



**SEWER SYSTEM MANAGEMENT PLAN
(SSMP)
AND
SEWER OVERFLOW RESPONSE PLAN
(SORP)**

CITY OF ESCONDIDO

2009

UPDATED APRIL 2014

UPDATED AUGUST 2017

**California Regional Water Quality Control Board
San Diego Region
NPDES Permit No. CA0107981
Order No. 2006-0003-DWQ**

**SEWER SYSTEM MANAGEMENT PLAN
(SSMP)
AND
SEWER OVERFLOW RESPONSE PLAN
(SORP)**

**CITY OF ESCONDIDO
2009**

**UPDATED APRIL 2014
UPDATED AUGUST 2017**

MANAGEMENT APPROVAL

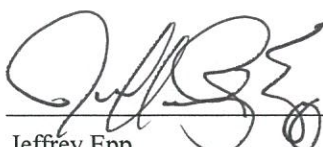
Approved:



Christopher W. McKinney
Director of Utilities

08.23.2017
Date

Approved:



Jeffrey Epp
City Manager

8-24-17
Date

TABLE OF CONTENTS

<u>SEWER SYSTEM MANAGEMENT PLAN (SSMP)</u>	<u>Page</u>
Summary.....	1
Goals.....	1
Organization.....	2
Sewage Collection System.....	2
Legal Authority.....	3
Collection System Operations and Maintenance Program.....	4
Design and Performance Provisions.....	4
Fog Control Program.....	4
System Evaluation and Capacity Assurance Plan.....	5
Monitoring, Measurement and Plan Modifications.....	5
SSMP Program Audits.....	5
Communication Program.....	6
Standard Operating Procedures - HARRF.....	7
Standard Operating Procedures - Lift Stations.....	8
 Attachment A:	
<u>SEWER OVERFLOW EMERGENCY RESPONSE PLAN, SORP</u>	
Summary.....	10
Exhibit 1- COLLECTION SYSTEM SORP.....	11
Activation.....	11
Immediate Action.....	11
Guidelines.....	11
Exhibit 2- HARRF SORP Standard Operating Procedures.....	17
Exhibit 3- LIFT STATIONS SORP Standard Operating Procedures.....	19
Exhibit 4- SAMPLING, POSTING & FOLLOW UP MONITORING....	20
 Attachment B:	
Wastewater Division Organizational Chart.....	22

CITY OF ESCONDIDO

SEWER SYSTEM MANAGEMENT PLAN (SSMP)

SUMMARY

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2006-0003: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. The WDR prohibits sanitary sewer overflows (SSOs) and requires reporting of SSOs using the statewide electronic reporting system. The SSMP addresses the standards for the operation and maintenance of the City of Escondido's wastewater collection system. The goals and organization of personnel for the operation and maintenance of the sewerage system are addressed first. Additional major issues follow in terms of sewer overflow prevention in which success will be achieved through legal authority, proactive maintenance and an aggressive capital improvement program.

GOALS

The City of Escondido's SSMP goals are to:

1. Properly manage, operate and maintain all portions of the Agency's wastewater collection system. The Wastewater Collection Division shall utilize its 15 staff members to effectively and efficiently operate and maintain the gravity collection system and force mains. The sewer lift station group will use its 16 staff members to effectively and efficiently operate and maintain the lift stations. The Pretreatment group shall utilize its 5 staff members to effectively and efficiently inspect and monitor business establishments to ensure minimal impact to the sewer system.
2. Provide adequate capacity to convey peak wastewater flows. Periodic system capacity reviews will be conducted to measure collection system capacity with analysis and planning for expansion as an active phase. Emphasis will also be made to reduce inflow and infiltration (I & I) into the sewer system through active inspection, dye testing and smoke testing.
3. Minimize the frequency of Sanitary System Overflows (SSO). Wastewater Collection emphasis will be on line cleaning with 3 Vactors and inspection with a televising vehicle. Additional activity will include root removal and pipe replacement when necessary while lift station maintenance staff uses periodic preventative maintenance, pump replacement and SCADA to maintain the lift stations to optimum efficiency. Pretreatment staff shall effectively and efficiently inspect and monitor automotive service establishments, food service establishments and commercial/industrial establishments for regulatory compliance. Emphasis is placed on the reduction of fats, oils and grease that may be introduced to the collection system by food service establishments
4. Mitigate the impacts that are associated with any SSO that may occur. The Wastewater Collection Division provides an aggressive sewer overflow response plan to mitigate impacts associated with SSO. The sewer overflow plan includes active initial response, mitigation, recovery and notification (Attachment A).
5. Meet all applicable regulatory notification and reporting requirements. The Wastewater Collection Division provides a comprehensive regulatory notification and reporting protocol that meets all applicable required tasks.

