V. Ocean Monitoring Data Summary

A. Ocean Sediment Chemistry Data Tables.
B. Fish Tissue Chemistry Data Tables.

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Maps, with sampling sites labeled, are included in this section.

Summary of Sampling Technique[6]:

Sediments

Benthic sediment is obtained using a $0.1m^2$, chain-rigged Tandem van Veen grab sampler deployed from a City ocean monitoring vessel. Sediment samples are collected from the top 2 cm of an undisturbed grab surface and then placed into an appropriately labeled sample container. Subsamples are placed on ice and subsequently shipped to the laboratory for chemical analysis. Preservatives are used in accordance with the requirements of 40 CFR and our Quality Assurance Plan. Sediment concentrations are based on the dry weight of a sample.

Fish Tissue

Several species of flat fish and rock fish are taken by Otter trawls and/or rig fishing. The dissected muscle and liver tissues are frozen and delivered to the laboratory for analysis. Tissue samples are kept frozen until prepared for analyses.

6 For complete description of the sampling protocols, dissections, equipment, vessels, etc. related to the sampling of ocean sediments and fish, please refer to the City of San Diego, Annual Receiving Waters Monitoring Report 2011

A. Ocean Sediment Chemistries.

The data for Biochemical Oxygen Demand (BOD) and Total Volatile Solids (TVS), all measures of organic enrichment, as well as total sulfides and temperature, are all presented by quarter and averaged. The quarterly particle size analysis does not lend itself to summarization and each quarter's analysis is presented separately. For the data from all the metals, cyanide, radiation and all of the numerous organic priority pollutant analyses (except dioxin, presented by quarter) only the average of the four quarters is presented here; the values for each quarter has been reported in the Quarterly Monitoring Reports.

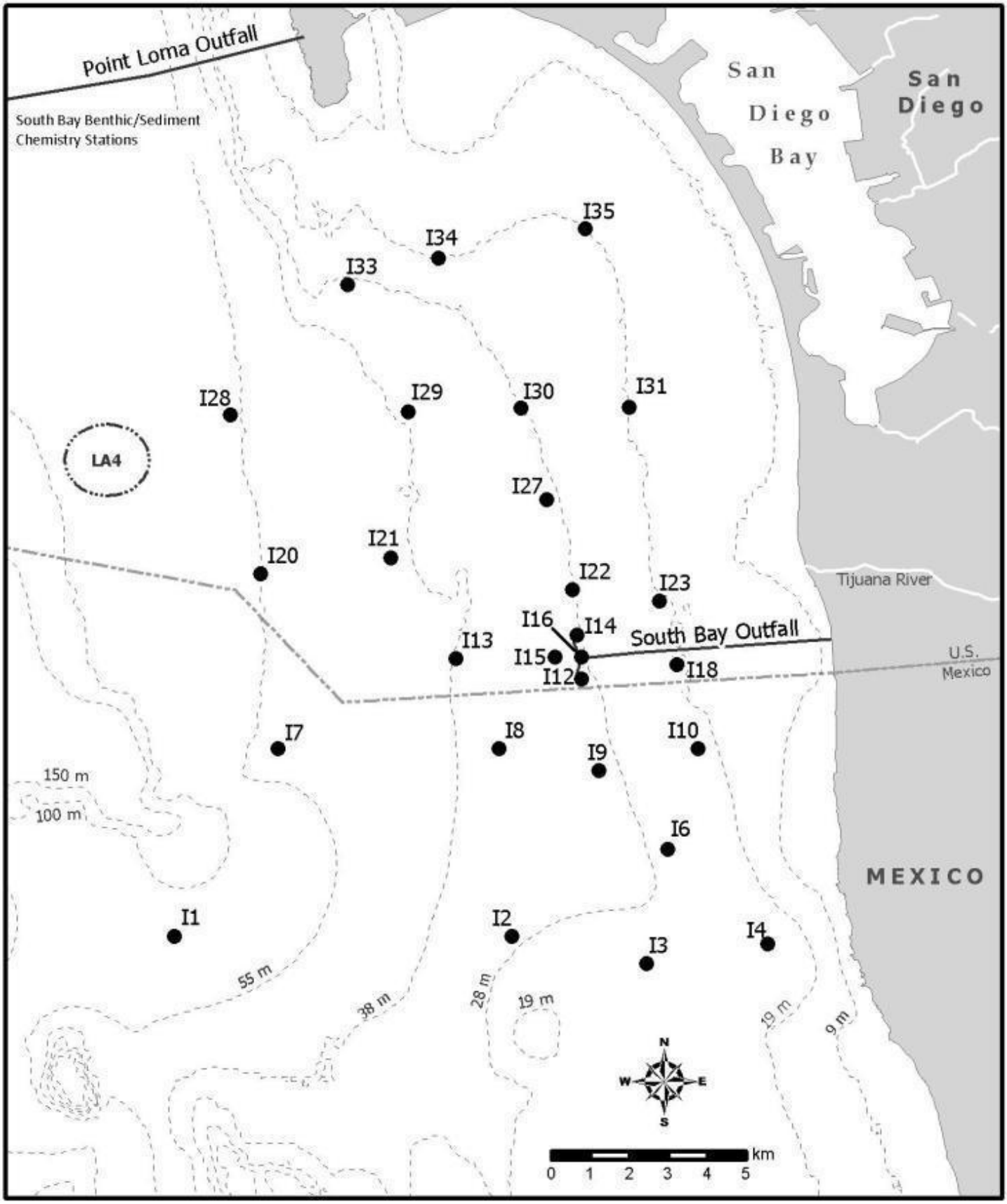
Station

I-1	I-12	I-23
I-2	I-13	I-27
I-3	I-14	I-28
I-4	I-15	I-29
I-6	I-16	I-30
I-7	I-18	I-31
I-8	I-20	I-33
I-9	I-21	I-34
I-10	I-22	I-35

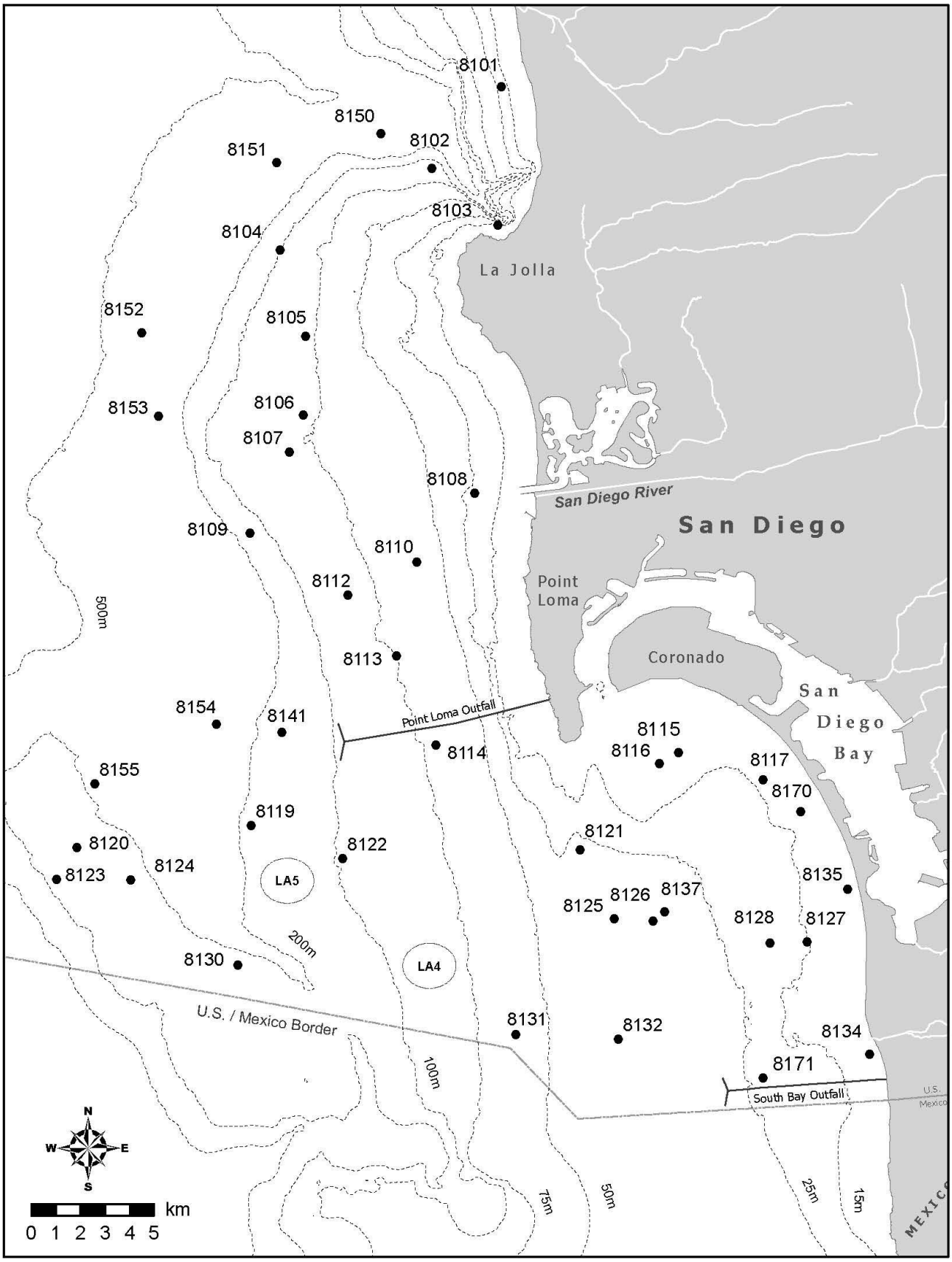
2011 Random Stations

Station	Sample Date	Station	Sample Date	Station	Sample Date
8101	14-Jul-11	8116	7-Jul-11	8132	6-Jul-11
8102	14-Jul-11	8117	7-Jul-11	8134	6-Jul-11
8103	14-Jul-11	8119	11-Jul-11	8135	7-Jul-11
8104	14-Jul-11	8120	18-Jul-11	8137	8-Jul-11
8105	14-Jul-11	8121	8-Jul-11	8141	20-Jul-11
8106	14-Jul-11	8122	11-Jul-11	8150	19-Jul-11
8107	14-Jul-11	8123	18-Jul-11	8151	19-Jul-11
8108	14-Jul-11	8124	18-Jul-11	8152	19-Jul-11
8109	18-Jul-11	8125	8-Jul-11	8153	19-Jul-11
8110	12-Jul-11	8126	8-Jul-11	8154	20-Jul-11
8112	12-Jul-11	8127	7-Jul-11	8155	19-Jul-11
8113	12-Jul-11	8128	7-Jul-11	8170	20-Jul-11
8114	12-Jul-11	8130	18-Jul-11	8171	20-Jul-11
8115	7-Jul-11	8131	6-Jul-11		

SBWRP Regular Fixed Grid Ocean sediment (benthic) stations



2011 Randomly Selected Regional Stations



SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - International Stations
Sulfide and Total Volatile Solids Analysis

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6	I-7	I-8	I-9	I-10
Date:			2011	2011	2011	2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Sulfides-Total	.14	MG/KG	0.69	<0.14	0.49	2.07	0.30	0.63	2.09	1.99	1.29
Total Volatile Solids	.11	WT%	1.01	0.42	0.41	0.58	0.45	0.51	0.53	1.22	0.89

Source:			I-12	I-13	I-14	I-15	I-16	I-18	I-20	I-21	I-22
Date:			2011	2011	2011	2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Sulfides-Total	.14	MG/KG	1.60	2.52	4.84	0.55	1.79	1.54	0.35	0.29	2.71
Total Volatile Solids	.11	WT%	0.75	0.60	0.95	0.50	0.60	0.68	0.53	0.55	0.89

Source:			I-23	I-27	I-28	I-29	I-30	I-31	I-33	I-34	I-35
Date:			2011	2011	2011	2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Sulfides-Total	.14	MG/KG	1.86	2.74	2.66	1.90	1.71	1.74	4.34	1.28	7.14
Total Volatile Solids	.11	WT%	0.88	0.98	1.75	1.05	1.02	0.64	1.25	0.63	1.41

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-1	I-1	I-2	I-2	I-3
Sample ID:			P547645	P571513	P547655	P571523	P547659
Analyte	MDL	Units	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.000	0.000	0.000
>2.0 to 2.4 microns			0.047	0.000	0.000	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.179	0.096	0.000	0.000	0.000
>2.9 to 3.4 microns			0.192	0.164	0.000	0.000	0.000
>3.4 to 3.9 microns, Phi 8			0.211	0.180	0.000	0.000	0.000
>3.9 to 4 microns			0.046	0.039	0.000	0.000	0.000
>4.0 to 4.3 microns			0.131	0.113	0.000	0.000	0.000
>4.3 to 4.5 microns			0.085	0.073	0.000	0.000	0.000
>4.5 to 5 microns			0.231	0.199	0.000	0.000	0.000
>5 to 5.5 microns			0.233	0.202	0.000	0.000	0.000
>5.5 to 5.7 microns			0.090	0.078	0.000	0.000	0.000
>5.7 to 5.9 microns, Phi 7.5			0.090	0.078	0.000	0.000	0.000
>5.9 to 7.8 microns, Phi 7			0.873	0.766	0.000	0.000	0.000
>7.8 to 8 microns			0.089	0.079	0.000	0.000	0.000
>8 to 8.5 microns			0.213	0.189	0.000	0.000	0.000
>8.5 to 8.9 microns			0.163	0.145	0.000	0.008	0.000
>8.9 to 9.1 microns			0.082	0.074	0.000	0.018	0.000
>9.1 to 9.5 microns			0.160	0.143	0.000	0.034	0.000
>9.5 to 9.8 microns			0.115	0.103	0.000	0.025	0.000
>9.8 to 10.1 microns			0.112	0.100	0.000	0.024	0.000
>10.1 to 10.6 microns			0.190	0.172	0.000	0.041	0.000
>10.6 to 11.1 microns			0.181	0.164	0.000	0.039	0.000
>11.1 to 11.3 microns			0.070	0.063	0.000	0.015	0.000
>11.3 to 11.7 microns, Phi 6.5			0.136	0.123	0.009	0.030	0.000
>11.7 to 14 microns			0.694	0.632	0.137	0.157	0.000
>14 to 14.8 microns			0.214	0.196	0.043	0.049	0.000
>14.8 to 15.6 microns			0.199	0.182	0.041	0.046	0.000
>15.6 to 16 microns			0.094	0.086	0.020	0.022	0.000
>16 to 20 microns			0.804	0.737	0.166	0.189	0.000
>20 to 23 microns, Phi 5.5			0.460	0.421	0.000	0.103	0.000
>23 to 27 microns			0.489	0.444	0.000	0.000	0.000
>27 to 31 microns, Phi 5			0.410	0.368	0.000	0.000	0.000
>31 to 32 microns			0.095	0.085	0.000	0.000	0.000
>32 to 35.6 microns			0.335	0.298	0.000	0.000	0.000
>35.6 to 37 microns, Phi 4.75			0.131	0.116	0.000	0.000	0.000
>37 to 39.6 microns			0.239	0.211	0.000	0.000	0.000
>39.6 to 43.6 microns			0.419	0.370	0.000	0.000	0.000
>43.6 to 44 microns, Phi 4.5			0.040	0.035	0.000	0.000	0.000
>44 to 45 microns			0.100	0.089	0.000	0.000	0.000
>45 to 46.4 microns			0.188	0.168	0.000	0.000	0.000
>46.4 to 53 microns, Phi 4.25			0.912	0.815	0.000	0.000	0.000
>53 to 62.5 microns, Phi 4			1.870	1.710	0.055	0.057	0.000
>62.5 to 64 microns			0.353	0.327	0.022	0.023	0.000
>64 to 71.7 microns			2.230	2.100	0.130	0.136	0.058

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-1	I-1	I-2	I-2	I-3
Sample ID:			P547645	P571513	P547655	P571523	P547659
Analyte	MDL	Units	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011
>71.7 to 74 microns			0.754	0.718	0.042	0.044	0.031
>74 to 79.6 microns			2.130	2.050	0.118	0.127	0.084
>79.6 to 87.6 microns			3.570	3.480	0.198	0.215	0.137
>87.6 to 88 microns, Phi 3.5			0.170	0.166	0.009	0.010	0.007
>88 to 90 microns			1.110	1.100	0.068	0.076	0.046
>90 to 105 microns, Phi 3.25			9.050	9.030	0.624	0.702	0.414
>105 to 125 microns, Phi 3			13.800	13.900	1.420	1.620	0.958
>125 to 149 microns, Phi 2.75			15.900	16.000	2.830	3.210	2.070
>149 to 160 microns			6.150	6.240	1.940	2.160	1.570
>160 to 177 microns, Phi 2.5			8.220	8.360	3.350	3.720	2.830
>177 to 197 microns			7.140	7.310	5.050	5.480	4.620
>197 to 210 microns, Phi 2.25			3.320	3.430	3.870	4.090	3.770
>210 to 217 microns			1.550	1.610	2.120	2.230	2.100
>217 to 245 microns			4.630	4.830	8.730	8.980	8.870
>245 to 250 microns, Phi 2			0.622	0.654	1.570	1.590	1.630
>250 to 300 microns, Phi 1.75			4.030	4.280	14.700	14.500	15.300
>300 to 320 microns			0.758	0.821	4.820	4.590	5.030
>320 to 350 microns, Phi 1.5			0.962	1.040	6.470	6.150	6.750
>350 to 360 microns			0.204	0.223	1.760	1.650	1.820
>360 to 400 microns			0.727	0.796	6.420	6.020	6.630
>400 to 420 microns, Phi 1.25			0.236	0.259	2.510	2.340	2.570
>420 to 440 microns			0.225	0.247	2.390	2.230	2.450
>440 to 500 microns, Phi 1			0.478	0.527	5.700	5.330	5.890
>500 to 590 microns, Phi 0.75			0.117	0.129	6.250	5.910	6.570
>590 to 630 microns			0.000	0.000	2.070	1.990	2.220
>630 to 696 microns			0.000	0.000	2.990	2.880	3.230
>696 to 710 microns, Phi 0.5			0.000	0.000	0.529	0.516	0.577
>710 to 773 microns			0.000	0.000	2.260	2.200	2.460
>773 to 840 microns, Phi 0.25			0.000	0.000	1.890	1.840	2.060
>840 to 850 microns			0.000	0.000	0.265	0.259	0.290
>850 to 930 microns			0.000	0.000	1.810	1.770	1.980
>930 to 1000 microns, Phi 0			0.000	0.000	1.280	1.250	1.400
1000 to 1100 microns			0.000	0.000	1.250	1.220	1.360
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.839	0.825	0.912
>1190 to 1300 microns			0.000	0.000	0.595	0.587	0.640
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.388	0.384	0.381
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.310	0.306	0.275
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.048	99.933	100.058	100.017	99.990

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-3	I-4	I-4	I-6	I-6
Sample ID:			P571527	P547668	P571536	P547673	P571541
Analyte	MDL	Units	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.000	0.000	0.000
>2.0 to 2.4 microns			0.000	0.000	0.000	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.000	0.000	0.000	0.000	0.000
>2.9 to 3.4 microns			0.000	0.000	0.000	0.000	0.000
>3.4 to 3.9 microns, Phi 8			0.000	0.000	0.000	0.000	0.000
>3.9 to 4 microns			0.000	0.000	0.000	0.000	0.000
>4.0 to 4.3 microns			0.000	0.000	0.000	0.000	0.000
>4.3 to 4.5 microns			0.000	0.000	0.005	0.000	0.000
>4.5 to 5 microns			0.000	0.000	0.085	0.000	0.000
>5 to 5.5 microns			0.000	0.000	0.084	0.000	0.000
>5.5 to 5.7 microns			0.000	0.000	0.032	0.000	0.000
>5.7 to 5.9 microns, Phi 7.5			0.000	0.000	0.032	0.000	0.000
>5.9 to 7.8 microns, Phi 7			0.000	0.010	0.300	0.000	0.000
>7.8 to 8 microns			0.000	0.020	0.030	0.000	0.000
>8 to 8.5 microns			0.000	0.047	0.073	0.000	0.000
>8.5 to 8.9 microns			0.000	0.036	0.056	0.000	0.000
>8.9 to 9.1 microns			0.000	0.018	0.029	0.000	0.000
>9.1 to 9.5 microns			0.000	0.036	0.055	0.000	0.000
>9.5 to 9.8 microns			0.000	0.026	0.040	0.000	0.000
>9.8 to 10.1 microns			0.000	0.025	0.039	0.000	0.000
>10.1 to 10.6 microns			0.000	0.042	0.066	0.000	0.000
>10.6 to 11.1 microns			0.000	0.040	0.063	0.000	0.000
>11.1 to 11.3 microns			0.000	0.016	0.024	0.000	0.000
>11.3 to 11.7 microns, Phi 6.5			0.000	0.031	0.048	0.000	0.000
>11.7 to 14 microns			0.000	0.164	0.255	0.000	0.000
>14 to 14.8 microns			0.000	0.052	0.081	0.000	0.000
>14.8 to 15.6 microns			0.000	0.051	0.078	0.000	0.000
>15.6 to 16 microns			0.000	0.025	0.038	0.000	0.000
>16 to 20 microns			0.000	0.225	0.343	0.000	0.000
>20 to 23 microns, Phi 5.5			0.000	0.149	0.223	0.000	0.000
>23 to 27 microns			0.000	0.188	0.274	0.000	0.000
>27 to 31 microns, Phi 5			0.000	0.191	0.270	0.000	0.000
>31 to 32 microns			0.000	0.051	0.071	0.000	0.000
>32 to 35.6 microns			0.000	0.196	0.269	0.000	0.000
>35.6 to 37 microns, Phi 4.75			0.000	0.086	0.117	0.000	0.000
>37 to 39.6 microns			0.000	0.164	0.222	0.000	0.000
>39.6 to 43.6 microns			0.000	0.338	0.453	0.000	0.000
>43.6 to 44 microns, Phi 4.5			0.000	0.032	0.043	0.000	0.000
>44 to 45 microns			0.000	0.082	0.110	0.001	0.000
>45 to 46.4 microns			0.000	0.180	0.242	0.024	0.000
>46.4 to 53 microns, Phi 4.25			0.000	0.906	1.230	0.107	0.000
>53 to 62.5 microns, Phi 4			0.000	2.080	2.890	0.164	0.047
>62.5 to 64 microns			0.000	0.404	0.572	0.026	0.019
>64 to 71.7 microns			0.048	2.500	3.620	0.140	0.100

