II. Influent and Effluent Data Summary.

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A. Mass Emissions

Mass Emissions of Effluent Using 2007 Monthly Averages

DISCHARGE SPECIFICATIONS from NPDES Permit No. CA0109045/RWQCB Order No. 2006-067 effective on January 1st 2007 with limits on pollutant discharges.

Effluent Limitations Based on Secondary Treatment Standards				
Constituent/Property	Limit: Monthly Average (30 day) **(lbs/day)**	2007 Mass Emissions (lbs/day)[1]	2007 Average Concentration	Units
Flow (MGD)			*4.03*	MGD
Total Suspended Solids	3,700	306	9.1	mg/L
BOD	3,700	696	20.7	mg/L
Oil & Grease	3,100	104	3.1	mg/L

Effluent Limitations Based on 2005 California Ocean Plan				
Constituent/Property	Limit: Daily Maximum **(lbs/day)**	2007 Mass Emissions (lbs/day)[1]	2007 Average Concentration	Units
Arsenic	350	0.022	0.65	ug/L
Cadmium	48	0.003	0.1	ug/L
Chromium	96	0.040	1.2	ug/L
Copper	120	0.4	13	ug/L
Lead	96	0.0	0.2	ug/L
Mercury	1.9	0.0	0	ug/L
Nickel	2.4	0.36	10.6	ug/L
Selenium	720	0.031	0.92	ug/L
Silver	32	0.000	0	ug/L
Zinc	860	1.1	31.6	ug/L
Cyanide	48	0.128	0.0038	mg/L
Residual Chlorine	96	1.0	0.03	mg/L
Ammonia	29,000	228.7	6.8	mg/L
Non-Chor. Phenols	1,400	0.1	1.6	ug/L
Chlorinated Phenols	48	0.0	0	ug/L
Endosulfan	0.21	0.001	25	ng/L
Endrin	0.05	0.00	2	ng/L
hexachlorocyclohexanes *(HCH) (all as Lindane, the gamma isomer)	0.1	0.0004	12	ng/L
Acrolein	2,600	0	0	ug/L
Antimony	14,000	0.00	0	ug/L
Bis(2-chloroethoxy) methane	53	0	0	ug/L
Bis(2-chloroisopropyl) ether	14,000	0	0	ug/L
Chlorobenzene	6,800	0	0	ug/L
Chromium (III)	--	--	--	
di-n-butyl phthalate	42,000	0	0	ug/L

Effluent Limitations Based on 2005 California Ocean Plan				
Constituent/Property	Limit: Daily Maximum **(lbs/day)**	2007 Mass Emissions (lbs/day)[1]	2007 Average Concentration	Units
dichlorobenzenes	61,000	0	0	ug/L
1,1-dichloroethylene	11	0	0	ug/L
Diethyl phthalate	390,000	0	0	ug/L
Dimethyl phthalate	9,800,000	0	0	ug/L
4,6-dinitro-2-methylphenol	2,600	0	0	ug/L
2,4-dinitrophenol	480	0	0	ug/L
Ethylbenzene	49,000	0	0.6	ug/L
Fluoranthene	180	0	0	ug/L
Hexachlorocyclopentadiene	690	0	0	ug/L
Isophorone	70,000	0	0	ug/L
Nitrobenzene	59	0	0	ug/L
Thallium	24	0	0	ug/L
Toluene	1,000,000	0	5	ug/L
1,1,2,2-tetrachloroethane	27	0	0	ug/L
Tributyltin	0.02	0	0	ug/L
1,1,1-trichloroethane	6,500,000	0	0	ug/L
1,1,2-trichloroethane	110	0	0	ug/L
Acrylonitrile	1.2	0	0	ug/L
Aldrin	0.00026	0	0	ng/L
Benzene	71	0	0	ug/L
Benzidine	82,000	0	0	ug/L
Beryllium	0.39	0	0	ug/L
Bis(2-chloroethyl)ether	0.54	0	0	ug/L
Bis(2-ethylhexyl)phthalate	42	0	3.2	ug/L
Carbon Tetrachloride	11	0	0	ug/L
Chlordane	0.00027	0.0001	3	ng/L
Chlorodibromomethane	100	0	0	ug/L
Chloroform	1,500	0.07	2	ug/L
DDT	0.002	0.0002	5	ng/L
1,4-dichlorobenzene	210	0	1.6	ug/L
3,3-dichlorobenzidine	0.097	0	0	ug/L
1,2-dichloroethane	330	0	0	ug/L
Dichlorobromomethane	74	0	0	ug/L
Dichloromethane (methylene chloride)	5,400	0	0.5	ug/L
1,3-dichloropropene	110	0	0	ug/L
Dieldrin	0.00048	0.0001	3	ng/L
2,4-dinitrotoluene	31	0	0	ug/L
1,2-diphenylhydrazine	1.9	0	0	ug/L
Halomethanes	1,500	0	0	ug/L
Heptachlor	0.0006	0.000034	1	ng/L
Heptachlor epoxide	0.00024	0	0	ng/L
Hexachlorobenzene	0.0025	0	0	ug/L
Hexachlorobutadiene	170	0	0	ug/L

Effluent Limitations Based on 2005 California Ocean Plan				
Constituent/Property	Limit: Daily Maximum **(lbs/day)**	2007 Mass Emissions (lbs/day)[1]	2007 Average Concentration	Units
Hexachloroethane	30	0	0	ug/L
N-nitrosodimethylamine	87	0	0.7	ug/L
N-nitrosodi-N-Propylamine	4.5	0	0	ug/L
N-nitrosodiphenylamine	30	0	0	ug/L
PAHs	0.11	0	0	ug/L
PCBs	0.00023	0	0	ng/L
TCDD equivalents	0.000000048	0	0	pg/L
Tetrachloroethylene	24	0	0	ug/L
Toxaphene	0.0025	0	0	ng/L
Trichloroethylene	320	0	0	ug/L
2,4,6-trichlorophenol	3.5	0	0	ug/L
Vinyl Chloride	430	0	0	ug/L

[1] Metric tons of mass emissions is calculated assuming the density of effluent is 1. The mean assuming that constant concentration over 365 days.

B. Discharge Limits

NPDES Permit No. CA0109045/RWQCB Order No. 2006-067

DISCHARGE SPECIFICATIONS from NPDES Permit No. CA0109045/RWQCB Order No. 2006-067 effective on January 1st, 2007 with limits on pollutant discharges.
The discharge of waste through the South Bay Ocean Outfall containing pollutants in excess of the following effluent limitations are prohibited:

NPDES Permit No. CA0109045/RWQCB Order No. 2006-067						
Constituent	Units	6-month Median	30-day Average	7-Day Average	Daily Maximum	Instantaneous Maximum
Biochemical Oxygen Demand BOD_5 @ 20EC	mg/L lb/day		30 3,750	45 5,630		50 6,260
Total Suspended Solids[2]	mg/L lb/day		30 3,750	45 5,630		50 6,260
pH	pH units		Within the limits of 6.0 - 9.0 at all times.			
Grease & Oil	mg/L lb/day		25 3,130	40 5,000		75 9,380
Settleable Solids	mL/L		1.0	2.0		3.0
Turbidity	NTU		75	100		230
Acute Toxicity	TUa				3.1[3]	
Arsenic	ug/L	480			2,800	7,400
Cadmium	ug/L	96			380	960
Chromium[4] (Hexavalent)	ug/L	190			760	1900
Copper	ug/L	97			960	2,700
Lead	ug/L	190			760	1,900
Mercury	ug/L	38			15.0	3.8
Nickel	ug/L	480			1,900	4,800
Selenium	ug/L	1,400			5,700	14,000
Silver	ug/L	52			250	650
Zinc	ug/L	1,100			6,900	1,000
Cyanide	mg/L	0.096			0.38	0.96
Total Residual Chlorine(TRC)	mg/L	0.19			0.76	5.7
Ammonia (expressed as Nitrogen)	mg/L	57			230	570
Chronic Toxicity	TUc				96	

[2] Total Suspended Solids (TSS)- The discharger shall achieve a mass emission of TSS of no greater than 13,995 mt/yr; this requirement shall be effective through December 31, 2005. Effective January 1, 2006, the discharger shall achieve a mass emission of TSS of no greater than 13,599 mt/yr. These mass emission requirements shall only apply to TSS discharged from POTWs which are owned and operated by the discharger, and the discharger's wastewater generated in the Metro System service area. These mass emission requirements do not apply to wastewater (and the resulting TSS) generated in Mexico as a result of upset or shutdown and treated at and discharged from the PLMWTP.

[3] Permit shows $2.9x10^{-1}$ which reflects an apparent error in calculation as discussed with SDRWQCB staff. Correction to 3.1 TUa referenced by email of Friday, January 26, 2007 4:14 PM, From: Melissa Valdovinos [mailto:mvaldovinos@waterboards.ca.gov] To: Stebbins, Tim, [Tstebbins@sandiego.gov]

[4] Hexavalent Chromium limit met as Total Chromium.

NPDES Permit No. CA0109045/RWQCB Order No. 2006-067						
Constituent	Units	6-month Median	30-day Average	7-Day Average	Daily Maximum	Instantaneous Maximum
Phenolic Compounds (non- chlorinated)	ug/L	2,900			11,000	29,000
Chlorinated Phenolics	ug/L	96			380	960
Endosulfan	ng/L	860			1,700	2,600
Endrin	ng/L	190			380	570
HCH (hexachlorocyclohexanes)	ng/L lb/day	380			760	1,100
Radioactivity - Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269 of the California Code of Regulations.						

Note:
mg/L= milligrams per liter
ug/L= micrograms per liter
ng/L= nanograms per liter
lb/day= pounds per day
NTU= Nephelometric turbidity units
TUa= Acute toxicity units
TUc= Chronic toxicity units

NPDES Permit No. CA0109045/RWQCB Order No. 2006-067			
Constituent	Units	Monthly Average (30-Day)	
LIMITATIONS FOR PROTECTION OF HUMAN HEALTH--NONCARCINOGENS			
Acrolein	ug/L	21,000	
Antimony	ug/L	110,000	
Bis(2-chloroethoxy) methane	ug/L	420	
Bis(2-chloroisopropyl) ether	ug/L	110,000	
Chlorobenzene	ug/L	54,000	
Chromium (III)[5]	ug/L	18,000,000	
di-n-butyl phthalate	ug/L	330,000	
Dichlorobenzenes	ug/L	490,000	
Diethyl phthalate	ug/L	3,100,000	
Dimethyl phthalate	ug/L	78,000,000	
4,6-dinitro-2-methylphenol	ug/L	21,000	
2,4-dinitrophenol	ug/L	3800	
Ethylbenzene	ug/L	390,000	
Fluoranthene	ug/L	1,400	
Hexachlorocyclopentadiene	ug/L	5,500	
Nitrobenzene	ug/L	470	
Thallium	ug/L	190	
Toluene	ug/L	8,100,000	
Tributyltin	ug/L	0.13	
1,1,1-trichloroethane	ug/L	52,000,000	
Isophorone	ug/L	70,000	
1,1,2-trichloroethane	ug/L	900	
1,1-dichloroethylene	ug/L	86	
1,1,2,2-tetrachloroethane	ug/L	220	

[5] Chromium (III) limit is met by Total Chromium.

NPDES Permit No. CA0109045/RWQCB Order No. 2006-067

Constituent	Units	Monthly Average (30-Day)	
LIMITATIONS FOR PROTECTION OF HUMAN HEALT—CARCINOGENS			
Acrylonitrile	ug/L	9.6	
Aldrin	ng/L	2.1	
Benzene	ug/L	560	
Benzidine	ug/L	0.0066	
Beryllium	ug/L	3.1	
Bis(2-chloroethyl)ether	ug/L	4.3	
Bis(2-ethylhexyl)phthalate	ug/L	330	
Carbon Tetrachloride	ug/L	86	
Chlordane	ng/L	2,200,000	
Chloroform	ug/L	12,000	
DDT	ng/L	16	
1,4-dichlorobenzene	ug/L	1,700	
3,3-dichlorobenzidine	ug/L	0.77	
1,2-dichloroethane	ug/L	2,700	
Dichloromethane	ug/L	43,000	
1,3-dichloropropene	ug/L	850	
Dieldrin	ng/L	3.8	
2,4-dinitrotoluene	ug/L	250	
1,2-diphenylhydrazine	ug/L	15	
Halomethanes	ug/L	12,000	
Heptachlor	ng/L	48	
Hexachlorobenzene	ug/L	0.02	
Hexachlorobutadiene	ug/L	1,300	
Hexachloroethane	ug/L	240	
N-nitrosodimethylamine	ug/L	700	
N-nitrosodiphenylamine	ug/L	240	
PAHs	ug/L	0.84	
PCBs	ng/L	1.8	
TCDD equivalents	pg/L	0.37	
Tetrachloroethylene	ug/L	190	
Toxaphene	ng/L	200	
Trichloroethylene	ug/L	2,600	
Vinyl Chloride	ug/L	3,400	

C. Influent and Effluent Data Summaries

The results of all analyses performed on the SBWRP influent and effluent are summarized in tables with monthly and annual averages (and in some cases annual totals) calculated.

SOUTH BAY WATER RECLAMATION PLANT

SEWAGE ANNUAL

From 01-JAN-2007 To 31-DEC-2007

Biochemical Oxygen Demand Concentration
(24-hour composite)

	Influent Flow	Daily Influent Value (mg/L)	Daily Influent Value (lbs/Day)	Effluent Flow (MGD)	Daily Effluent Value (mg/L)	Daily Effluent BOD (lbs/Day)	Percent Removal (%)
JANUARY -2007	7.9	314	20688	6.2	9.5	491	97.0
FEBRUARY -2007	8.5	291	20629	6.5	6.6	358	97.7
MARCH -2007	8.6	291	20872	6.5	4.9	266	98.3
APRIL -2007	8.7	300	21767	6.2	6.0	310	98.0
MAY -2007	8.7	301	21840	5.0	7.1	296	97.6
JUNE -2007	8.6	320	22952	1.1	23.9	219	92.5
JULY -2007	8.8	313	22972	1.0	54.8	457	82.5
AUGUST -2007	8.8	309	22678	1.0	53.7	448	82.6
SEPTEMBER-2007	8.7	276	20026	1.9	34.9	553	87.4
OCTOBER -2007	8.8	283	20770	2.9	25.4	614	91.0
NOVEMBER -2007	8.7	301	21840	4.1	17.2	588	94.3
DECEMBER -2007	8.8	335	24586	5.9	4.6	226	98.6
Average	8.6	303	21802	4.0	20.7	402	93.1

Annual Mass Emissions are calculated from monthly averages of flow and BOD, where as Monthly Report average mass emissions are calculated from average daily mass emissions.

ND=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT

SEWAGE ANNUAL

From 01-JAN-2007 To 31-DEC-2007

Total Suspended Solids Concentration
(24-hour composite)

	Influent Flow	Daily Influent TSS (mg/L)	Daily Influent VSS (mg/L)	Percent VSS (%)	Daily Influent Value (lbs/Day)
JANUARY -2007	7.9	276	244	88.4	18185
FEBRUARY -2007	8.5	261	225	86.2	18502
MARCH -2007	8.6	262	230	87.8	18792
APRIL -2007	8.7	295	251	85.1	21405
MAY -2007	8.7	269	240	89.2	19518
JUNE -2007	8.6	290	256	88.3	20800
JULY -2007	8.8	284	250	88.0	20843
AUGUST -2007	8.8	265	233	87.9	19449
SEPTEMBER-2007	8.7	265	239	90.2	19228
OCTOBER -2007	8.8	266	233	87.6	19522
NOVEMBER -2007	8.7	267	236	88.4	19373
DECEMBER -2007	8.8	329	286	86.9	24146
Average	8.6	277	244		19980

Annual Mass Emissions are calculated from monthly averages of flow and TSS, where as Monthly Report average mass emissions are calculated from average daily mass emissions.

TSS = Total Suspended Solids
VSS = Volatile Suspended Solids

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT

SEWAGE ANNUAL

From 01-JAN-2007 To 31-DEC-2007

Total Suspended Solids Concentration
(24-hour composite)

	Effluent Flow	Daily Effluent Value (mg/L)	Daily Effluent Volitile (mg/L)	Percent Percent VSS (%)	Daily Effluent Value (lbs/Day)	Percent Removal TSS* (%)	Percent Removal VSS (%)
JANUARY -2007	6.2	3.7	3.1	83.8	191	98.7	98.7
FEBRUARY -2007	6.5	4.3	3.7	86.0	233	98.4	98.4
MARCH -2007	6.5	1.9	<1.6	0.0	103	99.3	100.0
APRIL -2007	6.2	3.6	3.0	83.3	186	98.8	98.8
MAY -2007	5.0	5.1	4.1	80.4	213	98.1	98.3
JUNE -2007	1.1	11.4	8.8	77.2	105	96.1	96.6
JULY -2007	1.0	22.0	17.1	77.7	183	92.3	93.2
AUGUST -2007	1.0	18.1	13.9	76.8	151	93.2	94.0
SEPTEMBER-2007	1.9	17.8	13.6	76.4	282	93.3	94.3
OCTOBER -2007	2.9	10.8	8.3	76.9	261	95.9	96.4
NOVEMBER -2007	4.1	7.6	5.4	71.1	260	97.2	97.7
DECEMBER -2007	5.9	3.2	2.2	68.8	157	99.0	99.2
Average	4.0	9.1	6.9		194	96.7	97.1

Annual Mass Emissions are calculated from monthly averages of flow and TSS, wheras
Monthly Report average mass emissions are calculated from average daily mass emissions.

nd=not detected; NS=not sampled; NA=not analyzed

* The limit is 85% removal on daily running averages.

SOUTH BAY WATER RECLAMATION PLANT

From 01-JAN-2007 To 31-DEC-2007

Effluent to Ocean Outfall
(SB_OUTFALL_00)

	Flow (mgd)	pH	Settleable Solids (ml/L)	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)
Limit:	15						
JANUARY -2007	6.18	7.24	ND	9.47	3.67	3.08	795
FEBRUARY -2007	6.47	7.30	ND	6.64	4.28	3.65	898
MARCH -2007	6.51	7.31	ND	4.87	1.85	<1.60	917
APRIL -2007	6.17	7.32	ND	5.96	3.62	2.99	867
MAY -2007	5.00	7.39	ND	7.14	5.06	4.13	883
JUNE -2007	1.10	7.29	0.1	23.90	11.40	8.80	1020
JULY -2007	1.03	7.33	ND	54.80	22.00	17.10	1240
AUGUST -2007	1.05	7.33	ND	53.70	18.10	13.90	1190
SEPTEMBER-2007	1.87	7.36	ND	34.90	17.80	13.60	1080
OCTOBER -2007	2.92	7.30	ND	25.40	10.80	8.32	1250
NOVEMBER -2007	4.15	7.29	ND	17.20	7.58	5.36	828
DECEMBER -2007	5.94	7.33	ND	4.58	3.18	2.24	847
Average	4.03	7.32	0.0	20.71	9.11	6.93	985

	Oil & Grease (mg/L)	Outfall Temperature (C)	Residual Chlorine (mg/L)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
JANUARY -2007	1.6	21.1	ND	2.23	5.70
FEBRUARY -2007	2.0	21.2	ND	1.42	6.32
MARCH -2007	4.5	21.4	0.22	1.44	5.50
APRIL -2007	<1.4	22.9	ND	1.93	6.79
MAY -2007	2.4	23.9	ND	2.44	5.10
JUNE -2007	5.7	24.5	ND	11.10	2.89
JULY -2007	2.9	25.7	ND	21.90	2.86
AUGUST -2007	4.9	26.4	ND	18.00	1.48
SEPTEMBER-2007	3.0	26.3	ND	18.70	1.17
OCTOBER -2007	5.9	24.4	<0.03	7.43	2.04
NOVEMBER -2007	1.7	22.0	0.06	5.77	4.35
DECEMBER -2007	3.0	22.4	0.10	2.77	6.90
Average	3.1	23.5	0.03	7.93	4.26

nd=not detected; NS=not sampled; NA=not analyzed.

SOUTH BAY WATER RECLAMATION PLANT

From 01-JAN-2007 To 31-DEC-2007

Influent to Plant
(SB_INF_02)

	Flow (mgd)	pH	Total Dissolved Solids (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Turbidity (NTU)
Limit:	15						
JANUARY -2007	7.90	7.50	830	314	276	244	NR
FEBRUARY -2007	8.52	7.56	947	291	261	225	152.00
MARCH -2007	8.65	7.60	929	291	262	230	NR
APRIL -2007	8.73	7.57	890	300	295	251	NR
MAY -2007	8.73	7.65	907	301	269	240	161.00
JUNE -2007	8.59	7.57	909	320	290	256	NR
JULY -2007	8.80	7.58	914	313	284	250	NR
AUGUST -2007	8.79	7.62	899	309	265	233	157.00
SEPTEMBER-2007	8.67	7.65	951	276	265	239	NR
OCTOBER -2007	8.77	7.63	933	283	266	233	88.00
NOVEMBER -2007	8.73	7.57	823	301	267	236	NR
DECEMBER -2007	8.79	7.50	854	335	329	286	NR
Average	8.64	7.58	899	303	277	244	

nd=not detected; NS=not sampled; NA=not analyzed.

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Trace Metals
(Limits shown are the 6-Month Median Maximum)

From: 01-JAN-2007 To: 31-DEC-2007

Analyte:	Antimony	Antimony	Arsenic	Arsenic	Beryllium	Beryllium
MAX MDL Units:	2.9 ug/L	2.9 ug/L	.4 ug/L	.4 ug/L	.022 ug/L	.022 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:				480		
JANUARY -2007	ND	ND	0.72	ND	NR	ND
FEBRUARY -2007	ND	ND	1.05	0.47	ND	ND
MARCH -2007	ND	ND	1.04	0.69	ND	ND
APRIL -2007	ND	ND	0.77	0.63	ND	ND
MAY -2007	ND	ND	0.95	0.76	ND	ND
JUNE -2007	ND	ND	0.84	0.53	ND	ND
JULY -2007	ND	ND	0.77	1.41	ND	ND
AUGUST -2007	ND	ND	0.60	0.57	ND	ND
SEPTEMBER-2007	ND	ND	0.50	1.08	ND	ND
OCTOBER -2007	ND	ND	0.45	ND	ND	ND
NOVEMBER -2007	ND	ND	0.44	1.65	NR	ND
DECEMBER -2007	ND	ND	0.77	ND	NR	ND
AVERAGE	ND	ND	0.74	0.65	ND	ND

Analyte:	Cadmium	Cadmium	Chromium	Chromium	Copper	Copper
MAX MDL Units:	.53 ug/L	.53 ug/L	1.2 ug/L	1.2 ug/L	.63 ug/L	.63 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		96		190		97
JANUARY -2007	ND	ND	3.3	ND	53	9
FEBRUARY -2007	0.9	ND	5.2	ND	78	7
MARCH -2007	ND	ND	3.0	2.1	65	10
APRIL -2007	ND	ND	2.8	ND	63	15
MAY -2007	ND	ND	3.3	ND	63	5
JUNE -2007	0.6	1.2	1.6	ND	53	10
JULY -2007	ND	ND	2.7	ND	62	51
AUGUST -2007	ND	ND	2.2	5.0	101	4
SEPTEMBER-2007	ND	ND	ND	1.4	66	9
OCTOBER -2007	ND	ND	1.8	1.4	62	10
NOVEMBER -2007	ND	ND	2.2	2.7	55	12
DECEMBER -2007	ND	ND	4.0	2.0	61	14
AVERAGE	0.1	0.1	2.7	1.2	65	13

Analyte:	Iron	Iron	Lead	Lead	Mercury	Mercury
MAX MDL Units:	37 ug/L	37 ug/L	2 ug/L	2 ug/L	.09 ug/L	.09 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:				190		38
JANUARY -2007	639	48	4.3	ND	ND	ND
FEBRUARY -2007	2060	86	ND	ND	0.13	ND
MARCH -2007	767	94	5.4	2.8	1.77	ND
APRIL -2007	650	95	ND	ND	ND	ND
MAY -2007	605	121	2.1	ND	0.10	ND
JUNE -2007	521	168	ND	ND	ND	ND
JULY -2007	505	2270	ND	ND	ND	ND
AUGUST -2007	541	2880	ND	ND	0.15	ND
SEPTEMBER-2007	602	1600	ND	ND	ND	ND
OCTOBER -2007	443	364	2.4	ND	0.16	ND
NOVEMBER -2007	531	1600	3.8	ND	ND	ND
DECEMBER -2007	841	154	2.2	ND	ND	ND
AVERAGE	725	790	1.7	0.2	0.19	ND

ND= not detected, NA= not analyzed, NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Trace Metals
(Limits shown are the 6-Month Median Maximum)

From: 01-JAN-2007 To: 31-DEC-2007

Analyte:	Nickel	Nickel	Selenium	Selenium	Silver	Silver
MAX MDL Units:	.53 ug/L	.53 ug/L	.28 ug/L	.28 ug/L	.4 ug/L	.4 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		480		1400		52
JANUARY -2007	5.57	3.06	1.61	0.56	0.5	ND
FEBRUARY -2007	6.60	3.72	2.59	0.91	1.0	ND
MARCH -2007	5.65	3.10	1.60	0.67	1.4	ND
APRIL -2007	5.32	19.20	1.31	0.51	0.5	ND
MAY -2007	5.35	6.02	1.59	0.62	1.6	ND
JUNE -2007	4.89	4.07	1.55	0.74	0.8	ND
JULY -2007	5.79	16.60	2.01	2.19	0.9	ND
AUGUST -2007	7.17	11.80	1.47	1.01	1.1	ND
SEPTEMBER-2007	5.09	16.30	0.97	1.30	0.9	ND
OCTOBER -2007	4.05	8.29	1.66	0.67	ND	ND
NOVEMBER -2007	6.32	31.10	1.29	1.42	1.3	ND
DECEMBER -2007	6.74	4.13	1.33	0.45	0.6	ND
AVERAGE	5.71	10.62	1.58	0.92	0.9	ND

Analyte:	Thallium	Thallium	Zinc	Zinc	Manganese	Manganese
MAX MDL Units:	3.9 ug/L	3.9 ug/L	.41 ug/L	.41 ug/L	.24 ug/L	.24 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:				1100		
JANUARY -2007	ND	ND	156	30.9	77	36.0
FEBRUARY -2007	ND	ND	149	28.9	89	44.9
MARCH -2007	ND	ND	137	28.8	61	21.9
APRIL -2007	ND	ND	135	38.3	68	22.2
MAY -2007	ND	ND	136	22.8	61	38.7
JUNE -2007	ND	ND	132	33.9	46	13.5
JULY -2007	ND	ND	140	31.8	38	153.0
AUGUST -2007	ND	ND	143	17.4	30	39.3
SEPTEMBER-2007	4.0	ND	140	39.3	28	47.5
OCTOBER -2007	4.6	ND	117	45.2	26	12.8
NOVEMBER -2007	ND	ND	117	23.3	24	172.0
DECEMBER -2007	5.4	ND	130	39.0	44	16.0
AVERAGE	1.2	ND	136	31.6	49	51.5

Analyte:	Boron	Boron	Barium	Barium	Aluminum	Aluminum
MAX MDL Units:	1.7 ug/L	1.7 ug/L	.039 ug/L	.039 ug/L	47 ug/L	47 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						
JANUARY -2007	276	192	81	42.8	1020	149
FEBRUARY -2007	312	343	148	65.6	2910	ND
MARCH -2007	312	299	101	62.2	1020	227
APRIL -2007	332	359	99	56.7	1130	195
MAY -2007	288	335	103	61.5	1240	127
JUNE -2007	315	322	83	53.2	766	ND
JULY -2007	329	395	101	31.8	962	307
AUGUST -2007	332	353	85	39.3	809	110
SEPTEMBER-2007	289	396	94	34.1	914	177
OCTOBER -2007	238	359	78	46.2	875	160
NOVEMBER -2007	243	467	69	18.7	878	159
DECEMBER -2007	324	372	86	51.8	1210	133
AVERAGE	299	349	94	47.0	1144.5	145.3

ND= not detected, NA= not analyzed, NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Trace Metals
(Limits shown are the 6-Month Median Maximum)

From: 01-JAN-2007 To: 31-DEC-2007

Analyte:	Cobalt	Cobalt	Molybdenum	Molybdenum	Vanadium	Vanadium
MAX MDL Units:	.85 ug/L	.85 ug/L	.89 ug/L	.89 ug/L	.64 ug/L	.64 ug/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						
JANUARY -2007	NR	ND	NR	2.5	NR	ND
FEBRUARY -2007	ND	ND	9.7	4.6	4.2	ND
MARCH -2007	1.0	ND	7.2	5.1	0.9	ND
APRIL -2007	ND	ND	5.3	3.7	0.9	ND
MAY -2007	ND	ND	8.1	4.3	2.6	ND
JUNE -2007	ND	ND	5.1	3.9	ND	ND
JULY -2007	ND	1.7	5.5	9.4	1.2	ND
AUGUST -2007	ND	ND	6.4	3.5	0.8	ND
SEPTEMBER-2007	ND	ND	5.0	5.0	ND	ND
OCTOBER -2007	0.9	ND	5.2	4.2	ND	ND
NOVEMBER -2007	NR	ND	NR	10.4	NR	ND
DECEMBER -2007	NR	ND	NR	4.5	NR	ND
AVERAGE	0.2	0.1	6.4	5.1	1.2	ND

ND= not detected
NA= not analyzed
NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage
Cations

From 01-JAN-2007 To 31-DEC-2007

	Calcium		Magnesium		Lithium	
MDL/Units	.04	mg/L	.1	mg/L	.002	mg/L
	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	57.5	55.0	NR	22.0	0.031	0.028
FEBRUARY -2007	71.1	71.9	29.3	28.2	0.044	0.046
MARCH -2007	70.7	72.8	30.7	30.3	0.035	0.035
APRIL -2007	66.0	64.9	30.9	28.0	0.032	0.026
MAY -2007	66.8	65.6	28.9	27.7	0.036	0.028
JUNE -2007	68.9	79.1	NR	36.7	0.028	0.054
JULY -2007	67.5	79.9	NR	37.7	0.034	0.065
AUGUST -2007	65.4	63.0	29.9	28.7	0.032	0.032
SEPTEMBER-2007	74.6	78.6	31.6	37.6	0.035	0.060
OCTOBER -2007	66.9	70.3	28.1	27.9	0.037	0.035
NOVEMBER -2007	68.2	106.0	NR	51.3	0.033	0.087
DECEMBER -2007	64.0	62.5	NR	23.7	0.031	0.029
Average:	67.3	72.5	29.9	31.7	0.034	0.044

	Sodium		Potassium	
MDL/Units	1	mg/L	.3	mg/L
	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	155	149	17.3	14.6
FEBRUARY -2007	168	169	18.0	15.7
MARCH -2007	179	184	18.5	16.5
APRIL -2007	169	168	17.5	15.8
MAY -2007	179	176	17.1	15.1
JUNE -2007	183	249	20.0	20.5
JULY -2007	178	261	19.7	20.9
AUGUST -2007	177	190	19.1	18.1
SEPTEMBER-2007	183	255	19.4	20.7
OCTOBER -2007	162	172	18.2	18.1
NOVEMBER -2007	176	379	21.9	26.0
DECEMBER -2007	159	158	18.8	16.7
Average:	172	209	18.8	18.2

ND=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Anions

From 01-JAN-2007 To 31-DEC-2007

Analyte:	Bromide	Bromide	Chloride	Chloride	Fluoride	Fluoride
MDL:	.1	.1	7	7	.05	.05
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Source:	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
JANUARY -2007	NR	0.421	NR	199	NR	0.346
FEBRUARY -2007	0.380	0.403	204	210	0.439	0.370
MARCH -2007	NR	0.484	NR	235	NR	0.471
APRIL -2007	NR	0.501	NR	228	NR	0.597
MAY -2007	0.526	0.570	231	234	0.396	0.403
JUNE -2007	NR	0.501	NR	311	NR	0.621
JULY -2007	NR	0.422	NR	324	NR	0.464
AUGUST -2007	0.346	0.363	212	240	0.477	0.439
SEPTEMBER-2007	NR	0.363	NR	294	NR	0.637
OCTOBER -2007	0.371	0.387	204	221	0.381	0.414
NOVEMBER -2007	NR	0.574	NR	439	NR	0.723
DECEMBER -2007	NR	0.511	NR	203	NR	0.495
AVERAGE	0.406	0.458	213	262	0.423	0.498

Analyte:	Nitrate	Nitrate	Ortho Phos	OrthoPhos	Sulfate	Sulfate
MDL:	.04	.04	.2	.2	9	9
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Source:	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
JANUARY -2007	NR	17.2	NR	4.02	NR	159
FEBRUARY -2007	ND	20.2	11.70	5.34	175	209
MARCH -2007	NR	30.9	NR	6.74	NR	207
APRIL -2007	NR	30.0	NR	8.48	NR	176
MAY -2007	ND	24.8	12.20	7.08	164	197
JUNE -2007	NR	3.6	NR	4.32	NR	298
JULY -2007	NR	11.5	NR	1.82	NR	623
AUGUST -2007	0.1	10.0	12.30	7.77	128	147
SEPTEMBER-2007	NR	1.1	NR	5.14	NR	303
OCTOBER -2007	ND	57.7	10.70	8.34	150	190
NOVEMBER -2007	NR	0.9	NR	1.92	NR	395
DECEMBER -2007	NR	34.6	NR	4.67	NR	177
AVERAGE	0.0	20.2	11.73	5.47	154	257

ND= not detected
NA= not analyzed
NS= not sampled
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Ammonia-Nitrogen and Total Cyanides
(Limits shown are the 6-Month Median Maximum)

From 01-JAN-2007 To 31-DEC-2007

	Ammonia-N .3 MG/L SB_INF_02	Ammonia-N .3 MG/L SB_OUTFALL_00	Cyanides,Total .002 MG/L SB_INF_02	Cyanides,Total .002 MG/L SB_OUTFALL_00
Limit:				0.096
JANUARY -2007	NR	5.3*	ND	ND
FEBRUARY -2007	30.5	ND	ND	0.0023
MARCH -2007	NR	ND	ND	0.0020
APRIL -2007	NR	ND	ND	ND
MAY -2007	30.6	ND	ND	ND
JUNE -2007	NR	19.4	ND	0.0026
JULY -2007	NR	5.5	ND	0.0026
AUGUST -2007	32.5	4.0	ND	0.0041
SEPTEMBER-2007	NR	5.9	0.0022	0.0038
OCTOBER -2007	32.4	ND	ND	0.0217
NOVEMBER -2007	NR	40.2	ND	0.0032
DECEMBER -2007	NR	ND	ND	0.0028
Average:	31.5	6.8	0.0002	0.0038

* = Batch did not meet QC criteria, data is not being reported it is shown for review only and it is not included in averages.