ORGANIZATION

The City of Escondido operates its wastewater system within the Utilities Department. The Utilities Department organizational structure is presented in Attachment B. Key positions within this organizational structure for developing and implementing the SSMP include:

- *City Manager.* The City Manager manages operations within the City of Escondido in accordance with City Council directives, and advises the City Council on budget, financing, operations and other issues related to public works and utilities department operations.
- *Director of Utilities.* The Director of Utilities is in charge of water and wastewater utilities within the City of Escondido. The Director of Utilities advises the City Manager and City Council on water and wastewater facilities and operations, including capital improvements, operation, and maintenance of the City's wastewater system. Under the direction of the City Manager, the Director of Utilities is responsible for developing, approving, updating, and implementing the SSMP.
- *Deputy Director of Utilities/Wastewater.* The Deputy Director of Utilities/Wastewater supervises all facilities and operations within the City's wastewater division, including wastewater collection, wastewater treatment, and recycled water use. The Deputy Director, Wastewater is responsible for assisting the Director of Utilities in developing the SSMP and overseeing implementation SSMP elements related to wastewater system operations and maintenance, sewer overflow response, FOG control, system evaluation, and monitoring/measurement of SSMP effectiveness.

The maintenance of the sewage collection system is the responsibility of the Wastewater Collection Division. The "sewage collection system" includes the actual wastewater collection system and the Escondido Land Outfall (ELO) pipeline carrying effluent from the wastewater treatment plant, Hale Avenue Resource Recovery Facility (HARRF), to the San Elijo Ocean Outfall (SEOO). The maintenance of the HARRF, lift stations within the sewage collection system, liaison with the San Elijo Joint Powers Authority and its operation and maintenance of the ocean outfall, as well as the liaison with the City of San Diego's Rancho Bernardo Pump Station #77, is the responsibility of the Utilities Department Director and HARRF staff. Within the Utilities Department, the HARRF Operation Section is responsible for the plant operations. Mechanical and electrical maintenance at the HARRF and pump stations within the collection system are the responsibility of the Utilities Maintenance Section.

The City of Escondido has implemented a recycled water program at the HARRF. This program enhances the HARRF's 18.0 MGD activated sludge secondary plant by adding 9 MGD tertiary treated effluent. Tertiary treated effluent from the plant meets all requirements for State Health Department Regulations Title 22. The plant will provide Escondido with 400 acre feet per year of reclaimed water and the Rincon Del Diablo Municipal Water District with 2,500 acre feet per year of reclaimed water through a reclaimed water distribution system.

The Escondido Land Outfall will continue to be used for disposal of secondary effluent to the ocean outfall.

The City maintains an updated Sewer Overflow Emergency Response Plan (Attachment A) which documents procedures for reporting and responding to sewer overflows. Under the direction of the Deputy Director of Utilities/Wastewater, the Wastewater Division directs and responds to operational needs based on the demands per the attached organizational chart and span of authority (Attachment B).

SEWAGE COLLECTION SYSTEM

The City of Escondido sewage collection system consists of approximately 380 miles of pipeline, 7,530 manholes,

and 14 pump stations. The system serves an estimated population of 146,000.

The collection system delivers wastewater to the HARRF, which is the City's only treatment plant. With minor exceptions, the sewage collection system serves only properties within the incorporated boundaries of the city of Escondido. The plant is a conventional activated sludge secondary treatment plant. The plant's biosolids are digested, dewatered with three centrifuges, hauled to a private farm, and land applied as soil amendment. The plant's effluent is released to the Escondido Land Outfall for delivery and discharge to the ocean outfall. An equalization basin is available to equalize peak flows.

The land outfall is a 14.3-mile-long pipeline with varying internal diameters from 30" to 36". The pipeline operates under gravity flow conditions from the HARRF, roughly paralleling Escondido Creek, to a point near Lone Jack Road in Olivenhain. From that point to the land outfall's connection with the San Elijo Joint Powers Authority's effluent pipeline and the ocean outfall line, the pipeline flows under pressure. This junction of the land outfall and ocean outfall is located just westerly of Interstate 5 and just northerly of the San Elijo Lagoon, adjacent to Manchester Road.

The ocean outfall traverses the San Elijo Lagoon, crosses under the railroad and Pacific Coast Highway, and extends 8,000 lineal feet into the ocean. The ocean outfall pipeline has a 30" internal diameter from the junction with the land outfall to a point 4,000 feet westerly of the beach. The pipeline has a structural pressure limitation based upon pressure head. From the terminus of this pipeline, the ocean outfall extends 200 feet in a southerly direction, parallel to the beach. At this point, the pipe diameter increases to 48". The pipeline then turns westerly and extends an additional 4,000 feet into the ocean. The last 1,200 feet of the ocean outfall consists of the diffuser. The diffuser has 2" ports, 12 feet on center. The diffuser begins at a depth of 116 feet and ends at a depth of 148 feet.