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-3	I-4	I-4	I-6	I-6
Sample ID:			P571527	P547668	P571536	P547673	P571541
Analyte	MDL	Units	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011
>71.7 to 74 microns			0.025	0.833	1.230	0.042	0.030
>74 to 79.6 microns			0.069	2.200	3.300	0.107	0.076
>79.6 to 87.6 microns			0.114	3.440	5.280	0.158	0.112
>87.6 to 88 microns, Phi 3.5			0.005	0.163	0.251	0.008	0.005
>88 to 90 microns			0.039	0.908	1.430	0.045	0.032
>90 to 105 microns, Phi 3.25			0.361	6.600	10.500	0.354	0.258
>105 to 125 microns, Phi 3			0.872	7.700	12.400	0.607	0.458
>125 to 149 microns, Phi 2.75			1.950	7.490	11.600	1.010	0.795
>149 to 160 microns			1.510	2.950	4.230	0.650	0.537
>160 to 177 microns, Phi 2.5			2.760	4.160	5.680	1.130	0.949
>177 to 197 microns			4.550	4.430	5.410	1.770	1.540
>197 to 210 microns, Phi 2.25			3.740	2.700	2.920	1.520	1.350
>210 to 217 microns			2.080	1.390	1.450	0.854	0.764
>217 to 245 microns			8.840	5.220	4.950	4.020	3.670
>245 to 250 microns, Phi 2			1.630	0.878	0.766	0.785	0.724
>250 to 300 microns, Phi 1.75			15.400	7.880	6.030	9.040	8.520
>300 to 320 microns			5.120	2.630	1.590	4.250	4.140
>320 to 350 microns, Phi 1.5			6.890	3.580	2.090	6.050	5.940
>350 to 360 microns			1.880	1.040	0.516	2.070	2.100
>360 to 400 microns			6.840	3.820	1.860	7.780	7.920
>400 to 420 microns, Phi 1.25			2.670	1.590	0.646	3.680	3.880
>420 to 440 microns			2.550	1.520	0.616	3.510	3.700
>440 to 500 microns, Phi 1			6.100	3.790	1.300	9.430	10.200
>500 to 590 microns, Phi 0.75			6.720	4.340	1.000	11.400	12.500
>590 to 630 microns			2.220	1.490	0.199	3.940	4.270
>630 to 696 microns			3.200	2.170	0.215	5.690	6.120
>696 to 710 microns, Phi 0.5			0.562	0.389	0.000	0.996	1.050
>710 to 773 microns			2.400	1.660	0.000	4.250	4.470
>773 to 840 microns, Phi 0.25			1.980	1.380	0.000	3.390	3.440
>840 to 850 microns			0.278	0.195	0.000	0.476	0.481
>850 to 930 microns			1.880	1.160	0.000	3.150	3.130
>930 to 1000 microns, Phi 0			1.320	0.663	0.000	2.150	2.080
1000 to 1100 microns			1.270	0.562	0.000	1.980	1.870
>1100 to 1190 microns, Phi -0.25			0.850	0.357	0.000	1.290	1.210
>1190 to 1300 microns			0.598	0.249	0.000	0.844	0.788
>1300 to 1410 microns, Phi -0.5			0.384	0.080	0.000	0.485	0.457
>1410 to 1680 microns, Phi -0.75			0.301	0.000	0.000	0.543	0.320
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.098	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.006	100.018	99.921	100.014	100.052

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-7	I-7	I-8	I-8	I-9
Sample ID:			P547677	P571545	P547679	P571547	P547684
Analyte	MDL	Units	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.000	0.000	0.000
>2.0 to 2.4 microns			0.000	0.000	0.000	0.000	0.049
>2.4 to 2.9 microns, Phi 8.5			0.000	0.000	0.000	0.000	0.181
>2.9 to 3.4 microns			0.000	0.000	0.000	0.000	0.185
>3.4 to 3.9 microns, Phi 8			0.000	0.000	0.105	0.000	0.196
>3.9 to 4 microns			0.000	0.019	0.023	0.000	0.041
>4.0 to 4.3 microns			0.000	0.058	0.067	0.000	0.117
>4.3 to 4.5 microns			0.005	0.038	0.043	0.000	0.076
>4.5 to 5 microns			0.081	0.104	0.118	0.000	0.200
>5 to 5.5 microns			0.080	0.104	0.120	0.059	0.197
>5.5 to 5.7 microns			0.031	0.040	0.046	0.030	0.076
>5.7 to 5.9 microns, Phi 7.5			0.030	0.040	0.046	0.029	0.075
>5.9 to 7.8 microns, Phi 7			0.285	0.383	0.458	0.279	0.701
>7.8 to 8 microns			0.028	0.038	0.048	0.028	0.070
>8 to 8.5 microns			0.066	0.090	0.115	0.067	0.168
>8.5 to 8.9 microns			0.051	0.069	0.089	0.052	0.129
>8.9 to 9.1 microns			0.025	0.034	0.046	0.026	0.065
>9.1 to 9.5 microns			0.048	0.066	0.088	0.050	0.126
>9.5 to 9.8 microns			0.035	0.048	0.064	0.036	0.091
>9.8 to 10.1 microns			0.034	0.046	0.062	0.035	0.088
>10.1 to 10.6 microns			0.055	0.076	0.108	0.059	0.149
>10.6 to 11.1 microns			0.053	0.072	0.103	0.057	0.142
>11.1 to 11.3 microns			0.020	0.028	0.040	0.022	0.055
>11.3 to 11.7 microns, Phi 6.5			0.039	0.054	0.078	0.043	0.108
>11.7 to 14 microns			0.195	0.264	0.408	0.218	0.570
>14 to 14.8 microns			0.059	0.079	0.128	0.067	0.180
>14.8 to 15.6 microns			0.054	0.071	0.120	0.062	0.176
>15.6 to 16 microns			0.025	0.033	0.057	0.029	0.087
>16 to 20 microns			0.209	0.270	0.492	0.250	0.781
>20 to 23 microns, Phi 5.5			0.107	0.141	0.286	0.141	0.523
>23 to 27 microns			0.000	0.110	0.298	0.145	0.677
>27 to 31 microns, Phi 5			0.000	0.000	0.235	0.114	0.720
>31 to 32 microns			0.000	0.000	0.051	0.025	0.201
>32 to 35.6 microns			0.000	0.000	0.171	0.053	0.789
>35.6 to 37 microns, Phi 4.75			0.000	0.000	0.061	0.000	0.359
>37 to 39.6 microns			0.000	0.000	0.108	0.007	0.687
>39.6 to 43.6 microns			0.000	0.000	0.161	0.074	1.460
>43.6 to 44 microns, Phi 4.5			0.000	0.000	0.015	0.007	0.139
>44 to 45 microns			0.000	0.000	0.038	0.017	0.356
>45 to 46.4 microns			0.000	0.000	0.058	0.025	0.784
>46.4 to 53 microns, Phi 4.25			0.000	0.000	0.263	0.113	3.890
>53 to 62.5 microns, Phi 4			0.050	0.047	0.415	0.167	8.220
>62.5 to 64 microns			0.020	0.019	0.070	0.027	1.520
>64 to 71.7 microns			0.109	0.101	0.400	0.149	8.520

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-7	I-7	I-8	I-8	I-9
Sample ID:			P547677	P571545	P547679	P571547	P547684
Analyte	MDL	Units	03-JAN-2011	05-JUL-2011	03-JAN-2011	05-JUL-2011	03-JAN-2011
>71.7 to 74 microns			0.033	0.031	0.127	0.046	2.680
>74 to 79.6 microns			0.084	0.078	0.344	0.122	6.510
>79.6 to 87.6 microns			0.125	0.116	0.553	0.191	9.190
>87.6 to 88 microns, Phi 3.5			0.006	0.006	0.026	0.009	0.437
>88 to 90 microns			0.035	0.033	0.174	0.059	2.100
>90 to 105 microns, Phi 3.25			0.277	0.257	1.470	0.489	13.800
>105 to 125 microns, Phi 3			0.441	0.411	2.690	0.906	12.200
>125 to 149 microns, Phi 2.75			0.653	0.612	4.300	1.540	8.340
>149 to 160 microns			0.379	0.360	2.500	0.977	2.240
>160 to 177 microns, Phi 2.5			0.633	0.606	4.110	1.670	2.570
>177 to 197 microns			0.932	0.905	5.720	2.540	1.800
>197 to 210 microns, Phi 2.25			0.772	0.763	4.280	2.080	0.767
>210 to 217 microns			0.430	0.427	2.340	1.150	0.344
>217 to 245 microns			2.030	2.050	9.770	5.200	1.010
>245 to 250 microns, Phi 2			0.396	0.404	1.780	0.990	0.133
>250 to 300 microns, Phi 1.75			4.720	4.920	17.100	10.700	0.891
>300 to 320 microns			2.430	2.610	5.740	4.470	0.189
>320 to 350 microns, Phi 1.5			3.560	3.860	7.620	6.250	0.247
>350 to 360 microns			1.350	1.490	1.950	2.000	0.059
>360 to 400 microns			5.200	5.750	6.980	7.430	0.215
>400 to 420 microns, Phi 1.25			2.850	3.180	2.310	3.330	0.081
>420 to 440 microns			2.720	3.030	2.210	3.180	0.077
>440 to 500 microns, Phi 1			8.550	9.420	4.240	8.290	0.185
>500 to 590 microns, Phi 0.75			12.600	13.500	3.290	9.790	0.047
>590 to 630 microns			5.440	5.420	0.686	3.330	0.000
>630 to 696 microns			8.240	8.060	0.891	4.780	0.000
>696 to 710 microns, Phi 0.5			1.620	1.500	0.117	0.828	0.000
>710 to 773 microns			6.910	6.420	0.498	3.540	0.000
>773 to 840 microns, Phi 0.25			6.020	5.280	0.284	2.790	0.000
>840 to 850 microns			0.849	0.742	0.038	0.391	0.000
>850 to 930 microns			5.660	4.870	0.150	2.580	0.000
>930 to 1000 microns, Phi 0			3.900	3.270	0.000	1.750	0.000
1000 to 1100 microns			3.430	2.870	0.000	1.620	0.000
>1100 to 1190 microns, Phi -0.25			2.150	1.810	0.000	1.060	0.000
>1190 to 1300 microns			1.270	1.090	0.000	0.710	0.000
>1300 to 1410 microns, Phi -0.5			0.684	0.605	0.000	0.416	0.000
>1410 to 1680 microns, Phi -0.75			0.704	0.645	0.000	0.295	0.000
>1680 to 2000 microns, Phi -1			0.127	0.116	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.004	100.059	99.990	100.061	100.036

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-9	I-10	I-10	I-12	I-12
Sample ID:			P571552	P547651	P571519	P548108	P572084
Analyte	MDL	Units	05-JUL-2011	03-JAN-2011	05-JUL-2011	04-JAN-2011	06-JUL-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.008	0.000	0.000	0.000	0.000
>2.0 to 2.4 microns			0.163	0.000	0.000	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.207	0.000	0.000	0.000	0.000
>2.9 to 3.4 microns			0.209	0.054	0.000	0.000	0.000
>3.4 to 3.9 microns, Phi 8			0.219	0.123	0.118	0.000	0.000
>3.9 to 4 microns			0.045	0.026	0.026	0.000	0.000
>4.0 to 4.3 microns			0.130	0.076	0.074	0.000	0.000
>4.3 to 4.5 microns			0.083	0.049	0.048	0.000	0.000
>4.5 to 5 microns			0.219	0.129	0.127	0.000	0.000
>5 to 5.5 microns			0.213	0.129	0.127	0.000	0.000
>5.5 to 5.7 microns			0.082	0.050	0.049	0.000	0.000
>5.7 to 5.9 microns, Phi 7.5			0.081	0.050	0.049	0.000	0.000
>5.9 to 7.8 microns, Phi 7			0.739	0.477	0.468	0.000	0.000
>7.8 to 8 microns			0.073	0.050	0.048	0.000	0.000
>8 to 8.5 microns			0.174	0.119	0.115	0.000	0.000
>8.5 to 8.9 microns			0.133	0.091	0.088	0.000	0.000
>8.9 to 9.1 microns			0.067	0.047	0.045	0.000	0.000
>9.1 to 9.5 microns			0.129	0.091	0.087	0.000	0.000
>9.5 to 9.8 microns			0.093	0.066	0.063	0.000	0.000
>9.8 to 10.1 microns			0.090	0.064	0.061	0.000	0.000
>10.1 to 10.6 microns			0.151	0.110	0.103	0.000	0.000
>10.6 to 11.1 microns			0.144	0.105	0.099	0.000	0.000
>11.1 to 11.3 microns			0.056	0.041	0.038	0.000	0.000
>11.3 to 11.7 microns, Phi 6.5			0.109	0.080	0.075	0.000	0.000
>11.7 to 14 microns			0.570	0.426	0.392	0.000	0.000
>14 to 14.8 microns			0.179	0.135	0.123	0.000	0.000
>14.8 to 15.6 microns			0.174	0.131	0.118	0.000	0.000
>15.6 to 16 microns			0.086	0.064	0.057	0.000	0.000
>16 to 20 microns			0.772	0.571	0.503	0.000	0.106
>20 to 23 microns, Phi 5.5			0.517	0.368	0.315	0.000	0.105
>23 to 27 microns			0.673	0.443	0.375	0.000	0.123
>27 to 31 microns, Phi 5			0.719	0.429	0.361	0.000	0.112
>31 to 32 microns			0.201	0.111	0.094	0.000	0.028
>32 to 35.6 microns			0.792	0.417	0.356	0.000	0.100
>35.6 to 37 microns, Phi 4.75			0.361	0.179	0.155	0.000	0.040
>37 to 39.6 microns			0.689	0.338	0.293	0.000	0.074
>39.6 to 43.6 microns			1.470	0.677	0.604	0.000	0.131
>43.6 to 44 microns, Phi 4.5			0.139	0.065	0.057	0.000	0.012
>44 to 45 microns			0.356	0.165	0.147	0.000	0.031
>45 to 46.4 microns			0.784	0.356	0.329	0.000	0.056
>46.4 to 53 microns, Phi 4.25			3.890	1.800	1.680	0.000	0.264
>53 to 62.5 microns, Phi 4			8.200	4.210	4.100	0.000	0.465
>62.5 to 64 microns			1.510	0.836	0.826	0.000	0.080
>64 to 71.7 microns			8.500	5.350	5.370	0.000	0.446

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-9	I-10	I-10	I-12	I-12
Sample ID:			P571552	P547651	P571519	P548108	P572084
Analyte	MDL	Units	05-JUL-2011	03-JAN-2011	05-JUL-2011	04-JAN-2011	06-JUL-2011
>71.7 to 74 microns			2.670	1.820	1.840	0.000	0.139
>74 to 79.6 microns			6.490	4.950	5.040	0.000	0.352
>79.6 to 87.6 microns			9.160	7.980	8.180	0.000	0.523
>87.6 to 88 microns, Phi 3.5			0.436	0.380	0.389	0.000	0.025
>88 to 90 microns			2.090	2.160	2.230	0.015	0.141
>90 to 105 microns, Phi 3.25			13.700	15.700	16.200	0.162	1.060
>105 to 125 microns, Phi 3			12.100	17.000	17.400	0.298	1.540
>125 to 149 microns, Phi 2.75			8.260	13.200	13.300	0.536	2.130
>149 to 160 microns			2.220	3.710	3.710	0.378	1.210
>160 to 177 microns, Phi 2.5			2.560	4.320	4.300	0.683	2.000
>177 to 197 microns			1.800	3.040	2.980	1.160	2.910
>197 to 210 microns, Phi 2.25			0.770	1.270	1.230	1.090	2.330
>210 to 217 microns			0.347	0.568	0.546	0.619	1.290
>217 to 245 microns			1.020	1.650	1.570	3.090	5.750
>245 to 250 microns, Phi 2			0.136	0.213	0.200	0.622	1.090
>250 to 300 microns, Phi 1.75			0.912	1.390	1.290	7.610	11.600
>300 to 320 microns			0.196	0.279	0.252	3.880	4.730
>320 to 350 microns, Phi 1.5			0.256	0.361	0.324	5.630	6.560
>350 to 360 microns			0.062	0.083	0.074	2.050	2.030
>360 to 400 microns			0.224	0.301	0.267	7.770	7.520
>400 to 420 microns, Phi 1.25			0.084	0.109	0.095	3.940	3.230
>420 to 440 microns			0.080	0.104	0.091	3.750	3.080
>440 to 500 microns, Phi 1			0.193	0.240	0.212	10.700	7.720
>500 to 590 microns, Phi 0.75			0.049	0.061	0.053	13.500	8.710
>590 to 630 microns			0.000	0.000	0.000	4.720	2.840
>630 to 696 microns			0.000	0.000	0.000	6.770	4.050
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	1.160	0.691
>710 to 773 microns			0.000	0.000	0.000	4.950	2.950
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	3.780	2.300
>840 to 850 microns			0.000	0.000	0.000	0.528	0.322
>850 to 930 microns			0.000	0.000	0.000	3.430	2.120
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	2.260	1.430
1000 to 1100 microns			0.000	0.000	0.000	2.030	1.330
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	1.300	0.871
>1190 to 1300 microns			0.000	0.000	0.000	0.841	0.594
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.484	0.388
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.335	0.309
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.014	99.987	99.936	100.071	100.038

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-13	I-13	I-14	I-14	I-15
Sample ID:			P548110	P572092	P548114	P572094	P548123
Analyte	MDL	Units	04-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.008	0.000	0.000
>2.0 to 2.4 microns			0.000	0.044	0.152	0.046	0.000
>2.4 to 2.9 microns, Phi 8.5			0.000	0.166	0.195	0.171	0.000
>2.9 to 3.4 microns			0.000	0.180	0.200	0.175	0.000
>3.4 to 3.9 microns, Phi 8			0.000	0.200	0.211	0.186	0.000
>3.9 to 4 microns			0.000	0.043	0.044	0.039	0.000
>4.0 to 4.3 microns			0.000	0.122	0.128	0.112	0.000
>4.3 to 4.5 microns			0.000	0.079	0.082	0.072	0.000
>4.5 to 5 microns			0.000	0.214	0.218	0.191	0.000
>5 to 5.5 microns			0.000	0.213	0.216	0.188	0.058
>5.5 to 5.7 microns			0.000	0.082	0.083	0.073	0.029
>5.7 to 5.9 microns, Phi 7.5			0.000	0.081	0.082	0.072	0.029
>5.9 to 7.8 microns, Phi 7			0.000	0.769	0.778	0.671	0.268
>7.8 to 8 microns			0.000	0.076	0.078	0.067	0.027
>8 to 8.5 microns			0.000	0.183	0.188	0.161	0.064
>8.5 to 8.9 microns			0.000	0.140	0.144	0.124	0.049
>8.9 to 9.1 microns			0.000	0.070	0.073	0.063	0.025
>9.1 to 9.5 microns			0.000	0.135	0.141	0.121	0.048
>9.5 to 9.8 microns			0.000	0.097	0.102	0.087	0.035
>9.8 to 10.1 microns			0.000	0.094	0.099	0.085	0.033
>10.1 to 10.6 microns			0.000	0.158	0.167	0.143	0.056
>10.6 to 11.1 microns			0.000	0.150	0.159	0.137	0.054
>11.1 to 11.3 microns			0.000	0.058	0.062	0.053	0.021
>11.3 to 11.7 microns, Phi 6.5			0.000	0.112	0.121	0.104	0.041
>11.7 to 14 microns			0.000	0.567	0.633	0.546	0.213
>14 to 14.8 microns			0.000	0.174	0.199	0.172	0.067
>14.8 to 15.6 microns			0.000	0.161	0.191	0.167	0.064
>15.6 to 16 microns			0.000	0.076	0.093	0.082	0.031
>16 to 20 microns			0.000	0.648	0.831	0.735	0.273
>20 to 23 microns, Phi 5.5			0.000	0.371	0.535	0.483	0.172
>23 to 27 microns			0.000	0.397	0.657	0.608	0.204
>27 to 31 microns, Phi 5			0.000	0.332	0.654	0.621	0.191
>31 to 32 microns			0.000	0.077	0.174	0.168	0.048
>32 to 35.6 microns			0.000	0.265	0.661	0.648	0.173
>35.6 to 37 microns, Phi 4.75			0.000	0.101	0.289	0.288	0.070
>37 to 39.6 microns			0.000	0.182	0.546	0.547	0.129
>39.6 to 43.6 microns			0.000	0.298	1.110	1.130	0.226
>43.6 to 44 microns, Phi 4.5			0.000	0.028	0.106	0.108	0.021
>44 to 45 microns			0.000	0.071	0.270	0.276	0.054
>45 to 46.4 microns			0.000	0.120	0.581	0.602	0.094
>46.4 to 53 microns, Phi 4.25			0.000	0.561	2.900	3.000	0.437
>53 to 62.5 microns, Phi 4			0.046	0.994	6.360	6.570	0.721
>62.5 to 64 microns			0.019	0.176	1.210	1.240	0.120
>64 to 71.7 microns			0.106	1.040	7.180	7.300	0.635

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-13	I-13	I-14	I-14	I-15
Sample ID:			P548110	P572092	P548114	P572094	P548123
Analyte	MDL	Units	04-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011
>71.7 to 74 microns			0.033	0.339	2.340	2.360	0.192
>74 to 79.6 microns			0.089	0.924	5.930	5.940	0.474
>79.6 to 87.6 microns			0.141	1.500	8.850	8.780	0.682
>87.6 to 88 microns, Phi 3.5			0.007	0.071	0.421	0.418	0.032
>88 to 90 microns			0.043	0.456	2.160	2.120	0.179
>90 to 105 microns, Phi 3.25			0.360	3.710	14.700	14.400	1.340
>105 to 125 microns, Phi 3			0.651	5.890	13.900	13.800	1.950
>125 to 149 microns, Phi 2.75			1.050	7.610	9.820	10.000	2.770
>149 to 160 microns			0.639	3.570	2.670	2.810	1.610
>160 to 177 microns, Phi 2.5			1.080	5.350	3.090	3.290	2.680
>177 to 197 microns			1.600	6.200	2.170	2.360	3.900
>197 to 210 microns, Phi 2.25			1.330	3.970	0.924	1.010	3.080
>210 to 217 microns			0.739	2.080	0.415	0.453	1.700
>217 to 245 microns			3.470	7.930	1.220	1.320	7.360
>245 to 250 microns, Phi 2			0.676	1.350	0.161	0.173	1.370
>250 to 300 microns, Phi 1.75			7.960	12.100	1.080	1.130	13.700
>300 to 320 microns			3.940	3.840	0.229	0.225	4.990
>320 to 350 microns, Phi 1.5			5.680	5.130	0.297	0.289	6.770
>350 to 360 microns			2.030	1.350	0.071	0.065	1.920
>360 to 400 microns			7.680	4.850	0.257	0.235	7.020
>400 to 420 microns, Phi 1.25			3.810	1.700	0.095	0.082	2.760
>420 to 440 microns			3.630	1.630	0.091	0.078	2.630
>440 to 500 microns, Phi 1			10.100	3.300	0.214	0.178	6.130
>500 to 590 microns, Phi 0.75			12.600	2.740	0.054	0.045	6.380
>590 to 630 microns			4.370	0.607	0.000	0.000	1.950
>630 to 696 microns			6.290	0.785	0.000	0.000	2.750
>696 to 710 microns, Phi 0.5			1.080	0.098	0.000	0.000	0.457
>710 to 773 microns			4.620	0.420	0.000	0.000	1.950
>773 to 840 microns, Phi 0.25			3.560	0.240	0.000	0.000	1.510
>840 to 850 microns			0.497	0.032	0.000	0.000	0.211
>850 to 930 microns			3.230	0.127	0.000	0.000	1.400
>930 to 1000 microns, Phi 0			2.140	0.000	0.000	0.000	0.952
1000 to 1100 microns			1.920	0.000	0.000	0.000	0.909
>1100 to 1190 microns, Phi -0.25			1.230	0.000	0.000	0.000	0.606
>1190 to 1300 microns			0.797	0.000	0.000	0.000	0.424
>1300 to 1410 microns, Phi -0.5			0.460	0.000	0.000	0.000	0.277
>1410 to 1680 microns, Phi -0.75			0.320	0.000	0.000	0.000	0.221
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.023	100.004	100.070	99.993	100.016

