

Sanitary Sewer Overflows – December 2006 (Eric Becker, Charles Cheng, Joann Cofrancesco, Michelle Mata, Olufisayo Osibodu, Melissa Valdovinos)

From December 1 to December 31, 2006, there were 18 sanitary sewer overflows, including four spills of 1,000 gallons or more, reported to the Regional Board office pursuant to the requirements of Order No. 96-04 from publicly-owned sewage collection systems. Eight of the 18 spills reached surface waters or storm drains, one of which resulted in closure of recreational waters. The combined total volume of reported sewage spilled from all publicly-owned collection systems for the month of December 2006 was 7,860 gallons.

There were also 20 sewage overflows from private property reported in December 2006. Fourteen of these spills reached surface waters or storm drains, and one resulted in closure of recreational waters. All of the reported sewage spills from private property were less than 1,000 gallons.

During December 2006, 0.71 inches of rainfall was recorded at San Diego's Lindbergh Field. For comparison, in November 2006, 0.15 inches of rainfall was recorded at Lindbergh Field, and 17 public SSOs were reported. Also for comparison, in December 2005, 0.25 inches of rainfall was recorded at Lindbergh Field, and 17 public SSOs were reported.

Attached is a table titled "Sanitary Sewer Overflow Statistics", updated through December 31, 2006, which contains a summary of all SSOs by fiscal year (FY) from each agency since FY 2002-2003.

It should be noted that the data for spill volume per volume conveyed (GAL/MG) could be easily misinterpreted. For a sewage collection agency that has a relatively small system, a spill of a few hundred gallons or more could result in a high value for spill volume per volume conveyed. On the other hand, a high volume spill event for a large collection system may still result in a low value for this statistic. Hence, these numbers by themselves are not sufficiently representative of the measures being taken by a sewer agency to prevent SSOs, nor can the numbers be compared directly between sewage collection agencies. The data does represent a different way to review and analyze SSO volume data as it relates to system size.

One Notice of Violation (NOV) for an SSO was issued in December. The NOV was sent on December 5, 2006 to Eastern Municipal Water District for a one million-gallon SSO that occurred on November 14, 2006. The SSO was caused by an accidental punctuation of a force main pipe, which resulted in discharge of raw sewage to Murrieta Creek, a tributary to the Santa Margarita River.

As of November 2, 2006, sewage collection agencies in Region 9 were required to be enrolled under State Board Order No. 2006-003-DWQ (General Statewide Waste Discharge Requirements for Collection Agencies). Enrollment under State Board Order No. 2006-003 requires sewage collection agencies to submit electronic SSO reports to the State Board. The content of future monthly SSO Executive Officer Reports will change due to the new electronic reporting system.

Tentative Order No. R9-2006-0121, a Region 9 Order prohibiting SSOs, which will supersede the current Order No. 96-04, was presented to the Regional Board in October 2006. Tentative Order No. R9-2006-0121 has been revised to clarify findings, definitions, and reporting requirements. The Tentative Order has been mailed to the sewage collection agencies and will be presented to the Regional Board on January 24, 2007.

Additional information about the Regional Board's SSO regulatory program is available at the Regional Board's web site at <http://www.waterboards.ca.gov/sandiego/programs/sso.html>.