ND= not detected
NA= not analyzed
NS= not sampled
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE
Radioactivity

From 01-JAN-2007 To 31-DEC-2007
Effluen to the Ocean
(SB_OUTFALL_00)

Source	Month	Gross Alpha Radiation	Gross Beta Radiation
SB_OUTFALL_00	JANUARY -2007	0.6±0.8	7.0±2.1
SB_OUTFALL_00	FEBRUARY -2007	2.4±1.2	18.3±2.8
SB_OUTFALL_00	MARCH -2007	3.0±1.6	18.5±3.9
SB_OUTFALL_00	APRIL -2007	1.0±1.3	16.4±3.5
SB_OUTFALL_00	MAY -2007	0.9±0.8	17.3±4.1
SB_OUTFALL_00	JUNE -2007	2.0±0.9	20.7±4.9
SB_OUTFALL_00	JULY -2007	1.3±1.0	20.7±4.6
SB_OUTFALL_00	AUGUST -2007	1.8±1.2	18.5±4.2
SB_OUTFALL_00	SEPTEMBER-2007	0.9±0.9	22.6±4.8
SB_OUTFALL_00	OCTOBER -2007	0.8±0.8	22.1±4.4
SB_OUTFALL_00	NOVEMBER -2007	1.5±1.1	26.5±5.5
SB_OUTFALL_00	DECEMBER -2007	0.8±0.7	18.1±4.3
AVERAGE		1.4±1.0	18.9±4.1

ND= not detected
NA= not analyzed
NS= not sampled

Units in picocuries/liter (pCi/L)

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Chlorinated Pesticide Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	EFF JAN	EFF FEB	EFF MAR	EFF APR	EFF MAY	EFF JUN	EFF JUL	EFF AUG	EFF SEP	EFF OCT	EFF NOV	EFF DEC	EFF Avg
Aldrin	60	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Dieldrin	50	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	10	NG/L	19	ND	ND	7	ND	12	*	ND	10	ND	ND	8	5
BHC, Delta isomer	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
p,p-DDE	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
p,p-DDT	50	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
o,p-DDD	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
o,p-DDT	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Heptachlor	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	30	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	80	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA	NA	NA	*	NA	NA	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA	NA	NA	*	NA	NA	NA	NA	NA	NA
Oxychlordane	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Trans Nonachlor	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Cis Nonachlor	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	30	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Beta Endosulfan	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Endrin	50	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Endrin aldehyde	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Mirex	20	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Methoxychlor	60	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Toxaphene	4000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1016	4000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1221	4000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1232	4000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1242	4000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1248	2000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1254	2000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1260	2000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
PCB 1262	2000	NG/L	ND	ND	ND	ND	ND	ND	*	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	60	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	19	0	0	7	0	12	*	0	10	0	0	8	5
DDT and derivatives	100	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Chlordane + related cmpds.	80	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Polychlorinated biphenyls	4000	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Endosulfans	30	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Heptachlors	20	NG/L	0	0	0	0	0	0	*	0	0	0	0	0	0
Chlorinated Hydrocarbons	4000	NG/L	19	0	0	7	0	12	*	0	10	0	0	8	5

nd=not detected; NS=not sampled; NA=not analyzed

* = Due to Glassware cross contamination from previous ELAP PT sample analysis data is not being reported.

"Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds."

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Chlorinated Pesticide Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	INF FEB	INF MAY	INF AUG	INF OCT	INF Avg
Aldrin	60	NG/L	ND	ND	ND	ND	ND
Dieldrin	50	NG/L	ND	ND	ND	ND	ND
BHC, Alpha isomer	20	NG/L	ND	ND	ND	ND	ND
BHC, Beta isomer	20	NG/L	ND	ND	ND	ND	ND
BHC, Gamma isomer	10	NG/L	11	ND	ND	ND	3
BHC, Delta isomer	20	NG/L	ND	ND	ND	ND	ND
p,p-DDD	20	NG/L	ND	ND	ND	ND	ND
p,p-DDE	20	NG/L	23	7	ND	ND	8
p,p-DDT	50	NG/L	ND	ND	ND	ND	ND
o,p-DDD	20	NG/L	ND	ND	ND	ND	ND
o,p-DDE	100	NG/L	ND	ND	ND	ND	ND
o,p-DDT	20	NG/L	ND	ND	ND	ND	ND
Heptachlor	20	NG/L	ND	ND	ND	ND	ND
Heptachlor epoxide	20	NG/L	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	30	NG/L	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	80	NG/L	ND	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA	NA
Gamma Chlordene		NG/L	NA	NA	NA	NA	NA
Oxychlordane	20	NG/L	ND	ND	ND	ND	ND
Trans Nonachlor	20	NG/L	ND	ND	ND	ND	ND
Cis Nonachlor	20	NG/L	ND	ND	ND	ND	ND
Alpha Endosulfan	30	NG/L	ND	ND	ND	ND	ND
Beta Endosulfan	20	NG/L	ND	ND	ND	ND	ND
Endosulfan Sulfate	20	NG/L	ND	ND	ND	ND	ND
Endrin	50	NG/L	ND	ND	ND	ND	ND
Endrin aldehyde	20	NG/L	ND	ND	ND	ND	ND
Mirex	20	NG/L	ND	ND	ND	ND	ND
Methoxychlor	60	NG/L	ND	ND	ND	ND	ND
Toxaphene	4000	NG/L	ND	ND	ND	ND	ND
PCB 1016	4000	NG/L	ND	ND	ND	ND	ND
PCB 1221	4000	NG/L	ND	ND	ND	ND	ND
PCB 1232	4000	NG/L	ND	ND	ND	ND	ND
PCB 1242	4000	NG/L	ND	ND	ND	ND	ND
PCB 1248	2000	NG/L	ND	ND	ND	ND	ND
PCB 1254	2000	NG/L	ND	ND	ND	ND	ND
PCB 1260	2000	NG/L	ND	ND	ND	ND	ND
PCB 1262	2000	NG/L	ND	ND	ND	ND	ND
Aldrin + Dieldrin	60	NG/L	0	0	0	0	0
Hexachlorocyclohexanes	20	NG/L	11	0	0	0	3
DDT and derivatives	100	NG/L	23	7	0	0	8
Chlordane + related cmpds.	80	NG/L	0	0	0	0	0
Polychlorinated biphenyls	4000	NG/L	0	0	0	0	0
Endosulfans	30	NG/L	0	0	0	0	0
Heptachlors	20	NG/L	0	0	0	0	0
Chlorinated Hydrocarbons	4000	NG/L	34	7	0	0	10

nd=not detected; NS=not sampled; 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 WATER RECLAMATION PLANT
Organophosphorus PesticidesEPA Method 614/622 (with additions)
INFLUENT(SB_INF_02) & EFFLUENT(SB_OUTFALL_00)
From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Effluent 08-MAY-2007 P380550	Effluent 02-OCT-2007 P399377	Influent 08-MAY-2007 P380545	Influent 02-OCT-2007 P399372
Demeton O	.15	UG/L	ND	ND	ND	ND
Demeton S	.08	UG/L	ND	ND	ND	ND
Diazinon	.03	UG/L	ND	ND	ND	ND
Guthion	.15	UG/L	ND	ND	ND	ND
Malathion	.03	UG/L	ND	ND	ND	ND
Parathion	.03	UG/L	ND	ND	ND	ND
Tetraethylpyrophosphate		UG/L	NA	NA	NA	NA
Dichlorvos	.05	UG/L	ND	ND	ND	ND
Dibrom	.2	UG/L	ND	ND	ND	ND
Ethoprop	.04	UG/L	ND	ND	ND	ND
Phorate	.04	UG/L	ND	ND	ND	ND
Sulfotepp	.04	UG/L	ND	ND	ND	ND
Disulfoton	.02	UG/L	ND	ND	ND	ND
Monocrotophos		UG/L	NA	NA	NA	NA
Dimethoate	.04	UG/L	ND	ND	ND	ND
Ronnel	.03	UG/L	ND	ND	ND	ND
Trichloronate	.04	UG/L	ND	ND	ND	ND
Merphos	.09	UG/L	ND	ND	ND	ND
Dichlofenthion	.03	UG/L	ND	ND	ND	ND
Tokuthion	.06	UG/L	ND	ND	ND	ND
Stirophos	.03	UG/L	ND	ND	ND	ND
Bolstar	.07	UG/L	ND	ND	ND	ND
Fensulfothion	.07	UG/L	ND	ND	ND	ND
EPN	.09	UG/L	ND	ND	ND	ND
Coumaphos	.15	UG/L	ND	ND	ND	ND
Mevinphos, e isomer	.05	UG/L	ND	ND	ND	ND
Mevinphos, z isomer	.3	UG/L	ND	ND	ND	ND
Chlorpyrifos	.03	UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15	UG/L	0.0	0.0	0.0	0.0
Demeton -O, -S	.15	UG/L	0.0	0.0	0.0	0.0
Total Organophosphorus Pesticides	.3	UG/L	0.0	0.0	0.0	0.0

ND=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE - Tributyl Tin Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	EFF FEB	EFF MAY	EFF AUG	EFF OCT	Average
Dibutyl tin	7	UG/L	ND	ND	ND	ND	ND
Monobutyl Tin	16	UG/L	ND	ND	ND	ND	ND
Tributyl tin	2	UG/L	ND	ND	ND	ND	ND

Analyte	MDL	Units	INF FEB	INF MAY	INF AUG	INF OCT	Average
Dibutyl tin	7	UG/L	ND	ND	ND	ND	ND
Monobutyl Tin	16	UG/L	ND	ND	ND	ND	ND
Tributyl tin	2	UG/L	ND	ND	ND	ND	ND

nd=not detected
NS=not sampled
NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Acid Extractables

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	EFF FEB	EFF MAR	EFF APR	EFF MAY	EFF JUN	EFF JUL	EFF AUG	EFF SEP	EFF OCT	EFF DEC	Average
2-chlorophenol	1.76	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dichlorophenol	1.95	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-chloro-3-methylphenol	1.34	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-trichlorophenol	1.75	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	5.87	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	2.53	UG/L	ND	ND	ND	ND	ND	ND	12.1	ND	6.0	ND	ND	1.6
2-nitrophenol	1.88	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dimethylphenol	1.32	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitrophenol	6.07	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-nitrophenol	3.17	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-methyl-4,6-dinitrophenol	4.29	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chlorinated Phenols	5.87	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Chlorinated Phenols	6.07	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	6.0	0.0	0.0	1.6
Total Phenols	6.07	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	6.0	0.0	0.0	1.6
2-methylphenol	1.51	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-methylphenol(4-MP is unresolved)	4.4	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
4-methylphenol(3-MP is unresolved)	4.22	UG/L	ND	ND	ND	ND	ND	ND	15.9	ND	ND	ND	ND	1.4
2,4,5-trichlorophenol	1.66	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EFF
JAN

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Acid Extractables

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	INF FEB	INF MAY	INF AUG	INF OCT	Average
2-chlorophenol	1.76	UG/L	ND	ND	ND	ND	ND
2,4-dichlorophenol	1.95	UG/L	ND	ND	ND	ND	ND
4-chloro-3-methylphenol	1.34	UG/L	ND	ND	ND	ND	ND
2,4,6-trichlorophenol	1.75	UG/L	ND	ND	ND	ND	ND
Pentachlorophenol	5.87	UG/L	ND	ND	ND	ND	ND
Phenol	2.53	UG/L	36.8	31.4	36.1	27.7	33.0
2-nitrophenol	1.88	UG/L	ND	ND	ND	ND	ND
2,4-dimethylphenol	1.32	UG/L	ND	ND	ND	ND	ND
2,4-dinitrophenol	6.07	UG/L	ND	ND	ND	ND	ND
4-nitrophenol	3.17	UG/L	ND	ND	ND	ND	ND
2-methyl-4,6-dinitrophenol	4.29	UG/L	ND	ND	ND	ND	ND
Total Chlorinated Phenols	5.87	UG/L	0.0	0.0	0.0	0.0	0.0
Total Non-Chlorinated Phenols	6.07	UG/L	36.8	31.4	36.1	27.7	33.0
Total Phenols	6.07	UG/L	36.8	31.4	36.1	27.7	33.0
2-methylphenol	1.51	UG/L	ND	ND	ND	ND	ND
3-methylphenol(4-MP is unresolved)	4.4	UG/L	ND	ND	ND	ND	ND
4-methylphenol(3-MP is unresolved)	4.22	UG/L	108.0	104.0	102.0	95.1	102.3
2,4,5-trichlorophenol	1.66	UG/L	ND	ND	ND	ND	ND

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Base/Neutrals

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	EFF FEB	EFF MAY	EFF AUG	EFF OCT	EFF Average
bis(2-chloroethyl) ether	2.62	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	8.95	UG/L	ND	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.63	UG/L	ND	ND	ND	ND	ND
Nitrobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Hexachloroethane	3.55	UG/L	ND	ND	ND	ND	ND
Isophorone	1.93	UG/L	ND	ND	ND	ND	ND
bis(2-chloroethoxy)methane	1.57	UG/L	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	1.44	UG/L	ND	ND	ND	ND	ND
Naphthalene	1.52	UG/L	ND	ND	ND	ND	ND
Hexachlorobutadiene	2.87	UG/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		UG/L	ND	ND	ND	ND	ND
Acenaphthylene	2.02	UG/L	ND	ND	ND	ND	ND
Dimethyl phthalate	3.26	UG/L	ND	ND	ND	ND	ND
2,6-dinitrotoluene	1.93	UG/L	ND	ND	ND	ND	ND
Acenaphthene	2.2	UG/L	ND	ND	ND	ND	ND
2,4-dinitrotoluene	1.49	UG/L	ND	ND	ND	ND	ND
Fluorene	2.43	UG/L	ND	ND	ND	ND	ND
4-chlorophenyl phenyl ether	3.62	UG/L	ND	ND	ND	ND	ND
Diethyl phthalate	6.97	UG/L	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	2.96	UG/L	ND	ND	ND	ND	ND
4-bromophenyl phenyl ether	4.04	UG/L	ND	ND	ND	ND	ND
Hexachlorobenzene	4.8	UG/L	ND	ND	ND	ND	ND
Phenanthrene	4.15	UG/L	ND	ND	ND	ND	ND
Anthracene	4.04	UG/L	ND	ND	ND	ND	ND
Di-n-butyl phthalate	6.49	UG/L	ND	ND	ND	ND	ND
N-nitrosodimethylamine	2.01	UG/L	2.7	ND	ND	ND	0.7
Fluoranthene	6.9	UG/L	ND	ND	ND	ND	ND
Pyrene	5.19	UG/L	ND	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	4.77	UG/L	ND	ND	ND	ND	ND
Chrysene	7.49	UG/L	ND	ND	ND	ND	ND
Benzo[A]anthracene	7.68	UG/L	ND	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	10.43	UG/L	ND	ND	12.9	ND	3.2
Di-n-octyl phthalate	8.59	UG/L	ND	ND	ND	ND	ND
3,3-dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND	ND
Benzo[K]fluoranthene	7.36	UG/L	ND	ND	ND	ND	ND
3,4-benzo(B)fluoranthene	6.63	UG/L	ND	ND	ND	ND	ND
Benzo[A]pyrene	6.53	UG/L	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	6.27	UG/L	ND	ND	ND	ND	ND
Dibenzo(A,H)anthracene	6.19	UG/L	ND	ND	ND	ND	ND
Benzo[G,H,I]perylene	6.5	UG/L	ND	ND	ND	ND	ND
1,2-diphenylhydrazine	2.49	UG/L	ND	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	7.68	UG/L	0.0	0.0	0.0	0.0	0.0
Base/Neutral Compounds	10.43	UG/L	2.7	0.0	12.9	0.0	3.9
1-methylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
2-methylnaphthalene	2.25	UG/L	ND	ND	ND	ND	ND
2,6-dimethylnaphthalene	3.31	UG/L	ND	ND	ND	ND	ND
2,3,5-trimethylnaphthalene	4.4	UG/L	ND	ND	ND	ND	ND
1-methylphenanthrene	6.29	UG/L	ND	ND	ND	ND	ND
Benzo[e]pyrene	7.67	UG/L	ND	ND	ND	ND	ND
Perylene	6.61	UG/L	ND	ND	ND	ND	ND
Biphenyl	2.43	UG/L	ND	ND	ND	ND	ND

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Base/Neutrals

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	INF FEB	INF MAY	INF AUG	INF OCT	Average
bis(2-chloroethyl) ether	2.62	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	8.95	UG/L	ND	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.63	UG/L	ND	ND	ND	ND	ND
Nitrobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Hexachloroethane	3.55	UG/L	ND	ND	ND	ND	ND
Isophorone	1.93	UG/L	ND	ND	ND	ND	ND
bis(2-chloroethoxy)methane	1.57	UG/L	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	1.44	UG/L	ND	ND	ND	ND	ND
Naphthalene	1.52	UG/L	ND	ND	ND	ND	ND
Hexachlorobutadiene	2.87	UG/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		UG/L	ND	ND	ND	ND	ND
Acenaphthylene	2.02	UG/L	ND	ND	ND	ND	ND
Dimethyl phthalate	3.26	UG/L	ND	ND	ND	ND	ND
2,6-dinitrotoluene	1.93	UG/L	ND	ND	ND	ND	ND
Acenaphthene	2.2	UG/L	ND	ND	ND	ND	ND
2,4-dinitrotoluene	1.49	UG/L	ND	ND	ND	ND	ND
Fluorene	2.43	UG/L	ND	ND	ND	ND	ND
4-chlorophenyl phenyl ether	3.62	UG/L	ND	ND	ND	ND	ND
Diethyl phthalate	6.97	UG/L	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	2.96	UG/L	ND	ND	ND	ND	ND
4-bromophenyl phenyl ether	4.04	UG/L	ND	ND	ND	ND	ND
Hexachlorobenzene	4.8	UG/L	ND	ND	ND	ND	ND
Phenanthrene	4.15	UG/L	ND	ND	ND	ND	ND
Anthracene	4.04	UG/L	ND	ND	ND	ND	ND
Di-n-butyl phthalate	6.49	UG/L	ND	ND	ND	ND	ND
N-nitrosodimethylamine	2.01	UG/L	ND	ND	ND	ND	ND
Fluoranthene	6.9	UG/L	ND	ND	ND	ND	ND
Pyrene	5.19	UG/L	ND	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	4.77	UG/L	ND	ND	ND	ND	ND
Chrysene	7.49	UG/L	ND	ND	ND	ND	ND
Benzo[A]anthracene	7.68	UG/L	ND	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	10.43	UG/L	16.3	30.8	11.2	33.2	22.9
Di-n-octyl phthalate	8.59	UG/L	ND	ND	ND	ND	ND
3,3-dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND	ND
Benzo[K]fluoranthene	7.36	UG/L	ND	ND	ND	ND	ND
3,4-benzo(B)fluoranthene	6.63	UG/L	ND	ND	ND	ND	ND
Benzo[A]pyrene	6.53	UG/L	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	6.27	UG/L	ND	ND	ND	ND	ND
Dibenzo(A,H)anthracene	6.19	UG/L	ND	ND	ND	ND	ND
Benzo[G,H,I]perylene	6.5	UG/L	ND	ND	ND	ND	ND
1,2-diphenylhydrazine	2.49	UG/L	ND	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	7.68	UG/L	0.0	0.0	0.0	0.0	0.0
Base/Neutral Compounds	10.43	UG/L	16.3	30.8	11.2	33.2	22.9
1-methylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
2-methylnaphthalene	2.25	UG/L	ND	ND	ND	ND	ND
2,6-dimethylnaphthalene	3.31	UG/L	ND	ND	ND	ND	ND
2,3,5-trimethylnaphthalene	4.4	UG/L	ND	ND	ND	ND	ND
1-methylphenanthrene	6.29	UG/L	ND	ND	ND	ND	ND
Benzo[e]pyrene	7.67	UG/L	ND	ND	ND	ND	ND
Perylene	6.61	UG/L	ND	ND	ND	ND	ND
Biphenyl	2.43	UG/L	ND	ND	ND	ND	ND

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Purgeables

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	EFF FEB Avg	EFF MAY Avg	EFF AUG Avg	EFF OCT Avg	EFF Average
Dichlorodifluoromethane		UG/L	NR	ND	ND	ND	ND
Chloromethane	1	UG/L	ND	ND	ND	ND	ND
Vinyl chloride	1	UG/L	ND	ND	ND	ND	ND
Bromomethane	1	UG/L	ND	ND	ND	ND	ND
Chloroethane	1	UG/L	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	UG/L	ND	ND	ND	ND	ND
Acrolein	11.4	UG/L	ND	ND	ND	ND	ND
1,1-dichloroethane	1	UG/L	ND	ND	ND	ND	ND
Methylene chloride	1	UG/L	ND	ND	2.0	ND	0.5
trans-1,2-dichloroethene	1	UG/L	ND	ND	ND	ND	ND
1,1-dichloroethene	1	UG/L	ND	ND	ND	ND	ND
Acrylonitrile	13.8	UG/L	ND	ND	ND	ND	ND
Chloroform	1	UG/L	ND	ND	3.3	4.5	2.0
1,1,1-trichloroethane	1	UG/L	ND	ND	ND	ND	ND
Carbon tetrachloride	1	UG/L	ND	ND	ND	ND	ND
Benzene	1	UG/L	ND	ND	ND	ND	ND
1,2-dichloroethane	1	UG/L	ND	ND	ND	ND	ND
Trichloroethene	1	UG/L	ND	ND	ND	ND	ND
1,2-dichloropropane	1	UG/L	ND	ND	ND	ND	ND
Bromodichloromethane	1	UG/L	ND	ND	ND	ND	ND
2-chloroethylvinyl ether	1	UG/L	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	1	UG/L	ND	ND	ND	ND	ND
Toluene	1	UG/L	ND	ND	5.5	14.5	5.0
trans-1,3-dichloropropene	1	UG/L	ND	ND	ND	ND	ND
1,1,2-trichloroethane	1	UG/L	ND	ND	ND	ND	ND
Tetrachloroethene	1	UG/L	ND	ND	ND	ND	ND
Dibromochloromethane	1	UG/L	ND	ND	ND	ND	ND
Chlorobenzene	1	UG/L	ND	ND	ND	ND	ND
Ethylbenzene	1	UG/L	ND	ND	ND	2.2	0.6
Bromoform	1	UG/L	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	1	UG/L	ND	ND	ND	ND	ND
1,3-dichlorobenzene	1	UG/L	ND	ND	ND	ND	ND
1,4-dichlorobenzene	1	UG/L	ND	ND	3.3	2.9	1.6
1,2-dichlorobenzene	1	UG/L	ND	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	1	UG/L	0.0	0.0	0.0	0.0	0.0
Purgeable Compounds	13.8	UG/L	0.0	0.0	10.8	21.2	8.0
Dichlorobenzenes	1	UG/L	0.0	0.0	0.0	0.0	0.0
Methyl Iodide	1	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	1	UG/L	ND	ND	1.6	1.4	0.8
Acetone	20	UG/L	ND	ND	621	1030	413
Allyl chloride	1	UG/L	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1	UG/L	ND	ND	ND	ND	ND
Chloroprene	1.4	UG/L	ND	ND	ND	ND	ND
1,2-dibromoethane	3.3	UG/L	ND	ND	ND	ND	ND
2-butanone	4	UG/L	ND	ND	6.8	28.2	8.8
Methyl methacrylate	4.6	UG/L	ND	ND	ND	ND	ND
2-nitropropane	10	UG/L	ND	ND	ND	ND	ND
4-methyl-2-pentanone	6.1	UG/L	ND	ND	ND	ND	ND
meta,para xylenes	3.1	UG/L	ND	ND	ND	10.5	2.6
ortho-xylene	3.4	UG/L	ND	ND	ND	8.4	2.1
Isopropylbenzene	4.4	UG/L	ND	ND	ND	ND	ND
Styrene	4.7	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	7.2	UG/L	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	1.44	UG/L	ND	ND	ND	ND	ND

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Purgeables

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	INF FEB Avg	INF MAY Avg	INF AUG Avg	INF OCT Avg	INF Average
Dichlorodifluoromethane		UG/L	NR	ND	ND	ND	ND
Chloromethane	1	UG/L	ND	ND	ND	ND	ND
Vinyl chloride	1	UG/L	ND	ND	ND	ND	ND
Bromomethane	1	UG/L	ND	ND	ND	ND	ND
Chloroethane	1	UG/L	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	UG/L	ND	ND	ND	ND	ND
Acrolein	11.4	UG/L	ND	ND	ND	ND	ND
1,1-dichloroethane	1	UG/L	ND	ND	ND	ND	ND
Methylene chloride	1	UG/L	2.1	2.6	3.0	ND	1.9
trans-1,2-dichloroethene	1	UG/L	ND	ND	ND	ND	ND
1,1-dichloroethene	1	UG/L	ND	ND	ND	ND	ND
Acrylonitrile	13.8	UG/L	ND	ND	ND	ND	ND
Chloroform	1	UG/L	5.4	6.0	5.3	4.3	5.3
1,1,1-trichloroethane	1	UG/L	ND	ND	ND	ND	ND
Carbon tetrachloride	1	UG/L	ND	ND	ND	ND	ND
Benzene	1	UG/L	ND	ND	ND	ND	ND
1,2-dichloroethane	1	UG/L	ND	ND	ND	ND	ND
Trichloroethene	1	UG/L	ND	ND	ND	ND	ND
1,2-dichloropropane	1	UG/L	ND	ND	ND	ND	ND
Bromodichloromethane	1	UG/L	1.3	ND	ND	ND	0.3
2-chloroethylvinyl ether	1	UG/L	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	1	UG/L	ND	ND	ND	ND	ND
Toluene	1	UG/L	1.0	ND	20.7	ND	5.4
trans-1,3-dichloropropene	1	UG/L	ND	ND	ND	ND	ND
1,1,2-trichloroethane	1	UG/L	ND	ND	ND	ND	ND
Tetrachloroethene	1	UG/L	ND	ND	1.8	ND	0.5
Dibromochloromethane	1	UG/L	ND	ND	ND	ND	ND
Chlorobenzene	1	UG/L	ND	ND	ND	ND	ND
Ethylbenzene	1	UG/L	ND	ND	ND	ND	ND
Bromoform	1	UG/L	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	1	UG/L	ND	ND	ND	ND	ND
1,3-dichlorobenzene	1	UG/L	ND	ND	ND	ND	ND
1,4-dichlorobenzene	1	UG/L	3.1	2.6	1.8	2.0	2.4
1,2-dichlorobenzene	1	UG/L	ND	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	1	UG/L	1.3	0.0	0.0	0.0	0.3
Purgeable Compounds	13.8	UG/L	9.8	8.6	30.8	4.3	13.4
Dichlorobenzenes	1	UG/L	0.0	0.0	0.0	0.0	0.0
Methyl Iodide	1	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	1	UG/L	1.6	4.3	3.1	ND	2.3
Acetone	20	UG/L	199	251	85	140	169
Allyl chloride	1	UG/L	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1	UG/L	ND	ND	ND	ND	ND
Chloroprene	1.4	UG/L	ND	ND	ND	ND	ND
1,2-dibromoethane	3.3	UG/L	ND	ND	ND	ND	ND
2-butanone	4	UG/L	ND	6.1	ND	ND	1.5
Methyl methacrylate	4.6	UG/L	ND	ND	ND	ND	ND
2-nitropropane	10	UG/L	ND	ND	ND	ND	ND
4-methyl-2-pentanone	6.1	UG/L	ND	ND	ND	ND	ND
meta,para xylenes	3.1	UG/L	ND	ND	ND	ND	ND
ortho-xylene	3.4	UG/L	ND	ND	ND	ND	ND
Isopropylbenzene	4.4	UG/L	ND	ND	ND	ND	ND
Styrene	4.7	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	7.2	UG/L	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	1.44	UG/L	ND	ND	ND	ND	ND

nd=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	INF JAN P368500	INF FEB P370700	INF MAR P375902	INF APR P379811
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Analyte	MDL	Units	Equiv	INF MAY P380545	INF JUN P387199	INF JUL P390698	INF AUG P392170
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	INF SEP P397847	INF OCT P399372	INF NOV P405544	INF DEC P409100
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	EFF JAN P368504	EFF FEB P370705	EFF MAR P375906	EFF APR P379815
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Effluent Limit (TCDD): 0.37 pg/L (30-day Average)

Analyte	MDL	Units	Equiv	EFF MAY P380550	EFF JUN P388039	EFF JUL P390702	EFF AUG P392175
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Effluent Limit (TCDD): 0.37 pg/L (30-day Average)

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

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Analyte	MDL	Units	Equiv	EFF SEP P397851	EFF OCT P399377	EFF NOV P405548	EFF DEC P409104
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Effluent Limit (TCDD): 0.39 pg/L (30-day Average)

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	INF TCCD JAN P368500	INF TCCD FEB P370700	INF TCCD MAR P375902	INF TCCD APR P379811
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Analyte	MDL	Units	Equiv	INF TCCD MAY P380545	INF TCCD JUN P387199	INF TCCD JUL P390698	INF TCCD AUG P392170
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
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From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	INF TCCD SEP P397847	INF TCCD OCT P399372	INF TCCD NOV P405544	INF TCCD DEC P409100
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	EFF TCCD JAN P368504	EFF TCCD FEB P370705	EFF TCCD MAR P375906	EFF TCCD APR P379815
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Analyte	MDL	Units	Equiv	EFF TCCD MAY P380550	EFF TCCD JUN P388039	EFF TCCD JUL P390702	EFF TCCD AUG P392175
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

From 01-JAN-2007 To 31-DEC-2007

Analyte	MDL	Units	Equiv	EFF TCCD SEP P397851	EFF TCCD OCT P399377	EFF TCCD NOV P405548	EFF TCCD DEC P409104
2,3,7,8-tetra CDD	500	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	500	PG/L	0.010	ND	ND	ND	ND
octa CDD	1000	PG/L	0.001	ND	ND	ND	ND
2,3,7,8-tetra CDF	250	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	500	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	500	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	500	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	500	PG/L	0.010	ND	ND	ND	ND
octa CDF	1000	PG/L	0.001	ND	ND	ND	ND

Above are permit required CDD/CDF isomers.
nd= not detected
NA= not analyzed NS= not sampled

SOUTH BAY WATER RECLAMATION PLANT
Additional Analytes – sewage annual

From 01-JAN-2007 To 31-DEC-2007

	Aluminum		Turbidity		Barium	
MDL/Units:	47	ug/L	.13	NTU	.039	ug/L
Source:	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	1020	149	NR	2.2	81.4	42.8
FEBRUARY -2007	2910	ND	152.0	1.4	148.0	65.6
MARCH -2007	1020	227	NR	1.4	101.0	62.2
APRIL -2007	1130	195	NR	1.9	98.9	56.7
MAY -2007	1240	127	161.0	2.4	103.0	61.5
JUNE -2007	766	ND	NR	11.1	83.1	53.2
JULY -2007	962	307	NR	21.9	101.0	31.8
AUGUST -2007	1120	290	157.0	18.0	84.7	39.3
SEPTEMBER-2007	914	177	NR	18.7	93.8	34.1
OCTOBER -2007	875	160	88.0	7.4	77.7	46.2
NOVEMBER -2007	878	159	NR	5.8	68.7	18.7
DECEMBER -2007	1210	133	NR	2.8	86.0	51.8
Average:	1170	160	139.5	7.9	93.9	47.0

	Manganese		Boron		Cobalt	
MDL/Units:	.24	ug/L	1.7	ug/L	.85	ug/L
Source	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	77.3	36.0	276	192	NR	ND
FEBRUARY -2007	89.3	44.9	312	343	ND	ND
MARCH -2007	61.2	21.9	312	299	1.0	ND
APRIL -2007	68.2	22.2	332	359	ND	ND
MAY -2007	61.2	38.7	288	335	ND	ND
JUNE -2007	46.4	13.5	315	322	ND	ND
JULY -2007	37.9	153.0	329	395	ND	1.7
AUGUST -2007	29.8	39.3	332	353	ND	ND
SEPTEMBER-2007	27.8	47.5	289	396	ND	ND
OCTOBER -2007	25.5	12.8	238	359	0.9	ND
NOVEMBER -2007	24.2	172.0	243	467	NR	ND
DECEMBER -2007	43.6	16.0	324	372	NR	ND
Average:	49.4	51.5	299	349	0.2	0.1