LEGAL AUTHORITY

- (A) The enforcement agency and official can exercise any enforcement powers as provided in the City of Escondido's Municipal Codes, Chapter 22, as may be necessary to effectively implement and enforce this article.
- (B) In addition to the general enforcement powers provided in this ordinance, the enforcement agency and enforcement official shall exercise any of the following supplemental enforcement powers as maybe necessary under the circumstances:
 - 1) Sampling Authority
 - 2) Cleanup and Abatement
 - 3) Monitoring and Mitigation
 - 4) Stormwater Pollution Prevention Plan
 - 5) Employee Training Program
 - 6) Best Management Practices
- (C) Any person violating any of the provisions in this ordinance, Chapter 22, Article 1, Sections 22-10/11, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in an amount as defined. The City may also pursue any of the alternative civil remedies herein against any person, corporation or association who violates the provisions of this article.
 - 1) Charge for repair of damage to facilities
 - 2) Injunction by petition to Superior Court
 - 3) Reimbursement of fine issued to City as a result of illegal discharge
 - 4) Cost recovery for costs incurred for abating illicit discharges

5) Administrative fines

COLLECTION SYSTEM OPERATIONS AND MAINTENANCE PROGRAM

The City maintains an up-to-date map of its sanitary sewer system which shows gravity segments and manholes, pumping facilities, force mains, valves, and other appurtenances. The City has established Standard Operating Procedures (Exhibits 2 and 3) to ensure proper operation and prevent overflows from the HARRF and from the City's sewage lift stations.

The City also maintains a comprehensive program for monitoring and maintaining its sewer collection gravity mains, force mains, and collection system appurtenances. The City of Escondido's Utility Department televises an average of ten thousand (10,000) lineal feet of collection system pipeline each month, and an average of one hundred fifteen thousand (115,000) lineal feet of pipeline is cleaned each month. The City's predictive, preventive and corrective maintenance programs consist of a variety of components for the operation, maintenance, repair, and replacement of sewer mains, manholes and pump stations. The programs provide for the routine monitoring, inspection, cleaning, and related maintenance of all components of the collection system in order to reduce the potential of sanitary system overflows and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly for high frequency cleaning. If necessary, repairs are initiated by Asset Management work orders with City maintenance crews. Larger more complex projects are referred for inclusion in the CIP process for planning, design and construction.

DESIGN AND PERFORMANCE PROVISIONS

The City of Escondido currently has Engineering and Design Standards created in conjunction with current City construction requirements. The standards are updated periodically as required.

The City of Escondido has procedures and standards for inspecting and testing the installation of new sewers, pumps and other appurtenances and for rehabilitation and repair projects. These inspection standards are based on references and compatibility to the City's Engineering and Design Standards, Standard Specifications for Public Works Construction, and the most current edition of the Public Works Inspector's Manual.

FOG CONTROL PROGRAM

The Pretreatment department consists of five (5) employees, one supervisor and four (4) environmental compliance inspectors. The objective of this department is to effectively and efficiently inspect and monitor food service establishments (FSE), automotive service establishments (MSE), and at times commercial and industrial establishments (COMM/IND) to insure compliance with state, federal and local regulations resulting in minimal impact to the sanitary sewer system and the Publicly Owned Treatment Works (POTW) Hale Avenue Resource Recovery Facility.

Pretreatment inspections target the reduction of fats, oils and grease (FOG) through the inspection and compliance process that may be introduced to the collection system by food service establishments. Additionally, it focuses on the discharges from MSE and COMM/IND establishments that would have an adverse impact on the integrity of the sanitary system or the POTW treatment process.

A contributing cause of sanitary sewer overflows is the introduction of fats, oils and grease (FOG) into the sanitary sewer system. The City of Escondido has a comprehensive pretreatment inspection program. The primary objective of the program is to keep fats, oils and grease (FOG) out of the sanitary sewer system thus reducing the potential for sanitary sewer overflows. There are over 500 automotive maintenance facilities and

over 500 food service establishments (FSE) which are regularly inspected to ensure compliance with the City's pretreatment program.

The pretreatment program sewer use ordinance (City of Escondido Municipal Code Chapter 22) grants the City the enforcement authority to permit, monitor, sample, inspect and issue enforcement actions. This ordinance may be updated periodically to enhance the ability of the inspector to gain compliance and reduce the impact of FOG on the sanitary sewer system.

Part of the pretreatment program inspections focus on education and outreach to the customers on the proper disposal of FOG. Educational material is distributed regularly during inspections and investigations of FSE's.

SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

- A) The City of Escondido has evaluated the portions of the sanitary sewer system that may potentially contribute to an SSO discharge caused by hydraulic deficiency. The evaluation completed as part of the June 2012 Wastewater Master Plan provides estimates of peak flows, estimates of the capacity of key system components, hydraulic deficiencies, and the major sources that contribute to the peak flows associated with overflow events.
- B) The City of Escondido will encapsulate the system deficiencies identified above and apply the capacity requirements and design criteria established by the City to plan for the appropriate hydraulic capacity.
- C) The City of Escondido has utilized the completed sanitary sewer system evaluation from the June 2012 Wastewater Master Plan to enact a prioritized list of sewer line improvements. Factors including existing condition, hydraulic deficiencies and future needs for expansion have been utilized to define the replacement list. Implementation is scheduled in phases of design and construction of identified sewer lines.

