

# **City of Placentia** Sanitary Sewer Overflow Emergency Response Plan

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### CITY OF PLACENTIA Sanitary Sewer Overflow Emergency Response Plan

### General:

The City of Placentia owns and operates approximately 60% or 75 miles of sanitary collection system pipelines within the City. The sanitary collection system in the remaining 40% areas of the City is owned, operated and maintained by the Yorba Linda Water District (YLWD). The City currently utilizes, under contract, the services of YLWD, Walker Sewer and Orange County Septic Pumping to clean, maintain and provide emergency response for the City owned portion of the sanitary collection system. Should a Sanitary Sewer Overflow (SSO) occur within the City owned collection system, Walker Sewer and Orange County Septic Pumping or YLWD is notified to provide emergency response and to clear any blockage. Walker Sewer, YLWD and City crews work together to contain and cleanup the SSO. Working with multi agencies we feel gives us the a choice to have the quickest responder assist us in removing the blockage as soon as possible thus reducing the amount that would enter the storm drain system.

## Authority:

On April 16, 2002, the Regional Water Quality Control Board (RWQCB), Santa Ana Region issued Order No. R8-2002-0014 (commonly referred to as Sewer Waste Discharge Requirements for Orange County, also known as the Sewer WDR) to the City of Placentia and all other collection agencies within the Santa Ana Region of Orange County. This permit is intended to ensure that all collection agencies within the Santa Ana Region of Orange County provide adequate and appropriate collection system capacity, maintenance and operation, emergency sewer spill response, and legal responsibility to reduce or eliminate sewage discharges from entering the waters of the state.

As the owner of a sanitary collection system within its City limits, the City of Placentia has the right and responsibility to ensure that the collection system is properly funded and maintained, including the appropriate response to sewer system overflows as prescribed in Order No. R8-2002-0014.

## **Types of spills:**

<u>Private Property SSO</u>. A private property sanitary sewer overflow is an overflow that occurs on private property and is contained within that property. A private property SSO does not encroach on public property, such as a street, and does not enter the storm drain, flood channel or any other storm water conveyance or waters of the U.S. Private property SSOs are the responsibility of the property owner although the City or its

collection system contractor may offer assistance. The City may request compensation from the property owner for such assistance. An example of a private property SSO is the backup of a private sewer lateral where the entire overflow of sewage is contained within the property. As the City becomes aware, the City is responsible to report all private property SSOs on the Monthly SSO Report.

<u>Public Property SSO</u>. A public property sanitary sewer overflow is an overflow that either occurs on public property or occurs on private property and migrates to public property. Once an SSO occurs on public property, it is the responsibility of the City to determine the cause and initiate corrective action including the cleanup and recovery of all recoverable sewage regardless of its source. The city may request compensation for a SSO that originates on private property and migrates to public property. An example of a public property SSO is the overflow of a manhole on a city owned collection system line. All public property SSOs must be reported in accordance with the reporting procedures outlined in the Sanitary Sewer Overflow Emergency Response Plan.

Regardless of the source of an SSO, every effort must be made to ensure that sewage does not reach the receiving waters of the U.S.; that is every effort must be made to prevent sewage from reaching storm drains, flood channels, drainage ditches or any other storm water conveyance. Should an SSO reach a storm water conveyance, every effort must be made to remove the sewage as rapidly and completely as possible. This includes all storm water conveyance whether the City owns them or not. Should an SSO reach a storm water conveyance may be required from the Orange County Flood Control District to eliminate the spill.

### **Procedures:**

The purpose of this response plan is: to protect personnel and public health, environment and property from sewage spill events and restore area back to normal as soon as possible after a spill; to safely and competently respond with available resources and capabilities within the City of Placentia; to establish perimeters and control zones using appropriate measures and directing traffic as needed; to promptly notify the Orange County Health Care Agency (OCHCA), the Orange County Public Facilities and Resources Division (PFRD), California Regional Water Quality Control Board, and other agencies as required according to the area of the spill; and to contain the sewage discharge as much as possible—with every effort being made to prevent the discharge of sewage into surface waters.

The following outlines the City of Placentia's response plan:

- 1. <u>First Responder's Duties:</u>
  - a. Identify and assess the area and extent of the discharge. Determine if there is a need for additional support from City maintenance personnel.

