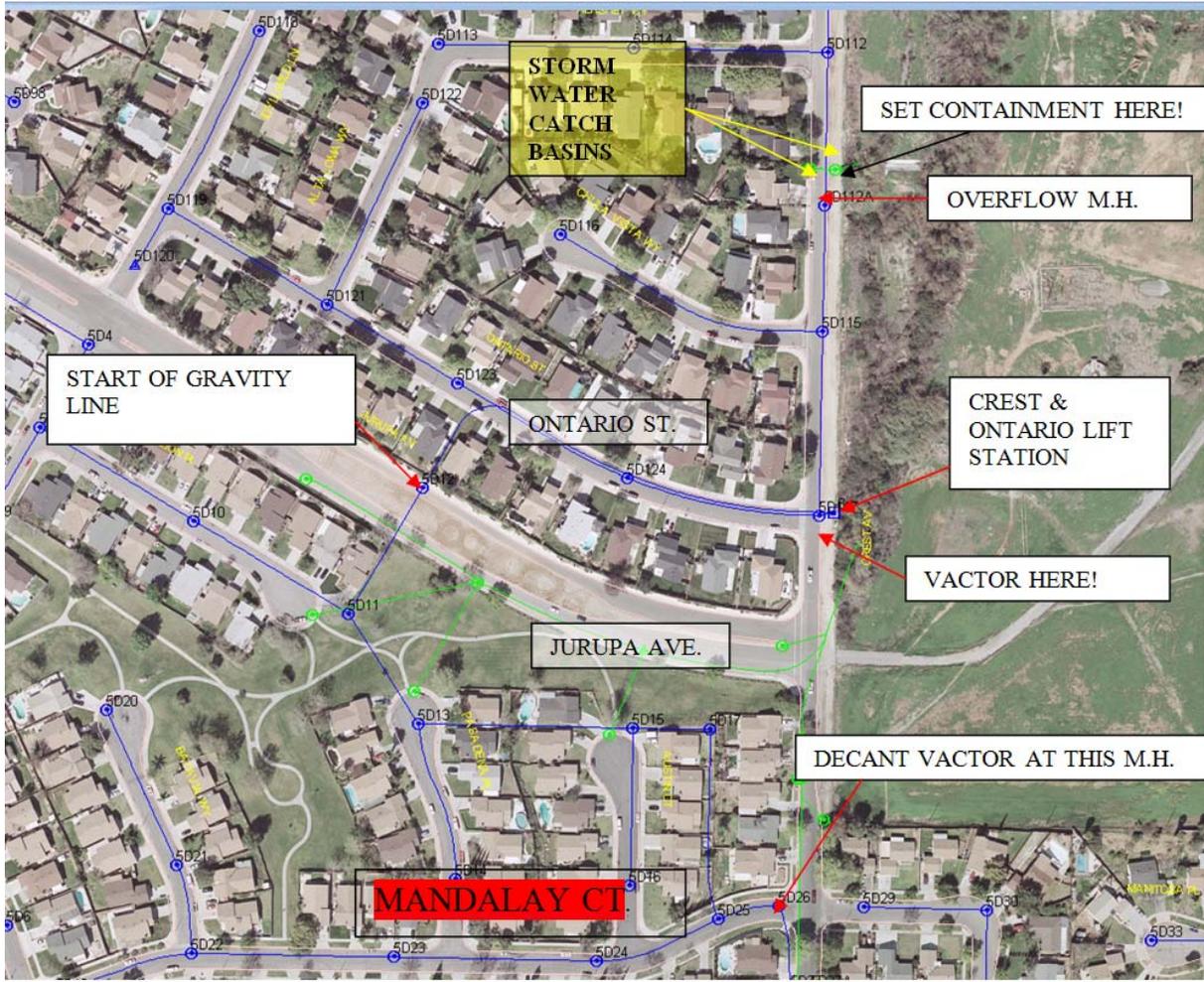
In House

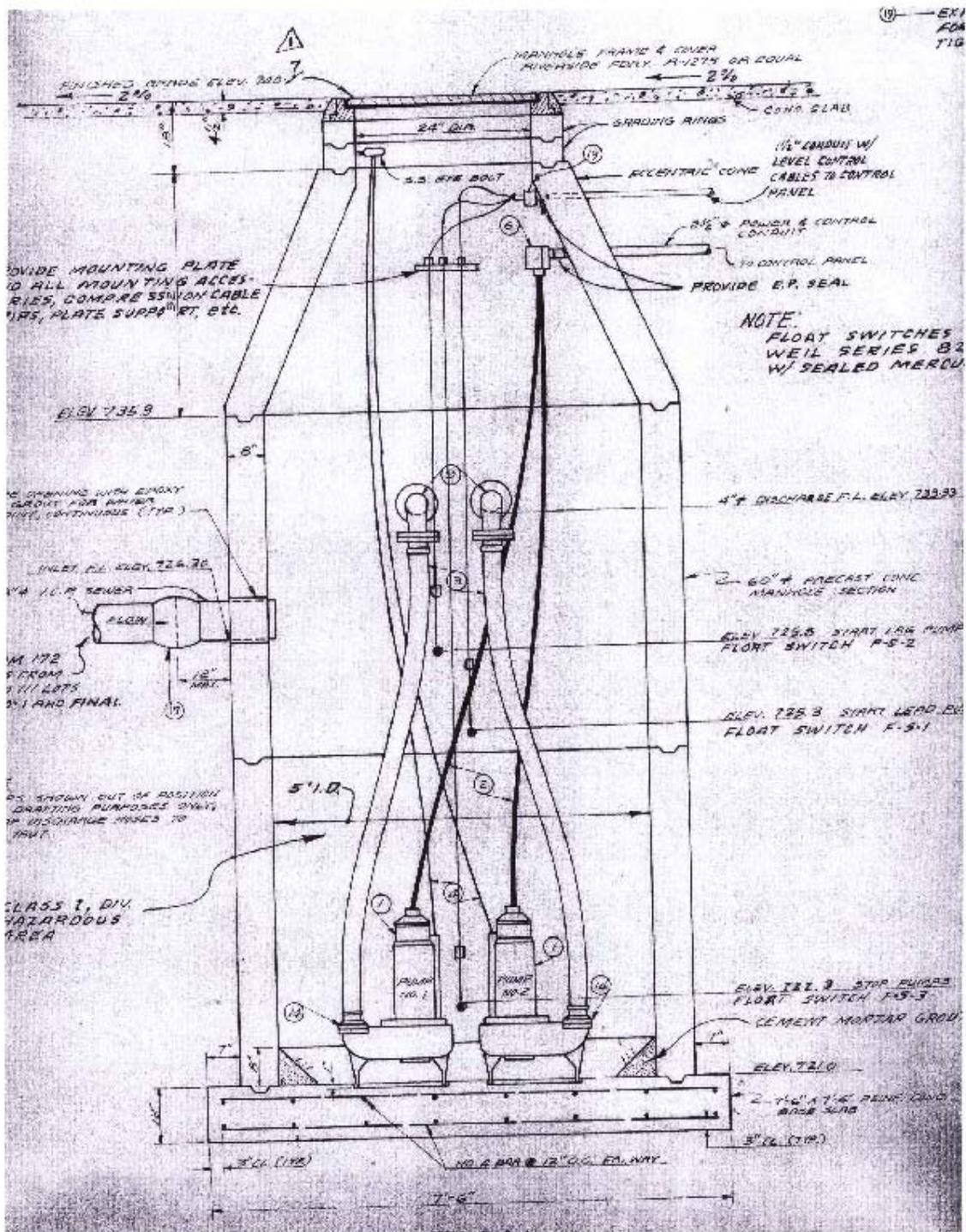
- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Spec. new wet well cover hatch.
- Spec new valve vault hatch.
- Add SCADA motor fail alarms.
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Install Ultra Sonic Level Control.
- Install emergency stand-by power connection.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install new control panel with PLC & RTU. Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well hatch cover, & valve vault cover. Pour concrete slab, upgrade fencing around station

Crest & Ontario Site and Spill Plan





Example of older duplex submersible station

WESTERN WASTEWATER LIFT STATION, Q-COL-WLS-009

The Western wastewater lift station is located at 7700 Western. The Western Wastewater lift station is a duplex submersible pump station with two five horse power Essco submersible pumps rated at one hundred sixty gallons per minute at thirty six feet of total dynamic head. The station is twenty-one year old and was installed in 1987.



Current conditions of the infrastructure: The retaining wall and concrete slab are cracking and buckling. The wet well opening is just a large manhole cover; the valve vault opening has a two piece cover large enough for valve maintenance. The two pumps are not mounted on guide rails, therefore a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping and valves seem to be operating as designed although not much attention has been given to them. This station has an emergency pump connection on the discharge piping.

Current conditions of electrical equipment: The existing power is two hundred and thirty volt, single phase. The pump motors use a starting capacitor. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: Float system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts, relay controlled.

Recommendations: A flow study should be performed, to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. The stations power should be upgraded to four hundred and sixty volt three phase; the pumps replaced with four hundred and sixty volt, three phase units; install discharge elbows and guide rails for pump removal. Enlarge the wet well

opening for easier access for pump removal. Enlarge the valve pit cover for ease of entry for valve changes and valve maintenance. Upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system. Install a receptacle and tie switch for emergency generator power. Repair retaining wall, replace broken concrete slab.

Improvements for Western Wastewater Lift Station

In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Spec. new wet well cover hatch.
- Add SCADA motor fail alarms.
- Spec new valve vault hatch.
- Spec slide rail & discharge elbow for submersible pumps.
- Install Ultra Sonic Level Control.
- Install necessary equipment for emergency stand by power.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Investigate the possible slope movement & retaining wall & concrete slab damage
- Develop a bid package to, build & install new control panel with PLC & RTU. Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well hatch cover, & valve vault cover. Pour concrete slab, repair / replace retaining wall, upgrade fencing around station

ARLINGTON AND FAIRHAVEN WASTEWATER LIFT STATION, Q-COL-WLS-011

The Arlington Fairhaven wastewater lift station is located at 11344 Arlington Avenue. The Arlington Fairhaven Wastewater lift station is a duplex submersible pump station with two five horse power Essco submersible pumps rated at one hundred sixty gallons per minute at thirty six feet of total dynamic head. The station is nineteen years old and installed in 1989.



Current conditions of the infrastructure: The wet well opening is just a large manhole cover; the valve vault opening has a two piece cover large enough for valve maintenance. The two pumps are not mounted on guide rails, therefore, a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping and valves seem to be operating as designed. This station has an emergency pump connection on discharge piping.

Current conditions of electrical equipment: The existing power is two hundred and thirty volt, single phase. The pump motors use a starting capacitor. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: Float system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts, relay controlled

Recommendations: A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. The stations power should be upgraded to four hundred and sixty volt, three phase; the pumps replaced with four hundred and sixty volt three phase units; install discharge elbows and guide rails for pump removal. Enlarge the wet well cover

for ease of pump removal. Enlarge the valve vault cover to ease access to valves for valve changes and valve maintenance. Upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system. Install a receptacle and tie switch for emergency generator power.

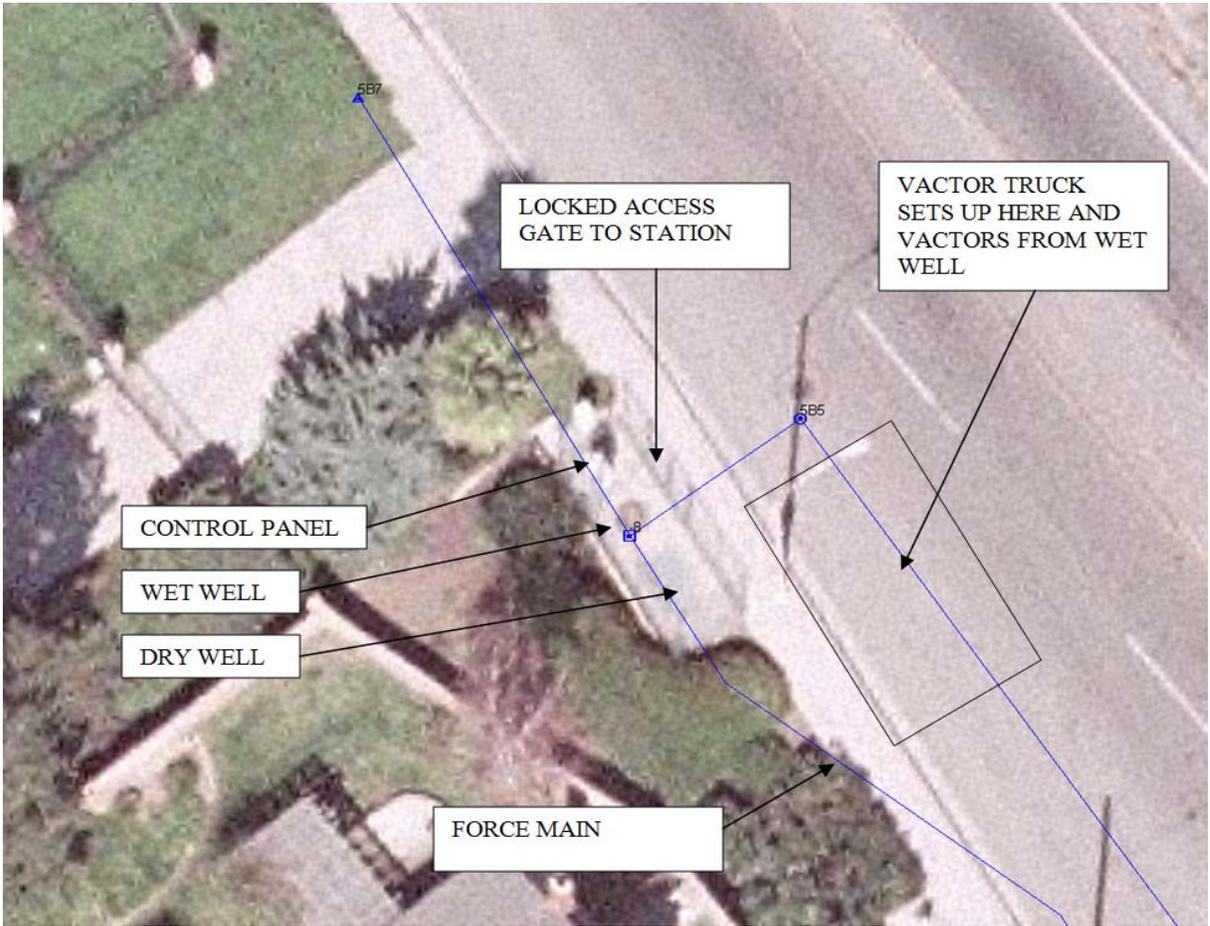
Improvements for Arlington & Fairhaven Wastewater Lift Station

In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Spec. new wet well cover hatch.
- Spec slide rail & discharge elbow for submersible pumps.
- Install Ultra Sonic Level Control.
- Install necessary equipment for emergency stand by power.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install new control panel with PLC & RTU Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well hatch cover. Pour concrete slab, upgrade fencing around station....



LAKWOOD (AKA MISSION GROVE) WASTEWATER LIFT STATION, Q-COL-WLS-010

The Lakewood wastewater lift station is located at 6730 Dark Wood. The Lakewood Wastewater lift station is a duplex submersible pump station with two twenty horse power Essco submersible pumps rated at two hundred gallons per minute at one hundred feet of total dynamic head. The station is nineteen years old and installed in 1989.



Current conditions of the infrastructure: The wet well opening is just a large manhole cover. The valve vault cover is sized for maintenance access. The discharge piping does have an emergency pumping connection. The two pumps are not mounted on guide rails, therefore, a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping and valves seem to be operating as designed although not much attention has been given to them.

Current conditions of electrical equipment: The existing power is four hundred and sixty volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: Float system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts, relay controlled.

Recommendations: This station was designed nineteen years ago. A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. Install discharge elbows and guide rails, enlarge wet well opening and cover, for pump removal and enlarge the valve vault cover for easier access to valves for valve changes or valve maintenance .

Upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system. Install a receptacle and tie switch for emergency generator power.

Improvements for Lakewood Wastewater Lift Station

In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Add SCADA motor fail alarms.
- Spec. new wet well cover hatch.
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Install Ultra Sonic Level Control.
- Install necessary equipment for emergency stand by power.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Develop a bid package to, build & install new control panel with PLC & RTU, Procure & install a slide rail & discharge elbow system. Procure & install enlarged wet well hatch cover. Pour concrete slab, upgrade fencing around station.

Lakewood Site and Spill Plan



FAIRGROUNDS WASTEWATER LIFT STATION, COL-WLS-001

The Fairgrounds wastewater lift station is located at 3991 Fairgrounds Street. This is one of the four drywell stations. This station is approximately forty- two years old, it was installed in 1966.



Current conditions of infrastructure at the station are as follows: The dry well has water infiltrating at the concrete joints, and is subject to flooding from rain water and irrigation water. The egress ladder to enter dry well is configured in a strange way the ladder, that maybe no longer up to current codes. The integrity of the buried suction piping, and discharge piping is unknown. The integrity of the concrete wet well is also unknown. The size of the wet well seems to be on the small side for the size of pumps, the wet well measures five feet diameter by fourteen feet to the top, the bottom of the influent pipe is only five feet from bottom this equals 734 gallons in the wet well before backing into lines.

Current conditions of the mechanical equipment are as follows: The existing Fairbanks Morse vertical non clog pumps are of original design; they both have been rebuilt within the last three years. The piping and valves in the dry well appear to be sound. The station has an inlet and out vent tube with a fan mechanism to provide proper ventilation. There is no automatic sewage gas detection and alarm system.

Current conditions of electrical equipment are as follows: The two five horse power two hundred and thirty volt three phase motors are operating as designed. The control / breaker panel is located in the dry well below grade.

Current conditions of the control and SCADA are as follows: The station is controlled with floats. There are four floats to control the station: pump on, second pump on, high wet well, and off. The SCADA system has alarms for site entry, AC power, and high wet well. SCADA reports the runtime and motor starts for each pump set all relay controlled.

Recommendations: This station was designed over forty years ago, and has probably out lived it expected life. A flow study should be performed, to know the actual flow to the station. A completely new submersible duplex station should be designed, with four hundred eighty volt three phase power with control panel installed above ground, submersible pumps installed on guide rails with discharge elbow, Upgrade the controls with PLC control with ultra sonic level measurement which also could be used as back up control system The station should be fenced for security purposes.

Improvements for Fairgrounds Wastewater Lift Station

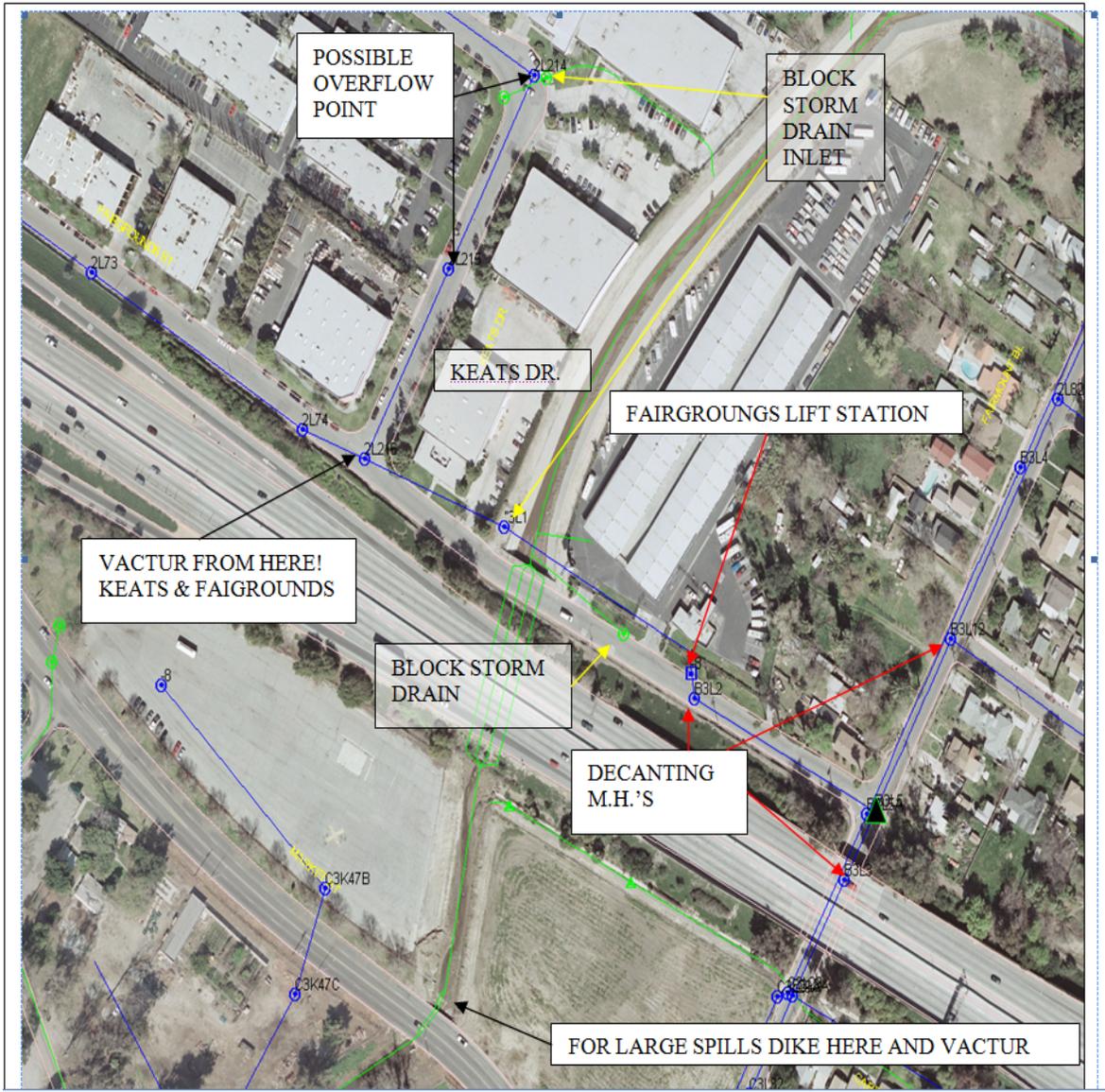
In House

- Check current station flow & storage capacity
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Spec. new wet well cover hatch.
- Spec new valve vault hatch.
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Add SCADA motor fail alarms.
- Install Ultra Sonic Level Control.
- Install emergency standby power connection.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install a new submersible station with new control panel with PLC & RTU, & emergency generator power receptacle Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well, with a enlarged hatch, & new valve vault with enlarged vault cover & emergency pump connection. Pour concrete slab, upgrade fencing around station

Fairgrounds Site and Spill Plan



UNIVERSITY KNOLLS WASTEWATER LIFT STATION, Q-COL-WLS-008

The University Knolls wastewater lift station is located at 899 North University Avenue. The University Knolls Wastewater lift station is a duplex submersible pump station with two, three and three quarter horse power ABS submersible pumps rated at thirty gallons per minute at thirty five feet of total dynamic head. The station is twenty years old and installed in 1988.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore not requiring a confined space entry to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible ABS pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping seems to be operating as designed; the two check valves and the two discharge valve were recently replaced.

Current conditions of electrical equipment: The existing power is two hundred and thirty volt single phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: Float system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts controlled by relays.

Recommendations: A flow study should be performed, to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. The stations power should be upgraded to four hundred and sixty volt, three phases; the

pumps replaced with four hundred and sixty volt, three phase units; upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system. Install a receptacle and tie switch for emergency generator power. Install an emergency pumping connection on discharge piping. Install concrete slab, and fence station.

Improvements for University Knolls Lift Station

In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station
- Design / develop a PLC control program for station
- Spec. new wet well cover hatch.
- Install Ultra Sonic Level Control
- Install necessary equipment for emergency stand by power

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install new control panel with PLC & RTU Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well hatch cover, & valve vault cover. Pour concrete slab, upgrade fencing around station

University Knolls Site and Spill Plan



DEXTER DRIVE WASTE WATER LIFT STATION, COL-WLS-002

The Dexter Drive wastewater lift station is located at 2981 Dexter Drive, in the back of the American Legion Building. This is one of the four drywell stations. This station is approximately forty years old, it was installed in 1968.



Current conditions of infrastructure at the station are as follows: The integrity of the buried suction piping, and discharge piping is unknown. The integrity of the concrete wet well is also unknown. The dry well is small and filled with pumps and piping therefore making equipment removal some what of a task. The pumps discharge into an elevated manhole just out side the station, and the pumps have known to blow the manhole cover off.

Current conditions of the mechanical equipment are as follows: The existing Vaughan vertical chopper pumps were installed in the early 1990s replacing vertical non clog pumps. The Vaughan chopper pumps are rated for 170 GPM, at 20 feet TDH. The piping and valves in the dry well appear to be sound.

Current conditions of electrical equipment are as follows. The two, seven and one half horse power, single phase two hundred and thirty volt motors, are operating as designed. The control / breaker panel is located in the dry well below grade.

Current conditions of the control and SCADA are as follows: The station is controlled with floats & relays. There are four floats to control the station: pump on, second pump on, high wet well, and off. The SCADA system has alarms for: site entry, AC power, and high wet well. SCADA reports the runtime and motor starts for each pump set.

Recommendations: This station was designed forty years ago, and has probably out lived it expected life. A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. A completely new submersible duplex station should be designed with four hundred

eighty volt three phase power with control panel installed above ground, and submersible pumps installed on guide rails with discharge elbow, Upgrade the controls to PLC control with ultra-sonic level measurement which also could be used as back up control system. The station should be fenced for security purposes.

Improvements for Dexter St. Wastewater Lift Station

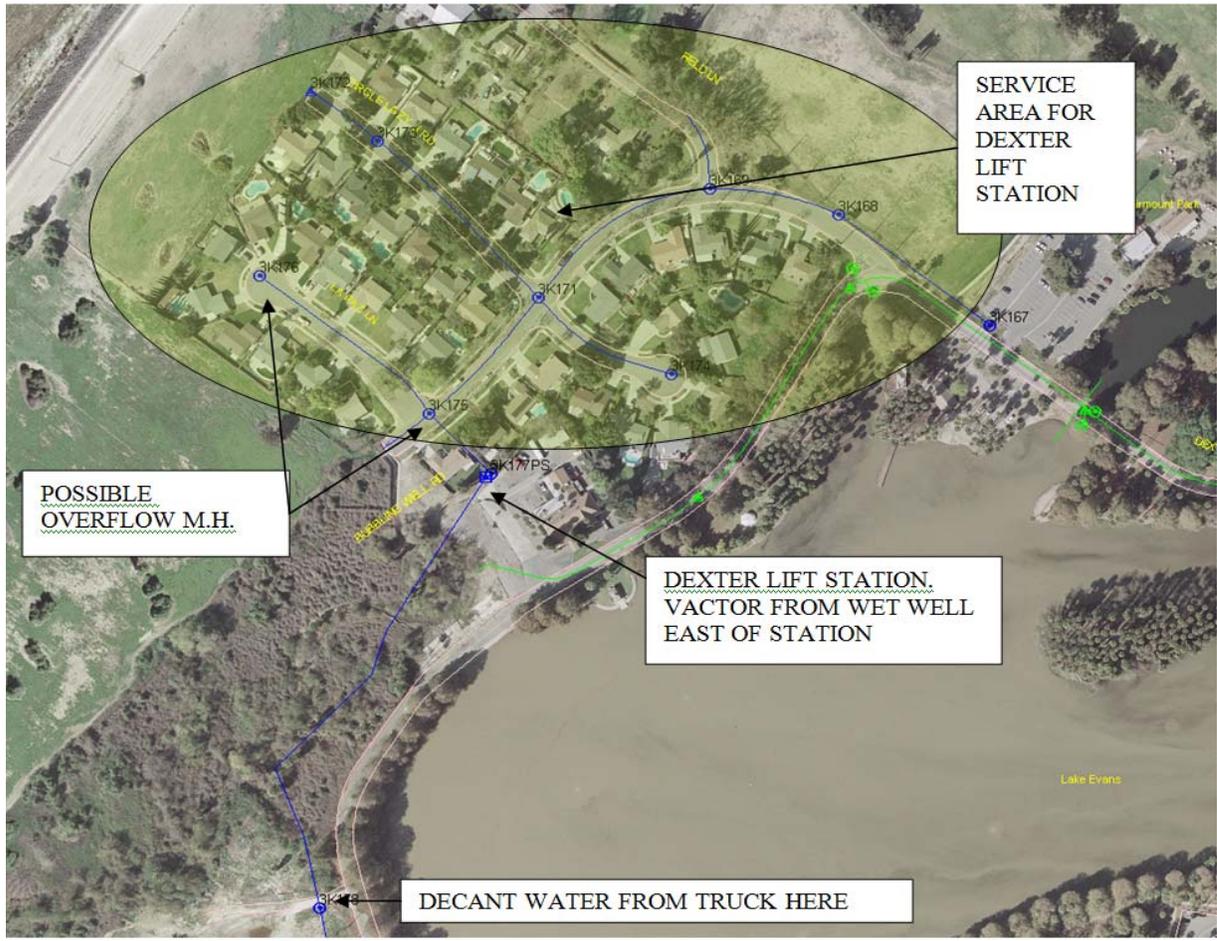
In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station.
- Design / develop a PLC control program for station.
- Spec. new wet well cover hatch.
- Add SCADA motor fail alarms.
- Spec new valve vault hatch.
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Install Ultra Sonic Level Control.
- Install necessary equipment for emergency stand by power.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install a new submersible station with new control panel with PLC & RTU, & emergency generator power receptacle Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well, with a enlarged hatch, & new valve vault with enlarged vault cover & emergency pump connection. Pour concrete slab, upgrade fencing around station

Dexter Site and Spill Plan



GARDEN HILLS WASTEWATER LIFT STATION, Q-COL-WLS-016

The Garden Hills Wastewater lift station is located at 6364 Garden Hills Way. The Garden Hills Wastewater lift station is a duplex self priming pump station with two fifteen horse power Gorman Rupp self priming pumps rated at one hundred twenty five gallons per minute at ninety five feet of total dynamic head. The station is five years old and installed in 2002.



Current conditions of the infrastructure: The station is built above the wet well contained in an enclosure seventy seven inches square, and fifty eight inches tall. This arrangement leaves very little room for maintenance access.

Current conditions of mechanical equipment: The two existing self priming Gorman Rupp pumps are working as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty, volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: The station uses PLC control, with ultrasonic level measurement used as a back up control system. The PLC & ultrasonic level measuring device are non-standard or proprietary brands

Recommendations: A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. This station does not meet the City's specification for a small duplex station. Remove existing station and replace with a new submersible station.