MONITORING, MEASUREMENT, AND PLAN MODIFICATIONS

Utilizing the continuous improvement approach, the City of Escondido will identify and monitor key performance indicators within the wastewater collection system in order to prioritize SSMP activities, identify SSO trends, and measure progress and efficiency of the SSMP. Performance indicators will include:

- 1) Blockages and SSO's over the past 12 months
- 2) SSO events by cause (e.g. roots, grease, debris, etc.)
- 3) Volume of SSO's
- 4) Volume recovered and returned to the sewer system
- 5) Line cleaning and inspection production

This will be monitored in the Wastewater Collection Division's Azteca/City works asset management program. Results of the monitoring will be used by City staff to determine how SSMP elements may be modified to better achieve the SSMP goals.

SSMP PROGRAM AUDITS

SSMP program audits will be conducted every two years and a report will be kept on file. The audit will utilize the components from the Monitoring, Measurement and Plans Modifications section to evaluate the effectiveness of the SSMP. The City will also audit its compliance with the SSMP requirements as identified within the

required elements, which includes the identification of any deficiencies in the SSMP, and establish steps to correct them. The City will engage in the SSMP program audit utilizing the Director of Utilities or designee and/or contracted consultant. The results of this audit will be reviewed by senior management and acted upon if necessary. The City may choose to modify the SSMP at any time in response to SSMP audit recommendations, changed conditions, or experience gained from implementing the SSMP.

COMMUNICATION PROGRAM

The City of Escondido has implemented a communication program that provides public access and review of its SSMP components. Stakeholders and the public had an opportunity to provide input to the review and development of this SSMP through publicly noticed City Council meetings. City Council meeting agendas and proceedings are posted on the City's web site for public review and input. Council meetings are also accessible to the public via live streaming on the internet. The City's SSMP is available for review on the City's web site, along with contact information for soliciting public comments and questions.

The City of Escondido holds annual meetings with its satellite discharger, the City of San Diego, in order to discuss pretreatment, collections and flow issues to maintain a functional SSMP.

DISTRIBUTION OF THE SEWER SYSTEM MANAGEMENT PLAN (SSMP) AND AMENDMENTS

The SSMP will be maintained in a condition that reflects the current programs of the City. Updates will be made whenever there is a change in conditions which materially affect the potential of sewer overflows. Such changes of condition will include modifications to design, construction, operation, or maintenance of the sewerage system or sewerage facilities.

All Wastewater Department employees and other City employees who may be involved in the prevention of sewer overflows will be familiar with the SSMP and receive specific training in meeting its objectives.

SEWER SYSTEM MANAGEMENT PLAN (SSMP) - HARRF

CITY OF ESCONDIDO STANDARD OPERATING PROCEDURES

PURPOSE: To prevent sewer overflows at the Hale Avenue Resource Recovery Facility (HARRF).

PROCEDURE: Operators are responsible for monitoring all plant treatment processes to ensure proper operation. This site monitoring is to include the following:

1. The HARRF is to be staffed by a minimum of two Operators on a 24 hour per day basis under normal conditions.
2. Operators are to make plant rounds at least once every two hours. These rounds are to include routine inspection of all operating plant equipment and treatment processes to identify any potential overflows or spills.
3. Insure proper valve positioning in the storm drain structure adjacent to DAF#2. Six inch plug valve to plant normally open, six inch storm drain valve normally closed.
4. Insure proper position of stormwater valve behind DAF building. Normally closed.
5. Insure proper position of stormwater valves (2) along box culvert. Normally closed.
6. Insure proper position of stormwater valve (1) behind DAFT #2 Bldg. Normally closed.
7. Monitor and respond to all alarms in Operations Center.
8. All Operations Staff is to be trained in the use and location of equipment needed to prevent a spill from being discharged offsite:
 - a. Pumps and Hoses
 - b. Bobcat
 - c. Hand tools
 - d. Equipment rentals:

Clairemont Equipment
1330 Mission Road, Escondido, CA 92029
Emergency Contact: Jason Williams
Cell: 760-250-9642
8. All Operations Staff is to become familiar with the Sewer Overflow Response Plan.
9. Documentation of SSMP & SORP training will be retained in HARRF's files.