	Calcium		Magnesium		Lithium	
MDL/Units:	.04	mg/L	.1	mg/L	.002	mg/L
Source:	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	57.5	55.0	NR	22.0	0.031	0.028
FEBRUARY -2007	71.1	71.9	29.3	28.2	0.044	0.046
MARCH -2007	70.7	72.8	30.7	30.3	0.035	0.035
APRIL -2007	66.0	64.9	30.9	28.0	0.032	0.026
MAY -2007	66.8	65.6	28.9	27.7	0.036	0.028
JUNE -2007	68.9	79.1	NR	36.7	0.028	0.054
JULY -2007	67.5	79.9	NR	37.7	0.034	0.065
AUGUST -2007	65.4	63.0	29.9	28.7	0.032	0.032
SEPTEMBER-2007	74.6	78.6	31.6	37.6	0.035	0.060
OCTOBER -2007	66.9	70.3	28.1	27.9	0.037	0.035
NOVEMBER -2007	68.2	106.0	NR	51.3	0.033	0.087
DECEMBER -2007	64.0	62.5	NR	23.7	0.031	0.029
Average:	67.3	72.5	29.9	31.7	0.034	0.044

ND=not detected; NS=not sampled; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
Additional Analytes

From 01-JAN-2007 To 31-DEC-2007

	Sodium		Potassium	
MDL/Units:	1	mg/L	.3	mg/L
Source:	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	155	149	17.3	14.6
FEBRUARY -2007	168	169	18.0	15.7
MARCH -2007	179	184	18.5	16.5
APRIL -2007	169	168	17.5	15.8
MAY -2007	179	176	17.1	15.1
JUNE -2007	183	249	20.0	20.5
JULY -2007	178	261	19.7	20.9
AUGUST -2007	177	190	19.1	18.1
SEPTEMBER-2007	183	255	19.4	20.7
OCTOBER -2007	162	172	18.2	18.1
NOVEMBER -2007	176	379	21.9	26.0
DECEMBER -2007	159	158	18.8	16.7
Average:	172	209	18.8	18.2

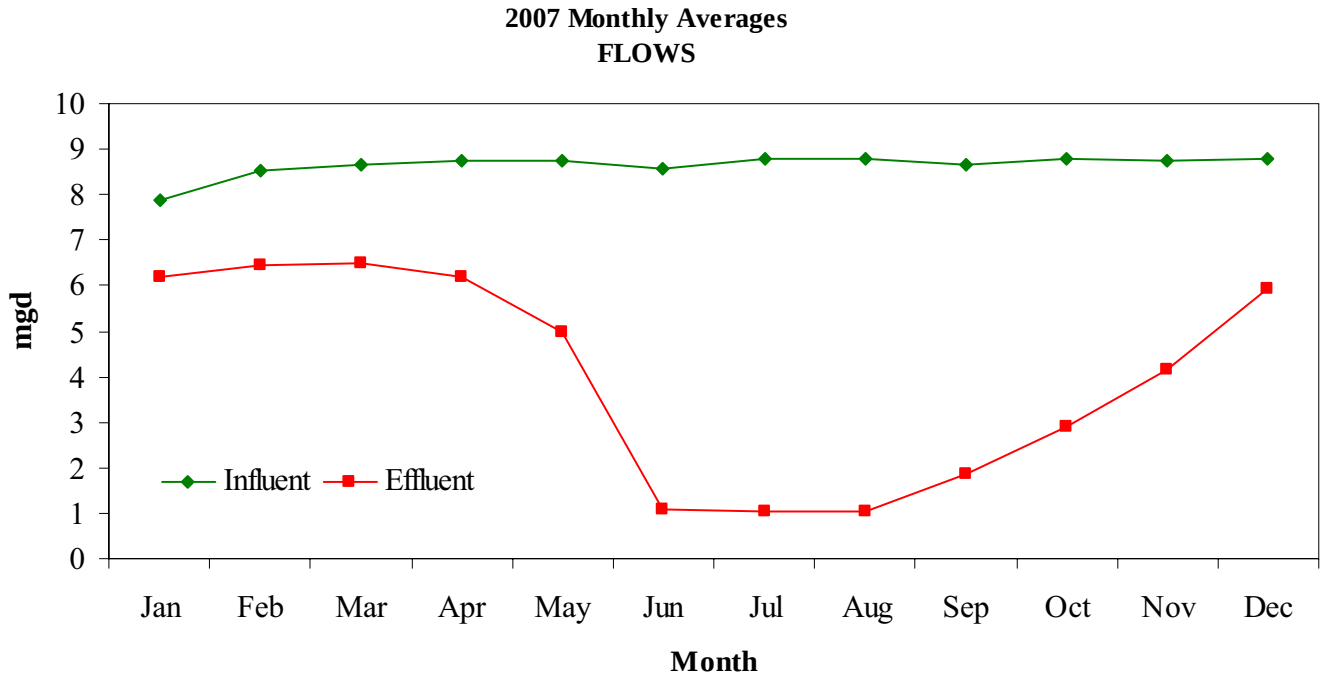
	Molybdenum		Vanadium		Total Dissolved Solids	
MDL/Units:	.89	ug/L	.64	ug/L	42	mg/L
Source:	Inf.	Eff.	Inf.	Eff.	Inf.	Eff.
JANUARY -2007	NR	2.5	NR	ND	830	795
FEBRUARY -2007	9.7	4.6	4.2	ND	947	898
MARCH -2007	7.2	5.1	0.9	ND	929	917
APRIL -2007	5.3	3.7	0.9	ND	890	867
MAY -2007	8.1	4.3	2.6	ND	907	883
JUNE -2007	5.1	3.9	ND	ND	909	1020
JULY -2007	5.5	9.4	1.2	ND	914	1240
AUGUST -2007	6.4	3.5	0.8	ND	899	1190
SEPTEMBER-2007	5.0	5.0	ND	ND	951	1080
OCTOBER -2007	5.2	4.2	ND	ND	933	1250
NOVEMBER -2007	NR	10.4	NR	ND	823	828
DECEMBER -2007	NR	4.5	NR	ND	854	847
Average:	6.4	5.1	1.2	ND	899	985

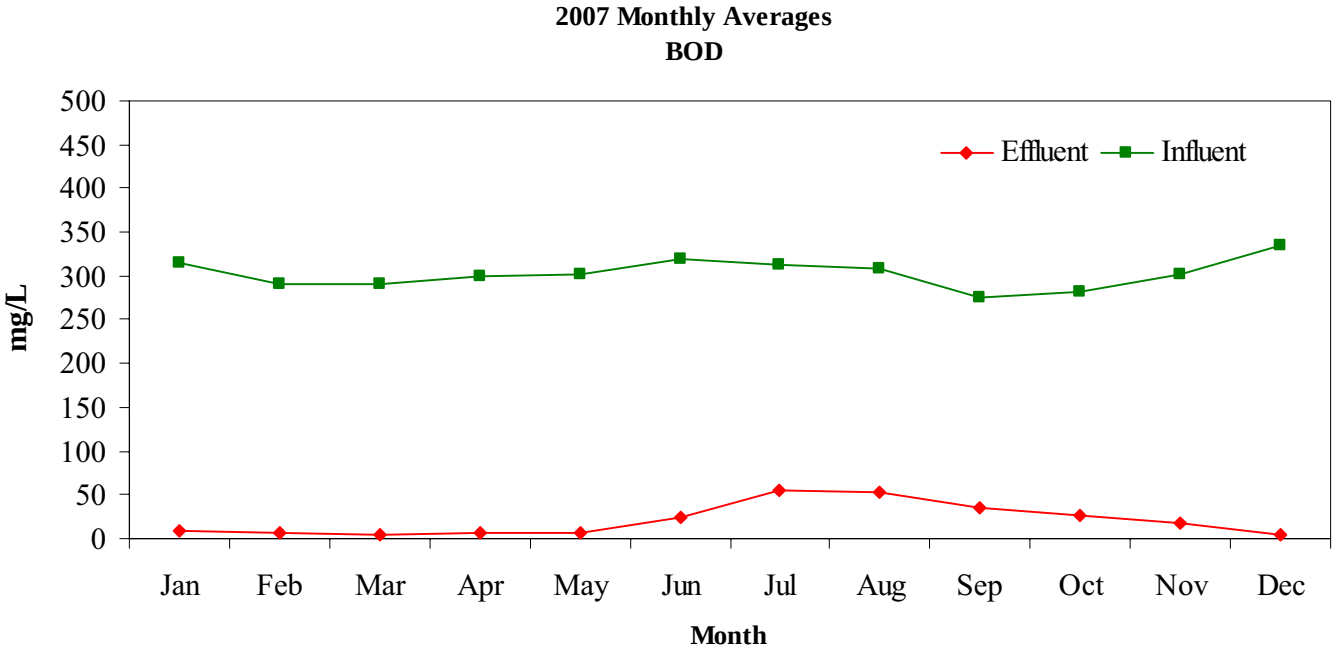
ND=not detected; NS=not sampled; NA=not analyzed

D. Influent and Effluent Graphs

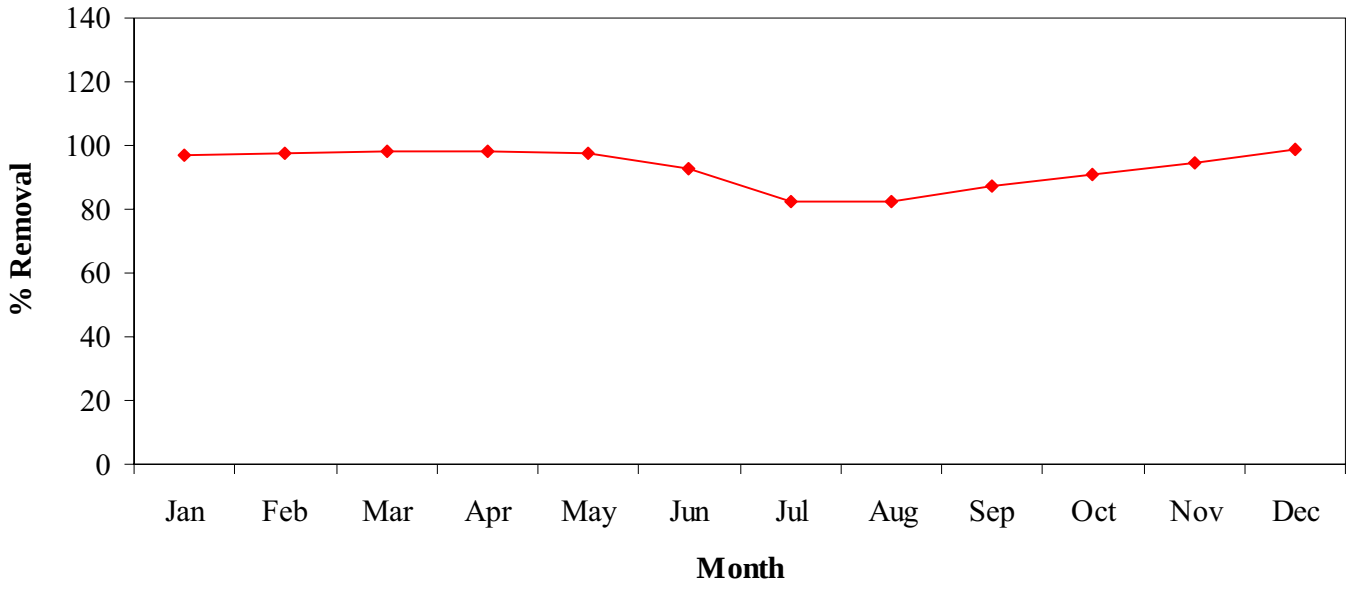
Graphs of monthly averages for permit parameters with measurable concentration averages.

Where possible, the influent and effluent values of a given parameter have been included on the same graph so that removals and other relationships are readily apparent. Please note that many of the graphs are on expanded scales. That is, they normally don't go to zero concentrations but show, in magnified scale, that range of concentrations where variation takes place. This makes differences and some trends obvious that might normally not be noticed. However, it also provides the temptation to interpret minor changes or trends as being of more significance than they are. Frequent reference to the scales and the actual differences in concentrations is therefore necessary.

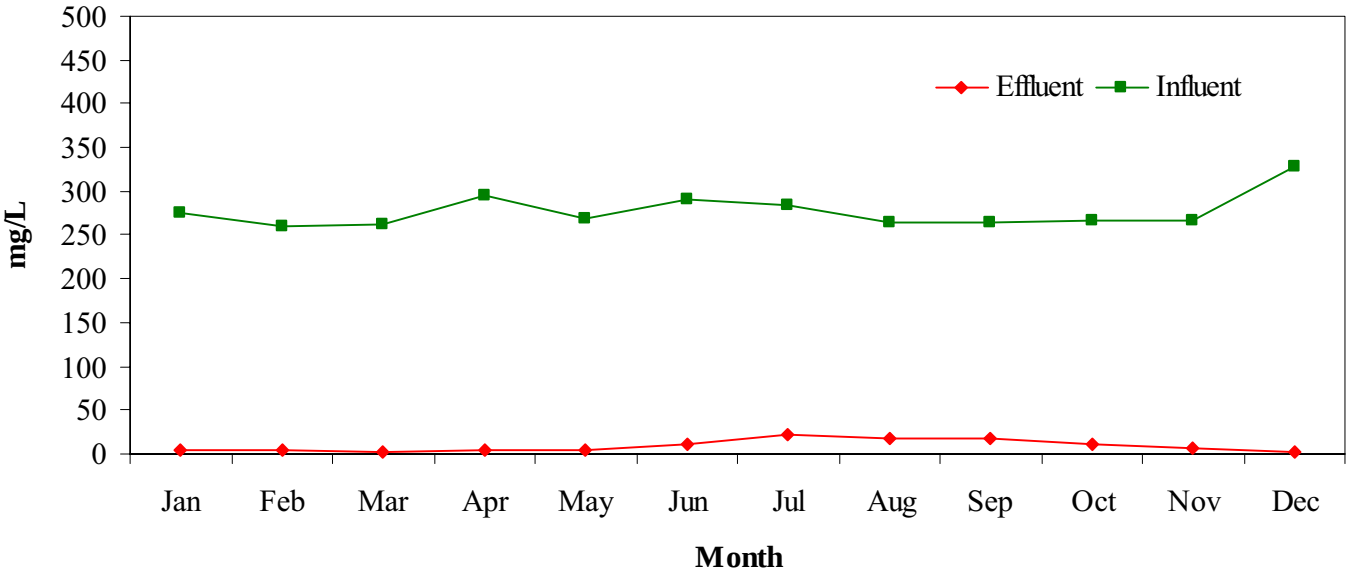

2007 Monthly Averages
FLOWS
mgd
10
9
8
7
6
5
4
3
2
1
0
Influent
Effluent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

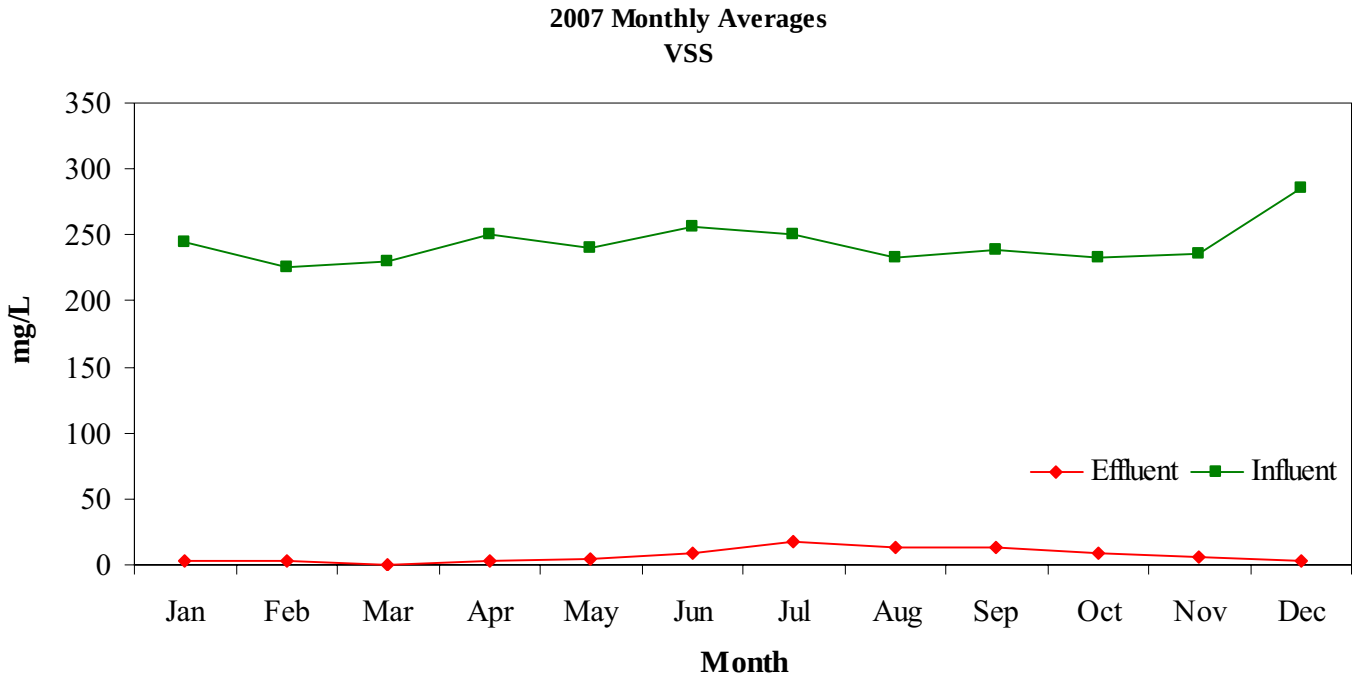

2007 Monthly Averages
BOD
mg/L
500
450
400
350
300
250
200
150
100
50
0
Effluent
Influent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

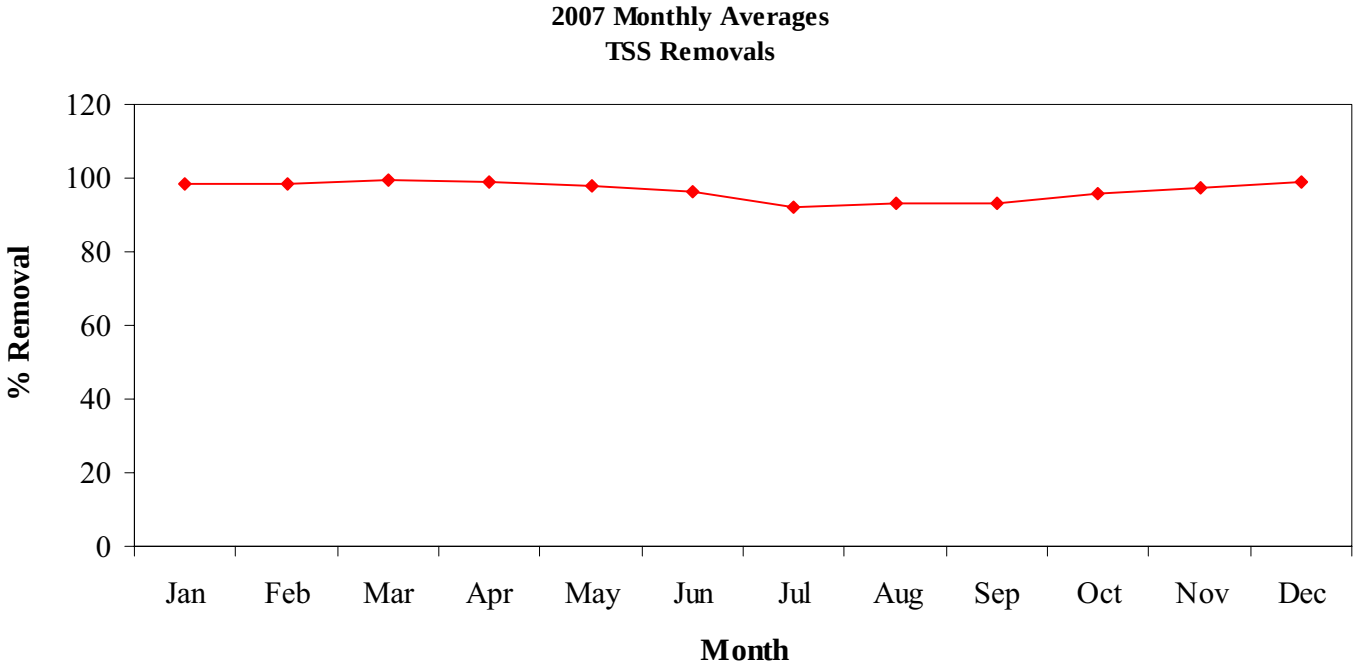
2007 Monthly Averages
BOD Removals



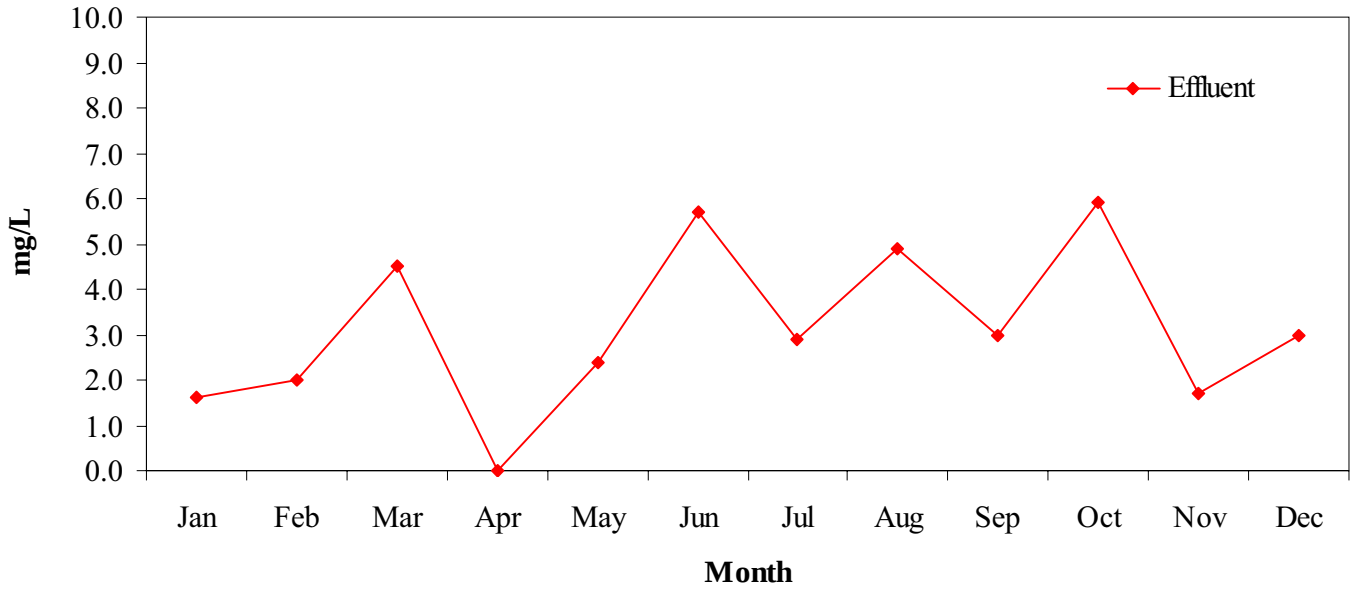
2007 Monthly Averages
TSS



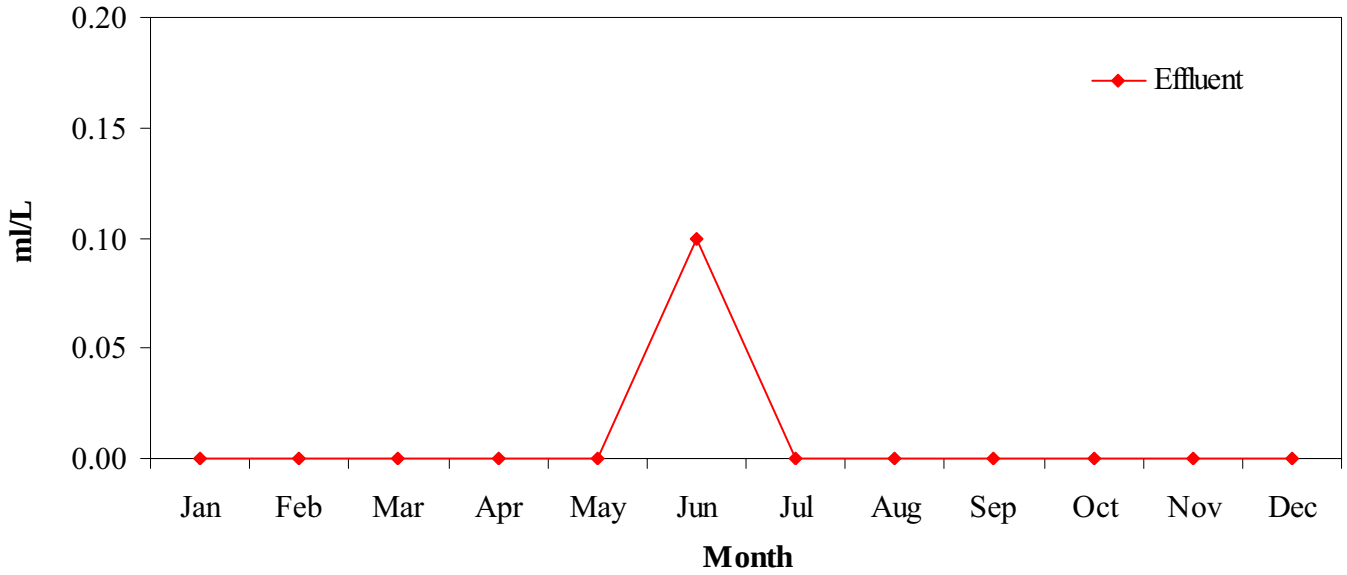

2007 Monthly Averages
VSS
350
300
250
200
150
100
50
0
mg/L
Effluent
Influent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

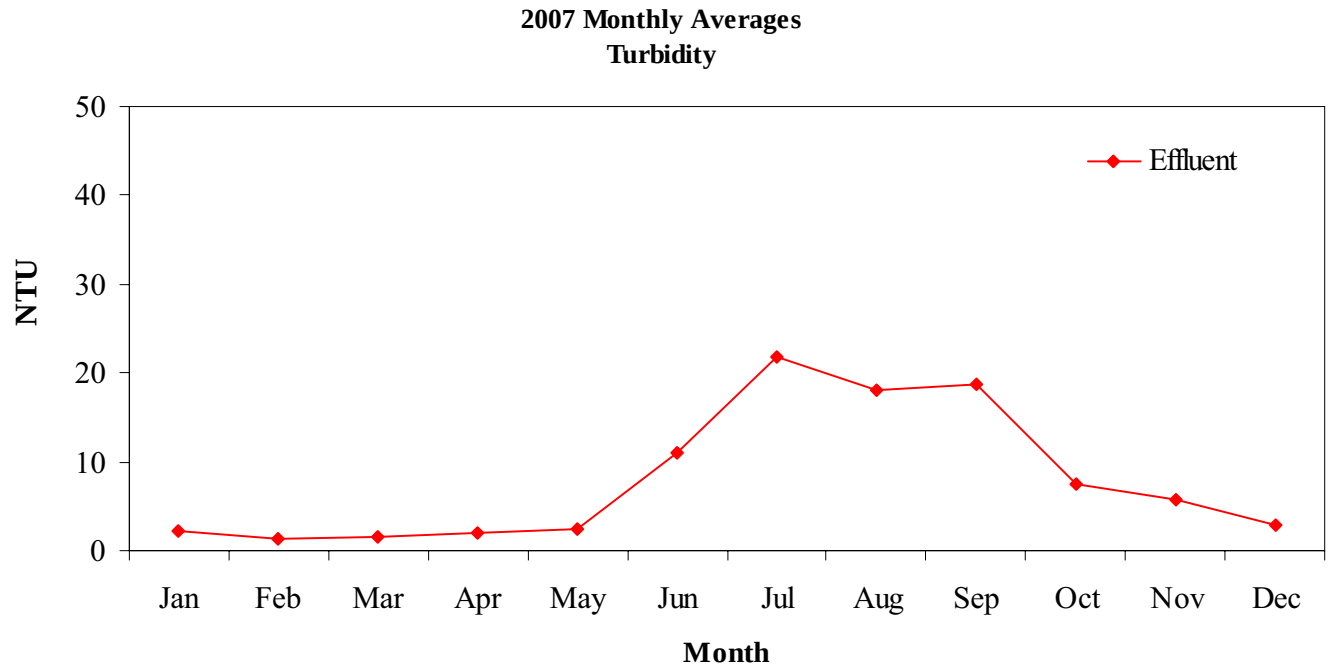

2007 Monthly Averages
TSS Removals
120
100
80
60
40
20
0
% Removal
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

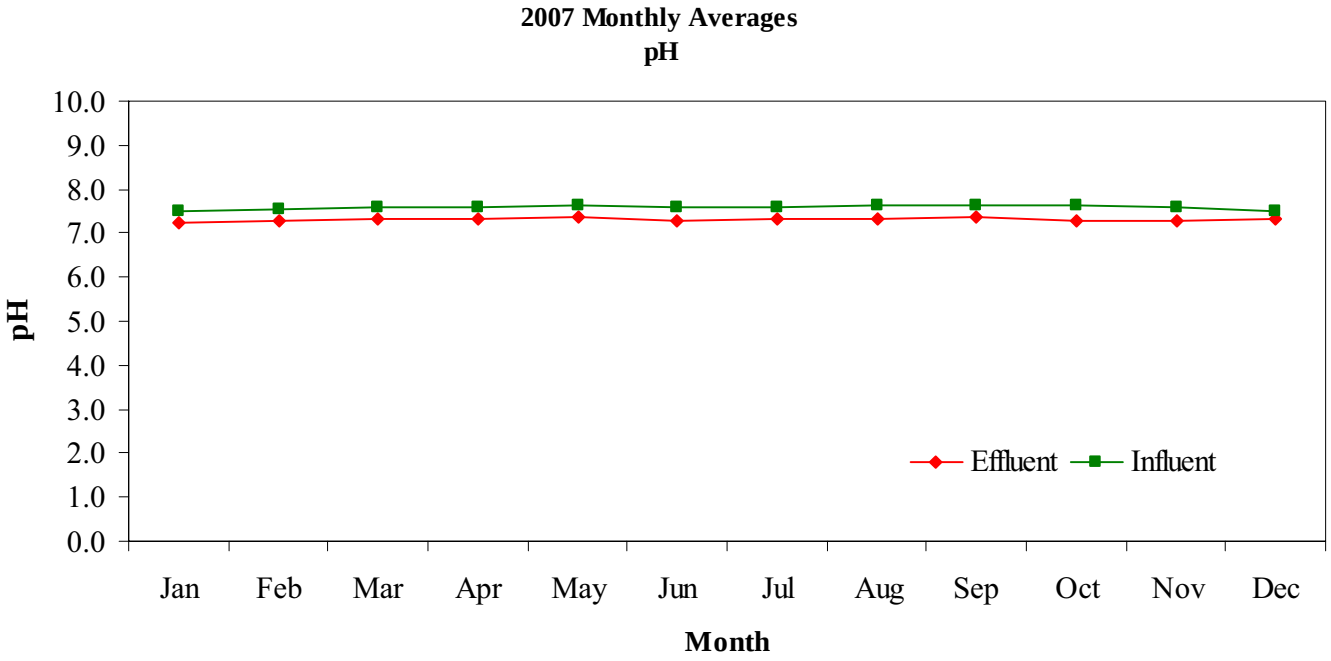
2007 Monthly Averages
Oil & Grease



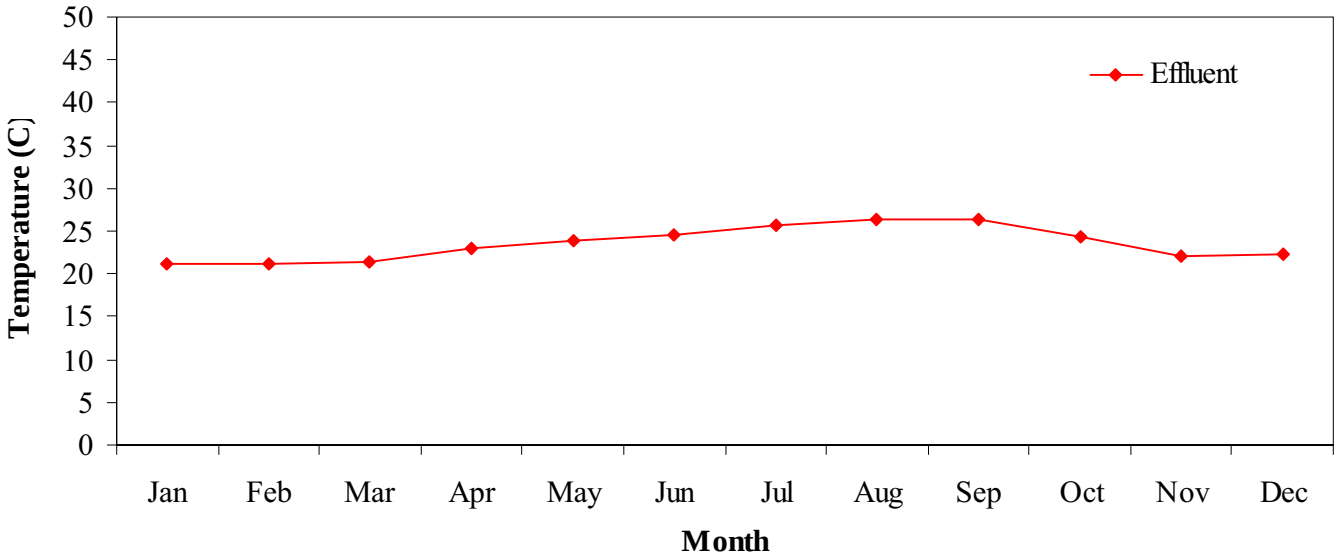
2007 Monthly Averages
SettleableSolids



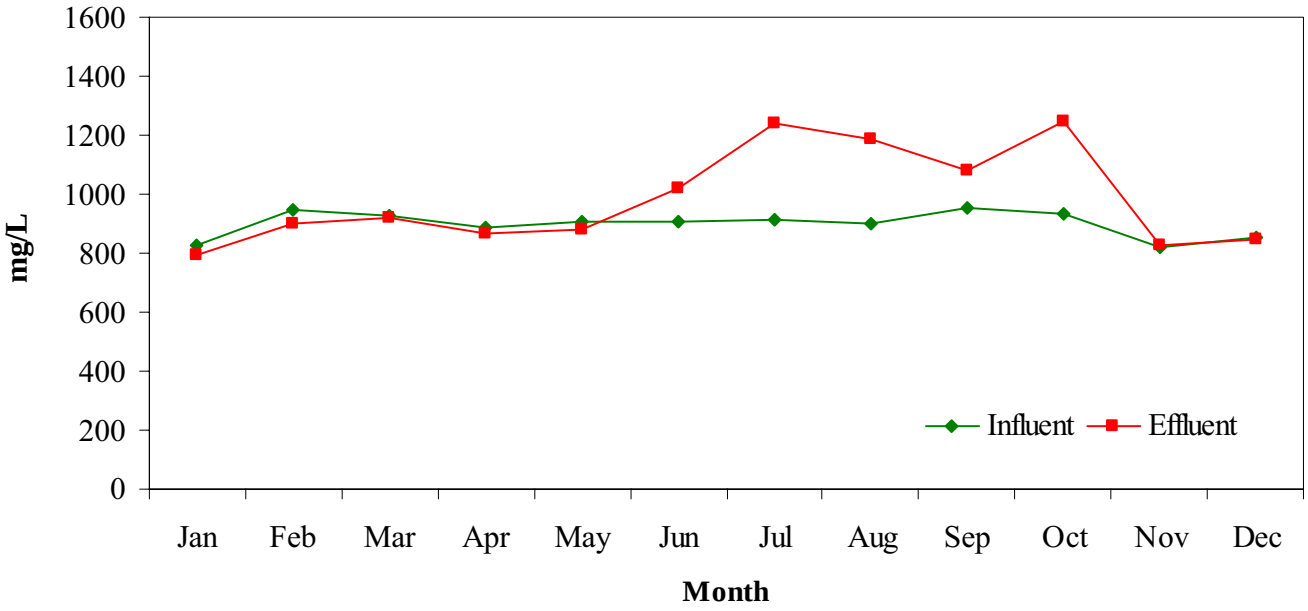

2007 Monthly Averages
Turbidity
NTU
50
40
30
20
10
0
Effluent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
pH
pH
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Effluent
Influent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