Improvements for Garden Hills Wastewater Lift Station

In House

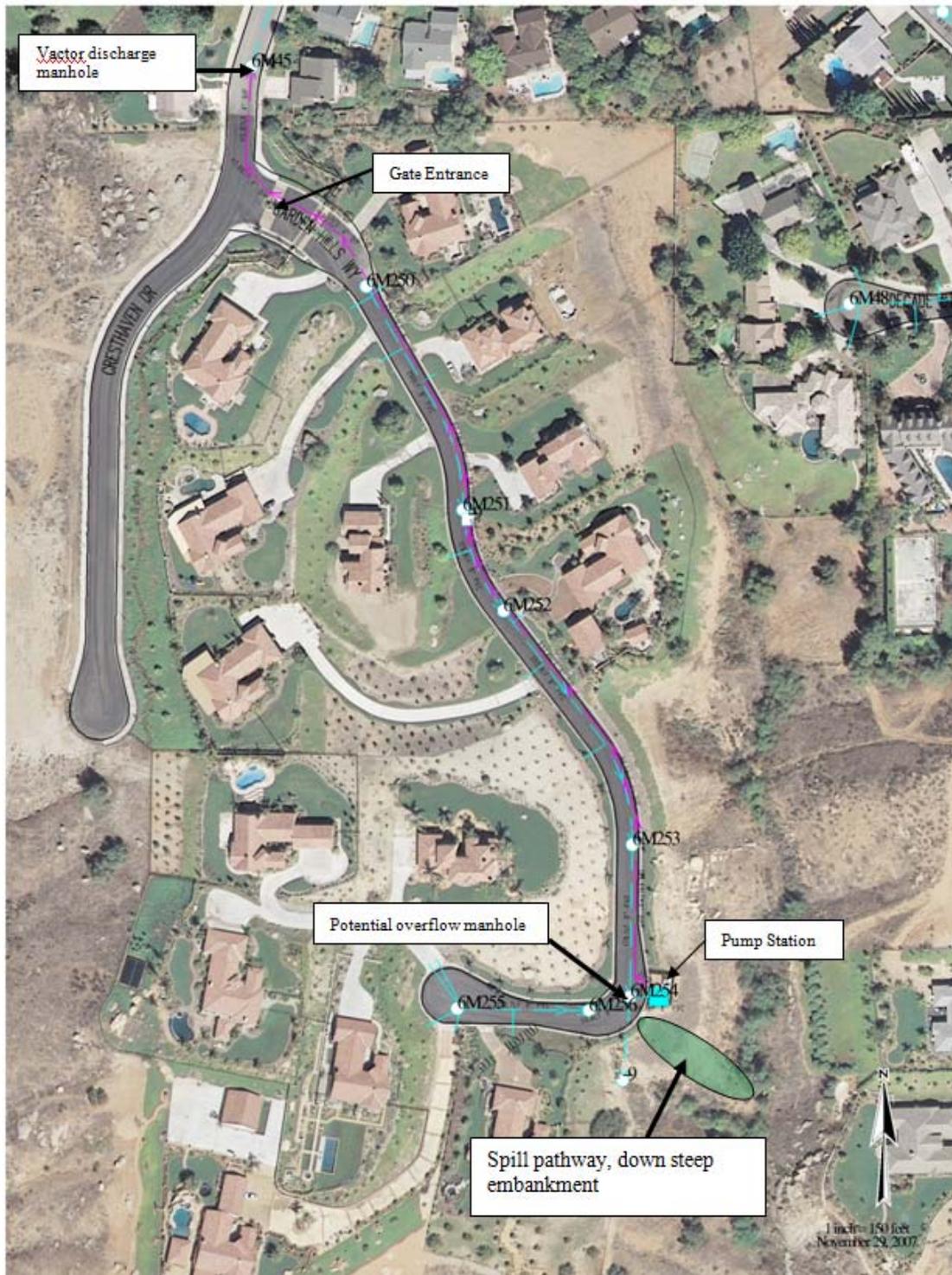
- Check current station flow & storage capacity.

- Design & spec. a new control panel for the station
- Design / develop a PLC control program for station
- Spec. new wet well cover hatch.
- Spec new valve vault hatch
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Install Ultra Sonic Level Control
- Install necessary equipment for emergency stand by power

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Check for availability of 480 volt 3 phase power.
- Develop a bid package to, build & install a new submersible station with new control panel with PLC & RTU, & emergency generator power receptacle Spec & procure & install new 480 volt 3 phase pumps, with slide rail & discharge elbow system. Procure & install enlarged wet well, with a enlarged hatch, & new valve vault with enlarged vault cover & emergency pump connection. Pour concrete slab, upgrade fencing around station

Garden Hills Site and Spill Plan



RIVERCREST WASTEWATER LIFT STATION, Q-COL-WLS-007

The Rivercrest wastewater lift station is located at 6013 Rivercrest Drive. The Rivercrest Wastewater lift station is a duplex submersible pump station with two seven and one half horse power Essco submersible pumps rated at two hundred fifty gallons per minute at thirty seven feet of total dynamic head. The station is twenty-three years old and installed in 1985.



Current conditions of the infrastructure: The wet well opening is just a large manhole cover; the valve vault is the same type and size opening. The two pumps are not mounted on guide rails, therefore, a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping and valves seem to be operating as designed although not much attention has been given to them.

Current conditions of electrical equipment: The existing power is four hundred sixty volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: Float system, controlled by relays with outside light and horn. This station does not have SCADA.

Recommendations: A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. The submersible pumps need to be installed on guide rails with discharge elbow, and an emergency pipe connection needs to be installed on discharge piping. Enlarge wet well and valve vault lids for ease of access for pump removal and valve repairs. Upgrade the controls to PLC control with ultrasonic level measurement which also could be used as back up control system, and

telemetry system. Install a receptacle and tie switch for emergency generator power

Improvements for Rivercrest Wastewater Lift Station

In House

- Check current station flow & storage capacity.
- Design & spec. a new control panel for the station
- Design / develop a PLC control program for station
- Spec. new wet well cover hatch.
- Spec new valve vault hatch
- Spec slide rail & discharge elbow for submersible pumps.
- Design changes to piping in valve vault for an emergency pumping connection.
- Install Ultra Sonic Level Control
- Install necessary equipment for emergency stand by power

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.
- Develop a bid package to, build & install a new submersible station with new control panel with PLC & RTU, & emergency generator power receptacle Spec & procure & install slide rail & discharge elbow system. Procure & install enlarged wet well, with a enlarged hatch, & new valve vault with enlarged vault cover & emergency pump connection. Pour concrete slab, upgrade fencing around

Rivercrest Site and Spill Plan



APOSTLE WASTEWATER LIFT STATION, Q-COL-WLS-014

The Apostle Wastewater lift station is located at 1980 Apostle. The Apostle Wastewater lift station is a duplex submersible pump station with two ten horse power Homa submersible pumps rated at eighty gallons per minute at fifty seven feet of total dynamic head. The station is nine years old and installed in 1999.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore; not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Homa pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty volt three phase. Condition of the breakers and electrical gear should be checked. The station has an auxiliary power connection.

Current conditions of control and SCADA: PLC control with ultrasonic level measurement which also is being used as back up control system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: A flow study should be performed, to determine the actual flow to the station or if the sewer could be rearranged to flow gravity.

Improvements for Apostle Wastewater Lift Station

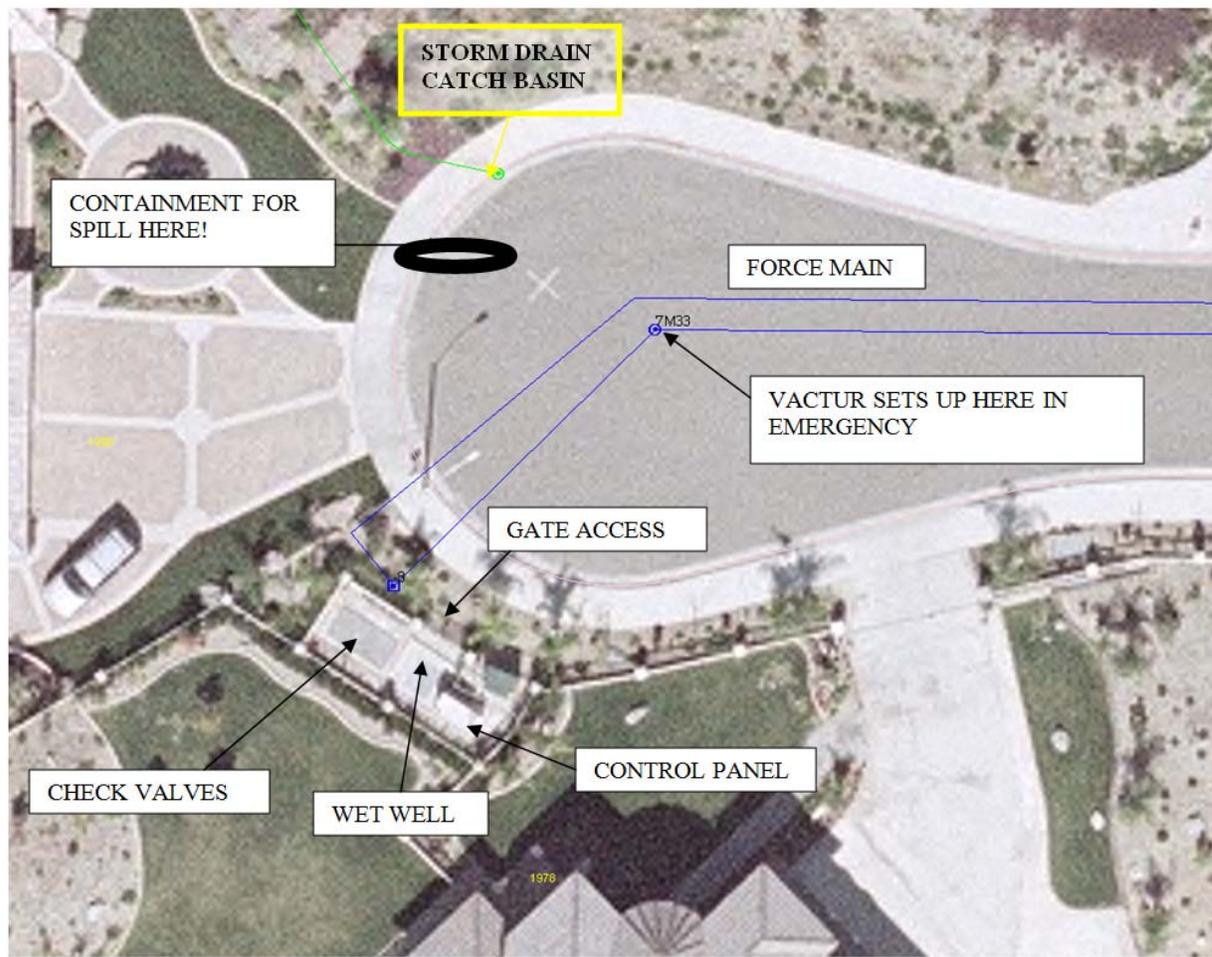
In House

- Check current station flow & storage capacity.
- Add SCADA motor fail alarms.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.

Apostle Site and Spill Plan



MLK 1 WASTEWATER LIFT STATION, Q-COL-WLS-012

The MLK 1 wastewater lift station is located at 18601 Van Buren Boulevard. The MLK 1 Wastewater lift station is a duplex submersible pump station with two fifteen horse power Essco submersible pumps rated at two hundred eight gallons per minute at seventy five feet of total dynamic head. The station is eleven years old and was installed in 1997.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore, not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty volt, and three phase. Condition of the breakers and electrical gear should be checked.

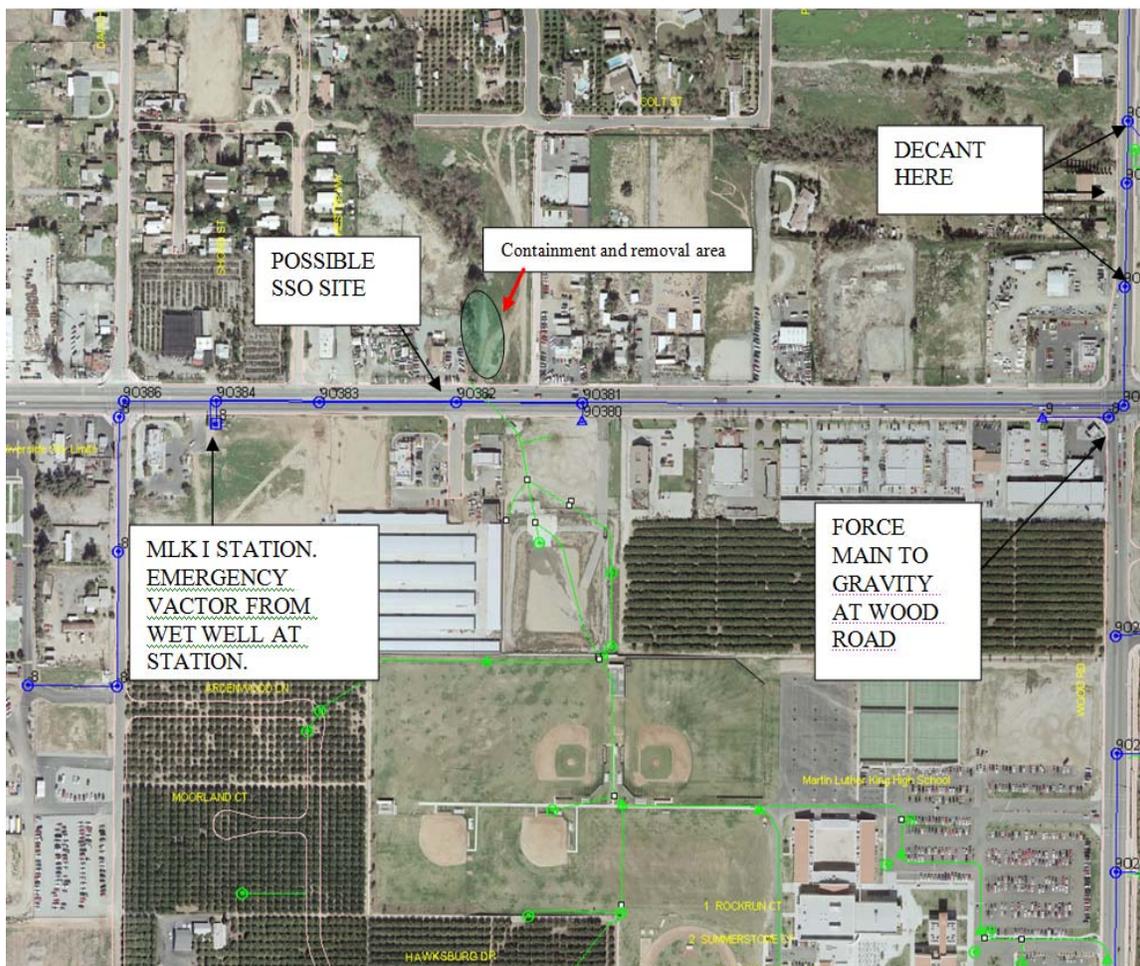
Current conditions of controls and SCADA: PLC control with ultrasonic level measurement which also could be used as back up control system with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity.

Improvements for MLK. 1 Wastewater Lift Station

- In House**
 - Check current station flow & storage capacity.
 - Add a SCADA motor fail alarms.
- Project**
 - Check for planned growth in the service area.
 - Check the feasibility of having the flow run gravity

MLK 1 Site and Spill Plan



MLK 2 WASTEWATER LIFT STATION, Q-COL-WLS-013

The MLK 2 wastewater lift station is located at 9220 Wood Road. The MLK 2 Wastewater lift station is a duplex submersible pump station with two five horse power Essco submersible pumps rated at two hundred forty gallons per minute at twenty nine and half feet of total dynamic head. The station is three years old and was installed in 2005.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore, not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty, volt, and three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: PLC control with ultrasonic level measurement which also is being used as back up control system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: None at this time. A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity.

Improvement for MLK 2 Wastewater Lift Station

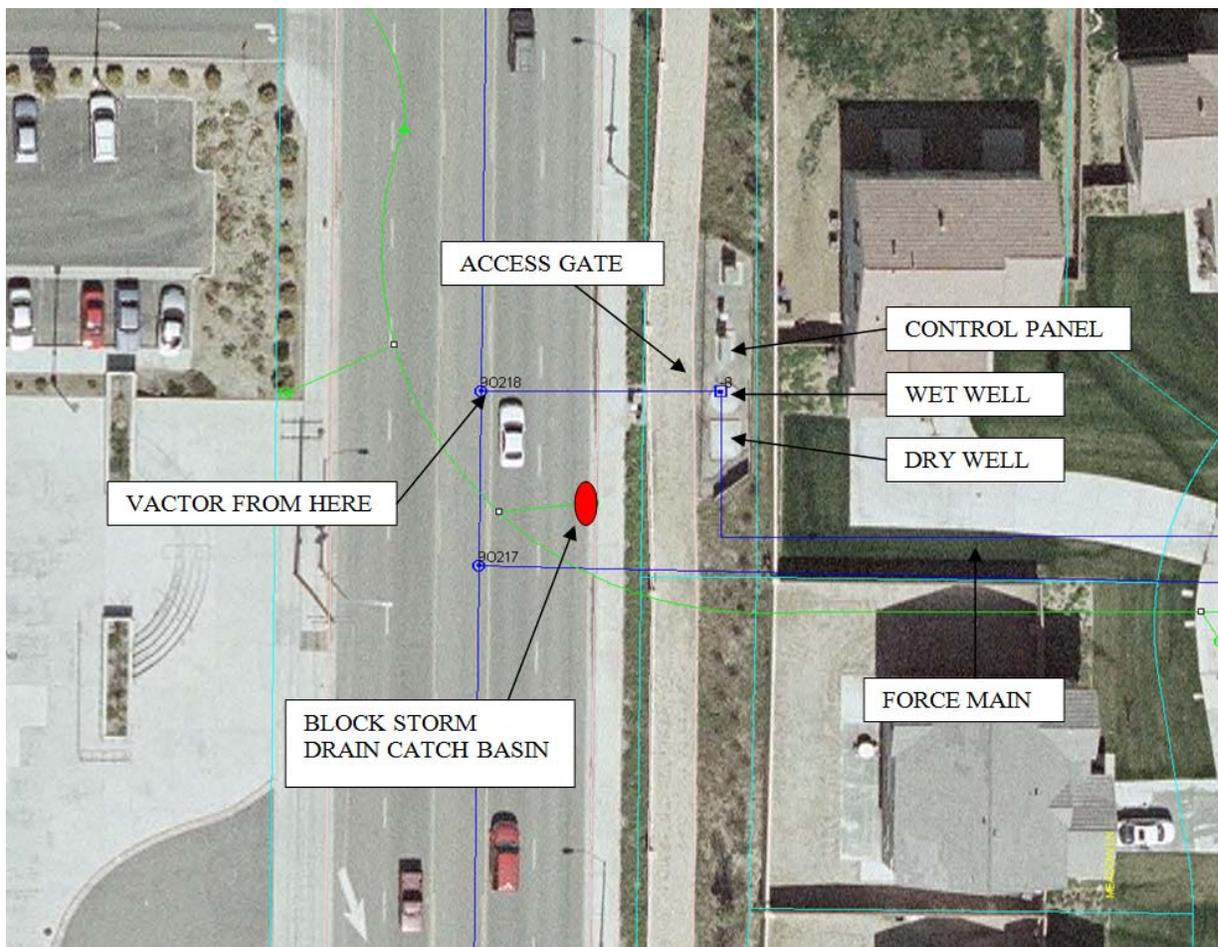
In House

- Check current station flow & storage capacity.
- Add SCADA motor fail alarms.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity

MLK 2 Site and Spill Plan



JFK WASTEWATER LIFT STATION, Q-COL-WLS-015

The JFK Wastewater lift station is located at 7921 Dauchy. The JFK Wastewater lift station is a duplex submersible pump station with two fifteen horse power Wemco submersible pumps rated at eighty gallons per minute at one hundred nineteen feet of total dynamic head. The station is seven years old and was installed in 2001.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore, not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Wemco pumps are working as designed; the City has also purchased a spare pump to keep station operating as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty, volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: PLC control with ultrasonic level measurement which is being used as back up control system, with outside light and horn. This station has SCADA with alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: A flow study should be performed to determine the actual flow to the station or if the sewer could be rearranged to flow gravity. This is a good example of a duplex submersible station.

Improvements for JFK Wastewater Lift Station

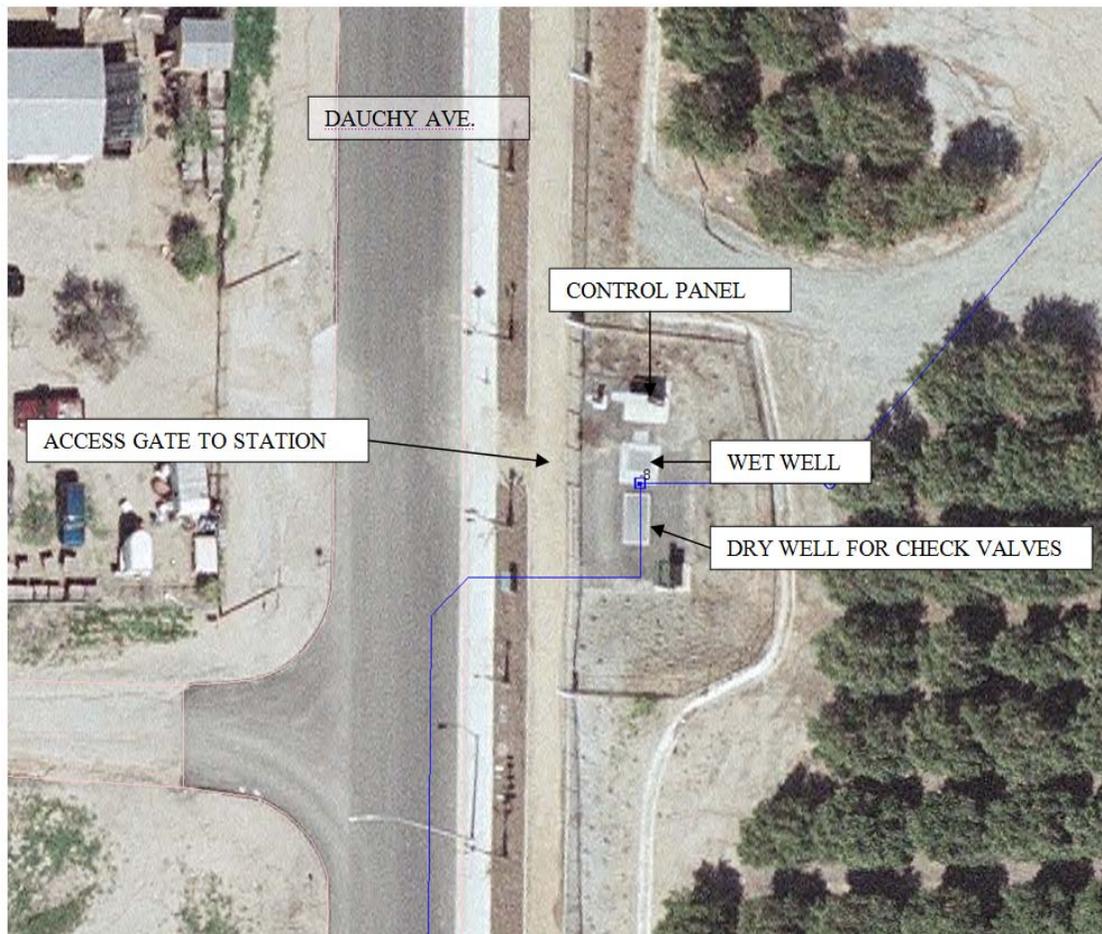
In House

- Check current station flow & storage capacity.
- Add SCADA motor fail alarms.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity

JFK Site and Spill Plan



BRYANT PARK WASTEWATER LIFT STATION, Q-COL-WLS-017

The Bryant Park Wastewater lift station is located at 7950 Philbin. The Bryant Park Wastewater lift station is a duplex submersible pump station with two three horse power Essco submersible pumps rated at two hundred gallons per minute at twenty feet of total dynamic head. The station is three years old and was installed in 2005.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore, not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty, volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: This station is PLC control with ultrasonic level measurement used as a back up control system. SCADA alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: None at this time. This station is a good example of a duplex submersible station.

Improvements for Bryant Park Wastewater Lift Station

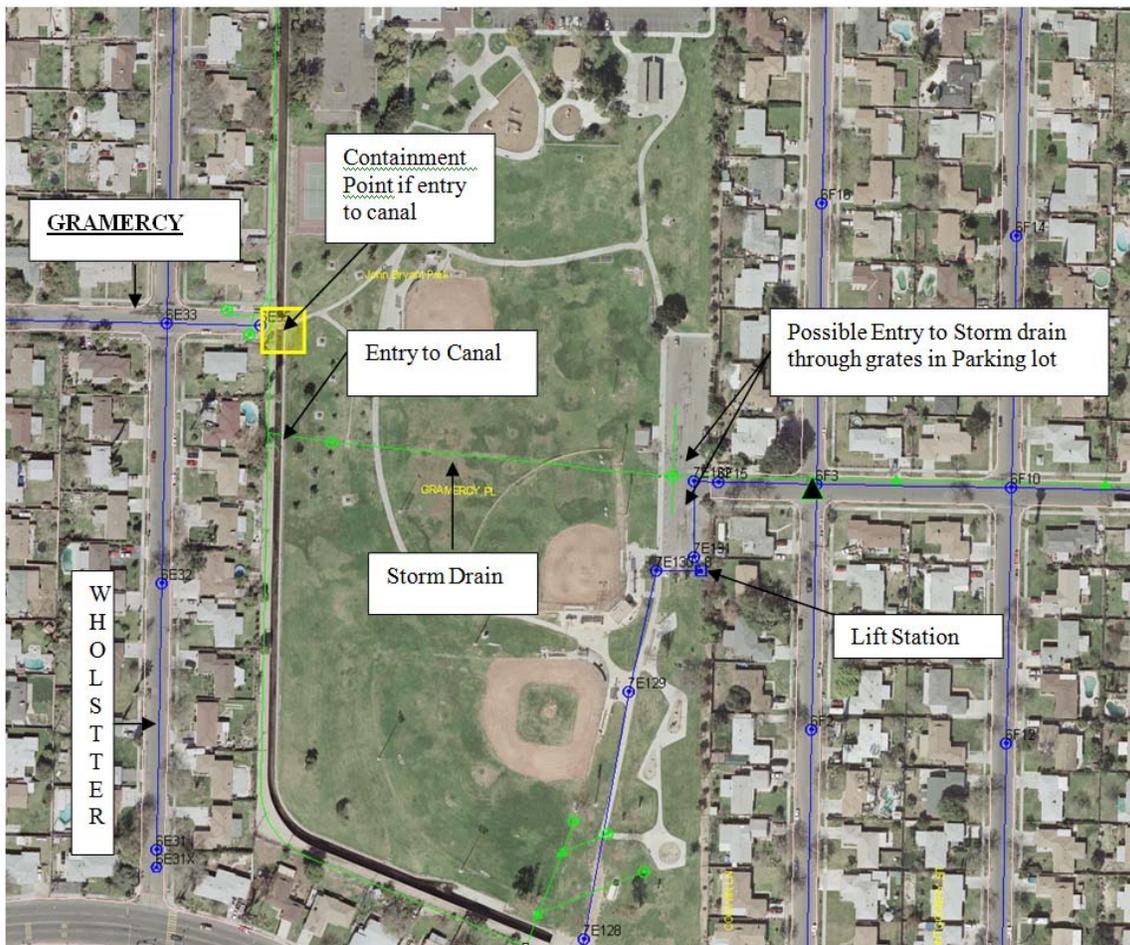
In House

- Check current station flow & storage capacity.

Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity.

Bryant Park Site and Spill Plan



ANTHERTON WASTEWATER LIFT STATION, Q-COL-WLS-018

The Antherton Wastewater lift station is located at 4966 Jurupa Avenue. The Antherton Wastewater lift station is a duplex submersible pump station with two three horse power Essco submersible pumps rated at eighty gallons per minute at fourteen feet of total dynamic head. The station is two years old and was installed in 2006.



Current conditions of the infrastructure: The wet well opening is large enough for pump removal; the valve vault opening is large enough for ease of valve maintenance. The two pumps are mounted on guide rails, therefore, not requiring a confined space entry is required to remove or install pumps.

Current conditions of mechanical equipment: The two existing submersible Essco pumps are working as designed. The piping seems to be operating as designed.

Current conditions of electrical equipment: The existing power is four hundred and sixty volt three phase. Condition of the breakers and electrical gear should be checked.

Current conditions of control and SCADA: This station is PLC control, with ultrasonic level measurement used as a back up control system. SCADA alarms for high wet well, site entry, and loss of power; SCADA reports motor run time and motor starts.

Recommendations: None at this time. This station is a good example of a duplex submersible station.

Improvements for Atherton Wastewater Lift Station

In House

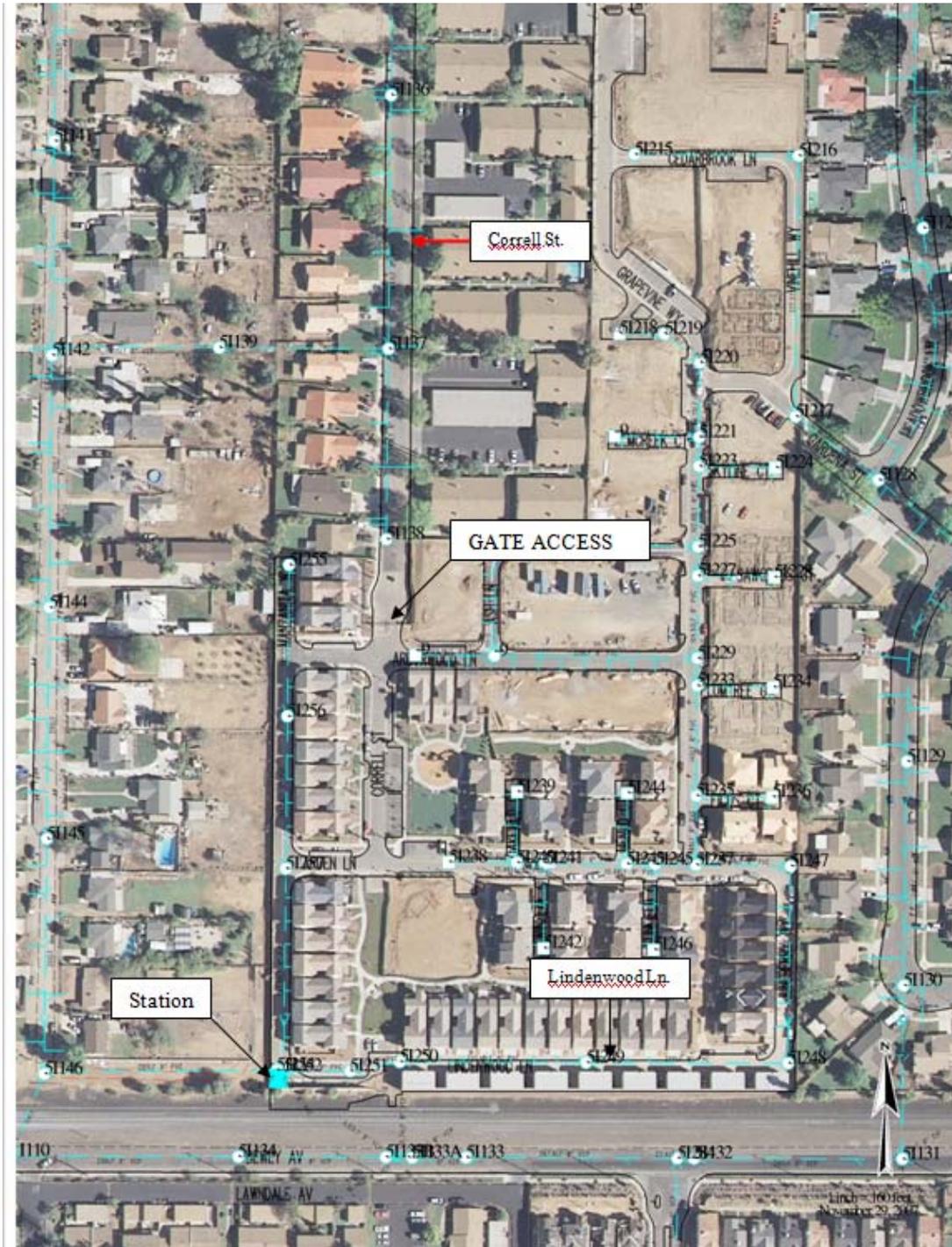
- Check current station flow & storage capacity.