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-15	I-16	I-16	I-18	I-18
Sample ID:			P572102	P548126	P572105	P548132	P572110
Analyte	MDL	Units	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.000	0.000	0.000
>2.0 to 2.4 microns			0.000	0.000	0.000	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.000	0.000	0.000	0.084	0.000
>2.9 to 3.4 microns			0.000	0.000	0.105	0.138	0.102
>3.4 to 3.9 microns, Phi 8			0.000	0.000	0.132	0.145	0.124
>3.9 to 4 microns			0.000	0.000	0.028	0.030	0.026
>4.0 to 4.3 microns			0.000	0.000	0.081	0.087	0.075
>4.3 to 4.5 microns			0.000	0.000	0.052	0.056	0.048
>4.5 to 5 microns			0.000	0.000	0.141	0.149	0.127
>5 to 5.5 microns			0.056	0.056	0.141	0.147	0.126
>5.5 to 5.7 microns			0.028	0.028	0.054	0.057	0.049
>5.7 to 5.9 microns, Phi 7.5			0.028	0.028	0.054	0.056	0.048
>5.9 to 7.8 microns, Phi 7			0.258	0.272	0.515	0.529	0.453
>7.8 to 8 microns			0.026	0.028	0.052	0.053	0.046
>8 to 8.5 microns			0.062	0.068	0.125	0.128	0.110
>8.5 to 8.9 microns			0.047	0.053	0.096	0.098	0.084
>8.9 to 9.1 microns			0.024	0.027	0.048	0.049	0.043
>9.1 to 9.5 microns			0.046	0.052	0.094	0.096	0.083
>9.5 to 9.8 microns			0.033	0.038	0.068	0.069	0.060
>9.8 to 10.1 microns			0.032	0.037	0.066	0.067	0.058
>10.1 to 10.6 microns			0.054	0.064	0.111	0.114	0.098
>10.6 to 11.1 microns			0.051	0.061	0.106	0.108	0.094
>11.1 to 11.3 microns			0.020	0.024	0.041	0.042	0.036
>11.3 to 11.7 microns, Phi 6.5			0.039	0.046	0.080	0.082	0.071
>11.7 to 14 microns			0.199	0.247	0.416	0.431	0.376
>14 to 14.8 microns			0.062	0.078	0.130	0.136	0.119
>14.8 to 15.6 microns			0.059	0.074	0.123	0.131	0.115
>15.6 to 16 microns			0.028	0.036	0.059	0.064	0.056
>16 to 20 microns			0.245	0.317	0.517	0.568	0.505
>20 to 23 microns, Phi 5.5			0.149	0.195	0.316	0.366	0.330
>23 to 27 microns			0.168	0.218	0.363	0.450	0.410
>27 to 31 microns, Phi 5			0.150	0.187	0.333	0.448	0.413
>31 to 32 microns			0.036	0.044	0.083	0.119	0.110
>32 to 35.6 microns			0.128	0.151	0.303	0.453	0.422
>35.6 to 37 microns, Phi 4.75			0.051	0.057	0.125	0.198	0.186
>37 to 39.6 microns			0.092	0.103	0.232	0.376	0.353
>39.6 to 43.6 microns			0.154	0.166	0.433	0.771	0.730
>43.6 to 44 microns, Phi 4.5			0.015	0.016	0.041	0.073	0.069
>44 to 45 microns			0.036	0.039	0.104	0.188	0.178
>45 to 46.4 microns			0.062	0.064	0.205	0.413	0.396
>46.4 to 53 microns, Phi 4.25			0.281	0.297	0.994	2.090	2.020
>53 to 62.5 microns, Phi 4			0.443	0.494	2.020	4.880	4.810
>62.5 to 64 microns			0.072	0.084	0.375	0.963	0.958
>64 to 71.7 microns			0.380	0.484	2.250	6.060	6.100

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-15	I-16	I-16	I-18	I-18
Sample ID:			P572102	P548126	P572105	P548132	P572110
Analyte	MDL	Units	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011
>71.7 to 74 microns			0.114	0.154	0.740	2.050	2.070
>74 to 79.6 microns			0.283	0.414	1.980	5.450	5.560
>79.6 to 87.6 microns			0.410	0.659	3.140	8.610	8.850
>87.6 to 88 microns, Phi 3.5			0.019	0.031	0.149	0.410	0.421
>88 to 90 microns			0.111	0.204	0.895	2.250	2.330
>90 to 105 microns, Phi 3.25			0.844	1.720	6.920	16.000	16.600
>105 to 125 microns, Phi 3			1.320	3.180	9.760	16.400	16.900
>125 to 149 microns, Phi 2.75			2.060	5.280	11.400	12.000	12.200
>149 to 160 microns			1.290	3.150	4.970	3.270	3.250
>160 to 177 microns, Phi 2.5			2.220	5.150	7.150	3.760	3.690
>177 to 197 microns			3.450	6.920	7.500	2.580	2.480
>197 to 210 microns, Phi 2.25			2.870	4.680	4.200	1.070	1.010
>210 to 217 microns			1.600	2.490	2.110	0.476	0.444
>217 to 245 microns			7.140	9.350	7.120	1.380	1.270
>245 to 250 microns, Phi 2			1.350	1.570	1.090	0.178	0.161
>250 to 300 microns, Phi 1.75			13.800	13.200	8.200	1.160	1.040
>300 to 320 microns			5.120	3.720	1.940	0.237	0.208
>320 to 350 microns, Phi 1.5			6.960	4.930	2.500	0.307	0.269
>350 to 360 microns			1.980	1.270	0.570	0.072	0.063
>360 to 400 microns			7.260	4.620	2.040	0.261	0.229
>400 to 420 microns, Phi 1.25			2.880	1.770	0.665	0.096	0.085
>420 to 440 microns			2.750	1.690	0.634	0.091	0.081
>440 to 500 microns, Phi 1			6.520	4.060	1.300	0.217	0.194
>500 to 590 microns, Phi 0.75			7.030	4.560	0.988	0.055	0.050
>590 to 630 microns			2.250	1.560	0.196	0.000	0.000
>630 to 696 microns			3.220	2.280	0.212	0.000	0.000
>696 to 710 microns, Phi 0.5			0.556	0.412	0.000	0.000	0.000
>710 to 773 microns			2.370	1.760	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			1.930	1.490	0.000	0.000	0.000
>840 to 850 microns			0.270	0.210	0.000	0.000	0.000
>850 to 930 microns			1.820	1.250	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			1.270	0.715	0.000	0.000	0.000
1000 to 1100 microns			1.230	0.606	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.822	0.384	0.000	0.000	0.000
>1190 to 1300 microns			0.580	0.269	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.379	0.086	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.302	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			99.994	100.027	99.981	99.942	100.072

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-20	I-20	I-21	I-21	I-22
Sample ID:			P549447	P572117	P548139	P572118	P548148
Analyte	MDL	Units	11-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.000	0.000	0.000	0.000	0.007
>2.0 to 2.4 microns			0.042	0.051	0.042	0.000	0.145
>2.4 to 2.9 microns, Phi 8.5			0.163	0.197	0.158	0.000	0.190
>2.9 to 3.4 microns			0.182	0.220	0.163	0.000	0.199
>3.4 to 3.9 microns, Phi 8			0.210	0.255	0.174	0.106	0.215
>3.9 to 4 microns			0.045	0.055	0.037	0.023	0.045
>4.0 to 4.3 microns			0.130	0.158	0.105	0.066	0.131
>4.3 to 4.5 microns			0.084	0.103	0.068	0.043	0.084
>4.5 to 5 microns			0.231	0.284	0.181	0.116	0.226
>5 to 5.5 microns			0.231	0.284	0.180	0.115	0.225
>5.5 to 5.7 microns			0.089	0.110	0.069	0.044	0.087
>5.7 to 5.9 microns, Phi 7.5			0.088	0.109	0.069	0.044	0.086
>5.9 to 7.8 microns, Phi 7			0.846	1.040	0.650	0.414	0.820
>7.8 to 8 microns			0.084	0.102	0.066	0.041	0.083
>8 to 8.5 microns			0.202	0.245	0.157	0.098	0.199
>8.5 to 8.9 microns			0.154	0.187	0.121	0.075	0.153
>8.9 to 9.1 microns			0.077	0.092	0.061	0.037	0.077
>9.1 to 9.5 microns			0.148	0.177	0.118	0.072	0.150
>9.5 to 9.8 microns			0.107	0.128	0.085	0.052	0.108
>9.8 to 10.1 microns			0.104	0.124	0.083	0.050	0.105
>10.1 to 10.6 microns			0.174	0.205	0.141	0.083	0.178
>10.6 to 11.1 microns			0.166	0.195	0.134	0.079	0.170
>11.1 to 11.3 microns			0.064	0.076	0.052	0.031	0.066
>11.3 to 11.7 microns, Phi 6.5			0.124	0.144	0.102	0.059	0.129
>11.7 to 14 microns			0.618	0.703	0.532	0.299	0.675
>14 to 14.8 microns			0.188	0.210	0.167	0.091	0.212
>14.8 to 15.6 microns			0.171	0.190	0.160	0.084	0.204
>15.6 to 16 microns			0.080	0.087	0.078	0.040	0.099
>16 to 20 microns			0.666	0.720	0.691	0.338	0.882
>20 to 23 microns, Phi 5.5			0.361	0.379	0.439	0.191	0.563
>23 to 27 microns			0.359	0.375	0.530	0.201	0.683
>27 to 31 microns, Phi 5			0.271	0.291	0.514	0.161	0.666
>31 to 32 microns			0.057	0.064	0.134	0.036	0.174
>32 to 35.6 microns			0.185	0.216	0.502	0.119	0.652
>35.6 to 37 microns, Phi 4.75			0.063	0.079	0.215	0.043	0.279
>37 to 39.6 microns			0.110	0.142	0.404	0.076	0.524
>39.6 to 43.6 microns			0.150	0.225	0.796	0.110	1.030
>43.6 to 44 microns, Phi 4.5			0.014	0.021	0.076	0.010	0.097
>44 to 45 microns			0.035	0.053	0.192	0.026	0.248
>45 to 46.4 microns			0.048	0.088	0.399	0.037	0.508
>46.4 to 53 microns, Phi 4.25			0.208	0.411	1.960	0.161	2.480
>53 to 62.5 microns, Phi 4			0.271	0.718	4.140	0.213	5.110
>62.5 to 64 microns			0.041	0.127	0.776	0.032	0.946
>64 to 71.7 microns			0.208	0.749	4.610	0.159	5.520

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-20	I-20	I-21	I-21	I-22
Sample ID:			P549447	P572117	P548139	P572118	P548148
Analyte	MDL	Units	11-JAN-2011	06-JUL-2011	04-JAN-2011	06-JUL-2011	04-JAN-2011
>71.7 to 74 microns			0.061	0.244	1.500	0.046	1.780
>74 to 79.6 microns			0.152	0.668	3.870	0.111	4.540
>79.6 to 87.6 microns			0.220	1.090	5.910	0.155	6.820
>87.6 to 88 microns, Phi 3.5			0.010	0.052	0.281	0.007	0.324
>88 to 90 microns			0.061	0.343	1.530	0.040	1.740
>90 to 105 microns, Phi 3.25			0.486	2.870	11.000	0.304	12.300
>105 to 125 microns, Phi 3			0.825	5.110	12.600	0.446	13.600
>125 to 149 microns, Phi 2.75			1.370	7.760	11.500	0.625	11.700
>149 to 160 microns			0.881	4.220	4.020	0.354	3.810
>160 to 177 microns, Phi 2.5			1.530	6.650	5.270	0.588	4.780
>177 to 197 microns			2.370	8.320	4.700	0.858	3.840
>197 to 210 microns, Phi 2.25			2.010	5.330	2.370	0.705	1.740
>210 to 217 microns			1.120	2.790	1.140	0.392	0.804
>217 to 245 microns			5.240	10.100	3.700	1.830	2.390
>245 to 250 microns, Phi 2			1.020	1.660	0.543	0.355	0.321
>250 to 300 microns, Phi 1.75			11.700	13.200	3.990	4.150	2.090
>300 to 320 microns			5.490	3.340	0.957	2.080	0.397
>320 to 350 microns, Phi 1.5			7.820	4.320	1.250	3.050	0.505
>350 to 360 microns			2.680	0.983	0.300	1.160	0.107
>360 to 400 microns			9.980	3.500	1.080	4.490	0.381
>400 to 420 microns, Phi 1.25			4.530	1.110	0.381	2.530	0.123
>420 to 440 microns			4.320	1.060	0.363	2.410	0.118
>440 to 500 microns, Phi 1			10.300	2.070	0.795	8.000	0.252
>500 to 590 microns, Phi 0.75			9.630	1.700	0.622	12.600	0.062
>590 to 630 microns			2.090	0.351	0.013	5.690	0.000
>630 to 696 microns			2.660	0.450	0.000	8.660	0.000
>696 to 710 microns, Phi 0.5			0.308	0.056	0.000	1.710	0.000
>710 to 773 microns			1.320	0.241	0.000	7.290	0.000
>773 to 840 microns, Phi 0.25			0.685	0.015	0.000	6.290	0.000
>840 to 850 microns			0.092	0.000	0.000	0.887	0.000
>850 to 930 microns			0.546	0.000	0.000	5.880	0.000
>930 to 1000 microns, Phi 0			0.312	0.000	0.000	4.020	0.000
1000 to 1100 microns			0.265	0.000	0.000	3.530	0.000
>1100 to 1190 microns, Phi -0.25			0.143	0.000	0.000	2.220	0.000
>1190 to 1300 microns			0.000	0.000	0.000	1.310	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.709	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.451	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.076	99.992	100.016	100.008	99.954

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-22	I-23	I-27	I-27	I-29
Sample ID:			P572219	P572227	P548209	P572229	P548222
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	05-JAN-2011	07-JUL-2011	05-JAN-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.110
>1.5 to 2 microns, Phi 9			0.115	0.000	0.008	0.007	0.327
>2.0 to 2.4 microns			0.181	0.000	0.148	0.147	0.285
>2.4 to 2.9 microns, Phi 8.5			0.239	0.000	0.186	0.187	0.372
>2.9 to 3.4 microns			0.253	0.118	0.189	0.190	0.386
>3.4 to 3.9 microns, Phi 8			0.276	0.148	0.198	0.199	0.415
>3.9 to 4 microns			0.058	0.032	0.042	0.041	0.087
>4.0 to 4.3 microns			0.168	0.092	0.119	0.118	0.249
>4.3 to 4.5 microns			0.108	0.059	0.077	0.076	0.160
>4.5 to 5 microns			0.292	0.161	0.202	0.199	0.426
>5 to 5.5 microns			0.290	0.161	0.200	0.194	0.422
>5.5 to 5.7 microns			0.112	0.062	0.077	0.075	0.163
>5.7 to 5.9 microns, Phi 7.5			0.111	0.062	0.076	0.074	0.160
>5.9 to 7.8 microns, Phi 7			1.050	0.600	0.713	0.677	1.500
>7.8 to 8 microns			0.105	0.061	0.072	0.067	0.153
>8 to 8.5 microns			0.252	0.147	0.173	0.160	0.365
>8.5 to 8.9 microns			0.193	0.113	0.133	0.123	0.281
>8.9 to 9.1 microns			0.097	0.057	0.068	0.062	0.143
>9.1 to 9.5 microns			0.188	0.110	0.131	0.119	0.277
>9.5 to 9.8 microns			0.136	0.080	0.095	0.086	0.200
>9.8 to 10.1 microns			0.132	0.077	0.092	0.084	0.194
>10.1 to 10.6 microns			0.223	0.132	0.156	0.140	0.333
>10.6 to 11.1 microns			0.212	0.126	0.149	0.134	0.317
>11.1 to 11.3 microns			0.082	0.049	0.058	0.052	0.123
>11.3 to 11.7 microns, Phi 6.5			0.160	0.095	0.113	0.101	0.242
>11.7 to 14 microns			0.826	0.494	0.600	0.532	1.290
>14 to 14.8 microns			0.257	0.154	0.190	0.168	0.413
>14.8 to 15.6 microns			0.245	0.146	0.185	0.163	0.404
>15.6 to 16 microns			0.118	0.071	0.091	0.080	0.200
>16 to 20 microns			1.040	0.619	0.820	0.721	1.820
>20 to 23 microns, Phi 5.5			0.645	0.380	0.544	0.481	1.240
>23 to 27 microns			0.761	0.443	0.687	0.618	1.610
>27 to 31 microns, Phi 5			0.721	0.418	0.703	0.646	1.650
>31 to 32 microns			0.184	0.107	0.190	0.177	0.438
>32 to 35.6 microns			0.682	0.403	0.729	0.687	1.630
>35.6 to 37 microns, Phi 4.75			0.287	0.173	0.322	0.308	0.692
>37 to 39.6 microns			0.536	0.327	0.611	0.585	1.280
>39.6 to 43.6 microns			1.030	0.662	1.260	1.220	2.370
>43.6 to 44 microns, Phi 4.5			0.097	0.063	0.120	0.116	0.224
>44 to 45 microns			0.247	0.161	0.306	0.298	0.565
>45 to 46.4 microns			0.494	0.354	0.663	0.654	1.040
>46.4 to 53 microns, Phi 4.25			2.400	1.800	3.300	3.270	4.860
>53 to 62.5 microns, Phi 4			4.780	4.280	7.160	7.200	8.260
>62.5 to 64 microns			0.872	0.855	1.350	1.370	1.370
>64 to 71.7 microns			5.020	5.490	7.860	8.010	7.130

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-22	I-23	I-27	I-27	I-29
Sample ID:			P572219	P572227	P548209	P572229	P548222
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	05-JAN-2011	07-JUL-2011	05-JAN-2011
>71.7 to 74 microns			1.600	1.870	2.530	2.590	2.120
>74 to 79.6 microns			4.070	5.070	6.320	6.490	4.990
>79.6 to 87.6 microns			6.090	8.160	9.240	9.540	6.730
>87.6 to 88 microns, Phi 3.5			0.290	0.388	0.440	0.454	0.320
>88 to 90 microns			1.560	2.190	2.190	2.270	1.520
>90 to 105 microns, Phi 3.25			11.100	15.800	14.600	15.200	9.990
>105 to 125 microns, Phi 3			12.600	16.600	13.300	13.700	9.360
>125 to 149 microns, Phi 2.75			11.400	12.500	9.030	9.130	7.040
>149 to 160 microns			3.880	3.500	2.380	2.340	2.080
>160 to 177 microns, Phi 2.5			5.000	4.080	2.710	2.620	2.510
>177 to 197 microns			4.230	2.910	1.870	1.730	1.920
>197 to 210 microns, Phi 2.25			2.010	1.250	0.786	0.698	0.866
>210 to 217 microns			0.950	0.564	0.351	0.305	0.400
>217 to 245 microns			2.920	1.670	1.030	0.867	1.210
>245 to 250 microns, Phi 2			0.406	0.222	0.134	0.109	0.166
>250 to 300 microns, Phi 1.75			2.770	1.500	0.894	0.695	1.150
>300 to 320 microns			0.573	0.321	0.189	0.134	0.255
>320 to 350 microns, Phi 1.5			0.734	0.417	0.245	0.172	0.332
>350 to 360 microns			0.162	0.099	0.059	0.039	0.080
>360 to 400 microns			0.578	0.360	0.214	0.141	0.288
>400 to 420 microns, Phi 1.25			0.191	0.131	0.080	0.051	0.106
>420 to 440 microns			0.182	0.125	0.076	0.049	0.101
>440 to 500 microns, Phi 1			0.388	0.290	0.182	0.116	0.233
>500 to 590 microns, Phi 0.75			0.095	0.073	0.047	0.029	0.059
>590 to 630 microns			0.000	0.000	0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.054	100.032	100.063	100.085	100.002

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-29	I-30	I-30	I-31	I-31
Sample ID:			P572350	P548225	P572355	P548229	P572237
Analyte	MDL	Units	08-JUL-2011	05-JAN-2011	08-JUL-2011	05-JAN-2011	07-JUL-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.232	0.000	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.381	0.000	0.114	0.000	0.000
>2.0 to 2.4 microns			0.348	0.046	0.177	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.469	0.171	0.231	0.088	0.000
>2.9 to 3.4 microns			0.500	0.175	0.240	0.146	0.112
>3.4 to 3.9 microns, Phi 8			0.553	0.185	0.259	0.152	0.140
>3.9 to 4 microns			0.118	0.039	0.054	0.032	0.030
>4.0 to 4.3 microns			0.338	0.112	0.156	0.093	0.086
>4.3 to 4.5 microns			0.218	0.072	0.100	0.060	0.056
>4.5 to 5 microns			0.592	0.191	0.267	0.159	0.149
>5 to 5.5 microns			0.593	0.189	0.263	0.158	0.149
>5.5 to 5.7 microns			0.229	0.073	0.101	0.061	0.058
>5.7 to 5.9 microns, Phi 7.5			0.227	0.072	0.100	0.060	0.057
>5.9 to 7.8 microns, Phi 7			2.170	0.680	0.934	0.578	0.546
>7.8 to 8 microns			0.221	0.069	0.093	0.059	0.055
>8 to 8.5 microns			0.529	0.164	0.222	0.141	0.131
>8.5 to 8.9 microns			0.406	0.126	0.170	0.109	0.101
>8.9 to 9.1 microns			0.205	0.064	0.085	0.055	0.051
>9.1 to 9.5 microns			0.397	0.124	0.165	0.107	0.098
>9.5 to 9.8 microns			0.287	0.089	0.120	0.077	0.071
>9.8 to 10.1 microns			0.279	0.087	0.116	0.075	0.069
>10.1 to 10.6 microns			0.475	0.147	0.195	0.128	0.116
>10.6 to 11.1 microns			0.453	0.140	0.186	0.122	0.110
>11.1 to 11.3 microns			0.176	0.054	0.072	0.047	0.043
>11.3 to 11.7 microns, Phi 6.5			0.341	0.107	0.140	0.093	0.083
>11.7 to 14 microns			1.750	0.564	0.730	0.488	0.426
>14 to 14.8 microns			0.546	0.178	0.228	0.154	0.132
>14.8 to 15.6 microns			0.514	0.173	0.220	0.148	0.124
>15.6 to 16 microns			0.246	0.085	0.107	0.072	0.060
>16 to 20 microns			2.130	0.764	0.957	0.638	0.519
>20 to 23 microns, Phi 5.5			1.270	0.504	0.620	0.405	0.314
>23 to 27 microns			1.410	0.639	0.773	0.485	0.364
>27 to 31 microns, Phi 5			1.220	0.659	0.784	0.467	0.344
>31 to 32 microns			0.286	0.180	0.211	0.121	0.089
>32 to 35.6 microns			0.986	0.695	0.811	0.453	0.338
>35.6 to 37 microns, Phi 4.75			0.373	0.310	0.358	0.193	0.147
>37 to 39.6 microns			0.668	0.592	0.679	0.364	0.279
>39.6 to 43.6 microns			1.040	1.240	1.400	0.724	0.580
>43.6 to 44 microns, Phi 4.5			0.099	0.118	0.132	0.069	0.055
>44 to 45 microns			0.246	0.302	0.339	0.176	0.142
>45 to 46.4 microns			0.376	0.669	0.730	0.377	0.323
>46.4 to 53 microns, Phi 4.25			1.680	3.350	3.620	1.900	1.660
>53 to 62.5 microns, Phi 4			2.350	7.450	7.730	4.440	4.190
>62.5 to 64 microns			0.359	1.420	1.440	0.881	0.859
>64 to 71.7 microns			1.800	8.300	8.290	5.660	5.690

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-29	I-30	I-30	I-31	I-31
Sample ID:			P572350	P548225	P572355	P548229	P572237
Analyte	MDL	Units	08-JUL-2011	05-JAN-2011	08-JUL-2011	05-JAN-2011	07-JUL-2011
>71.7 to 74 microns			0.518	2.680	2.650	1.930	1.980
>74 to 79.6 microns			1.240	6.680	6.530	5.260	5.450
>79.6 to 87.6 microns			1.710	9.740	9.410	8.510	8.940
>87.6 to 88 microns, Phi 3.5			0.081	0.463	0.447	0.405	0.425
>88 to 90 microns			0.436	2.280	2.190	2.300	2.420
>90 to 105 microns, Phi 3.25			3.210	15.100	14.400	16.600	17.500
>105 to 125 microns, Phi 3			4.530	13.300	12.700	17.300	18.000
>125 to 149 microns, Phi 2.75			6.110	8.730	8.320	12.500	12.700
>149 to 160 microns			3.260	2.230	2.100	3.310	3.280
>160 to 177 microns, Phi 2.5			5.200	2.500	2.330	3.720	3.650
>177 to 197 microns			6.810	1.660	1.510	2.460	2.350
>197 to 210 microns, Phi 2.25			4.600	0.673	0.602	0.994	0.931
>210 to 217 microns			2.450	0.295	0.261	0.434	0.403
>217 to 245 microns			8.990	0.842	0.731	1.240	1.130
>245 to 250 microns, Phi 2			1.490	0.107	0.090	0.156	0.139
>250 to 300 microns, Phi 1.75			11.200	0.685	0.561	0.996	0.875
>300 to 320 microns			2.200	0.134	0.103	0.196	0.165
>320 to 350 microns, Phi 1.5			2.700	0.173	0.132	0.252	0.213
>350 to 360 microns			0.442	0.040	0.029	0.059	0.049
>360 to 400 microns			1.520	0.145	0.106	0.212	0.176
>400 to 420 microns, Phi 1.25			0.325	0.053	0.038	0.077	0.064
>420 to 440 microns			0.310	0.050	0.036	0.074	0.061
>440 to 500 microns, Phi 1			0.480	0.120	0.020	0.175	0.146
>500 to 590 microns, Phi 0.75			0.102	0.031	0.000	0.045	0.037
>590 to 630 microns			0.000	0.000	0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.000	100.079	100.015	100.020	100.030