- b. Notify supervisor of the location and condition of the discharge. Offduty hour phone numbers are identified on the standby list for additional personnel to be contacted.
- c. Divert spill by building a small berm to change direction of flow away from any storm drain system. If possible, retain spill by letting it collect in a natural low area and recover sewage when time permits. Use all available means to prevent discharge from entering storm drain system or flowing into waterways.
- d. Notify sewer-cleaning contractors currently being used by the City. Phone numbers are listed below:
- e. Area shall be flushed and disinfected as required with all wash water being captured and returned to the sewer system.

Walker Sewer	714-680-5380
Yorba Linda Water Dist.	714-777-9593
Orange County Septic Pumping	714-540-5181
Pro Pipe	1-800-386-1497
Premier West Contractors	714-279-0903
Gentry Brothers	626-357-9631

#### 2. Duties of Supervisory Personnel:

- a. Assess discharge rate and duration of discharge.
- b. Contact OCHCA, PFRD, RWQCB and provide them with the required information regarding the spill and State OES.
- c. Take photos of the discharge. Photos need to show the spill, the area effected and the area after the cleanup. Copies of these photos are to accompany the report to the RQWCB.
- d. Ensure expedient arrival of sewer cleaning equipment. Supervise containment methods used by the first responder.
- e. Document all actions taken during the spill: location of spill; flow rate; time of flow; when flow was stopped; type of containment; cause of discharge; time clean-up was completed; method used to clean area; and agencies contacted with names of personnel contacted.
- f. Fill out appropriate form for RWQCB. Send information or FAX to RWQCB (refer to Reporting Section). File copies of information in department file system for sewer discharges.

#### Storm Drain System:

Every effort must be made to keep an SSO out of the storm drain system. The storm drain system includes catch basins, drainage ditches, flood control channels, waterways or any other conveyance utilized for storm water drainage. Earthen berms or sand bags can be constructed to divert and contain the sewage flow. Rubber sheeting, available on

City response vehicles, can be used to prevent sewage from entering the storm drain system. Even if sewage has already entered the storm drain system the above methods should be utilized to prevent additional sewage from continuing to enter the storm drain system.

If the SSO has entered the storm drain system first take steps to prevent additional sewage from entering the storm drain. Consult the Storm Drain/Sewer Utility Map Book located in the response vehicle. Determine the direction of flow and where the closest location is where the storm drain system can be inspected to determine if the extent of sewage contamination within the storm drain system. If the SSO has entered the county's flood control system, the Orange County Flood Control District will have to be notified for assistance or access to their facilities. Cleanup of the storm drain system is to begin as soon as equipment and personnel are available. Disinfectants should not be utilized unless under the direction of your supervisor or a regulatory agency representative. They will determine the type, amount and dilution of the disinfectant. City crews will work in conjunction with contractor responding to the SSO to cleanup and remove the sewage from the storm drain system. To the extent that access permits, a vacuum truck should be utilized to remove the sewage from the storm drain and return the sewage to the sanitary collection system. If this is not possible whatever means are available should be used to cleanup the storm drain thus preventing the SSO from reaching the waters of the United States.

## **Reporting Procedures:**

To remain in compliance with the California Regional Water Quality Control Board, Santa Ana Region's General Waste Discharge Requirements Order Number R8-2002-0014, **ALL** SSOs must be reported. The method for reporting varies depending upon the circumstances surrounding the SSO. Depending upon the type and location of the SSO, up to three basic reports are required. These reports, an initial telephone report, a written SSO report to be submitted within five days of the SSO and the SSO Monthly Summary Report, are in addition to reports made to the OCHCA, PFRD and, if necessary, the California Office of Emergency Services. Photographs must be taken of each SSO within the City's jurisdiction to be included with the monthly report.

The initial telephone report to the SWQCB is required for all SSOs that occur in the City's collection system and requires specific information as does the initial report to the OCHCA and PFRD, and must be made ASAP. The telephone report is not required (for SWQCB) if the SSO is totally contained, totally cleaned up and returned to the sewer system, has not caused a nuisance and/or has not entered the storm drain system.