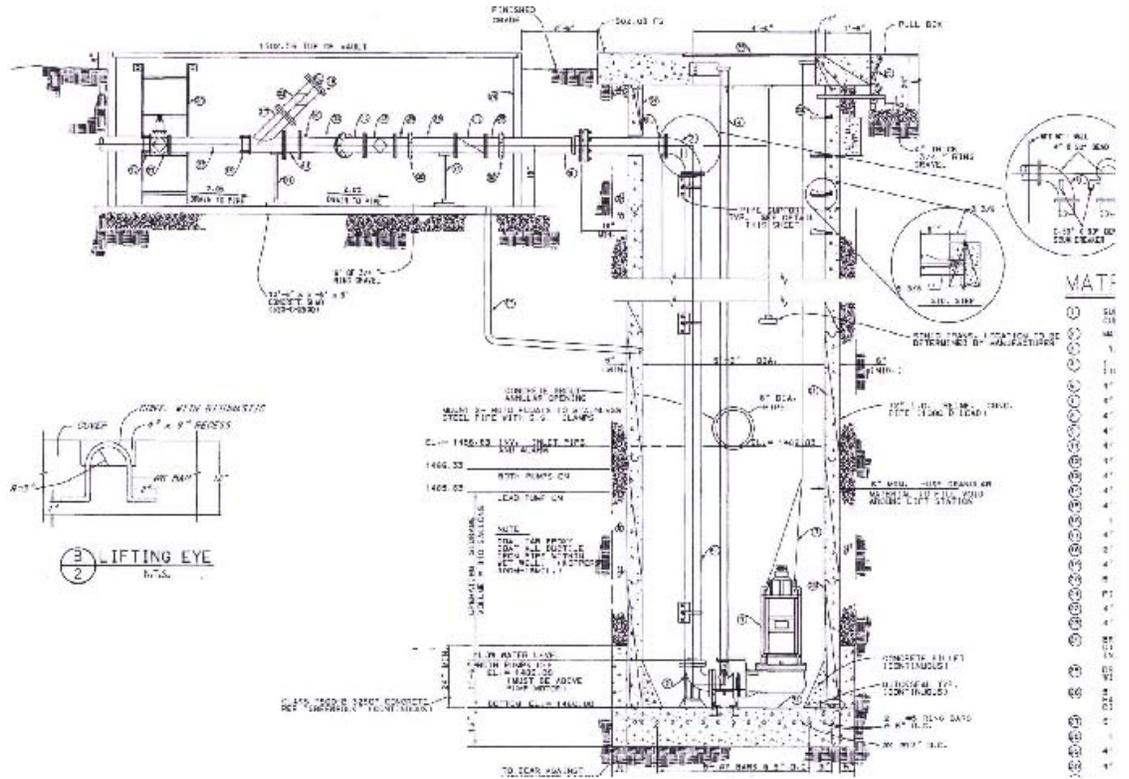
Project

- Check for planned growth in the service area.
- Check the feasibility of having the flow run gravity

Atherton Site and Spill Plan

This station as an overflow in the wet well to the gravity sewer on Manzanita, manhole # 5I254. If there was station failure, then the wet well would rise to the overflow lateral and discharging into the gravity sewer.





A GOOD EXAMPLE OF A NEWER DESIGNED WET WELL

WOOD ROAD WASTEWATER LIFT STATION, COL-WLS-005

The Wood Road wastewater lift station is located at 7802 Wood Road. This is one of the four dry well station that the City of Riverside maintains and operates. The Wood Road Wastewater lift station was designed in 1986 and 1987, the original design was for two seventy-five horse power pumps rated at sixteen hundred gallons per minute at ninety-four feet total dynamic head. These pumps were four hundred eighty volt three phase pumps. The station also has a three hundred fifty kilowatt diesel powered standby emergency generator with a two thousand gallon underground fuel tank.

The Wood Road station was upgrade in the early 1990s. The seventy five horse power pumps were replaced with four Dry pit submersible two hundred horse power pumps with variable frequency drives. This got be a problematic design for the City of Riverside because the transformer was not sized correctly, there was problems with variable frequency drives, and pump motor problems. These problems resulted in flooding the station on occasion.

The Wood Road lift station was again upgraded in 2007. Four Fairbanks Morse 94.8 horse power dry pit submersible pumps each rated at sixteen hundred gallons per minute at one hundred forty one feet of total dynamic head were installed. Two Godwin diesel powered emergency standby pumps each rated at two thousand forty-seven gallons per minute at one hundred eighty two gallons per minute at one hundred eighty two feet of dynamic head were installed. Also a Sparling sixteen inch magnetic flow meter was installed in the force main. Soft starts replaced the existing variable frequency drives.

Current conditions of mechanical equipment are as follows: The pumps have not had any problems as of yet. The check valves were replaced to a larger size with no problems, and no problems with piping.

Current conditions of electrical equipment are as follows: There are not any problems with the electrical equipment.

Current conditions of the control and SCADA are as follows: The SCADA alarms, site entry: PLC comm.. failure, AC power failure, and emergency standby pump status. SCADA reports: station flow, pump run time, motor starts, and east and west wet well levels for both electric pumps and standby emergency pumps, pump motor amperage, real time pump flow, and lead pump status.

Recommendations: None at this time.

PIERCE STREET WASTEWATER LIFT STATION, Q-COL-WLS-006

The Pierce Street wastewater lift station is located at 3930 Pierce Street. This is largest of the four dry well stations that the City of Riverside maintains and operates. The Pierce Street Wastewater lift station was designed in 1968 and upgrades designed in 1980, 1994, and 2007. This station had a major flood in 1992. The 1994 upgrade had four Wemco Hidrosthral pumps with long drive shafts connecting the pumps at the lowest level of the drywell to the motors installed at ground level. Two of the pumps are driven with 200 HP motors; the remaining two pumps are driven with 100 HP motors, and variable frequency drives, the station was PLC controlled using sonic level indicators. The emergency diesel powered standby generator was also upgraded at this time. The 2007 upgrade was mostly electrical and controls, two new sixteen inch Sparling magnetic flow meters were installed, along with new variable frequency drives along with PLC and SCADA up dates. Bioxide is also added at the station, with a small metering pump and small bulk tank for Bioxide. The Bioxide is being replaced by Sodium Hypochlorite, this tank which sets on the asphalt is unlevel and sitting on top of wet well cover, and it is not sure the wet well cover will be strong enough for this added weight.

Current conditions of infrastructure at the station are as follows: The station and all enclosures are sound, the integrity of the twenty four inch force main is scheduled to be inspected, and the other force main has recently been repaired.

Current conditions of mechanical equipment are as follows: Two of the pumps have been completely rebuilt with advanced packing system; the other pumps are awaiting parts for overhaul. Repair parts have lead times as long as one year. The valves in the station seem to work but again they are old.

Current conditions of electrical equipment are as follows: Two of the motors have been replaced; the other two motors will be overhauled and reinstalled. The remainder of electrical seems to be operating as designed.

Current conditions of the control and SCADA are as follows: The SCADA reports alarms, site entry, PLC comm. failure, AC power failure, SCADA reports: station flow, pump run time, motor starts, and east and west wet well levels, pump motor amperage, pump hertz, real time pump flow, station total flow, pump speed status, and lead pump status.

Recommendations: When pumps are to be upgrade, use dry pit submersibles. A feasibility study could be done to consider installing a Micro Filtration system. For part of the flow, then this water then could be used for "The River Walk", or irrigation along the Ninety One Freeway, or ground water recharge.

**LIFT STATION
START UP CHECK SHEET
SUBMERSIBLE PUMPS**

Date: _____

Lift Station Location: _____

Address: _____

STATION:

- Fence installed properly? Yes No
- Is Concrete in good condition? Yes No
- Wet well size: _____ *Ft. Dia. X* _____ *Ft. Deep*
- Wet well clear of debris? Yes No
- Guide rails, installed correctly plump & parallel Yes No
- Base elbow install level & properly anchored? Yes No
- Does wet well vault door (s) open & close properly? Yes No
- Does wet well vault door (s) have a way of locking? Yes No
- Does valve vault door (s) open & close properly? Yes No
- Does valve vault door (s) have a way of locking? Yes No
- Do all valves function properly? Yes No
- Has piping been installed correctly? Yes No

PUMPS

- What is the condition of pumps before start up? Good Fair Poor
- Does impeller turn freely by hand? Yes No
- Rotation: Direction of impeller: clockwise counter clockwise
- Viewed from top of pump bottom of pump
- Name plate attached to pumps? Yes No
- What is the condition of motors before start up? Good Fair Poor
- What is the condition of power & control cables before start up? Good Fair Poor
- Name plate attached to motors? Yes No

CONTROL PANEL

- What is the condition of control panel before start up? Good Fair Poor
- Does control panel door (s) open & close properly? Yes No
- Does control panel door (s) have a way of locking? Yes No
- Wiring is done correctly: Yes No
- Wiring is labeled: Yes No
- Do all switches work properly? Yes No
- Do all indicator lights work properly? Yes No
- Do protective devices comply with pump motor Amp rating? Yes No
- SCADA antenna sized & installed correctly? Yes No

START UP TEST

- Can pumps be pulled up guide rails & removed from wet well? Yes No
- Is liquid available to pump? Yes No
- Is pump seated on discharge elbow properly? Yes No

Resistance of cable and pump measured at pump control.

RED-BLACK _____ Ohms RED-WHITE _____ Ohms
WHITE-BLACK _____ Ohms

Resistance of ground circuit control panel to pump. _____ Ohms

Meg Ohm check of insulation:

RED to GROUND _____ Ohms WHITE TO GROUND _____ Ohms
BLACK TO GROUND _____ Ohms

Voltage supply @ panel line connection, pump off

L1-L2 _____ VOLTS, L2-L3 _____ VOLTS, L3-L1 _____ VOLTS

Voltage supply @ panel line connection, pump on

L1-L2 _____ VOLTS, L2-L3 _____ VOLTS, L3-L1 _____ VOLTS

Amperage: Load connection pump on.

L1 _____ AMPS, L2 _____ AMPS, L3 _____ AMPS

Does the station appear to operate at proper flow rate?

Yes No

Do check valves work properly?

Yes No

Are the pumps running **Quietly**, **Noisily** **VERY NOISILY**

What is the elevation to turn on lead pump? _____ Ft.

What is the elevation to turn on lag pump? _____ Ft.

What is the elevation to turn off lag pump? _____ Ft.

What is the elevation to turn off lead pump? _____ Ft.

What is the elevation to turn on high wet well alarm? _____ Ft.

Does HIGH HIGH level float work correctly?

Yes No

Will the station function correctly when powered by a generator?

Yes No

ULTRASONIC LEVEL INDICATOR/CONTROLLER

Does ultrasonic level indicator/controller provide an analog level input to PLC

Yes No

Does ultrasonic level indicator/controller provide off & on starting of pumps in the event of PLC failure?

Yes No

Does ultrasonic level indicator/controller provide alternation of pumps in the event of PLC failure?

Yes No

Does ultrasonic level indicator/controller provide ultrasonic failure input to RTU

Yes No

FLOAT SWITCH

Does the float switch provide RTU (HIGH HIGH Level)

Yes No

PLC

Does the PLC provide starting & stopping of the pumps in AUTO

Yes No

Does the PLC provide alternation of pumps (after each cycle)

Yes No

Does the PLC recognize ultrasonic level indicator/controller failure & provide an input to the RTU?

Yes No

Does the PLC recognize pump hand switch position & adjust the control logic?

Yes No

Does the PLC provide all timing functions?

Yes No

Does the PLC provide low level alarm output to RTU?

Yes No

Does the PLC provide input to the RTU in event of seal failure of pumps (each pump)?

Yes No

- Does the PLC provide input to the RTU in event of thermal overload? **Yes** **No**
- Does the PLC call for lag pump if required? **Yes** **No**
- Does the PLC provide input to the RTU indicating pump failure & identifying the pump? **Yes** **No**
- Does the PLC provide output to the RTU for high level alarm? **Yes** **No**
- Does the three position selector switch (P1-AUTO-P2) interface with the PLC to provide for alternator override in case of pump failure? **Yes** **No**

CONTROLS

- When in the HAND function is the level, ultrasonic level indicator/controller, PLC, bypassed, & directly energizes the starters? **Yes** **No**
- When in the AUTO function is the station controlled by the PLC or in event of PLC failure, will the ultrasonic indicator/controller start, stop, alternate lead and lag pumps? **Yes** **No**

RTU

- Does the RTU monitor only, not control? **Yes** **No**
- Does the RTU transmit dynamic wet well level (analog output)? **Yes** **No**
- Does the RTU indicate low level? **Yes** **No**
- Does the RTU indicate high level? **Yes** **No**
- Does the RTU indicate site entry? **Yes** **No**
- Does the RTU indicate AC failure? **Yes** **No**
- Does the RTU indicate individual pump failure? **Yes** **No**
- Does the RTU indicate pump AUTO, pump NOT AUTO? **Yes** **No**
- Does the RTU indicate pump run status? **Yes** **No**
- Does the RTU indicate ultrasonic indicator/controller failure? **Yes** **No**
- Does the RTU indicate seal failure? **Yes** **No**

EXTERNAL RELAYS

- Is external relay for the HIGH HIGH level float intrinsically safe? **Yes** **No**
- Is external relay for the seal failure intrinsically safe? **Yes** **No**
- Are the motor starters intrinsically safe? **Yes** **No**

DOCUMENTATION

- Has a set of complete maintenance and spare parts information for all station components been provided? **Yes** **No**
- Has a complete set of “**As Built drawings**” been provided? **Yes** **No**
- Has a fully annotated copy of the PLC program, both in electronic format and a hard copy printed format been provided? **Yes** **No**
- Has a certified pump curve been provided for each pump? **Yes** **No**
- Has a copy of the warranty been provided and have you been briefed on the warranty? **Yes** **No**
- Has nameplate data for station components been provided? **Yes** **No**
- Has the original cost of equipment been provided? **Yes** **No**
- Has Name, address, phone number for local representative/distributor been provided? **Yes** **No**
- Have keys been provided? **Yes** **No**

COMMENTS & NOTE

APPENDIX G

Sewer Monthly Performance Report

The Collections Department Productivity Report (1/1/09 thru 6/1/09)

C.C.T.V. sewer line inspections

- 11,744 FT of new line inspected (Sewer & Storm)
- 46,043 Ft of quality control inspections of sewer inspected
- 15,200 Ft of miscellaneous inspections (hot spot eval, EC special projects, etc.)

Manholes

- 27 manholes raised to grade level

Storm Drains

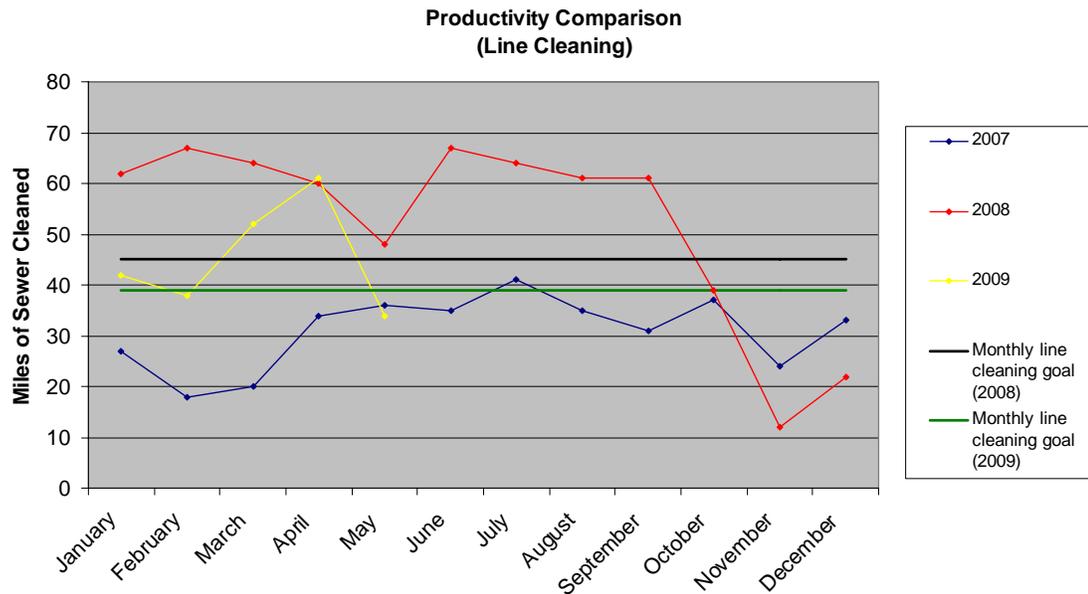
- 102 basins cleaned
- 396 Cu/Yd of debris removed from basins, channels, ditches, and drains
- 27,821 ft of channels, ditches, and storm pipes cleaned

SRO's Completed

- 325 Service Request Orders completed

Sewer Line Cleaning

- 228.4 miles of sewer lines cleaned

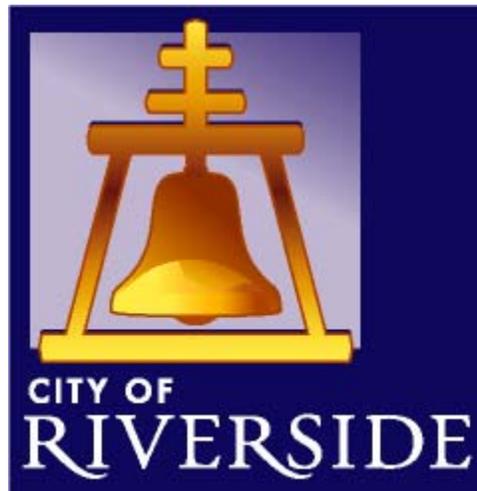


2009 monthly line cleaning goals was lowered to reflect the change in staff assignment concerning storm drains and wastewater collections.

APPENDIX H

Fats, Oil and Grease (FOG) Program

City of Riverside



Fats, Oils, and Grease (FOG) Program

Background

The discharge of fats, oils, and grease (FOG) from animal and vegetable sources can create sewer line stoppages that result in sanitary sewer overflows (SSOs). Two main sources of FOG discharges are from the restaurant industry and similar facilities (e.g. cafeterias, penal institutions, schools, colleges, and universities with food services, and commercial kitchens) and residential users. The FOG discharges may be a result of poor housekeeping practices at restaurants and from poorly informed decisions by residential users. The result is the same: SSOs.

The FOG discharges start in a liquid, semi-liquid or solid state due to temperature or hydrogenation state. Fats, oils, and greases all have fatty acid components. Palmitic acid is the most widely occurring saturated fatty acid and is found in beef tallow (32%), lard (30%) and cottonseed oil (21%). Oleic acid is the most widely occurring unsaturated fatty acid and is found in olive oil (83%) and peanut oil (60%).

Two conditions of common fats are saturated and unsaturated. The saturated fats are solids at room temperature, while the unsaturated fats are either liquid or semi solid at room temperature. Many unsaturated fats are hydrogenated to make the fat solid at room temperatures. The hydrogenation process breaks the double carbon bonds of an unsaturated fat and replaces hydrogen molecules in place of the double bond. This hydrogenation process creates a saturated fat. The more hydrogenated a vegetable oil the more solid the oil is at room temperature. Vegetable shortenings that are solid at room temperature are vegetable oils that have been completely hydrogenated.

Examples of animal saturated fats are beef, chicken, and pork. An example of a plant saturated fat is found in avocados. Many forms of these fats are liquefied by increasing the temperature of the fat as in the case of a deep fat fryer. Some are liquefied when exposed to certain bacteria, biological or chemical enzymes, chemical agents, or solvents.

The discharge of hot or warm FOG materials to the sewer causes the quickest stoppage problems due to the receiving environment. The sewer line temperatures typically range from 70 –80 degrees Fahrenheit. At this temperature, the hot or warm FOGs that are discharged to the sewer cool off, adhere to the interior surfaces of a sewer line, and then harden in place once completely cooled. The adhesion sites become future sites for additional adhesions much like making a candle. A source discharge of FOG will create a blockage pattern in the sewer line characteristic of the material discharged and the frequency of discharge. The blockage tends to increase in size downstream of the user's lateral connection to the sewer.

Many FOGs accumulate on the upper surfaces of sewer lines due to the floating properties of FOGs and the non-miscibility of FOGs in water. The depositions of the FOGs on the upper surfaces of a sewer line are exacerbated by increases in the wastewater level caused by FOG obstructions that restrict the sewer flows.

Grease interceptors are gravity separation devices to separate FOGs and solids from the wastewater discharge. The use of biological or chemical agents in grease interceptors to liquefy FOGs prior to discharge is problematic. Bacteria and enzymes act by reducing the long chain fatty acids into smaller chain molecules. A bacteriological system would need 24 – 72 hours to completely aerobically metabolize the FOGs to carbon dioxide and water. A gravity separation interceptor has about 30 –120 minutes of detention time. The result of bacterial or enzymatic product usage is a liquefaction or emulsification of the FOGs in the interceptor. This liquefied FOG is subsequently discharged to the sewer where any further degradation of the FOG by the bacteria or enzyme is prevented due to the dilution of the material and other interferences in the receiving sewage. The liquefied FOGs begin to adhere to sewer line interior walls, deplete the oxygen content of the wastewater due to the natural degradation microbes present in wastewater, and create odor problems due to the depleted oxygen content.

The City's FOG program is focused on preventing the discharge of FOGs to the sewer system and educating the restaurant community and homeowners about good FOG management practices.

FOG Program Elements

The City has over 800 restaurants and similar sites. Approximately sixty-three percent of these sites have grease interceptors ranging in size from 750 to 10,000 gallons. The City uses many activities, or elements, to control and prevent the discharge of FOG to the City's sewer collection system (collection system). These elements include:

1. Site inspections
2. Public education and outreach
3. Collection system cleaning and assessments
4. Collection system and sewer lateral closed circuit television (CCTV) inspection
5. Enforcement actions by the Environmental Compliance Section (ECS)
6. Grease interceptor retro fits
7. Training

Site Inspections

Inspections of restaurants and similar sites enable the City to learn what sites may be problematic to the area's collection system. The City's ECS is responsible for inspecting all restaurants and similar facilities within the City limits minimally once per year, with many being inspected two to four times per year. The increase in inspection frequency is determined by the history of the site, the type of restaurant, whether or not a grease interceptor is on site, complaint history, sewer line stoppage history, or SSO history. The site inspections are maintained in a computer relational database in the ECS that has the ability to provide the inspector with an inspection and enforcement history for the site.

The inspection will reveal if any bacterial, enzymatic, or chemical agents are used to dissolve, emulsify or suspend FOGs. The bacterial, enzymatic, or chemical agents may be found in products used for cleaning silverware, pots and pans, drain cleaning, and floor cleaning. Some products are specifically designed as a grease interceptor additive and are used to liquefy the FOGs in the grease interceptor with the promise that the interceptor will never need pumping.

The site inspection will also evaluate the grease interceptor for performance and integrity (Appendix A). By City standards, a grease interceptor's performance will be negatively impacted once the operational fluid capacity reaches 25%. The performance will also be affected by missing elbows or mid-wall tees or influent extensions that are too long. The integrity of the interceptor is often affected by anaerobic conditions that generate sulfide gas that causes corrosion of concrete surfaces. Once the concrete begins to corrode,

plumbing connections are compromised and, in some cases, the structural integrity of the interceptor is in question.

The ECS also works closely with the Riverside County Department of Environmental Health to share information gained during restaurant inspections. The ECS inspectors have some knowledge of what constitutes Health and Safety Code restaurant violations. When these violations are observed, a phone call is placed to the Health Department to have the area inspector respond and take appropriate enforcement actions.

Public Education and Outreach

The City uses the ECS inspectors as the principle education and outreach method to contact the restaurant community and residents. Occasionally the ECS will participate in outreach efforts sponsored by other agencies, e.g. Earth Day, Riverside County Department of Environmental Health and a business expo hosted by the Riverside Chamber of Commerce. During an inspection of a restaurant, the inspector will use the opportunity to inform and educate the owner or manager about the various laws and regulations that affect their business. Subject areas would include: stormdrain, product usage and substitution, good housekeeping practices, grease interceptor evaluation, Riverside Municipal Code (RMC) applicability, and any City ECS permit requirements. The Riverside County Department of Environmental Health and the Riverside County Flood Control District supply some of the information materials distributed.

The City also has a Public Works web site that informs residents about the proper disposal methods for FOG. The residents are instructed to, “Never pour kitchen grease down the drain. Put it in a container and dispose of it in the trash.” This web site educates the resident about the proper care of their sewer lateral and the need to keep FOG out of the sewer. The residents are encouraged to call to receive more information or clarifications about the care of their sewer laterals. The Public Works Website for sewer lateral care and FOG information is found at www.riversideca.gov. Select “City Government” then click the drop down box to select a City Department and select “Public Works.” At the bottom of the Public Works screen is a drop down list box. Click on the drop down list and select, “Plumbing and Sewer Maintenance.”

Sewer Line Cleaning and Assessments

The City has approximately 820 miles of gravity draining sewer lines and six miles of force main sewer lines. The majority of the gravity flow sewer lines are eight inches in diameter. The City’s Collections Staff is scheduled to clean a certain amount of sewer line every day to insure that the system’s operational capability is realized. The collection system also has 15 sewer lift stations that are inspected on a daily basis to insure peak performance.

All the attention to line cleaning and pump station performance is focused on system integrity. A two-inch thick deposit of FOG on the sidewalls of an eight-inch sewer line can lead to an SSO in a very short period of time. The City’s collection system’s

scheduled cleaning can prevent many SSOs from occurring. In addition to routine cleaning, known problem areas throughout the City are given extra attention. These additional cleanings are for sewer lines with a history of excessive roots, grease, solids or all three.

The Collections Staff prepares written reports for all sewer cleaning activities, including SSOs. These reports provide the details of the condition of the sewer line and any problems that were encountered. When heavy or excessive FOG is found, a report is generated and given to the ECS to investigate.

Sewer and Lateral CCTV Inspections

The most useful tool used by the Collection Staff to evaluate the condition of the sewer system is closed circuit television (CCTV) inspection. The Sewer Division has two CCTV vehicles that are used daily to inspect the City's sewers and storm drains. The goal is to have a video library of every sewer line in the City. The CCTV inspections are also used to provide information about sewer line blockages. Since these CCTV inspections are recording actual events and conditions, the CCTV records can be used as evidence in an enforcement action. Sewer and lateral CCTV inspections are a necessary component for the ECS to bring an enforcement action against a business or company that has caused or has the potential to cause a sewer line blockage and/or SSO.

Enforcement

The discharge of wastewater by user that causes a sewer line obstruction or blockage is prohibited by the federal Clean Water Act, 40 CFR 403.5(b)(3) and Riverside Municipal Code (RMC) Section 14.12.315(a). The ECS is empowered by the City's federally approved pretreatment program to take enforcement actions against any user that causes a sewer line obstruction and/or SSO. In order for the enforcement action(s) to be successful, a firm foundation of court admissible evidence must be obtained. This evidence must be objective and devoid of personal opinions. The use of CCTV evidence is a critical component of an enforcement action taken against a user for causing a sewer line blockage and/or SSO. In addition to the CCTV evidence, inspections are performed by the ECS at the suspected business to evaluate and investigate the cause(s) of the sewer line blockages and/or SSO. Once all the evidence is collected, the information is reviewed and an enforcement strategy is planned.

The enforcement will always be commensurate with the degree of the violation found and will follow the procedures and requirements of the City's Enforcement Response Plan. If the sewer line debris accumulation has just begun and no SSO or sewer obstruction has occurred, then a correction notice may be issued to improve housekeeping practices and evaluate the business practices that may lead to the discharge of materials that caused the sewer line debris accumulations. If the sewer line debris accumulations are significant and/or an SSO has occurred, then more severe enforcement actions may be taken. A Notice of Violation (NOV) or a Cease and Desist Order (CDO) may be issued with a compliance schedule to mitigate the conditions that caused the sewer line blockage and/or

SSO to occur. The NOV or CDO will require that the discharges causing the sewer line blockage and/or SSO must stop immediately and the user shall take all actions necessary to prevent any future discharges that would cause a sewer line blockage or SSO. These actions are required to be submitted in writing and the user is held accountable for the correction actions submitted. If the user fails to achieve compliance or is unresponsive to the requirements of the correction orders, then additional civil and/or criminal actions may be taken.

RMC Section 14.12.265(B and C) prohibits the use of any chemical or material that will emulsify, suspend or dissolve oil and grease and the use of any microbiological product to metabolize FOG. The ECS inspection staff is constantly looking for these products during every restaurant inspection. When a prohibited product is discovered being used, the user is ordered to immediately stop the use of the product and have the product removed from the premises. Failure to comply with these administrative orders may result in additional enforcement actions, including civil and/or criminal actions.

Grease Interceptor Retro Fits

One of the main enforcement tools used by the ECS for restaurant and similar facilities is the required installation of a grease interceptor. For new construction and tenant improvement projects, this action is accomplished through the City's plan check process. Building permits cannot be obtained if the user has not agreed to the ECS requirements for the project. If an existing restaurant or similar facility has been proven to be the cause of a sewer line blockage and/or SSO and does not have a grease interceptor, then the user is required to install an appropriately sized grease interceptor within 90 days. This enforcement action may also include the installation of trench drains at the trash enclosure, drive through, and rear door areas of the facility to prevent wastewater discharges from entering the storm drain. If the existing restaurant or similar facility has a grease interceptor but the device is poorly maintained or is inadequate to treat the type and volume of wastewater from the facility, then the user will be required to replace the existing grease interceptor with a one that is adequate for the intended application.

If the restaurant or similar facility is found responsible for the sewer line blockage and/or SSO, then the costs of cleanup and/or repairs necessary to remove the blockage and/or SSO will be invoiced to the facility.

Training

The ECS inspector has knowledge, skills, and abilities that are constantly being challenged and improved. Training of the inspector for FOG issues is critical to insure that the inspector is adequately equipped to respond to restaurant inspection and SSO investigation findings. This training includes:

1. Laws and regulations

2. Cleaning, degreasing, and microbiological product identification and use
3. New technology and equipment
4. New pretreatment methodology
5. Inspection practices
6. Enforcement actions

The City uses a variety of means to train the ECS inspector in these areas. These are:

1. ECS Phase Training
2. Pretreatment Inspection Courses, Cal State Sacramento
3. Specialty conferences and events
4. Special schools and training events
5. Meetings, discussions, and field training with more experienced ECS inspectors

Summary

The City's ECS and Collection System Section work closely together to find, investigate, and correct problems caused by the discharge of FOG to the City's sewer system. Preventive rather than reactive sewer cleaning and inspections and ECS inspections are critical to insure the integrity of the City's collection system. Prompt responses to SSOs are necessary to quickly mitigate the effects to the SSO on the community. Enlisting the services and resources of the County and Californian Regional Board Water Quality Control Board enhance the performance of the City's FOG program.

Appendix A

Grease Interceptor Evaluation Form

INTERCEPTOR EVALUATION FORM

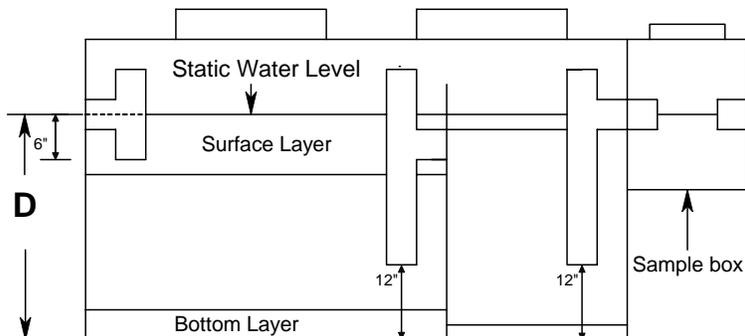
Company Name: _____

IR #: _____

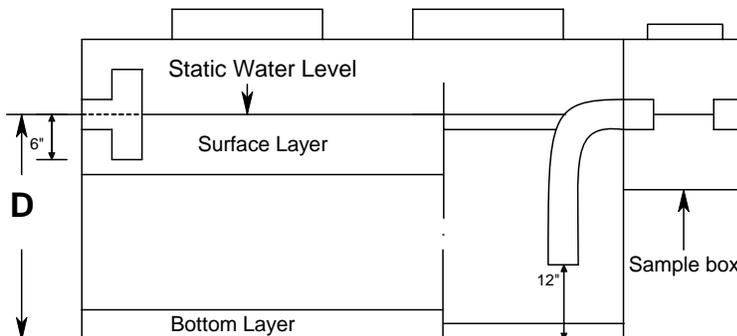
Address: _____

Date: _____

Typical Two Chamber Grease Interceptor



Typical Two Chamber Sand/Oil Interceptor



Tee Condition

Inlet	_____
#1 Midwall	_____
#2 Midwall	_____
#3 Midwall	_____
#4 Midwall	_____
#5 Midwall	_____

D = _____ inches	Surface (S) Layer (inches)	Bottom (B) Layer (inches)
% of Total Capacity		
1 st Chamber = _____	_____	_____
2 nd Chamber = _____	_____	_____
3 rd Chamber = _____	_____	_____
4 th Chamber = _____	_____	_____
5 th Chamber = _____	_____	_____

% Capacity (S+B/D) x 100	Proportioned Capacity (% Capacity x Total Capacity)
1 st Chamber = _____	1 st Chamber = _____
2 nd Chamber = _____	2 nd Chamber = _____
3 rd Chamber = _____	3 rd Chamber = _____
4 th Chamber = _____	4 th Chamber = _____
5 th Chamber = _____	5 th Chamber = _____

EVALUATION CRITERIA

%	Condition	Pump Req'mnt
<input type="checkbox"/> 0-10	Good	Not Required
<input type="checkbox"/> 10.1 - 15	Fair	Not Required
<input type="checkbox"/> 15.1 - 24.9	Marginal	Not Required, but advise to pump soon
<input type="checkbox"/> 25-30	Poor	Shall pump 7-10 calendar days
<input type="checkbox"/> 30.1 -35	Poorer	Shall pump 3-5 calendar days
<input type="checkbox"/> >35	Poorest	Shall pump immediately to 2 calendar days

Total Occupied Capacity =
(add all proportioned % capacities)

Form Received by: _____

Print Title: _____

Print Name: _____

Signature: _____

Environ. Compliance Inspector: _____

Inspector's Signature: _____

Fats, Oils and Grease

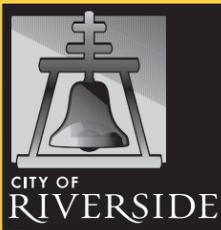
Fats, oils, and greases aren't just bad for your arteries and your waistline; they're bad for the sewer, too!