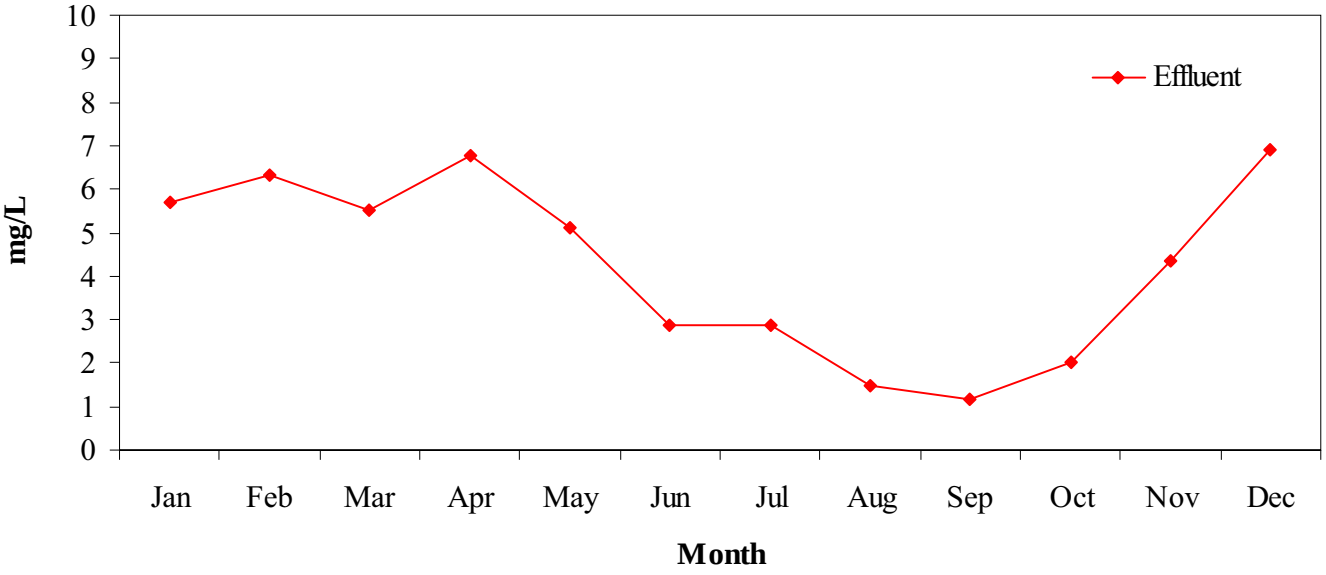
2007 Monthly Averages
Outfall Temperature



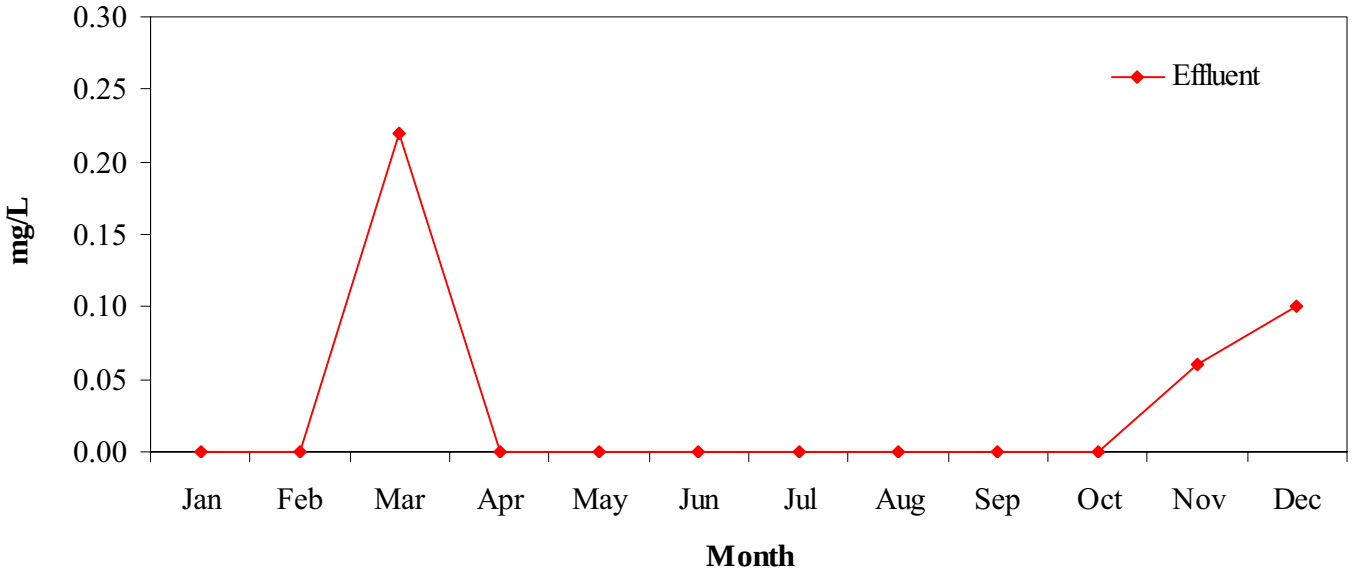
2007 Monthly Averages
Total Dissolved Solids



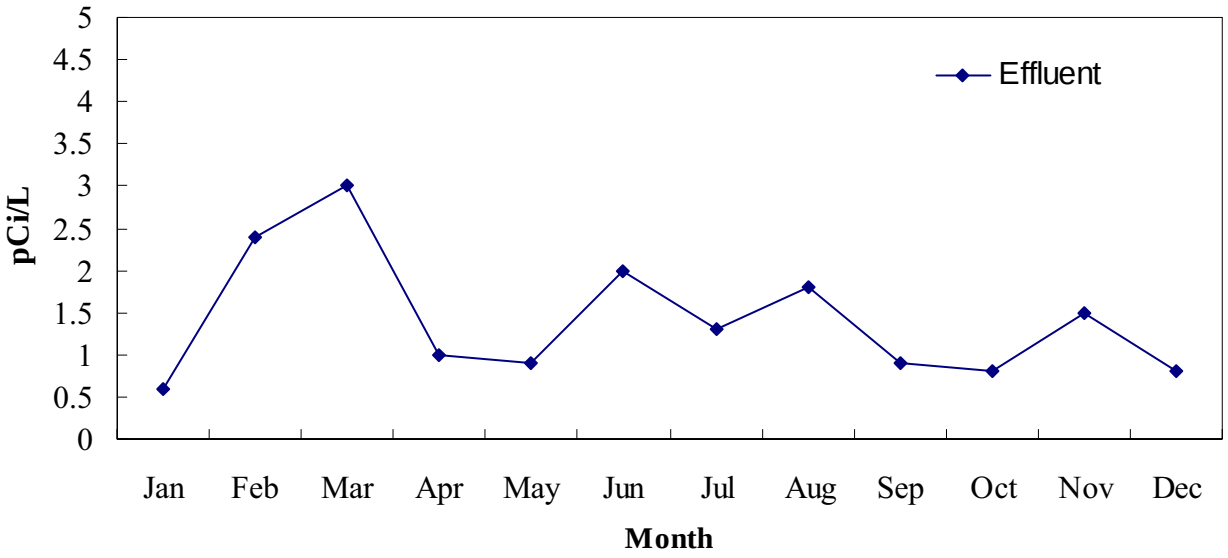
2007 Monthly Averages
Dissolved Oxygen



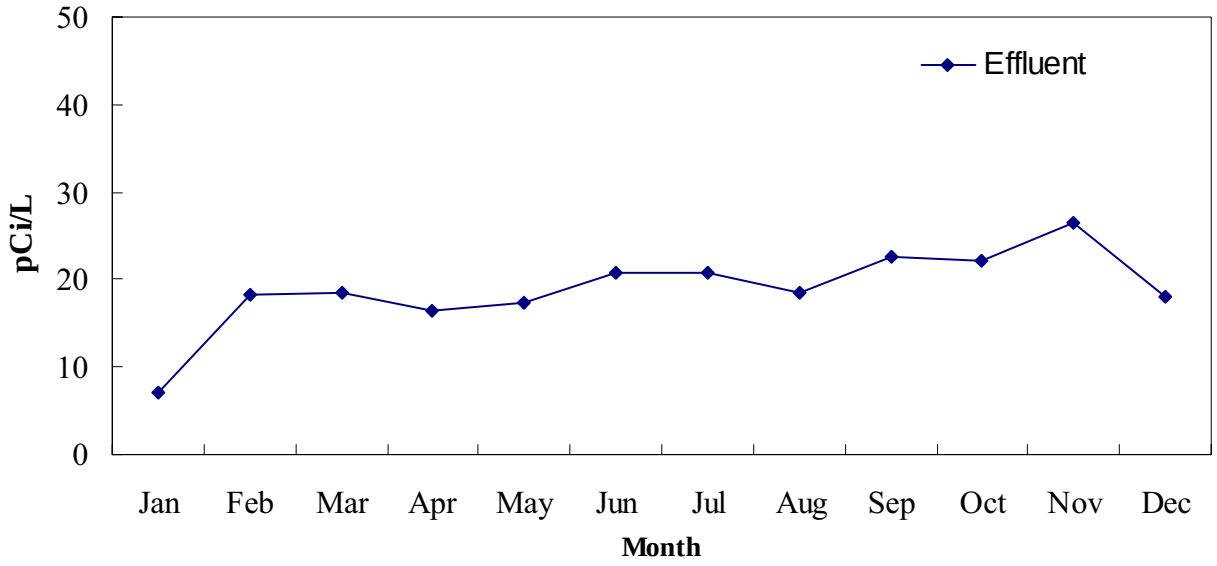
2007 Monthly Averages
Residual Chlorine

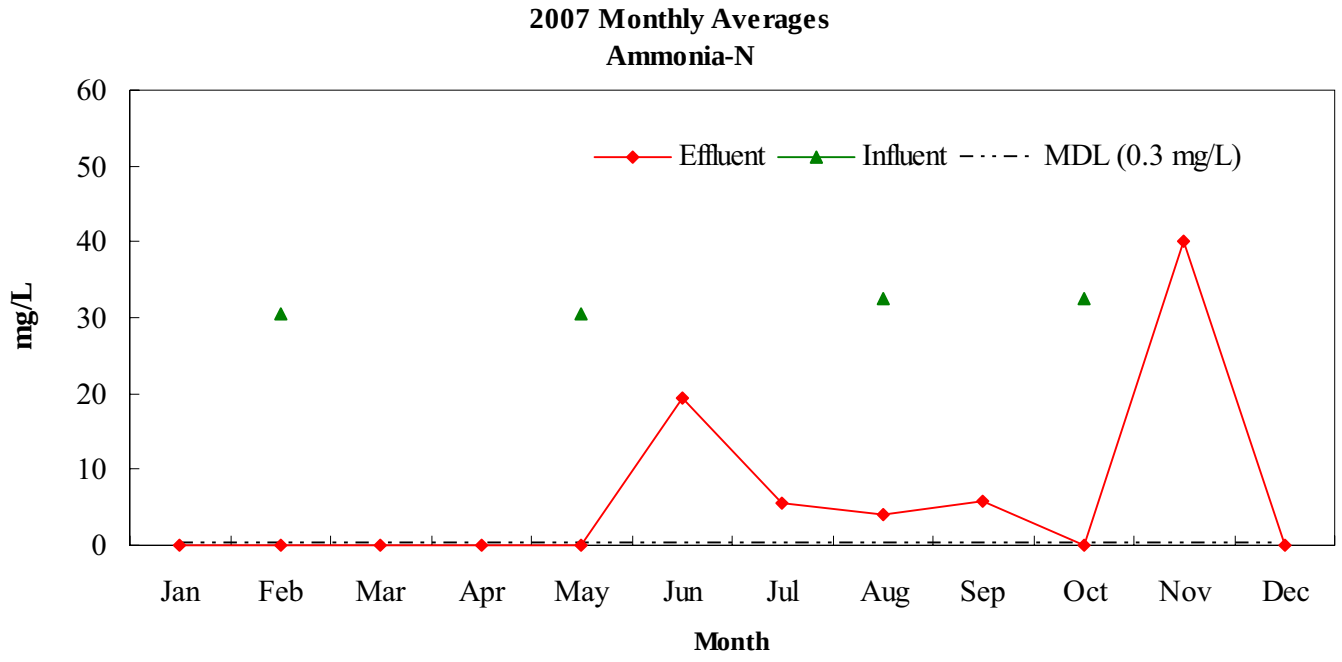


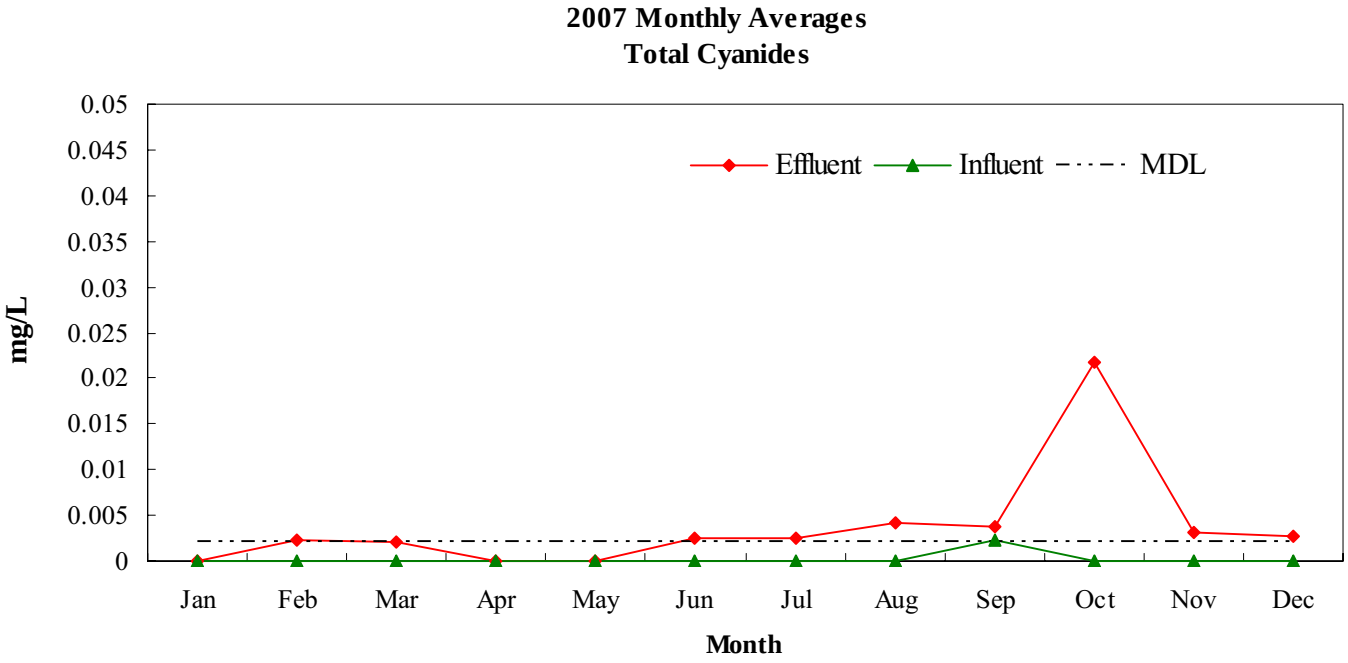
2007 Monthly Averages
Alpha Radiation

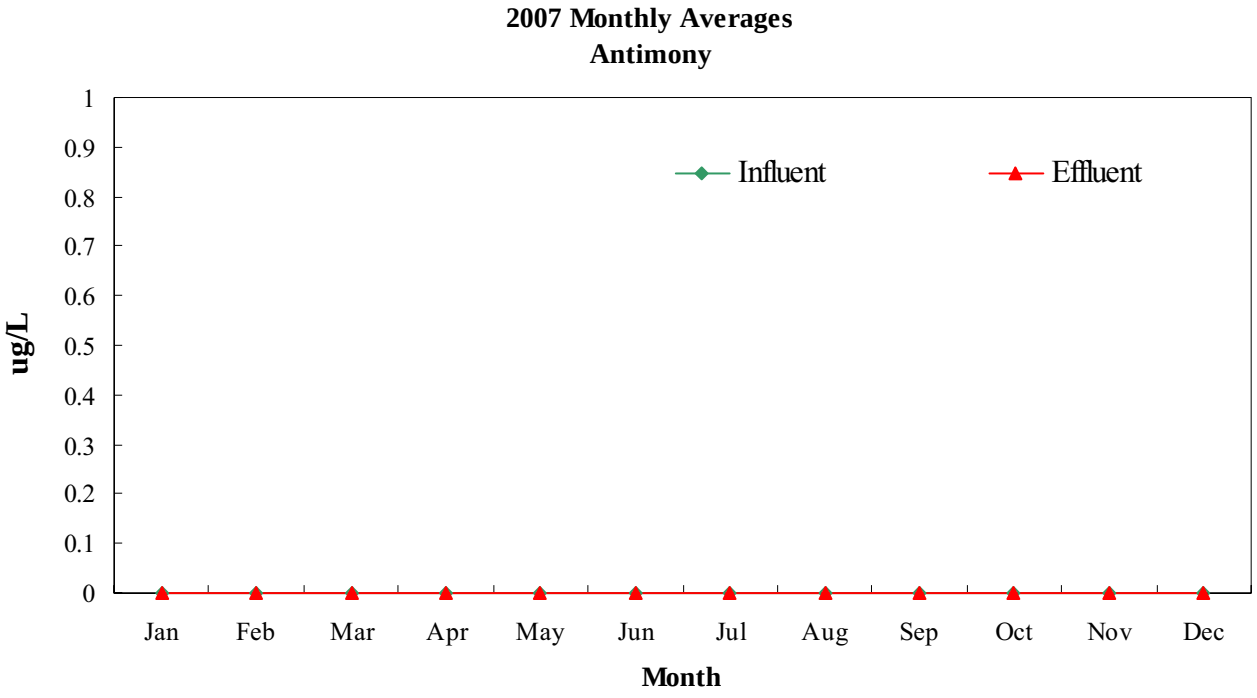


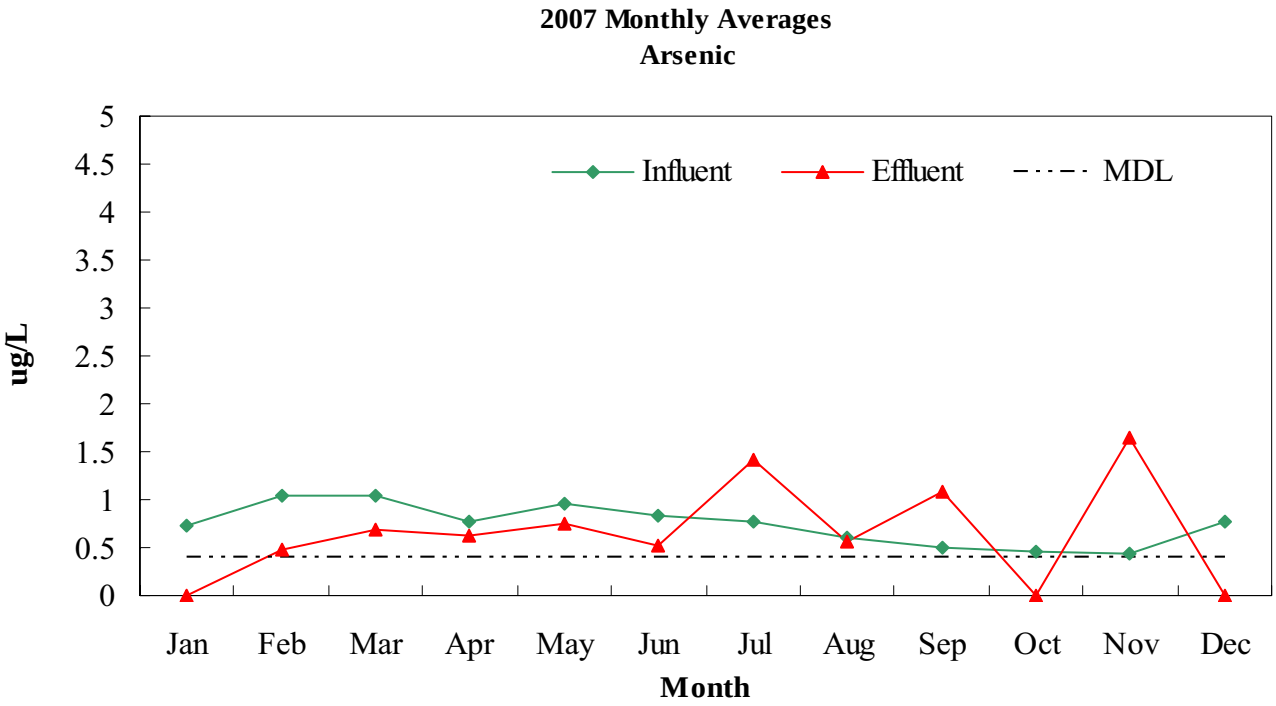
2007 Monthly Averages
Beta Radiation



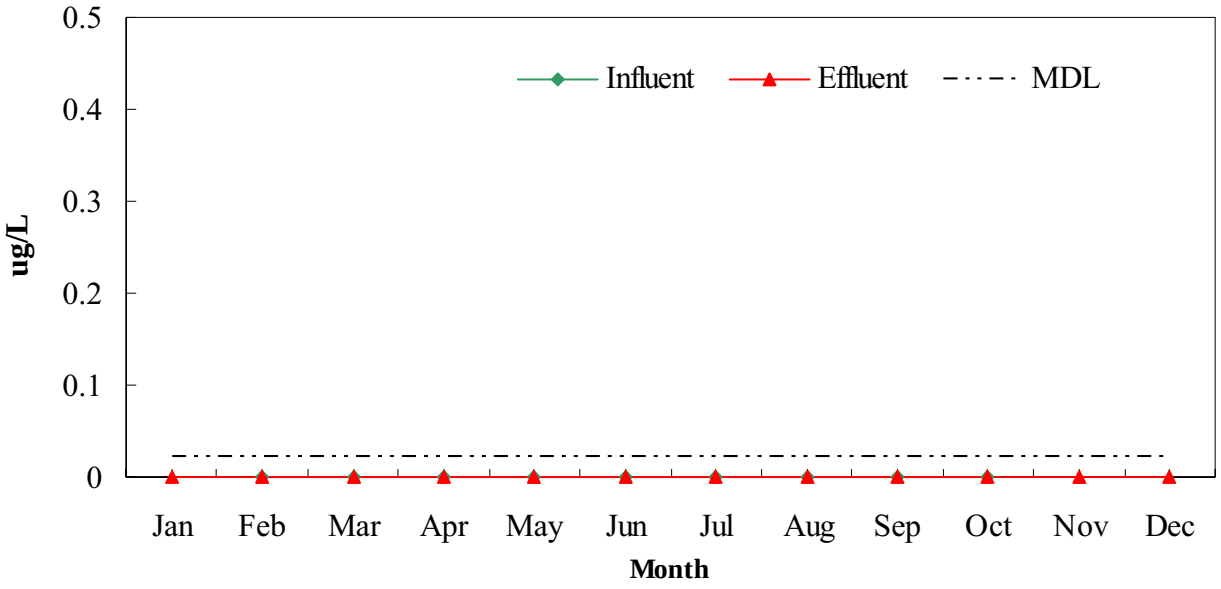

2007 Monthly Averages
Ammonia-N
60
50
40
30
20
10
0
mg/L
Effluent
Influent
MDL (0.3 mg/L)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
Total Cyanides
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
mg/L
Effluent
Influent
MDL
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

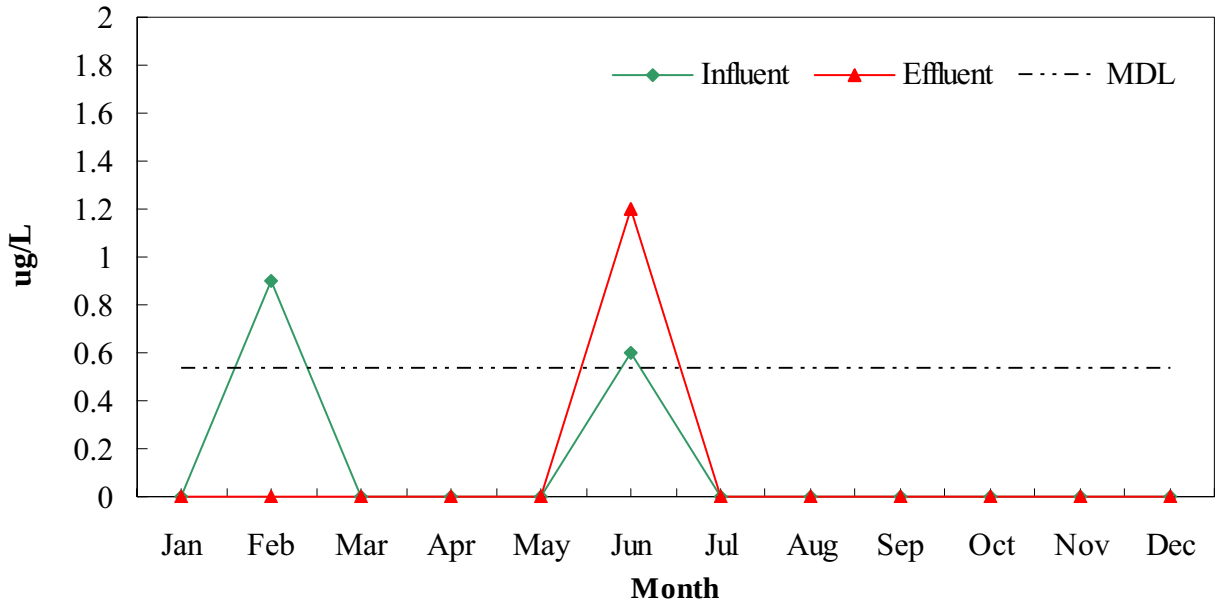

2007 Monthly Averages
Antimony
ug/L
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Influent
Effluent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
Arsenic
ug/L
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Influent
Effluent
MDL
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