A written report of an SSO must be submitted to the RWQCB, within five days. This report contains most of the information required on the initial telephone report plus some additional information. Like the initial telephone report, the written report is required for all SSOs except those that are totally contained, totally cleaned up and returned to the sewer system, has not caused a nuisance and/or has not entered the storm drain system. The written report is required even if the sewage can be recaptured in an enclosed storm drain. In this situation, the discharger is required to demonstrate that no sewage was discharged to surface waters.

The Monthly Summary is submitted via a Microsoft Excel spreadsheet within thirty days of the end of each monthly reporting period. Each calendar month is a monthly reporting period. This monthly summary is to include ALL SSOs. This includes SSOs within the City limits but on private property that the City becomes aware of, SSOs that occur within the City limits but within the jurisdiction of the Yorba Linda Water District that the City becomes aware of, and SSOs that occur within the City's collection system, including those that were totally contained and did not require a telephone or written report. Should there be no SSOs within the City's jurisdiction or the City is unaware of any spills outside of its jurisdiction, a letter stating that no spills occurred during the reporting period may be submitted in lieu of the Monthly Summary spreadsheet.

All reports submitted to the Regional Board must be signed by the Director of Public Works and include the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direct 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 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.

All SSOs within the City's collection system must be reported to the Orange County Health Care Agency 714-667-3750 and Control one after hours 714-834-7208 also to the California Water Regional Control Board 909-782-4130

All SSOs over one thousand (1,000) gallons must be additionally reported to the California Office of Emergency Services, phone number 1(800)-825-7550. The Fax number for follow up is 1(916)-262-1677.

SSO Reporting Summary			
Type of SSO	Type of Report		
Private property SSO totally contained.	Monthly Summary Report if the City becomes aware of the SSO.		
Private property SSO that is not contained and flows to public property and/or enters	Reports are contingent upon the City becoming aware of the problem.		
the storm drain system.	Initial telephone report.		
	Written report.		
	Monthly Summary Report.		
	Orange County Health Care Agency.		
	Office of Emergency Services if over 1,000 gallons.		
Public property within the City's collection system, totally contained, does not enter the storm drain system.	Monthly summary report.		
Public property within the City limits but within the Yorba Linda Water District's collection system, is totally contained and does not enter the storm drain system.	Monthly Summary Report if the City becomes aware of the SSO.		
Public property within the City's collection	Initial telephone report.		
system, is not totally contained, and/or	Written report.		
enters the storm drain system.	Monthly Summary Report.		
	Orange County Health Care Agency.		
	Office of Emergency Services if over 1,000 gallons.		
Public property within the City limits but within the Yorba Linda Water District's collection system, is not totally contained, and/or enters the storm drain system.	Monthly Summary Report if the City becomes aware of the SSO.		
No SSOs occurred nor does the City have any knowledge of SSOs occurring.	A letter submitted stating that no SSOs occurred in lieu of the Monthly Summary Report.		

The following table is a summary of how SSOs are to be reported.

## **Reporting Contacts:**

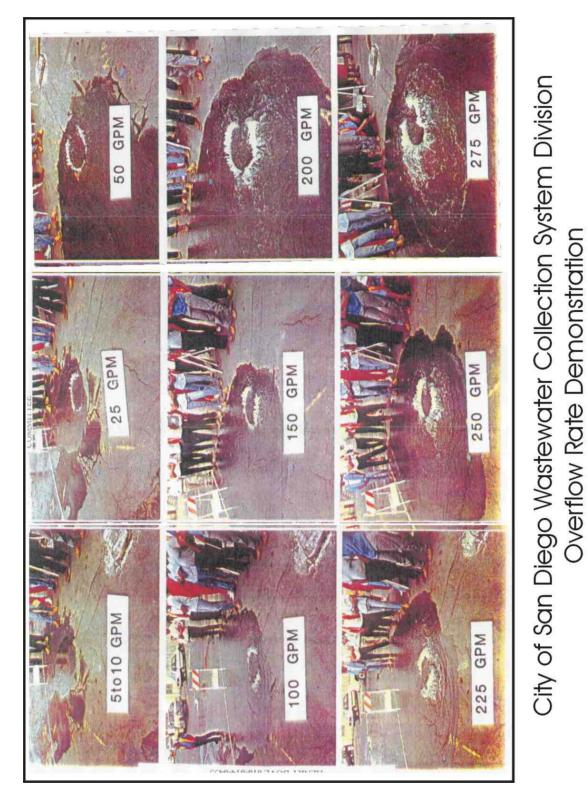
1.	California Regional Water Quality Control Board	(909) 782-4992			
	3737 Main Street, Suite 500 FA	X (909) 781-6288			
	Riverside, CA 92501-3339				
	Attention: Mr. Ken Theisen (contact person)	(909) 320-6362			
2.	Orange County Health Care Agency				
	2009 East Edinger Avenue				
	Santa Ana, CA 92705-4720	(714) 667-3600			
	Attention: Mr. Larry Honeybourne				
	After Hours:				
	Orange County Communications Control	(714) 834-7208			
	(NOTE: You must inform the dispatcher that the problem is related to a sewer				
	overflow, leave your phone number, a field sanitarian will ca	ll you later.)			
3.	State of California Office of Emergency Services	(800) 852-7550			
	(NOTE: Make sure you write down the case number they give you.)				
4.	Orange County Public Facilities and Resources Department	(714) 567-6363			
5	Flood Control Division, O&M and Environmental Resources	(714) 567-6300			