Sewer overflow and backups can cause health hazards, damage home interiors and threaten the environment.

An increasingly common cause of overflow in sewer pipes is blockage caused by grease. Grease gets into the sewer from household drains as well as poorly maintained grease traps in restaurants and other businesses.

Where does the grease come from?

Most of us know grease as a by-product of cooking. Grease is found in things such as meats, sauces, gravies, salad dressings, deep-fried dishes, dairy products, soups, chili, pastas, pastries, butter and margarine.



This brochure was produced with information from the Water Environment Federation® and the City of Longmont Colorado Public Works

Fat-Free Sewers

Protect Your Home and Preserve Your Environment

Public Works Department

5950 Acorn Street • Riverside, CA 92504

The **EASIEST** way to solve the grease problem and prevent overflow is to keep it out of the sewer system in the first place!

Follow these three easy steps for proper disposal:

- 1** Pour cooled oils and grease into an old glass jar or can and dispose of it in the trash.
- 2** Remove excess grease left on cookware with a paper towel and dispose of it in the trash. Also scrape leftover food scraps from dishes or cookware into the trash.
- 3** Tell your family and friends about protecting their home and preserving the environment through proper disposal of fats, oils and grease.



NEVER POUR GREASE DOWN THE DRAIN!

Collecting your grease in a container is the best thing to do.



Don't let it happen to you!

When grease in a sewer line cools, it can stick to the pipes and over time, block sewers completely. This can lead to raw wastewater backing up into neighborhood homes.

If the blockage originates from your kitchen, your home is likely to be the first affected. Clean-ups are messy and expensive.

Other impacts could include raw wastewater spills into yards, city parks and streets. Nuisance odors can permeate the neighborhood from these blockages.

Raw wastewater can contain disease causing bacteria. Contact with the raw wastewater could lead to cramps and diarrhea or more serious illnesses.

Sewer overflows are not only unsanitary and bad for the environment; they are also costly to the city and its customers.



Fats, oils and grease aren't just bad for your arteries and your waistline; they're bad for the sewer too!

Sewer overflows and backups can cause health hazards, damage home interiors and threaten the environment.

An increasingly common cause of overflows are sewer pipes blocked by grease. Grease gets into the sewer from household drains as well as from poorly maintained grease traps in restaurants and other businesses.

Hot water, soap and garbage disposals do not destroy grease. Liquid grease will flow through pipes until it cools, then the grease hardens and blocks water flow, resulting in sewer overflows and backups.

For more information call 826-5311 and ask for Environmental Compliance.

Para mas información llame al 826-5311 y pregunte por el departamento de Cumplimiento Ambiental.

Three Easy Steps to Proper Disposal

1. Pour cooled oils and grease into an old glass jar or can and dispose of it in the trash.
2. Remove excess grease left on cookware with a paper towel and dispose of it in the trash and scrape excess food scraps left on cookware into the trash.
3. Tell your family and friends about protecting their home and preserving the environment through proper disposal of fats, oil and grease.



For more information call 826-5311 and ask for Environmental Compliance.

Para mas información llame al 826-5311 y pregunte por el departamento de Cumplimiento Ambiental.

APPENDIX I
CCTV Inspection Report

Tabular Report of PSR B6F38 X for RIVERSIDE

Setup 16	Surveyor Pauley	Certificate # 002	System Owner		
Drainage		Survey Customer			
P/O #	Date 03/24/2009	Time 11:30:00	Street PEMBROKE		
Locality RIVERSIDE		Further location details			
Start B6F38	Rim to invert	Grade to invert	Rim to grade	Ft	
Finish B6F39	Rim to invert	Grade to invert	Rim to grade	Ft	
Use Sanitary	Direction Down	Flow control		Tape/Media # DVD	
Shape Circular	Height 8	Width	ins Preclean Z	Year Cleaned	
Material Vitrified Clay Pipe	Joint length	Ft	Total length 388.7	Ft	Length Surveyed 388.7
Lining	Year laid	Year rehabilitated	Weather		
Purpose Maintenance Related		Cat			
Additional info H.F. ASSESSMENT			Structural	O&M	Constructional
Location			Miscellaneous	Hydraulic	

Count	Video	CD	Code	In1	In2	%	Jnt	Fr	To	ImRef	Remarks
0.0	00000		ST Start of Survey								
0.0	00000		AMH Manhole								B6F38
0.0	00000		MWL Water Level			30					
40.5			TFA Tap Factory Active	04				09			
43.9			TFA Tap Factory Active	04				03			
111.3			TFA Tap Factory Active	04				09			
114.7			TFA Tap Factory Active	04				03			
181.2			TFA Tap Factory Active	04				09			
184.3			TFA Tap Factory Active	04				03			
232.5			TFC Tap Factory Capped	04				09			
235.7			TFC Tap Factory Capped	04				03			
274.4			TBA Tap Break-in Active	04				03			
280.7			TBA Tap Break-in Active	04				09			
304.6			TFC Tap Factory Capped	04				09			
307.9			TFC Tap Factory Capped	04				03			
348.5			TBA Tap Break-in Active	04				09			
353.7			TBA Tap Break-in Active	04				03			
371.9			TFC Tap Factory Capped	04				09			
375.5			TFC Tap Factory Capped	04				03			
388.7			AMH Manhole								B6F39
388.7			FH End of Survey								

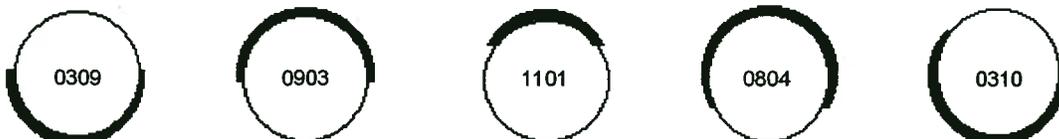
388.7 Ft Total Length Surveyed

Scores

Structural:	Total 0	Mean Defect 0	Peak 0	Mean Pipe 0
Service:	Total 0	Mean Defect 0	Peak 0	Mean Pipe 0

Notes

Clock references: Clock references are given clockwise ie from 10 o'clock to 2 o'clock = 1002. The upper part of a pipe is 0903 and the lower half is 0309. See illustration below

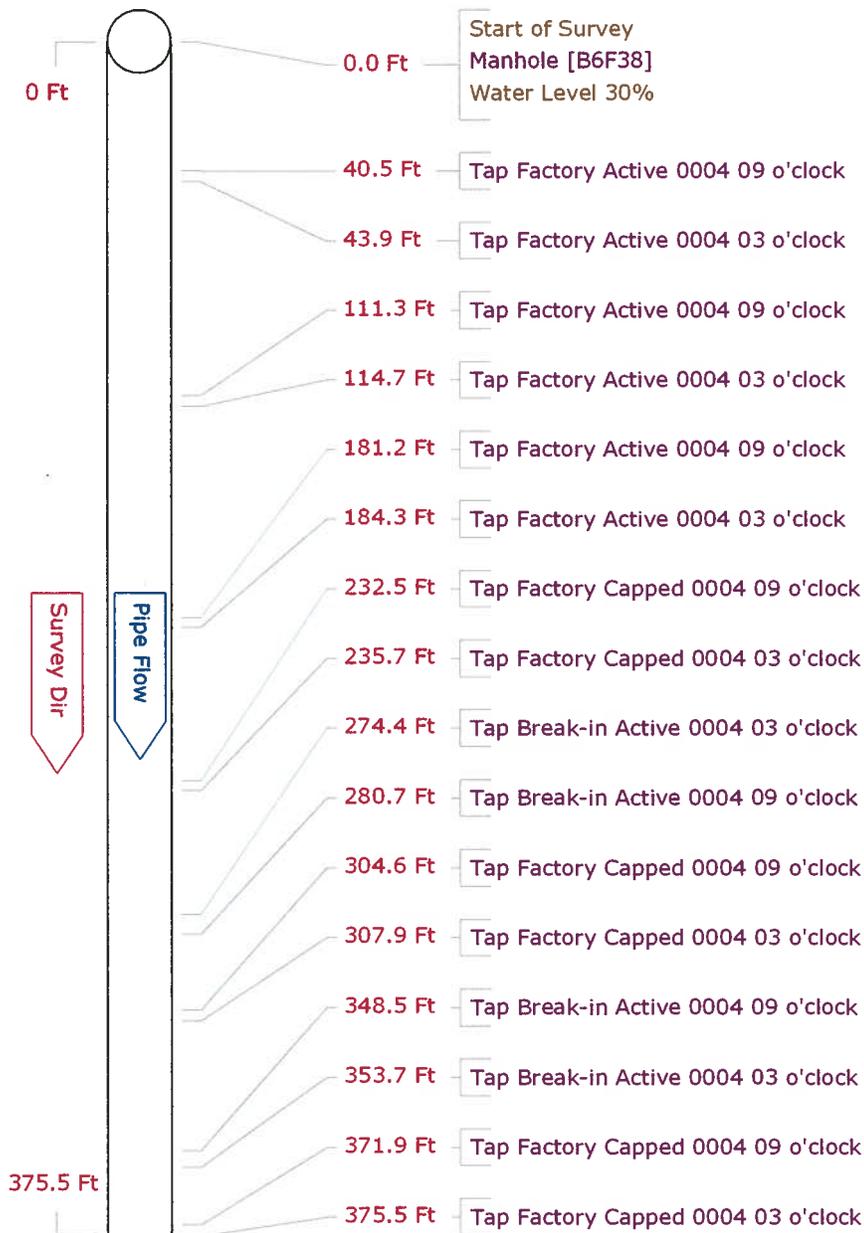


Pipe Graphic Report of PLR B6F38

X

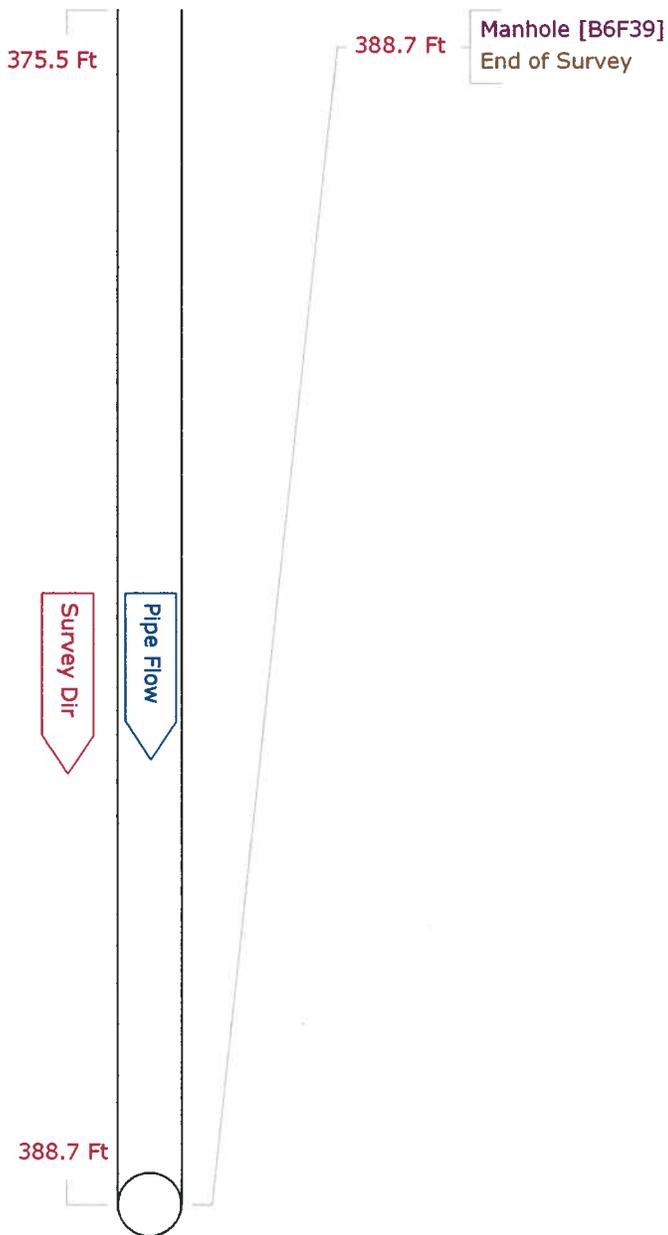
for RIVERSIDE

Setup 16	Surveyor Pauley	Certificate # 002	System Owner		
Drainage	Survey Customer				
P/O #	Date 2009/03/24	Time 11:30:00	Street PEMBROKE		
Locality RIVERSIDE	Further location details				
Start B6F38	Rim to invert	Grade to invert	Rim to grade	Ft	
Finish B6F39	Rim to invert	Grade to invert	Rim to grade	Ft	
Use Sanitary	Direction Downstream	Flow control		Tape/Media # DVD	
Shape Circular	Height 8	Width	ins	Preclean Z	Year Cleaned
Material Vitrified Clay Pipe	Joint length	Ft	Total length 388.7	Ft	Length Surveyed 388.70
Lining	Year laid	Year rehabilitated	Weather		
Purpose Maintenance Related	Cat				
Additional info H.F. ASSESSMENT	Structural		O&M	Constructional	
Location	Miscellaneous		Hydraulic		



Pipe Graphic Report of PLR B6F38 X for RIVERSIDE

Setup 16	Surveyor Pauley	Certificate # 002	System Owner		
Drainage		Survey Customer			
P/O #	Date 2009/03/24	Time 11:30:00	Street PEMBROKE		
Locality RIVERSIDE		Further location details			
Start B6F38	Rim to Invert	Grade to invert	Rim to grade	Ft	
Finish B6F39	Rim to Invert	Grade to invert	Rim to grade	Ft	
Use Sanitary	Direction Downstream	Flow control		Tape/Media # DVD	
Shape Circular	Height 8	Width	Ins	Preclean Z	Year Cleaned
Material Vitrified Clay Pipe	Joint length	Ft	Total length 388.7	Ft	Length Surveyed 388.70
Lining	Year laid	Year rehabilitated	Weather		
Purpose Maintenance Related		Cat			
Additional info H.F. ASSESSMENT			Structural	O&M	Constructional
Location			Miscellaneous	Hydraulic	



Setup Number 15

Survey Date 24-Mar-2009

Street Name PEMBROKE

Tractor Reverse setup
Flow

Facility

Van Reference H227

City Name RIVERSIDE

Direction Upstream

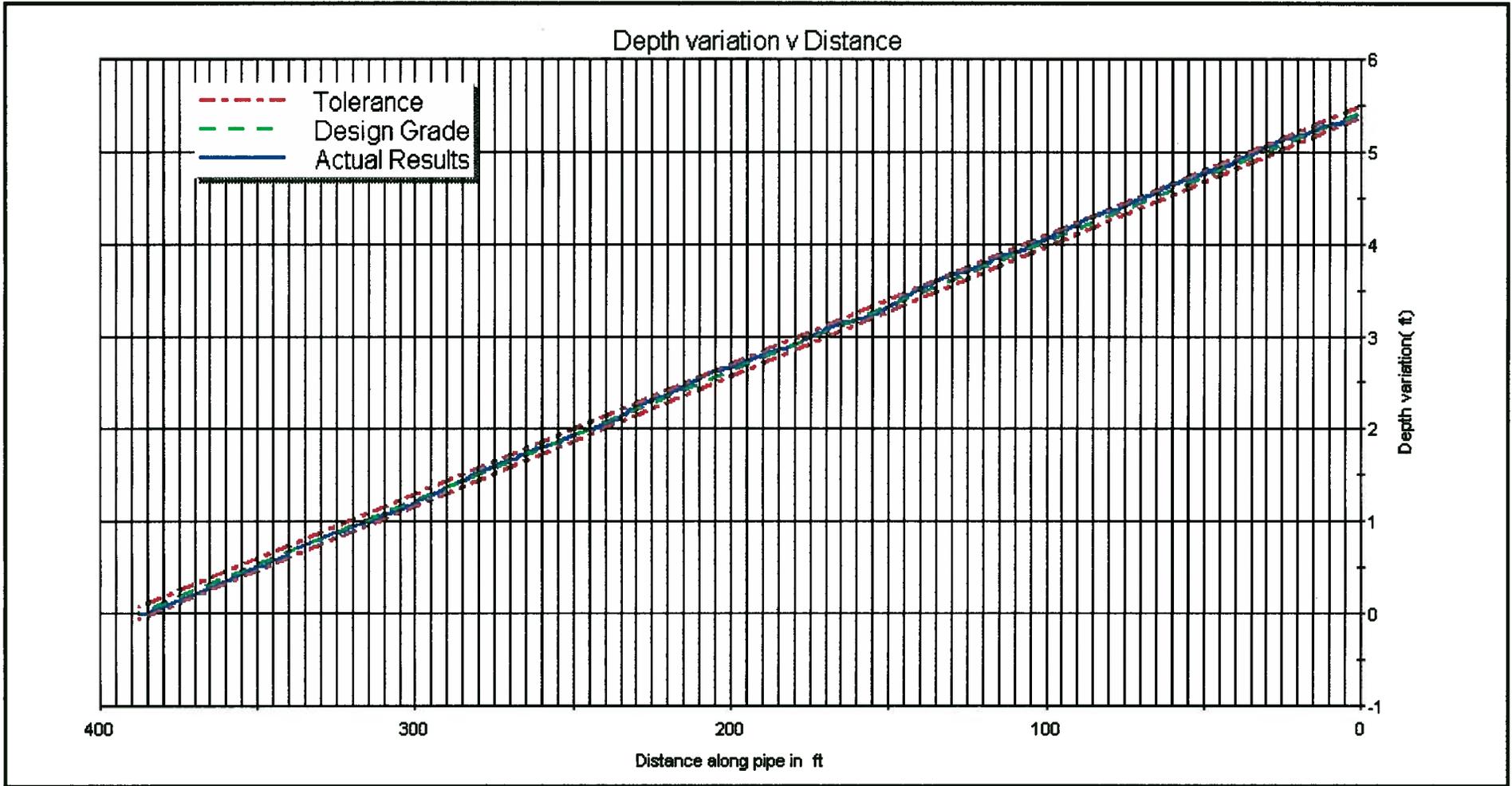
Work Order

Van operator PAULEY

Comments

Weather Circular

Depth variation v Distance



Start B6F39	
Cover level	ft
Depth	ft
Invert Level	ft

Pipe shape	Circular	Size	8	By	in
Material	Circular	Joint Spacing			ft
Lining		Scheduled length	388.7		ft
Pre-clean Z		Year laid			
Design Grade %	1.40	+/- Tolerance %	10		
Average measured grade %	1.40				

Finish B6F38	
Cover level	ft
Depth	ft
Invert Level	ft

APPENDIX J

Customer Service Request Form

311 CRM Service Request Order

SR: 1-6088862 *EMERGENCY*
Created: 04/28/2009 07:21:56 **Status** *Closed*
Solution: Sewage, Discharge or Overflow, Private Property

Department: Public Works
Division: Sewage Systems
Group: Field Maintenance

Creator: KTHOMPSON **Address:** 4870 GLENWOOD DR **Ward:** 1
Closed Date: 04/29/2009 19:33:19 **x-Street:** GREGORY **Neighborhood:** Downtown
Source: Call **Location:** **Trash Type:** Curbside
Assigned: , **Provider:** City
Closing Comments: Unit HVII cleared stopage from MH, per pwner will clean spill, 10 gallon tank nics made SSO report Need to investigate sewer **Routes:** RLITH

Contact Information

Description: PER CP: SEWAGE COMING OUT OF CLEAN OUT AT 4870 & 4860 GLENWOOD.

Name: KASPRZYK, MAREK
Phone: (951) 328-1130
Address: 4870 GLENWOOD DR RIVERSIDE CA 92501

Q & A

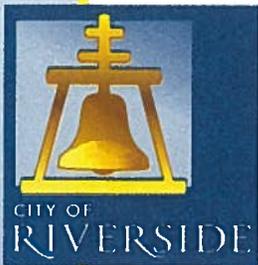
Question	Answer	Question	Answer
Has a private plumber been out to location?	NOT SPECIFIED		

Activities	Description	Assigned To	Status	Scheduled
Clean	Gomez verified lateral is City's. Called CP. Returning to site to do cleanup.		Completed	4/28/2009
Inspection	C Gomez-Tagle spoke w/resident. Cleanout in backyard. 10 gal spill, percolated into soil. Identified as a homeowner's problem. advised to call plumber		Completed	4/28/2009
Dispatched	C Gomez-Tagle, ETA 15 min		Completed	4/28/2009
Notification	CALLED CHOE IN SEWER TO NOTIFY.		Completed	4/28/2009

Action	Action Date	Service Provider
_____	_____	_____
_____	_____	_____
_____	_____	_____

APPENDIX K

Private Sewer Lateral Letter and Maintenance Brochure



Public Works
Department

RESIDENTIAL SEWER LATERAL RESPONSIBILITIES AND REPAIRS

Policy and Procedures

Pursuant to the City Riverside Municipal Code (RMC) Section 14.08.020, residential property owners are responsible for their private lateral line from the residence to the property line. Typically the property line is located 13 to 15 feet from the street curb.

In the event of a blockage in the owner's portion of the sewer lateral line, the owner is responsible for determining the cause and taking all necessary action to remove the blockage. A licensed plumber or contractor can be called to assist in clearing or repairing the private sewer lateral line.

The City's Public Works Department is not responsible for determining the cause or removal of a blockage in a residential private sewer lateral line as defined herein. The City's sole responsibility is that portion of the sewer lateral line from the property line to the City's sewer main lines in the street or right-of-ways.

If a property owner's lateral will not drain and a determination has been made that the owner's private portion of the sewer lateral is clear and City's portion of the lateral or sewer line is the cause of the problem, then the owner should immediately contact the Public Works Department at (951) 351-6280. This number is accessible 24 hours per day. City crews will be dispatched to assist with evaluating and correcting the situation.

Thank you

Public Works Department



Fats, Oils and Grease

Remember to put your fats, oils and grease from the pan into a container, not down the drain.

Save yourself from a grease build-up problem later. Help keep your lateral line and the City's main lines flowing freely. No one wants to have raw sewage in the house, on the ground, or in the street.

It takes everyone doing their share to keep our sewer lines clean and the environment safe for all of us.



PUBLIC WORKS DEPARTMENT ENVIRONMENTAL COMPLIANCE

5950 Acorn Street
Riverside, CA 92504-1036

Phone: 951-351-6145

Fax: 951-687-6978

www.riversideca.gov/pworks

Home Sewer Line Maintenance

Protect Your Home and
Sewer System from
Overflows

Public Works Department
5950 Acorn Street • Riverside, CA 92504

Did You Know?

All household plumbing is attached to a SEWER LATERAL LINE. This line carries the waste from your house to the City's sewer line. Care and maintenance of the House Lateral Line is the responsibility of the resident. *Periodic cleaning is ESSENTIAL to keep household waste flowing!*

Problem Solving

If your lateral line is blocked, it is your responsibility to determine the cause and remove the blockage. Most licensed plumbers can provide services to clear a lateral.

If your lateral line is blocked, and it has been determined by a licensed plumber or contractor that the City's portion of the line is the problem, then it is important to immediately contact the Sewerage Systems Division at (951) 351-6280. This number is accessible 24 hours a day.



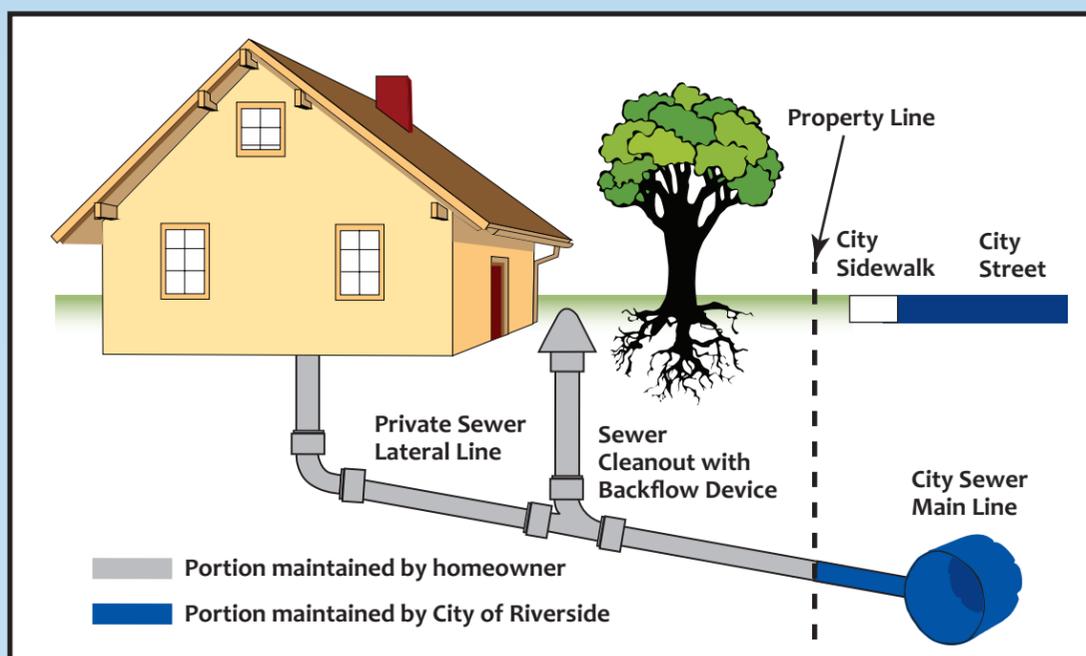
Tree Roots

If properly installed, your household lateral line will not allow the intrusion of tree roots. Occasionally, a line is installed improperly, or due to age, the joints in the lateral fail.

This allows thirsty roots to seek water and nourishment from your lateral line.

If the line is not inspected and maintained properly, the roots will block the flow from your house and cause back up of the drains. This could cause flooding damage.

Care should be given to place trees away from lateral lines.



APPENDIX L

Incident Response Procedure



RIVERSIDE WATER QUALITY COINTROL PLANT PROCEDURE

PAGE: 1 of 6
EFFECTIVE: 8/24/2004
REVISED: 06/29/2009

APPROVED BY:



Craig A. Justice
Wastewater Systems Manager

SANITARY SEWER OVERFLOW (SSO) PROCEDURES

SUBJECT: RESPONSE TO SEWAGE OVERFLOWS

1.0 BACKGROUND

In 2006 the California State Water Resources Control Board issued Order No 2006-0003 for statewide general waste discharge requirements for sanitary sewer systems. The City Regional Water Quality Control Plant (RWQCP) filed a Notice of Intent (NOI) to participate in the new general permit. This permit created three (3) categories of SSOs based on the threat to public health and the environment. The permit also require enrollment into the California Integrated Water Quality System (CIWQS). The RWQCP has enrolled into the CIWQS system and is reporting all SSOs as required. The CIWQS SSO discharger workbook the City uses for SSO reporting is included as **Attachment A**.

Category 1 SSOs

Are all discharges of sewage from the City collection system that are equal to or greater than 1,000 gallons or discharge to a drainage channel and/or surface water; or discharge to a storm drain pipe and were not fully recovered. Category 1 SSOs require the City to immediately notify the California Regional Water Quality Control Board (Regional Board), the California Office of Emergency Services (OES), and Riverside County Department of Environmental Health. Initial notification must occur within two (2) hours with agency notification required within a 24-hour period. An electronic report is due to CIWQS within three (3) business days and a CIWQS certified report within 15 calendar days upon of the conclusion of the SSO response and remediation.

Category 2 SSOs

Are all other sewage spills from the City's collection system. All category 2 SSOs and must be electronically reported to CIWQS within thirty days following the end of the month in which the SSO occurred.

Category 3 SSOs

Are sewage spills from private laterals. Category 3 SSOs may be reported at the discretion of the City. If there are no SSOs during any calendar month, an electronic report must be submitted to the State within thirty days following the conclusion of the month.

2.0 PURPOSE

The purpose of these procedures is to establish a uniform set of guidelines, instructions, and responses to SSOs. This policy shall:

- a. Standardize the methods used by Wastewater Division personnel when responding to a report of a sewage spill or a possible sewage spill.
- b. Ensure that all City and Wastewater Division safety precautions, policies, and procedures are consistently followed to minimize the effect of a sewage spill on public health, employee safety, and the environment, including, but not limited to, traffic safety, electrical safety, Lockout/Tagout procedures, confined spaces, MSDS, bloodborne pathogens, personal protective equipment and injury and illness prevention.
- c. Align the City's spill response plan with the California Incident Command System.
- d. Provide all notifications and documentation to the appropriate agencies and City personnel of the SSO pursuant to 40 CFR 122.41(1)(6), and Order No. 2006-003, Part A.

3.0 PROCEDURE

The sewage overflow/spill response procedures are coordinated between the Administration, Regulatory Compliance, Collection Systems, and Operations sections of the Wastewater Systems Division at the Water Quality Control Plant. All calls received that are reporting a sewage overflow will be designated an "SSO." All SSO calls are to be routed to Control Center dispatch or the Senior Operator during graveyard shift when a dispatcher is unavailable, regardless of who receives the call in the division. The sewage spill response flow chart describing key actions is shown in (**Attachment B**).

WASTEWATER OPERATIONS SECTION

- A. The Shift Supervisor or Senior Operator shall be responsible for all the Control Center dispatch functions of the sewage spill/overflow response plan. The sewer spill decision flow chart is shown in (**Attachment B**).
- B. When the Control Center dispatch receives notification of a possible sewage spill or sewer overflow, a Service Request is initiated according to the Service Request Form from the City 311 call center (**Attachment C**). All calls received for sewage spills or overflows will be considered as "possible" until field verified by the collection systems crew.
- C. The Service Request is placed on the Administration front counter to be retrieved by the Senior Wastewater Collection Systems Technician or the collection systems crew assigned to the call.
- D. The Control Center dispatcher or Senior Operator (graveyard shift) shall send a SSO City groupwise e-mail notification with specifics on the reported SSO, including address and Ward number (**Attachment D**). An event communication log shall be started at the moment the call is received for all notifications of an SSO, regardless of size or whether caused by the City or an Owner. This event communication log shall be used to document chronologically all the events related to the SSO and shall be in use until the response to the SSO is concluded. The event communication log shall be completed according to the event communication log instructions (**Attachment E**).
- E. Upon arrival at the scene of the SSO, the collection systems crew shall determine if the SSO is

valid and shall notify the RWQCP Control center dispatch immediately of the findings. If the SSO is not verified, the assigned collection systems crew shall immediately report these findings by stating that the SSO is not founded and to cancel the SSO. The Control Center dispatch shall immediately send a City groupwise e-mail update as necessary of the reported findings (**Attachment D**).