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-33	I-33	I-34	I-35	I-35
Sample ID:			P548235	P572362	P548239	P548243	P572241
Analyte	MDL	Units	05-JAN-2011	08-JUL-2011	05-JAN-2011	05-JAN-2011	07-JUL-2011
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.105
>1.5 to 2 microns, Phi 9			0.000	0.008	0.000	0.260	0.311
>2.0 to 2.4 microns			0.043	0.161	0.000	0.214	0.267
>2.4 to 2.9 microns, Phi 8.5			0.162	0.218	0.000	0.263	0.342
>2.9 to 3.4 microns			0.173	0.235	0.000	0.259	0.347
>3.4 to 3.9 microns, Phi 8			0.190	0.262	0.000	0.263	0.365
>3.9 to 4 microns			0.041	0.056	0.000	0.055	0.076
>4.0 to 4.3 microns			0.118	0.162	0.000	0.157	0.217
>4.3 to 4.5 microns			0.076	0.105	0.000	0.101	0.139
>4.5 to 5 microns			0.208	0.287	0.000	0.263	0.366
>5 to 5.5 microns			0.210	0.287	0.000	0.265	0.364
>5.5 to 5.7 microns			0.081	0.111	0.000	0.103	0.141
>5.7 to 5.9 microns, Phi 7.5			0.081	0.110	0.000	0.101	0.138
>5.9 to 7.8 microns, Phi 7			0.788	1.060	0.000	0.991	1.320
>7.8 to 8 microns			0.081	0.107	0.000	0.110	0.140
>8 to 8.5 microns			0.194	0.256	0.000	0.264	0.334
>8.5 to 8.9 microns			0.149	0.196	0.000	0.207	0.260
>8.9 to 9.1 microns			0.076	0.099	0.000	0.112	0.137
>9.1 to 9.5 microns			0.147	0.191	0.000	0.217	0.264
>9.5 to 9.8 microns			0.106	0.138	0.000	0.157	0.191
>9.8 to 10.1 microns			0.103	0.134	0.000	0.153	0.185
>10.1 to 10.6 microns			0.177	0.226	0.038	0.285	0.332
>10.6 to 11.1 microns			0.169	0.215	0.036	0.272	0.317
>11.1 to 11.3 microns			0.066	0.083	0.014	0.105	0.123
>11.3 to 11.7 microns, Phi 6.5			0.128	0.162	0.028	0.215	0.247
>11.7 to 14 microns			0.663	0.819	0.148	1.280	1.400
>14 to 14.8 microns			0.207	0.252	0.047	0.440	0.468
>14.8 to 15.6 microns			0.195	0.235	0.045	0.456	0.475
>15.6 to 16 microns			0.094	0.111	0.022	0.236	0.242
>16 to 20 microns			0.814	0.952	0.199	2.330	2.320
>20 to 23 microns, Phi 5.5			0.487	0.551	0.129	1.850	1.750
>23 to 27 microns			0.541	0.595	0.154	2.600	2.420
>27 to 31 microns, Phi 5			0.473	0.506	0.141	2.680	2.510
>31 to 32 microns			0.114	0.119	0.034	0.688	0.652
>32 to 35.6 microns			0.404	0.421	0.120	2.440	2.330
>35.6 to 37 microns, Phi 4.75			0.161	0.165	0.047	0.963	0.933
>37 to 39.6 microns			0.295	0.302	0.084	1.740	1.690
>39.6 to 43.6 microns			0.529	0.533	0.136	2.820	2.770
>43.6 to 44 microns, Phi 4.5			0.050	0.051	0.013	0.267	0.263
>44 to 45 microns			0.127	0.128	0.032	0.665	0.656
>45 to 46.4 microns			0.245	0.242	0.053	1.060	1.060
>46.4 to 53 microns, Phi 4.25			1.200	1.180	0.243	4.810	4.780
>53 to 62.5 microns, Phi 4			2.550	2.480	0.407	7.230	7.160
>62.5 to 64 microns			0.494	0.476	0.070	1.150	1.130
>64 to 71.7 microns			3.210	3.090	0.414	5.910	5.790

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL- Grain Size
(all values are in percent distribution)

Annual 2011

Source:			I-33	I-33	I-34	I-35	I-35
Sample ID:			P548235	P572362	P548239	P548243	P572241
Analyte	MDL	Units	05-JAN-2011	08-JUL-2011	05-JAN-2011	05-JAN-2011	07-JUL-2011
>71.7 to 74 microns			1.100	1.060	0.134	1.740	1.700
>74 to 79.6 microns			3.150	3.040	0.374	4.160	4.040
>79.6 to 87.6 microns			5.360	5.190	0.619	5.740	5.530
>87.6 to 88 microns, Phi 3.5			0.255	0.247	0.029	0.273	0.263
>88 to 90 microns			1.650	1.620	0.208	1.370	1.310
>90 to 105 microns, Phi 3.25			13.100	13.000	1.850	9.400	8.980
>105 to 125 microns, Phi 3			17.600	17.800	3.990	9.820	9.400
>125 to 149 microns, Phi 2.75			16.200	16.700	7.590	8.080	7.880
>149 to 160 microns			5.070	5.150	4.860	2.480	2.480
>160 to 177 microns, Phi 2.5			6.130	6.150	8.080	3.010	3.060
>177 to 197 microns			4.470	4.320	10.800	2.250	2.360
>197 to 210 microns, Phi 2.25			1.890	1.750	6.990	0.963	1.040
>210 to 217 microns			0.844	0.764	3.670	0.434	0.471
>217 to 245 microns			2.430	2.120	12.900	1.250	1.370
>245 to 250 microns, Phi 2			0.312	0.259	2.060	0.159	0.179
>250 to 300 microns, Phi 1.75			2.000	1.560	15.400	0.998	1.130
>300 to 320 microns			0.383	0.259	3.400	0.178	0.203
>320 to 350 microns, Phi 1.5			0.490	0.327	4.320	0.226	0.257
>350 to 360 microns			0.109	0.067	0.901	0.047	0.054
>360 to 400 microns			0.394	0.239	3.190	0.170	0.191
>400 to 420 microns, Phi 1.25			0.138	0.078	0.949	0.056	0.062
>420 to 440 microns			0.131	0.074	0.905	0.054	0.060
>440 to 500 microns, Phi 1			0.298	0.164	1.730	0.121	0.132
>500 to 590 microns, Phi 0.75			0.075	0.041	1.410	0.030	0.033
>590 to 630 microns			0.000	0.000	0.290	0.000	0.000
>630 to 696 microns			0.000	0.000	0.373	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.047	0.000	0.000
>710 to 773 microns			0.000	0.000	0.199	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.013	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	1.36	ND
Totals:			99.999	100.056	99.935	101.376	100.012

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size (Sieve)
(all values are in percent distribution)

Annual 2011

Source:			I-23	I-28	I-28	I-34
Sample ID:			P548151	P548217	P572347	P572321
Analyte	MDL	Units	04-JAN-2011	05-JAN-2011	08-JUL-2011	08-JUL-2011
<63 microns, Phi<4			1.5	21.3	23.3	0.5
>63 to 125 microns, Phi>4			0.5	17.4	19.8	0.6
>125 to 250 microns, Phi>3			2.0	3.6	3.7	11.4
>250 to 500 microns, Phi>2			27.3	15.0	14.8	25.5
>500 to 1000 microns, Phi>1			36.8	26.0	24.5	23.5
>1000 to 2000 microns, Phi>0			14.0	12.5	9.8	22.2
>2000 microns, Phi>-1			17.9	4.1	4.3	16.3
Totals:			100.0	99.9	100.2	100.0

SOUTH BAY WATER RECLAMATION PLANT
SEDIMENT ANNUAL Total Organic Carbon/Total Nitrogen - Standard Stations by Quarter

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6	I-7
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Total Nitrogen	.005	WT%	0.025	0.014	0.014	0.015	0.014	0.014
Total Organic Carbon	.01	WT%	0.174	0.070	0.059	0.071	0.056	0.062

Source:			I-8	I-9	I-10	I-12	I-13	I-14
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Total Nitrogen	.005	WT%	0.015	0.029	0.021	0.020	0.017	0.026
Total Organic Carbon	.01	WT%	0.066	0.195	0.121	0.110	0.082	0.180

Source:			I-15	I-16	I-18	I-20	I-21	I-22
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Total Nitrogen	.005	WT%	0.015	0.016	0.018	0.018	0.015	0.025
Total Organic Carbon	.01	WT%	0.073	0.075	0.102	0.084	0.105	0.166

Source:			I-23	I-27	I-28	I-29	I-30	I-31
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Total Nitrogen	.005	WT%	0.018	0.024	0.050	0.031	0.028	0.020
Total Organic Carbon	.01	WT%	1.020	0.154	0.398	0.221	0.174	0.105

Source:			I-33	I-34	I-35
Date:			2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg
Total Nitrogen	.005	WT%	0.028	0.013	0.036
Total Organic Carbon	.01	WT%	0.163	0.195	0.239

ND=not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
ANNUAL OCEAN SEDIMENT – STANDARD

Trace Metals

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6
Date:			2011	2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average	Average
Aluminum	2	MG/KG	2030	866	752	2380	840
Antimony	.3	MG/KG	<0.3	0.35	<0.3	<0.3	0.34
Arsenic	.33	MG/KG	1.19	0.71	1.17	1.33	4.73
Beryllium	.01	MG/KG	0.017	ND	ND	0.01	<0.01
Cadmium	.06	MG/KG	0.162	0.237	0.160	0.155	0.166
Chromium	.1	MG/KG	5.4	6.4	6.2	6.1	9.1
Copper	.2	MG/KG	1.38	1.45	0.68	1.84	3.23
Iron	9	MG/KG	2770	1130	1200	2930	3660
Lead	.8	MG/KG	1.81	<0.80	<0.80	1.64	1.74
Manganese	.08	MG/KG	26.3	7.3	5.7	28.4	8.3
Mercury	.004	MG/KG	0.014	ND	ND	ND	ND
Nickel	.1	MG/KG	1.40	0.82	0.48	1.04	0.52
Selenium	.24	MG/KG	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	1.16	1.63	0.80	0.86	0.74
Tin	.3	MG/KG	0.7	0.8	0.7	0.8	0.7
Zinc	.25	MG/KG	7.4	3.7	2.6	7.5	5.5

Source:			I-7	I-8	I-9	I-10	I-12
Date:			2011	2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average	Average
Aluminum	2	MG/KG	1150	1850	6720	4570	13600
Antimony	.3	MG/KG	0.425	0.33	0.385	0.315	0.38
Arsenic	.33	MG/KG	5.65	2.45	1.83	1.51	1.51
Beryllium	.01	MG/KG	0.02	0.016	0.043	0.022	0.038
Cadmium	.06	MG/KG	0.207	0.184	0.225	0.195	<0.060
Chromium	.1	MG/KG	12.2	8.5	10.0	7.0	24.6
Copper	.2	MG/KG	8.01	0.92	3.68	1.89	3.70
Iron	9	MG/KG	6180	4070	6700	4640	18100
Lead	.8	MG/KG	2.51	1.35	1.60	1.49	5.0
Manganese	.08	MG/KG	15.2	20.0	72.5	50.1	162
Mercury	.004	MG/KG	0.009	ND	ND	ND	<0.004
Nickel	.1	MG/KG	0.68	0.78	4.13	1.45	1.79
Selenium	.24	MG/KG	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	0.50	0.68	<0.50	0.58	ND
Tin	.3	MG/KG	0.7	0.7	1.1	1.0	1.3
Zinc	.25	MG/KG	9.9	8.1	19.7	12.5	43.3

ND= not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
ANNUAL OCEAN SEDIMENT – STANDARD

Trace Metals

Annual 2011

Source:			I-13	I-14	I-15	I-16	I-18
Date:			2011	2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average	Average
Aluminum	2	MG/KG	1120	5650	2000	2730	4600
Antimony	.3	MG/KG	<0.3	<0.3	ND	ND	ND
Arsenic	.33	MG/KG	3.83	1.67	2.45	1.50	1.60
Beryllium	.01	MG/KG	0.021	0.045	0.037	0.031	0.039
Cadmium	.06	MG/KG	<0.06	<0.06	ND	ND	ND
Chromium	.1	MG/KG	10.0	10.4	8.6	6.4	9.6
Copper	.2	MG/KG	0.71	3.87	1.82	1.93	2.09
Iron	9	MG/KG	4580	5990	3920	3840	5360
Lead	.8	MG/KG	2.47	2.50	2.05	1.61	2.17
Manganese	.08	MG/KG	16.2	66.6	25.0	41.9	60.2
Mercury	.004	MG/KG	<0.004	<0.004	0.004	ND	ND
Nickel	.1	MG/KG	0.45	1.84	0.75	0.72	1.41
Selenium	.24	MG/KG	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND
Tin	.3	MG/KG	ND	0.4	ND	ND	0.3
Zinc	.25	MG/KG	6.0	17.7	9.4	10.0	12.7

Source:			I-20	I-21	I-22	I-23	I-27
Date:			2011	2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average	Average
Aluminum	2	MG/KG	1160	1100	4480	2340	6370
Antimony	.3	MG/KG	ND	<0.3	<0.3	ND	<0.3
Arsenic	.33	MG/KG	2.26	9.04	1.53	1.98	1.04
Beryllium	.01	MG/KG	0.045	0.043	0.068	0.037	0.082
Cadmium	.06	MG/KG	ND	<0.06	<0.06	ND	ND
Chromium	.1	MG/KG	5.7	11.6	9.2	5.7	10.1
Copper	.2	MG/KG	0.72	0.40	2.76	1.81	3.34
Iron	9	MG/KG	4350	7700	5390	3790	6360
Lead	.8	MG/KG	1.71	3.96	2.65	1.68	2.76
Manganese	.08	MG/KG	14.8	14.4	46.3	31.3	64.3
Mercury	.004	MG/KG	<0.004	ND	0.007	<0.004	0.005
Nickel	.1	MG/KG	0.42	0.53	3.29	2.44	3.80
Selenium	.24	MG/KG	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND
Tin	.3	MG/KG	ND	ND	0.5	0.3	0.4
Zinc	.25	MG/KG	6.5	6.8	13.6	9.2	17.6

ND= not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
ANNUAL OCEAN SEDIMENT – STANDARD

Trace Metals

Annual 2011

Source:			I-28	I-29	I-30	I-31	I-33
Date:			2011	2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average	Average
Aluminum	2	MG/KG	5760	10200	5660	3170	4150
Antimony	.3	MG/KG	<0.3	0.42	ND	ND	ND
Arsenic	.33	MG/KG	2.56	2.77	1.41	0.64	1.52
Beryllium	.01	MG/KG	0.102	0.137	0.082	0.043	0.059
Cadmium	.06	MG/KG	0.097	0.096	0.07	ND	0.066
Chromium	.1	MG/KG	10.5	16.6	10.5	6.7	7.7
Copper	.2	MG/KG	5.61	6.28	3.90	1.90	3.20
Iron	9	MG/KG	7630	12400	6380	3080	5630
Lead	.8	MG/KG	4.64	6.22	3.10	1.77	3.90
Manganese	.08	MG/KG	58.3	90.6	58.7	32.1	57.3
Mercury	.004	MG/KG	0.021	0.01	0.007	<0.004	0.012
Nickel	.1	MG/KG	5.78	5.63	3.74	1.77	2.65
Selenium	.24	MG/KG	<0.24	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND
Tin	.3	MG/KG	0.7	0.6	0.4	<0.3	0.6
Zinc	.25	MG/KG	19.5	26.7	17.8	7.9	15.0

Source:			I-34	I-35
Date:			2011	2011
Analyte:	MDL	Units	Average	Average
Aluminum	2	MG/KG	1420	7280
Antimony	.3	MG/KG	ND	0.395
Arsenic	.33	MG/KG	1.83	2.04
Beryllium	.01	MG/KG	0.019	0.107
Cadmium	.06	MG/KG	ND	0.102
Chromium	.1	MG/KG	3.4	12.5
Copper	.2	MG/KG	2.03	5.37
Iron	9	MG/KG	2750	9310
Lead	.8	MG/KG	1.87	4.99
Manganese	.08	MG/KG	26.1	88.7
Mercury	.004	MG/KG	<0.004	0.018
Nickel	.1	MG/KG	1.09	4.78
Selenium	.24	MG/KG	ND	ND
Silver	.04	MG/KG	ND	ND
Thallium	.5	MG/KG	ND	ND
Tin	.3	MG/KG	ND	0.7
Zinc	.25	MG/KG	6.5	26.0

ND= not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT Chlorinated Pesticide Analysis - International Stations

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6	I-7	I-8	I-9
Date:			2011	2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	ND	ND	ND	<260	ND	ND
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	0	0	0	0	0	0	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	0	0	0	0	0	0

ND=not detected
NA=not analyzed
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT Chlorinated Pesticide Analysis - International Stations

Annual 2011

Source:			I-10	I-12	I-13	I-14	I-15	I-16	I-18	I-20
Date:			2011	2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	ND	<260	ND	ND	ND	ND
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	0	0	0	0	0	0	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	0	0	0	0	0	0

ND=not detected
NA=not analyzed
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT Chlorinated Pesticide Analysis - International Stations

Annual 2011

Source:			I-21	I-22	I-23	I-27	I-28	I-29	I-30	I-31
Date:			2011	2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	ND	<260	710	1520	ND	ND
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	850	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	0	0	0	710	2370	0	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	0	0	710	2370	0	0

ND=not detected
NA=not analyzed
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT Chlorinated Pesticide Analysis - International Stations

Annual 2011

Source:			I-33	I-34	I-35
Date:			2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg
Aldrin	430	NG/KG	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	<260
p,p-DDT	800	NG/KG	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0
DDT and derivatives	830	NG/KG	0	0	0
Chlordane + related cmpds.	350	NG/KG	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	0

ND=not detected
NA=not analyzed
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - PCB Congeners (I-1 to I-40)

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6	I-7
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - PCB Congeners (I-1 to I-40)

Annual 2011

Source:			I-8	I-9	I-10	I-12	I-13	I-14
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - PCB Congeners (I-1 to I-40)

Annual 2011

Source:			I-15	I-16	I-18	I-20	I-21	I-22
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - PCB Congeners (I-1 to I-40)

Annual 2011

Source:			I-23	I-27	I-28	I-29	I-30	I-31
Date:			2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	<640	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	<500	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	<830	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	<720	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT ANNUAL - PCB Congeners (I-1 to I-40)

Annual 2011

Source:			I-33	I-34	I-35
Date:			2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg
PCB 18	540	NG/KG	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Base/Neutrals - International Stations

Annual 2011

Source:			I-1	I-2	I-3	I-4	I-6	I-7	I-8
Date:			2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Acenaphthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Biphenyl	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Chrysene	40	UG/KG	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluorene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylphenanthrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Naphthalene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Perylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Base/Neutral Compounds			0	0	0	0	0	0	0

Source:			I-9	I-10	I-12	I-13	I-14	I-15	I-16
Date:			2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Acenaphthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Biphenyl	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Chrysene	40	UG/KG	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluorene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylphenanthrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Naphthalene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Perylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Base/Neutral Compounds			0	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Base/Neutrals - International Stations

Annual 2011

Source:			I-18	I-20	I-21	I-22	I-23	I-27	I-28
Date:			2011	2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg	Avg
Acenaphthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Biphenyl	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Chrysene	40	UG/KG	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Fluorene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylphenanthrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Naphthalene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Perylene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	30	UG/KG	ND	ND	ND	ND	ND	ND	ND
Pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND	ND
Base/Neutral Compounds			0	0	0	0	0	0	0

Source:			I-29	I-30	I-31	I-33	I-34	I-35
Date:			2011	2011	2011	2011	2011	2011
Analyte:	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Acenaphthene	20	UG/KG	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	UG/KG	ND	ND	ND	ND	ND	ND
Anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	20	UG/KG	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND
Biphenyl	30	UG/KG	ND	ND	ND	ND	ND	ND
Chrysene	40	UG/KG	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	20	UG/KG	ND	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND
Fluoranthene	20	UG/KG	ND	ND	ND	ND	ND	ND
Fluorene	20	UG/KG	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND
1-Methylphenanthrene	20	UG/KG	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND
Naphthalene	30	UG/KG	ND	ND	ND	ND	ND	ND
Perylene	30	UG/KG	ND	ND	ND	ND	ND	ND
Phenanthrene	30	UG/KG	ND	ND	ND	ND	ND	ND
Pyrene	20	UG/KG	ND	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	20	UG/KG	ND	ND	ND	ND	ND	ND
Base/Neutral Compounds			0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Random Stations
Sulfide and Total Volatile Solids Analysis

Annual 2011

Source:			8101	8102	8103	8104	8105	8106
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Sulfides-Total	.14	MG/KG	1.67	9.68	1.08	9.08	5.58	3.01
Total Volatile Solids	.11	WT%	0.74	2.60	0.48	2.42	3.11	3.52

Source:			8107	8108	8109	8110	8112	8113
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011
Sulfides-Total	.14	MG/KG	10.0	7.66	9.51	5.37	18.6	10.5
Total Volatile Solids	.11	WT%	3.24	0.98	2.55	2.68	2.93	3.11

Source:			8114	8115	8116	8117	8119	8120
Analyte	MDL	Units	12-JUL-2011	07-JUL-2011	07-JUL-2011	07-JUL-2011	11-JUL-2011	18-JUL-2011
Sulfides-Total	.14	MG/KG	9.29	1.12	1.89	8.50	17.3	2.48
Total Volatile Solids	.11	WT%	2.84	0.45	0.47	0.87	4.80	2.01

Source:			8121	8122	8123	8124	8125	8126
Analyte	MDL	Units	08-JUL-2011	11-JUL-2011	18-JUL-2011	18-JUL-2011	08-JUL-2011	08-JUL-2011
Sulfides-Total	.14	MG/KG	6.19	7.92	8.18	1.52	2.89	3.03
Total Volatile Solids	.11	WT%	1.22	2.87	2.43	3.02	1.30	1.05

Source:			8127	8128	8130	8131	8132	8134
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011	06-JUL-2011	06-JUL-2011
Sulfides-Total	.14	MG/KG	ND	2.37	12.1	0.78	1.29	85.2
Total Volatile Solids	.11	WT%	0.69	0.70	4.49	0.63	0.67	0.90

Source:			8135	8137	8141	8150	8151	8152
Analyte	MDL	Units	07-JUL-2011	08-JUL-2011	20-JUL-2011	19-JUL-2011	19-JUL-2011	19-JUL-2011
Sulfides-Total	.14	MG/KG	7.91	4.39	13.1	416	15.1	11.0
Total Volatile Solids	.11	WT%	1.14	0.94	4.20	7.15	5.39	6.32

Source:			8153	8154	8155	8170	8171
Analyte	MDL	Units	19-JUL-2011	20-JUL-2011	19-JUL-2011	20-JUL-2011	20-JUL-2011
Sulfides-Total	.14	MG/KG	51.8	3.07	3.21	9.49	2.03
Total Volatile Solids	.11	WT%	6.25	7.03	3.06	1.48	0.86