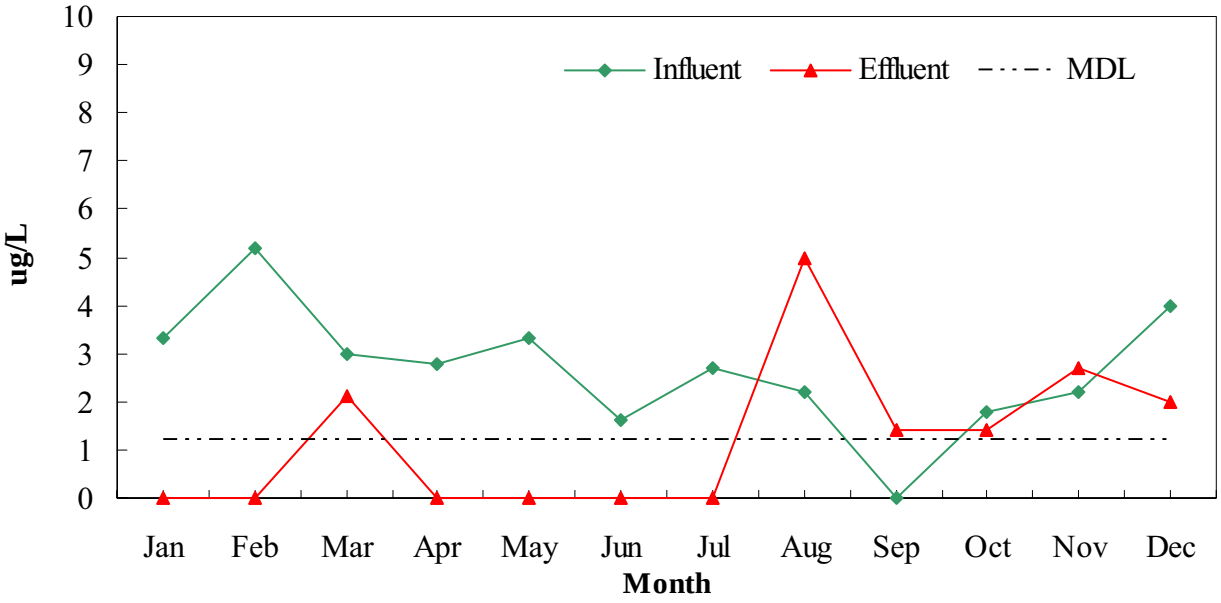
2007 Monthly Averages
Beryllium



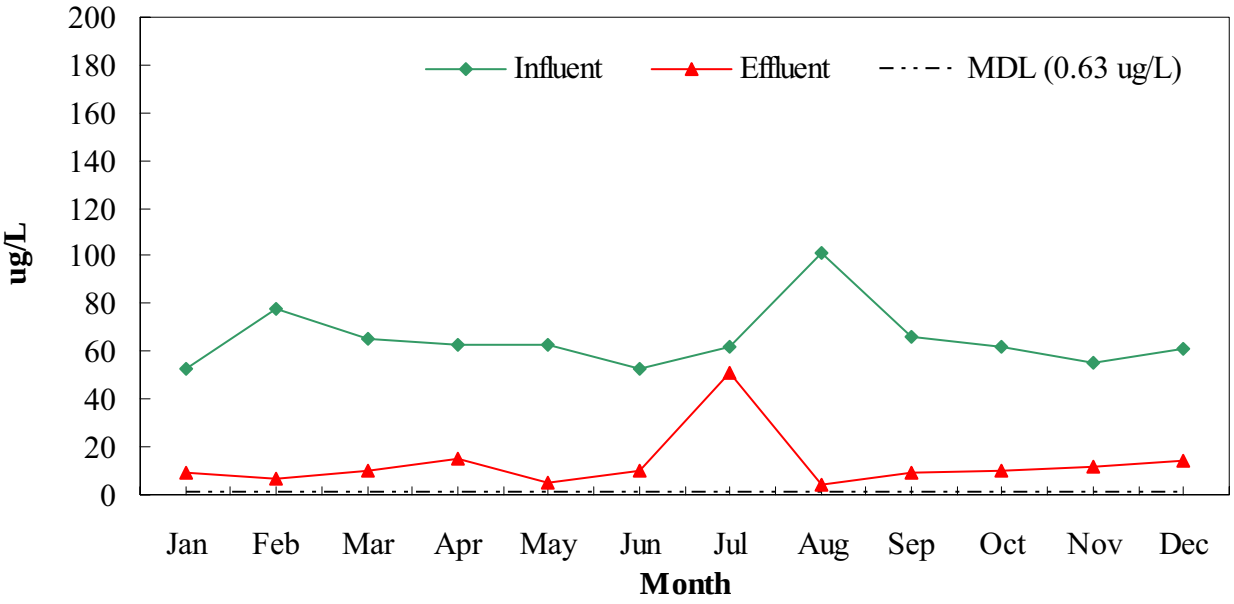
2007 Monthly Averages
Cadmium



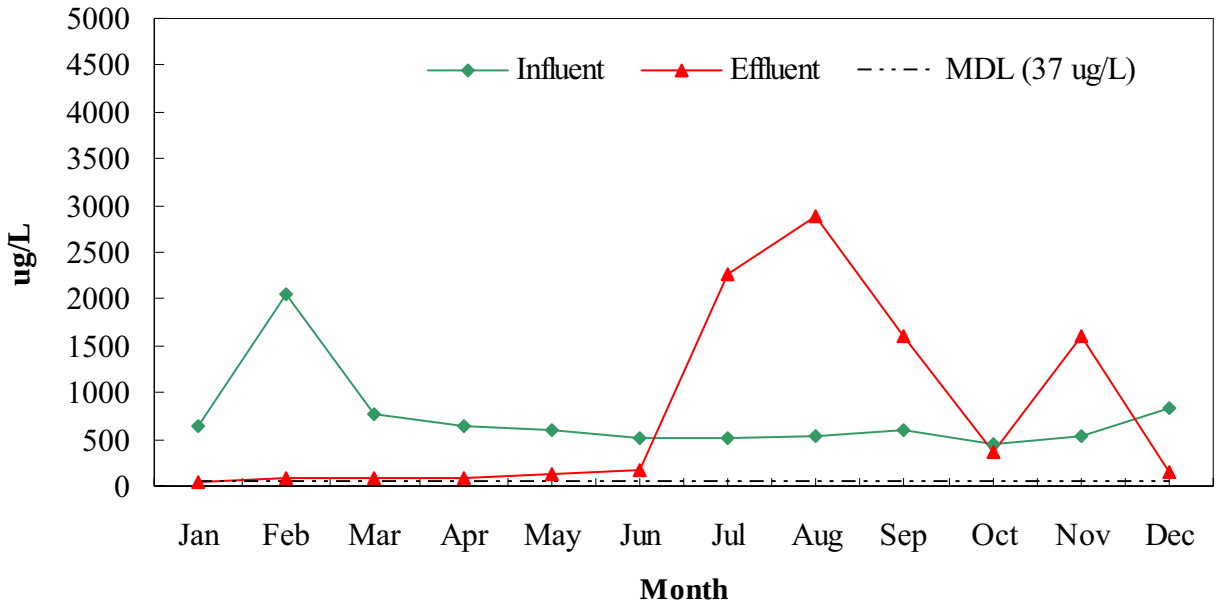
2007 Monthly Averages
Chromium



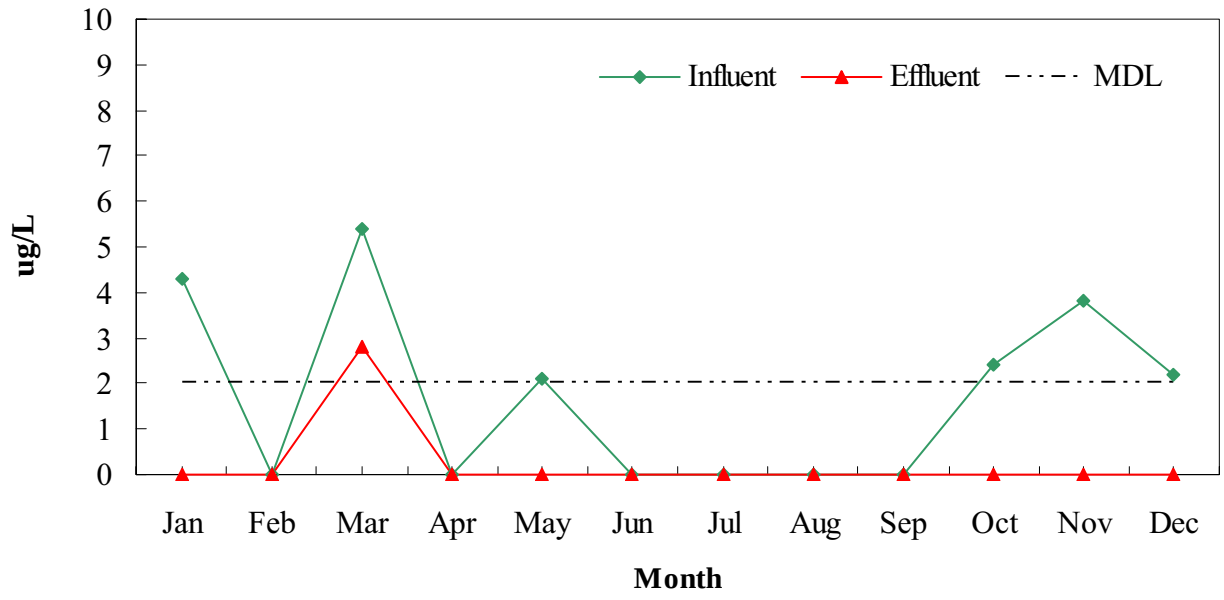
2007 Monthly Averages
Copper



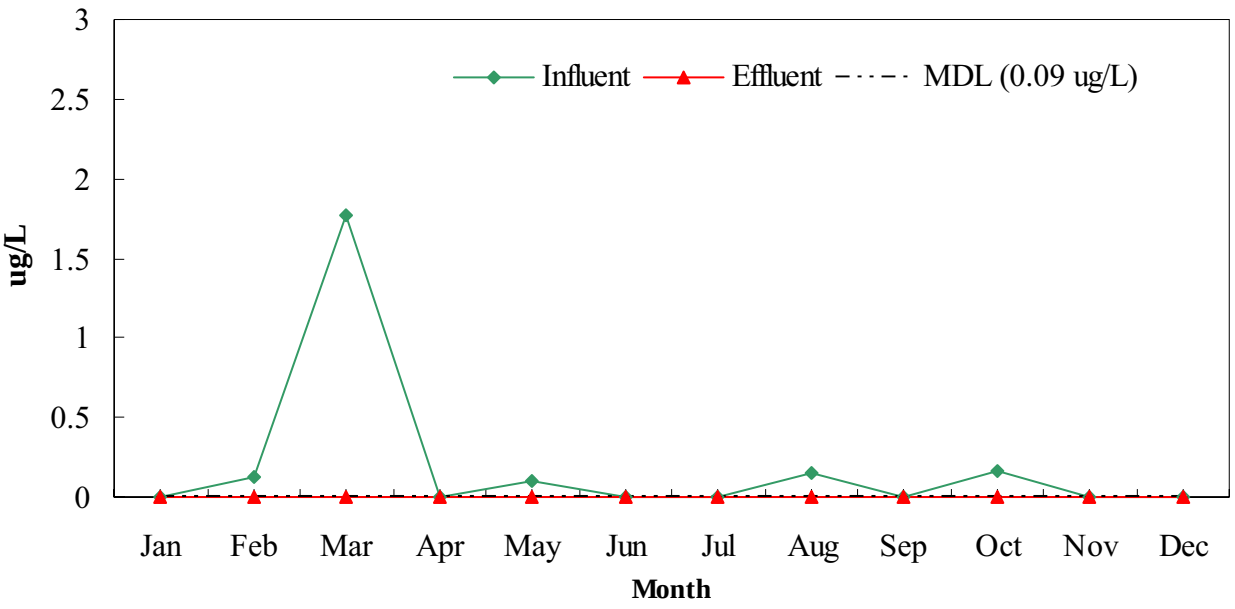
2007 Monthly Averages
Iron



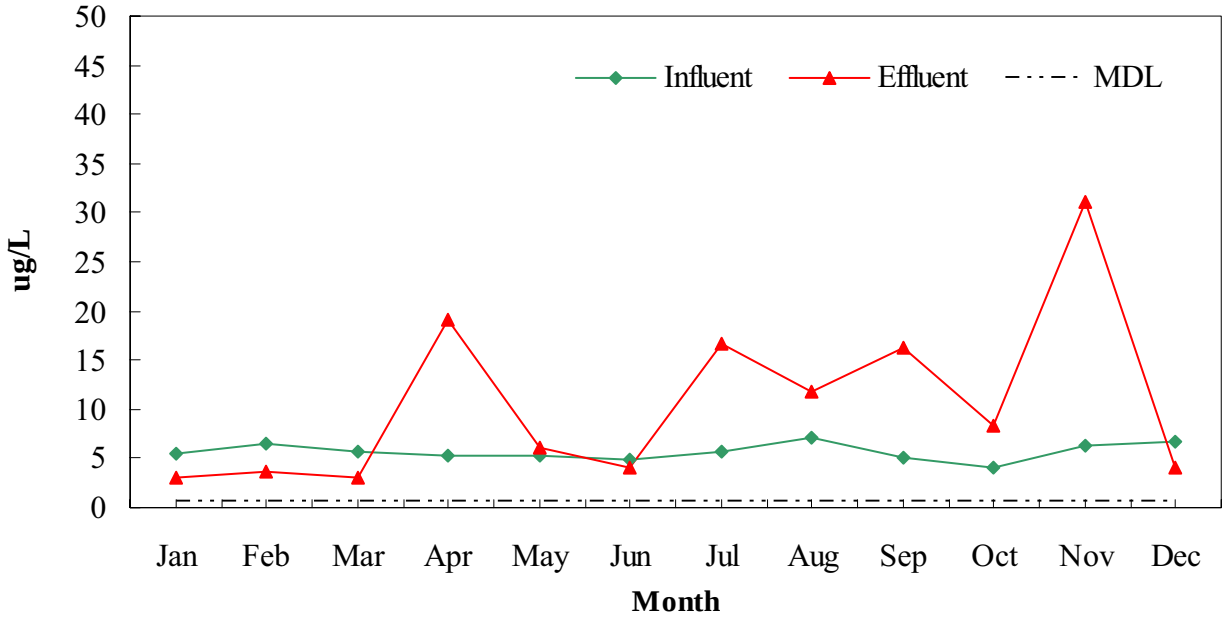
2007 Monthly Averages
Lead



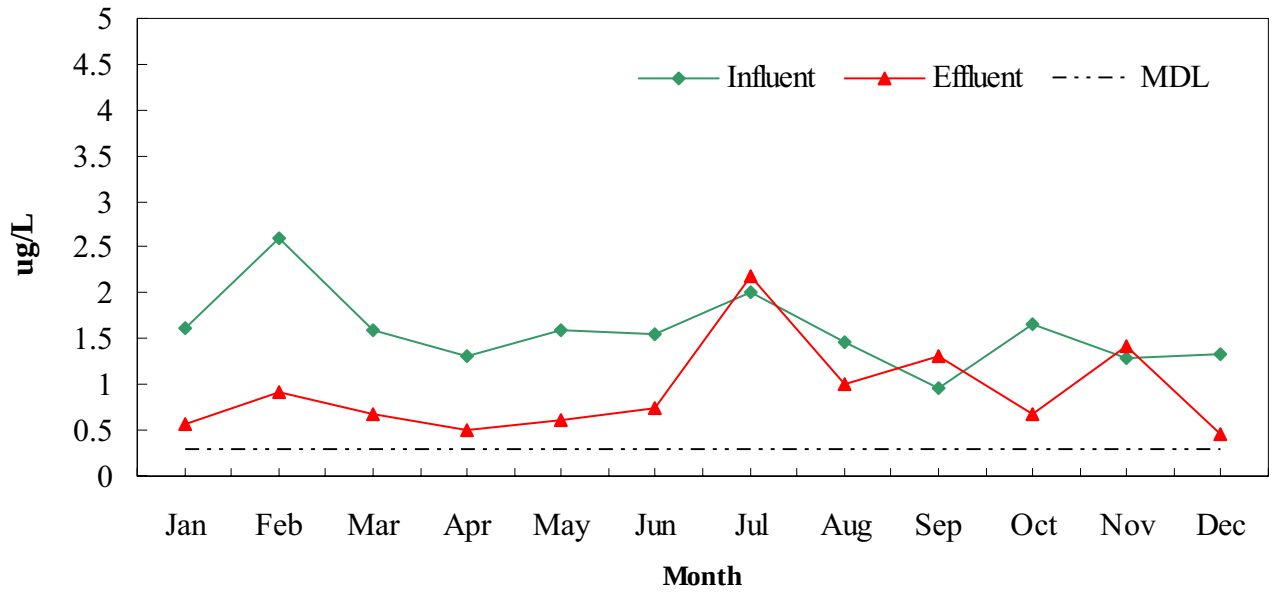
2007 Monthly Averages
Mercury



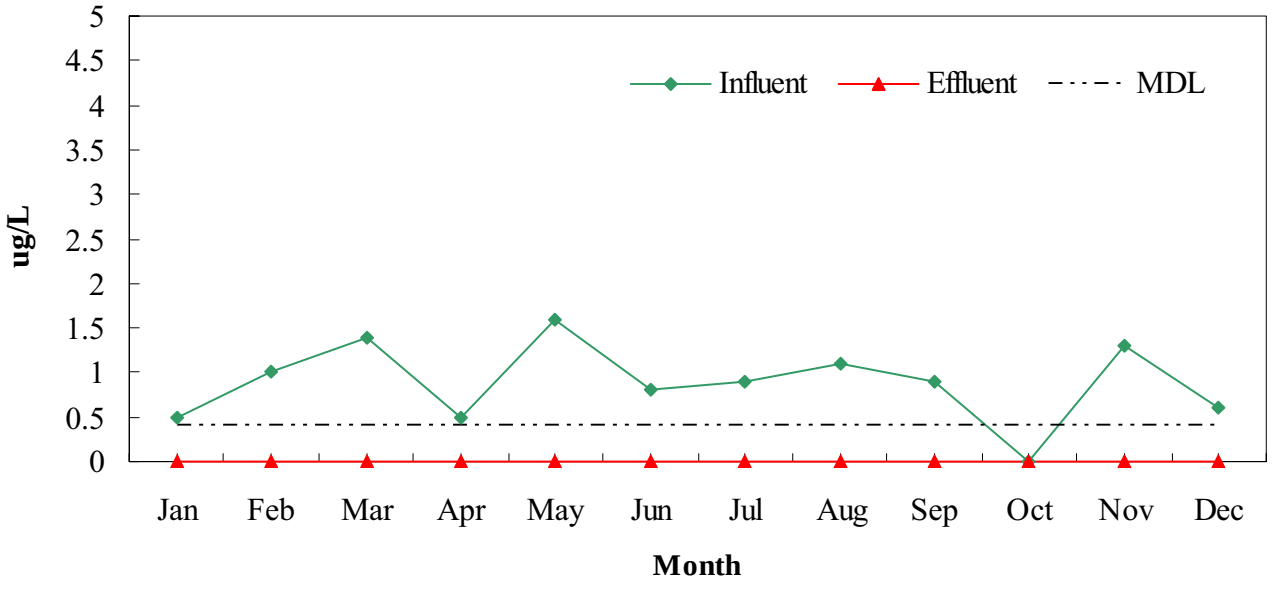
2007 Monthly Averages
Nickel



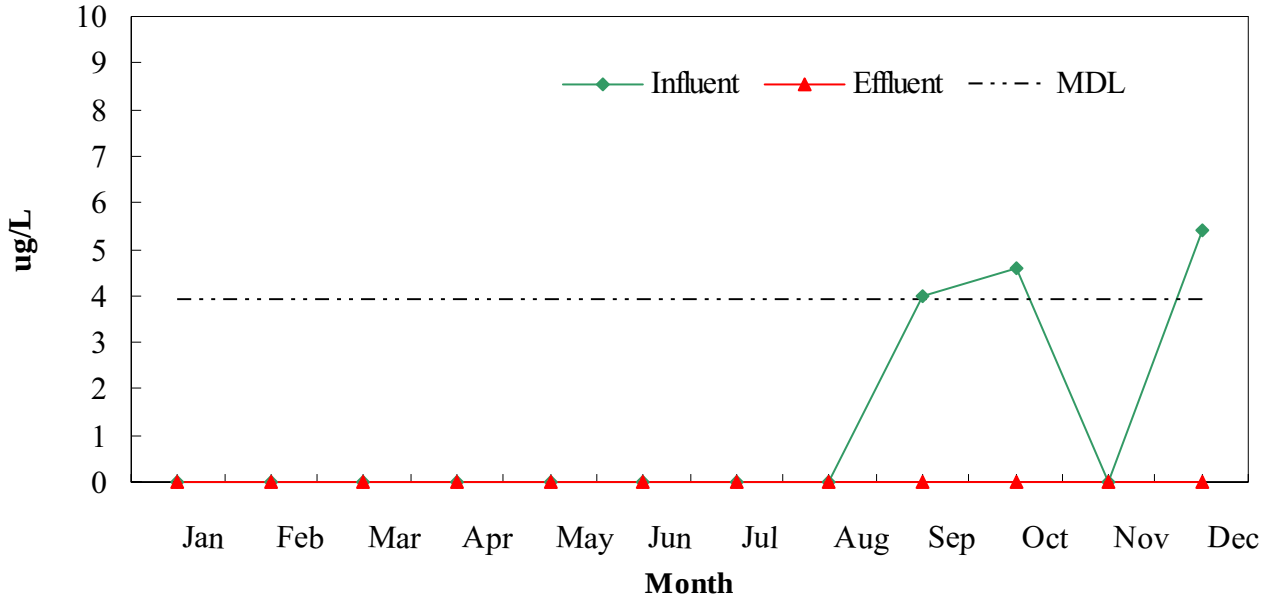
2007 Monthly Averages
Selenium



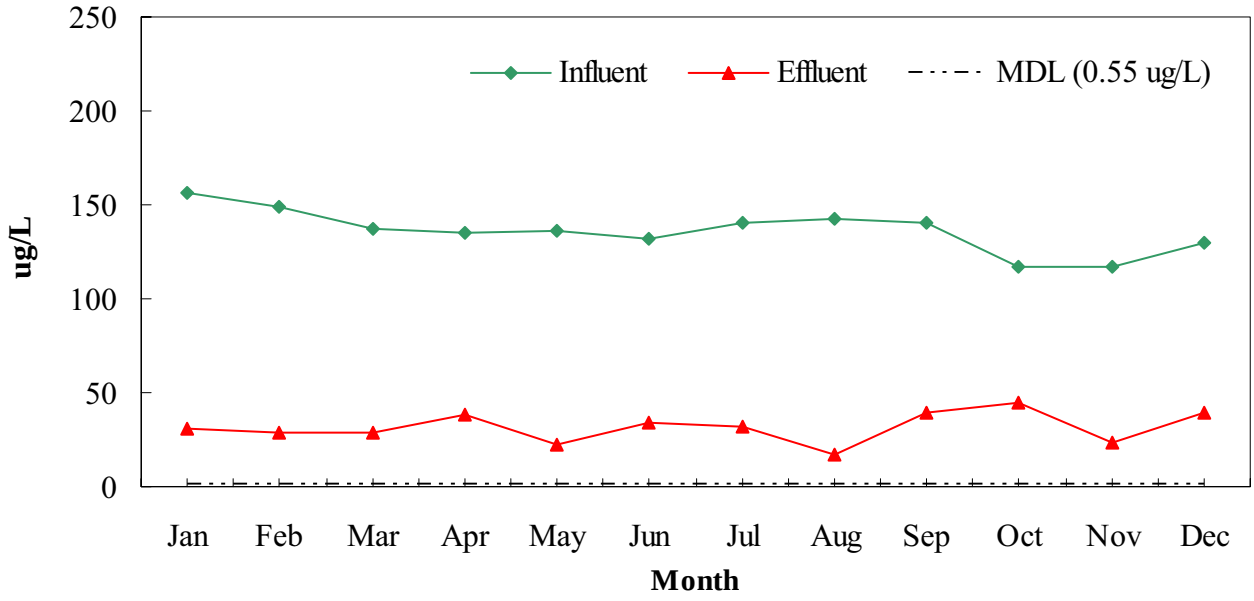
2007 Monthly Averages
Silver

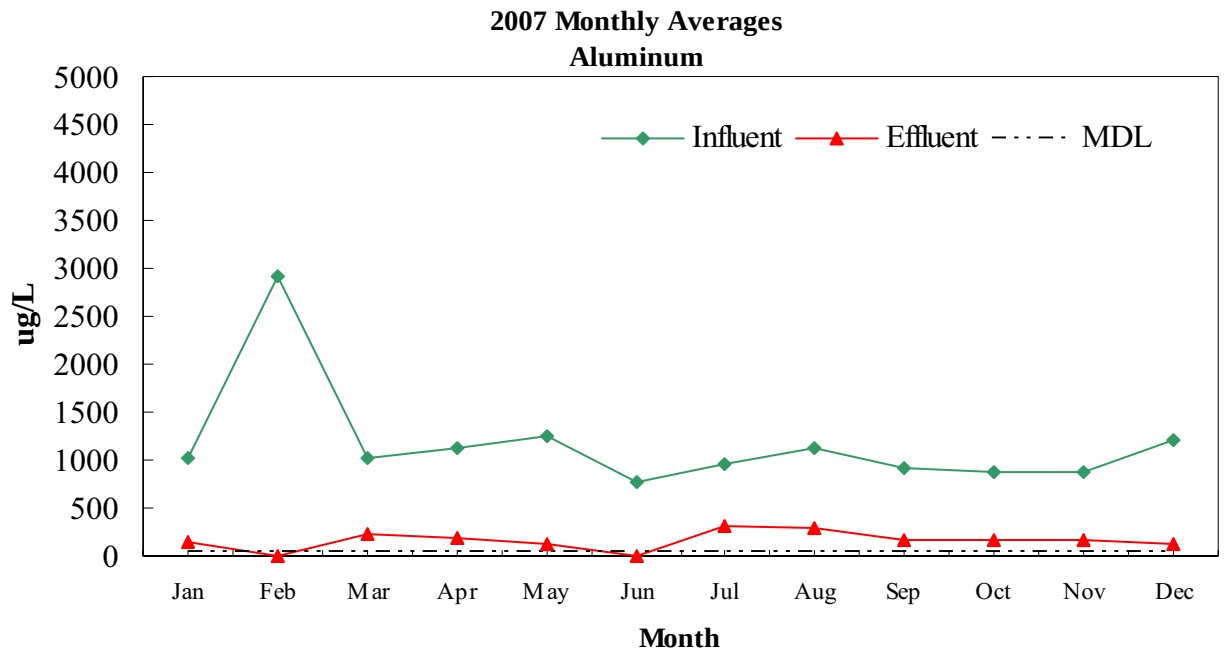


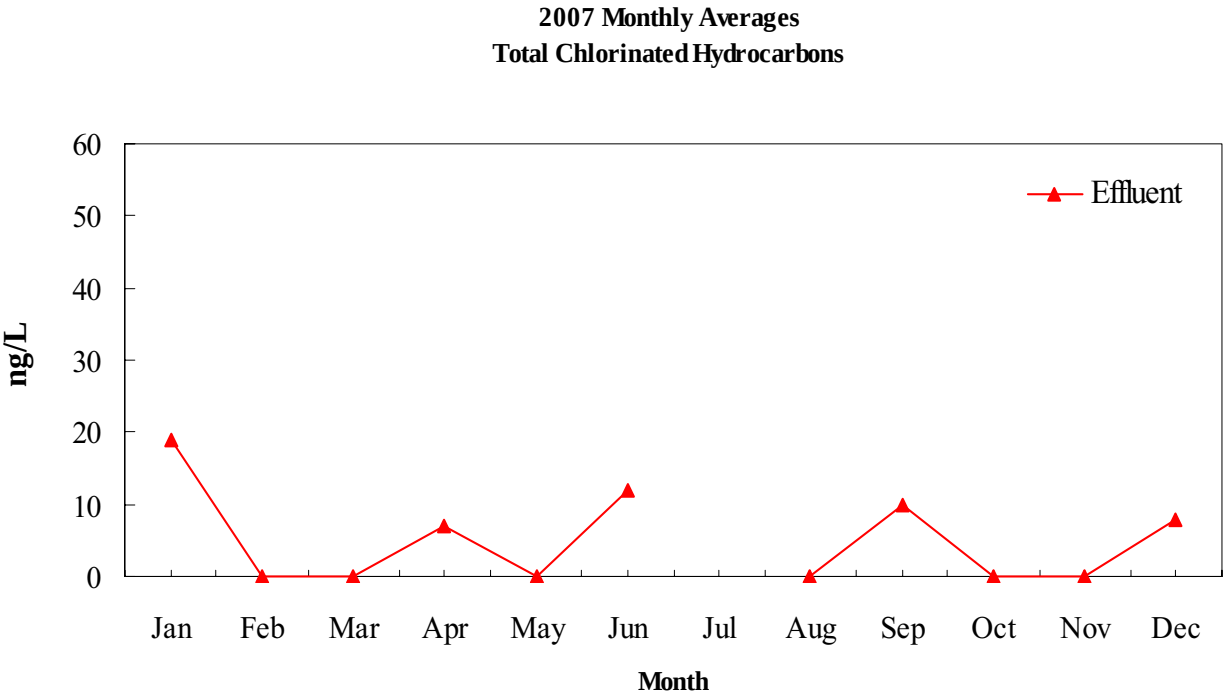
2007 Monthly Averages
Thallium



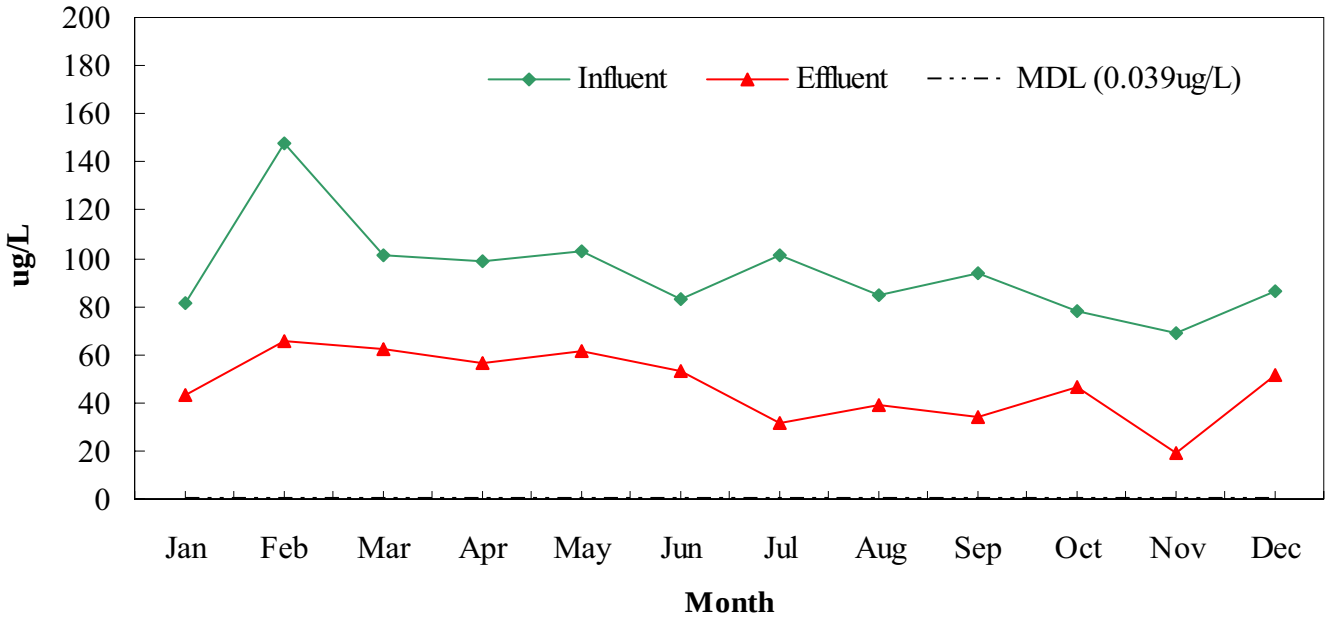
2007 Monthly Averages
Zinc



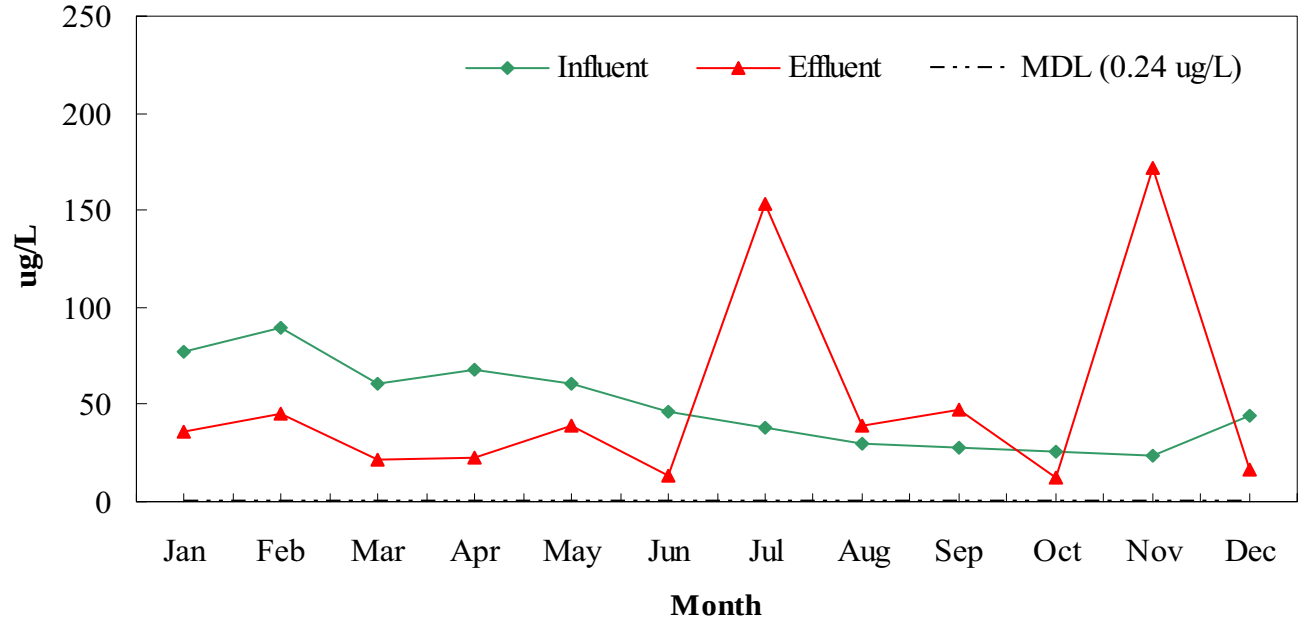

2007 Monthly Averages
Aluminum
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
ug/L
Influent
Effluent
MDL
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

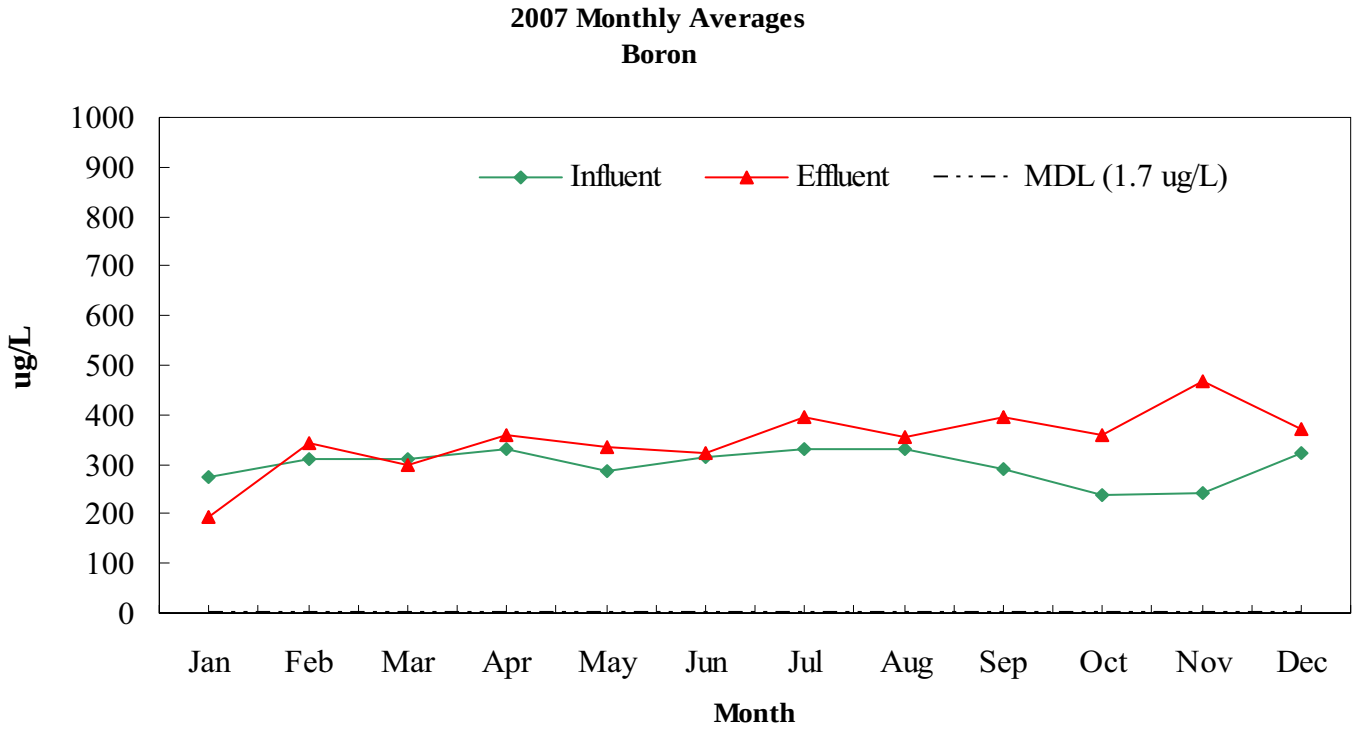

2007 Monthly Averages
Total Chlorinated Hydrocarbons
60
50
40
30
20
10
0
ng/L
Effluent
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