- F. For confirmed SSOs by the responding collection systems crew, the Control Center dispatch or Senior Operator (graveyard shift) shall immediately notify the appropriate agency on the SSO Agency Notification List (**Attachment F**).
- G. For Category 1 SSOs or spills that reach a water body or channel, Control Center dispatch or the Senior Operator (graveyard shift) shall call Division Management (Wastewater Systems Manager, Wastewater Operations Managers) on their City mobile phones.
- H. For spills that reach a receiving water body or channel an assessment needs to be completed immediately and the SSO posting and sampling procedure enacted (**Attachment G**). The Control Center dispatch or Senior Operator (graveyard shift) shall notify the appropriate City staff using groupwise E-mail notification or City mobile phones.
- I. The shift Operations Supervisor or Senior Operator shall respond in instance when a confirmed SSO is significant in volume or nature, has damaged or impacted private property, has reached the storm drain system or a receiving water body.
- J. If the Collection Systems crew confirms a City sewer problem has caused private property damage, then Control Center dispatch or the Senior Operator (graveyard shift) shall notify the City's Risk Management section. Risk Management will then contact the City's contractor for inspection, clean up, repairs, and remediation. If the Risk Manager cannot be contacted, then Control Center dispatch or the Senior Operator (graveyard shift) shall contact the City's Claim Adjuster. The Claim Adjuster will then contact the City's contractor for inspection, clean up, repairs, and remediation. If neither the Risk Manager nor the Claims Adjuster can be contacted, then the Control Center dispatch or the Senior Operator (graveyard shift) shall leave a voice mail message detailing the SSO and that the City's contractor will be notified to respond directly to the SSO site (**Attachment F**).
- K. If the Collection Systems crew reports that the SSO has entered a Riverside County Flood Control facility or channel, then the Control Center dispatch or the Senior Operator (graveyard shift) shall immediately notify the Riverside County Flood Control District (District) and other required agencies. This notification shall provide the location of the SSO, the volume (if known), and the affected District's facilities.
- L. If the Collection Systems crew reports that the SSO is not sewage but rather an underground water leak from a City water main, then the Collection Systems crew shall call Control Center dispatch or the Senior Operator (graveyard shift) and request the City's Water Department be notified of the leak.
- M. Radio or cell phone contact with responding collection systems crew(s) shall be maintained as appropriate for satisfactory response during SSO events. For Category 1 SSOs, Control Center

dispatch or the Senior Operator (graveyard shift) shall call Division Management (Wastewater Systems Manager, Wastewater Operations Managers) on their mobile phones.

- N. The Control Center dispatch or Senior Operator (graveyard shift) shall provide a SSO update using the Groupwise City e-mail notification instructions once the nature of the spill is known and remedial actions are underway.
- O. Additional assistance shall be dispatched to the responding collection systems crew as requested and/or required.
- P. The Control Center dispatch shall receive the SSO report information from the sewer collections crew and complete the CIWQS regulatory report notification for Wastewater Systems Manager approval. .

WASTEWATER COLLECTIONS SECTION

- A. The designated collection systems standby crew shall ensure that their City pager or cell phone has sufficient power reserves at all times, is turned on, and is carried on the person and is available at all times during the on-call period.
- B. The assigned collection systems crew shall respond immediately to the SSO location and gather information to validate the report. If the report is valid, then the collection systems crew verifying the report shall immediately contact the Control Center dispatch or Senior Operator (graveyard shift) with the confirmation findings including, at a minimum:
 - Spill location
 - Cause of the overflow or spill
 - Estimated flow and/or volume
 - If containment is possible and the containment means used
 - If any sewage was discharged to the storm drain
 - Expected cleanup required and
 - Expected time for cleanup to be completed

If the spill/overflow is not valid, then the assigned collection systems crew shall immediately report this finding to Control Center dispatch or Senior Operator (graveyard shift), depending on the time and day by stating that the SSO is not founded and to cancel the SSO.

- C. If the cause of the sewage spill or overflow is due to a problem or blockage in a City system, the problem shall be resolved or the blockage removed by the collection systems crew.
- D. If the Collection System crew verifies that an SSO caused by problems with a City sewer has resulted in private property damage, then the Collection Crew shall notify Control Center dispatch or Senior Operator (graveyard shift) to call the City's Risk Management. The Collection System crew shall keep the resident/business responsible party informed of the activities of the City's remediation contractor and coordinate communications with the Control Center dispatch or Senior Operator (graveyard shift).

- E. The Control Center dispatch or Senior Operator (graveyard shit) shall call the City contractor as necessary to assist with SSO cause identification and remediation. This includes private property damage and private lateral issues. The collection crew will coordinate required activities with the City contractor related to private property SSOs and property damage.
- F. If the Collection Systems crew verifies that an SSO has reached a receiving water body to facilities of the Riverside County Flood Control District (storm drains, channels, etc.), then the Collection Systems crew shall immediately notify Control Center dispatch or Senior Operator (graveyard shit) to call the Riverside County Flood Control District and all other required agencies. The Collection System crew will coordinate with Riverside County Flood Control District personnel for the remediation of the SSO in the Riverside County Flood Control District facilities.
- G. The collection crew shall coordinate containment and recovery activities as needed to protect the storm drain system and receiving water bodies. If a SSO reaches receiving water an assessment needs to be completed immediately and the SSO posting and sampling procedure enacted (**Attachment G**).
- H. If the cause is a result of a private property spill (private lateral), the Collections crew will facilitate the property owner contacting a plumbing company for assistance. The Collections crew should address any private property spill or construction problem that will impact the City collection system.
- I. If the SSO results from a problem in the City's portion of a private lateral line, the collection crew shall coordinate with the City contractor on identification of the cause and remediation actions.
- J. If the cause of the SSO is not sewage but rather an underground water leak from a City water main, then the Collection Systems crew shall call Dispatch or the Senior Operator and request that the City's Water Department be notified of the leak.
- K. The collection systems crew assigned the SSO shall abide by all policies and procedures relating to safety, traffic safety, electrical safety, Lockout/Tagout procedures, confined spaces, MSDS, bloodborne pathogens, personal protective equipment and injury and illness prevention.
- L. The collection systems crew shall complete in detail the SSO Report consisting of the Service Request Form, Spill Data Sheet and the Flooding Data Sheet (**Attachment H**) prior to returning to the POTW after the conclusion of the SSO.
- M. The Wastewater Collection System Scheduler shall submit the completed SSO Report to the Wastewater Collections Supervisor within 24 hours of receiving the final report information on the event regardless of size.
- N. After review, the Wastewater Collections Supervisor shall submit the complete SSO Report to the Control Center dispatch for incorporation into the CIWQS reports.

LABORATORY AND ENVIROMENTAL COMPLIANCE SECTIONS

- A. The Laboratory and Environmental Compliance Sections are responsible for assisting with SSO investigations, source identification, and enacting the SSO posting and sampling procedure.

REGULATROY COMPLIANCE SECTION

- A. The Regulatory Compliance Section shall be responsible for producing written regulatory agency reports and notifications. . Information from the SSO report will be utilized to develop necessary regulatory reporting in response to SSO events. The Wastewater Systems Manager will approve all written notification and be the responsible party for signing and written documentation to regulatory agencies.



SSO Discharger Work Book



Introduction:

Registering for CIWQS

Welcome to the Sanitary Sewer Overflow (SSO) Discharger Work Book. This guide is designed to help you through the SSO database. The SSO database is the newest module of the California Integrated Water Quality System (CIWQS). However, before you are allowed to use CIWQS, you must first register and receive a CIWQS username and password. At this time, registration for both data submitters and legally responsible officials (see discussion below for an explanation of these terms) is handled by paper. The data submitter and legally responsible official registration forms can be found on the CIWQS Help Center webpage at <http://www.waterboards.ca.gov/ciwqs/chc.html>. The instructions for submitting the completed forms can be found at the bottom of each form.

SSO Database Overview

This section describes the general workflow for the sanitary sewer overflow (SSO) database, which is utilized by an agency (enrollee) that has applied for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems - Water Quality Order No. 2006-0003-DWQ (Sanitary Sewer Order) to comply with the SSO reporting requirements.

An enrollee must report two types of information into the SSO database: sanitary sewer system/agency characteristics – collection system questionnaire and spill details – SSO report. The collection system questionnaire must be initially completed before any SSO reports can be submitted. Additionally, the collection system questionnaire must be updated annually. All SSOs (aka spills) from an enrollee's sanitary sewer system must be reported to the SSO database. The reporting deadline for submittal of a SSO report depends on the classification of the spill, which is either Category 1 (greater threat) or Category 2 (lesser threat). For a Category 1 spill, the enrollee must submit an initial, uncertified report of the spill as soon as possible but no later than 3 business days after being made aware of the SSO. The final, certified report for a Category 1 spill must be submitted within 15 calendar days of the conclusion of SSO response activities. For a Category 2 spill, the enrollee must submit a final, certified report (no initial, uncertified report required) within 30 calendar days after the end of the calendar month in which the SSO occurred.

The process of entering information into the SSO database begins with the enrollee specifying the pertinent sanitary sewer system. If the enrollee is responsible for multiple sanitary sewer systems, then, after selecting the "SSO" link from the CIWQS main menu, the enrollee needs to identify the appropriate sanitary sewer system from the "Sanitary Sewer System" screen. If the enrollee is responsible for only one sanitary sewer system, then the SSO database



automatically correlates the information to it and the “Sanitary Sewer System” screen doesn’t appear.

The collection system questionnaire is an online form which contains questions regarding the relevant characteristics of an enrollee’s sanitary sewer system and agency. After initial login, the first major task an enrollee needs to perform is completing the collection system questionnaire. A new collection system questionnaire is accessed through the “Collection System Questionnaire” link on the SSO menu. The collection system questionnaire must be updated at least every 12 months, and this is done through the “Collection System Questionnaire” link on the SSO menu.

Along with completing the collection system questionnaire, an enrollee must also report all SSOs to the database. To begin a new spill report, the enrollee selects the “Reporting New SSO” link from the SSO menu. Then, the enrollee enters the information requested on the form. A spill report can exist at several different levels of completion: “work in progress”, “draft”, “ready to certify”, and “certified”. A “work in progress” SSO report is a preparatory draft of the report with limited required information and is intended only for the enrollee’s use. To save a spill report as a “work in progress”, the enrollee selects the “Save Work in Progress” button on the “SSO – General Information” screen. A SSO report in “draft” status is a working draft of the report with more required information than “work in progress” status. By submitting a report in “draft” status, the enrollee fulfills the initial, uncertified reporting requirement for a Category 1 spill. The enrollee selects the “Submit Draft” button on the “SSO – General Information” screen to submit a report as a “draft”. Once the spill report contains all the required information, it can be submitted for certification by selecting the “Ready to Certify” button on the “SSO – General Information” screen. A “ready to certify” SSO report that is complete and accurate is certified by the enrollee through first selecting the “Modify Existing SSO” link on the SSO menu. Then, the spill report to be certified must be located by using the “SSO – Search” screen. Next, the “Certify” button on the “SSO – General Information” screen for the specified report is selected. Finally, the report is certified by selecting the “Certify” button on the “SSO – Certifying an SSO Report” screen. The database will then display a confirmation of the report certification. An enrollee has fulfilled the final, certified reporting requirement for a Category 1 or Category 2 spill by submitting a certified report in the SSO database. A spill report can be submitted directly as “ready to certify” without being submitted as a “work in progress” or “draft”, assuming the enrollee has entered all the necessary information.

When submitting a spill report, the enrollee can add supporting documentation such as pictures and reports by using the “Attachments” tab on the “SSO – General Information” screen. Additionally, the enrollee can include details about related parties (e.g., fire or police department responders) by selecting the “Spill Related Parties” tab on the “SSO – General Information” screen.



A “certified” SSO report can be modified by an enrollee to correct or add information, if necessary. To do this, an enrollee begins by locating the “certified” spill report through the “SSO – Search” screen after selecting the “Modify Existing SSO” link on the SSO menu. The “Amend” button on the “SSO – General Information” screen for the designated “certified” SSO report is then selected. The spill report is returned to “Submit Draft” status and can be modified. Finally, the spill report needs to be re-certified after the necessary modifications have been completed.

If a sanitary sewer system doesn’t have any SSOs for an entire calendar month, a “no spill certification” must be submitted (“Generate No Spill Certification” link from the SSO menu) by the enrollee. A “no spill certification” must be submitted within 30 calendar days after the end of each calendar month in which no spills occur. The database will display a confirmation of the “no spill certification” when completed.

The SSO database automatically sends email notifications to interested parties when spill reports are generated. When a SSO report is submitted in “draft” form (“Submit Draft” button selected) for the first time, an email notification is sent to the enrollee, responsible Regional Water Quality Control Board, and County Health Official (if known – this is a courtesy and not required by the Sanitary Sewer Order). Every time a report is submitted as ready for certification (“Ready to Certify” button) or certified (“Certify” button) results in email notifications being sent to the enrollee, responsible Regional Water Quality Control Board, and County Health Official (if known – this is a courtesy and not required by the Sanitary Sewer Order). However if a SSO report is saved as a “work in progress” (“Save Work in Progress” button), no email notifications are generated because the report is preliminary and only intended to be viewed by the enrollee.

As for database use by an enrollee, there are two levels of access available to staff entering the information: legally responsible officials (LROs) and data submitters. LROs have full access to enter information and certify spill reports. Data submitters, on the other hand, only have authority to enter information - they can’t certify SSO reports, including a “No Spill Certification”. An enrollee can have multiple LROs and data submitters to enter the necessary information into the SSO database for their sanitary sewer system.



Part 1: Logging in and Changing Personal Information.

To get you started we are going to show you how to log into the system and how to make changes to your personal information. While these are very basic tasks it is one of the best beginner demonstrations to the module system in CIWQS and it will introduce you to the methods with which all information is changed in the system.

User roles that need to review this section: All

1. Start by going to the CIWQS login screen at:
<http://ciwqs.waterboards.ca.gov/>.
2. Once the page loads enter your CIWQS username into the "User ID:" field and your password into the "Password:" field.
3. Press "Login".
4. After you press "Login" the CIWQS main menu will appear. Depending on your access you will be provided with the links to various CIWQS modules. Including but not limited to:
 - [Submit/Review a Self Monitoring Report \(SMR\)](#)
 - [Run Reports](#)
 - [View/Change My Personal Information](#)
 - [Create/Maintain Places](#)
 - [Create/Maintain Parties](#)
 - [Create/Maintain Regulatory Measures](#)
 - [Create/Maintain Violations](#)
 - [Create/Maintain Inspections](#)
 - [Create/Maintain Invoices](#)
 - [GeoWBS Online Editor](#)
 - [Map It!](#)
 - [Administer System](#)
 - [SSO](#)
5. Select the "View/Change My Personal Information" module hyperlink.
6. You will be taken to the Personal Information page, here you can update your contact information, add a new facility, change your password, or request a more serious change.
7. Let's start with changing your password. To change your password; press the "Change Password" button.



User ID:
Change Password
My Name:
Prefix:
First Name:

8. After pressing "Change Password" you will be taken to a new screen asking you to enter the new password you have chosen twice.

New Password: *	<input type="text"/>
Confirm New Password:*	<input type="text"/>
Save	Cancel

9. Once you have entered your new password press "Save".
10. After pressing "Save" you will be asked to verify that you wish to save, press "Ok".
11. You will be returned to the personal information screen. If you scroll down a little you can view all of your contact information.

My Address:	
Street Number:	<input type="text"/>
Street Name:	<input type="text"/>
Apt.:	<input type="text"/>
City:	<input type="text"/>
State:	California <input type="button" value="v"/>
Zip Code:	<input type="text"/>
My Phone Number:	<input type="text"/>
My Fax Number:	<input type="text"/>
My Email Address:	<input type="text"/>

12. If you make any changes to your contact information they have to be saved by pressing the "Save Changes" button at the bottom of the page.
13. After pressing "Save Changes" you will see a screen verifying that your changes were logged. You will also be provided with two hyperlinks. Press the first "here" hyperlink to return to the personal information screen.



14. To request another change to your account that you don't have access to make yourself press the "Request Another Change" button near the bottom of the view/change my personal information page.
15. After pressing the button your computer's email client will launch a new email window with the CIWQS Help Center email address in the "To:" field. Describe the change you wish to have made to your account and send the email. Be sure to include your name and username.
16. We are now done with this module; press the "Menu" hyperlink available at the top right corner of the page to return to the CIWQS main menu.



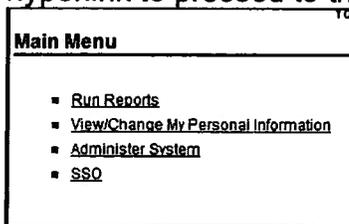
Part 2: Completing the SSO Collection System Questionnaire

One of the first things that must be done by an enrollee is to complete the Collection System Questionnaire. For the new Sanitary Sewer Order the State has decided that instead of including a questionnaire with the Notice of Intent form they will require this online questionnaire to be filled out for each facility. This is a better system than the old one because employees at each facility can easily update the questionnaire at any time if something changes.

Note: All fields in this section, with the exception of one dropdown, are for numeric characters only. Also, the questionnaire must be updated every twelve months but can be modified more often if the enrollee desires.

User roles that need to review this section: LRO

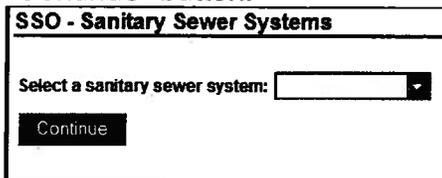
1. If you are not already logged into the CIWQS system proceed to this URL <http://ciwqs.waterboards.ca.gov/> and login.
2. After logging in you will see the CIWQS main menu. Select the "SSO" hyperlink to proceed to the SSO module.



The screenshot shows a web browser window with a title bar that says "CIWQS". The main content area is titled "Main Menu" and contains a list of four items, each preceded by a small square bullet point:

- Run Reports
- View/Change My Personal Information
- Administer System
- SSO

3. Upon entering the SSO module you will be required to select the collection system you wish to submit information for from the "Select a Sanitary Sewer System:" dropdown. After selecting the appropriate system press the "Continue" button.



The screenshot shows a web browser window with a title bar that says "SSO - Sanitary Sewer Systems". The main content area contains the text "Select a sanitary sewer system:" followed by a dropdown menu. Below the dropdown menu is a button labeled "Continue".

4. When a collection system has been selected you will be taken to the SSO main menu. At the top of this menu will be the "Collection System Questionnaire" hyperlink. Select that hyperlink.



- [Collection System Questionnaire](#)
Pertinent information regarding your collection system.
- [Reporting New SSO](#)
Report new SSO.
- [Modifying Existing SSO](#)
View/Modify existing SSO Report.
- [Generate No Spill Certification](#)
Certify that no spills occurred within a certain time period.

5. You will be taken to the collection system questionnaire page. It has a series of fields that need to be filled in with current information from your facility.
6. Question 1 requires you to enter the number of people served by your collection system.

Collection System Questionnaire <input <="" td="" type="button" value="?"/>	
1) What is the population served by your agency's sanitary sewer system?	<input type="text" value="78,778"/>

7. Questions 2 and 3 require annual budget information for the collection system. The values entered should be as close to the actual amount of money spent as possible (i.e., excluding funds planned for reserve).

2) What is your current annual operation and maintenance budget for sanitary sewer system facilities?	<input type="text" value="5,678,900"/>
3) What is your current annual capital expenditure budget for sanitary sewer system facilities?	<input type="text" value="4,500,000"/>

8. Sections 4 through 7 require you to enter number of employees you have in each of four experience levels and the number of employees in each of the four grades of California Water Environment Association (CWEA) collection system operator certification. There is no dependent relationship between these two numbers. For example, an enrollee can potentially have more Grade I certified employees than the total number of employees with less than 2 years experience. The number of employees can be entered as fractional values, if necessary (e.g., 1.5).



General Classifications	
4) Entry Level (Less than 2 years experience)	
Number of agency employees?	<input type="text" value="6"/>
Number of certified (CWEA Grade I) agency employees?	<input type="text" value="4"/>
5) Journey Level (Greater than or equal 2 years experience)	
Number of agency employees?	<input type="text" value="6"/>
Number of Certified (CWEA Grade II) agency employees?	<input type="text" value="8"/>
6) Supervisory Level	
Number of agency employees?	<input type="text" value="2"/>
Number of Certified (CWEA Grade III) agency employees?	<input type="text" value="3"/>
7) Managerial Level	
Number of agency employees?	<input type="text" value="10"/>
Number of Certified (CWEA Grade IV) agency employees?	<input type="text" value="10"/>

9. Question 8 requires you to enter the number of miles of forced mains and pressure systems used in your collection system.

8) How many miles of forced mains and other pressure systems?	<input type="text" value="7.6"/>
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10. Question 9 asks the mileage of the combined gravity lines within the system.

9) How many miles of gravity sewers?	<input type="text" value="103"/>
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11. Questions 10 through 13 require information about the sewer laterals within the collection system. Including: their total mileage, the portion your agency is responsible for, the total mileage of that portion, and the number of service connections. The responsibility for maintaining a lateral can be split between the enrollee and private property owner. The terms "upper" and "lower" lateral indicates this. The enrollee would be responsible for the "lower" lateral section, which is connected to the main, and the private property owner would be responsible for the "upper" lateral section, which is connected to the home/building.

10) Estimated total miles of laterals (upper and lower)?	<input type="text" value="128"/>
11) Which portion of laterals is your agency responsible for?	<input type="text" value="Upper and lower"/>
12) Estimated total miles of laterals your agency is responsible for?	<input type="text" value="65"/>
13) Number of service lateral connections?	<input type="text" value="889"/>

12. Section 14 is for you to enter what percentage of your collection system was constructed during various time periods. The total sum of the 7 fields in this section must equal 100.



14) Approximately, what percentage of your sanitary sewer system was constructed between the years of:
(note: total must sum to 100%)

10	%	2000 - Present
10	%	1980 - 1999
3	%	1960 - 1979
17	%	1940 - 1959
40	%	1920 - 1939
10	%	1900 - 1919
10	%	Before 1900

13. Question 15 is for you to enter the total miles of your collection system that is not accessible by vehicle.

15) Estimated total miles of your sanitary sewer system not accessible by vehicle?

14. Question 16 requires the total mileage of the collection system that is cleaned per year.

16) What is your total gravity sewer system cleaning production in miles/year?

15. Question 17 is for the total mileage of the collection system that is inspected per year.

17) What is your total gravity sewer system condition inspection (e.g., CCTV) production in miles/year?

16. Once all the fields are complete look back over the questionnaire to make sure that all of the information is accurate.

17. Your questionnaire is now complete. Press one of the "Save" buttons that can be found either at the bottom left or top left of the page.



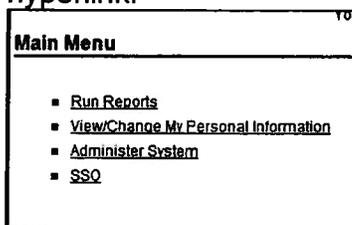
Part 3: Creating and Editing an SSO

This section describes the core purpose of the SSO module; which is the ability to report SSOs online. Before the enrollee is able to complete this task they must have a completed Collection System Questionnaire. There are two types of SSOs, Category 1 and Category 2, and both of them will be discussed and demonstrated here.

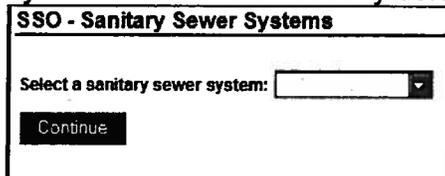
Note: In the SSO report screens only the fields with asterisks must be filled out before the report can be readied for certification or certified. This document goes over every field in the order they appear. Fewer fields must be completed to save a work in progress and to submit a draft. These mandatory fields are noted in the discussion below.

User roles that need to review this section: All

1. If you are not already in the system, proceed to the CIWQS Login page at: <http://ciwqs.waterboards.ca.gov/>.
2. Using your username and password log into the system.
3. You will be taken to the CIWQS main menu. From that menu press the "SSO" hyperlink.



4. Upon entering the SSO module you will be required to select the sanitary sewer system (aka collection system) you wish to submit information for from the "Select a Sanitary Sewer System:" dropdown. After selecting the appropriate collection system press the "Continue" button. If your agency only has one collection system this screen will be bypassed and the collection system will be automatically selected.



5. The SSO menu will appear. Press the "Reporting New SSO" hyperlink. It is the second one down on the page.



- [Collection System Questionnaire](#) ?
Pertinent information regarding your collection system.
- [Reporting New SSO](#) ?
Report new SSO.
- [Modifying Existing SSO](#) ?
View/Modify existing SSO Report.
- [Generate No Spill Certification](#) ?
Certify that no spills occurred within a certain time period.

6. The first screen in reporting a new SSO helps you determine whether or not the SSO is a Category 1 or a Category 2 spill.
- a. If you answer yes to questions 2 or 3 and/or the spill amount is over 1000 the event is considered a Category 1 spill.
 - b. If you answer no to both questions and the spill amount is under 1000 the event is considered a Category 2 spill.

Note: Questions with "" are required to be answered.*

Determine Spill Type: ?

* 1. Estimated spill volume? gallons

* 2. Did the spill discharge to a drainage channel and/or surface water?

* 3. Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system?

7. After entering your information in those three fields select whether or not the spill was a private lateral spill. If it was, list the responsible agency in the box provided. The reporting of private lateral SSOs is voluntary, based on the terms of the Sanitary Sewer Order, but enrollees are strongly encouraged to do so. This additional information will provide a better understanding of the prevalence and impact of private lateral spills throughout the State.

* 4. Private Lateral Spill? No

5. Name of responsible party (for private lateral spill only, if known):

8. Check to make sure the information you entered is accurate then press the "Continue" button.
9. The SSO General Info tab will appear. Start by entering the name of the location where the spill occurred in the "Spill Location Name:" field. This entry should be a general descriptor of the spill location (e.g., street address, intersection, or manhole number). The "Spill Location Name:" field must be completed to "save work in progress" or "submit draft" for any SSO report.

Physical Location Details

* Spill location name:



10. Enter the latitude and longitude of the spill location. Using a handheld GPS unit or referencing a web-based mapping site such as earth.google.com can determine this information. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

* Latitude of spill location:	<input type="text"/>	deg.	<input type="text"/>	min.	<input type="text"/>	sec. OR	<input type="text"/>	decimal degrees
* Longitude of spill location:	<input type="text"/>	deg.	<input type="text"/>	min.	<input type="text"/>	sec. OR	<input type="text"/>	decimal degrees

11. Enter the street address of the spill location and a cross street, if there was one.

Street number:	<input type="text"/>	Street direction:	<input type="text"/>		
Street name:	<input type="text"/>	Street type:	<input type="text"/>	Suite/Apt:	<input type="text"/>
Cross street:	<input type="text"/>				

12. Enter the City, State, Zip, and county of the spill site in their corresponding fields. These fields can be found just above the “Location Description” field. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

City:	<input type="text"/>	State:	<input type="text" value="CA"/>	Zip:	<input type="text"/>
* County:	<input type="text"/>				

13. Enter a description of the spill site in the “Spill Location Description:” field. This field is optional and allows for a detailed description of the spill site including any significant characteristics or considerations.

Spill location description:	<input type="text"/>
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14. Select the region in which the spill occurred from the “Regional Water Quality Control Board:” dropdown. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

* Regional Water Quality Control Board:	<input type="text"/>
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15. Select the spill appearance point from the “Spill Appearance Point:” dropdown. If you selected “other” you are required to enter a description in the text box available immediately below this field. The “Spill Appearance Point:” is where wastewater first surfaced on the spill site. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.



Spill Details	
* Spill appearance point:	<input type="text"/>
Spill appearance point explanation: (Required if spill appearance point is "Other")	<input type="text"/>

16. The next four questions were answered in step 6 when you were determining your spill type. If, at any time, you need to change the answers you can do so in this screen. These fields must be completed to "save work in progress" or "submit draft" for any SSO report.

* Did the spill discharge to a drainage channel and/or surface water?	<input type="text" value="No"/>
* Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system?	<input type="text" value="No"/>
* Private lateral spill?	<input type="text" value="No"/>
Name of responsible party (for private lateral spill only, if known):	<input type="text"/>

17. Select the final destinations of the spill in the "Final Spill Destination:" box. Hold CTRL on your keyboard if you wish to select multiple. If "other" was among your selections you are required to enter an explanation in the available text box. The "Final Spill Destination:" describes the areas that wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary. This field doesn't need to be completed to "save work in progress" or "submit draft" for any SSO report.

* Final spill destination: (Hold Ctrl key to Select Multiple answers from the list)	<input type="text" value="Beach"/> <input type="text" value="Building or structure"/> <input type="text" value="Other paved surface"/>
Explanation of final spill destination: (Required if final spill destination is "Other")	<input type="text"/>

18. The field "Estimated Spill Volume:" was completed when determining your spill type. If, at any time, this number changes you can return to this screen and update the information. This field must be completed to "save work in progress" or "submit draft" for any SSO report.

* Estimated spill volume:	<input type="text" value="1000"/> gallons
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19. This field will only appear if the spill is a Category 1. It requires you to enter the volume of the spill that was recovered. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Estimated volume of spill recovered:	<input type="text"/> gallons
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20. This field will only appear if the spill is a Category 1. Enter the volume of the spill that reached surface water, drainage channel, or was not recovered from a storm drain. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Estimated volume of spill that reached surface water, drainage channel, or not recovered from a storm drain: <input type="text"/> gallons

21. If the spill is still occurring enter the current spill rate.

Estimated current spill rate (if applicable): <input type="text"/> gallons per minute

22. The next four fields require you to enter date and time information:

- a. Enter the "Estimated Spill Start Date/Time"
- b. Enter the Date/Time your agency discovered or was notified of the spill.
- c. Enter the "Estimated Operator Arrival Date/Time"
- d. Enter the "Estimated Spill End Date/Time"

Item (a) above must be completed to "save work in progress" or "submit draft" for any SSO report. Items (b), (c), and (d) above must be completed to "submit draft" for any SSO report but not to "save work in progress".

Estimated spill start date/time:	<input type="text" value="11/08/2006"/>	<input type="text" value="10"/>	:	<input type="text" value="00"/>	Date Format: MM/DD/YY
* Date and time sanitary sewer system agency was notified of or discovered spill:	<input type="text"/>	<input type="text" value="12"/>	:	<input type="text" value="00"/>	Date Format: MM/DD/YY
* Estimated Operator arrival date/time:	<input type="text"/>	<input type="text" value="12"/>	:	<input type="text" value="00"/>	Date Format: MM/DD/YY
* Estimated spill end date/time:	<input type="text"/>	<input type="text" value="12"/>	:	<input type="text" value="00"/>	Date Format: MM/DD/YY

23. Please select a cause for the spill from the available dropdown. If the cause you selected was other you are required to enter an explanation in the available text box. This field must be completed to "submit draft" for any SSO report but not to "save work in progress".

* Spill cause:	<input type="text"/>
Spill cause explanation: (Required if spill Cause is "Other")	<input type="text"/>

24. If the spill was cause by wet weather please select the size of the storm from the available dropdown.

If spill caused by wet weather, choose size of storm:	<input type="text"/>
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25. If applicable to the spill cause you selected, the next three fields ask information about the point of blockage for the pipe or spill cause. The information asked is the diameter (in inches) of the pipe, the material of the pipe, and the age of the pipe. For material of pipe, abbreviations such as PVC and VCP are acceptable.



Diameter of sewer pipe at the point of blockage or spill cause (if applicable):	<input type="text"/>	Inches
Material of sewer pipe at the point of blockage or spill cause (if applicable):	<input type="text"/>	
Estimated age of sewer pipe at the point of blockage or spill cause (if applicable):	<input type="text"/>	

26. In this field, please enter the response activities that your agency initiated because of the spill. If your selection is other, you are required to enter an explanation of the activities. This field doesn't need to be completed to "save work in progress" or "submit draft" for any SSO report.