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8101	8102	8103	8104	8105
Date:			14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Analyte	MDL	Units	P573526	P573534	P573538	P573541	P573548
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.210	0.600
>1 to 1.5 microns, Phi 9.5			0.000	0.407	0.000	0.453	0.558
>1.5 to 2 microns, Phi 9			0.000	0.511	0.000	0.526	0.646
>2.0 to 2.4 microns			0.000	0.482	0.000	0.470	0.576
>2.4 to 2.9 microns, Phi 8.5			0.000	0.660	0.000	0.616	0.753
>2.9 to 3.4 microns			0.100	0.713	0.000	0.635	0.780
>3.4 to 3.9 microns, Phi 8			0.122	0.804	0.000	0.685	0.842
>3.9 to 4 microns			0.025	0.170	0.000	0.140	0.175
>4.0 to 4.3 microns			0.073	0.488	0.000	0.403	0.502
>4.3 to 4.5 microns			0.047	0.315	0.000	0.259	0.323
>4.5 to 5 microns			0.122	0.858	0.000	0.683	0.859
>5 to 5.5 microns			0.120	0.855	0.000	0.669	0.853
>5.5 to 5.7 microns			0.046	0.330	0.000	0.257	0.329
>5.7 to 5.9 microns, Phi 7.5			0.046	0.326	0.000	0.253	0.324
>5.9 to 7.8 microns, Phi 7			0.423	3.090	0.000	2.320	3.050
>7.8 to 8 microns			0.042	0.309	0.000	0.232	0.314
>8 to 8.5 microns			0.100	0.741	0.000	0.556	0.753
>8.5 to 8.9 microns			0.077	0.567	0.000	0.427	0.580
>8.9 to 9.1 microns			0.038	0.284	0.000	0.215	0.298
>9.1 to 9.5 microns			0.074	0.550	0.000	0.417	0.576
>9.5 to 9.8 microns			0.054	0.397	0.000	0.301	0.416
>9.8 to 10.1 microns			0.052	0.386	0.000	0.293	0.404
>10.1 to 10.6 microns			0.087	0.650	0.000	0.497	0.702
>10.6 to 11.1 microns			0.083	0.620	0.000	0.474	0.670
>11.1 to 11.3 microns			0.032	0.240	0.000	0.184	0.260
>11.3 to 11.7 microns, Phi 6.5			0.063	0.465	0.000	0.360	0.512
>11.7 to 14 microns			0.324	2.370	0.000	1.900	2.750
>14 to 14.8 microns			0.100	0.734	0.000	0.604	0.887
>14.8 to 15.6 microns			0.095	0.692	0.000	0.589	0.869
>15.6 to 16 microns			0.046	0.332	0.000	0.290	0.431
>16 to 20 microns			0.401	2.890	0.000	2.640	3.940
>20 to 23 microns, Phi 5.5			0.246	1.750	0.000	1.780	2.700
>23 to 27 microns			0.285	2.000	0.000	2.270	3.440
>27 to 31 microns, Phi 5			0.264	1.800	0.000	2.270	3.380
>31 to 32 microns			0.066	0.438	0.000	0.589	0.861
>32 to 35.6 microns			0.243	1.550	0.000	2.150	3.080
>35.6 to 37 microns, Phi 4.75			0.101	0.613	0.000	0.888	1.230
>37 to 39.6 microns			0.188	1.120	0.000	1.630	2.230
>39.6 to 43.6 microns			0.356	1.900	0.000	2.870	3.690
>43.6 to 44 microns, Phi 4.5			0.034	0.180	0.000	0.273	0.351
>44 to 45 microns			0.086	0.451	0.000	0.683	0.872
>45 to 46.4 microns			0.176	0.778	0.000	1.190	1.390
>46.4 to 53 microns, Phi 4.25			0.879	3.600	0.029	5.490	6.210
>53 to 62.5 microns, Phi 4			2.030	6.000	0.194	8.760	8.630
>62.5 to 64 microns			0.406	1.010	0.036	1.410	1.290
>64 to 71.7 microns			2.750	5.400	0.229	7.160	6.080

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8101	8102	8103	8104	8105
Date:			14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Analyte	MDL	Units	P573526	P573534	P573538	P573541	P573548
>71.7 to 74 microns			0.962	1.650	0.078	2.090	1.670
>74 to 79.6 microns			2.830	4.030	0.234	4.820	3.710
>79.6 to 87.6 microns			4.920	5.730	0.417	6.350	4.560
>87.6 to 88 microns, Phi 3.5			0.234	0.273	0.020	0.302	0.217
>88 to 90 microns			1.560	1.400	0.157	1.390	0.946
>90 to 105 microns, Phi 3.25			12.600	9.600	1.480	8.850	5.840
>105 to 125 microns, Phi 3			17.700	9.770	3.400	7.610	4.840
>125 to 149 microns, Phi 2.75			17.300	7.490	6.050	5.050	3.230
>149 to 160 microns			5.760	2.110	3.370	1.310	0.864
>160 to 177 microns, Phi 2.5			7.190	2.440	5.260	1.470	0.995
>177 to 197 microns			5.550	1.670	6.210	0.985	0.698
>197 to 210 microns, Phi 2.25			2.420	0.676	3.770	0.400	0.296
>210 to 217 microns			1.100	0.296	1.950	0.175	0.133
>217 to 245 microns			3.220	0.830	7.050	0.499	0.389
>245 to 250 microns, Phi 2			0.419	0.103	1.150	0.063	0.051
>250 to 300 microns, Phi 1.75			2.700	0.632	9.900	0.399	0.340
>300 to 320 microns			0.514	0.112	3.160	0.077	0.071
>320 to 350 microns, Phi 1.5			0.656	0.143	4.310	0.099	0.093
>350 to 360 microns			0.143	0.031	1.260	0.023	0.022
>360 to 400 microns			0.513	0.111	4.690	0.073	0.071
>400 to 420 microns, Phi 1.25			0.174	0.039	2.080	0.000	0.000
>420 to 440 microns			0.166	0.037	1.980	0.000	0.000
>440 to 500 microns, Phi 1			0.366	0.020	5.310	0.000	0.000
>500 to 590 microns, Phi 0.75			0.091	0.000	6.650	0.000	0.000
>590 to 630 microns			0.000	0.000	2.460	0.000	0.000
>630 to 696 microns			0.000	0.000	3.610	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.658	0.000	0.000
>710 to 773 microns			0.000	0.000	2.810	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	2.340	0.000	0.000
>840 to 850 microns			0.000	0.000	0.329	0.000	0.000
>850 to 930 microns			0.000	0.000	2.210	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	1.530	0.000	0.000
1000 to 1100 microns			0.000	0.000	1.440	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.944	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.639	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.374	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.264	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			99.990	100.019	100.032	100.006	100.002

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8106	8107	8109	8110	8112
Date:			14-JUL-2011	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011
Analyte	MDL	Units	P573550	P573559	P573699	P573056	P573060
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.224	0.218	0.000	0.219	0.599
>1 to 1.5 microns, Phi 9.5			0.518	0.505	0.351	0.480	0.559
>1.5 to 2 microns, Phi 9			0.641	0.627	0.475	0.565	0.648
>2.0 to 2.4 microns			0.594	0.580	0.449	0.508	0.575
>2.4 to 2.9 microns, Phi 8.5			0.795	0.773	0.609	0.669	0.750
>2.9 to 3.4 microns			0.837	0.810	0.648	0.696	0.773
>3.4 to 3.9 microns, Phi 8			0.922	0.886	0.722	0.757	0.831
>3.9 to 4 microns			0.192	0.183	0.149	0.157	0.172
>4.0 to 4.3 microns			0.551	0.526	0.428	0.452	0.492
>4.3 to 4.5 microns			0.355	0.338	0.276	0.291	0.317
>4.5 to 5 microns			0.950	0.901	0.736	0.776	0.838
>5 to 5.5 microns			0.943	0.890	0.720	0.770	0.829
>5.5 to 5.7 microns			0.364	0.343	0.277	0.297	0.320
>5.7 to 5.9 microns, Phi 7.5			0.358	0.337	0.272	0.293	0.314
>5.9 to 7.8 microns, Phi 7			3.370	3.150	2.480	2.760	2.940
>7.8 to 8 microns			0.344	0.320	0.242	0.284	0.302
>8 to 8.5 microns			0.824	0.766	0.579	0.679	0.722
>8.5 to 8.9 microns			0.634	0.590	0.442	0.523	0.557
>8.9 to 9.1 microns			0.324	0.301	0.219	0.268	0.286
>9.1 to 9.5 microns			0.627	0.582	0.423	0.519	0.553
>9.5 to 9.8 microns			0.453	0.421	0.306	0.375	0.400
>9.8 to 10.1 microns			0.440	0.408	0.297	0.364	0.388
>10.1 to 10.6 microns			0.758	0.703	0.491	0.631	0.673
>10.6 to 11.1 microns			0.723	0.671	0.469	0.602	0.642
>11.1 to 11.3 microns			0.280	0.260	0.182	0.233	0.249
>11.3 to 11.7 microns, Phi 6.5			0.551	0.511	0.351	0.459	0.491
>11.7 to 14 microns			2.940	2.740	1.780	2.460	2.660
>14 to 14.8 microns			0.942	0.880	0.552	0.791	0.860
>14.8 to 15.6 microns			0.921	0.865	0.525	0.774	0.850
>15.6 to 16 microns			0.455	0.429	0.254	0.383	0.423
>16 to 20 microns			4.150	3.940	2.230	3.490	3.910
>20 to 23 microns, Phi 5.5			2.830	2.730	1.400	2.380	2.740
>23 to 27 microns			3.600	3.540	1.690	3.010	3.590
>27 to 31 microns, Phi 5			3.560	3.580	1.610	2.950	3.620
>31 to 32 microns			0.915	0.931	0.411	0.755	0.941
>32 to 35.6 microns			3.290	3.370	1.490	2.720	3.390
>35.6 to 37 microns, Phi 4.75			1.330	1.370	0.613	1.100	1.380
>37 to 39.6 microns			2.400	2.490	1.120	2.010	2.500
>39.6 to 43.6 microns			3.980	4.170	2.010	3.430	4.170
>43.6 to 44 microns, Phi 4.5			0.378	0.396	0.190	0.326	0.395
>44 to 45 microns			0.939	0.985	0.479	0.813	0.983
>45 to 46.4 microns			1.490	1.570	0.864	1.350	1.560
>46.4 to 53 microns, Phi 4.25			6.610	6.950	4.040	6.120	6.930
>53 to 62.5 microns, Phi 4			8.960	9.350	7.000	8.980	9.330
>62.5 to 64 microns			1.310	1.360	1.190	1.380	1.360
>64 to 71.7 microns			6.070	6.230	6.410	6.630	6.240

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8106	8107	8109	8110	8112
Date:			14-JUL-2011	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011
Analyte	MDL	Units	P573550	P573559	P573699	P573056	P573060
>71.7 to 74 microns			1.630	1.660	1.960	1.850	1.670
>74 to 79.6 microns			3.560	3.610	4.750	4.130	3.630
>79.6 to 87.6 microns			4.250	4.260	6.690	5.140	4.300
>87.6 to 88 microns, Phi 3.5			0.202	0.203	0.318	0.245	0.205
>88 to 90 microns			0.854	0.848	1.580	1.070	0.862
>90 to 105 microns, Phi 3.25			5.150	5.080	10.600	6.660	5.190
>105 to 125 microns, Phi 3			4.060	3.990	10.100	5.590	4.130
>125 to 149 microns, Phi 2.75			2.610	2.580	7.190	3.820	2.710
>149 to 160 microns			0.684	0.687	1.940	1.050	0.721
>160 to 177 microns, Phi 2.5			0.780	0.792	2.210	1.220	0.830
>177 to 197 microns			0.542	0.565	1.490	0.876	0.584
>197 to 210 microns, Phi 2.25			0.229	0.244	0.606	0.376	0.248
>210 to 217 microns			0.103	0.111	0.266	0.170	0.111
>217 to 245 microns			0.301	0.329	0.750	0.500	0.327
>245 to 250 microns, Phi 2			0.040	0.044	0.094	0.066	0.043
>250 to 300 microns, Phi 1.75			0.264	0.301	0.585	0.438	0.288
>300 to 320 microns			0.056	0.066	0.107	0.090	0.061
>320 to 350 microns, Phi 1.5			0.062	0.087	0.137	0.117	0.068
>350 to 360 microns			0.000	0.021	0.030	0.027	0.000
>360 to 400 microns			0.000	0.068	0.106	0.088	0.000
>400 to 420 microns, Phi 1.25			0.000	0.000	0.029	0.000	0.000
>420 to 440 microns			0.000	0.000	0.028	0.000	0.000
>440 to 500 microns, Phi 1			0.000	0.000	0.016	0.000	0.000
>500 to 590 microns, Phi 0.75			0.000	0.000	0.000	0.000	0.000
>590 to 630 microns			0.000	0.000	0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.019	100.022	100.033	100.002	100.030

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8113	8114	8115	8116	8117
Date:			12-JUL-2011	12-JUL-2011	07-JUL-2011	07-JUL-2011	07-JUL-2011
Analyte	MDL	Units	P573069	P573074	P572244	P572252	P572255
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.101	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.442	0.407	0.000	0.000	0.000
>1.5 to 2 microns, Phi 9			0.546	0.491	0.000	0.000	0.000
>2.0 to 2.4 microns			0.510	0.450	0.000	0.000	0.000
>2.4 to 2.9 microns, Phi 8.5			0.689	0.603	0.000	0.000	0.087
>2.9 to 3.4 microns			0.732	0.639	0.000	0.000	0.144
>3.4 to 3.9 microns, Phi 8			0.813	0.704	0.000	0.000	0.154
>3.9 to 4 microns			0.170	0.148	0.000	0.000	0.033
>4.0 to 4.3 microns			0.489	0.426	0.000	0.000	0.094
>4.3 to 4.5 microns			0.315	0.275	0.000	0.000	0.060
>4.5 to 5 microns			0.849	0.741	0.000	0.000	0.162
>5 to 5.5 microns			0.846	0.741	0.000	0.000	0.162
>5.5 to 5.7 microns			0.327	0.287	0.000	0.000	0.063
>5.7 to 5.9 microns, Phi 7.5			0.322	0.283	0.000	0.000	0.062
>5.9 to 7.8 microns, Phi 7			3.050	2.710	0.000	0.000	0.603
>7.8 to 8 microns			0.312	0.281	0.000	0.000	0.063
>8 to 8.5 microns			0.747	0.673	0.000	0.000	0.152
>8.5 to 8.9 microns			0.575	0.520	0.000	0.000	0.117
>8.9 to 9.1 microns			0.294	0.267	0.000	0.000	0.061
>9.1 to 9.5 microns			0.569	0.517	0.000	0.000	0.118
>9.5 to 9.8 microns			0.411	0.374	0.000	0.000	0.085
>9.8 to 10.1 microns			0.399	0.363	0.000	0.000	0.083
>10.1 to 10.6 microns			0.689	0.633	0.000	0.000	0.145
>10.6 to 11.1 microns			0.657	0.604	0.000	0.000	0.138
>11.1 to 11.3 microns			0.255	0.234	0.000	0.000	0.054
>11.3 to 11.7 microns, Phi 6.5			0.501	0.461	0.000	0.000	0.107
>11.7 to 14 microns			2.670	2.480	0.000	0.000	0.583
>14 to 14.8 microns			0.855	0.798	0.000	0.000	0.189
>14.8 to 15.6 microns			0.836	0.780	0.000	0.000	0.186
>15.6 to 16 microns			0.413	0.385	0.000	0.000	0.093
>16 to 20 microns			3.760	3.510	0.000	0.000	0.850
>20 to 23 microns, Phi 5.5			2.550	2.380	0.000	0.000	0.583
>23 to 27 microns			3.250	2.980	0.000	0.000	0.742
>27 to 31 microns, Phi 5			3.220	2.900	0.000	0.000	0.737
>31 to 32 microns			0.832	0.737	0.000	0.000	0.191
>32 to 35.6 microns			3.010	2.650	0.000	0.000	0.700
>35.6 to 37 microns, Phi 4.75			1.230	1.070	0.000	0.000	0.290
>37 to 39.6 microns			2.230	1.940	0.000	0.000	0.534
>39.6 to 43.6 microns			3.810	3.290	0.000	0.000	0.962
>43.6 to 44 microns, Phi 4.5			0.361	0.312	0.000	0.000	0.091
>44 to 45 microns			0.901	0.780	0.000	0.001	0.230
>45 to 46.4 microns			1.480	1.300	0.000	0.028	0.423
>46.4 to 53 microns, Phi 4.25			6.650	5.880	0.023	0.135	2.000
>53 to 62.5 microns, Phi 4			9.420	8.730	0.154	0.265	3.680
>62.5 to 64 microns			1.410	1.350	0.028	0.050	0.653
>64 to 71.7 microns			6.610	6.590	0.178	0.331	3.780

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8113	8114	8115	8116	8117
Date:			12-JUL-2011	12-JUL-2011	07-JUL-2011	07-JUL-2011	07-JUL-2011
Analyte	MDL	Units	P573069	P573074	P572244	P572252	P572255
>71.7 to 74 microns			1.800	1.860	0.061	0.115	1.210
>74 to 79.6 microns			3.960	4.190	0.183	0.354	3.180
>79.6 to 87.6 microns			4.770	5.300	0.328	0.645	4.950
>87.6 to 88 microns, Phi 3.5			0.227	0.252	0.016	0.031	0.235
>88 to 90 microns			0.964	1.130	0.127	0.250	1.390
>90 to 105 microns, Phi 3.25			5.840	7.070	1.230	2.400	10.600
>105 to 125 microns, Phi 3			4.660	6.060	3.050	5.620	14.000
>125 to 149 microns, Phi 2.75			3.040	4.180	5.970	9.860	14.100
>149 to 160 microns			0.806	1.140	3.600	5.240	5.000
>160 to 177 microns, Phi 2.5			0.925	1.330	5.780	7.930	6.450
>177 to 197 microns			0.647	0.939	7.180	8.640	5.310
>197 to 210 microns, Phi 2.25			0.273	0.397	4.470	4.770	2.420
>210 to 217 microns			0.122	0.177	2.320	2.390	1.130
>217 to 245 microns			0.358	0.515	8.420	7.990	3.360
>245 to 250 microns, Phi 2			0.047	0.067	1.380	1.220	0.453
>250 to 300 microns, Phi 1.75			0.311	0.432	11.700	9.330	2.990
>300 to 320 microns			0.065	0.086	3.570	2.440	0.592
>320 to 350 microns, Phi 1.5			0.073	0.110	4.810	3.250	0.757
>350 to 360 microns			0.000	0.025	1.350	0.857	0.166
>360 to 400 microns			0.000	0.082	4.970	3.150	0.596
>400 to 420 microns, Phi 1.25			0.000	0.000	2.060	1.290	0.200
>420 to 440 microns			0.000	0.000	1.970	1.230	0.191
>440 to 500 microns, Phi 1			0.000	0.000	4.950	3.170	0.413
>500 to 590 microns, Phi 0.75			0.000	0.000	5.710	3.920	0.102
>590 to 630 microns			0.000	0.000	1.920	1.480	0.000
>630 to 696 microns			0.000	0.000	2.770	2.200	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.482	0.416	0.000
>710 to 773 microns			0.000	0.000	2.060	1.780	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	1.650	1.560	0.000
>840 to 850 microns			0.000	0.000	0.232	0.221	0.000
>850 to 930 microns			0.000	0.000	1.540	1.520	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	1.060	1.090	0.000
1000 to 1100 microns			0.000	0.000	1.010	1.060	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.676	0.717	0.000
>1190 to 1300 microns			0.000	0.000	0.478	0.509	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.312	0.333	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.249	0.265	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			99.996	100.016	100.027	100.053	100.039

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8120	8121	8122	8124	8125
Date:			18-JUL-2011	08-JUL-2011	11-JUL-2011	18-JUL-2011	08-JUL-2011
Analyte	MDL	Units	P573707	P572326	P572996	P573717	P572333
<0.500 microns, Phi 11			0.000	0.000	0.230	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	1.050	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	1.220	0.000	0.000
>1.5 to 2 microns, Phi 9			0.145	0.007	1.440	0.289	0.282
>2.0 to 2.4 microns			0.255	0.147	1.230	0.290	0.252
>2.4 to 2.9 microns, Phi 8.5			0.367	0.196	1.510	0.413	0.332
>2.9 to 3.4 microns			0.412	0.209	1.460	0.459	0.346
>3.4 to 3.9 microns, Phi 8			0.481	0.230	1.490	0.531	0.375
>3.9 to 4 microns			0.103	0.049	0.291	0.113	0.078
>4.0 to 4.3 microns			0.295	0.140	0.832	0.324	0.225
>4.3 to 4.5 microns			0.191	0.091	0.531	0.210	0.145
>4.5 to 5 microns			0.528	0.245	1.350	0.575	0.386
>5 to 5.5 microns			0.525	0.244	1.280	0.569	0.381
>5.5 to 5.7 microns			0.203	0.094	0.489	0.219	0.147
>5.7 to 5.9 microns, Phi 7.5			0.201	0.093	0.476	0.217	0.145
>5.9 to 7.8 microns, Phi 7			1.900	0.883	4.110	2.030	1.350
>7.8 to 8 microns			0.187	0.088	0.390	0.196	0.136
>8 to 8.5 microns			0.448	0.211	0.933	0.469	0.327
>8.5 to 8.9 microns			0.341	0.161	0.710	0.357	0.251
>8.9 to 9.1 microns			0.168	0.080	0.347	0.174	0.127
>9.1 to 9.5 microns			0.325	0.156	0.671	0.337	0.246
>9.5 to 9.8 microns			0.235	0.112	0.485	0.243	0.178
>9.8 to 10.1 microns			0.228	0.109	0.470	0.236	0.173
>10.1 to 10.6 microns			0.377	0.183	0.768	0.386	0.294
>10.6 to 11.1 microns			0.360	0.174	0.733	0.368	0.280
>11.1 to 11.3 microns			0.139	0.067	0.284	0.143	0.109
>11.3 to 11.7 microns, Phi 6.5			0.267	0.130	0.546	0.271	0.213
>11.7 to 14 microns			1.310	0.660	2.740	1.310	1.130
>14 to 14.8 microns			0.393	0.202	0.842	0.392	0.360
>14.8 to 15.6 microns			0.357	0.189	0.795	0.354	0.352
>15.6 to 16 microns			0.165	0.089	0.382	0.163	0.174
>16 to 20 microns			1.370	0.765	3.340	1.350	1.580
>20 to 23 microns, Phi 5.5			0.740	0.444	2.070	0.715	1.080
>23 to 27 microns			0.740	0.484	2.440	0.711	1.390
>27 to 31 microns, Phi 5			0.571	0.416	2.240	0.549	1.440
>31 to 32 microns			0.123	0.098	0.548	0.119	0.386
>32 to 35.6 microns			0.409	0.348	1.920	0.393	1.450
>35.6 to 37 microns, Phi 4.75			0.145	0.137	0.748	0.139	0.626
>37 to 39.6 microns			0.257	0.251	1.340	0.246	1.170
>39.6 to 43.6 microns			0.380	0.443	2.160	0.357	2.230
>43.6 to 44 microns, Phi 4.5			0.036	0.042	0.205	0.034	0.212
>44 to 45 microns			0.090	0.106	0.510	0.084	0.535
>45 to 46.4 microns			0.136	0.201	0.801	0.122	1.030
>46.4 to 53 microns, Phi 4.25			0.619	0.979	3.590	0.545	4.880
>53 to 62.5 microns, Phi 4			0.974	2.070	5.190	0.779	8.750
>62.5 to 64 microns			0.163	0.399	0.806	0.123	1.500
>64 to 71.7 microns			0.929	2.610	4.050	0.650	7.890