SEWER SYSTEM MANAGEMENT PLAN (SSMP) - LIFT STATIONS

CITY OF ESCONDIDO STANDARD OPERATING PROCEDURES

PURPOSE: To prevent sewer overflows at the City of Escondido's Pump Stations. This assessment is being provided to assist with finalizing the HARRF OVERFLOW & RESPONSE PLANS. Maintenance personnel have incorporated many separate and proven practices in an effort to manage this occurrence. This assessment of current preparedness is divided into the following four (4) categories:

- ☐ Site Monitoring
- ☐ Notification
- ☐ Response Actions
- ☐ Restoration

PROCEDURE: Site Monitoring

☐ Maintenance Actions:

1. Physical checks and maintenance - All 14 lift stations are inspected weekly, monthly, quarterly and annually as per the asset management program. Inspections are made Monday through Friday during regular business hours. Stand-by personnel respond to alarms after normal business hours, weekends and holidays.
2. Weekly checks –The asset management program generates a unique PM list for each station. Work is documented in the asset management program.
3. Monthly checks – The asset management program generates a unique PM list for each station. Work is documented in the asset management program.
4. Quarterly checks – The asset management program generates a unique PM list for each station. Work is documented in the asset management program.
5. Annual checks - The asset management program generates a unique PM list for each station. Work is documented in the asset management program.
6. Electronic monitoring – All lift station are real time monitored by Radio Telemetry system. All alarms go to HARRF Operations. HARRF Operations is manned 24/7 and dispatches the standby personnel.
7. Stand-by personnel respond to alarms at lift stations on weekends

☐ Operator Actions:

1. Alarms - Contact appropriate individuals for response and/or assistance from standby roster.
2. Establish a communications link - Maintain two-way communication with response personnel.

Notification:

☐ Standby Maintenance Actions (Off-Hours):

1. Contact HARRF plant (Station - S) - Provide assessment of alarms and request assistance as required.
2. Establish radio or cell phone communications link - Maintain two-way communication with plant personnel.
3. Respond upon receiving direction (if not on duty or working at another location).

☐ Operator Actions:

1. Establish radio or cell phone communications link - Maintain two-way communication with response personnel and stand-by to render assistance.

Response Actions:

1. During regular business hours, the maintenance staff is notified of alarms by the SCADA system, HARRF operators, or other City staff. During nights, weekends, and holidays, standby personnel are notified by the HARRF operator. HARRF operators receive alarms from the SCADA system 24/7.
2. The response person is dispatched to make a primary assessment of the situation. Repairs may be performed by the response person. If additional help is needed, or a special trade person is required, the HARRF duty operator is notified and additional staff is called out. If further assistance or direction is required, the electrical and/ or mechanical supervisor(s) will be called out.
3. Once repairs are completed, the maintenance staff contacts the HARRF duty operator, informing the operator of the current equipment conditions and instructions if needed.

Restoration:

1. It is the goal of the department to complete all repairs in a timely manner. In the event a temporary repair is made, the HARRF duty operator is notified and informed how the equipment will operate until full repairs are completed.
2. The response person contacts the maintenance supervisor at the start of regular business hours, informing the supervisor of any callouts, process changes, or disparities in the equipment.
3. In cases where further repairs are required, the maintenance supervisor will schedule the work flow.

Attachment "A"

SEWER OVERFLOW EMERGENCY RESPONSE PLAN

SUMMARY

The City of Escondido's Sewage Overflow Response Plan (SORP) is designed to assure that every report of a sewer spill is immediately dispatched to the appropriate City crews so that the impacts of the overflow can be minimized. The SORP also includes provisions to assure that impacted surface waters are posted for public health and safety pursuant to the directions provided by the San Diego County Department of Environmental Health and that notifications and reporting are made to the appropriate City and regional authorities. It provides a guideline for the collection system personnel, maintenance and electrical personnel, and plant operations personnel. It will serve as the emergency procedure guideline. Exhibit 1 is to be used by collection personnel. Exhibit 2 is to be used by HARRF operational personnel. Exhibit 3 is to be used by plant maintenance and electrical personnel for both the HARRF and City pump station overflows.

The Deputy Director of Utilities/Wastewater is responsible for developing and implementing procedures to ensure that wastewater division personnel are familiar with:

- Reporting guidelines and requirements established by the San Diego Regional Water Quality Control Board and County of San Diego Department of Environmental Health, and
- Sewer overflow response provisions established within the City's Standard Operating Procedures (Exhibits 1, 2, 3 and 4) and this Sewer Overflow Emergency Response Plan.

EXHIBIT 1
SEWER OVERFLOW RESPONSE PLAN (SORP)
COLLECTION SYSTEM
CITY OF ESCONDIDO
STANDARD OPERATING PROCEDURES

ACTIVATION

During regular working hours, the Wastewater Collection Section staff is notified of overflows by the public or a City staff member. These reports are called into the Maintenance and Operations office staff and are immediately reported to the Wastewater Collection Division supervisor. During off-hours, reports of overflows are called into the Police Department. The Police Department immediately calls the primary wastewater collection stand-by person. In order to expedite overflow response and recovery, a second stand-by person also responds to assist in equipment mobilization.