* Spill response activities: (Hold Ctrl key to Select Multiple answers from the list)	<input type="checkbox"/> Cleaned-up (mitigated effects of spill) <input type="checkbox"/> Contained all or portion of spill <input type="checkbox"/> Inspected sewer using CCTV to determine cause
Explanation of spill response activities: (Required if spill response activities is "Other")	<input type="text"/>

27. This field will only appear if the spill is a Category 1. This field requires the user to enter the date/time they completed their spill response activities. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Spill response completion date:	<input type="text"/>	<input type="text"/>	12	:	00	Date Format: MM/DD/YY
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28. The user can enter a description of the visual inspection results from the impacted receiving water.

Visual inspection results from impacted receiving water:	<input type="text"/>
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29. This field will only appear if the spill is a Category 1. Select whether or not health warnings were posted because of the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Health warnings posted?	<input type="text"/>
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30. This field will only appear if the spill is a Category 1. Enter the names of any and all beaches that were impacted by the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report

* Name of impacted beach(es) (enter NA if not applicable):	<input type="text"/>
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31. **This field will only appear if the spill is a Category 1.** Enter the names of any and all surface waters impacted by the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Name of impacted surface water(s) (enter NA if not applicable):	<input type="text"/>
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32. **This field will only appear if the spill is a Category 1.** Choose whether or not there is an ongoing investigation concerning the spill event. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Is there an ongoing investigation?	<input type="checkbox"/>
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33. **This field will only appear if the spill is a Category 1.** Select what the water quality samples taken from the spill were analyzed for. Hold CTRL to select multiple. Please note that some selections require a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Water quality samples analyzed for: (Hold Ctrl key to Select Multiple answers from the list)	<input type="checkbox"/> Dissolved oxygen <input type="checkbox"/> Other chemical indicator(s) - specify below <input type="checkbox"/> Biological indicator(s) - specify below
Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")	<input type="text"/>

34. **This field will only appear if the spill is a Category 1.** Select which agencies the results of the water samples were reported to. Hold CTRL to select multiple. Please note that a selection of "other" requires a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* Water quality sample results reported To: (Hold Ctrl key to Select Multiple answers)	<input type="checkbox"/> County Health Agency <input type="checkbox"/> Regional Water Quality Control Board <input type="checkbox"/> None of the above
Explanation of water quality sample results reported to: (Required if water quality sample results reported to is "Other")	<input type="text"/>

35. **This field will only appear if the spill is a Category 1.** Select which corrective actions were taken by your agency in response to the spill. Hold CTRL to select multiple. Please note that a selection of "other" requires a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.



* Spill corrective action taken: (Hold Ctrl key to Select Multiple answers from the list)	Added sewer to preventive maintenance program Adjusted schedule/method of preventive maintenance Enforcement action against FOG source
Explanation of spill corrective action taken: (Required if spill corrective action is "Other")	

36. Enter an overall description of the spill.

Overall Spill Description:	
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37. Enter the OES Control Number for your agency and the date/time you notified OES of the spill. This field must be completed to "ready to certify" or "certify" a Category 1 report if the estimated spill volume is greater than or equal to 1,000 gal and wastewater reached a drainage channel/surface water or storm drainpipe that was not fully captured. This field doesn't need to be completed to "save work in progress" or "submit draft" for any SSO report.

Notification Details	
OES Control Number (Required for Category 1 spill report if estimated spill volume >= 1000 Gals):	<input type="text"/>
OES Called Date/Time (Required for Category 1 spill report if estimated spill volume >= 1000 Gals):	<input type="text"/> <input type="text"/> 12:00 Date Format: MM/DD/YY

38. These fields will only appear if the spill is a Category 1. Select whether or not you notified your county health agency of the spill. If yes enter the date/time they were notified. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* County health agency notified:	No
County health agency notified date/time: (required if County health agency notified is "Yes")	<input type="text"/> <input type="text"/> 12:00 Date Format: MM/DD/YY

39. Enter the date and time that your Regional Water Quality Control Board was notified of the spill, if applicable. For example, some Regional Water Quality Control Boards require 24-hour notification of certain spills, which an enrollee can note was completed by entering the information in this field.

Regional Water Quality Control Board notified date/time:	<input type="text"/> <input type="text"/> 12:00 Date Format: MM/DD/YY
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40. Enter the name of any other agency that was notified of the spill.

Other Agency Notified:	<input type="text"/>
-------------------------------	----------------------



41. Select whether or not any of the information available in the report you just filled out was faxed to your Regional Water Quality Control Board. If some of the information was faxed, enter the date/time the fax was sent in the accompanying field. The Sanitary Sewer Order requires spill report information to be faxed to the responsible Regional Water Quality Control Board if the SSO database is not available for the enrollee to meet the applicable reporting deadline. When the SSO database becomes available, the enrollee must enter all faxed information into the SSO database.

Was any of this spill report information submitted via fax to the Regional Water Quality Control Board?	No
Date and time spill report information was submitted via fax to the Regional Water quality Control Board: (required if spill report information submitted via fax to Regional Water Board is "Yes")	

42. The "General Info" tab of your SSO report is now complete. Press the "Save Work in Progress" button.

General Info	Spill Related Parties	Attachments
Save Work in Progress	Submit Draft	Ready to Certify
Note: Questions with "*" are required to be answered.		

43. Select the "Spills Related Parties" tab. The purpose of this tab is to list any private parties who may have caused, contributed to, or were impacted by the spill.

General Info	Spill Related Parties	Attachments
--------------	-----------------------	-------------

44. Enter the names of any individual or representatives in the "Party Name" field.

General Info	Spill Related Part
Party Name	
<input type="text"/>	

45. Enter the organization name in the "Organization" field.

General Info	Spill Related Part
Organization	
<input type="text"/>	

46. Enter a number at which the part can be reached in the "Phone Number" field.



A screenshot of a web form with a header box labeled "Phone Number" and a rectangular input field below it.

47. Enter a description of how the party is related to the spill in the "Description" field.

A screenshot of a web form with a header box labeled "Description" and a large rectangular text area below it. To the right of the text area is a small button with an upward-pointing arrow and a downward-pointing arrow, and the word "Add" is visible to its right.

48. Once all of the information is complete for a party press the "Add" hyperlink to the right of the "Description" field. The information will be saved and you will then be allowed to enter another party. If, at any time, you wish to remove a party press the "Delete" hyperlink.

A screenshot of a web form showing a list of entries. To the right of the list is a button labeled "Add".

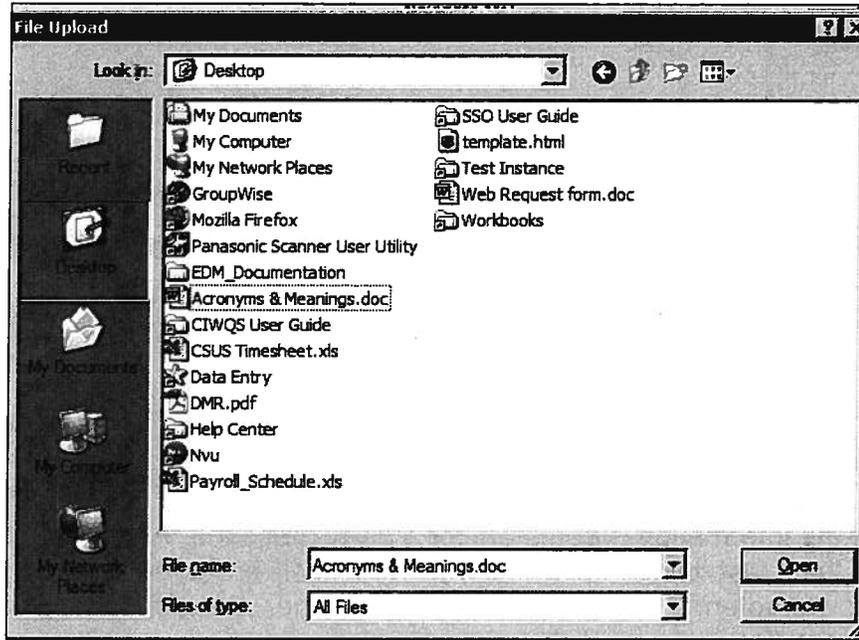
49. When you are finished adding parties select the "Attachments" tab. This tab allows you to attach any paper reports, pictures, diagrams, etc. of the spill.

A screenshot of a web interface showing three tabs: "General Info", "Spill Related Parties", and "Attachments". Below the tabs is a text prompt: "To add a document select the file and click Upload".

50. Begin by pressing the "Browse" button.

A screenshot of a file search window titled "File ^". It contains a text input field and a button labeled "Browse..." to its right.

51. A file search window will appear. Locate the file you wish to attach, select it and press the "Open" button.



52. You will be returned to the attachments screen. Enter a brief description of the file you will be uploading into the “File Description” field and press the “Upload File” button.

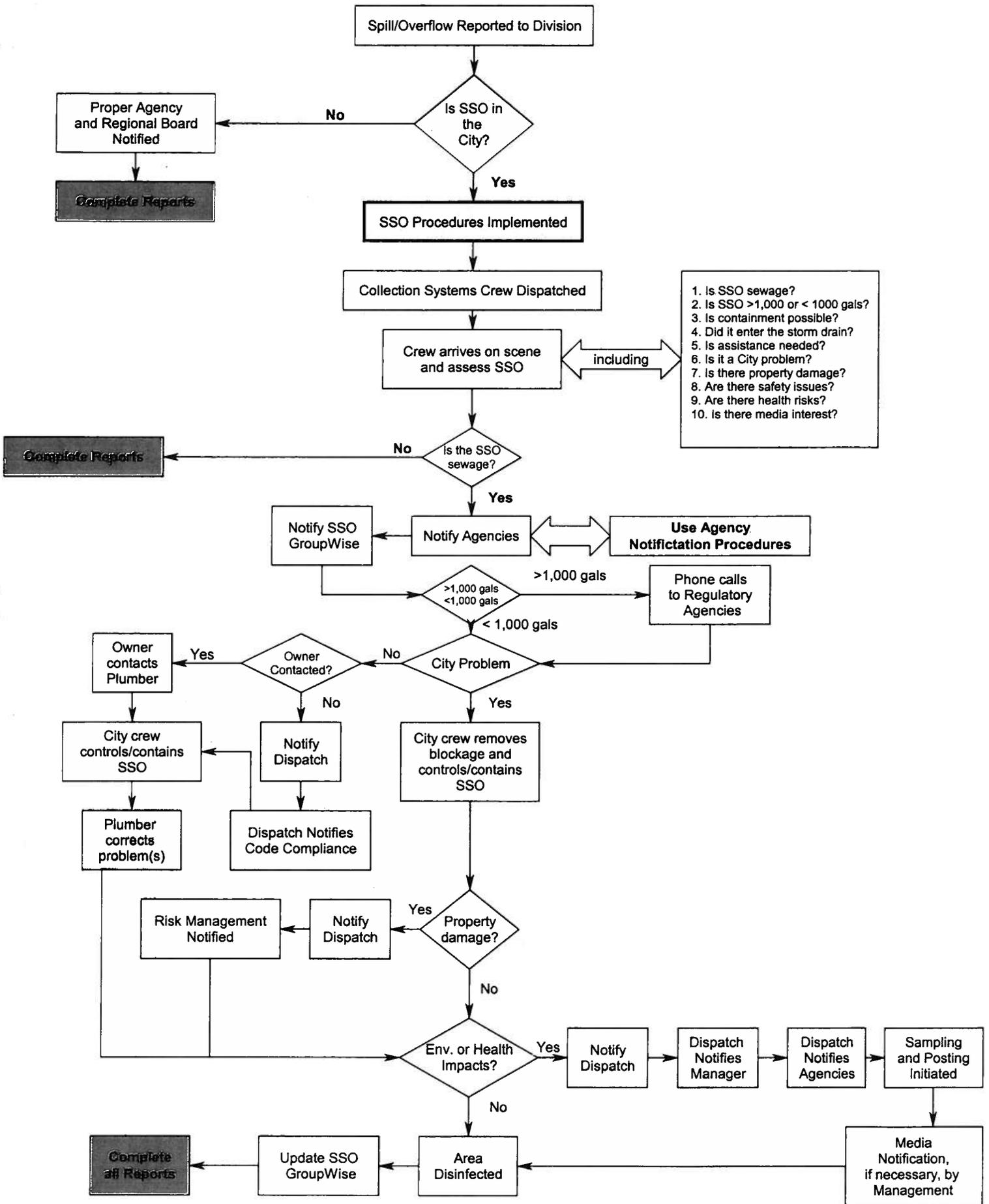
File Description	
<input type="text"/>	<input type="button" value="Upload File"/>

53. Your SSO Spill report is now complete. If at any time you wish to edit the report before you certify it select the “Modify Existing SSO” hyperlink from the SSO menu, and look up your SSO using one of the available search fields.

Report new SSO.
▪ Modifying Existing SSO ?
View/Modify existing SSO Report.

54. To learn how to save drafts and certify your report proceed to the next section of this document.

City of Riverside SSO Response Flow Chart



Attachment B

311 CRM Service Request Order

SR: 1-6088862 *EMERGENCY*
Created: 04/28/2009 07:21:56 **Status** *Closed*
Solution: Sewage, Discharge or Overflow, Private Property

Department: Public Works
Division: Sewage Systems
Group: Field Maintenance

Creator: KTHOMPSON **Address:** 4870 GLENWOOD DR **Ward:** 1
Closed Date: 04/29/2009 19:33:19 **x-Street:** GREGORY **Neighborhood:** Downtown
Source: Call **Location:** **Trash Type:** Curbside
Assigned: , **Provider:** City
Closing Comments: Unit HVII cleared stopage from MH, per pwner will clean spill, 10 gallon took nice, made SSQ report. Need to investigate sewer **Routes:** RL1TH

Contact Information

Description: PER CP: SEWAGE COMING OUT OF CLEAN OUT AT 4870 & 4860 GLENWOOD.
Name: KASPRZYK, MAREK
Phone: (951) 328-1130
Address: 4870 GLENWOOD DR RIVERSIDE CA 92501

Q & A

Question	Answer	Question	Answer
Has a private plumber been out to location?	NOT SPECIFIED		

Activities	Description	Assigned To	Status	Scheduled
Clean	Gomez verified lateral is City's. Called CP. Returning to site to do cleanup.		Completed	4/28/2009
Inspection	C Gomez-Tagle spoke w/resident. Cleanout in backyard. 10 gal spill, percolated into soil. Identified as a homeowner's problem. advised to call plumber		Completed	4/28/2009
Dispatched	C Gomez-Tagle, ETA 15 min		Completed	4/28/2009
Notification	CALLED CHOE IN SEWER TO NOTIFY.		Completed	4/28/2009

Action	Action Date	Service Provider
_____	_____	_____
_____	_____	_____
_____	_____	_____

SSO ELECTRONIC NOTIFICATION INSTRUCTIONS

Electronic notification of an SSO incident is critical to insure that all parties requiring notification receive the same information. **The following City personnel and agencies must be electronically notified immediately upon confirmation of an SSO incident and shall be provided SSO updates, as necessary, regardless of volume or responsibility (i.e. owner or City).** All notifications are done through the City's Outlook E-mail system by choosing Agency Reportable Notification List from the contact list.

Position or Agency
Public Works Director
Deputy Public Works Director
Wastewater Systems Manager
Risk Manager
Public Works, Sewer Sr. Administrative Analyst
Wastewater Collection Systems Supervisor
All Wastewater Operations Managers
Operations Superintendent
All Operations Supervisors
Wastewater Collection Systems Supervisor
Wastewater Collection System Scheduler
Public Works Safety Officer
California Regional Waster Quality Control Board
Riverside County Dept. of Environmental Health

SSO EVENT COMMUNICATIONS LOG INSTRUCTIONS

Event Communications Log

Background

The Events Communications log is the written chronological chain of events for an SSO incident. The information contained in the log is critical in complying with the required SSO incident reports. Each separate SSO incident shall have a unique communication log sheet with only that information relevant to that SSO incident. This form is not to be used to record multiple SSO incidents. The completed communications log shall be submitted to the Collection Systems Supervisor for inclusion with the SSO report submitted for electronic reporting and database entry. The communication logs that may be used are the SRO report log, the Outlook email contact notification, and the 3-1-1 Call Center Log. Be sure to always use the preexisting email or SRO log to continue disseminating information. Do not create a new email when you receive new information for the same SSO event.

Instructions

The following is the minimum information for dates and times that must be entered into the log:

When the call was received.

When the Collection Systems Section was notified

The designated collection systems crew or standby crew unit number and when they were notified.

When the designated collection systems crew or standby crew responded to the notification.

When the designated collection systems crew or standby crew arrived at the site of the SSO.

For any additional crew(s) and or personnel, when they were notified, when they responded to the notification, when they arrived at the wastewater treatment plant, when they departed to the SSO, and when they arrived at the site of the SSO.

When the collection systems crew or standby crew reported their initial SSO findings to validate or invalidate the SSO.

When the regulatory agencies were notified, including the California Regional Water Quality Control Board, Santa Ana Region and the Riverside County Department of Environmental Health. Each agency must be listed separately.

When an OES number was obtained, if necessary, date, time and the actual OES number.

When the Outlook email notifications were sent, date and time.

When City Risk Management, City Public Utilities or Streets ERT team was notified, if necessary, date and time.

When requests were made for additional personnel, equipment or other resources, date and time. State specifically the items or personnel requested.

When the requested items or personnel were on scene at the SSO, date and time

When SSO updates were issued and to whom the updates were given, date and time.

When the SSO response was concluded and what was done, date and time.

When the SSO was cancelled, date and time.

As stated before, this is not a comprehensive list. The purpose of the Event Communications log is to accurately document **all the chain of events in an SSO incident.**

SSO AGENCY NOTIFICATION INSTRUCTIONS

Background

There are several agencies that require notification when a sewage spill or overflow occurs depending on the circumstances. This notification is required by the City's SSMP. In addition to the reporting requirement, the California Office of Emergency Services (OES) must be called ***immediately*** for all sewage spills 1,000 gallons or more and all spills that may endanger human health or the environment to obtain an OES incident number. OES will then notify the California Department of Fish and Game, the California Regional Water Quality Control Board, and the Riverside County Department of Environmental Health. The City must also ***immediately*** notify the California Regional Water Quality Control Board and the Riverside County Department of Environmental Health for all sewage spills regardless of volume and regardless of whether City or Owner responsibility.*

Instructions

The following list and table provides the agency, phone number and conditions required for notification. (All phone numbers are local, area code 951, unless otherwise indicated).

1. California Regional Water Quality Control Board, Santa Ana Region, 782-4130, fax 781-6288
2. California Office of Emergency Services (OES), 1-800-852-7550
3. California Department of Fish and Game, (909) 484-0167
4. Riverside County Department of Environmental Health, 955-8982 or 955-8980, after hrs. 955-8928
5. California Department of Transportation (CALTRANS),383-6470
6. Riverside County Flood Control, Mark Biloki, 955-1310, cell 288-5254, home 909-877-2716, NPDES Stormwater Permit Group: 955-1200
7. Orange County Water District, (714) 378-3200
8. City Code Compliance, Community Development Dept., 826-5633
9. City Risk Management, Finance Dept., 826-5896
10. Wastewater Collections Supervisor, 351-6195
11. City Public Utilities, Water, 351-6331, after hours, weekends, holidays, 687-0791
12. City Contractor, Stillwell Construction: Office 686-5088, Cell: 453-6913, Home: 780-6474
13. City Risk Management Claims Adjuster: Office 784-0114 x 112, After hours: 1-800-331-2154
14. City Streets Division Environmental Response Team: call Field Services Operations Manager at x6129 or 351-6247, or cell phone 232-7915
15. Streets Division standby crew: cell phone 232-7917.

SSO Condition	Agency, Department or Division														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Any amount to surface waters or drainage channel	X	X	X	X						X					
Over 1,000 gallons	X	X	X	X						X					
Less than 1,000 gallons	X			X						X					
Impacting waters of the State	X	X	X	X						X					
Impacting County storm drain system						X				X					
Impacting State roadway					X					X					
Impacting City storm drain system										X					
Impacting waters of Prado Basin	X	X	X	X			X			X					
Private property damage				X				X	X	X		X	X		
Causing City street flooding										X				X	X
Possible hazardous waste spills														X	
City water Leak											X				

* Emails shall be sent to the Regional Board and the Health Dept. for all SSOs regardless of size. Phone calls shall be made, in addition to emails, for all SSOs over one thousand gallons.

City of Riverside

Sanitary Sewer Overflow (SSO) Posting and Sampling Procedures

Should an SSO event occur with a potential for the wastewater to reach Waters of the State, the following sampling procedures are to be initiated:

Area Assessment and Posting

The spill receiving water area shall be evaluated for threat to public health and the environment. This includes visual evaluation and inspection of impacts and identification of areas where best to sample upstream and downstream of the spill location into a water body.

If threats to human contact are present, the area affected shall be posted with warning signs informing the public. The warnings signs shall stay in place until testing results indicate there is no threat.

Sampling Constitute

Fecal Coliform shall be the sampling constitute for all SSO sample activities.

Sample Locations

For any wastewater spill originating from the sewer collection system or lift station that has a potential for reaching the Santa Ana River, the following sample locations shall be used:

Secondary Tributary Locations

1. Any secondary flowing tributary [that may reach the Santa Ana River] that wastewater flow enters, one (1) up stream sample and one (1) down stream sample shall be collected as early into the spill event as possible.
2. Staff will need to estimate the flow of the tributary receiving water [make your best guess or measure if possible].
3. Staff will need to determine if any down stream tributaries will enter the sampled tributary. If this occurs, one (1) sample will need to be collected up stream of each tributary prior to its entering the tributary contaminated by the spill event.
4. A diagram of all collection points shall be created that identifies all sample points during the spill event.
5. Samples shall be collected for five (5) consecutive days following the spill event for each sample collection point.

Santa Ana River Locations

1. Any time wastewater flow from a spill event enters the Santa Ana River, one (1) up stream sample and one (1) down stream sample shall be collected as early into the spill event as possible.
2. One (1) sample shall be collected from the spill stream prior to its entering the Santa Ana River.
3. A diagram of all collection points shall be created that identifies all sample points during the spill event
4. Samples shall be collected for five (5) consecutive days following the spill incident for each sample collection point.

Sample Labeling

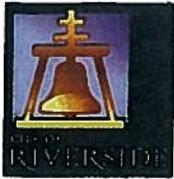
Every grab sample collected shall contain the following information; sample source, sample location, date of collection, and who collected the sample. It is also important to identify ambient weather conditions if those conditions may impact the sampling process [wind or rain as examples]

Sample Collection Procedures

When collecting the fecal Coliform sample it is important to ensure a representative sample is obtained at each required sample point. Care must be taken to ensure the collected sample is not accidentally contaminated during the collection process. The following must be taken into consideration during the sample collection process:

Note: The fecal coliform sample cannot be preserved and requires sample analysis within six hours of the sample collection. Laboratory staff will need to be immediately notified if sample collection is going to be necessary.

1. Protective gloves shall be used when collecting samples.
2. Only laboratory quality coliform sample bottles shall be used for collection of fecal coliform samples.
3. Care shall be taken to ensure a representative sample is collected. At no time should a sample container come in contact with anything other than the water source being sampled.
4. The sample container shall be sealed immediately upon collection of the sample.
5. After sealing of the sample bottle, the sample shall be immediately labeled.
6. Sample is to be transported to the WQCP Laboratory as quickly as possible.



City of Riverside

5950 Acorn St., Riverside, CA 92504

(951) 351-6170, FAX (951) 351-6267

Sanitary Sewer Overflow (SSO) Report

To: Gary Stewart/Najah Amin
California Regional Water Quality Control Board, Santa Ana Region
FAX: (951) 781-6288

Date of Report: 4/29/2009

City Tracking SDS #: 1584

OES Number:

From: Ponciano Navarro
Collection Systems Supervisor

SSO Event ID: 737047

Cert No: 131249

Location: Single Family Residence

Latitude: 33 58 43.9718

4870 Glenwood Dr Riverside, CA 92501

Longitude: -117 23 47.8851

Cross Street: Gregory Rd

Spill Date: 4/28/2009

Spill volume: 10 Gals

Discharge to storm drain

Time Received: 7:22 AM

% recovered: 0

Site posted

Time Responded: 7:22 AM

Gallons to storm drain: 0

Disinfected

Time Arrived: 7:40 AM

Distance to river: 0 Miles

Date Cleared: 4/28/2009

Gallons not recovered: 0 Gals

Notifications

Time Cleared: 7:55 AM

RCDEH Notification: 4/28/2009 8:10:00 AM

CRWQCB Notification: 4/28/2009 8:10:00 AM

Responsibility

City Risk Management Notification:

Owner City

Environmental Compliance Notification:

Code Comp Notification:

Description: The City's portion of a private lateral (from the property line to the main line) had a blockage of paper products resulting in a sewage overflow.

Containment: The spill was contained around the clean out and percolated into the soil.

Correction: The blockage was removed from the main line and service was restored.

Cleanup: Resident cleaned and disinfected area.

Disinfection: By owner
Material



[Menu](#) | [Help](#) | [Log out](#)

Navigate to: _____
 You are logged-in as: kmazur. If this account does not belong to you, please log out.

SSO - General Information [?](#) [SSO Menu](#)

SSO Event ID: 737047 Regional Water Board: Region 8 - Santa Ana
 Spill Location Name: Single Family Residence Agency: Riverside City
 Sanitary Sewer System: Riverside City CS

[General Info](#) | [Spill Related Parties](#) | [Attachments](#)

Certified by Craig A. Justice (Wastewater Systems Manager) on 05/07/2009 at City of Riverside RWQCP
 (Certification ID 131249)

Amend

Note: Questions with "*" are required to be answered to certify this report.

SSO Type: Category 2
 Version: 1

Physical Location Details

* Spill location name:

* Latitude of spill location: deg. min. sec. OR decimal degrees

* Longitude of spill location: deg. min. sec. OR decimal degrees

Street number: Street direction:

Street name: Street type: Suite/Apt:

Cross street:

City: State: Zip:

* County:

Spill location description:
 (Use attachment if location description is more than 2000 characters)

* Regional Water Quality Control Board:

Spill Details

* Spill appearance point:

Spill appearance point explanation:
 (Required if spill appearance point is "Other")

* Did the spill discharge to a drainage channel and/or surface water? [\(View History\)](#)

* Did the spill reach a storm drainpipe? [\(View History\)](#)

* If spill reached to a storm drainpipe, was all of the wastewater fully captured and returned to the sanitary sewer system? [\(View History\)](#)

* Private lateral spill? [\(View History\)](#)

Name of responsible party (for private lateral spill only, if known):

* Final spill destination:
 (Hold Ctrl key to Select Multiple answers from the list)

 [\(View History\)](#)

Explanation of final spill destination:
 (Required if final spill destination is "Other")

* Estimated spill volume: gallons [\(View History\)](#)

Estimated volume of spill recovered: gallons [\(View History\)](#)

Estimated current spill rate (if applicable): gallons per minute

* Estimated spill start date/time: : Date Format: MM/DD/YYYY

* Date and time sanitary sewer system agency was notified of or discovered spill: : Date Format: MM/DD/YYYY

* Estimated Operator arrival date/time: : Date Format: MM/DD/YYYY

* Estimated spill end date/time: : Date Format: MM/DD/YYYY

* Spill cause:

Spill cause explanation:
(Required if spill Cause is "Other")

Where did failure occur?

Explanation of Where Failure Occurred:
(Required if Where Failure Occurred is "Other")

If spill caused by wet weather, choose size of storm:

Diameter of sewer pipe at the point of blockage or spill cause (if applicable): inches

Material of sewer pipe at the point of blockage or spill cause (if applicable):

Estimated age of sewer pipe at the point of blockage or spill cause (if applicable):

Description of terrain surrounding the point of blockage or spill cause (if applicable):

* Spill response activities:
(Hold Ctrl key to Select Multiple answers from the list)

Cleaned-up impacted effects of spill

Contained all or portion of spill

Inspected sewer using CCTV to determine cause

Explanation of spill response activities:
(Required if spill response activities is "Other", use attachment if the text is more than 1700 characters)

Visual inspection results from impacted receiving water:

Overall Spill Description:
(Maximum 3832 characters with spaces)

Notification Details

OES Control Number
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements):

OES Called Date/Time
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements): : Date Format: MM/DD/YYYY

Regional Water Quality Control Board notified date/time: : Date Format: MM/DD/YYYY

Method Notification

Name of Staff Contacted

Phone Number of Staff Contacted

Other Agency Notified:

Was any of this spill report information submitted via fax to the Regional Water Quality Control Board? No

Date and time spill report information was submitted via fax to the Regional Water quality Control Board:
(required if spill report information submitted via fax to Regional Water Board is "Yes") : Date Format: MM/DD/YYYY

Amend

Note: Questions with * are required to be answered to certify this report.

SPILL DATA COVER SHEET

Date: 4/29/09

Spill Date: 4/28/09

SDS # 1584

LOCATION: 4870 Glenwood Drive Ward 1 92501

TOTAL 10 gallons

RECOVERED: 0 %

POSTED: No

TYPE: City Main line

LAST CLEANED: N/A

RIVER: No

TO STORM DRN: No

DISINFECTED: Yes

RSK MGMT: No

CO. ENVIR HLTH: No

ENVRMTL CMP: No

CODE: No

LONGITUDE: - 117 23 47.8851

LATITUDE: 33 58 43.9718

COMMENTS: The Main line was plugged with paper product. The owner was made aware of the situation and is cleaning up around the clean out and disinfecting per Gomez.

