



CITY of PACIFICA, WASTEWATER DEPARTMENT
 CALERA CREEK WATER RECYCLING PLANT
 170 Santa Maria Avenue, Pacifica, California
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2/28/13

Bruce H. Wolfe, Executive Officer
 California Regional Water Quality Control Board, San Francisco Bay Region
 1515 Clay Street, Suite 1400
 Oakland, CA 94612
 ATTN: Claudia Villacorta

Dear Mr. Wolfe,

Subject: SSMP Audit and Annual Report of Sanitary Sewer System Overflows for Calendar Year 2012

The purpose of this letter is to report on the calendar year 2012 SSMP audit and the Sanitary Sewer System Overflows (SSOs) that occurred in the City of Pacifica sanitary sewer system during the period January 1, 2012 through December 31, 2012. This report is submitted pursuant to the requirements included in the San Francisco Bay Regional Water Quality Control Board Letter, New Requirements for Reporting Sanitary Sewer Overflows, dated November 15, 2004 and the Statewide General WDR dated May 2, 2006.

Number and Size of SSOs

The total number of SSOs for the reporting period was 5. There were zero SSOs related to wet-weather during this period. The sizes of SSOs are summarized as shown on Table 1.

Table 1. Number of SSOs

Size of SSO (gallons)	Number	Percent of Total by Number
Greater than or equal to 1,000	0	0%
From 100 to 999	2	40%
From 10 to 99	1	20%
Less than 10 [can include in line above]	2	40%
[Public portion of lateral (<i>also included in above lines</i>)]		
Total	5	100%

The volume of spills contained and returned to the sanitary sewer system, as well as the volume reaching waters of the State is shown in Table 2.

Table 2. Volume of SSOs

	Volume (gallons)	Percent of Total by Volume
Total volume contained and returned to sewer system for treatment	321	100%
Total volume reaching waters of the State	0	0%
Total volume not contained but not reaching waters of the State (everything else)		
Total	321	100%

The highest volume SSO for 2012 was a 200 gallon spill on January 2nd involving a root intruded joint of a six inch sewer main. This report does not include SSOs that occurred from private sewer service laterals within the City of Pacifica jurisdiction that were caused by conditions in privately-owned laterals or on private property. On January 1, 2012 the City Council passed a new ordinance that, among other provisions, removed any responsibility for the maintenance or repairs of any part of a sewer service lateral regardless of the location of a cleanout. The property owners are responsible for the condition and the operation of the sewer service lateral from the structure to the sewer main line in the public right-of-way.

Cause of SSOs

The only cause of SSOs during the period of this report was root intrusion. The distribution of SSOs by cause is shown on Table 3.

Table 3. Causes of SSOs

Cause of SSO	Number	Percent of Total
Blockage:		
Roots	5	100%
Grease		
Debris		
Debris from Laterals		
Vandalism		
Animal Carcass		
Construction Debris		
Multiple Causes		
Subtotal for Blockage	5	
Infrastructure Failure		
Inflow & Infiltration		
Electrical Power Failure		
Flow Capacity Deficiency		

Natural Disaster		
Bypass		
Cause Unknown		
Total	5	100%

Location of SSOs

The SSOs that have occurred in the City of Pacifica are spread throughout our jurisdiction and there is no general location in which they are occurring. In the northern neighborhood of Manor there was one SSO, in the central neighborhood of Sharp Park there was one SSO, and in the southernmost neighborhoods of Linda Mar and Pedro Point there were two and one SSOs respectively.

SSO Trends

The number of SSOs from a main line in the City of Pacifica during 2012 was the same as in 2011. The total number of main line annual SSOs has significantly decreased since 2008.

Main Line SSOs	Year	2008	2009	2010	2011	2012
	Annual Number	21	17	16	5	5

Under Part VI of the City’s Consent Decree the SSO Reduction Performance Goal for 2012 was 14 and we were 9 SSOs under our goal.

Sewer System Management Plan (SSMP)

The SSMP for the City of Pacifica was re-certified by the City Council in a public meeting November 13th, 2012. A number of changes and updates were made to the Operations and Maintenance, F.O.G. Program, Legal Authority, Emergency Response Plan, Sewer System Evaluation and Capacity Assurance Plan, and Organization sections. A significant change to the SSMP was a new ordinance updating source control provisions, maintenance responsibility of sewer service laterals, and inspection and replacement of sewer service laterals at transfer of property. The Master Plan, SSO Reduction Plan, smoke testing data, and Division Training Plan for the collection system was included in the Operations and Maintenance section. To view all of the changes the entire SSMP may be found online at

http://www.cityofpacific.org/depts/wwt/waste_water_collection/sanitarymp.asp

SSMP Audit

Operations and Maintenance

We have an ongoing sewer system maintenance program in which we use a power rodding truck and a hydro-jet rod truck to clean the system per a SSO Reduction Plan schedule. A computerized asset management/maintenance system (CMMS) program was implemented in September of 2011 (ICOM3 by Redzone Robotics) and we are now scheduling our maintenance and repair activities through the program. The SSO Reduction Plan was developed for the

Division by RMC Engineering and the information from this plan was incorporated in the CMMS. In 2012 Division staff cleaned approximately 105 miles of main lines using a mechanical power rodder and a hydro-jetter. Using the power rodder we cleaned at an average rate of 331 feet/hour and with the hydro-jetter we cleaned at an average rate of 663 feet/hour.