**SANITARY SEWER OVERFLOW STATISTICS (Updated through December, 31 2006)**

SEWAGE COLLECTION AGENCY	SYSTEM SIZE <sup>B</sup>		NO. OF SEWAGE SPILLS [LISTED BY FISCAL YEAR (FY) - JULY 1 THROUGH JUNE 30]					SPILLS PER 100 MILES (LISTED BY FY)					SPILL VOLUME 2006-07 <sup>A</sup>		NO. OF PRIVATE SPILLS <sup>E</sup>	VOLUME OF PRIVATE SPILLS
	Miles	MGD	02-03	03-04	04-05 <sup>A</sup>	05-06 <sup>A</sup>	06-07 <sup>A</sup>	02-03	03-04	04-05 <sup>A</sup>	05-06 <sup>A</sup>	06-07 <sup>A</sup>	GAL	GAL/MG <sup>C</sup>	06-07	GAL
<b>ORANGE COUNTY:</b>																
EL TORO WD	55	2.2	1	3	3	2	1	1.8	5.5	5.5	3.7	1.8	0	0	1	8
EMERALD BAY SERVICE DISTRICT	6	0.1	0	0	1	0	0	0.0	0.0	16.7	0.0	0.0	0	0	0	0
IRVINE RANCH WD	36	2.0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0	0	0
LAGUNA BEACH, CITY OF	95	2.4	27	8	11	5	2	28.4	8.4	12.6	5.3	2.1	1,000	2	7	273
MOULTON NIGUEL WD	530	13.0	1	2	5	1	1	0.2	0.4	0.9	0.2	0.2	600	0	0	0
SAN CLEMENTE, CITY OF	179	4.5	7	2	5	2	4	3.9	1.1	2.8	1.1	2.2	2,050	2	3	100
SAN JUAN CAPISTRANO, CITY OF	100	3.4	0	1	2	0	1	0.0	1.0	2.0	0.0	1.0	5,300	8	0	0
SANTA MARGARITA WD	546	10.7	4	5	6	4	1	0.7	0.9	1.1	0.7	0.2	0	0	1	300
SOUTH COAST CWD	132	4.0	8	7	4	3	2	6.1	5.3	3.0	2.3	1.5	450	1	3	80
TRABUCO CANYON WD	43	0.7	0	1	3	0	1	0.0	2.3	7.0	0.0	2.3	0	0	0	0
<b>RIVERSIDE COUNTY:</b>																
EASTERN MWD	421	9.5	3	7	0	0	2	0.7	1.7	0.0	0.0	0.5	1,071,000	613	0	0
ELSINORE VALLEY MWD	80	2.0	0	1	3	1	0	0.0	1.3	3.8	1.3	0.0	0	0	0	0
MURRIETA MWD	25	0.5	0	1	0	0	0	0	4.0	0.0	0.0	0.0	0	0	0	0
RANCHO CA WD	71	2.9	0	1	2	1	1	0.0	1.4	2.8	1.4	1.4	600	1	0	0
<b>SAN DIEGO COUNTY:</b>																
BUENA SANITARY DISTRICT	84	1.9	2	1	2	3	0	2.4	1.2	2.4	3.6	0.0	0	0	0	0
CARLSBAD MWD	214	7.2	6	6	12	10	8	2.8	2.8	4.7	4.7	3.7	2,657	2	3	690
CHULA VISTA, CITY OF	400	16.0	3	1	7	4	1	0.8	0.3	1.3	1.0	0.3	200	0	5	377
CORONADO, CITY OF	53	3.8	2	5	0	0	0	3.8	9.4	0.0	0.0	0.0	0	0	0	0
DEL MAR, CITY OF	30	1.1	7	1	0	2	0	23.4	3.3	0.0	6.7	0.0	0	0	0	0
EL CAJON, CITY OF	198	9.1	3	0	3	0	3	1.5	0.0	1.5	0.0	1.5	4,100	2	0	0
ENCINITAS, CITY OF	118	4.1	6	1	5	0	1	5.1	0.8	4.2	0.0	0.8	0	0	0	0
ESCONDIDO, CITY OF	350	10.8	3	2	4	4	5	0.9	0.6	1.1	1.1	1.4	860	0	3	190
FAIRBANKS RANCH COMM SERV DIST	15	0.2	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0	0	0
FALLBROOK PUBLIC UTILITY DIST	72	2.0	22	9	10	8	0	30.6	12.5	13.9	11.1	0.0	0	0	2	90
IMPERIAL BEACH, CITY OF	84	2.2	14	2	8	2	0	16.7	2.4	9.5	2.4	0.0	0	0	0	0
LA MESA, CITY OF	155	5.8	3	4	3	0	0	1.9	2.6	1.9	0.0	0.0	0	0	0	0
LEMON GROVE, CITY OF	69	2.4	4	4	3	0	0	5.8	5.8	4.3	0.0	0.0	0	0	0	0
LEUCADIA CWD	185	4.2	6	1	6	3	0	3.2	0.5	2.7	1.6	0.0	0	0	0	0
NATIONAL CITY, CITY OF	97	5.1	1	2	1	4	0	1.0	2.1	1.0	4.1	0.0	0	0	0	0
OCEANSIDE, CITY OF, WTR UTIL DEP	446	13.0	23	22	13	7	2	5.2	4.9	3.1	1.6	0.4	770	0	1	700
OLIVENHAIN MWD	16	0.4	2	0	3	0	0	12.5	0.0	18.8	0.0	0.0	0	0	0	0
OTAY MWD	86	1.4	3	1	0	0	0	3.5	1.2	0.0	0.0	0.0	0	0	0	0
PADRE DAM MWD	150	5.1	3	3	1	1	0	2.0	2.0	0.7	0.7	0.0	0	0	0	0
PAUMA VALLEY COMM SERVICE DIS	8	0.7	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0	0	0
POWAY, CITY OF	170	4.0	5	3	0	5	1	2.9	1.8	0.0	2.9	0.6	100	0	0	0