A

DATE: 4-28-09 ASSIGNED BY DISPATCHER Crew/Truck: C832-E333

Start Time 7:21 AM PM
 Arrive Time 7:40 AM PM
 * Open Time 7:55 AM PM
 End Time 8:30 AM PM

NAME: C.E. Gomez TAULE
 NAME: C. Alessi
 NAME: B. GRUNLON
 NAME: _____

Location: 4870 GLENWOOD DR Map Page _____

Amount of Domestic Water Included in the spill volume, Used in clean up 0 gallons

Contact Dispatch/Senior Op.	1. Estimated Amount of Spill	<u>10 Gal</u>	<u>C.E.G.T.</u>
	2. Storm Drain/Canals Effected	<u>NA</u>	
	3. Surface Water Effected	<u>NA</u>	
	4. Need Assistance at Site	<u>NA</u>	
	5. Flooding Notify Risk Mgt.	<u>NA</u>	
	6. Need Code Compliance	<u>NA</u>	

B Spill Volume Data:

1. Spill Containment Area: Length 5' Width 1' Depth 1"

2. Manhole with Lid:
 # Pick Holes NA Diameter of Pick Holes NA Height of Water from Holes NIL
 Diameter of Casting NA Casting to Lid Gap NA Height of Water from Gap NA

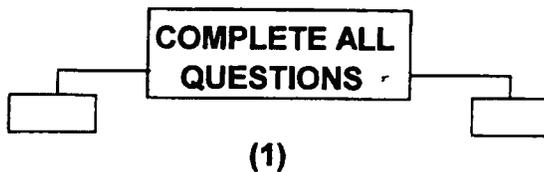
3. Manhole Missing Lid: Diameter of Casting NA Water Height NA

- Containment of Spill: Method of Containment GROUND AROUND CFO, SOAK INTO
- Photos of Containment / Spill Area (1) (2) (3) (M) _____ Initials C.E.G.T.
- Clear Blockage Time Line was Opened (Go to Block A) Initials C.E.G.T.
- Notify Dispatch/Senior Op. Immediately once Main Line is Open Initials NA

C Estimated Amount of Spill Returned to System 0 %

Method of Return: Vactor Truck NA # of Tank Loads NA
 Pump Type NA Run Time _____

Estimated Amount of Spill to Surface Water 0 %
 Disinfected: YES BY OWNER
 Chance of Human Contact: (yes) (no) Bleach Gal: _____

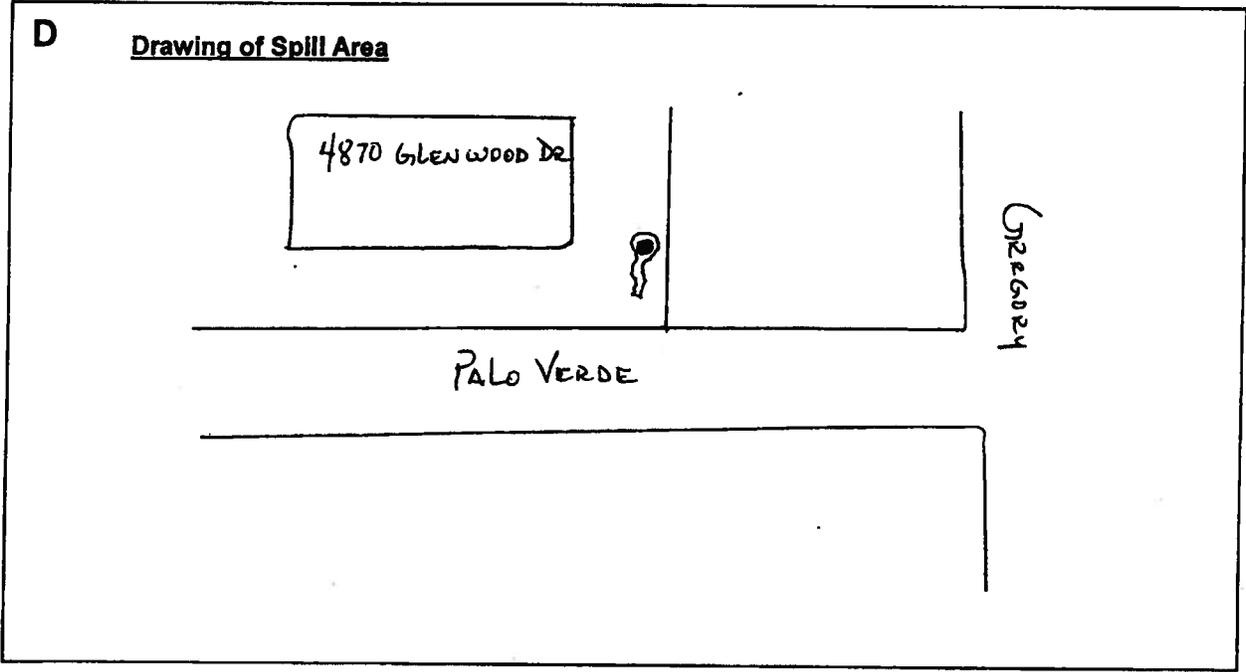


Clean Up Spill Area and Pick Up Containment
 Notify Dispatch/Senior Operator of the Site Status Initials NA
 Clean Effected Storm Drain/Canal System # of Ft cleaned N/A Basins Initials NA
 Detail Description of Spill Cause: PER CREW #111 LOTS OF PAPER

Detail Description of Spill Containment: AROUND CLEAN-OUT SOAK INTO GROUND

Detail Description of Spill Area: AROUND CLEAN OUT

Detail Description of Chance of Human Contact: NONE - SOAK INTO GROUND, BEEN DISINFECTED BY OWNER



Owners Problem give copy of lateral Policy Initials NA
 Check Upstream / Downstream Maholes for Problems Initials C.E.H.T.
 Notify Dispatch/ Sr. Operator when You are Back in Plant Initials NA
 Finish Spill Data Sheet Initials NA

Is Follow Up Needed (yes) (no)
 If Yes, explain: NEEDS TO INVESTIGATE HISTORY RELATE TO SEWER LINE

FLOODING DATA SHEET

- Was Flooding Caused by City Blockage (yes) (no) Initials C.E.G.T.
- Was Flooding Caused by Cleaning of City Lines (yes) (no) Initials C.E.G.T.
- Was Risk Mgmt. Notified (yes) (n/a) Name of Contact _____
E.T.A. _____ Phone # _____
- Was Code Compliance Notified (yes) (n/a) Name of Contact _____
E.T.A. _____ Phone # _____

1. Location _____

Resident Name _____ Phone # _____

Owners Name _____ Phone # _____

Number of Rooms Flooded _____

Description of Flooding Photographs:

- 1. _____ 4. _____
- 2. _____ 5. _____
- 3. _____ 6. _____

2. Location _____

Resident Name _____ Phone # _____

Owners Name _____ Phone # _____

Number of Rooms Flooded _____

Description of Flooding Photographs:

- 1. _____ 4. _____
- 2. _____ 5. _____
- 3. _____ 6. _____

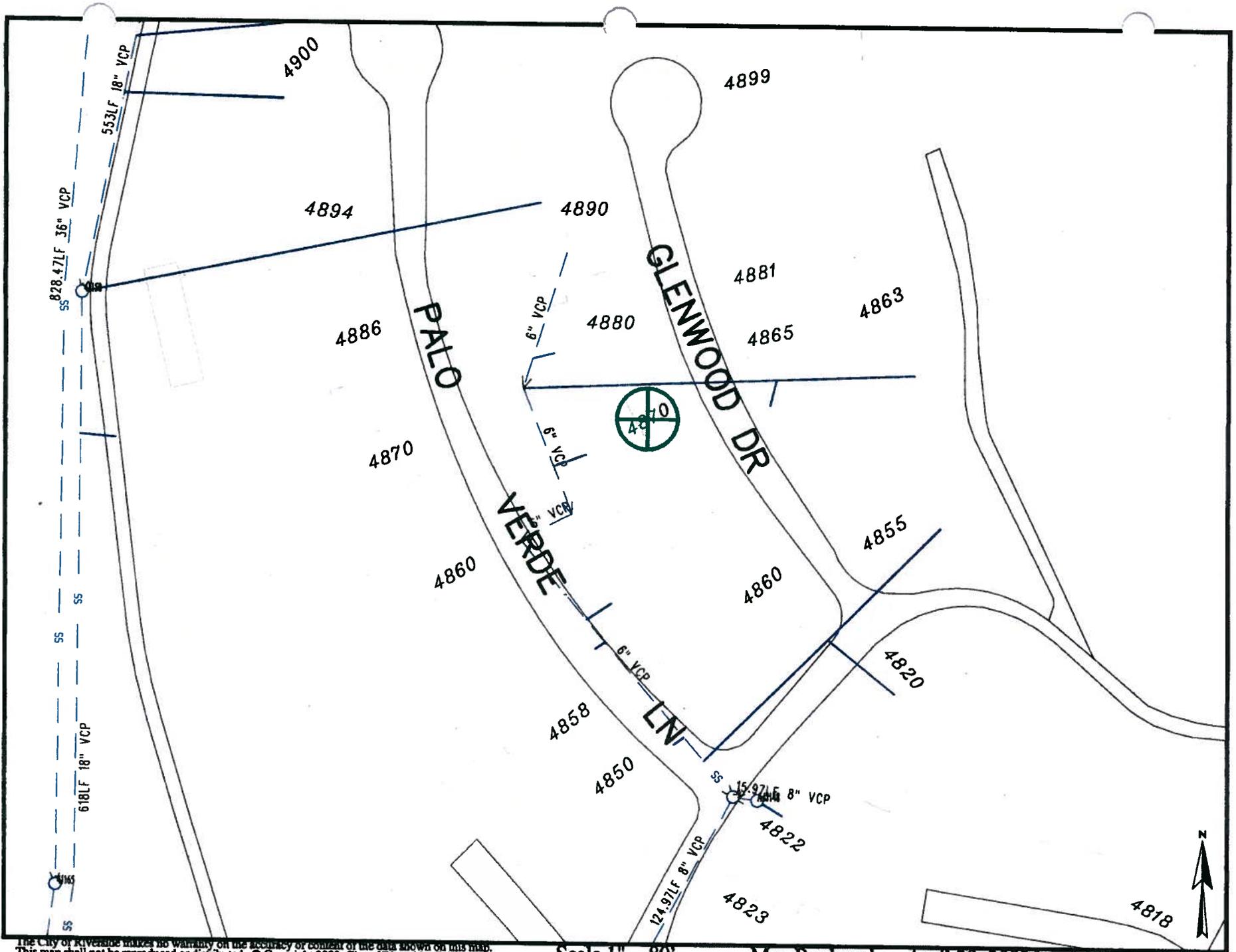
Complete Equipment used VACTOR E333

City Lateral or Private Lateral CITY SEWER LINE Cause of Blockage _____

Televised Lateral no Location of Blockage AT SEWER LINE

Is Follow up needed yes, Specify POSSIBLE TV LATERAL

Comments _____



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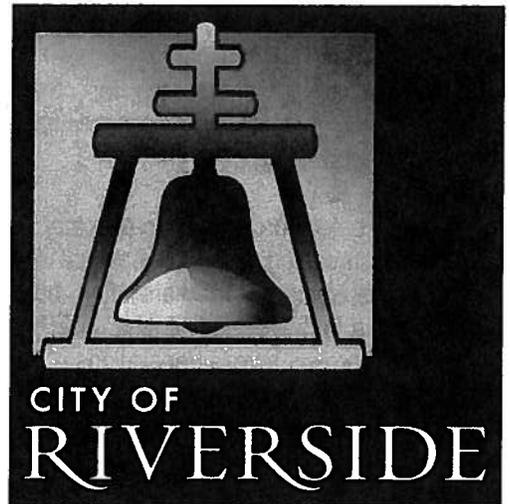
Scale 1" = 80'

Map Produced on April 28, 2009 by alchang



APPENDIX M
Sewer Collection CIP Program

CAPITAL IMPROVEMENT PROGRAM SUMMARY



CAPITAL IMPROVEMENT PROGRAM SUMMARY

Capital Improvement Program Defined

The City's Capital Improvement Program (CIP) is a multi-year planning instrument that drives the evaluation and identification of capital infrastructure projects in need of renovation, repair, and/or construction. Capital projects range from road maintenance or construction to the renovation of municipal buildings, recreation centers, and ball fields, to water main and sewer repair. The CIP relates these projected capital needs to the financial sources that will support their realization and the timeframe in which both the financing and work will take place. Capital improvement programming is the process by which these capital projects are identified, prioritized, and selected, and thus are incorporated into the long-range fiscal and strategic planning of the City. The CIP document is designed to report to the City Council, the public, City staff, and other interested parties the capital management and planning strategies of the City.

Benefits of the Capital Improvement Program

Capital improvement programming links short and long-range general plans with growth, public and private development, and the annual budgetary process. In this way, the CIP attempts to achieve the goals and objectives of the City's residents, a variety of boards and commissions, and the City Council. The CIP carries the following primary benefits:

- Focuses attention on Citywide priorities and citizen expectations
- Provides a concrete implementation framework for the General Plan, Citywide Strategic Plan, and Visioning Report
- Fosters inter-departmental coordination of City infrastructure investments
- Promotes accountability for the long-term planning and investment of public funds for large-scale public purposes

Capital improvement projects typically carry considerable future impact, meaning that they have a life span of at least five years or more. They are often, but not always, financed over a longer period of time, in effect spreading the cost of the project across generations of users. In this sense, the choices made for how a project will be paid for is not only a financial question of fiscal capacity and prudence, but a philosophical issue as well.

Perhaps the greatest benefit of having a Capital Improvement Program is that the process focuses attention on improving or constructing the capital improvements necessary for providing the services and facilities expected by the residents and businesses of the City of Riverside, both today and tomorrow.

The CIP and the City's Annual Operating Budget

In order to reap the benefits of focused attention paid to long-term planning for capital projects, the Capital Improvement Program is for the most part developed separately from the City's Annual Operating Budget. However, the approval of the CIP does not signal appropriation of funds. Rather, the CIP serves as a planning instrument for both budgeting and infrastructure development. Appropriations are made for capital projects when the City Council approves the annual budget for the City.

The Capital Improvement Program document is different from the annual budget as it sets forth a five-year program. The first year's program contains projects that are included in the proposed Annual Operating Budget for the upcoming fiscal year. The remaining four years reflect staff's recommended priorities for the future and are reviewed and revised annually by the City Council.

Development and Adoption of the CIP

The development of the City's Capital Improvement Program occurs over approximately a six month period. The City Manager's Office initiates the CIP process by providing a preparation guide and schedules to the relevant departments. The schedules and project lists are reviewed at the departmental level and updated accordingly.

The development of the City's Capital Improvement Program is to a certain extent decentralized. This means that although the CIP is coordinated through the Finance Division of the City Manager's Office, individual departments are responsible for fully developing their individual Capital Improvement Programs. This is accomplished by identifying needs, performing appropriate fiscal and environmental impact analyses, conducting legislative and environmental scans to ensure that the CIP is current, acquiring input from various stakeholders, and selecting the final projects for consideration. Each

CAPITAL IMPROVEMENT PROGRAM SUMMARY

department then submits its CIP to the City Manager's Office.

The City Manager's Office evaluates the individual Capital Improvement Programs for consistency with the Citywide Strategic Plan, the General Plan, citizen input, and the Visioning Report. The City Manager's Office then finalizes the proposed Capital Improvement Program for preliminary City Council review and conceptual approval. Projects for which conceptual approval has been attained are inserted into the Operating Budget and proposed for adoption in May or June of each year.

- Storm Drain
- Refuse
- Public Parking
- Airport
- Electric
- Water

Amending the Capital Budget

At any Council meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the affirmative votes of at least five members. This vote authorizes the transfer of unused balances appropriated for one purpose to another purpose or to appropriate available funds not included in the budget.

CIP Program Sections

Capital projects are grouped into ten program sections in the Capital Improvement Program. They are:

- Municipal Buildings and Facilities
- Parks, Recreation, and Community Services
- Transportation
- Grade Separations
- Sewer

Municipal Buildings and Facilities

The Municipal Buildings and Facilities program includes expenditures for Departments that are not described in other sections of the CIP. Such projects include Police and Fire stations, Libraries, the Museum, the Municipal Auditorium, and the Convention Center. Projects of a recurring nature such as parking lot repaving and facility painting are also included in the Municipal Buildings and Facilities CIP, even for Departments described elsewhere in this document.

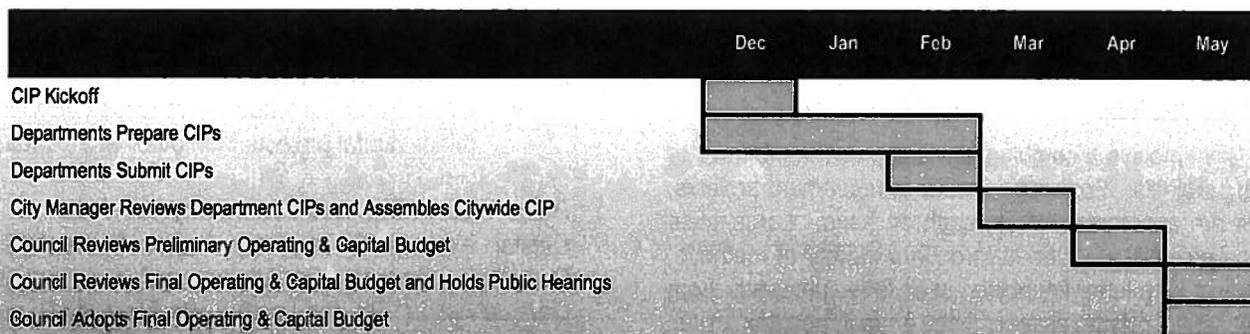
Parks, Recreation, and Community Services

The Parks, Recreation, and Community Services program includes projects to construct, maintain, and upgrade parks, game courts and fields, medians, community centers, and recreation buildings.

Transportation

The Transportation program includes projects to extend and widen streets, street resurfacing, construction of curbs, gutters, center medians, bikeways & pedestrian facilities, right-of-way acquisition, and traffic signal improvements.

CIP DEVELOPMENT PROCESS TIMELINE



CAPITAL IMPROVEMENT PROGRAM SUMMARY

Grade Separations

The Grade Separations program includes projects that grade separate the intersections of City streets with the BNSF and Union Pacific railroads as well as other, related rail projects.

Sewer

The Sewer program includes projects to increase system capacity for new users, replace aging or obsolete systems, and meet new regulatory requirements.

Storm Drain

The Storm Drain program includes projects that either eliminate a nuisance flow or provide additional flood protection.

Refuse

The Refuse program includes projects to meet the State mandate that the closed Tequesquite landfill not pollute the nearby Santa Ana River and adjacent groundwater.

Public Parking

The Public Parking program includes projects to construct new parking facilities and to improve existing facilities.

Airport

The Airport program includes projects to maintain the Airport, to improve safety, and to comply with Federal Aviation Administration (FAA) standards and regulations.

Electric

The Electric program includes projects to construct additions to the City's electric infrastructure and to maintain existing facilities.

Water

The Water program includes projects to construct additions to the City's water infrastructure and to maintain existing facilities.

Funding Sources

The City employs a combination of approaches to fund its capital projects. For many smaller improvement projects, funds are appropriated from cash on hand. Large-scale capital projects are funded through a variety of methods, including long-term financing, user fees, proceeds from bond issues, grants, assessments, impact fees, tax levies, certificates of participation (COPs), and reserve balances.

Since the City's various Departments are budgeted within numerous Funds, each potentially with multiple revenue streams, the funding sources are greatly varied and the process decentralized.

The Funds in which capital improvements are budgeted and the various funding sources that provide revenue to these Funds are described below by CIP program section. General Fund revenue sources are not described, due to the complex nature of sources providing revenue to the General Fund. The General Fund's major support comes from sales tax, property tax, fees for services rendered, the utility users tax, and transfers from the Electric and Water Funds. General Fund projects are budgeted on an availability of funds basis and funded from annual revenues.

In addition to the typical projects outlined in the CIP, this year's CIP includes numerous projects funded through the Riverside Renaissance Initiative. These projects will be funded by a diverse set of revenues including Certificates of Participation, land sale proceeds, and Redevelopment Agency funds.

Municipal Buildings and Facilities

Projects included in the Municipal Buildings and Facilities CIP are funded primarily from the General Fund (101). In certain cases, projects are funded from other Funds when a project impacts a non-General Fund Department (such as Public Utilities). In all cases other than certain Riverside Renaissance Projects, these projects are funded from annual revenues. Major revenue sources include:

- General Fund Revenues – General Fund revenues allocated to capital projects
- Riverside Renaissance Funding – proceeds from the issuance of Certificates of Participation by the City, the sale of Tax Allocation Bonds by the Redevelopment Agency, and/or the sale of surplus City property
- Other Fund Revenues – revenues allocated to minor capital projects from other City Funds

Parks, Recreation, and Community Services

Capital expenditures for the Parks, Recreation, and Community Services Department are budgeted in the General Fund (101), the Local Parks Fund (411), and the Regional Parks Fund (413). Neighborhood park

CAPITAL IMPROVEMENT PROGRAM SUMMARY

improvements are funded through the Local Parks Fund, while regional park improvements are funded through the Regional Parks Fund. Major revenue sources include:

- General Fund Revenues – General Fund revenues allocated to capital projects
- Riverside Renaissance Funding – proceeds from the issuance of Certificates of Participation by the City, the sale of Tax Allocation Bonds by the Redevelopment Agency, and/or the sale of surplus City property
- Development Fees – portions of fees charged when property is developed that are dedicated to the funding of local and regional parks and recreation facilities

Local Park Fee and Regional Park Fee revenues are dependent on development. Therefore, the CIP only shows projects as funded for which fee revenues are already available or that are annual funding obligations. As funding becomes available, the Parks, Recreation, and Community Services Department requests that the City Council appropriate funds for projects contained in the Unfunded Capital Projects list. Projects are not programmed based on anticipated revenues.

Transportation & Grade Separations

Capital expenditures for the construction and improvement of transportation infrastructure are budgeted in the General Fund (101), the Special Gas Tax Fund (230), the Capital Outlay Fund (430), the Measure A Fund (432), the Transportation Development Impact Fees Fund (433), and the Transportation Uniform Mitigation Fees Fund (434). The allocation of revenues to the 230, 430, 432, 433, and 434 Funds is complex and is dictated by various regulations that are not important for the purposes of the CIP. In the detailed tables found in the Transportation program section of this document, these five funds are shown commingled, though in actuality specific revenues described below will be allocated to specific Funds. Revenue sources include:

- Riverside Renaissance Funding – proceeds from the issuance of Certificates of Participation by the City, the sale of Tax Allocation Bonds by the Redevelopment Agency, and/or the sale of surplus City property

- Signal Mitigation Fees – a City funding source generated from portions of fees charged when property is developed that are dedicated to funding new and upgraded traffic signals
- Transportation Impact Fees – a City funding source generated from portions of fees charged when property is developed that are dedicated to funding local transportation capacity improvements
- Measure A Sales Tax Revenue – a City and County funding source generated from Riverside County's half-cent sales tax dedicated to transportation projects that is allocated directly to the City of Riverside as well as through the Riverside County Transportation Commission
- Transportation Uniform Mitigation Fees (TUMF) – a regional funding source generated from portions of fees charged when property is developed that are dedicated to funding regional transportation capacity improvements
- State Gas Tax Revenue – revenue generated by the State's tax on gasoline sales that is dedicated to local transportation capacity improvements
- State Proposition 42 Revenue – revenue generated by additional gas tax revenues allocated to transportation projects by voter initiative
- State Proposition 1B Revenue – revenue generated by the sale of bonds authorized by voter initiative for transportation improvements
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program – a Federal funding program authorized by the Intermodal Surface Transportation Efficiency Act (ISTEA) that provides grants primarily for traffic signal projects, transportation demand management projects, and transit projects
- Surface Transportation Program (STP) – a Federal funding program authorized by ISTEA that includes two funding mechanisms – one is a population formula program where local agencies receive funds for transportation improvement projects according to their respective populations and the other provides grants for projects that reduce traffic congestion, improve transportation circulation, and maintain transportation infrastructure

CAPITAL IMPROVEMENT PROGRAM SUMMARY

- Surface Transportation Program Local (STPL) – STPL is similar to STP, except that funds are dedicated to local street improvements
- Demonstration (DEMO) Funds – allocations of STP funds for specific projects earmarked by congress
- Congressional Earmarks – project-specific appropriations made by congress to fund transportation capacity improvements
- California Public Utilities Commission Grade Separation Program – a funding program administered by the California Public Utilities Commission that provides funding for railroad grade separations
- Railroad Funds – private funding from the Union Pacific and BNSF railroads to assist with the construction of railroad grade separations

Sewer

Capital expenditures for the construction and improvement of the City's sewer system are budgeted in the Sewer Fund (550), which is an enterprise fund. In addition to capital expenditures, operational expenditures related to the City's sewer system are budgeted in the Sewer Fund. Revenue sources include:

- Sewer Connection Fees – fees charged when property is developed that are dedicated to the funding of sewer infrastructure projects
- Service Charges – funds transferred from the Sewer Service Fund that are generated from service charges to users of the City's sewer system
- Community Services District (CSD) Payments – payments from Community Services Districts for which the City provides sewage treatment services
- State Revolving Loans – low interest loans provided by the State to fund capital improvements
- Bond Proceeds – proceeds from the sale of revenue bonds

Storm Drain

Capital expenditures for the construction and improvement of storm drains are budgeted in the Storm Drain Fund (410). Revenue sources include:

- Storm Drain Fees – fees charged when property is developed that are dedicated to the funding of storm drain infrastructure projects

Refuse

Expenditures for the maintenance of the City's closed landfill are budgeted in the Refuse Collection Fund (540), which is an enterprise fund. No refuse-related capital expenditures are planned. Revenue sources for maintenance of the landfill include:

- Landfill Capping Surcharge – fee assessed to users of City commercial refuse disposal services

Public Parking

Capital expenditures for the City's Public Parking facilities are budgeted in the Public Parking Fund (570), which is an enterprise fund. Revenue sources include:

- Rent – revenue from rented facilities
- Garage, Lot and Meter Fees – fees charged for parking
- Parking Fines – fines assessed for parking violations
- Bond Proceeds – proceeds from the sale of revenue bonds

Airport

Capital expenditures for the Riverside Municipal Airport are budgeted in the Airport Fund (530), which is an enterprise fund. The Federal Aviation Administration (FAA) will fund up to 95 percent of eligible projects. And, under the California Department of Transportation (CALTRANS) Division of Aeronautics' grant program, the City can apply for 2.5 percent matching funds for FAA-approved projects. Revenue sources include:

- Rent Revenues – revenue from rented facilities
- Landing & Tie Down Fees – fees assessed on aircraft operating at and based at the Airport
- Fuel Flowage Fees – fees charges on fuel purchased at the Airport
- Non-Commercial Aircraft Tax – funds generated from taxes imposed on non-commercial aircraft
- CALTRANS Grants – grant proceeds received from the Division of Aeronautics
- Airport Improvement Program (AIP) Grants – grant proceeds received from the FAA

CAPITAL IMPROVEMENT PROGRAM SUMMARY

Electric

Capital expenditures for the City's Electric Utility are budgeted in the Electric Fund (510), which is an enterprise fund. Revenue sources include:

- Electric Rates – revenue from rates
- Contributions In Aid of Construction – funding contributions by private parties
- Bond Proceeds – proceeds from the sale of revenue bonds

Water

Capital expenditures for the City's Water Utility are budgeted in the Water Fund (520), which is an enterprise fund. Revenue sources include:

- Water Rates – revenue from rates
- Contributions In Aid of Construction – funding contributions by private parties
- Bond Proceeds – proceeds from the sale of revenue bonds

Overview of the CIP

The five-year Capital Improvement Program amounts to \$1,294,606,379, which includes years three through five of the Riverside Renaissance Initiative. The Riverside Renaissance Initiative also includes capital projects funded in fiscal years 2006/07 and 2007/08. For FY 2008/09, capital improvement projects totaling \$328,624,637 will be undertaken to expand and maintain the infrastructure within the City of Riverside. Descriptions of each project, as well as the related revenues and expenditures, can be found in the individual program sections of the CIP. Summary information can be found in the tables on the following pages.

Unfunded Capital Projects

In addition to the \$1.29 billion five-year funded CIP, unfunded capital project needs currently total \$378.6 million, including the \$33.0 million unfunded component of the Renaissance Initiative. The non-Renaissance unfunded projects are primarily included in the Water, Transportation, and Parks, Recreation, and Community Services CIP Sections. In the case of the Parks, Recreation, and Community Services CIP, the majority of the unfunded projects will be funded in the latter four years of the CIP. The Parks, Recreation, and Community Services Department does not show projects as funded until funding is in place. As a result, there are always projects listed on the unfunded project list that are anticipated to be funded before the conclusion of the five-year period covered by the CIP.

Transportation expenditures in the funded CIP are considerable. However, the current needs still outweigh available resources and \$80.4 million is still unfunded. The 12 unfunded or partially unfunded transportation projects include one highway interchange and three significant street widening projects. In the case of many of these projects, a sizable portion of the projects' cost is anticipated to be funded with non-City funds. Each unfunded project is described in the individual program sections of the CIP. Summary information can be found in the tables on the following pages.

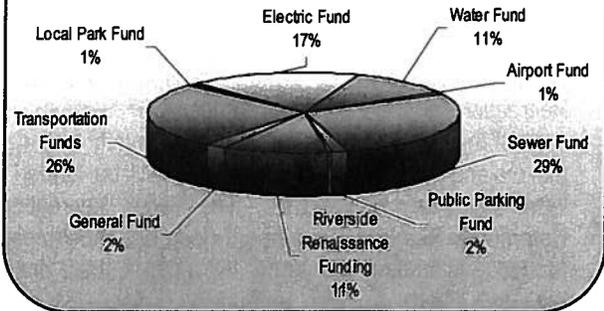
Lastly, the Water CIP's unfunded component is primarily related to long-term plans to construct a recycled/non-potable water system. As the funding plan for these and the other unfunded projects becomes more concrete they will be moved to the funded CIP.

Summary Tables

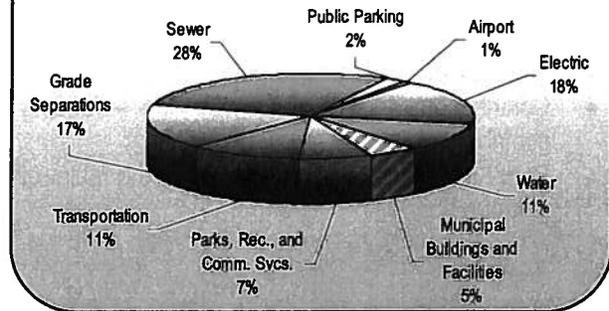
The following tables provide a high-level overview of the citywide five-year Capital Improvement Program.

CAPITAL IMPROVEMENT PROGRAM SUMMARY

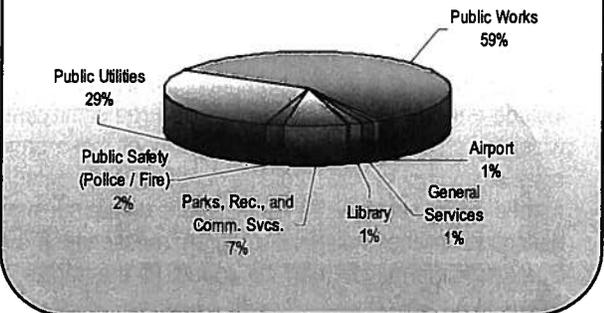
SUMMARY BY FUND



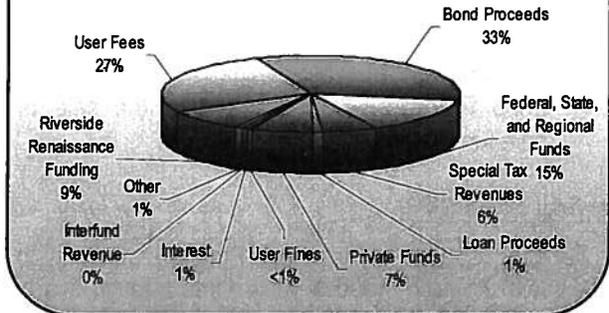
SUMMARY BY PROGRAM SECTION



SUMMARY BY DEPARTMENT



REVENUE BY SOURCE



REVENUE BY REVENUE SOURCE

Revenue Source	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Riverside Renaissance Funding	100,400,619	11,450,000	30,000,000	-	-	141,850,619
User Fees	67,908,396	77,176,602	79,790,887	87,899,889	93,813,991	406,589,766
Bond Proceeds	277,867,000	72,644,500	92,473,000	39,847,000	26,969,000	509,800,500
Federal, State, and Regional Funds	60,911,000	48,565,000	43,807,500	80,942,288	-	234,225,788
Special Tax Revenues	18,914,085	16,393,273	17,003,303	17,683,373	17,806,482	87,800,515
Loan Proceeds	15,000,000	2,250,000	-	-	-	17,250,000
Private Funds	6,350,000	61,400,000	18,300,000	17,100,000	-	103,150,000
User Fines	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	6,500,000
Interest	589,000	4,671,450	1,227,247	1,739,379	1,372,531	9,599,606
Interfund Revenue	149,000	149,000	149,000	149,000	149,000	745,000
Other (1)	820,000	4,151,000	2,600,000	2,360,000	2,360,000	12,291,000
Total	550,209,100	300,150,825	286,650,937	249,020,929	143,771,004	1,529,802,795
Less: Amounts Not Available for Current CIP (2)						(235,196,416)
Adjusted Total						1,294,606,379

- (1) Includes any revenues anticipated from the General Fund, Airport Fund, and Central Garage Fund for Routine Municipal Buildings and Facilities projects.
- (2) Includes funds estimated to be on hand at the end of the five-year CIP for future projects, certain enterprise funds operating expenditures, debt service for previous capital projects, and other minor items.