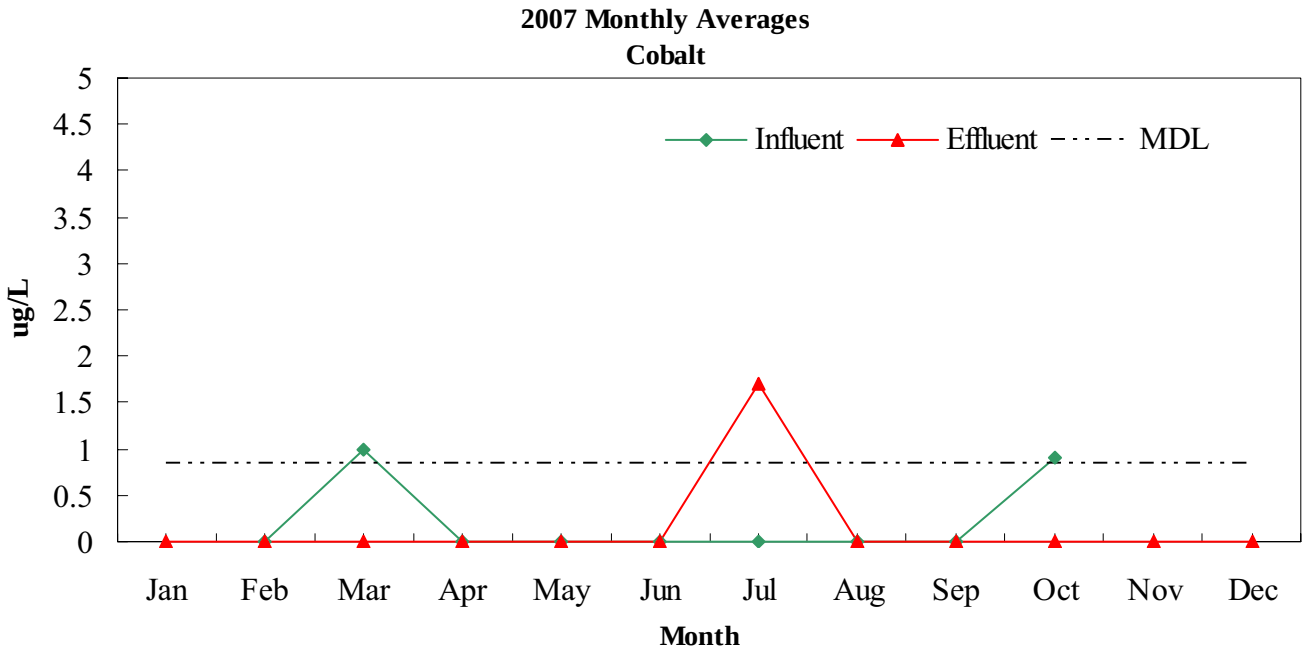
2007 Monthly Averages
Barium



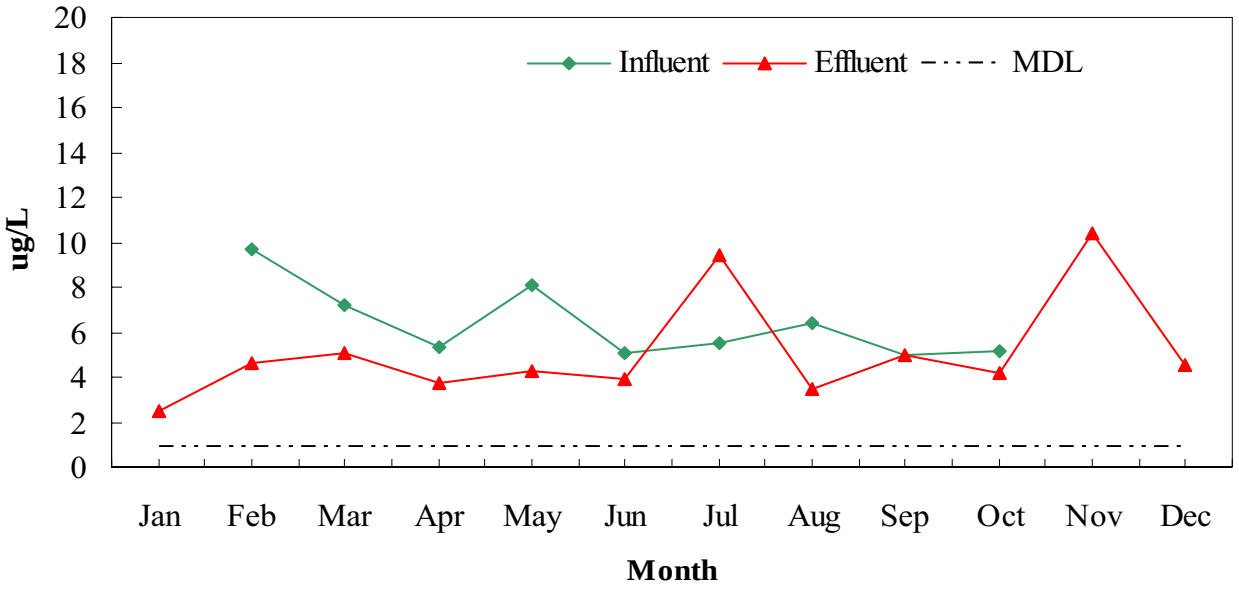
2007 Monthly Averages
Manganese



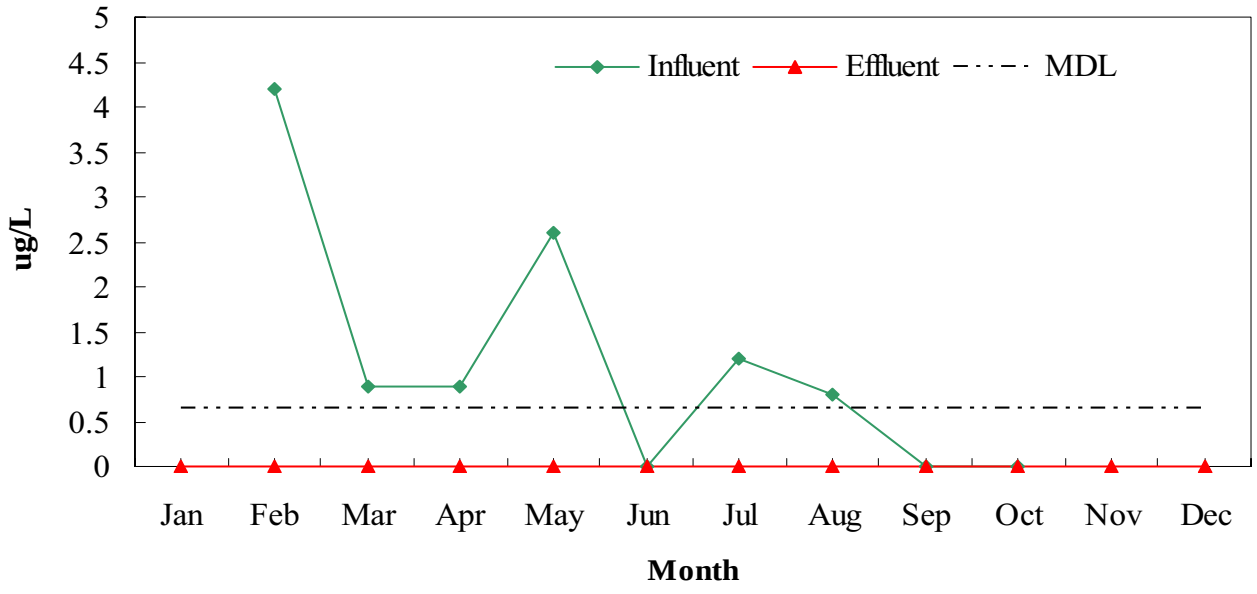

2007 Monthly Averages
Boron
1000
900
800
700
600
500
400
300
200
100
0
ug/L
Influent
Effluent
MDL (1.7 ug/L)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

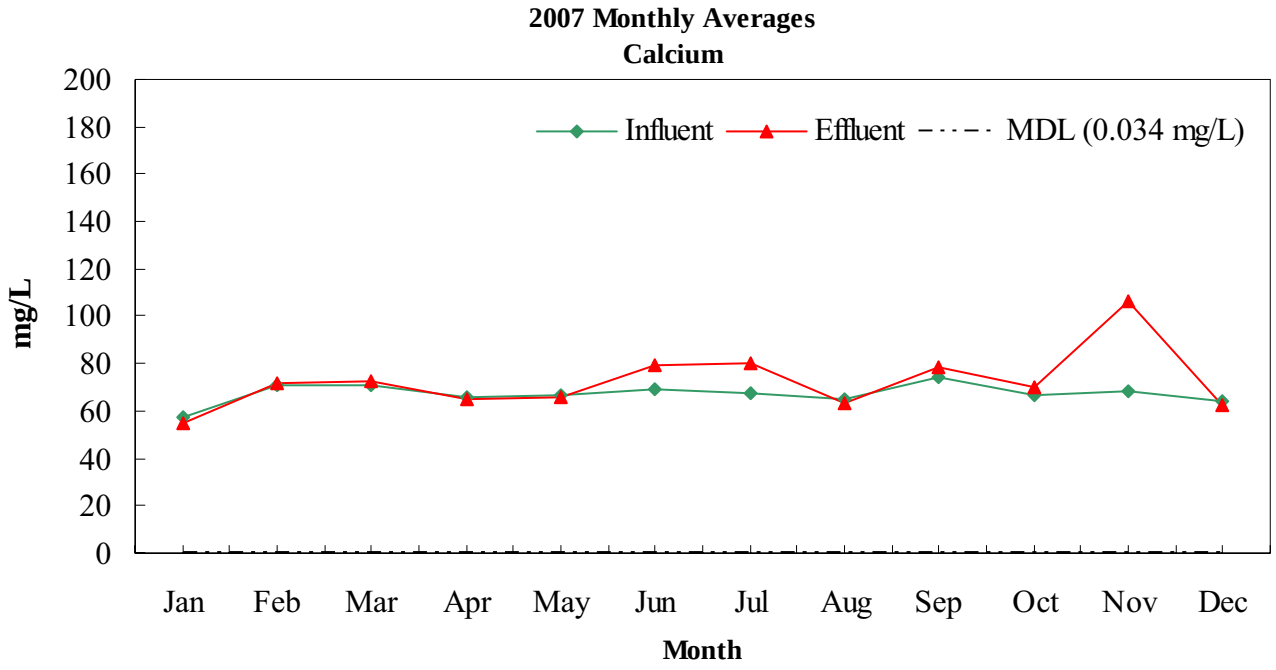

2007 Monthly Averages
Cobalt
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
ug/L
Influent
Effluent
MDL
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

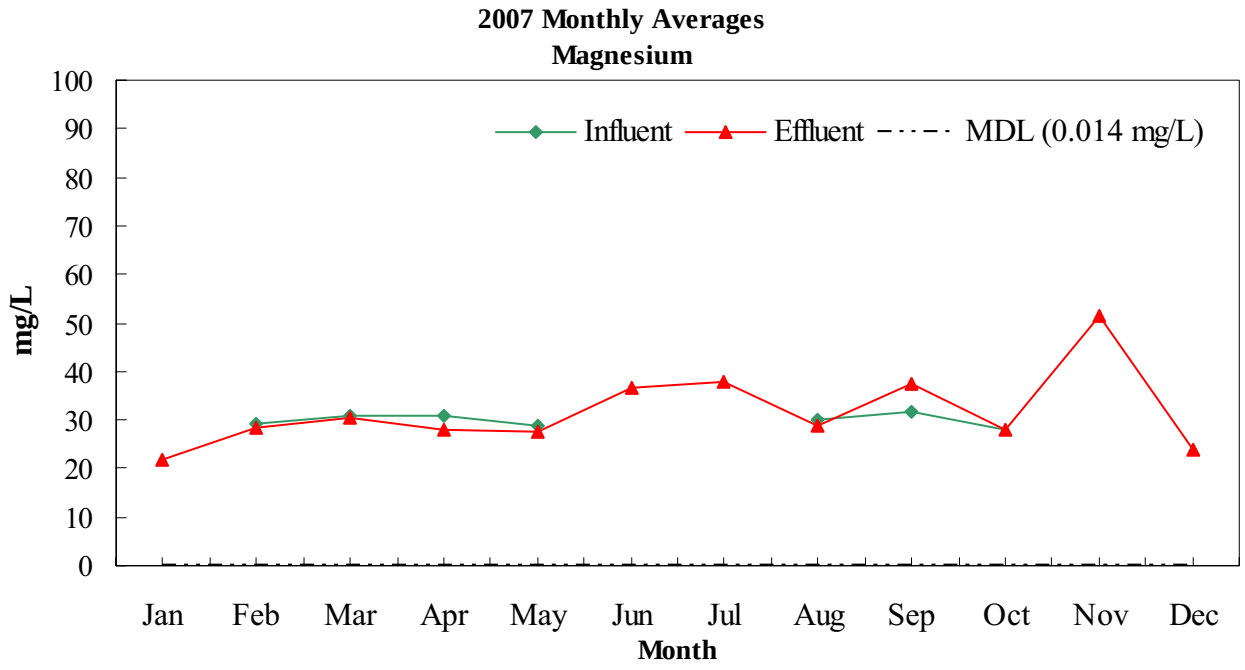
2007 Monthly Averages
Molybdenum

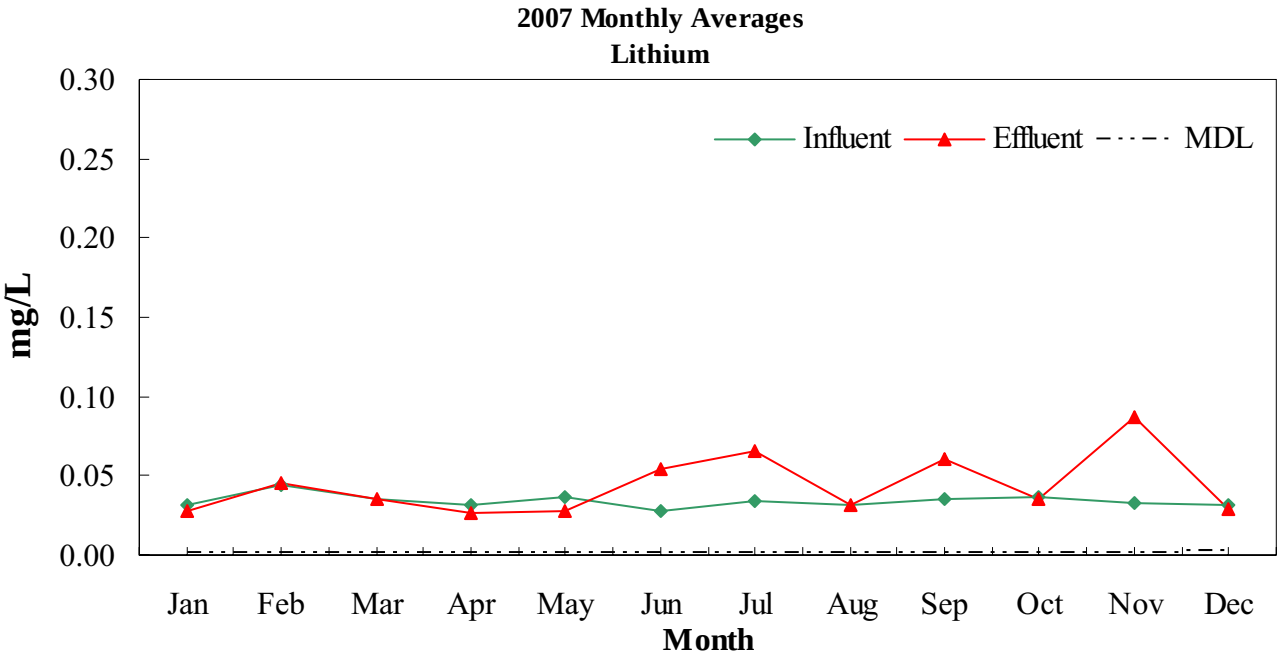


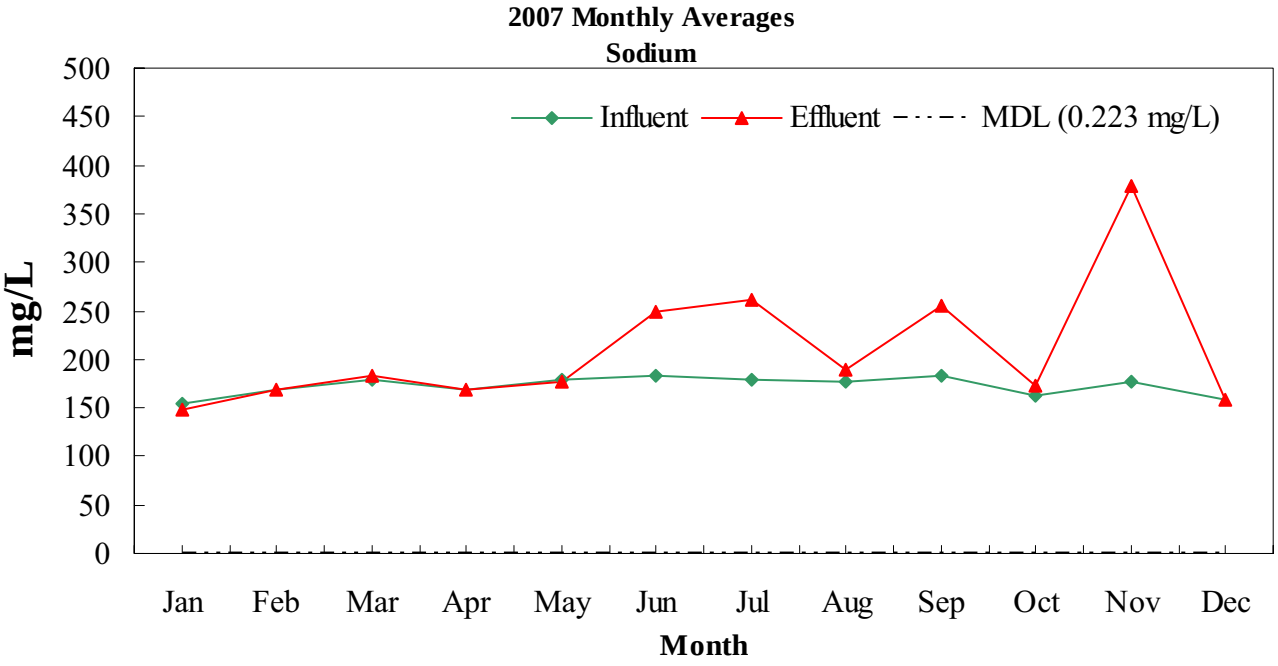
2007 Monthly Averages
Vanadium

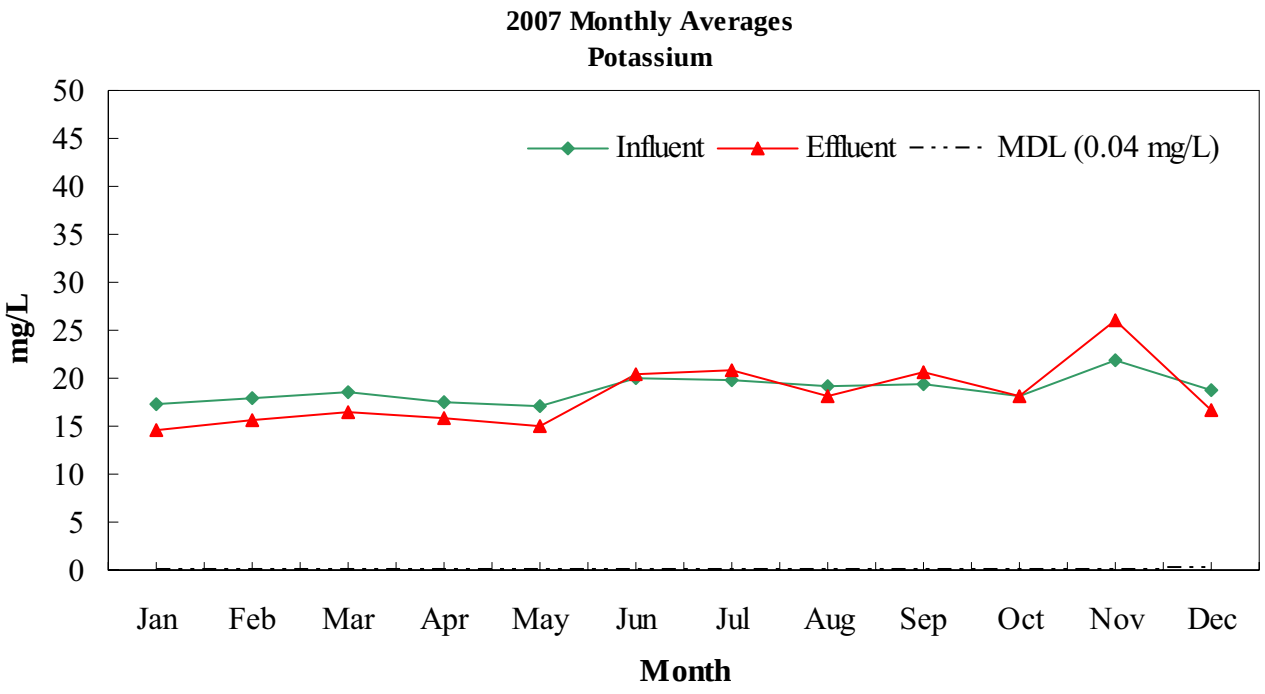


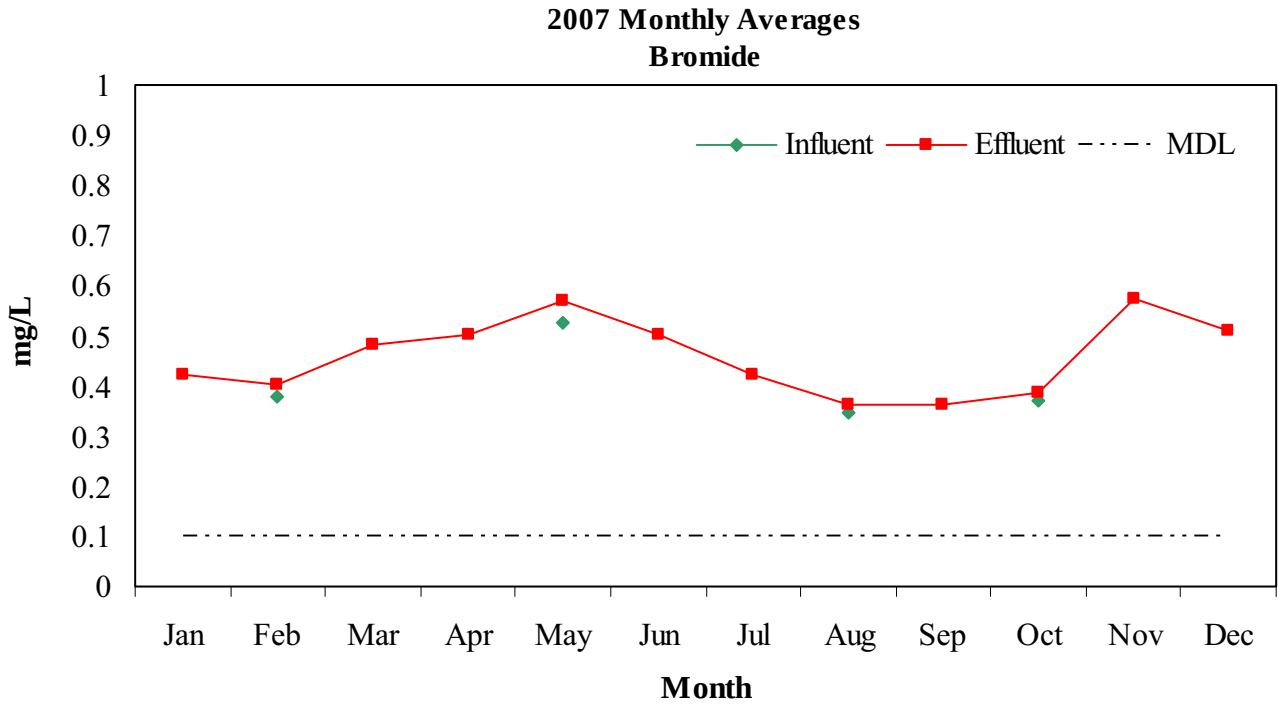

2007 Monthly Averages
Calcium
Influent
Effluent
MDL (0.034 mg/L)
mg/L
200
180
160
140
120
100
80
60
40
20
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

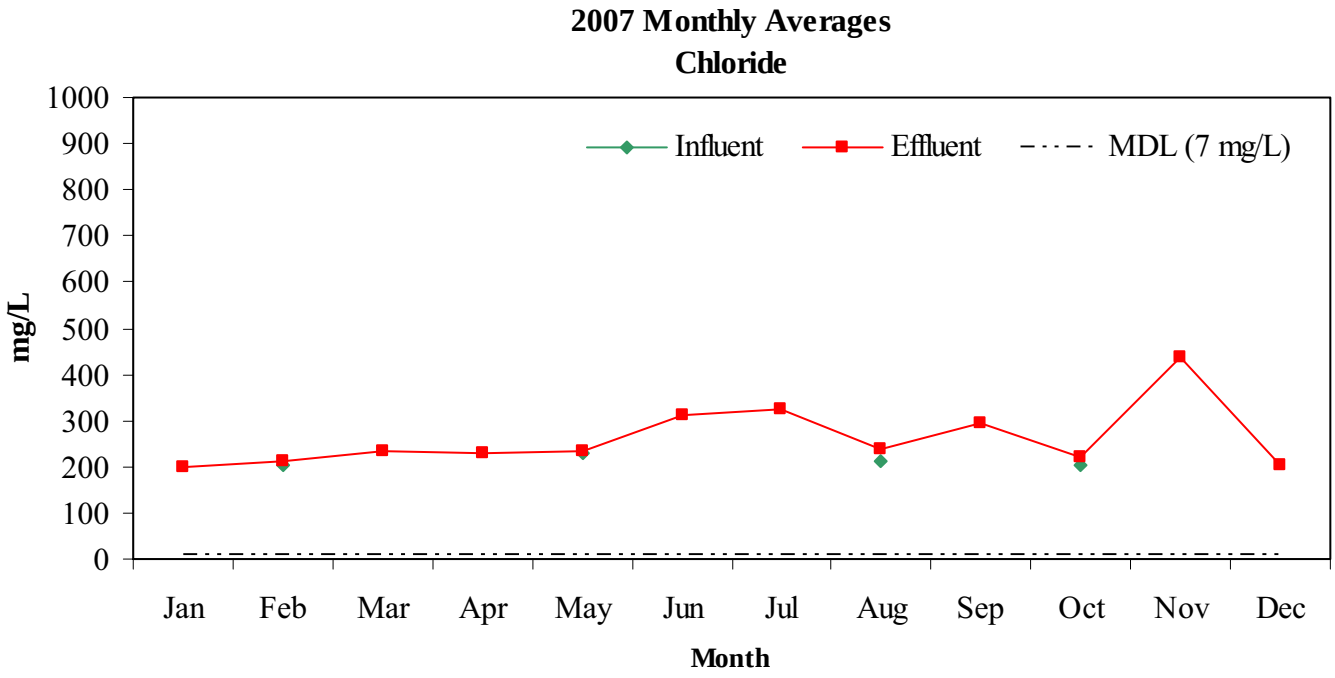

2007 Monthly Averages
Magnesium
Influent
Effluent
MDL (0.014 mg/L)
mg/L
100
90
80
70
60
50
40
30
20
10
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

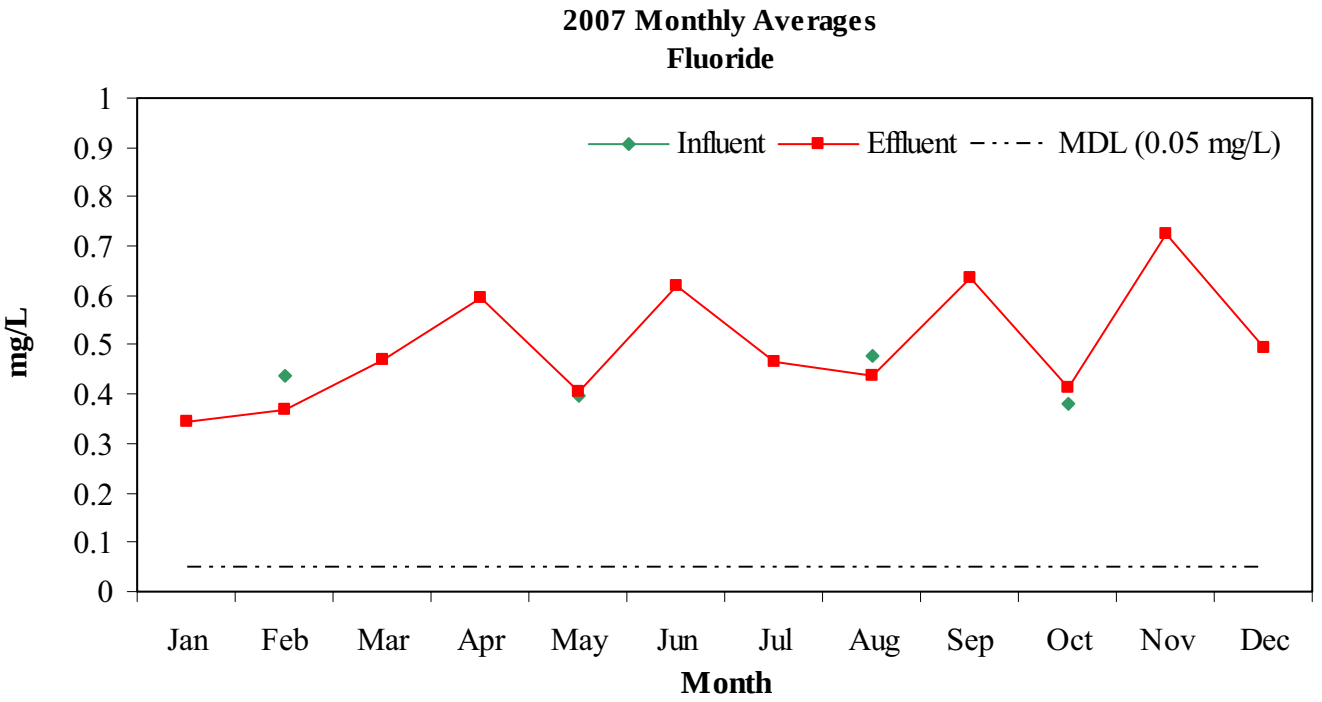

2007 Monthly Averages
Lithium
0.30
0.25
0.20
0.15
0.10
0.05
0.00
mg/L
Influent
Effluent
MDL
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

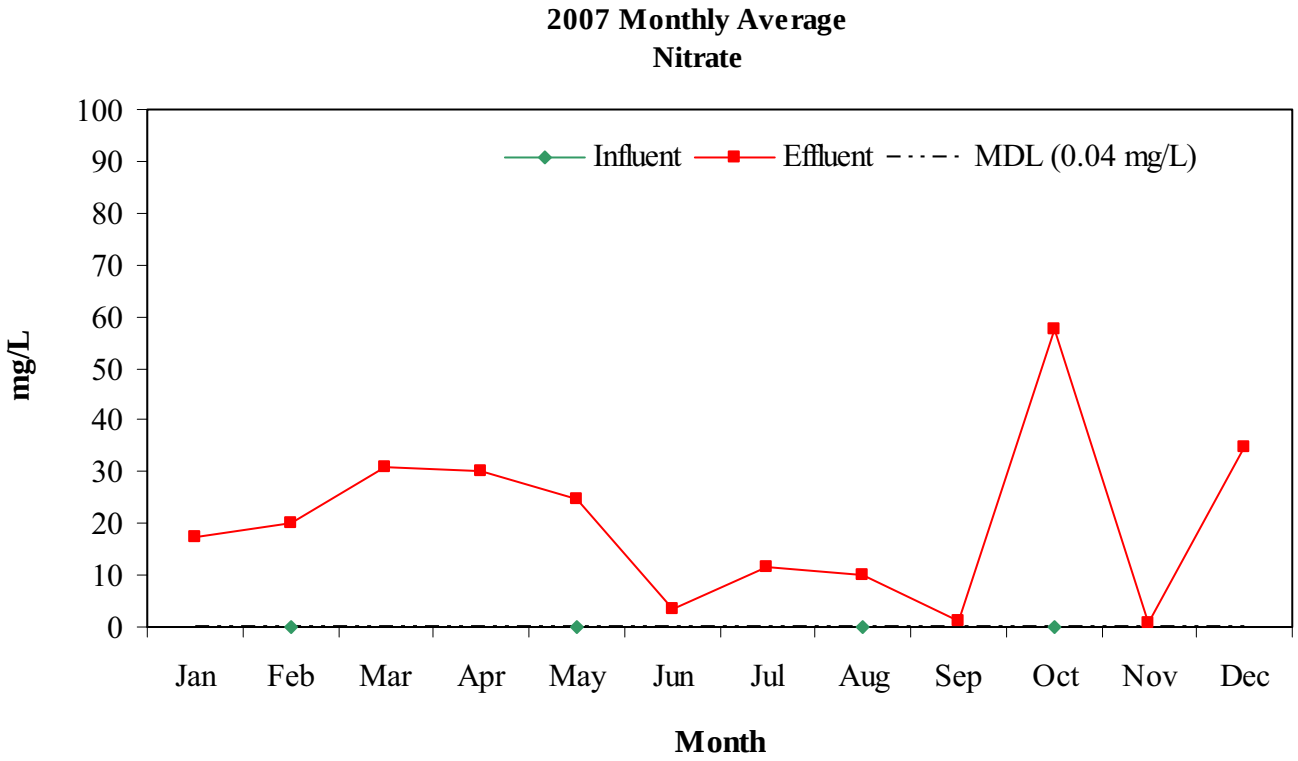

2007 Monthly Averages
Sodium
500
450
400
350
300
250
200
150
100
50
0
mg/L
Influent
Effluent
MDL (0.223 mg/L)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