IMMEDIATE ACTION

During regular working hours, a Vactor is immediately dispatched to the scene to contain, recover and stop the overflow. Several photographs are to be taken of the spill and surrounding area. A second recovery crew with a Vactor is dispatched as needed. During off hours, the standby employee responds and calls out a secondary stand-by person or crews as needed to contain, recover and stop the overflow. A supervisor is called as soon as possible. Several photographs are to be taken of the spill and surrounding area.

GUIDELINES

Efforts to contain and recover the overflow are the first priority, followed by removal of the blockage. Several photographs are to be taken of the spill and surrounding area, along with photographs that document City of Escondido actions to terminate the spill, clean up the spill, document downstream impacts (or lack of impacts), and/or minimize or mitigate spill impacts. Field notes and time lines shall also be prepared that (1) identify the arrival times and response actions of responding City staff and response equipment, (2) summarize City actions to contain the spill, clean up the spill, mitigate or minimize spill impacts, report the spill to authorities, post downstream areas, document downstream conditions, and/or mitigate/minimize downstream impacts.

Sewer spill sites are to be thoroughly cleaned as soon as possible after an overflow. No residue shall be left for future rains to carry away. The affected area is cleaned by wash down. All wash downs are contained and recovered by a Vactor. All line segments involved in the overflow are inspected by the section's CCTV crew. All areas exposed to overflow are posted, if requested by San Diego County Environmental Health, with bi-lingual warning signs. Notification to the appropriate City and regional authorities is performed after clearing the stoppage and posting the affected areas (see Exhibit 4, Sampling, Posting and Follow-Up Monitoring Response). Notification should be conducted in accordance with "Report Procedures for Overflows" which is attached. If requested by County Environmental Health, samples along affected waterways are then collected by the Pretreatment Program personnel. If the sanitary sewer overflow is grease related, the Pretreatment Program personnel shall conduct inspections at food service establishments and distribute educational material to high density dwellings if they are in the general vicinity of the sanitary sewer overflow.

Distribution and Amendments to the Sewer Overflow Response Plan

This Sewer Overflow Response Plan (SORP) has been prepared pursuant to the provisions of the Overflow Emergency Response Plan section of the Sewer System Management Plan (SSMP) that is required by State

Water Resources Control Board, Order No. 2006-0003-DWQ,
Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

The SORP reflects the City's procedures established for responding to sewer overflows to:

1. Minimize the sewer overflow volume that enters surface waters.
2. Minimize the adverse effects of sewer overflows on water quality.

Updates to the SORP will be made to reflect all changes in policies and procedures as may be required to achieve its objectives.

Copies of the SORP and any amendments thereto will be distributed or made available as follows:

1. Executive Officer, Regional Water Quality Control Board, San Diego Region.
2. All employees of the Wastewater Collection Division.
3. All other City employees who may become directly involved in responding to sewer overflows.

All Wastewater Collection Division employees and other City employees who may become directly involved in responding to sewer overflows shall be familiar with the SORP and receive specific training in meeting its objectives

Notification and Reporting Requirements

Any sewerage overflow potentially threatens the health and safety of the public and environment. The City of Escondido Wastewater Collection Division, the San Diego County Department of Environmental Health (DEH), and the Regional Water Quality Control Board (RWQCB) are charged with protecting the public from this potential harm. Therefore, it is the City's policy to report any overflows from the sewer system to the DEH and RWQCB. Reports submitted to the California Integrated Water Quality System (CIWQS) and required under Order No. 2006-0003-DWQ, Order No. 2013-0058-EXEC and Order No. R9-2007-0005.

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC
AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS
SUMMARY OF MRP REQUIREMENTS**

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	<p>Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:</p> <ul style="list-style-type: none"> • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	<p>Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.</p>
CATEGORY 3	<p>All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.</p>
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	<p>Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.</p>

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

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	<p>Call Cal OES at: (800) 852-7550</p>

REPORTING
(see section C of MRP)

- Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.
- Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.
- Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred.
- SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.
- "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred.
- Collection System Questionnaire: Update and certify every 12 months.

Enter data into the CIWQS Online SSO Database (<http://ciwqs.waterboards.ca.gov/>), certified by enrollee's Legally Responsible Official(s).

WATER QUALITY MONITORING
(see section D of MRP)

- Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.

Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.

RECORD KEEPING
(see section E of MRP)

- SSO event records.
- Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP.
- Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters.
- Collection system telemetry records if relied upon to document and/or estimate SSO Volume.

Self-maintained records shall be available during inspections or upon request.