CAPITAL IMPROVEMENT PROGRAM SUMMARY

SUMMARY BY FUND

Fund	Fund Description	2008/09	2009/10	2010/11	2011/12	2012/13	Total
101	General Fund	1,198,307	18,654,229	3,342,303	3,473,534	3,584,887	30,253,260
Various	Transportation Funds	78,419,500	67,485,000	86,930,500	93,720,000	8,520,000	335,075,000
410	Storm Drain Fund	1,150,000	100,000	100,000	100,000	95,000	1,545,000
411	Local Park Fund	1,100,000	4,100,000	6,050,000	600,000	600,000	12,450,000
413	Regional Park Fund	-	4,950,000	-	-	-	4,950,000
510	Electric Fund	34,909,000	109,368,500	27,165,000	29,507,000	25,428,000	226,377,500
520	Water Fund	34,133,000	38,285,000	25,448,000	25,714,000	17,152,000	140,732,000
530	Airport Fund	3,784,211	2,255,263	2,218,263	2,500,263	25,000	10,783,000
540	Refuse Collection Fund	50,000	50,000	50,000	50,000	50,000	250,000
550	Sewer Fund	72,990,000	15,775,000	249,425,000	13,225,000	15,825,000	367,240,000
570	Public Parking Fund	450,000	-	22,000,000	-	-	22,450,000
650	Central Garage Fund	40,000	410,000	200,000	-	-	650,000
	Riverside Renaissance Funding	100,400,619	11,450,000	30,000,000	-	-	141,850,619
	Total	328,624,637	272,882,992	452,929,066	168,889,797	71,279,887	1,294,606,379

SUMMARY BY PROGRAM SECTION

CIP Program Section	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Municipal Buildings and Facilities	38,168,029	10,351,000	12,100,000	2,360,000	2,360,000	65,339,029
Parks, Recreation, and Community Services	35,803,307	27,249,229	27,562,303	1,713,534	1,824,887	94,153,260
Transportation	58,775,990	21,785,000	43,630,500	9,420,000	8,520,000	142,131,490
Grade Separations	47,061,100	47,700,000	43,300,000	84,300,000	-	222,361,100
Sewer	72,990,000	15,775,000	249,425,000	13,225,000	15,825,000	367,240,000
Storm Drain	1,150,000	100,000	100,000	100,000	95,000	1,545,000
Refuse	50,000	50,000	50,000	50,000	50,000	250,000
Public Parking	450,000	-	22,000,000	-	-	22,450,000
Airport	3,784,211	2,219,263	2,148,263	2,500,263	25,000	10,677,000
Electric	36,259,000	109,368,500	27,165,000	29,507,000	25,428,000	227,727,500
Water	34,133,000	38,285,000	25,448,000	25,714,000	17,152,000	140,732,000
Total	328,624,637	272,882,992	452,929,066	168,889,797	71,279,887	1,294,606,379

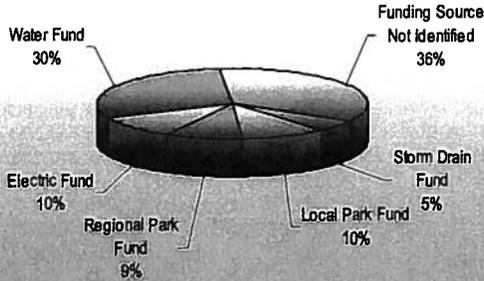
SUMMARY BY DEPARTMENT

Department	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Airport	3,784,211	2,255,263	2,218,263	2,500,263	25,000	10,783,000
General Services (1)	2,120,000	9,515,000	1,730,000	1,560,000	1,560,000	16,485,000
Library	17,959,970	250,000	250,000	250,000	250,000	18,959,970
Museum	-	50,000	5,050,000	50,000	50,000	5,200,000
Parks, Recreation, and Community Services	35,803,307	27,249,229	27,562,303	1,713,534	1,824,887	94,153,260
Public Safety (Police / Fire)	18,088,059	500,000	5,000,000	500,000	500,000	24,588,059
Public Utilities	70,392,000	147,653,500	52,613,000	55,221,000	42,580,000	368,459,500
Public Works	180,477,090	85,410,000	358,505,500	107,095,000	24,490,000	755,977,590
Total	328,624,637	272,882,992	452,929,066	168,889,797	71,279,887	1,294,606,379

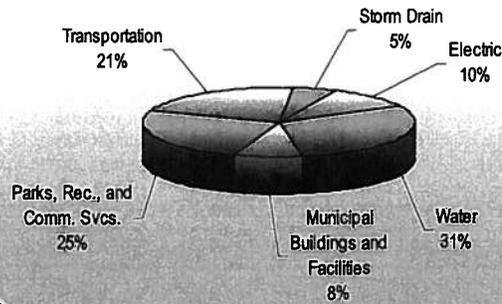
(1) Includes Downtown Riverside Renaissance Projects as well as recurring project budgets that may ultimately be charged to other Departments.

CAPITAL IMPROVEMENT PROGRAM SUMMARY

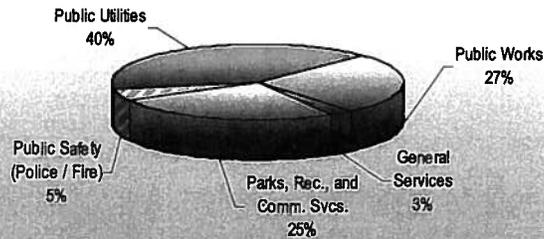
UNFUNDED SUMMARY BY FUND



UNFUNDED SUMMARY BY PROGRAM SECT.



UNFUNDED SUMMARY BY DEPARTMENT



CAPITAL IMPROVEMENT PROGRAM SUMMARY

UNFUNDED SUMMARY BY FUND

Fund	Fund Description	Total
410	Storm Drain Fund	20,000,000
411	Local Park Fund	39,325,000
413	Regional Park Fund	34,200,000
510	Electric Fund	38,832,689
520	Water Fund	113,700,000
	Funding Source Not Identified	132,590,380
Total		378,648,069

UNFUNDED SUMMARY BY PROGRAM SECTION

CIP Program Section	Total
Municipal Buildings and Facilities	30,000,000
Parks, Recreation, and Community Services	95,725,000
Transportation	80,390,380
Grade Separations	-
Sewer	-
Storm Drain	20,000,000
Refuse	-
Public Parking	-
Airport	-
Electric	38,832,689
Water	113,700,000
Total	378,648,069

UNFUNDED SUMMARY BY DEPARTMENT

Department	Total
Airport	-
General Services	10,000,000
Library	-
Museum	-
Parks, Recreation, and Community Services	95,725,000
Public Safety (Police / Fire)	20,000,000
Public Utilities	152,532,689
Public Works	100,390,380
Total	378,648,069

CAPITAL IMPROVEMENT PROGRAM SUMMARY

Budgeted Projects and Budgetary Impacts

The table below and on the facing page summarizes the programmed capital projects for fiscal year 2008/09. The majority of these projects are budgeted in the Annual Budget document. However, in some cases, certain projects may not be budgeted in the Annual Budget. These projects are either still sufficiently preliminary in nature not to warrant inclusion in the budget or are dependent on third party funding. Such projects will be brought before the City Council to request supplemental appropriations later in the fiscal year.

The table also outlines the anticipated project-specific recurring budgetary impacts of each proposed capital project for fiscal year 2008/09. The recurring budgetary impact of a capital project is the anticipated project-related

increase to the City's budget in the first fiscal year following completion of the project. These expenditures include additional personnel, operations and maintenance expenditures, recurring capital outlays, and capital debt service.

The potential budgetary impact of any proposed capital project is carefully considered as part of the capital improvement program review process. Many projects are related to maintenance for and replacements of existing City facilities and infrastructure, such as street and utility improvements or facility repairs and enhancement. These types of projects do not create significant budgetary impacts. Many of the smaller budgeted projects are components of cyclical replacement programs and also do not create significant budgetary impacts.

CAPITAL PROJECT BUDGETARY IMPACTS

Project Description	Project Cost	Annual Estimated Budgetary Impact				Total
		Personnel Services	Non-Personnel	Capital Outlay	Debt Service	
Municipal Buildings and Facilities						
Municipal Auditorium Seismic Retrofit/Rehabilitation	300,000	-	-	-	-	-
Corporation Yard Improvements - Fuel Island	40,000	-	-	-	-	-
Corporation Yard Renovation	1,000,000	-	-	-	-	-
Generator Switchgear	100,000	-	-	-	-	-
Arianza Cybrary	6,500,000	-	35,000	-	-	35,000
Downtown Library	11,459,970	-	-	-	-	-
Fire Admin/Fire Station #1	12,438,059	-	-	-	-	-
Fire Station #3 Rehabilitation	1,150,000	-	-	-	-	-
Fire Station #4 Replacement	4,500,000	-	-	-	-	-
Miscellaneous Improvements at City Facilities	500,000	-	-	-	-	-
Miscellaneous Projects	180,000	-	-	-	-	-
SubTotal Municipal Buildings and Facilities	38,168,029	-	35,000	-	-	35,000
Parks, Recreation, and Community Services						
Ab Brown Soccer Expansion	2,000,000	-	235,600	-	-	235,600
Aquatic Centers	6,000,000	32,739	219,600	-	-	252,339
Arlington Childcare Center	1,500,000	49,420	100,000	-	-	149,420
Arlington Heights Sports Park	10,400,000	140,000	303,800	-	-	443,800
Bobby Bonds Skate Park	785,000	16,473	10,000	-	-	26,473
Hunt Park Gymnasium	4,000,000	42,300	47,800	-	-	90,100
Hunter Park Adult Sports Complex	8,000,000	49,420	129,000	-	-	178,420
Mountain View Playground	500,000	-	10,000	-	-	10,000
Trails	500,000	-	-	-	-	-
Rutland/Park Renovation	1,100,000	-	-	-	-	-
Miscellaneous Projects	1,018,307	-	-	-	-	-
SubTotal Parks, Recreation, and Community Services	35,803,307	330,352	1,055,800	-	-	1,386,152
Airport						
Hangar Painting - Brown Hangars	50,000	-	-	-	-	-
North Side Taxiway Project (Grading) - Phase 4	3,684,211	-	-	-	-	-
Parlite Hangar Building, Parcel 6.1(d) Roof	25,000	-	-	-	-	-
Annual Pavement Preservation	25,000	-	-	-	-	-
SubTotal Airport	3,784,211	-	-	-	-	-
Electric						
Miscellaneous Projects	36,259,000	-	-	-	-	-
SubTotal Electric	36,259,000	-	-	-	-	-
Water						
Miscellaneous Projects	34,133,000	-	-	-	-	-
SubTotal Water	34,133,000	-	-	-	-	-

CAPITAL IMPROVEMENT PROGRAM SUMMARY

CAPITAL PROJECT BUDGETARY IMPACTS (CONTINUED)

Project Description	Project Cost	Annual Estimated Budgetary Impact				Total
		Personnel Services	Non-Personnel	Capital Outlay	Debt Service	
Transportation						
Alessandro Medians - Sycamore to Vista Grande (1)	2,000,000	-	24,710	-	-	24,710
Canyon Crest Widening	400,000	-	-	-	-	-
Central / Magnolia Intersection Beautification	1,000,000	-	-	-	-	-
Collett Avenue Extension	345,000	-	-	-	-	-
Eastridge Medians (1)	300,000	-	2,625	-	-	2,625
Magnolia Medians - Tyler to Buchanan	7,000,000	-	45,500	-	-	45,500
Main Street to Carter Street Improvements	501,000	-	-	-	-	-
Parkways and Medians	2,925,000	-	-	-	-	-
Sidewalks, Lighting	2,425,000	-	-	-	-	-
Sycamore Canyon, Cottonwood to Alessandro	300,000	-	-	-	-	-
Tyler Street Widening - Wells to Hole	4,600,000	-	-	-	-	-
University Avenue - Settlement	300,000	-	-	-	-	-
Van Buren Widening, Indiana to South City Limit	764,500	-	-	-	-	-
Van Buren Widening, Santa Ana River to Jackson	5,955,000	-	-	-	-	-
Van Buren/SR 91 Interchange	20,565,000	-	-	-	-	-
Victoria Avenue Improvements, Phase II	1,410,490	-	-	-	-	-
Miscellaneous Street Projects	6,400,000	-	-	-	-	-
Traffic Management Center (1)	300,000	-	42,600	-	-	42,600
Miscellaneous Traffic Signal Projects	1,285,000	-	-	-	-	-
SubTotal Transportation	58,775,990	-	115,435	-	-	115,435
Grade Separations						
BNSF Quiet Zone	7,211,100	-	-	-	-	-
Columbia Avenue Grade Separation	17,150,000	-	-	-	-	-
Magnolia/UPRR Grade Separation	22,000,000	-	-	-	-	-
Riverside Avenue/UPRR Grade Separation	350,000	-	-	-	-	-
Streeter Avenue/UPRR Grade Separation	350,000	-	-	-	-	-
SubTotal Grade Separations	47,061,100	-	-	-	-	-
Sewer						
Grease to Gas Energy System	250,000	-	-	-	-	-
Hidden Valley Wetlands Improvements	250,000	-	-	-	-	-
Recycled Water Upgrade	3,150,000	-	-	-	-	-
Solids Handling Upgrade	1,560,000	-	-	-	-	-
Water Quality Control Plant Expansion	25,000,000	-	-	-	-	-
1.2 Megawatt Fuel Cell Installation	2,500,000	-	-	-	-	-
Collett Ave from La Sierra Ave to 160' S. of Drexel Ave	250,000	-	-	-	-	-
Fillmore St from N. of SR91 to 300' S. of Magnolia Ave	200,000	-	-	-	-	-
Golden Ave from N. of Rancho del Oro to Magnolia Ave	400,000	-	-	-	-	-
Madison St between Indiana Ave and Evans St	1,000,000	-	-	-	-	-
Magnolia Ave between Golden Ave and Fillmore St	400,000	-	-	-	-	-
Miscellaneous Projects	4,775,000	-	-	-	-	-
Pierce Street Sewer Pump Station Upgrade	2,175,000	-	-	-	-	-
Santa Ana River Sewer Trunk Replacement	15,500,000	-	-	-	-	-
Tequesquite Arroyo Trunk Sewer Replacement	4,260,000	-	-	-	-	-
University Avenue Sewer - Chicago to Canyon Crest	1,320,000	-	-	-	-	-
Via Vista Drive Trunk Sewer - Alessandro to Berry	10,000,000	-	-	-	-	-
SubTotal Sewer	72,990,000	-	-	-	-	-
Storm Drain						
Cole/Lurin Storm Drain	1,000,000	-	-	-	-	-
Miscellaneous Storm Drain Construction	150,000	-	-	-	-	-
SubTotal Storm Drain	1,150,000	-	-	-	-	-
Refuse						
Landfill Equipment Upgrade/Replacement	50,000	-	-	-	-	-
SubTotal Refuse	50,000	-	-	-	-	-
Public Parking						
Revenue Control Equipment (North of 10th)	450,000	-	-	-	-	-
SubTotal Public Parking	450,000	-	-	-	-	-
Total	328,624,637	330,352	1,206,235	-	-	1,536,587

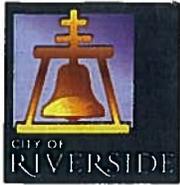
(1) The non-personnel component of the budgetary impact for these projects has been included in the fiscal year 2008/09 Annual Budget.

NOTE: Debt Service for the 2008 Certificates of Participation and 2008 Electric and Water Utility Revenue Bonds are not included in this analysis because the debt service expenditures are fully offset by new revenue streams. Therefore, the impact on the budget is a net of \$0.00.

NOTE: Personnel Services in this table includes minor liability insurance allocations assigned to each position that would actually be budgeted in a non-personnel account. Those amounts are included in the personnel services column to provide a better understanding of whether increased costs are personnel-related.

APPENDIX N

SSO Report



City of Riverside

5950 Acorn St., Riverside, CA 92504

(951) 351-6170, FAX (951) 351-6267

Sanitary Sewer Overflow (SSO) Report

To: Gary Stewart/Najah Amin
California Regional Water Quality Control Board, Santa Ana Region
FAX: (951) 781-6288

Date of Report: 4/29/2009

City Tracking SDS #: 1584

OES Number:

From: Ponciano Navarro
Collection Systems Supervisor

SSO Event ID: 737047

Cert No: 131249

Location: Single Family Residence

4870 Glenwood Dr Riverside, CA 92501

Latitude: 33 58 43.9718

Longitude: -117 23 47.8851

Cross Street: Gregory Rd

Spill Date: 4/28/2009

Spill volume: 10 Gals

Discharge to storm drain

Time Received: 7:22 AM

% recovered: 0

Site posted

Time Responded: 7:22 AM

Gallons to storm drain: 0

Disinfected

Time Arrived: 7:40 AM

Distance to river: 0 Miles

Date Cleared: 4/28/2009

Gallons not recovered: 0 Gals

Notifications

Time Cleared: 7:55 AM

RCDEH Notification: 4/28/2009 8:10:00 AM

CRWQCB Notification: 4/28/2009 8:10:00 AM

Responsibility

Owner City

City Risk Management Notification:

Environmental Compliance Notification:

Code Comp Notification:

Description: The City's portion of a private lateral (from the property line to the main line) had a blockage of paper products resulting in a sewage overflow.

Containment: The spill was contained around the clean out and percolated into the soil.

Correction: The blockage was removed from the main line and service was restored.

Cleanup: Resident cleaned and disinfected area.

Disinfection: By owner
Material



[Menu](#) | [Help](#) | [Log out](#)

Navigate to:

You are logged-in as: kmazur. If this account does not belong to you, please log out.

SSO - General Information [?](#) [SSO Menu](#)

SSO Event ID: 737047
 Spill Location Name: Single Family Residence
 Regional Water Board: Region 8 - Santa Ana
 Agency: Riverside City
 Sanitary Sewer System: Riverside City CS

[General Info](#) | [Spill Related Parties](#) | [Attachments](#)

Certified by Craig A. Justice (Wastewater Systems Manager) on 05/07/2009 at City of Riverside RWQCP (Certification ID 131249)

Amend

Note: Questions with "*" are required to be answered to certify this report.

SSO Type: Category 2
 Version: 1

Physical Location Details

* Spill location name:

* Latitude of spill location: deg. min. sec. OR decimal degrees

* Longitude of spill location: deg. min. sec. OR decimal degrees

Street number: Street direction:

Street name: Street type: Suites/Apt:

Cross street:

City: State: Zip:

* County:

Spill location description:
 (Use attachment if location description is more than 2000 characters)

* Regional Water Quality Control Board:

Spill Details

* Spill appearance point:

Spill appearance point explanation:
 (Required if spill appearance point is "Other")

* Did the spill discharge to a drainage channel and/or surface water? [\(View History\)](#)

* Did the spill reach a storm drainpipe? [\(View History\)](#)

* If spill reached to a storm drainpipe, was all of the wastewater fully captured and returned to the sanitary sewer system? [\(View History\)](#)

* Private lateral spill? [\(View History\)](#)

Name of responsible party (for private lateral spill only, if known):

* Final spill destination: [\(View History\)](#)
 (Hold Ctrl key to Select Multiple answers from the list)

Explanation of final spill destination:
 (Required if final spill destination is "Other")

* Estimated spill volume: gallons [\(View History\)](#)

Estimated volume of spill recovered: gallons [\(View History\)](#)

Estimated current spill rate (if applicable): gallons per minute

* Estimated spill start date/time: : Date Format: MM/DD/YYYY

* Date and time sanitary sewer system agency was notified of or discovered spill: : Date Format: MM/DD/YYYY

* **Estimated Operator arrival date/time:** : Date Format: MM/DD/YYYY

* **Estimated spill end date/time:** : Date Format: MM/DD/YYYY

* **Spill cause:**

Spill cause explanation:
(Required if spill Cause is "Other")

Where did failure occur?

Explanation of Where Failure Occurred:
(Required if Where Failure Occurred is "Other")

If spill caused by wet weather, choose size of storm:

Diameter of sewer pipe at the point of blockage or spill cause (if applicable): inches

Material of sewer pipe at the point of blockage or spill cause (if applicable):

Estimated age of sewer pipe at the point of blockage or spill cause (if applicable):

Description of terrain surrounding the point of blockage or spill cause (if applicable):

* **Spill response activities:**
(Hold Ctrl key to Select Multiple answers from the list)

Cleaned-up (mitigated effects of spill)
 Contained all or portion of spill
 Inspected sewer using CCTV to determine cause

Explanation of spill response activities:
(Required if spill response activities is "Other", use attachment if the text is more than 1700 characters)

Visual inspection results from impacted receiving water:

Overall Spill Description:
(Maximum 3932 characters with spaces)

Notification Details

OES Control Number
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements):

OES Called Date/Time
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements): : Date Format: MM/DD/YYYY

Regional Water Quality Control Board notified date/time: : Date Format: MM/DD/YYYY

Method Notification

Name of Staff Contacted

Phone Number of Staff Contacted

Other Agency Notified:

Was any of this spill report information submitted via fax to the Regional Water Quality Control Board? No

Date and time spill report information was submitted via fax to the Regional Water quality Control Board:
(required if spill report information submitted via fax to Regional Water Board is "Yes") : Date Format: MM/DD/YYYY

Amend

Note: Questions with "" are required to be answered to certify this report.*

SPILL DATA COVER SHEET

Date: 4/29/09

Spill Date: 4/28/09

SDS # 1584

LOCATION: 4870 Glenwood Drive Ward 1 92501

TOTAL 10 gallons

RECOVERED: 0 %

POSTED: No

TYPE: City Main line

LAST CLEANED: N/A

RIVER: No

TO STORM DRN: No

DISINFECTED: Yes

RSK MGMT: No

CO. ENVIR HLTH: No

ENVRMTL CMP: No

CODE: No

LONGITUDE: - 117 23 47.8851

LATITUDE: 33 58 43.9718

COMMENTS: The Main line was plugged with paper product. The owner was made aware of the situation and is cleaning up around the clean out and disinfecting per Gomez.

A

DATE: 4-28-09 ASSIGNED BY DISPATCHER Crew/Truck: C832-E333

Start Time 7:21 AM PM
 Arrive Time 7:40 AM PM
 * Open Time 7:55 AM PM
 End Time 8:30 AM PM

NAME: C.E. Gomez TALE
 NAME: C. Alessi
 NAME: B. Green Lons
 NAME: _____

Location: 4870 GLENWOOD DR Map Page _____

Amount of Domestic Water included in the spill volume, Used in clean up 0 gallons

Contact Dispatch/Senior Op.

1. Estimated Amount of Spill	<u>10 Gal</u>	<u>C.E.G.T.</u>
2. Storm Drain/Canals Effected	<u>NA</u>	
3. Surface Water Effected	<u>NA</u>	
4. Need Assistance at Site	<u>NA</u>	
5. Flooding Notify Risk Mgt.	<u>NA</u>	
6. Need Code Compliance	<u>NA</u>	

B Spill Volume Data:

1. Spill Containment Area: Length 5' Width 1' Depth 1'

2. Manhole with Lid:
 # Pick Holes NA Diameter of Pick Holes NA Height of Water from Holes NA
 Diameter of Casting NA Casting to Lid Gap NA Height of Water from Gap NA

3. Manhole Missing Lid: Diameter of Casting NA Water Height NA

Containment of Spill: Method of Containment GROUND AROUND C/O, SOAK INTO

Photos of Containment / Spill Area (1) (2) (3) (M) _____ Initials C.E.G.T.

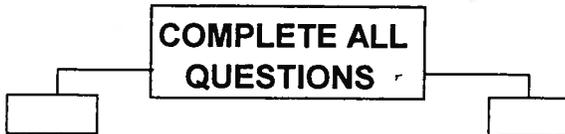
Clear Blockage Time Line was Opened (Go to Block A) Initials C.E.G.T.

Notify Dispatch/Senior Op. Immediately once Main Line is Open Initials NA

C Estimated Amount of Spill Returned to System 0 %

Method of Return: Vactor Truck NA # of Tank Loads NA
 Pump Type NA Run Time _____

Estimated Amount of Spill to Surface Water 0 %
 Disinfected: Yes by owner
 Chance of Human Contact: (yes) (no) Bleach Gal: _____

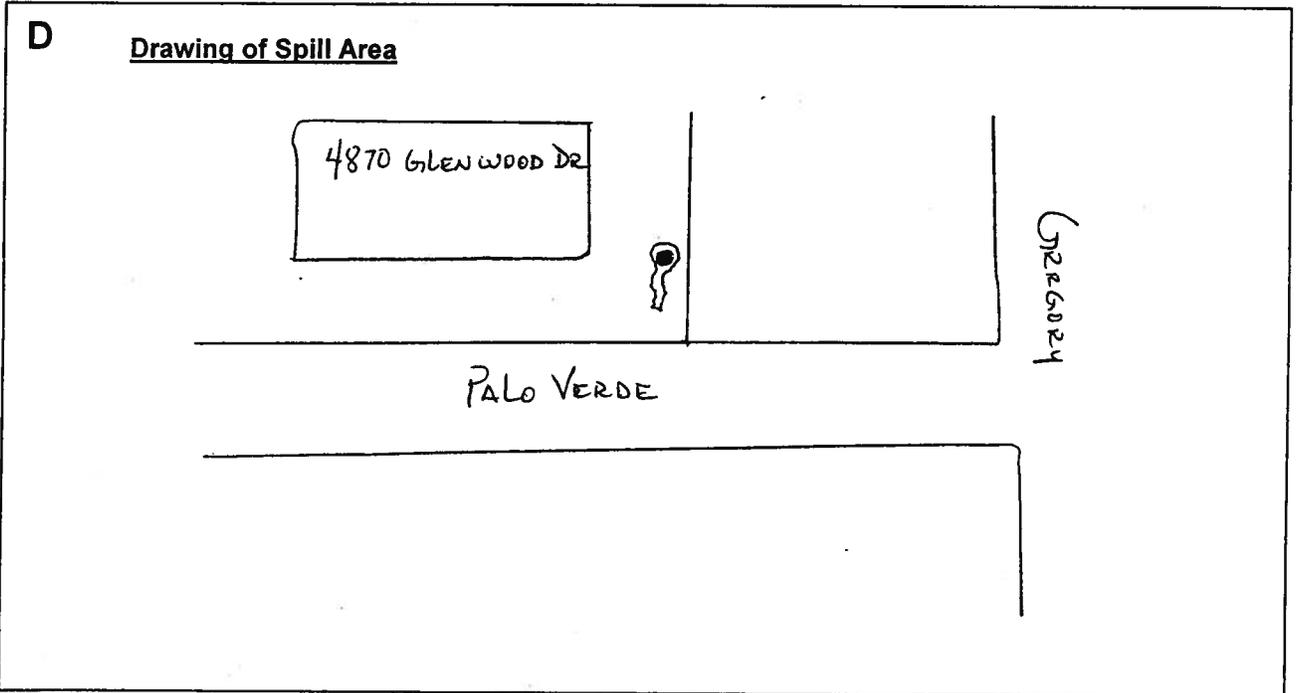


Clean Up Spill Area and Pick Up Containment
 Notify Dispatch/Senior Operator of the Site Status Initials HA
 Clean Effected Storm Drain/Canal System # of Ft cleaned NA Basins _____
 Detail Description of Spill Cause: PER CREW HVII LOTS OF PAPER

Detail Description of Spill Containment: AROUND CLEAN-OUT SOAK INTO GROUND

Detail Description of Spill Area: AROUND CLEANOUT

Detail Description of Chance of Human Contact: NONE - SOAK INTO GROUND, BEEN DESINFECTED BY OWNER



Owners Problem give copy of lateral Policy Initials NA
 Check Upstream / Downstream Maholes for Problems Initials C.E.G.T.
 Notify Dispatch/ Sr. Operator when You are Back in Plant Initials NA
 Finish Spill Data Sheet Initials HA

Is Follow Up Needed (yes) (no)
 If Yes, explain: NEEDS TO INVESTIGATE HISTORY RELATE TO SEWER LINE

FLOODING DATA SHEET

- Was Flooding Caused by City Blockage (yes) (no) Initials C.E.G.T.
- Was Flooding Caused by Cleaning of City Lines (yes) (no) Initials C.E.G.T.
- Was Risk Mgmt. Notified (yes) (n/a) Name of Contact _____
E.T.A. _____ Phone # _____
- Was Code Compliance Notified (yes) (n/a) Name of Contact _____
E.T.A. _____ Phone # _____

1. Location _____

Resident Name _____ Phone # _____

Owners Name _____ Phone # _____

Number of Rooms Flooded _____

Description of Flooding Photographs:

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

2. Location _____

Resident Name _____ Phone # _____

Owners Name _____ Phone # _____

Number of Rooms Flooded _____

Description of Flooding Photographs:

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

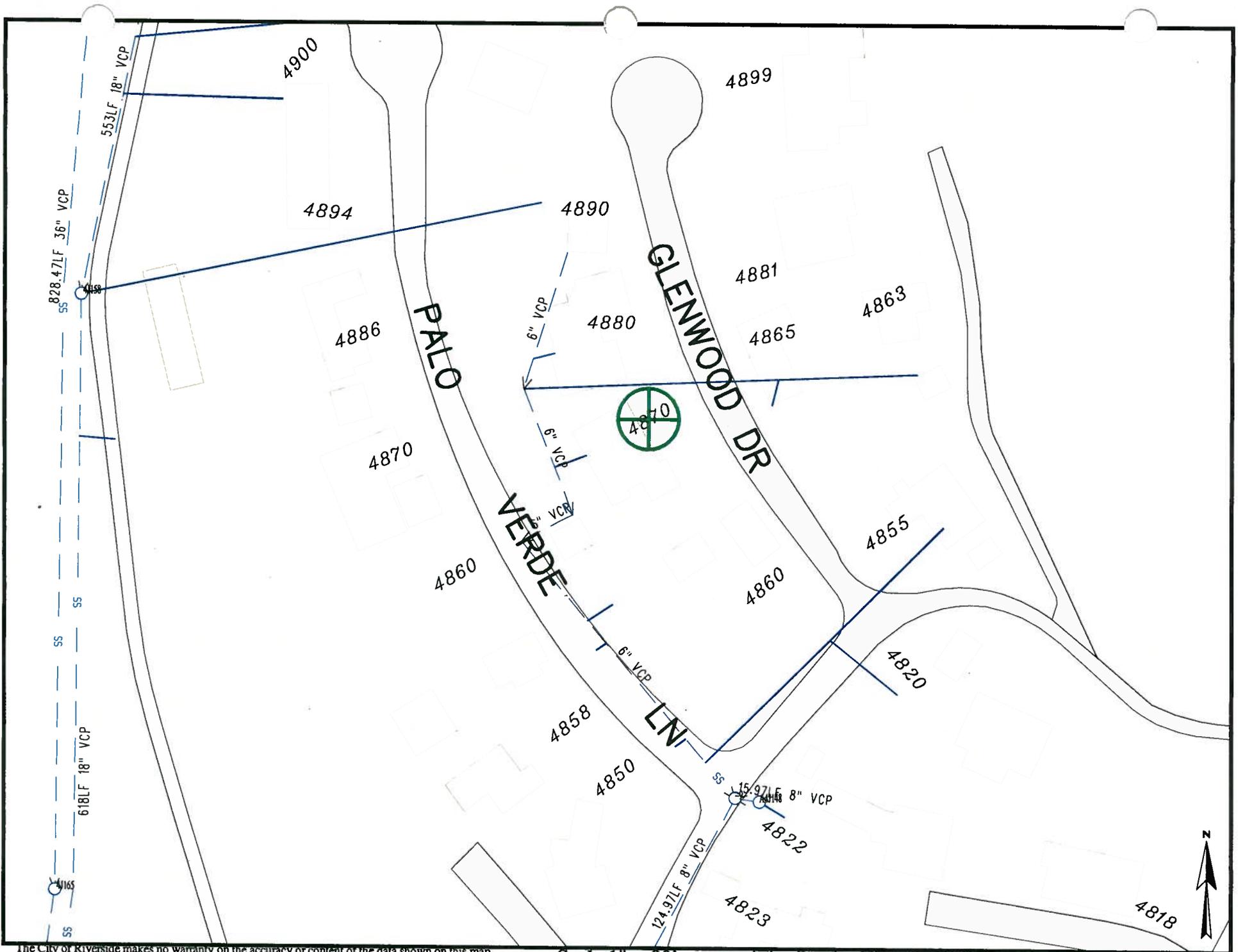
Complete Equipment used VACTOR E333

City Lateral or Private Lateral CITY SEWER LINE Cause of Blockage _____

Televised Lateral no Location of Blockage AT SEWER LINE

Is Follow up needed yes, Specify POSSIBLE TV LATERAL

Comments _____



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Scale 1" = 80'

Map Produced on April 28, 2009 by alchang



828.4711 36" VCP

618LF 18" VCP

PAID

VERDE

GREENWOOD DR



809711 60"