## **SSO Flow Estimation:**

Accurate flow estimation is essential to determine the impact of an SSO. Additionally, accurate flow estimation is important to determine the extent of the cleanup and its effectiveness. Flow estimation is basically the flow rate times the amount of time the flow has occurred. Exhibit I (low flow rates) and Exhibit II (higher flow rates) have been included to assist in the estimation of flow rates to determine the flow volume of an SSO. Exhibit I is a chart that assists in determining the estimated flow from the vent and pick holes in manhole covers. To use the chart determine the diameter of the vent or pick hole(s) and the height of the water column coming out of the hole(s). For any given size hole and water column the chart will provide the flow rates in cubic foot seconds (CFS), gallons per minute (GPM) or gallons per hour (GPH). The flow rate times the number of holes generating flow times the elapsed time of the SSO will determine the estimated volume of the SSO. Exhibit II is a series of illustrations depicting what an overflowing manhole looks like at various flow rates. Exhibit II can be used to give an approximate determination of the flow rate for manholes that are overflowing at a rate substantially higher than through only the vent and pick holes. To use exhibit II pick the illustration that most closely matches the actual overflow. Use that gpm rate times the elapsed time the manhole has been overflowing to determine the estimated SSO volume. Additionally, utilize the resources of the contractor who is assisting with the SSO to determine the estimated flow volume and amount of sewage recovered.

Hole Dia.	Water Ht	Q	Q	Q
inches	inches	cfs	gpm	gph
Vent Hole				
0.50	1/16 th	0.0005	0.23	14
0.50	1/8 th	0.0007	0.33	20
0.50	1/4 th	0.0010	0.47	28
0.50	one half	0.0015	0.66	40
0.50	3/4 ths	0.0018	0.81	49
0.50	1 inch	0.0021	0.94	56
Vent Hole				
0.75	1/16 th	0.0011	0.51	31
0.75	1/8 th	0.0016	0.72	43
0.75	1/4 th	0.0023	1.02	61
0.75	one half	0.0032	1.44	87
0.75	3/4 ths	0.0039	1.77	106
0.75	1 inch	0.0045	2.04	122
Vent Hole				
1.00	1/16 th	0.0020	0.88	53
1.00	1/8 th	0.0028	1.25	75
1.00	1/4 th	0.0039	1.77	106
1.00	one half	0.0056	2.50	150
1.00	3/4 ths	0.0068	3.06	184
1.00	1 inch	0.0079	3.54	212
Pick Hole	semicircula	ir area		
1.00	1/16 th	0.0010	0.44	27
1.00	1/8 th	0.0014	0.63	38
1.00	1/4 th	0.0020	0.89	53
1.00	one half	0.0028	1.25	75
1.00	3/4 ths	0.0034	1.53	92
1.00	1 inch	0.0039	1.77	106
1.00	1-1/2 incl	0.0048	2.17	130
1.00	2 inches	0.0056	2.51	150