Reporting Procedure for Overflows:

1. A standby supervisor shall be called on all overflows.
2. All personnel shall follow the San Diego Regional Water Quality Control Board general guidelines for sewage collection overflows.
3. All personnel shall follow the County of San Diego, Dept. of Environmental Health, Wastewater Spill Reporting Requirements and Guidelines.
4. The Collection primary standby person shall complete a Field Overflow Report, which will be utilized in preparing for the reporting procedures. Several photographs are to be taken of the spill and surrounding area. Staff shall calculate estimated volumes spilled and document.
5. Post all appropriate areas with contaminated signs per posting guideline, if requested by DEH. If posting is not requested, note name of person from DEH who authorized "No Posting."
6. Spills shall be reported immediately to the below listed agencies according to Table 2, Notification, Reporting, Monitoring and Record Keeping Requirements. Have all pertinent information ready and available, such as location, surface water destination, quantities, a notation that a written report will follow, etc. When reporting the spill, be specific and report only the details you can confirm. These details may be reported to the media.

County Environmental Health Department Contact:

Proposition 65 Coordinator, Keith Kezer: 858-495-5579

On weekend spills, call County Dispatch at: 858-565-5255.

Request to have the Hazmat duty specialist paged.

Email a copy of the overflow report to keith.kezer@sdcounty.ca.gov

Regional Water Quality Control Board Contact:

Joann Lim: 619-521-3362, or 619-516-1990 within 24 hours of spill verification.

OR Brandi Outwin-Beals: 619-521-5896.

For weekend spills, leave a message at 619-516-1990, be sure to mention that the message is for Joann Lim or Brandi Outwin-Beals.

Email address for Water Quality Control Board: joann.lim@waterboards.ca.gov or Brandi.Outwin-Beals@waterboards.ca.gov

Reports submitted to the California Integrated Water Quality System (CIWQS) and required under Order No. 2006-0003-DWQ, Order No. 2013-0058-EXEC and Order No. R9-2007-0005.

State Office of Emergency Services Contact: The phone number is 1-800-852-7550. Notified for spills larger than 1000 gallons. Be prepared to give Thomas Bros. Guide information.

7. The Collection System supervisor shall complete the on-line overflow report in accordance to the specifics of the discharge and (CIWQS) reporting procedures.

John Del Fante -	Office: 760-839-6290x7102	Cell Phone: 760-802-0486
Dennis Sperino -	Office: 760-839-6290x4290	Cell Phone: 760-716-1254
Lance Lauricha -	Office: 760-839-6290x7020	Cell Phone: 760-802-0741
Mike Schultz -	Office: 760-839-6290x7019	Cell Phone: 442-777-8504
Police Dept. (Station H) -	760-839-4722 or 839-4719	

EXHIBIT 2

SEWER OVERFLOW RESPONSE PLAN (SORP) HARRE CITY OF ESCONDIDO STANDARD OPERATING PROCEDURES

PURPOSE: Overflow and Response Procedure for reporting UNCONTAINED SEWAGE spills per NPDES Permit No. CA 0107981.

PROCEDURE: Operators are responsible for monitoring all plant processes to ensure proper operation. This is to prevent an overflow before it occurs.

In the event of an overflow the following actions are to be taken:

1. Find and secure the source of the overflow (*if possible*).
2. Contain on site (*if possible*):
 - a. Dam
 - b. Dike
 - c. Divert
 - d. Use all resources available to **"STOP OFF SITE DISCHARGE"**
3. Pump contained spill back to plant drain system.
4. Log event and fill out "Operators Report".
5. If an overflow results in an offsite discharge which **does not** reach surface waters, actions to take (in addition to above):
 - a. Notify:
 - Plant Superintendent
 - Operations Supervisor
 - Duty Operator

Within five days of start of event by Sewage Overflow Report (S.O.R.) supplied by RWQCB:

- County of San Diego Environmental Health Services
Call: Proposition 65 Coordinator, Keith Kezer: 858-495-5579
P.O. Box 129261
San Diego, Ca. 92112-9261
Email copy of spill report to: keith.kezer@sdcounty.ca.gov
- Regional Water Quality Control Board Contact:
Joann Lim: 619-521-3362 or Brandi Outwin-Beals: 619-521-5896.
For weekend spills, leave a message at 619-516-1990, be sure to mention that the

message is for Joann Lim or Brandi Outwin-Beals.

Email address for Water Quality Control Board:

joann.lim@waterboards.ca.gov or Brandi.Outwin-Beals@waterboards.ca.gov

Notify within 24 hours of spill verification or within 2 hours if reaching surface water.

b. Document Sewage Overflow Report (supplied by RWQCB):

- Time of overflow
- Location of overflow
- Volume of overflow
- Photograph impacted area showing visual of spill volume
- Cause of overflow
- Action taken

6. If offsite **discharge reaches surface water**, actions to take (in addition to above):

a. Discharges to surface waters require immediate notification by phone to County Environmental Health Services and notification by email within 24 hours. *This includes weekends. Leave a message on voice mail and email a copy.*

- County of San Diego Environmental Health Services
Proposition 65 Coordinator, Keith Kezer: 858-495-5579
Email copy of spill report to keith.kezer@sdcounty.ca.gov

b. The Regional Water Quality Control Board requests notification by phone within 2 hours if discharge came from a public system and within 24 hours if it was from a private system or was contained before reaching surface waters.