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<b>SAN DIEGO COUNTY (continued):</b>																
RAINBOW MWD	54	0.7	2	6	2	0	1	3.7	11.1	3.7	0.0	1.8	3,000	22	1	761
RAMONA MWD	83	1.3	2	2	4	4	0	2.4	2.4	3.6	4.8	0.0	0	0	0	0
RANCHO SANTA FE COMM SERV DIST	52	0.4	1	0	2	0	0	1.9	0.0	3.9	0.0	0.0	0	0	0	0
SAN DIEGO CO, PUBLIC WORKS	380	11.0	11	2	2	3	0	2.9	0.5	0.5	0.8	0.0	0	0	0	0
SAN DIEGO, CITY OF, MWWD	2,894	170.1	193	115	122	82	43	6.7	4.0	3.3	2.8	1.5	58,666	2	49	7,870
SOLANA BEACH, CITY OF	52	1.2	1	6	1	1	0	1.9	11.5	0.0	1.9	0.0	0	0	1	2,000
USMC BASE, CAMP PENDLETON	194	3.1	23	14	12	16	5	11.9	7.2	5.2	8.3	2.6	6,900	12	0	0
US NAVY	123	4.0	12	11	13	11	8	9.8	9.0	10.6	9.0	6.5	14,227,990	19,332	1	50
VALLECITOS WD	202	6.1	5	4	6	7	0	2.5	2.0	2.5	3.5	0.0	0	0	0	0
VALLEY CENTER MWD	48	0.3	3	1	1	0	0	6.3	2.1	2.1	0.0	0.0	0	0	0	0
VISTA, CITY OF	198	6.5	4	7	9	5	1	2.0	3.5	4.6	2.5	0.5	6,000	5	0	0
WHISPERING PALMS COMM SERV DIS	17	0.3	1	0	0	0	0	5.8	0.0	0.0	0.0	0.0	0	0	0	0
REGION 9 TOTAL	9,615	363	427	275	266	201	95						15,392,243		81	13,489
AVERAGE <sup>1</sup>								4.4	2.9	2.8	2.1	1.0		426		
STANDARD DEVIATION <sup>2</sup>								7.0	3.4	4.4	2.6	1.3		2,819		
MEDIAN <sup>3</sup>								2.4	2.0	2.5	1.0	0.0		0		

<sup>A</sup> Includes available preliminary data for July 1, 2004 through December 31, 2006, and may not include all spills less than 1,000 gallons that did not enter surface waters or storm drains during this period.

<sup>B</sup> As of June 2003.

<sup>C</sup> Total spill volume (in gallons) divided by the volume of wastewater conveyed (in million gallons) from July 1, 2006 through December 31, 2006.

<sup>D</sup> Included with Eastern Municipal Water District

<sup>E</sup> Private spills are listed to indicate their locations. Public sewer agencies are not responsible for private property spills and are not required by Order No. 96-04 to report private property spills.

<sup>1</sup> The average is the sum of all values divided by the number of values.

<sup>2</sup> In a normally distributed set of values, 68% of the values are within one standard deviation either above or below the average value.

<sup>3</sup> The median is the middle value in a set; half the values are above the median, and half are below the median.