The Division has developed a CCTV in-house inspection program to identify sources of SSOs and infiltration and inflow and in 2012 approximately 15 miles of sewer mains were televised and inspected. Since our CCTV inspection program was implemented we have now televised and inspected approximately 70 miles of sewer mains, or 85% of Pacifica's sanitary sewer system. The entire sanitary system completed by our CDO and Consent Decree time frame of March 1, 2013 (This report was prepared at the end of February 2013 and we have completed the CCTV of our entire system).

The Division has a regular sewer repair crew that performs spot repairs of main lines generated through CCTV and maintenance activities, and in some cases replaces whole pipe segments of the system. In 2012 the Division performed over 50 spot repairs and main line replacements with this in-house crew. As part of the Master and Capital Improvement Plan three major projects were completed; a 1400 foot main line replacement in the lower Linda Mar area, a 1600 foot capacity assurance project involving a trunk sewer in the Sharp Park area, and a 260 foot trunk sewer pipe lining project in the Manor area.

A pilot program involving root foaming of main line pipe segments was performed last year using Duke's Root Control, Inc. Approximately 22,000 feet of main lines were identified from our CMMS data and CCTV inspections as having major root intrusion issues and Duke's was contracted to root foam every pipe segment during October and November of 2012. Part of the pilot program involved progressively testing the use of root control chemicals and monitoring any effects on the Calera Creek Water Recycling Plant (CCWRP). The program was a success in that CCWRP did not experience any issues related to root control activities and we will CCTV the pipe segments after a three-month time to allow the chemicals to work.

The Division began outlining and then finalizing a 20-year Financial Plan that incorporates the data from the Master Plan and this should be completed by February of 2013. This is an important part of our long-range planning process.

Part of the Division's long-term capital planning for the pump stations involves purchasing a new pump and motor for each station at regular intervals and this was done for the Sharp Park P.S. in 2012. A new pump and motor is scheduled to be purchased for the Linda Mar P.S. as well as replacing the standby generator in 2013.

FOG Program

Staff continues to administer a FOG and Source Control Program in which we inspect the food establishments and FOG producers in Pacifica approximately once or twice a year. A full-time source control inspector administers this program and has begun working with local businesses to identify non-compliance with our ordinance and require upgrades where needed. Staff began this process with the major FOG producers in Pacifica, the Linda Mar Shopping Center and the Fairmont Shopping Center, both properties owned by Kimco Realty. Kimco was sent a letter requiring a maintenance plan, drawings of the system, and a CCTV inspection of these private systems due by March 1, 2013 (This report was prepared at the end of February 2013 and Kimco has complied with this requirement).

Areas for Improvement

Operations and Maintenance

A significant part of Pacifica's sanitary sewer system has root intruded joints that require a significant amount of maintenance with our power rodder and hydro-jetter. After the successful pilot project with root foaming we will identify other areas of root intrusion in the system and perform more root foaming activities in 2013. This should help to reduce the amount of maintenance activities involving root intruded main lines and reduce the number of SSOs due to root intrusion.

The two primary vehicles used to perform maintenance activities, a Sreco power rodder and a Vaccon sewer combination cleaner, are over 10 years old, require much vehicle maintenance, and over the last period had significant down time due to age related breakdowns. This has been a primary cause of our maintenance activities falling behind schedule at times, especially rodding maintenance, and consequently staff has budgeted in the 2012/2013 Fiscal Year to purchase a new Champion power rodder and a new Vaccon sewer combination cleaner. Both vehicles are expected to be delivered in the spring or summer of 2013. This should reduce the down time of our maintenance vehicles and allow staff to stay on schedule. Also, we are keeping the old Vaccon vehicle and will use it as the primary vacuum excavating equipment for sewer pipe repair activities allowing the new Vaccon to be dedicated full-time to maintenance activities.

Through the Division's FOG Program we have identified a number of food serving establishments that require an upgrade or new grease trap/interceptor installations and are in the processing of writing non-compliance letters to that effect. The Division began with the most significant source of FOG in Pacifica, the Linda Mar Shopping Center, and will move along to other sources throughout the year. This should reduce the amount of FOG entering the collection system and decrease the potential for FOG related SSOs.

The Master Plan and Capacity Assurance Plan outlines some significant main line replacements that will occur in 2013 that should help to alleviate infiltration and capacity issues. The lower neighborhood of Linda Mar adjacent to the Linda Mar State Beach has been identified through flow studies, CCTV inspection, and smoke testing as being a potential for significant infiltration and in the summer of 2013 approximately 8,000 feet of sewer main lines will be replaced and in some cases upgrading to expand capacity. The Feasibility Study for an equalization basin will be completed in 2013 and the engineering is slated to begin in 2013 as well. The basin is a major part of our Capacity Assurance Plan.

A consultant was hired in late 2012 to update the Division's Emergency Response Plan dealing with SSOs and the updated plan should be delivered to the Division in February of 2013. The Plan will be incorporated into the SSMP and the Training Program.

FOG Program

The organization in 2012 left one position unfilled in the FOG Program and this has caused our grease trap/inspection program to fall behind. In the beginning of 2013 we shall fill this position and staff believes we will be able to get our inspections back on track with the program requirements.

Certification

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joshua Cosgrove", with a long horizontal flourish extending to the right.

Joshua Cosgrove
Assistant Superintendent, City of Pacifica