- Regional Water Quality Control Board Contact:
Joann Lim: 619-521-3362 or Brandi Outwin-Beals: 619-521-5896.
For weekend spills, leave a message at 619-516-1990, be sure to mention that the message is for Joann Lim or Brandi Outwin-Beals.
Email address for Water Quality Control Board:
joann.lim@waterboards.ca.gov or Brandi.Outwin-Beals@waterboards.ca.gov the

Reports submitted to the California Integrated Water Quality System (CIWQS) and required under Order No. 2006-0003-DWQ, Order No. 2013-0058-EXEC and Order No. R9-2007-0005.

c. For spills equal to or over 1,000 gallons: **Within two hours** of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.

- Governor's Office of Emergency Services, Warning Center 24-hour phone number: 1-800-852-7550 or 916-262-1621 FAX number: 916-262-1676 or 1677

EXHIBIT 3

SEWER OVERFLOW RESPONSE PLAN (SORP) LIFT STATIONS CITY OF ESCONDIDO STANDARD OPERATING PROCEDURES

LIFT STATIONS

Response Actions

☐ Maintenance Actions:

1. Stop and contain flow, protect life, environment, and property.
2. Limit impact and isolate damaged equipment.
3. Request assistance (Station S) from other City departments and outside vendors as needed:
 - a. Collection Systems Vector truck
 - b. Atlas Pumping Service
4. Implement contingency plans – (i.e., Hazard Mat., Fire, Vehicle Accident).
5. Restore services and commence clean-up operations.

☐ Maintenance/Collections Staff Actions:

1. Monitor and assist as required. Post the spill site as required. Several photographs are to be taken of the spill and surrounding area.
2. Initiate Notifications – Make notifications per your response list.
3. Prepare Spill Report – Solicit report information from response personnel. Restoration

☐ Maintenance Actions:

1. Permanently repair and/or correct defective component (upon failed part/system evaluation).
2. Historically record all pertinent data on the computer data base.

☐ Maintenance/Collections Staff Actions:

1. Historically record all pertinent data on the Spill Report & Operations logs.

EXHIBIT 4

SEWER OVERFLOW RESPONSE PLAN (SORP) SAMPLING, POSTING & FOLLOW UP MONITORING CITY OF ESCONDIDO STANDARD OPERATING PROCEDURES

In response to sewage spills with a volume **between 1,000 and 10,000 gallons**, where release to the flood control system occurs, the following monitoring plan will be activated:

☐ SAMPLING

Upon notification of a spill, samples will be collected at the following locations along the flood control channel or creek:

1. At a location in the flood control channel 50 feet upstream of the point of discharge to the channel.
2. At a location in the flood control channel 50 feet downstream of the point of discharge to the channel.
3. At a location in the flood control channel 400 yards downstream of the point of discharge to the channel.
4. Escondido Creek at the Harmony Grove Road Bridge.
5. Escondido Creek at Country Club Drive and Harmony Grove Road.
6. Within 48 hours, samples will be taken for Ammonia, Total Coliform, Fecal Coliform and Enterococcus.

☐ POSTING

Posting of affected areas will consist of the following:

1. The immediate area of the overflow.
2. Escondido Creek at the Harmony Grove Road Bridge.
3. Escondido Creek at Country Club Drive and Harmony Grove Road.

Posting duration will be three days unless directed otherwise by Health Department or Regional Board.

In response to sewage spills with a volume **greater than 10,000 gallons**, where release to the flood control system occurs, the following monitoring plan will be activated:

□ SAMPLING

Notification of a sewage spill greater than 10,000 gallons will cause sampling at the following locations, **in addition to the above** mentioned sample sites:

1. Reidy Creek Flood Control Channel at the Spruce Street Maintenance and Operations Yard.
2. Escondido Creek Flood Control Channel at the Spruce Street Maintenance and Operations Yard.
3. Escondido Creek at the Elfin Forest Recreational Park (Mt. Israel).
4. Escondido Creek at the Via Ambiente, Olivenhain Reservoir Entry Road.
5. Within 48 hours, samples will be taken for Ammonia, Total Coliform, Fecal Coliform and Enterococcus.

□ POSTING

Extended posting of affected areas will consist of the following locations:

1. Escondido Creek at the Elfin Forest Recreational Reserve (Mt. Israel).
2. Escondido Creek at the Via Ambiente, Olivenhain Reservoir Entry Road.

Post duration will be ten days unless directed otherwise by Health Department or Regional Board.

□ MONITORING

Monitoring at identified sample locations will be repeated daily while signs warning of contamination are posted. Testing will terminate upon removal of posted warning signs.

Attachment "B"

City Manager &
Utilities
Management
July 2017