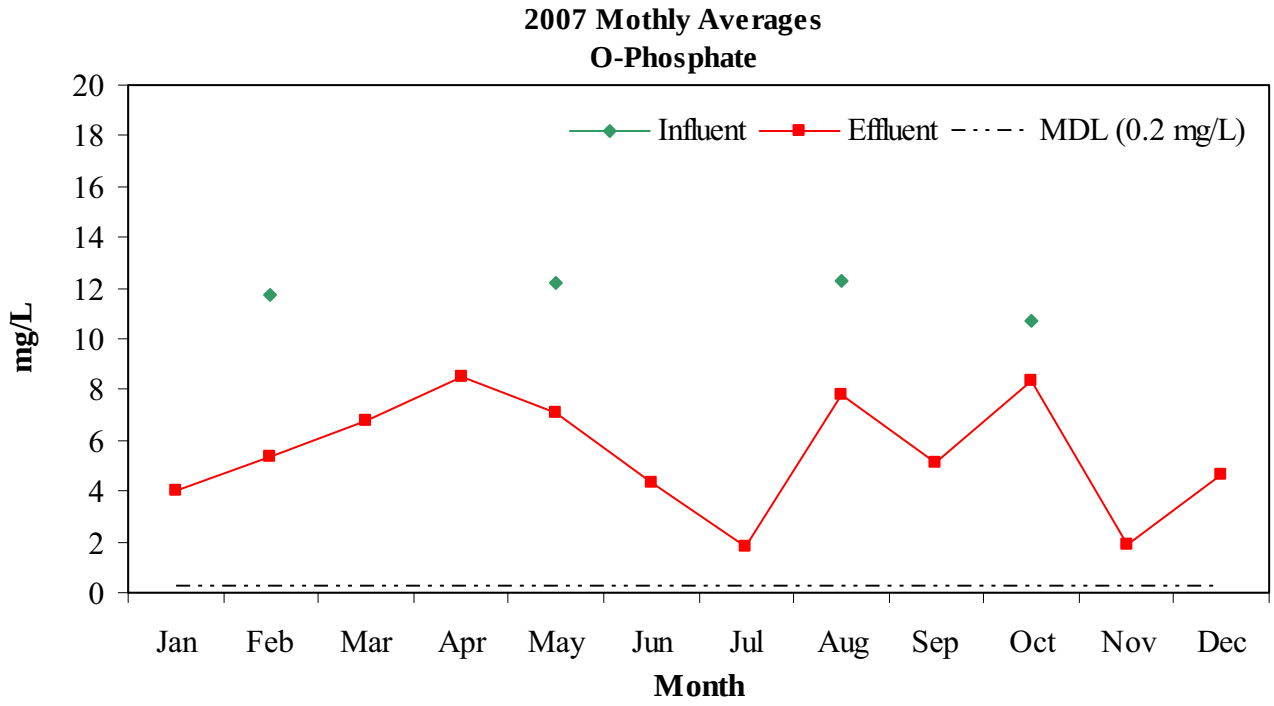

2007 Monthly Averages
Potassium
Influent
Effluent
MDL (0.04 mg/L)
mg/L
50
45
40
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

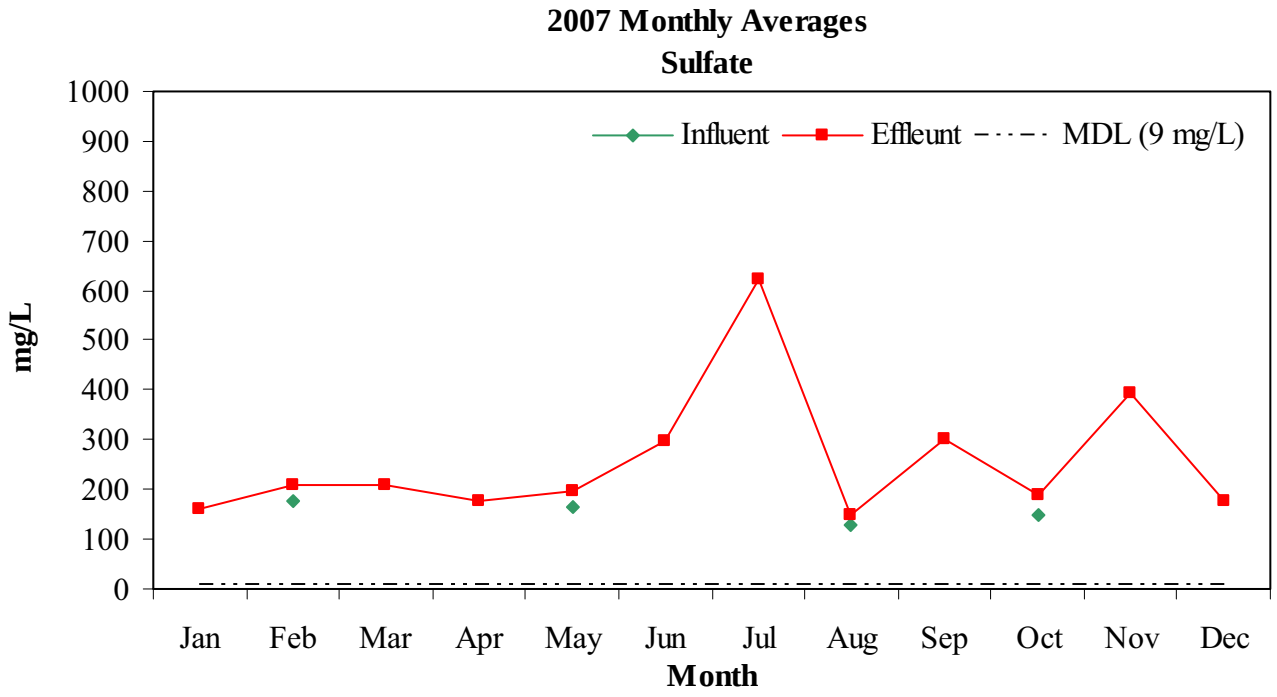

2007 Monthly Averages
Bromide
Influent
Effluent
MDL
mg/L
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
Chloride
1000
900
800
700
600
500
400
300
200
100
0
mg/L
Influent
Effluent
MDL (7 mg/L)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
Fluoride
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
mg/L
Influent
Effluent
MDL (0.05 mg/L)
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Average
Nitrate
Influent
Effluent
MDL (0.04 mg/L)
mg/L
100
90
80
70
60
50
40
30
20
10
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Mothly Averages
O-Phosphate
Influent
Effluent
MDL (0.2 mg/L)
mg/L
20
18
16
14
12
10
8
6
4
2
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month


2007 Monthly Averages
Sulfate
Influent
Effleunt
MDL (9 mg/L)
mg/L
1000
900
800
700
600
500
400
300
200
100
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month

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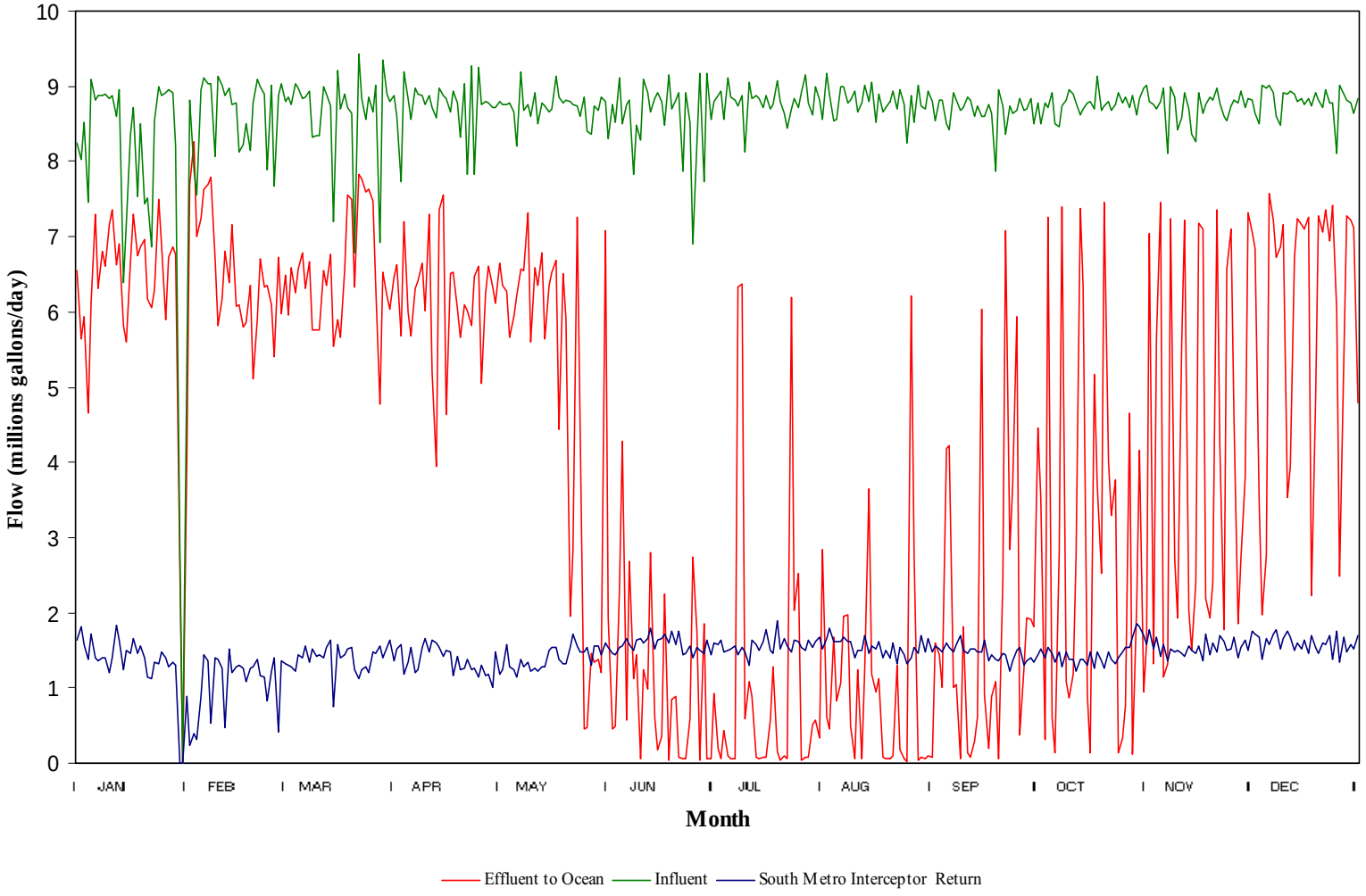
E. Daily Values of Selected Parameters.

Daily values of selected parameters (e.g. TSS, Flow, TSS Removals, etc.) are tabulated and presented graphically; statistical summary information is provided.

South Bay Wastewater Reclamation Plant
2007 Daily Flows



Daily Effluent to Ocean Flows (mgd) 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	6.55	4.02	6.49	6.47	6.64	1.94	0.92	2.85	0.08	4.45	1.60	7.06	
2	5.64	7.69	5.96	6.62	6.35	0.45	0.20	0.62	1.59	3.52	7.05	6.85	
3	5.93	8.26	6.58	5.69	6.28	0.50	0.06	0.45	1.43	0.31	1.33	3.46	
4	4.66	7.01	6.25	7.20	5.67	2.33	0.43	1.67	1.00	7.25	5.65	1.97	
5	6.12	7.23	6.57	6.00	5.94	4.28	0.10	0.83	4.19	0.61	7.46	2.76	
6	7.29	7.64	6.79	5.69	6.21	0.57	0.05	1.06	4.22	0.13	1.15	7.58	
7	6.32	7.69	6.32	6.31	6.56	2.69	0.06	1.96	1.01	2.83	1.32	7.22	
8	6.80	7.80	6.67	6.41	6.54	1.13	6.33	1.97	1.04	7.40	7.23	6.72	
9	6.61	6.70	5.75	6.65	7.32	1.44	6.38	0.49	0.06	1.08	2.72	6.87	
10	7.16	5.82	5.75	6.01	5.61	0.06	0.60	0.06	1.82	0.87	1.93	7.15	
11	7.35	6.18	5.75	7.29	6.58	1.24	1.09	1.25	0.14	1.19	5.56	3.54	
12	6.62	6.80	6.54	5.20	6.35	0.99	0.89	0.05	0.08	2.76	7.22	3.94	
13	6.91	6.40	6.35	3.95	6.78	2.80	0.07	1.24	0.29	7.38	2.04	6.73	
14	5.81	7.16	6.76	7.36	5.64	0.62	0.05	3.64	0.61	6.36	1.50	7.24	
15	5.61	6.08	5.54	7.56	6.36	0.18	0.07	1.18	6.03	0.91	2.40	7.15	
16	6.66	6.10	5.90	4.64	6.53	0.35	0.07	0.94	0.91	0.13	7.18	7.10	
17	7.29	5.79	5.67	6.51	6.69	2.25	0.57	1.13	0.19	5.17	7.11	7.25	
18	6.74	5.85	6.56	6.52	4.43	0.04	1.29	0.08	0.88	3.71	2.19	2.23	
19	6.86	6.36	7.56	6.03	6.51	0.84	0.16	0.05	1.08	2.53	1.94	4.82	
20	6.97	5.11	7.49	5.66	5.91	0.88	0.04	0.06	0.06	7.46	2.41	7.28	
21	6.18	5.91	6.33	6.09	1.96	0.07	0.09	0.09	2.44	4.02	7.36	7.07	
22	6.06	6.71	7.83	6.02	2.82	0.06	0.05	1.31	7.09	3.30	4.24	7.36	
23	6.30	6.34	7.77	5.81	7.26	0.06	6.19	0.17	2.84	3.77	1.77	6.95	
24	7.49	6.35	7.60	6.46	4.51	0.60	2.03	0.06	3.70	0.14	6.56	7.41	
25	6.89	6.10	7.64	6.60	0.46	2.74	2.53	0.01	5.93	0.33	7.10	6.02	
26	5.90	5.41	7.47	5.05	0.48	1.73	0.04	6.22	0.38	0.76	4.62	2.48	
27	6.73	6.72	6.35	6.25	1.45	0.04	0.08	2.79	1.27	4.66	1.86	5.39	
28	6.86	5.97	4.77	6.60	1.35	1.86	0.07	0.03	1.93	0.11	2.73	7.27	
29	6.77		6.53	6.34	1.39	0.05	0.52	0.07	1.92	2.14	3.80	7.22	
30	2.60		6.21	6.11	1.20	0.06	0.58	0.06	1.82	4.17	7.32	7.13	
31	*		6.04		7.08		0.33	0.10		0.94		4.80	Annual
Average	6.39	6.47	6.51	6.17	5.00	1.10	1.03	1.05	1.87	2.92	4.15	5.94	4.03
Minimum	2.60	4.02	4.77	3.95	0.46	0.04	0.04	0.01	0.06	0.11	1.15	1.97	0.01
Maximum	7.49	8.26	7.83	7.56	7.32	4.28	6.38	6.22	7.09	7.46	7.46	7.58	8.26
Total	191.68	181.20	201.79	185.10	154.86	32.85	31.94	32.49	56.03	90.39	124.35	184.02	1,467

* = Ethernet upgrade to DCS therefore no flow data was produced. Representative samples collected and delivered to Lab.

Daily Influent Flows (mgd) – 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	8.24	5.28	8.80	8.88	8.79	8.31	8.79	8.56	8.80	8.78	9.02	8.82	
2	8.02	8.82	8.86	8.60	8.76	8.75	8.87	9.18	8.54	8.50	8.79	8.64	
3	8.53	7.89	8.76	7.74	8.76	8.53	8.93	8.89	8.82	8.77	8.76	8.50	
4	7.45	7.55	9.04	9.20	8.78	9.12	8.57	8.54	8.81	8.72	8.70	9.01	
5	9.10	8.96	8.97	8.84	8.66	8.50	9.11	8.56	8.50	8.91	8.79	8.98	
6	8.82	9.11	8.84	8.57	8.21	8.76	8.86	9.00	8.42	8.50	8.98	9.02	
7	8.87	9.04	8.85	8.97	9.20	8.81	8.81	8.99	8.91	8.47	8.10	8.92	
8	8.87	9.04	8.93	8.90	8.68	7.83	8.73	8.78	8.81	8.74	9.00	8.59	
9	8.90	8.07	8.32	8.87	8.76	8.48	8.87	8.81	8.68	8.82	8.85	8.49	
10	8.83	9.13	8.34	8.76	8.60	8.29	8.13	8.94	8.71	8.96	8.42	8.92	
11	8.88	9.02	8.34	8.87	8.91	9.09	9.05	8.65	8.86	8.89	8.58	8.89	
12	8.60	8.87	8.99	8.71	8.50	8.92	8.83	8.77	8.81	8.77	8.92	8.94	
13	8.95	8.98	8.90	8.58	8.78	8.66	8.87	9.01	8.59	8.61	8.69	8.89	
14	6.40	8.76	8.74	8.97	8.73	8.84	8.83	8.79	8.73	8.70	8.37	8.80	
15	7.17	8.78	7.19	8.88	8.66	8.91	8.72	9.05	8.59	8.77	8.26	8.84	
16	8.36	8.13	9.21	8.84	8.69	8.80	8.88	8.52	8.60	8.79	8.91	8.75	
17	8.71	8.22	8.69	8.66	9.13	8.48	8.69	8.89	8.75	8.70	8.64	8.84	
18	7.53	8.51	8.89	8.94	8.86	9.15	8.75	8.65	8.64	9.13	8.76	8.74	
19	8.50	8.15	8.72	8.78	8.77	8.69	9.08	8.72	7.86	8.67	8.86	8.92	
20	7.44	8.77	8.63	8.32	8.82	8.81	8.80	8.80	8.96	8.73	8.81	8.82	
21	7.51	9.10	6.78	9.04	8.80	8.91	8.63	8.93	8.74	8.79	8.97	8.72	
22	6.86	9.00	9.43	7.83	8.76	7.87	8.44	8.70	8.36	8.68	8.77	8.95	
23	8.55	8.89	8.84	9.28	8.73	8.91	8.70	8.96	8.73	8.76	8.60	8.77	
24	8.99	7.89	8.56	7.83	8.60	8.53	8.83	8.75	8.64	8.92	8.55	8.77	
25	8.87	9.01	8.85	9.25	8.85	6.91	8.72	8.25	8.68	8.78	8.73	8.10	
26	8.91	7.67	8.66	8.75	8.40	8.27	8.91	8.88	8.83	8.86	8.81	9.02	
27	8.95	8.88	9.01	8.79	8.36	9.18	9.16	8.53	8.68	8.71	8.78	8.89	
28	8.91	9.03	6.93	8.78	8.73	7.73	8.78	9.01	8.70	8.87	8.93	8.81	
29	8.20		9.34	8.72	8.68	9.18	8.61	8.73	8.83	8.62	8.71	8.78	
30	2.86		8.89	8.71	8.85	8.57	9.00	8.69	8.51	8.84	8.84	8.63	
31	*		8.79		8.79		8.81	8.93		8.98		8.84	Annual
Average	8.16	8.52	8.65	8.73	8.73	8.59	8.80	8.79	8.67	8.77	8.73	8.79	8.66
Minimum	2.86	5.28	6.78	7.74	8.21	6.91	8.13	8.25	7.86	8.47	8.10	8.10	2.86
Maximum	9.10	9.13	9.43	9.28	9.20	9.18	9.16	9.18	8.96	9.13	9.02	9.02	9.43
Total	244.78	238.55	268.09	261.86	270.60	257.79	272.76	272.46	260.09	271.74	261.90	272.60	3,153

* = Ethernet upgrade to DCS therefore no flow data was produced. Representative samples collected and delivered to Lab.

South Metro Interceptor[6] Flows (mgd) 2007

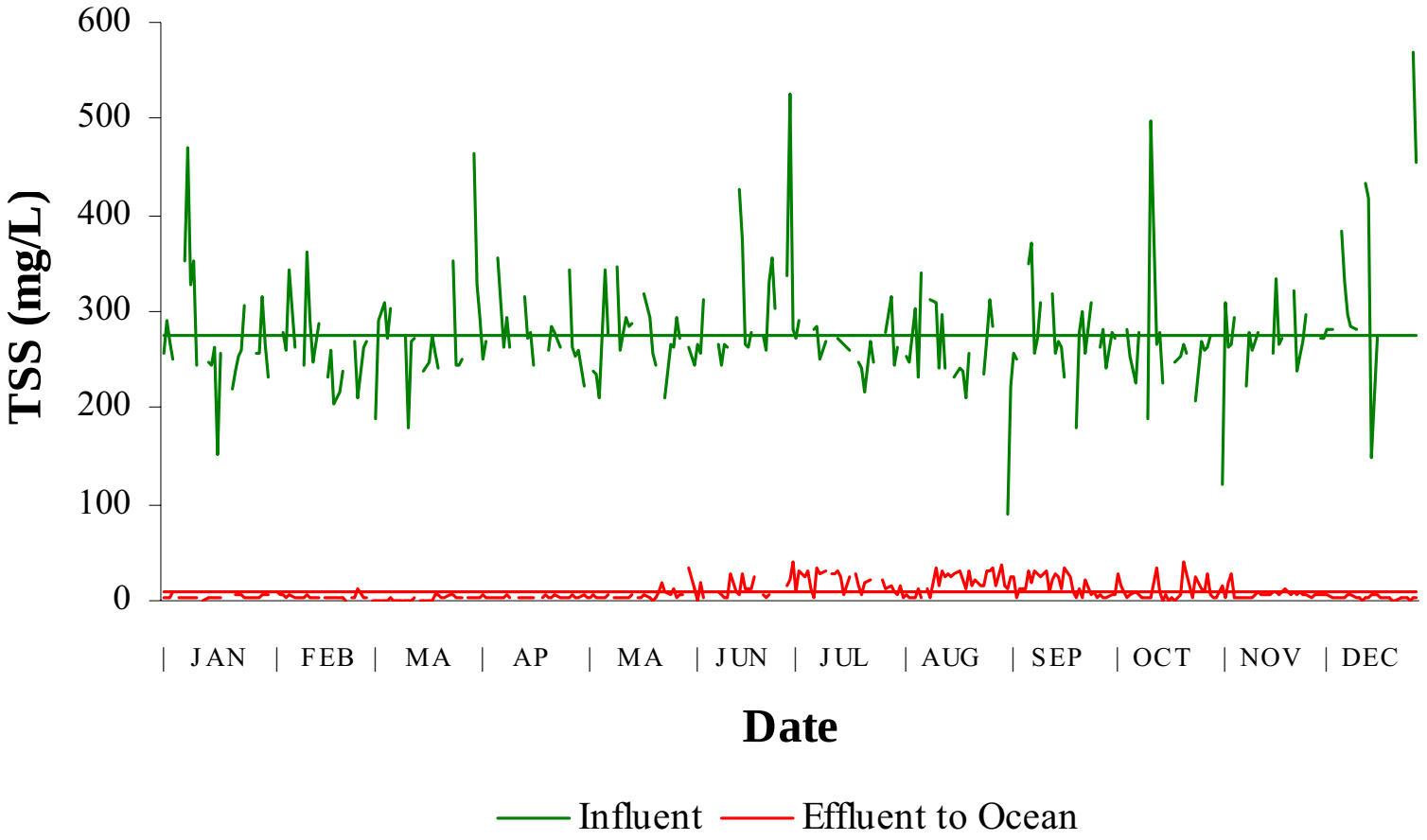
Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	1.63	0.89	1.32	1.37	1.18	1.53	1.60	1.52	1.48	1.44	1.57	1.76	
2	1.82	0.23	1.30	1.52	1.24	1.45	1.57	1.66	1.56	1.51	1.78	1.72	
3	1.57	0.39	1.29	1.57	1.57	1.43	1.64	1.80	1.52	1.40	1.51	1.67	
4	1.38	0.31	1.23	1.18	1.29	1.53	1.47	1.61	1.47	1.54	1.67	1.38	
5	1.72	0.89	1.44	1.35	1.24	1.55	1.49	1.62	1.59	1.45	1.42	1.66	
6	1.40	1.43	1.40	1.53	1.14	1.66	1.52	1.62	1.53	1.35	1.57	1.58	
7	1.36	1.36	1.56	1.20	1.38	1.58	1.55	1.68	1.47	1.47	1.36	1.72	
8	1.40	0.53	1.35	1.25	1.29	1.50	1.43	1.62	1.58	1.28	1.51	1.78	
9	1.41	1.40	1.51	1.54	1.35	1.64	1.54	1.61	1.70	1.47	1.48	1.51	
10	1.20	1.39	1.42	1.66	1.22	1.66	1.48	1.40	1.49	1.38	1.49	1.65	
11	1.40	1.27	1.44	1.48	1.26	1.59	1.31	1.49	1.46	1.38	1.46	1.76	
12	1.84	0.48	1.40	1.64	1.22	1.66	1.64	1.50	1.52	1.23	1.42	1.67	
13	1.64	1.51	1.53	1.59	1.28	1.79	1.57	1.70	1.51	1.38	1.56	1.49	
14	1.25	1.21	1.64	1.54	1.29	1.52	1.49	1.46	1.47	1.39	1.50	1.60	
15	1.50	1.29	0.74	1.42	1.49	1.64	1.61	1.55	1.48	1.31	1.46	1.52	
16	1.45	1.30	1.57	1.49	1.53	1.65	1.77	1.52	1.63	1.47	1.56	1.63	
17	1.66	1.27	1.41	1.48	1.53	1.71	1.50	1.62	1.36	1.26	1.37	1.45	
18	1.45	1.09	1.44	1.16	1.39	1.60	1.46	1.41	1.44	1.48	1.71	1.70	
19	1.56	1.27	1.51	1.42	1.32	1.75	1.90	1.49	1.39	1.37	1.43	1.54	
20	1.40	1.29	1.54	1.24	1.32	1.57	1.51	1.41	1.37	1.26	1.60	1.46	
21	1.14	1.39	1.25	1.26	1.53	1.75	1.66	1.59	1.45	1.48	1.48	1.60	
22	1.12	1.16	1.13	1.38	1.72	1.43	1.55	1.33	1.44	1.39	1.69	1.57	
23	1.35	1.15	1.24	1.25	1.56	1.45	1.48	1.54	1.22	1.32	1.62	1.70	
24	1.32	0.82	1.29	1.27	1.48	1.56	1.63	1.43	1.36	1.40	1.50	1.38	
25	1.47	1.23	1.20	1.14	1.47	1.40	1.62	1.33	1.49	1.48	1.51	1.75	
26	1.41	1.40	1.47	1.30	1.53	1.54	1.54	1.41	1.53	1.54	1.68	1.34	
27	1.28	0.41	1.46	1.17	1.31	1.49	1.50	1.54	1.31	1.53	1.41	1.68	
28	1.34	1.37	1.56	1.18	1.56	1.45	1.64	1.45	1.36	1.68	1.54	1.48	
29	1.30		1.40	1.00	1.55	1.64	1.54	1.70	1.41	1.85	1.63	1.58	
30	0.00		1.53	1.47	1.44	1.43	1.61	1.48	1.34	1.82	1.50	1.51	
31	*		1.64		1.60	1.60	1.68	1.66		1.70		1.69	Annual
Average	1.39	1.06	1.39	1.37	1.40	1.57	1.56	1.54	1.46	1.45	1.53	1.60	1.45
Minimum	0.00	0.23	0.74	1.00	1.14	1.40	1.31	1.33	1.22	1.23	1.36	1.34	0.00
Maximum	1.84	1.51	1.64	1.66	1.72	1.79	1.90	1.80	1.70	1.85	1.78	1.78	1.90
Total	41.77	29.73	43.21	41.05	43.28	48.75	48.50	47.75	43.93	45.01	45.99	49.53	529

* = Ethernet upgrade to DCS therefore no flow data was produced. Representative samples collected and delivered to Lab.

6 South Metro Interceptor is the point at which any return stream (e.g. removed biosolids) are returned to the Metro System.