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8120	8121	8122	8124	8125
Date:			18-JUL-2011	08-JUL-2011	11-JUL-2011	18-JUL-2011	08-JUL-2011
Analyte	MDL	Units	P573707	P572326	P572996	P573717	P572333
>71.7 to 74 microns			0.295	0.898	1.170	0.196	2.380
>74 to 79.6 microns			0.793	2.600	2.760	0.496	5.610
>79.6 to 87.6 microns			1.270	4.480	3.750	0.739	7.620
>87.6 to 88 microns, Phi 3.5			0.060	0.213	0.178	0.035	0.362
>88 to 90 microns			0.394	1.430	0.890	0.210	1.710
>90 to 105 microns, Phi 3.25			3.300	11.600	6.110	1.670	11.100
>105 to 125 microns, Phi 3			5.900	16.600	6.610	2.760	9.990
>125 to 149 microns, Phi 2.75			8.950	16.600	5.860	4.240	7.070
>149 to 160 microns			4.720	5.530	1.950	2.470	1.950
>160 to 177 microns, Phi 2.5			7.290	6.900	2.480	4.060	2.270
>177 to 197 microns			8.610	5.350	2.000	5.680	1.610
>197 to 210 microns, Phi 2.25			5.170	2.360	0.890	4.200	0.678
>210 to 217 microns			2.660	1.080	0.408	2.290	0.303
>217 to 245 microns			9.170	3.190	1.190	9.360	0.873
>245 to 250 microns, Phi 2			1.440	0.424	0.154	1.680	0.112
>250 to 300 microns, Phi 1.75			10.700	2.800	0.948	15.500	0.715
>300 to 320 microns			2.340	0.565	0.158	4.740	0.135
>320 to 350 microns, Phi 1.5			2.950	0.727	0.198	6.200	0.172
>350 to 360 microns			0.591	0.164	0.039	1.460	0.038
>360 to 400 microns			2.070	0.588	0.133	5.170	0.136
>400 to 420 microns, Phi 1.25			0.566	0.202	0.027	1.540	0.047
>420 to 440 microns			0.540	0.193	0.026	1.470	0.045
>440 to 500 microns, Phi 1			0.950	0.423	0.040	2.570	0.105
>500 to 590 microns, Phi 0.75			0.682	0.105	0.009	1.750	0.027
>590 to 630 microns			0.014	0.000	0.000	0.322	0.000
>630 to 696 microns			0.000	0.000	0.000	0.411	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.051	0.000
>710 to 773 microns			0.000	0.000	0.000	0.220	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.014	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.013	100.054	100.021	100.058	100.001

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8126	8127	8128	8130	8131
Date:			08-JUL-2011	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011
Analyte	MDL	Units	P572336	P572259	P572266	P573721	P572124
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.259	0.243
>1.5 to 2 microns, Phi 9			0.280	0.000	0.000	0.498	0.441
>2.0 to 2.4 microns			0.250	0.000	0.000	0.511	0.434
>2.4 to 2.9 microns, Phi 8.5			0.328	0.000	0.083	0.731	0.611
>2.9 to 3.4 microns			0.340	0.102	0.138	0.810	0.676
>3.4 to 3.9 microns, Phi 8			0.367	0.125	0.148	0.943	0.779
>3.9 to 4 microns			0.076	0.026	0.032	0.196	0.167
>4.0 to 4.3 microns			0.219	0.076	0.091	0.564	0.479
>4.3 to 4.5 microns			0.141	0.049	0.059	0.364	0.311
>4.5 to 5 microns			0.373	0.131	0.159	0.992	0.857
>5 to 5.5 microns			0.367	0.130	0.159	0.969	0.858
>5.5 to 5.7 microns			0.141	0.050	0.061	0.372	0.332
>5.7 to 5.9 microns, Phi 7.5			0.139	0.050	0.061	0.366	0.329
>5.9 to 7.8 microns, Phi 7			1.290	0.472	0.586	3.330	3.140
>7.8 to 8 microns			0.129	0.048	0.059	0.314	0.311
>8 to 8.5 microns			0.308	0.115	0.142	0.751	0.744
>8.5 to 8.9 microns			0.236	0.088	0.109	0.569	0.567
>8.9 to 9.1 microns			0.119	0.045	0.055	0.274	0.280
>9.1 to 9.5 microns			0.230	0.087	0.106	0.531	0.541
>9.5 to 9.8 microns			0.166	0.063	0.077	0.384	0.391
>9.8 to 10.1 microns			0.162	0.061	0.075	0.372	0.379
>10.1 to 10.6 microns			0.273	0.103	0.126	0.597	0.630
>10.6 to 11.1 microns			0.260	0.099	0.120	0.570	0.601
>11.1 to 11.3 microns			0.101	0.038	0.047	0.221	0.233
>11.3 to 11.7 microns, Phi 6.5			0.198	0.075	0.091	0.419	0.444
>11.7 to 14 microns			1.040	0.395	0.468	2.020	2.170
>14 to 14.8 microns			0.330	0.124	0.145	0.600	0.650
>14.8 to 15.6 microns			0.322	0.120	0.137	0.549	0.587
>15.6 to 16 microns			0.159	0.058	0.066	0.256	0.270
>16 to 20 microns			1.440	0.521	0.574	2.140	2.230
>20 to 23 microns, Phi 5.5			0.971	0.335	0.348	1.190	1.170
>23 to 27 microns			1.260	0.409	0.399	1.280	1.150
>27 to 31 microns, Phi 5			1.310	0.403	0.371	1.100	0.861
>31 to 32 microns			0.355	0.106	0.094	0.259	0.182
>32 to 35.6 microns			1.350	0.402	0.351	0.903	0.594
>35.6 to 37 microns, Phi 4.75			0.588	0.175	0.149	0.347	0.205
>37 to 39.6 microns			1.100	0.330	0.282	0.626	0.360
>39.6 to 43.6 microns			2.130	0.670	0.568	1.020	0.503
>43.6 to 44 microns, Phi 4.5			0.202	0.064	0.054	0.097	0.048
>44 to 45 microns			0.511	0.163	0.138	0.241	0.118
>45 to 46.4 microns			0.992	0.356	0.306	0.393	0.164
>46.4 to 53 microns, Phi 4.25			4.700	1.800	1.570	1.800	0.722
>53 to 62.5 microns, Phi 4			8.360	4.280	3.880	2.840	0.977
>62.5 to 64 microns			1.420	0.855	0.791	0.467	0.150
>64 to 71.7 microns			7.390	5.520	5.260	2.520	0.777

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8126	8127	8128	8130	8131
Date:			08-JUL-2011	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011
Analyte	MDL	Units	P572336	P572259	P572266	P573721	P572124
>71.7 to 74 microns			2.200	1.890	1.830	0.770	0.230
>74 to 79.6 microns			5.180	5.160	5.080	1.940	0.578
>79.6 to 87.6 microns			6.970	8.380	8.400	2.870	0.849
>87.6 to 88 microns, Phi 3.5			0.332	0.399	0.400	0.137	0.040
>88 to 90 microns			1.570	2.280	2.320	0.779	0.240
>90 to 105 microns, Phi 3.25			10.300	16.600	16.900	5.900	1.910
>105 to 125 microns, Phi 3			9.870	17.600	18.000	8.250	3.240
>125 to 149 microns, Phi 2.75			7.780	13.100	13.200	9.740	5.250
>149 to 160 microns			2.420	3.540	3.500	4.200	3.220
>160 to 177 microns, Phi 2.5			2.990	4.020	3.950	5.980	5.390
>177 to 197 microns			2.360	2.680	2.620	6.010	7.650
>197 to 210 microns, Phi 2.25			1.060	1.080	1.060	3.100	5.420
>210 to 217 microns			0.491	0.471	0.463	1.520	2.920
>217 to 245 microns			1.460	1.330	1.320	4.690	10.800
>245 to 250 microns, Phi 2			0.194	0.167	0.166	0.657	1.800
>250 to 300 microns, Phi 1.75			1.260	1.060	1.070	4.190	13.300
>300 to 320 microns			0.236	0.203	0.211	0.684	2.440
>320 to 350 microns, Phi 1.5			0.299	0.261	0.273	0.841	2.960
>350 to 360 microns			0.063	0.060	0.064	0.146	0.449
>360 to 400 microns			0.223	0.216	0.231	0.509	1.540
>400 to 420 microns, Phi 1.25			0.073	0.078	0.085	0.131	0.304
>420 to 440 microns			0.069	0.075	0.081	0.125	0.290
>440 to 500 microns, Phi 1			0.151	0.177	0.194	0.231	0.430
>500 to 590 microns, Phi 0.75			0.037	0.045	0.049	0.053	0.089
>590 to 630 microns			0.000	0.000	0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.011	99.991	100.002	100.008	100.005

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8132	8134	8135	8137	8141
Date:			06-JUL-2011	06-JUL-2011	07-JUL-2011	08-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P572130	P572134	P572271	P572340	P574268
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000	0.000	0.110
>1 to 1.5 microns, Phi 9.5			0.000	0.000	0.000	0.000	0.542
>1.5 to 2 microns, Phi 9			0.000	0.000	0.002	0.126	0.754
>2.0 to 2.4 microns			0.000	0.000	0.073	0.194	0.746
>2.4 to 2.9 microns, Phi 8.5			0.000	0.087	0.178	0.248	1.030
>2.9 to 3.4 microns			0.000	0.139	0.178	0.252	1.100
>3.4 to 3.9 microns, Phi 8			0.000	0.141	0.184	0.266	1.240
>3.9 to 4 microns			0.020	0.029	0.039	0.055	0.255
>4.0 to 4.3 microns			0.058	0.083	0.112	0.158	0.733
>4.3 to 4.5 microns			0.038	0.053	0.072	0.101	0.473
>4.5 to 5 microns			0.102	0.137	0.189	0.266	1.270
>5 to 5.5 microns			0.100	0.134	0.192	0.261	1.240
>5.5 to 5.7 microns			0.038	0.052	0.074	0.100	0.478
>5.7 to 5.9 microns, Phi 7.5			0.038	0.051	0.073	0.099	0.469
>5.9 to 7.8 microns, Phi 7			0.355	0.475	0.727	0.914	4.300
>7.8 to 8 microns			0.035	0.049	0.081	0.092	0.421
>8 to 8.5 microns			0.084	0.118	0.193	0.220	1.010
>8.5 to 8.9 microns			0.064	0.091	0.151	0.169	0.770
>8.9 to 9.1 microns			0.032	0.048	0.081	0.086	0.382
>9.1 to 9.5 microns			0.062	0.092	0.157	0.167	0.739
>9.5 to 9.8 microns			0.045	0.066	0.113	0.121	0.534
>9.8 to 10.1 microns			0.043	0.065	0.110	0.117	0.518
>10.1 to 10.6 microns			0.072	0.113	0.204	0.199	0.863
>10.6 to 11.1 microns			0.068	0.108	0.195	0.190	0.823
>11.1 to 11.3 microns			0.026	0.042	0.075	0.074	0.319
>11.3 to 11.7 microns, Phi 6.5			0.051	0.084	0.153	0.145	0.617
>11.7 to 14 microns			0.260	0.468	0.888	0.783	3.140
>14 to 14.8 microns			0.079	0.154	0.301	0.251	0.974
>14.8 to 15.6 microns			0.074	0.155	0.306	0.249	0.928
>15.6 to 16 microns			0.035	0.078	0.156	0.124	0.448
>16 to 20 microns			0.295	0.741	1.490	1.150	3.950
>20 to 23 microns, Phi 5.5			0.168	0.545	1.110	0.809	2.490
>23 to 27 microns			0.176	0.743	1.470	1.090	2.990
>27 to 31 microns, Phi 5			0.139	0.787	1.420	1.180	2.830
>31 to 32 microns			0.030	0.213	0.354	0.327	0.714
>32 to 35.6 microns			0.100	0.801	1.240	1.260	2.560
>35.6 to 37 microns, Phi 4.75			0.035	0.344	0.482	0.556	1.030
>37 to 39.6 microns			0.062	0.642	0.869	1.040	1.870
>39.6 to 43.6 microns			0.088	1.230	1.410	2.060	3.160
>43.6 to 44 microns, Phi 4.5			0.008	0.116	0.134	0.196	0.300
>44 to 45 microns			0.021	0.295	0.334	0.495	0.748
>45 to 46.4 microns			0.029	0.577	0.549	0.974	1.230
>46.4 to 53 microns, Phi 4.25			0.129	2.770	2.520	4.620	5.560
>53 to 62.5 microns, Phi 4			0.179	5.350	4.160	8.210	8.090
>62.5 to 64 microns			0.028	0.960	0.704	1.380	1.240
>64 to 71.7 microns			0.146	5.450	3.940	7.150	5.930

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8132	8134	8135	8137	8141
Date:			06-JUL-2011	06-JUL-2011	07-JUL-2011	08-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P572130	P572134	P572271	P572340	P574268
>71.7 to 74 microns			0.044	1.730	1.240	2.110	1.650
>74 to 79.6 microns			0.112	4.350	3.190	4.920	3.690
>79.6 to 87.6 microns			0.167	6.450	4.870	6.520	4.580
>87.6 to 88 microns, Phi 3.5			0.008	0.307	0.232	0.310	0.218
>88 to 90 microns			0.048	1.640	1.340	1.450	0.948
>90 to 105 microns, Phi 3.25			0.385	11.600	10.100	9.470	5.830
>105 to 125 microns, Phi 3			0.659	13.000	13.100	9.120	4.720
>125 to 149 microns, Phi 2.75			1.050	11.600	12.900	7.580	3.050
>149 to 160 microns			0.641	3.880	4.440	2.580	0.792
>160 to 177 microns, Phi 2.5			1.090	4.940	5.660	3.360	0.897
>177 to 197 microns			1.640	4.100	4.570	3.020	0.612
>197 to 210 microns, Phi 2.25			1.370	1.930	2.050	1.540	0.254
>210 to 217 microns			0.763	0.906	0.946	0.750	0.113
>217 to 245 microns			3.590	2.780	2.800	2.450	0.325
>245 to 250 microns, Phi 2			0.699	0.387	0.372	0.363	0.042
>250 to 300 microns, Phi 1.75			8.170	2.670	2.420	2.670	0.274
>300 to 320 microns			4.000	0.567	0.464	0.627	0.056
>320 to 350 microns, Phi 1.5			5.760	0.730	0.591	0.811	0.062
>350 to 360 microns			2.060	0.165	0.128	0.186	0.000
>360 to 400 microns			7.790	0.593	0.456	0.667	0.000
>400 to 420 microns, Phi 1.25			3.860	0.202	0.151	0.220	0.000
>420 to 440 microns			3.680	0.192	0.144	0.210	0.000
>440 to 500 microns, Phi 1			10.100	0.417	0.312	0.435	0.000
>500 to 590 microns, Phi 0.75			12.300	0.103	0.077	0.106	0.000
>590 to 630 microns			4.070	0.000	0.000	0.000	0.000
>630 to 696 microns			5.770	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.954	0.000	0.000	0.000	0.000
>710 to 773 microns			4.070	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			3.010	0.000	0.000	0.000	0.000
>840 to 850 microns			0.419	0.000	0.000	0.000	0.000
>850 to 930 microns			2.680	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			1.740	0.000	0.000	0.000	0.000
1000 to 1100 microns			1.560	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			1.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.667	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.395	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.284	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.017	99.915	99.996	99.999	100.031

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8150	8151	8152	8153	8154
Date:			19-JUL-2011	19-JUL-2011	19-JUL-2011	19-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P573787	P573795	P573797	P573805	P574272
<0.500 microns, Phi 11			0.000	0.000	0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.219	0.245	0.226	0.226	0.117
>1 to 1.5 microns, Phi 9.5			0.602	0.632	0.579	0.589	0.599
>1.5 to 2 microns, Phi 9			0.847	0.857	0.789	0.811	0.855
>2.0 to 2.4 microns			0.835	0.831	0.774	0.797	0.852
>2.4 to 2.9 microns, Phi 8.5			1.160	1.140	1.070	1.100	1.180
>2.9 to 3.4 microns			1.270	1.230	1.170	1.190	1.280
>3.4 to 3.9 microns, Phi 8			1.460	1.380	1.340	1.360	1.440
>3.9 to 4 microns			0.319	0.292	0.287	0.288	0.305
>4.0 to 4.3 microns			0.917	0.839	0.826	0.828	0.877
>4.3 to 4.5 microns			0.596	0.542	0.535	0.536	0.567
>4.5 to 5 microns			1.660	1.480	1.480	1.470	1.550
>5 to 5.5 microns			1.720	1.480	1.500	1.480	1.560
>5.5 to 5.7 microns			0.673	0.572	0.584	0.573	0.604
>5.7 to 5.9 microns, Phi 7.5			0.669	0.565	0.578	0.567	0.596
>5.9 to 7.8 microns, Phi 7			6.780	5.370	5.660	5.460	5.750
>7.8 to 8 microns			0.733	0.545	0.592	0.562	0.598
>8 to 8.5 microns			1.750	1.310	1.420	1.350	1.430
>8.5 to 8.9 microns			1.360	1.000	1.090	1.040	1.100
>8.9 to 9.1 microns			0.706	0.505	0.559	0.526	0.565
>9.1 to 9.5 microns			1.370	0.977	1.080	1.020	1.090
>9.5 to 9.8 microns			0.988	0.706	0.782	0.736	0.791
>9.8 to 10.1 microns			0.959	0.686	0.759	0.714	0.768
>10.1 to 10.6 microns			1.710	1.170	1.320	1.230	1.340
>10.6 to 11.1 microns			1.630	1.120	1.260	1.170	1.280
>11.1 to 11.3 microns			0.632	0.432	0.489	0.455	0.495
>11.3 to 11.7 microns, Phi 6.5			1.240	0.837	0.953	0.884	0.968
>11.7 to 14 microns			6.480	4.290	4.970	4.570	5.100
>14 to 14.8 microns			2.050	1.340	1.570	1.430	1.620
>14.8 to 15.6 microns			1.930	1.260	1.490	1.360	1.560
>15.6 to 16 microns			0.923	0.605	0.716	0.652	0.757
>16 to 20 microns			8.020	5.270	6.290	5.710	6.740
>20 to 23 microns, Phi 5.5			4.730	3.200	3.860	3.480	4.300
>23 to 27 microns			5.010	3.630	4.360	3.940	5.040
>27 to 31 microns, Phi 5			3.990	3.200	3.790	3.430	4.490
>31 to 32 microns			0.865	0.758	0.887	0.805	1.060
>32 to 35.6 microns			2.840	2.620	3.040	2.760	3.600
>35.6 to 37 microns, Phi 4.75			0.982	0.999	1.140	1.040	1.330
>37 to 39.6 microns			1.720	1.790	2.020	1.850	2.350
>39.6 to 43.6 microns			2.360	2.820	3.080	2.850	3.420
>43.6 to 44 microns, Phi 4.5			0.224	0.268	0.292	0.270	0.324
>44 to 45 microns			0.549	0.664	0.723	0.670	0.798
>45 to 46.4 microns			0.728	1.020	1.060	1.000	1.090
>46.4 to 53 microns, Phi 4.25			3.140	4.550	4.670	4.430	4.700
>53 to 62.5 microns, Phi 4			3.720	6.270	6.040	5.920	5.450
>62.5 to 64 microns			0.517	0.940	0.869	0.871	0.736
>64 to 71.7 microns			2.390	4.500	4.020	4.120	3.260

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8150	8151	8152	8153	8154
Date:			19-JUL-2011	19-JUL-2011	19-JUL-2011	19-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P573787	P573795	P573797	P573805	P574272
>71.7 to 74 microns			0.640	1.250	1.080	1.130	0.838
>74 to 79.6 microns			1.430	2.800	2.360	2.530	1.800
>79.6 to 87.6 microns			1.780	3.510	2.840	3.140	2.070
>87.6 to 88 microns, Phi 3.5			0.084	0.167	0.135	0.149	0.099
>88 to 90 microns			0.387	0.745	0.577	0.666	0.415
>90 to 105 microns, Phi 3.25			2.500	4.670	3.510	4.200	2.510
>105 to 125 microns, Phi 3			2.390	4.010	2.840	3.680	2.100
>125 to 149 microns, Phi 2.75			1.890	2.760	1.890	2.640	1.510
>149 to 160 microns			0.581	0.748	0.504	0.751	0.445
>160 to 177 microns, Phi 2.5			0.712	0.864	0.581	0.892	0.540
>177 to 197 microns			0.551	0.604	0.408	0.659	0.422
>197 to 210 microns, Phi 2.25			0.243	0.254	0.173	0.288	0.194
>210 to 217 microns			0.111	0.113	0.077	0.131	0.090
>217 to 245 microns			0.327	0.329	0.226	0.390	0.276
>245 to 250 microns, Phi 2			0.043	0.043	0.030	0.052	0.038
>250 to 300 microns, Phi 1.75			0.277	0.280	0.195	0.347	0.268
>300 to 320 microns			0.053	0.057	0.002	0.072	0.060
>320 to 350 microns, Phi 1.5			0.059	0.064	0.000	0.093	0.067
>350 to 360 microns			0.000	0.000	0.000	0.022	0.000
>360 to 400 microns			0.000	0.000	0.000	0.070	0.000
>400 to 420 microns, Phi 1.25			0.000	0.000	0.000	0.000	0.000
>420 to 440 microns			0.000	0.000	0.000	0.000	0.000
>440 to 500 microns, Phi 1			0.000	0.000	0.000	0.000	0.000
>500 to 590 microns, Phi 0.75			0.000	0.000	0.000	0.000	0.000
>590 to 630 microns			0.000	0.000	0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000	0.000	0.000
>2000 microns*			ND	ND	ND	ND	ND
Totals:			100.031	100.005	100.017	100.022	100.024

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8155	8170	8171
Date:			19-JUL-2011	20-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P573809	P574281	P574286
<0.500 microns, Phi 11			0.000	0.000	0.000
>0.5 to 1 microns, Phi 10			0.000	0.000	0.000
>1 to 1.5 microns, Phi 9.5			0.293	0.221	0.000
>1.5 to 2 microns, Phi 9			0.602	0.311	0.000
>2.0 to 2.4 microns			0.632	0.239	0.000
>2.4 to 2.9 microns, Phi 8.5			0.904	0.278	0.000
>2.9 to 3.4 microns			1.000	0.260	0.110
>3.4 to 3.9 microns, Phi 8			1.170	0.251	0.135
>3.9 to 4 microns			0.250	0.051	0.028
>4.0 to 4.3 microns			0.718	0.146	0.082
>4.3 to 4.5 microns			0.466	0.093	0.053
>4.5 to 5 microns			1.290	0.236	0.140
>5 to 5.5 microns			1.300	0.235	0.139
>5.5 to 5.7 microns			0.504	0.091	0.054
>5.7 to 5.9 microns, Phi 7.5			0.499	0.089	0.053
>5.9 to 7.8 microns, Phi 7			4.820	0.858	0.502
>7.8 to 8 microns			0.490	0.097	0.050
>8 to 8.5 microns			1.170	0.233	0.121
>8.5 to 8.9 microns			0.899	0.183	0.093
>8.9 to 9.1 microns			0.451	0.101	0.047
>9.1 to 9.5 microns			0.874	0.196	0.091
>9.5 to 9.8 microns			0.631	0.142	0.065
>9.8 to 10.1 microns			0.613	0.138	0.063
>10.1 to 10.6 microns			1.040	0.263	0.107
>10.6 to 11.1 microns			0.995	0.251	0.102
>11.1 to 11.3 microns			0.385	0.097	0.040
>11.3 to 11.7 microns, Phi 6.5			0.741	0.202	0.077
>11.7 to 14 microns			3.710	1.260	0.403
>14 to 14.8 microns			1.140	0.451	0.126
>14.8 to 15.6 microns			1.040	0.487	0.121
>15.6 to 16 microns			0.488	0.260	0.059
>16 to 20 microns			4.120	2.700	0.520
>20 to 23 microns, Phi 5.5			2.280	2.420	0.329
>23 to 27 microns			2.320	3.800	0.398
>27 to 31 microns, Phi 5			1.780	4.270	0.393
>31 to 32 microns			0.379	1.150	0.104
>32 to 35.6 microns			1.240	4.100	0.400
>35.6 to 37 microns, Phi 4.75			0.423	1.650	0.176
>37 to 39.6 microns			0.742	2.950	0.336
>39.6 to 43.6 microns			1.020	4.700	0.707
>43.6 to 44 microns, Phi 4.5			0.097	0.446	0.067
>44 to 45 microns			0.237	1.110	0.173
>45 to 46.4 microns			0.323	1.670	0.395
>46.4 to 53 microns, Phi 4.25			1.410	7.350	2.030
>53 to 62.5 microns, Phi 4			1.840	9.650	4.990
>62.5 to 64 microns			0.277	1.400	1.010
>64 to 71.7 microns			1.410	6.560	6.450