Exhibit II



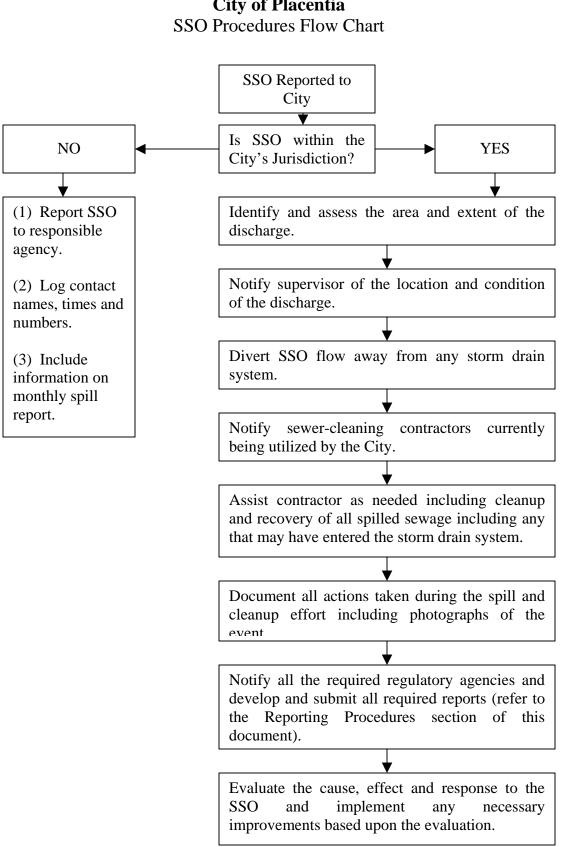
## **Employee Call-Out List:**

Standby list is updated quarterly. Currant list is as follows:

Standby Pager	XXX-XXX-XXXX
Standby cell phone	XXX-XXX-XXXX
Ozzy Rubalcava	XXX-XXX-XXXX
Joel Cardenas –	XXX-XXX-XXXX
Larry Moore –	XXX-XXX-XXXX
Joe Najera –	XXX-XXX-XXXX
<i>Crew Leaders</i> Ken Solvey Cell phone	XXX-XXX-XXXX XXX-XXX-XXXX
Derrick Warren	XXX-XXX-XXXX
Cell phone	XXX-XXX-XXXX
Roger Reyes	XXX-XXX-XXXX
Cell phone	XXX-XXX-XXXX
Jim Milano	XXX-XXX-XXXX
Cell phone	XXX-XXX-XXXX
Supervisors Bill Verstynen Cell phone Ken Rokosz Cell phone	XXX-XXX-XXXX XXX-XXX-XXXX XXX-XXX-XXXX XXX-XXX-XXXX
Superintendent Geoff Cobbett Cell phone	XXX-XXX-XXXX XXX-XXX-XXXX

## **Resource List:**

Yorba Linda Water District 4622 Plumosa Drive Yorba Linda, Ca 92885-0309	(714) 777-9593 FAX (714) 701-0413
Yorba Linda Water District Operations Yard 913 So. Richfield Placentia, CA 92870	(714) 701-1480
Orange County Sanitation District PO Box 8127 Fountain Valley, CA 92728	(714) 962-2411
Walker Sewer Service 412 North Philadelphia Anaheim, CA 92805	(714) 680-5380
Orange County Septic Pumping	(714) 540-5181
California Pipeline Inspection	(562) 699-5474
Asbury Environmental Service	(909) 356-0245
Premier West Contractors	(714) 279-0903
Gentry Brothers	(626) 357-9631
Pro Pipe	(800) 318-4161



## Training and Review:

This Sanitary Sewer Overflow Emergency Response Plan must be reviewed at least annually for its effectiveness in responding to sewer overflows. Any supporting documentation is likewise to be reviewed to ensure all documentation is current, correct and applicable to this plan. More frequent reviews may be necessary if, after an overflow, it is determined that the procedures enclosed are inadequate. This plan is to be modified as needed to always allow for an appropriate response to any sanitary sewer overflow within the City's collection system. Modifications of this plan shall be distributed to all required City personnel within 30 days of the modifications being finalized. Modifications shall be forwarded to the RWQCB upon completion or at their request.

This plan shall be made available to any member of the public upon written request to the City of Placentia.

All City employees involved in the management, administration, supervision, maintenance, operation, or response to a sanitary sewer overflow shall be trained in, and become familiar with, the procedures contained in the Sanitary Sewer Overflow Emergency Response Plan when this plan is initialized and shall receive further training at least annually. More frequent training may be required. All training, including the names of those receiving training is to be documented.