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8155	8170	8171
Date:			19-JUL-2011	20-JUL-2011	20-JUL-2011
Analyte	MDL	Units	P573809	P574281	P574286
>71.7 to 74 microns			0.412	1.790	2.200
>74 to 79.6 microns			1.020	3.970	5.880
>79.6 to 87.6 microns			1.480	4.910	9.330
>87.6 to 88 microns, Phi 3.5			0.070	0.233	0.444
>88 to 90 microns			0.408	1.050	2.420
>90 to 105 microns, Phi 3.25			3.190	6.620	17.000
>105 to 125 microns, Phi 3			5.110	6.000	16.800
>125 to 149 microns, Phi 2.75			7.270	4.530	11.700
>149 to 160 microns			3.650	1.350	3.050
>160 to 177 microns, Phi 2.5			5.490	1.640	3.410
>177 to 197 microns			6.000	1.260	2.240
>197 to 210 microns, Phi 2.25			3.210	0.556	0.893
>210 to 217 microns			1.590	0.254	0.388
>217 to 245 microns			4.890	0.754	1.090
>245 to 250 microns, Phi 2			0.682	0.100	0.136
>250 to 300 microns, Phi 1.75			4.200	0.661	0.850
>300 to 320 microns			0.617	0.131	0.159
>320 to 350 microns, Phi 1.5			0.750	0.168	0.204
>350 to 360 microns			0.121	0.038	0.046
>360 to 400 microns			0.420	0.136	0.165
>400 to 420 microns, Phi 1.25			0.103	0.048	0.059
>420 to 440 microns			0.098	0.046	0.056
>440 to 500 microns, Phi 1			0.179	0.106	0.132
>500 to 590 microns, Phi 0.75			0.041	0.027	0.034
>590 to 630 microns			0.000	0.000	0.000
>630 to 696 microns			0.000	0.000	0.000
>696 to 710 microns, Phi 0.5			0.000	0.000	0.000
>710 to 773 microns			0.000	0.000	0.000
>773 to 840 microns, Phi 0.25			0.000	0.000	0.000
>840 to 850 microns			0.000	0.000	0.000
>850 to 930 microns			0.000	0.000	0.000
>930 to 1000 microns, Phi 0			0.000	0.000	0.000
1000 to 1100 microns			0.000	0.000	0.000
>1100 to 1190 microns, Phi -0.25			0.000	0.000	0.000
>1190 to 1300 microns			0.000	0.000	0.000
>1300 to 1410 microns, Phi -0.5			0.000	0.000	0.000
>1410 to 1680 microns, Phi -0.75			0.000	0.000	0.000
>1680 to 2000 microns, Phi -1			0.000	0.000	0.000
>2000 microns*			ND	ND	ND
Totals:			100.014	100.024	100.025

*=A value in this field reflects a percentage of 30 grams remaining on a 2000 micron sieve. This value must be subtracted from the total percentage.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - Grain Size (Sieve) - Random Stations
(all values are in percent distribution)

Annual 2011

Source:			8108	8119	8123
Sample ID:			P573561	P572989	P573709
Analyte	MDL	Units	14-JUL-2011	11-JUL-2011	18-JUL-2011
<63 microns, Phi<4			3.5	61.3	5.6
>63 to 125 microns, Phi>4			0.7	13.0	8.8
>125 to 250 microns, Phi>3			0.6	7.1	37.2
>250 to 500 microns, Phi>2			8.4	5.9	29.9
>500 to 1000 microns, Phi>1			38.3	5.6	7.8
>1000 to 2000 microns, Phi>0			33.8	3.7	3.4
>2000 microns, Phi>-1			14.7	3.4	7.3
Totals:			100.0	100.0	100.0

SOUTH BAY WATER RECLAMATION PLANT
SEDIMENT Total Organic Carbon/Total Nitrogen - Random Stations

Annual 2011

Source:			8101	8102	8103	8104	8105	8106
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Total Nitrogen	.005	WT%	0.020	0.068	0.015	0.059	0.097	0.096
Total Organic Carbon	.01	WT%	0.108	0.542	0.059	0.478	0.779	0.828

Source:			8107	8108	8109	8110	8112	8113
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011
Total Nitrogen	.005	WT%	0.082	0.173	0.229	0.063	0.192	0.238
Total Organic Carbon	.01	WT%	0.753	2.31	0.635	0.678	0.717	0.768

Source:			8114	8115	8116	8117	8119	8120
Analyte	MDL	Units	12-JUL-2011	07-JUL-2011	07-JUL-2011	07-JUL-2011	11-JUL-2011	18-JUL-2011
Total Nitrogen	.005	WT%	0.268	0.012	0.011	0.016	0.087	0.034
Total Organic Carbon	.01	WT%	0.768	0.044	0.032	0.140	0.781	1.02

Source:			8121	8122	8123	8124	8125	8126
Analyte	MDL	Units	08-JUL-2011	11-JUL-2011	18-JUL-2011	18-JUL-2011	08-JUL-2011	08-JUL-2011
Total Nitrogen	.005	WT%	0.030	0.048	0.043	0.045	0.039	0.027
Total Organic Carbon	.01	WT%	0.194	0.428	2.35	1.50	0.309	0.204

Source:			8127	8128	8130	8131	8132	8134
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011	06-JUL-2011	06-JUL-2011
Total Nitrogen	.005	WT%	0.016	0.017	0.091	0.019	0.017	0.019
Total Organic Carbon	.01	WT%	0.083	0.095	4.71	0.103	0.072	0.085

Source:			8135	8137	8141	8150	8151	8152
Analyte	MDL	Units	07-JUL-2011	08-JUL-2011	20-JUL-2011	19-JUL-2011	19-JUL-2011	19-JUL-2011
Total Nitrogen	.005	WT%	0.022	0.023	0.071	0.142	0.159	0.184
Total Organic Carbon	.01	WT%	0.118	0.206	0.646	1.21	1.58	1.92

Source:			8153	8154	8155	8170	8171
Analyte	MDL	Units	19-JUL-2011	20-JUL-2011	19-JUL-2011	20-JUL-2011	20-JUL-2011
Total Nitrogen	.005	WT%	0.188	0.200	0.108	0.043	0.024
Total Organic Carbon	.01	WT%	2.05	2.42	1.90	0.292	0.145

ND=not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
OCEAN SEDIMENT – RANDOM STATIONS
Trace Metals

Annual 2011

Source:			8101	8102	8103	8104	8105	8106	8107
Date:			14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Analyte	MDL	Units							
Aluminum	2	MG/KG	3350	6210	1840	7500	9190	12200	11300
Antimony	.3	MG/KG	0.38	0.48	0.39	0.56	0.72	0.75	0.86
Arsenic	.33	MG/KG	2.96	4.57	2.08	3.92	5.14	5.94	5.56
Beryllium	.01	MG/KG	0.05	0.14	0.06	0.15	0.19	0.21	0.20
Cadmium	.06	MG/KG	0.07	0.22	0.45	0.16	0.16	0.15	0.14
Chromium	.1	MG/KG	8.7	14.8	5.4	17.0	21.2	24.3	23.7
Copper	.2	MG/KG	2.56	5.95	1.39	6.38	9.19	11.6	10.5
Iron	9	MG/KG	4870	10800	3550	11100	14500	17000	16400
Lead	.8	MG/KG	1.91	5.59	1.27	5.58	7.90	10.1	9.45
Manganese	.08	MG/KG	56.1	89.1	57.5	88.6	116	132	128
Mercury	.004	MG/KG	0.006	0.022	ND	0.025	0.037	0.048	0.041
Nickel	.1	MG/KG	3.08	6.43	2.33	7.37	9.44	11.1	10.8
Selenium	.24	MG/KG	ND	ND	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	0.6	0.9	0.6	1.6	1.6	2.0	1.7
Zinc	.25	MG/KG	12.8	26.9	10.4	26.9	35.2	42.0	39.9

Source:			8108	8109	8110	8112	8113	8114	8115
Date:			14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011	07-JUL-2011
Analyte	MDL	Units							
Aluminum	2	MG/KG	2630	7030	11400	14500	7990	7570	1160
Antimony	.3	MG/KG	ND	0.46	0.61	0.60	0.54	0.63	ND
Arsenic	.33	MG/KG	5.16	3.63	5.67	5.44	5.55	5.69	2.09
Beryllium	.01	MG/KG	0.03	0.14	0.19	0.22	0.17	0.19	0.02
Cadmium	.06	MG/KG	0.08	0.15	0.23	0.16	0.19	0.42	ND
Chromium	.1	MG/KG	6.2	15.7	20.2	23.2	18.4	17.0	2.8
Copper	.2	MG/KG	1.75	6.38	9.95	11.6	10.2	9.51	1.16
Iron	9	MG/KG	5320	10100	14100	16100	12600	11700	2170
Lead	.8	MG/KG	3.19	5.44	8.68	10.5	8.36	7.95	1.19
Manganese	.08	MG/KG	75.7	73.2	128	139	118	114	19.8
Mercury	.004	MG/KG	ND	0.028	0.051	0.045	0.060	0.051	0.015
Nickel	.1	MG/KG	2.50	7.08	9.04	11.3	9.09	8.49	0.83
Selenium	.24	MG/KG	ND	ND	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	0.08	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	0.7	1.0	1.9	1.9	1.7	1.5	ND
Zinc	.25	MG/KG	16.2	25.1	37.4	42.4	35.5	33.7	5.0

ND= not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
OCEAN SEDIMENT – RANDOM STATIONS
Trace Metals

Annual 2011

Source:			8116	8117	8119	8120	8121	8122	8123
Date:			07-JUL-2011	07-JUL-2011	11-JUL-2011	18-JUL-2011	08-JUL-2011	11-JUL-2011	18-JUL-2011
Analyte	MDL	Units							
Aluminum	2	MG/KG	1360	3420	7970	2610	3260	6720	2830
Antimony	.3	MG/KG	ND	ND	0.50	0.41	ND	0.51	0.46
Arsenic	.33	MG/KG	1.42	2.19	4.96	5.26	2.00	4.48	4.80
Beryllium	.01	MG/KG	0.03	0.06	0.22	0.16	0.06	0.24	0.14
Cadmium	.06	MG/KG	0.16	ND	0.17	0.11	ND	0.10	0.15
Chromium	.1	MG/KG	2.8	6.2	19.8	14.5	5.8	12.5	13.8
Copper	.2	MG/KG	1.43	2.60	20.3	2.48	4.12	10.2	4.09
Iron	9	MG/KG	2070	4470	12600	7550	4890	11000	8330
Lead	.8	MG/KG	1.09	2.65	10.3	2.97	3.81	6.46	3.42
Manganese	.08	MG/KG	19.9	42.8	115.0	21.6	46.3	86.5	40.9
Mercury	.004	MG/KG	0.008	0.009	0.124	0.009	0.016	0.045	0.014
Nickel	.1	MG/KG	0.85	2.27	11.6	3.96	2.24	6.55	4.89
Selenium	.24	MG/KG	ND	ND	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	ND	0.4	1.5	0.4	0.6	1.0	0.6
Zinc	.25	MG/KG	7.0	13.3	41.1	14.3	13.6	28.6	17.5

Source:			8124	8125	8126	8127	8128	8130	8131
Date:			18-JUL-2011	08-JUL-2011	08-JUL-2011	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011
Analyte	MDL	Units							
Aluminum	2	MG/KG	2260	5430	5310	3180	2820	4840	924
Antimony	.3	MG/KG	0.36	ND	ND	ND	ND	0.58	ND
Arsenic	.33	MG/KG	6.98	2.23	2.31	1.46	1.28	8.92	2.35
Beryllium	.01	MG/KG	0.17	0.11	0.10	0.06	0.06	0.30	0.04
Cadmium	.06	MG/KG	0.17	0.08	0.06	ND	ND	0.21	ND
Chromium	.1	MG/KG	13.9	10.4	10.5	7.2	6.3	24.6	4.5
Copper	.2	MG/KG	5.27	5.13	5.78	2.84	1.41	7.66	0.25
Iron	9	MG/KG	8430	6660	6940	3760	2890	15000	3260
Lead	.8	MG/KG	5.39	3.88	3.78	2.03	1.58	6.23	1.49
Manganese	.08	MG/KG	18.2	60.3	57.8	36.1	30.1	70.0	13.1
Mercury	.004	MG/KG	0.013	0.015	0.011	ND	ND	0.021	ND
Nickel	.1	MG/KG	4.79	4.74	4.43	2.04	1.91	9.27	ND
Selenium	.24	MG/KG	ND	ND	ND	ND	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	0.4	0.6	0.7	0.4	0.4	0.8	ND
Zinc	.25	MG/KG	19.8	18.5	18.6	11.2	8.2	32.0	5.4

ND= not detected

SOUTH BAY WASTEWATER RECLAMATION PLANT
OCEAN SEDIMENT – RANDOM STATIONS
Trace Metals

Annual 2011

Source:			8132	8134	8135	8137	8141	8150	8151
Date:			06-JUL-2011	06-JUL-2011	07-JUL-2011	08-JUL-2011	20-JUL-2011	19-JUL-2011	19-JUL-2011
Analyte	MDL	Units							
Aluminum	2	MG/KG	791	4190	4770	4470	7540	17000	14300
Antimony	.3	MG/KG	ND	ND	ND	ND	0.58	0.78	0.73
Arsenic	.33	MG/KG	5.85	1.78	2.13	2.54	4.03	10.5	5.34
Beryllium	.01	MG/KG	0.05	0.02	0.09	0.10	0.19	0.31	0.26
Cadmium	.06	MG/KG	ND	ND	ND	ND	0.17	0.61	0.51
Chromium	.1	MG/KG	10.3	8.0	8.8	10.2	19.4	30.4	26.9
Copper	.2	MG/KG	0.21	2.35	4.24	3.74	13.0	20.4	15.0
Iron	9	MG/KG	5130	5730	6800	6480	12000	23200	17600
Lead	.8	MG/KG	2.91	2.24	3.01	3.18	7.43	12.5	10.6
Manganese	.08	MG/KG	10.4	56.6	62.8	46.3	97.1	201	134
Mercury	.004	MG/KG	ND	0.037	0.014	0.012	0.060	0.065	0.060
Nickel	.1	MG/KG	ND	ND	3.64	3.42	11.6	16.2	14.3
Selenium	.24	MG/KG	ND	ND	ND	ND	ND	0.38	0.27
Silver	.04	MG/KG	ND	ND	ND	ND	ND	0.05	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	ND	0.5	0.6	0.6	1.4	1.9	1.6
Zinc	.25	MG/KG	6.0	15.0	18.5	15.3	35.6	64.0	48.2

Source:			8152	8153	8154	8155	8170	8171
Date:			19-JUL-2011	19-JUL-2011	20-JUL-2011	19-JUL-2011	20-JUL-2011	20-JUL-2011
Analyte	MDL	Units						
Aluminum	2	MG/KG	13500	13200	17000	7650	6970	5190
Antimony	.3	MG/KG	0.71	0.72	0.73	0.43	0.50	ND
Arsenic	.33	MG/KG	5.01	5.03	4.94	5.18	4.18	3.00
Beryllium	.01	MG/KG	0.25	0.28	0.26	0.12	0.21	0.08
Cadmium	.06	MG/KG	0.39	0.41	0.26	0.09	0.13	ND
Chromium	.1	MG/KG	27.0	29.7	29.9	12.5	22.2	8.4
Copper	.2	MG/KG	15.1	15.7	20.0	5.03	8.61	2.14
Iron	9	MG/KG	16000	18000	18100	9310	12300	5050
Lead	.8	MG/KG	8.02	9.21	11.1	4.76	5.48	2.52
Manganese	.08	MG/KG	125	125	144	94.0	52.7	53.8
Mercury	.004	MG/KG	0.043	0.058	0.110	0.028	0.017	ND
Nickel	.1	MG/KG	16.4	16.5	20.4	5.04	9.12	2.72
Selenium	.24	MG/KG	0.60	0.30	0.31	ND	ND	ND
Silver	.04	MG/KG	ND	ND	ND	ND	ND	ND
Thallium	.5	MG/KG	ND	ND	ND	ND	ND	ND
Tin	.3	MG/KG	1.2	1.3	1.8	0.9	0.9	0.6
Zinc	.25	MG/KG	47.1	48.5	53.0	28.0	27.4	12.7

ND= not detected

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8101	8102	8103	8104	8105	8106
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	360	ND	430	590	660
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	360	0	430	590	660
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	360	0	430	590	660

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8107	8108	8109	8110	8112	8113
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	550	ND	390	500	640	610
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	550	0	390	500	640	610
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	550	0	390	500	640	610

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8114	8115	8116	8117	8119	8120
Analyte	MDL	Units	12-JUL-2011	07-JUL-2011	07-JUL-2011	07-JUL-2011	11-JUL-2011	18-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	770	ND	ND	ND	470	E230
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	770	0	0	0	470	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	770	0	0	0	470	0

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8121	8122	8123	8124	8125	8126
Analyte	MDL	Units	08-JUL-2011	11-JUL-2011	18-JUL-2011	18-JUL-2011	08-JUL-2011	08-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	410	390	ND	380	550
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	410	390	0	380	550
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	410	390	0	380	550

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8127	8128	8130	8131	8132	8134
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011	06-JUL-2011	06-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	450	ND	ND	635
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	0	450	0	0	635
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	450	0	0	635

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8135	8137	8141	8150	8151	8152
Analyte	MDL	Units	07-JUL-2011	08-JUL-2011	20-JUL-2011	19-JUL-2011	19-JUL-2011	19-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	ND	ND	1500	ND	1000	ND
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0	0
DDT and derivatives	830	NG/KG	0	0	1500	0	1000	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	0	0	1500	0	1000	0

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
Chlorinated Pesticide Analysis - Random Stations

Annual 2011

Source:			8153	8154	8155	8170	8171
Analyte	MDL	Units	19-JUL-2011	20-JUL-2011	19-JUL-2011	20-JUL-2011	20-JUL-2011
Aldrin	430	NG/KG	ND	ND	ND	ND	ND
Dieldrin	310	NG/KG	ND	ND	ND	ND	ND
BHC, Alpha isomer	150	NG/KG	ND	ND	ND	ND	ND
BHC, Beta isomer	310	NG/KG	ND	ND	ND	ND	ND
BHC, Gamma isomer	260	NG/KG	ND	ND	ND	ND	ND
BHC, Delta isomer	700	NG/KG	ND	ND	ND	ND	ND
p,p-DDD	470	NG/KG	ND	ND	ND	ND	ND
p,p-DDE	260	NG/KG	1500	690	690	ND	ND
p,p-DDT	800	NG/KG	ND	ND	ND	ND	ND
o,p-DDD	830	NG/KG	ND	ND	ND	ND	ND
o,p-DDE	720	NG/KG	ND	ND	ND	ND	ND
o,p-DDT	800	NG/KG	ND	ND	ND	ND	ND
Heptachlor	1200	NG/KG	ND	ND	ND	ND	ND
Heptachlor epoxide	120	NG/KG	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	240	NG/KG	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	350	NG/KG	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA
Oxychlordane	240	NG/KG	ND	ND	ND	ND	ND
Trans Nonachlor	250	NG/KG	ND	ND	ND	ND	ND
Cis Nonachlor	240	NG/KG	ND	ND	ND	ND	ND
Alpha Endosulfan	240	NG/KG	ND	ND	ND	ND	ND
Beta Endosulfan	350	NG/KG	ND	ND	ND	ND	ND
Endosulfan Sulfate	260	NG/KG	ND	ND	ND	ND	ND
Endrin	830	NG/KG	ND	ND	ND	ND	ND
Endrin aldehyde	830	NG/KG	ND	ND	ND	ND	ND
Mirex	500	NG/KG	ND	ND	ND	ND	ND
Methoxychlor	1100	NG/KG	ND	ND	ND	ND	ND
Aldrin + Dieldrin	430	NG/KG	0	0	0	0	0
Hexachlorocyclohexanes	700	NG/KG	0	0	0	0	0
DDT and derivatives	830	NG/KG	1500	690	690	0	0
Chlordane + related cmpds.	350	NG/KG	0	0	0	0	0
Chlorinated Hydrocarbons	1200	NG/KG	1500	690	690	0	0

ND=not detected
Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8101	8102	8103	8104	8105	8106	8107
Analyte	MDL	Units	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011	14-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8108	8109	8110	8112	8113	8114	8115
Analyte	MDL	Units	14-JUL-2011	18-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011	12-JUL-2011	07-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8116	8117	8119	8120	8121	8122	8123
Analyte	MDL	Units	07-JUL-2011	07-JUL-2011	11-JUL-2011	18-JUL-2011	08-JUL-2011	11-JUL-2011	18-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	840	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	E430	ND	ND	E270	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	E490	ND	ND	E140	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	E290	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	E130	ND	ND	E65	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	E260	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	840	0	0	0	0

ND=not detected
E = DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8124	8125	8126	8127	8128	8130	8131
Analyte	MDL	Units	18-JUL-2011	08-JUL-2011	08-JUL-2011	07-JUL-2011	07-JUL-2011	18-JUL-2011	06-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	E180	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	730	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	E170	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	E180	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	E65	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	730	0	0	0	0

ND=not detected
E = DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8132	8134	8135	8137	8141	8150	8151
Analyte	MDL	Units	06-JUL-2011	06-JUL-2011	07-JUL-2011	08-JUL-2011	20-JUL-2011	19-JUL-2011	19-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0	0

ND=not detected

SOUTH BAY OCEAN OUTFALL MONITORING
SEDIMENT - PCB Congeners Random Stations

Annual 2011

Source:			8152	8153	8154	8155	8170	8171
Analyte	MDL	Units	19-JUL-2011	19-JUL-2011	20-JUL-2011	19-JUL-2011	20-JUL-2011	20-JUL-2011
PCB 18	540	NG/KG	ND	ND	ND	ND	ND	ND
PCB 28	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 52	1000	NG/KG	ND	ND	ND	ND	ND	ND
PCB 49	850	NG/KG	ND	ND	ND	ND	ND	ND
PCB 44	890	NG/KG	ND	ND	ND	ND	ND	ND
PCB 37	340	NG/KG	ND	ND	ND	ND	ND	ND
PCB 74	900	NG/KG	ND	ND	ND	ND	ND	ND
PCB 70	1100	NG/KG	ND	ND	ND	ND	ND	ND
PCB 66	920	NG/KG	ND	ND	ND	ND	ND	ND
PCB 101	430	NG/KG	ND	ND	ND	ND	ND	ND
PCB 99	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 119	560	NG/KG	ND	ND	ND	ND	ND	ND
PCB 87	600	NG/KG	ND	ND	ND	ND	ND	ND
PCB 110	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 81	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 151	640	NG/KG	ND	ND	ND	ND	ND	ND
PCB 77	790	NG/KG	ND	ND	ND	ND	ND	ND
PCB 149	500	NG/KG	ND	ND	ND	ND	ND	ND
PCB 123	660	NG/KG	ND	ND	ND	ND	ND	ND
PCB 118	830	NG/KG	ND	ND	ND	ND	ND	ND
PCB 114	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 105	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 138	590	NG/KG	ND	ND	ND	ND	ND	ND
PCB 158	510	NG/KG	ND	ND	ND	ND	ND	ND
PCB 187	470	NG/KG	ND	ND	ND	ND	ND	ND
PCB 183	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 126	720	NG/KG	ND	ND	ND	ND	ND	ND
PCB 128	570	NG/KG	ND	ND	ND	ND	ND	ND
PCB 167	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 177	650	NG/KG	ND	ND	ND	ND	ND	ND
PCB 201	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 156	620	NG/KG	ND	ND	ND	ND	ND	ND
PCB 157	700	NG/KG	ND	ND	ND	ND	ND	ND
PCB 180	530	NG/KG	ND	ND	ND	ND	ND	ND
PCB 170	570	NG/KG	ND	ND	ND	ND	ND	ND
Total PCB's	1100	NG/KG	0	0	0	0	0	0

ND=not detected

B. Fish Tissue Data.

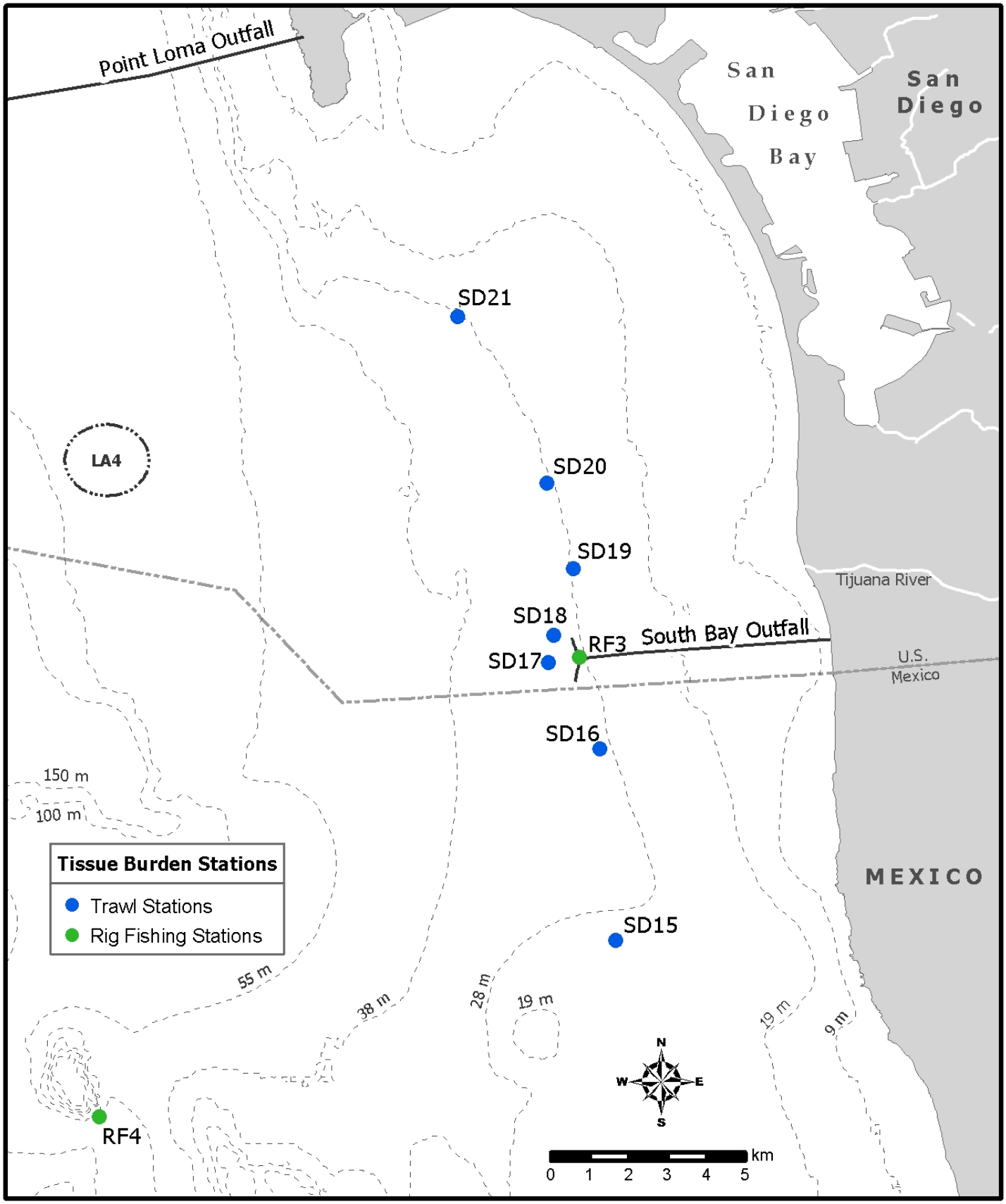
Fish were taken from the following stations during 2011. The fish were dissected, preserved by freezing, and each sample analyzed for PAHs, trace metals, chlorinated pesticides and PCBs. Lipids and total solids were also determined for each sample.

The reported values are annual averages. Results for individual sampling events are contained in the previously published quarterly reports.

Station
RF-3
RF-4

Station
SD-15
SD-16
SD-17
SD-18
SD-19
SD-20
SD-21

South Bay Rig Fishing and Trawl Stations



SOUTH BAY WATER RECLAMATION PLANT
TISSUE

Annual 2011

FISH - Lipids & Total Solids

Source:				SD-15	SD-16	SD-17	SD-18	SD-19	SD-20
Date:				2011	2011	2011	2011	2011	2011
Tissue	Analyte	MDL	Units	Avg	Avg	Avg	Avg	Avg	Avg
Liver	Lipids	.0975	WT%	11.6	11.0	12.6	9.0	18.1	21.6
Liver	Total Solids	.4	WT%	31.0	30.5	34.2	29.4	39.8	38.8

Source:				SD-21	RF-3	RF-4
Date:				2011	2011	2011
Tissue	Analyte	MDL	Units	Avg	Avg	Avg
Liver	Lipids	.0975	WT%	20.1		
Liver	Total Solids	.4	WT%	40.7		
Muscle	Lipids	.0975	WT%		1.4	1.0
Muscle	Total Solids	.4	WT%		21.3	22.8

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
FISH TISSUE - MUSCLE
Trace Metals

Annual 2011

Source:			RF-3	RF-4
Date:			2011	2011
Analyte:	MDL	Units	Average	Average
Aluminum	3	MG/KG	<3.0	<3.0
Antimony	.2	MG/KG	<0.2	ND
Arsenic	.24	MG/KG	1.04	2.68
Beryllium	.006	MG/KG	ND	<0.006
Cadmium	.06	MG/KG	<0.06	ND
Chromium	.1	MG/KG	0.2	0.14
Copper	.3	MG/KG	0.59	0.42
Iron	2	MG/KG	2.04	2.36
Lead	.2	MG/KG	ND	ND
Manganese	.1	MG/KG	<0.1	<0.1
Nickel	.2	MG/KG	<0.2	<0.2
Selenium	.06	MG/KG	0.30	0.30
Silver	.05	MG/KG	<0.05	ND
Thallium	.4	MG/KG	<0.4	<0.4
Tin	.2	MG/KG	0.4	0.4
Zinc	.15	MG/KG	4.29	4.15
Total Solids	.4	WT%	21.3	22.8

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
FISH TISSUE - LIVER
Trace Metals

Annual 2011

Source:			SD-15	SD-16	SD-17	SD-18
Date:			2011	2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average	Average
Aluminum	3	MG/KG	<3.00	<3.00	3.56	3.07
Antimony	.2	MG/KG	<0.20	ND	ND	ND
Arsenic	.24	MG/KG	4.83	4.23	7.21	7.34
Beryllium	.006	MG/KG	ND	ND	ND	<0.006
Cadmium	.06	MG/KG	7.10	3.45	3.57	3.90
Chromium	.1	MG/KG	0.19	0.23	0.27	0.19
Copper	.3	MG/KG	7.20	11.3	7.63	7.52
Iron	2	MG/KG	37	50	81	76
Lead	.2	MG/KG	ND	ND	0.32	<0.20
Manganese	.1	MG/KG	1.43	1.26	1.37	1.47
Nickel	.2	MG/KG	ND	<0.20	<0.20	<0.20
Selenium	.06	MG/KG	0.64	0.89	1.84	1.12
Thallium	.4	MG/KG	0.68	<0.40	<0.40	<0.40
Tin	.2	MG/KG	<0.20	0.36	0.33	0.43
Zinc	.15	MG/KG	34.7	42.2	32.1	44.1
Total Solids	.4	WT%	31.0	30.5	34.2	29.4

Source:			SD-19	SD-20	SD-21
Date:			2011	2011	2011
Analyte:	MDL	Units	Average	Average	Average
Aluminum	3	MG/KG	6.58	6.14	4.87
Antimony	.2	MG/KG	ND	ND	ND
Arsenic	.24	MG/KG	6.98	7.88	5.62
Beryllium	.006	MG/KG	ND	<0.006	ND
Cadmium	.06	MG/KG	3.55	3.19	3.72
Chromium	.1	MG/KG	0.20	0.20	0.19
Copper	.3	MG/KG	10.5	8.22	9.91
Iron	2	MG/KG	95	101	58
Lead	.2	MG/KG	<0.20	<0.20	ND
Manganese	.1	MG/KG	1.37	1.44	1.28
Nickel	.2	MG/KG	<0.20	<0.20	<0.20
Selenium	.06	MG/KG	1.14	1.14	0.93
Thallium	.4	MG/KG	<0.40	<0.40	<0.40
Tin	.2	MG/KG	0.46	0.63	0.71
Zinc	.15	MG/KG	30.0	27.9	37.3
Total Solids	.4	WT%	39.8	38.8	40.7

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL FISH LIVER - Chlorinated Pesticides

Annual 2011

Source:			SD-15	SD-16	SD-17	SD-18	SD-19
Date:			2011	2011	2011	2011	2011
Analyte	MDL	Units	Average	Average	Average	Average	Average
Hexachlorobenzene	1.32	UG/KG	E2.30	1.77	E1.61	9.63	E3.00
BHC, Gamma isomer	63.4	UG/KG	ND	ND	ND	ND	ND
Heptachlor	3.82	UG/KG	ND	ND	ND	ND	4.17
Aldrin	88.1	UG/KG	ND	ND	ND	ND	ND
Heptachlor epoxide	3.89	UG/KG	ND	ND	ND	ND	ND
o,p-DDE	2.79	UG/KG	<2.79	<2.79	E3.24	E12.4	4.18
Alpha Endosulfan	118	UG/KG	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	4.56	UG/KG	ND	ND	ND	ND	ND
Trans Nonachlor	2.58	UG/KG	ND	ND	ND	<2.58	<2.58
p,p-DDE	2.08	UG/KG	31.0	37.1	78.0	97.0	157
Dieldrin	17.1	UG/KG	ND	ND	ND	ND	ND
o,p-DDD	2.02	UG/KG	ND	ND	ND	ND	ND
Endrin	14.2	UG/KG	ND	ND	ND	ND	ND
o,p-DDT	1.62	UG/KG	ND	ND	ND	ND	ND
p,p-DDD	3.36	UG/KG	<3.36	<3.36	<3.36	E6.03	<3.36
p,p-DDT	2.69	UG/KG	<2.69	<2.69	<2.69	<2.69	E6.93
Mirex	1.49	UG/KG	ND	ND	ND	ND	ND

Source:			SD-20	SD-21
Date:			2011	2011
Analyte	MDL	Units	Average	Average
Hexachlorobenzene	1.32	UG/KG	E2.38	E2.48
BHC, Gamma isomer	63.4	UG/KG	ND	ND
Heptachlor	3.82	UG/KG	4.08	ND
Aldrin	88.1	UG/KG	ND	ND
Heptachlor epoxide	3.89	UG/KG	ND	ND
o,p-DDE	2.79	UG/KG	4.08	E3.04
Alpha Endosulfan	118	UG/KG	ND	ND
Alpha (cis) Chlordane	4.56	UG/KG	<4.56	<4.56
Trans Nonachlor	2.58	UG/KG	<2.58	<2.58
p,p-DDE	2.08	UG/KG	233	152
Dieldrin	17.1	UG/KG	ND	ND
o,p-DDD	2.02	UG/KG	ND	<2.02
Endrin	14.2	UG/KG	ND	ND
o,p-DDT	1.62	UG/KG	ND	ND
p,p-DDD	3.36	UG/KG	E4.68	<3.36
p,p-DDT	2.69	UG/KG	E3.61	<2.69
Mirex	1.49	UG/KG	ND	<1.49

ND= not detected
E = DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL FISH MUSCLE - Chlorinated Pesticides

Annual 2011

Source:			RF-3	RF-4
Date:			2011	2011
Analyte	MDL	Units	Average	Average
Hexachlorobenzene	.13	UG/KG	E0.20	<0.13
BHC, Gamma isomer	6.34	UG/KG	ND	ND
Heptachlor	.38	UG/KG	ND	ND
Aldrin	8.81	UG/KG	ND	ND
Heptachlor epoxide	.39	UG/KG	ND	ND
o,p-DDE	.28	UG/KG	<0.28	ND
Alpha Endosulfan	11.8	UG/KG	ND	ND
Alpha (cis) Chlordane	.46	UG/KG	ND	ND
Trans Nonachlor	.26	UG/KG	ND	ND
p,p-DDE	.21	UG/KG	2.38	1.58
Dieldrin	1.71	UG/KG	ND	ND
o,p-DDD	.2	UG/KG	ND	ND
Endrin	1.42	UG/KG	ND	ND
o,p-DDT	.16	UG/KG	ND	ND
p,p-DDD	.34	UG/KG	<0.34	ND
p,p-DDT	.27	UG/KG	<0.27	<0.27
Mirex	.15	UG/KG	ND	ND

ND= not detected
E= DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
FISH LIVER - Analysis of Poly Aromatic Hydrocarbon (PAH)

Annual 2011

Source:			SD-15	SD-16	SD-17	SD-18
Date:			2011	2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg	Avg
Acenaphthene	28.9	UG/KG	ND	ND	ND	ND
Acenaphthylene	24.7	UG/KG	ND	ND	ND	ND
Anthracene	25.3	UG/KG	ND	ND	ND	ND
Benzo[a]anthracene	47.3	UG/KG	ND	ND	ND	ND
Benzo[a]pyrene	42.9	UG/KG	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	30.2	UG/KG	ND	ND	ND	ND
Benzo[e]pyrene	41.8	UG/KG	ND	ND	ND	ND
Benzo[g,h,i]perylene	27.2	UG/KG	ND	ND	ND	ND
Benzo[k]fluoranthene	32	UG/KG	ND	ND	ND	ND
Biphenyl	38	UG/KG	ND	ND	ND	ND
Chrysene	18.1	UG/KG	ND	ND	ND	ND
Dibenzo(a,h)anthracene	37.6	UG/KG	ND	ND	ND	ND
2,6-Dimethylnaphthalene	21.7	UG/KG	ND	ND	ND	ND
Fluoranthene	19.9	UG/KG	ND	ND	ND	ND
Fluorene	27.3	UG/KG	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	25.6	UG/KG	ND	ND	ND	ND
1-Methylnaphthalene	27.9	UG/KG	ND	ND	ND	ND
2-Methylnaphthalene	35.8	UG/KG	ND	ND	ND	ND
1-Methylphenanthrene	17.4	UG/KG	ND	ND	ND	ND
Naphthalene	34.2	UG/KG	ND	ND	ND	ND
Perylene	18.5	UG/KG	ND	ND	ND	ND
Phenanthrene	11.6	UG/KG	ND	ND	ND	ND
Pyrene	9.1	UG/KG	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	21.7	UG/KG	ND	ND	ND	ND

Source:			SD-19	SD-20	SD-21
Date:			2011	2011	2011
Analyte	MDL	Units	Avg	Avg	Avg
Acenaphthene	28.9	UG/KG	ND	ND	ND
Acenaphthylene	24.7	UG/KG	ND	ND	ND
Anthracene	25.3	UG/KG	ND	ND	ND
Benzo[a]anthracene	47.3	UG/KG	ND	ND	ND
Benzo[a]pyrene	42.9	UG/KG	ND	ND	ND
3,4-Benzo(b)fluoranthene	30.2	UG/KG	ND	ND	ND
Benzo[e]pyrene	41.8	UG/KG	ND	ND	ND
Benzo[g,h,i]perylene	27.2	UG/KG	ND	ND	ND
Benzo[k]fluoranthene	32	UG/KG	ND	ND	ND
Biphenyl	38	UG/KG	ND	ND	ND
Chrysene	18.1	UG/KG	ND	ND	ND
Dibenzo(a,h)anthracene	37.6	UG/KG	ND	ND	ND
2,6-Dimethylnaphthalene	21.7	UG/KG	ND	ND	ND
Fluoranthene	19.9	UG/KG	ND	ND	ND
Fluorene	27.3	UG/KG	ND	ND	ND
Indeno(1,2,3-CD)pyrene	25.6	UG/KG	ND	ND	ND
1-Methylnaphthalene	27.9	UG/KG	ND	ND	ND
2-Methylnaphthalene	35.8	UG/KG	ND	ND	ND
1-Methylphenanthrene	17.4	UG/KG	ND	ND	ND
Naphthalene	34.2	UG/KG	ND	ND	ND
Perylene	18.5	UG/KG	ND	ND	ND
Phenanthrene	11.6	UG/KG	ND	ND	ND
Pyrene	9.1	UG/KG	ND	ND	ND
2,3,5-Trimethylnaphthalene	21.7	UG/KG	ND	ND	ND

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
FISH MUSCLE - Analysis of Poly Aromatic Hydrocarbon (PAH)

Annual 2011

Source:			RF-3	RF-4
Date:			2011	2011
Analyte	MDL	Units	Avg	Avg
Acenaphthene	11.3	UG/KG	ND	ND
Acenaphthylene	9.1	UG/KG	ND	ND
Anthracene	8.4	UG/KG	ND	ND
Benzo[a]anthracene	15.9	UG/KG	ND	ND
Benzo[a]pyrene	18.3	UG/KG	ND	ND
3,4-Benzo(b)fluoranthene	26.8	UG/KG	ND	ND
Benzo[e]pyrene	40.6	UG/KG	ND	ND
Benzo[g,h,i]perylene	59.5	UG/KG	ND	ND
Benzo[k]fluoranthene	37.3	UG/KG	ND	ND
Biphenyl	19.9	UG/KG	ND	ND
Chrysene	23	UG/KG	ND	ND
Dibenzo(a,h)anthracene	40.3	UG/KG	ND	ND
2,6-Dimethylnaphthalene	19.5	UG/KG	ND	ND
Fluoranthene	12.9	UG/KG	ND	ND
Fluorene	11.4	UG/KG	ND	ND
Indeno(1,2,3-CD)pyrene	46.5	UG/KG	ND	ND
1-Methylnaphthalene	26.4	UG/KG	ND	ND
2-Methylnaphthalene	13.2	UG/KG	ND	ND
1-Methylphenanthrene	23.3	UG/KG	ND	ND
Naphthalene	17.4	UG/KG	ND	ND
Perylene	50.9	UG/KG	ND	ND
Phenanthrene	12.9	UG/KG	ND	ND
Pyrene	16.6	UG/KG	ND	ND
2,3,5-Trimethylnaphthalene	21.6	UG/KG	ND	ND

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
FISH LIVER - Analysis of Poly Chlorinated Biphenyls

Annual 2011

Source:			SD-15	SD-16	SD-17	SD-18	SD-19	SD-20	SD-21
Date:			2011	2011	2011	2011	2011	2011	2011
Analyte	MDL	Units	Average	Average	Average	Average	Average	Average	Average
PCB 18	2.86	UG/KG	ND	ND	ND	ND	<2.86	ND	ND
PCB 28	2.47	UG/KG	ND	<2.47	<2.47	ND	<2.47	<2.47	<2.47
PCB 49	5.02	UG/KG	ND	<5.02	ND	<5.02	<5.02	<5.02	<5.02
PCB 37	2.77	UG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 70	2.49	UG/KG	<2.49	<2.49	<2.49	<2.49	<2.49	<2.49	<2.49
PCB 101	4.34	UG/KG	<4.34	<4.34	<4.34	<4.34	<4.34	E6.91	<4.34
PCB 119	2.39	UG/KG	ND	ND	ND	ND	ND	ND	<2.39
PCB 87	3.01	UG/KG	ND	ND	ND	<3.01	ND	ND	<3.01
PCB 110	2.5	UG/KG	<2.50	<2.50	<2.50	<2.50	2.53	E4.61	2.94
PCB 151	1.86	UG/KG	<1.86	<1.86	<1.86	<1.86	2.15	E3.77	E3.20
PCB 77	2.01	UG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 149	2.34	UG/KG	<2.34	<2.34	<2.34	E2.55	E3.72	E5.83	E6.02
PCB 123	2.64	UG/KG	ND	ND	ND	ND	ND	<2.64	<2.64
PCB 118	2.06	UG/KG	E2.89	E3.43	4.37	6.23	8.00	17.1	12.9
PCB 114	3.15	UG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 153/168	2.54	UG/KG	9.21	9.25	12.0	14.9	2 5.2	48.9	3 9.1
PCB 105	2.29	UG/KG	<2.29	<2.29	<2.29	<2.29	<2.29	E4.00	3.38
PCB 138	1.73	UG/KG	3.84	4.75	6.29	8.05	13.3	28.1	21.5
PCB 158	2.72	UG/KG	ND	ND	ND	<2.72	<2.72	<2.72	<2.72
PCB 187	2.5	UG/KG	E4.42	E3.91	4.58	E6.57	E10.3	E19.7	E14.5
PCB 183	1.55	UG/KG	<1.55	<1.55	<1.55	E1.86	E2.62	5.05	E3.16
PCB 126	1.52	UG/KG	ND	ND	ND	ND	ND	ND	ND
PCB 128	1.23	UG/KG	<1.23	<1.23	<1.23	<1.23	2.23	3.88	6.88
PCB 167	1.63	UG/KG	ND	ND	ND	<1.63	<1.63	<1.63	1.73
PCB 177	1.91	UG/KG	<1.91	ND	ND	<1.91	E1.92	E3.44	2.88
PCB 156	.64	UG/KG	ND	ND	ND	<0.64	0.92	1.84	3.88
PCB 157	2.88	UG/KG	ND	ND	ND	ND	ND	<2.88	<2.88
PCB 180	2.58	UG/KG	E3.98	E3.98	5.11	E6.65	E9.43	E17.5	E11.0
PCB 170	1.23	UG/KG	<1.23	<1.23	1.35	E2.23	3.47	6.39	E4.03
PCB 169	2.76	UG/KG	ND	ND	ND	ND	ND	<2.76	ND
PCB 189	1.78	UG/KG	ND	ND	ND	ND	ND	ND	<1.78
PCB 194	1.14	UG/KG	<1.14	<1.14	<1.14	1.69	2.03	5.32	3.66
PCB 206	1.28	UG/KG	<1.28	ND	ND	<1.28	<1.28	2.03	1.50

ND= not detected
E= DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
FISH MUSCLE - Analysis of Poly Chlorinated Biphenyls

Annual 2011

Source:			RF-3	RF-4
Date:			2011	2011
Analyte	MDL	Units	Avg	Avg
PCB 18	.29	UG/KG	ND	ND
PCB 28	.28	UG/KG	ND	ND
PCB 49	.5	UG/KG	ND	ND
PCB 37	.25	UG/KG	ND	ND
PCB 70	.25	UG/KG	ND	ND
PCB 101	.43	UG/KG	<0.43	<0.43
PCB 119	.24	UG/KG	ND	ND
PCB 87	.3	UG/KG	ND	ND
PCB 110	.25	UG/KG	<0.25	ND
PCB 151	.19	UG/KG	ND	ND
PCB 77	.2	UG/KG	ND	ND
PCB 149	.23	UG/KG	<0.23	ND
PCB 123	.26	UG/KG	ND	ND
PCB 118	.21	UG/KG	<0.21	<0.21
PCB 114	.31	UG/KG	ND	ND
PCB 153/168	.25	UG/KG	E0.48	E0.46
PCB 105	.23	UG/KG	ND	ND
PCB 138	.17	UG/KG	E0.22	0.24
PCB 158	.27	UG/KG	ND	ND
PCB 187	.25	UG/KG	<0.25	<0.25
PCB 183	.15	UG/KG	ND	<0.15
PCB 126	.15	UG/KG	ND	ND
PCB 128	.12	UG/KG	ND	<0.12
PCB 167	.16	UG/KG	ND	<0.16
PCB 177	.19	UG/KG	ND	ND
PCB 156	.06	UG/KG	ND	<0.06
PCB 157	.29	UG/KG	ND	ND
PCB 180	.26	UG/KG	<0.26	<0.26
PCB 170	.12	UG/KG	ND	<0.12
PCB 169	.28	UG/KG	ND	ND
PCB 189	.18	UG/KG	ND	<0.18
PCB 194	.11	UG/KG	<0.11	<0.11
PCB 206	.13	UG/KG	ND	ND

ND= not detected
E= DNQ (Detected but not quantified). Estimated analyte concentration below calibration range.

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