South Bay Wastewater Reclamation Plant

2007 Total Suspended Solids

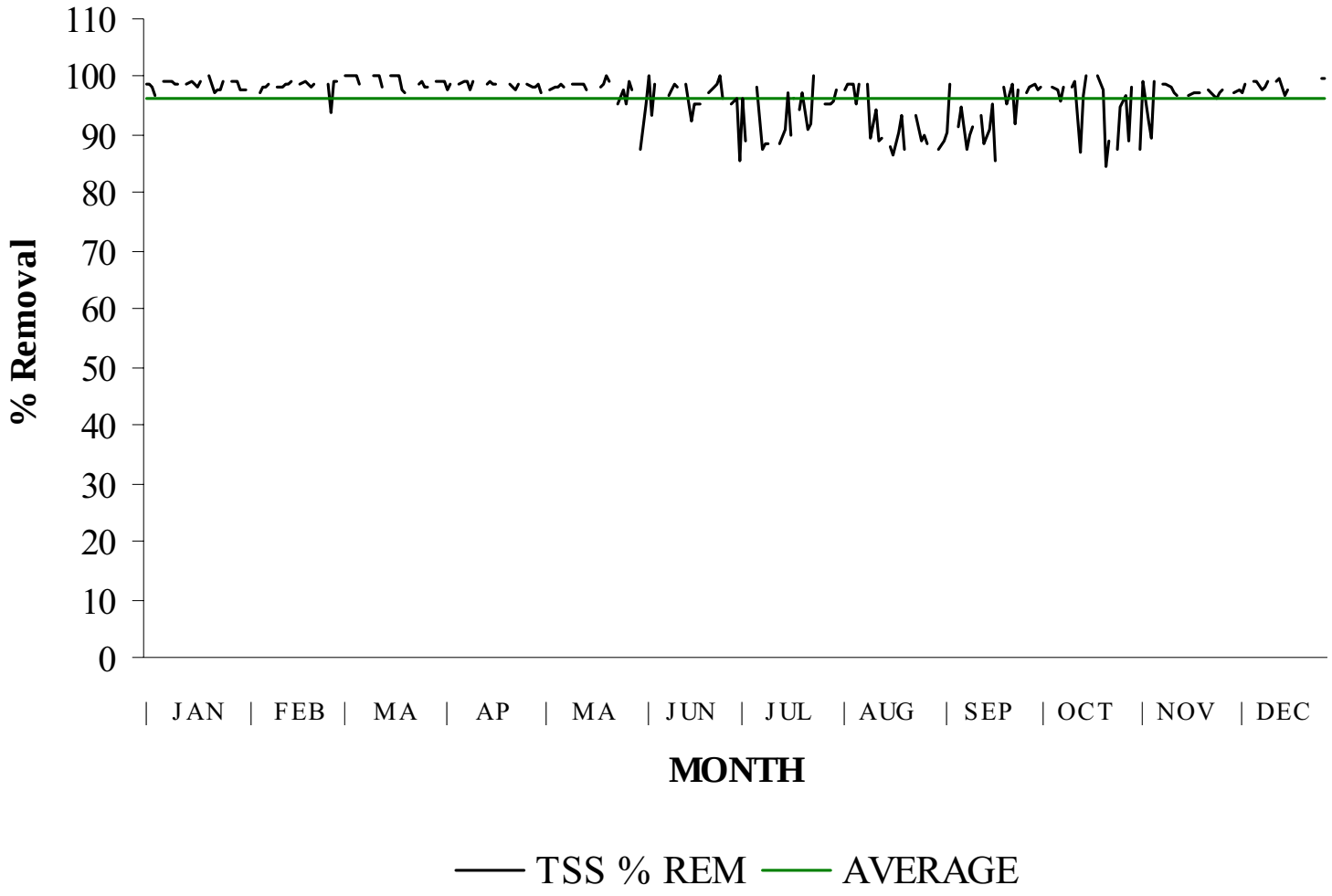


Daily TSS values – 2007

	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
Day	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
1	257	3.80	232	5.30	269	2.20	464	4.30	253	4.30		6.75	337	15.3	243	9.75		37.0	280	4.20	274	5.38		5.82
2	290	4.00					328	2.70	259	3.40			526	20.3	262	5.65		16.0	240	2.60		4.43		4.78
3	268	4.50		8.25		ND	293	2.60	222	5.80	263	32.7	282	40.3		15.5	91	11.3	279	6.27		4.17	271	7.25
4	251	7.88		7.50	190	ND	252	5.10		3.60	245	11.3	272	10.0		4.50	222	24.0	271	5.20	122	15.0	271	6.25
5			279	7.40	292	ND	269	3.10		4.50	267	ND	290	31.3	255	5.25	258	24.3		27.1	309	2.2	282	7.60
6		3.40	259	3.90	309	ND		3.45	239	5.60	257	17.5		25.0	248	3.50	251	3.50		16.5	264	20.0	282	3.88
7	354	2.67	342	5.60	272	ND		3.40	234	3.50	313	3.63		32.0	303	3.80		12.5		10.4	266	28.2		2.70
8	471	2.50	263	3.90	304	3.50	357	3.90	211	3.30				12.3	232	11.2		12.0	280	4.60	294	1.90		3.25
9	329	2.40		2.90		ND	308	2.60	342	4.10		9.63	280	4.2	340	4.44	348	30.0	254	5.83		2.60	384	2.30
10	354	3.90		3.30		ND	264	2.50	276	4.70			285	35.2			370	19.3	226	9.00		4.40	330	2.40
11	244	2.80	244	4.30		ND	294	5.90			267	9.00	252	28.8		12.7	256	32.0	277	4.77	223	3.10	297	7.00
12			362	5.50	275	ND	263	2.60		4.05	244	5.10	270	31.0	313	3.30	272	26.7		4.60	279	2.90	284	5.60
13		ND	290	4.10	180	ND			346	3.50	267	3.50			309	32.5	308	26.0		2.00	259	4.14	281	2.70
14	247	3.30	246	3.50	268	ND		3.10	260	3.60	262	4.50		27.5	241	14.0		31.7	190	2.90	268	6.75		2.50
15	244	2.40	287	2.60	272	4.60		3.00	293	3.20		26.7		28.0	296	32.3		8.80	497	4.40	277	8.22		ND
16	264	2.70					315	3.20	284	3.70		8.40	273	32.0	242	26.0	320	21.5	267	34.7		6.02	434	2.50
17	151	2.60		3.00		ND	273	2.00	288	5.70	426	5.10	268	24.7		27.0	257	29.3	277	8.40		6.91	416	1.80
18	257	1.90	233	2.80	239	ND	278	3.50			373	28.0	267	7.67		26.0	270	24.5	226	ND		7.09	150	4.83
19			259	1.80	246	ND	244	3.30		3.65	267	13.0	259	26.0	232	27.3	262	12.5		7.40	258	8.22	275	5.80
20			205	3.00	274	ND				3.50	263	12.3			242	32.0	233	34.0		1.50	335	9.56		1.60
21	219		215	3.40	257	5.10		3.45	320	4.80	277	13.5		28.7	239	23.0		23.3		2.89	267	7.67		1.75
22	238	6.75	238	3.50	240	6.50		4.70	294	3.40		24.5	247	14.4	209	13.7		9.33	248	ND	271	7.80		2.00
23	254	6.00		ND		3.20	260	3.80	258	ND			241	6.20	258	32.0	180	3.30	253	5.56		12.5		1.70
24	261	6.10				3.90	286	4.40	243	2.40	274	7.69	217	19.7		15.0	277	12.4	265	41.0		6.60	338	ND
25	307	2.90		3.00		4.70	277	6.10		8.67	260	4.50	268	22.0		21.5	301	3.40	256	28.0	322	7.80		ND
26		3.30	269	2.80	352	5.20	264	3.50		19.0	332	4.70	246			14.3	258	20.5		16.0	238	6.15		2.70
27		2.30	210	13.3	243	1.80		3.00	209	9.50	356				236	15.5	309	6.36		4.00	254	8.75	278	3.40
28	256	2.30	264	2.30	243	4.60		3.60	267	5.50	302	10.8			272	30.0		8.00	206	25.3	269	7.50		1.80
29	257	2.10			252	4.10	344	3.50	262	11.7				22.0	313	31.0		4.10	270	13.3	297	6.75		ND
30	315	7.41					262	5.00	294	2.40			279	13.7	285	33.0	262	6.50	261	7.83		4.62	568	2.60
31	266	5.40				2.40			272	5.56			316	14.7		16.2			263	29.1			454	2.10
Ave	277	4.00	261	4.46	262	3.87	293	3.67	271	5.15	290	11.95	285	21.48	266	18.47	265	17.44	266	12.01	267	7.48	348	3.56
Min	151	1.90	205	1.80	180	1.80	244	2.00	209	2.40	244	3.50	217	4.20	209	3.30	91	3.30	190	1.50	122	1.90	150	1.60
Max	471	7.88	362	13.3	352	6.50	464	6.10	346	19.0	426	32.7	526	40.3	340	33.0	370	37.0	497	41.0	335	28.2	568	7.60

Annual Summary	
Influent	Effluent
279	9.46
91.0	1.50
568	41.0

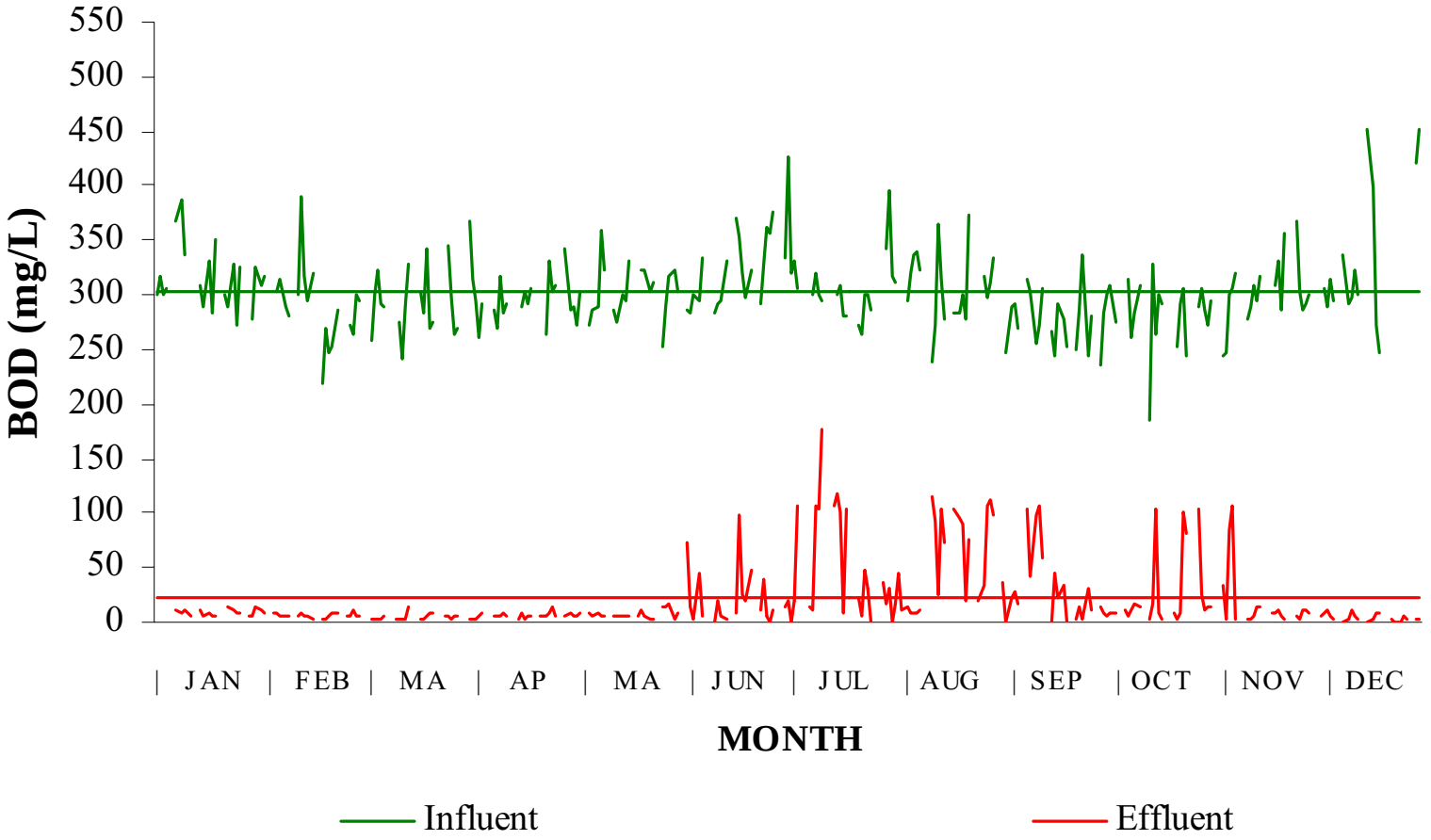
South Bay Wastewater Reclamation Plant
2007 TSS Percent Removal



2007 TSS Percent Removals

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	98.5	97.7	99.2	99.1	98.3		95.5	96.0		98.5	98.0		
2	98.6			99.2	98.7		96.1	97.8		98.9			
3	98.3			99.1	97.4	87.6	85.7		87.6	97.8		97.3	
4	96.9		100.0	98.0		95.4	96.3		89.2	98.1	87.7	97.7	
5		97.3	100.0	98.8		100.0	89.2	97.9	90.6		99.3	97.3	
6		98.5	100.0		97.7	93.2		98.6	98.6		92.4	98.6	
7	99.2	98.4	100.0		98.5	98.8		98.7			89.4		
8	99.5	98.5	98.8	98.9	98.4			95.2		98.4	99.4		
9	99.3			99.2	98.8		98.5	98.7	91.4	97.7		99.4	
10	98.9			99.1	98.3		87.6		94.8	96.0		99.3	
11	98.9	98.2		98.0		96.6	88.6		87.5	98.3	98.6	97.6	
12		98.5	100.0	99.0		97.9	88.5	98.9	90.2		99.0	98.0	
13		98.6	100.0		99.0	98.7		89.5	91.6		98.4	99.0	
14	98.7	98.6	100.0		98.6	98.3		94.2		98.5	97.5		
15	99.0	99.1	98.3		98.9			89.1		99.1	97.0		
16	99.0			99.0	98.7		88.3	89.3	93.3	87.0		99.4	
17	98.3			99.3	98.0	98.8	90.8		88.6	97.0		99.6	
18	99.3	98.8	100.0	98.7		92.5	97.1		90.9	100.0		96.8	
19		99.3	100.0	98.6		95.1	90.0	88.2	95.2		96.8	97.9	
20		98.5	100.0			95.3		86.8	85.4		97.1		
21		98.4	98.0		98.5	95.1		90.4			97.1		
22	97.2	98.5	97.3		98.8		94.2	93.4		100.0	97.1		
23	97.6			98.5	100.0		97.4	87.6	98.2	97.8			
24	97.7			98.5	99.0	97.2	90.9		95.5	84.5		100.0	
25	99.1			97.8		98.3	91.8		98.9	89.1	97.6		
26		99.0	98.5	98.7		98.6	100.0		92.1		97.4		
27		93.7	99.3		95.5	100.0		93.4	97.9		96.6	98.8	
28	99.1	99.1	98.1		97.9	96.4		89.0		87.7	97.2		
29	99.2		98.4	99.0	95.5			90.1		95.1	97.7		
30	97.6			98.1	99.2		95.1	88.4	97.5	97.0		99.5	
31	98.0				98.0		95.3			88.9		99.5	Annual
Average	98.5	98.3	99.3	98.7	98.3	96.5	92.8	92.9	92.7	95.5	96.6	98.6	96.6
Minimum	96.9	93.7	97.3	97.8	95.5	87.6	85.7	86.8	85.4	84.5	87.7	96.8	84.5
Maximum	99.5	99.3	100.0	99.3	100.0	100.0	100.0	98.9	98.9	100.0	99.4	100.0	100.0

South Bay Wastewater Reclamation Plant
2007 Biochemical Oxygen Demand

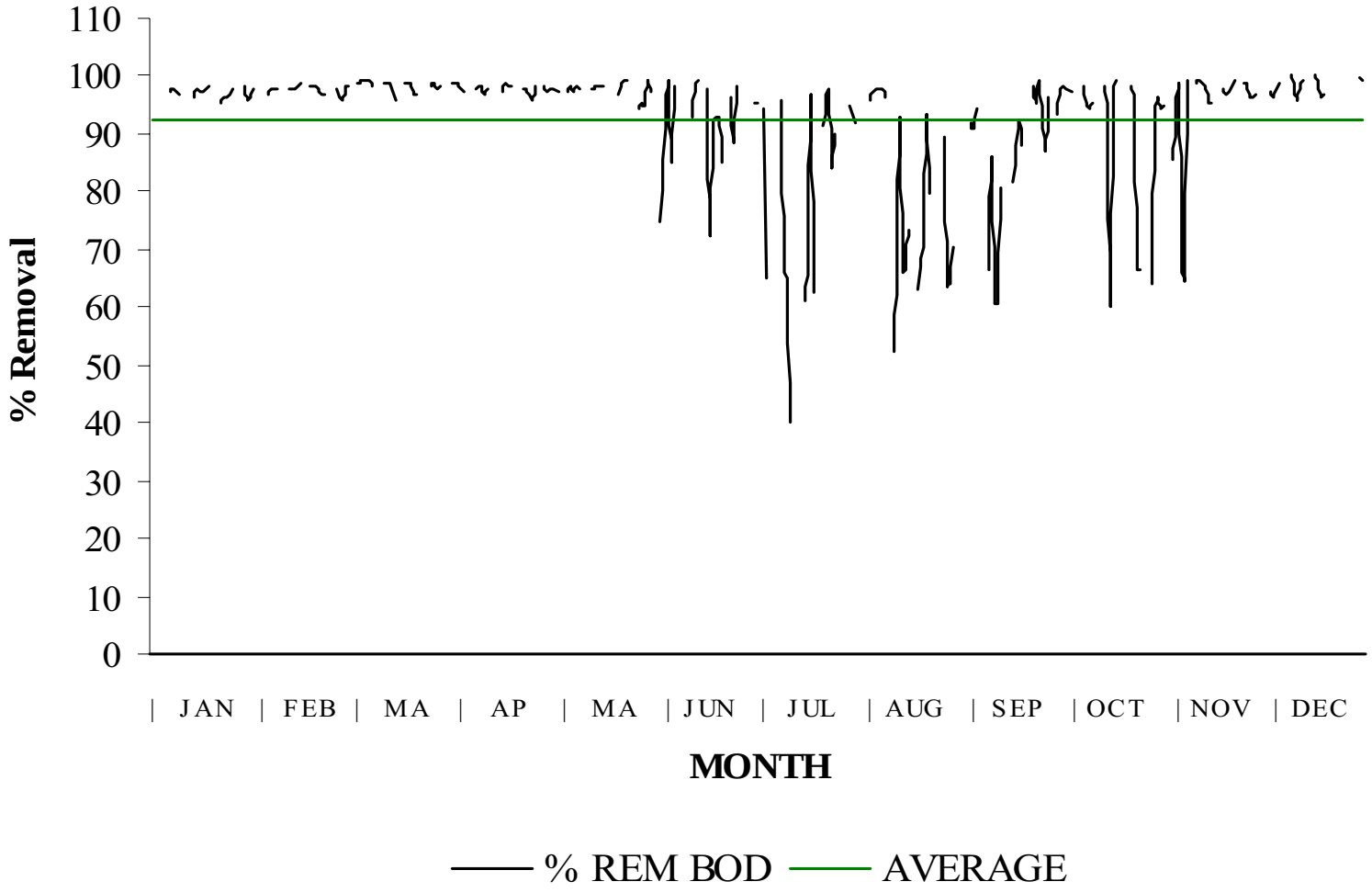


Daily BOD Values 2007

	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
Day	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
1	301	>11.9	317	7.55	294	4.95	368	3.81	289	7.01			333	14.8	317	<15			284	9.47	295	14.5		
2	316	>12.0					314	3.55	273	5.96			427	19.1	312	16.4		35.1	300	5.22				4.22
3	301	>12.5					294	3.50	302	8.62	286	72.4	321	<120		45.3	246	ND	308	7.29			305	8.91
4	307	18.8		9.06	258	2.91	261	6.16			283	15.2	332	18.6		10.0	288	23.4	274	7.89	243	34.8	289	10.5
5			303	9.25	299	3.84	291	7.24			300	2.33	305	106	294	12.7	292	26.9			246	3.75	313	6.23
6			313	6.34	322	3.15			272	7.11	294	44.2			321	8.60	270	15.5			299	85.1	296	3.87
7	367	10.5	290	6.71	293	2.79			287	5.33	335	5.57			336	7.82				12.3	307	107		
8	388	9.06	282	5.71	289	4.76	287	5.81	289	7.57				15.1	339	7.82			313	6.06	321	3.21		
9	336	11.0					270	5.17	358	6.03			301	12.2	324	12.5	313	105	261	11.8			336	ND
10		7.50					317	5.72	324	6.68			321	106			302	42.4	283	16.0			292	4.08
11	290	5.72	299	6.37		2.80	283	8.56			284	<15	299	105			256	99.5	309	13.8	278	3.59	298	12.2
12			390	9.02	276	3.17	293	6.84			291	20.1	296	178	238	114	271	107			288	2.47	322	6.3
13			316	6.5	240	3.57			286	5.9	295	5.25			273	92.1	307	59.7			308	5.36	299	2.19
14	310	12.0	296	4.85	289	3.03			276	5.93	332	2.99			364	25.5			186	3.19	294	13.7		
15	290	6.89	320	4.16	329	13.8		3.62	299	5.71				108	313	105			327	15.7	317	14.6		
16	331	9.02					290	7.5	294	5.09			299	117	278	74.0	266	ND	263	105			451	ND
17	283	6.25					303	3.73	331	5.00	370	7.64	309	100			245	45.2	300	9.19			398	2.37
18	352	6.09	219	4.19	303	3.47	291	4.5			353	97.8	282	8.84			293	21.8	293	2.43		7.71	271	9.36
19			268	4.12	284	3.90	307	5.19			319	24.0	280	105	284	105	278	33.0			308	7.17	247	8.39
20			246	5.93	343	4.60				6.00	298	20.6			283	94.1	252	>41			332	10.3		
21	299		253	7.49	268	7.36			324	10.1	323	47.9			301	89.7				8.60	287	4.48		
22	289	13.2	287	8.66	275	8.70		5.67	324	5.81			272	23.1	277	18.6			253	4.02	357	3.34		
23	329	11.5					264	5.47	302	2.33			265	5.98	374	75.7	250	3.91	291	8.78				2.25
24	271	9.82					331	7.11	311	2.49	292	10.1	299	47.9			287	13.0	307	101			366	ND
25	325	7.21		4.65		5.30	302	12.9			327	38.2	299	30.2			337	3.26	244	82.3	369	4.8		ND
26			272	6.15	346	6.05	310	5.98			361	6.25	287			20.9	245	31.7			303	3.87		6.72
27			263	10.5	298	3.01			252	13.9	356				316	33.8	280	10.4			287	9.97	334	4.15
28		5.31	299	5.54	265	6.27			290	13.7	376	10.4			298	108			289	104	292	11.1		
29	278	4.81			270	4.93	343	5.92	318	17.0				36.7	311	111			307	24.0	300	9.74		
30	326	13.4					286	7.21	322	2.65			342	17.6	333	99.3	237	15.2	285	10.7			422	2.09
31	310	11.8							302	8.32			397	31.2					271	15.1			453	2.37
Ave	314	8.18	291	6.64	292	4.87	300	5.96	301	7.14	320	23.9	313	54.8	309	53.7	276	33.0	283	25.4	302	17.2	335	4.58
Min	271	4.81	219	4.12	240	2.79	261	3.50	252	2.33	283	2.33	265	5.98	238	7.82	237	3.26	186	2.43	243	2.47	247	2.09
Max	388	18.8	390	10.5	346	13.8	368	12.9	358	17.0	376	97.8	427	178	374	114	337	107	327	105	369	107	453	12.2

Annual Summary	
Influent	Effluent
303	20.4
186	2.09
453	178

South Bay Wastewater Reclamation Plant
2007 BOD Percent Removal



2007 BOD Percent Removals

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1		97.6	98.3		97.6					96.7	95.1		
2				98.9	97.8		95.5	94.7		98.3			
3				98.8	97.1				100.0	97.6		97.1	
4	93.9		98.9	97.6		94.6			91.9	97.1	85.7	96.4	
5		96.9	98.7	97.5		99.2	65.2	95.7	90.8		98.5	98.0	
6		98.0	99.0			85.0		97.3	94.3		71.5	98.7	
7	97.1	97.7	99.0		98.1	98.3		97.7			65.1		
8	97.7	98.0	98.4		97.4			97.7		98.1	99.0		
9	96.7			98.1	98.3			96.1	66.5	95.5		100.0	
10				98.2	97.9		67.0		86.0	94.3		98.6	
11	98.0	97.9		97.0			64.9		61.1	95.5	98.7	95.9	
12		97.7	98.9	97.7			39.9	52.1	60.5		99.1	98.0	
13		97.9	98.5			98.2		66.3	80.6		98.3	99.3	
14	96.1	98.4	99.0		97.9	99.1		93.0		98.3	95.3		
15	97.6	98.7	95.8		98.1			66.5		95.2	95.4		
16	97.3				98.3			73.4	100.0	60.1		100.0	
17	97.8			98.8	98.5		67.6		81.6	96.9		99.4	
18	98.3	98.1	98.9	98.5		72.3	96.9		92.6	99.2		96.5	
19		98.5	98.6	98.3		92.5	62.5	63.0	88.1		97.7	96.6	
20		97.6	98.7			93.1		66.7			96.9		
21		97.0	97.3			85.2		70.2			98.4		
22	95.4	97.0	96.8		98.2			93.3		98.4	99.1		
23	96.5				99.2		97.7	79.8	98.4	97.0			
24	96.4			97.9	99.2		84.0		95.5	67.1		100.0	
25	97.8			95.7		88.3	89.9		99.0	66.3	98.7		
26		97.7	98.3	98.1		98.3			87.1		98.7		
27		96.0	99.0					89.3	96.3		96.5	98.8	
28		98.1	97.6		95.3	97.2		63.8		64.0	96.2		
29	98.3		98.2		94.7			64.3		92.2	96.8		
30	95.9			97.5	99.2			70.2	93.6	96.2		99.5	
31	96.2				97.2		92.1			94.4		99.5	Annual
Average	96.88	97.71	98.30	97.89	97.78	92.41	76.94	79.55	87.56	90.40	94.04	98.37	92.32
Minimum	93.88	96.01	95.81	95.73	94.65	72.29	39.86	52.10	60.52	60.08	65.15	95.91	39.86
Maximum	98.27	98.70	99.05	98.87	99.23	99.22	97.74	97.69	100.00	99.17	99.14	100.00	100.00

F. Toxicity Bioassays

Toxicity Testing: South Bay Water Reclamation Plant 2007

INTRODUCTION

The City of San Diego's Toxicology Laboratory (CSDTL) conducted aquatic toxicity tests as required by its National Pollutant Discharge Elimination System permit No. CA0109045, Order No. R9-2006-0067 for the South Bay Water Reclamation Plant (SBWRP). The testing requirement is designed to determine the acute and chronic toxicity of effluent samples collected from the SBWRP. In accordance with the above Order, the City also conducts toxicity tests of combined effluent samples that are collected from the SBWRP and the adjacent International Wastewater Treatment Plant (IWTP). This chapter presents summaries and discussion of all toxicity tests conducted in 2007.

Toxicity testing of wastewater effluent measures the bioavailability of toxicants in a complex mixture, accounts for interactions among potential toxicants, and integrates the effects of all constituents. Acute and chronic toxicity tests are characterized by the duration of exposure to a toxicant as well as the adverse effect (measured response) produced as the result of exposure to a toxicant. Acute toxicity testing consists of a short-term exposure period, usually 96 hours or less, and the acute effect refers to mortality of the test organism. The City of San Diego is required to conduct acute toxicity tests.

Chronic toxicity testing, in the classic sense, refers to long-term exposure of the test organism to a potential toxicant. This may involve exposing the test organism for its entire reproductive life cycle, which may exceed 12 months for organisms such as fish. In general, chronic tests are inherently more sensitive to toxicants than acute tests in that adverse effects are detected at lower toxicant concentrations. The City of San Diego is required to conduct critical/early life stage chronic tests that are intermediate between the acute and chronic toxicity testing protocols discussed above. These test results serve as short-term estimates of chronic toxicity.

MATERIALS & METHODS

Test Material

SBWRP Effluent

The acute toxicity tests were conducted on a quarterly as well as an accelerated schedule, while the chronic toxicity tests were conducted on a monthly schedule in 2007. Twenty-four hour, flow-weighted, effluent composite samples were collected at the in-stream sampling site (designated SB_Outfall_00) and stored at 4 ºC until test initiation.

In July 2007, a significant decrease in SBWRP discharge volume was observed concurrently with an increase in both acute and chronic effluent toxicity. Consequently, steps were taken to investigate whether backflow infiltration of the lesser treated IWTP effluent was contributing or causing contamination of the SB_Outfall_00 sampling site. Subsequent toxicity testing events were modified to test two discrete samples during the same time period to assess the potential effects of IWTP infiltration.

One sample was collected as described above from SB_Outfall_00. The second (designated SB_Outfall_01) was a flow-proportioned composite sample taken from multiple upstream locations known to be free from hydraulic backflow during low SBWRP outflow (discharge) conditions. The latter sample is considered to accurately represent final SBWRP effluent.

All toxicity tests were initiated within 36 hours of sample collection. Exposure concentrations consisted of 3.88, 7.75, 15.5, 31.0, and 62.0% (nominal) for the acute tests. Exposure concentrations consisted of 0.26, 0.53, 1.05, 2.10, and 4.20% for the chronic tests. Dilution water for all tests (effluent and reference toxicant) was obtained from the Scripps Institution of Oceanography (SIO), filtered, held at 4 ºC, and used within 96 hours of collection. Detailed descriptions for all toxicity tests are provided in the City of San Diego Toxicology Laboratory Quality Assurance Manual (City of San Diego 2000).

SBWRP/IWTP Combined Effluent

The City also conducted chronic and acute toxicity tests of combined effluent from the SBWRP and IWTP in accordance with the quarterly testing schedule stated in Order No. R9-2006-0067. Composite samples were collected during the same 24-hour sampling period by SBWRP and IWTP personnel at their respective facilities and combined in the laboratory in accordance with a ratio that is proportional to the flow from each plant at the time of the sample collection.

The acute and chronic toxicity tests were both conducted quarterly in 2007. Effluent samples were stored at 4 ºC and testing was initiated within 36 hours of sample collection. Acute toxicity test concentrations consisted of 3.88, 7.75, 15.5, 31.0, and 62.0% (nominal) effluent. Chronic toxicity test concentrations consisted of 0.26, 0.53, 1.05, 2.10, and 4.20%. Dilution water for all tests (effluent and reference toxicant) was obtained from SIO, filtered, held at 4 ºC, and used within 96 hours of collection. Detailed methodology for all toxicity testing is described in the City of San Diego Toxicology Laboratory Quality Assurance Manual (City of San Diego 2000).

Acute Bioassays

Topsmelt Survival Bioassay

The topsmelt acute bioassay was conducted in accordance with EPA/600/4-90/027F (USEPA 1993). Larval *Atherinops affinis* (9-14 days old) were purchased from Aquatic Bio Systems (Fort Collins, CO), and acclimated to test temperature and salinity for at least 24 hours. Upon test initiation, the topsmelt (10 per replicate) were exposed for 96 hours in a static-renewal system to the effluent exposure series. Dilution water and brine controls were also tested. The test solutions were renewed at 48 hours and the organisms were fed once each day.

Simultaneous reference toxicant testing was performed using reagent grade copper chloride. Test concentrations consisted of 56, 100, 180, 320, and 560 µg/L copper. Dilution water was obtained from SIO, filtered, held at 4 ºC, and used within 96 hours of collection. Upon conclusion of the exposure period, percent survival was recorded. Tests were declared valid if control mortality did not exceed 10%. The data were analyzed using a multiple comparison procedure and point

estimation method prescribed by USEPA (1993). ToxCalc software (Tidepool Scientific Software 2002) was used for all statistical analyses.

Mysid Survival Bioassay

The mysid acute bioassay was conducted in accordance with EPA/600/4-90/027F (USEPA 1993). Larval *Mysidopsis bahia* (4-5 days old) were purchased from Aquatic Bio Systems (Fort Collins, CO), and acclimated to test temperature and salinity for at least 24 hours. Upon test initiation, the mysids (10 per replicate) were exposed for 96 hours in a static-renewal system to the effluent exposure series. Dilution water and brine controls were also tested. The test solutions were renewed at 48 hours and the organisms were fed once daily.

Simultaneous reference toxicant testing was performed using reagent grade copper chloride. Test concentrations consisted of 56, 100, 180, 320, and 560 µg/L copper. A SIO seawater control was also tested. At the end of the exposure period, percent survival was recorded. Tests were declared valid if control mortality did not exceed 10%. The data were analyzed using a multiple comparison procedure and point estimation method prescribed by USEPA (1993). ToxCalc software (Tidepool Scientific Software 2002) was used for all statistical analyses.

Chronic Bioassays

Red Abalone Development Bioassay

Chronic bioassays using the red abalone, *Haliotis rufescens*, were conducted in accordance with EPA/600/R-95/136 (USEPA 1995). Test organisms were purchased from Cultured Abalone (Goleta, California), and shipped via overnight delivery to the CSDTL. Mature male and female abalone were placed in separate natural seawater tanks and held at 15 ºC. For each test event, spawning was induced in 6-8 abalones in gender-specific vessels. Eggs and sperm were retained and examined under magnification to ensure good quality. Once deemed acceptable, the sperm stock was used to fertilize the eggs, and a specific quantity of fertilized embryos was added to each test replicate and exposed to the effluent series for 48 hours. A receiving water control was also tested. At the end of the test period, 100 embryos were examined and the number of normally and abnormally developed embryos was recorded.

Simultaneous reference toxicant testing was performed using reagent grade zinc sulfate. The concentrations of zinc in the exposure series were 10, 18, 32, 56, and 100 µg/L. A SIO seawater control was also tested.

The percentage of normally developed embryos for each replicate was arcsine square root transformed. The data were analyzed in accordance with "Flowchart for statistical analysis of red abalone *Haliotis rufescens*, development data" (see USEPA 1995). ToxCalc software (Tidepool Scientific Software 2002) was used for all statistical analyses.

Kelp Germination and Growth Test

Chronic bioassays using the giant kelp, *Macrocystis pyrifera*, were conducted in accordance with USEPA protocol EPA/600/R-95/136 (USEPA 1995). Kelp zoospores were obtained from the reproductive blades (sporophylls) of adult *Macrocystis* plants, which were collected from the kelp beds near La Jolla, California one day prior to test initiation. The zoospores were exposed in a static system for 48 hours to effluent exposure series.

Simultaneous reference toxicant testing was performed using reagent grade copper chloride. The concentrations of copper in the exposure series were 5.6, 10, 18, 32, 56, 100, and 180 µg/L. A SIO seawater control was also tested. At the end of the exposure period, 100 zoospores from each replicate were examined and the percent germination was recorded. In addition, germ-tube length was measured and recorded for 10 of the germinated zoospores.

The data were analyzed in accordance with "Flowchart for statistical analysis of giant kelp, *Macrocystis pyrifera*, germination data" and "Flowchart for statistical analysis of giant kelp, *Macrocystis pyrifera*, growth data" (see USEPA 1995). ToxCalc software (Tidepool Scientific Software 2002) was used for all statistical analyses.

Topsmelt Survival and Growth Bioassays

Chronic bioassays using the topsmelt (*Atherinops affinis*) were conducted in accordance with EPA/600/R-95/136 (USEPA 1995). Larval topsmelt (9-14 days old) were purchased from a commercial vendor and exposed for seven days in a static-renewal system to effluent exposure series. The test endpoints are survival and growth (dry biomass).

Simultaneous reference toxicant testing was performed using reagent grade copper chloride. The concentrations of copper in the exposure series were 32, 56, 100, 180, and 320 µg/L. A reference toxicant control consisting of SIO dilution water was also tested. Upon conclusion of the exposure period, percent survival and dry biomass were recorded.

The data were analyzed using ToxCalc (Tidepool ScientificSoftware, 2002) in accordance with the appropriate US EPA flowcharts for statistical analysis of topsmelt survival and growth test data by hypothesis testing and point estimation (USEPA 1995; pp.105-106).

RESULTS & DISCUSSION

Acute Toxicity of SBWRP Effluent

In accordance with Order No. R9-2006-0067 and the most recent side-by-side acute re-screening study, the City used the most sensitive test organism, topsmelt, to monitor acute SBWRP effluent toxicity in 2007. All SB_Outfall_00 samples collected prior to the low outflow conditions (January through June) and the three SB_Outfall_01 samples collected during the low outflow conditions (July through early October) were within permit-specified performance goals. The four SB_Outfall_00 samples collected during the same low outflow period all exceeded the NPDES permit performance goals (Table T.1).

Chronic Toxicity of SBWRP Effluent

In accordance with Order No. R9-2006-0067, the City conducted monthly red abalone chronic toxicity tests using samples collected from SB_Outfall_00. In addition, SB_Outfall_01 samples were collected and tested in parallel with the SB_Outfall_00 samples from September through December to assess the impact of reduced flow on chronic toxicity. All chronic toxicity tests in 2007 were within NPDES permit performance goals (Table T.2).

Toxicity of SBWRP/IWTP Combined Effluent

The City also conducted chronic and acute bioassays for the SBWRP/IWTP combined effluent samples in accordance with the quarterly testing schedule stated in Order No. R9-2006-0067. Although this combined effluent testing is a requirement of the SBWRP monitoring program, there are no compliance limits or performance foals for these data.

In 2007, the City conducted the last two of the three requisite side-by-side chronic re-screening study to compare the sensitivity of the giant kelp, red abalone, and topsmelt to the combined effluent. The results showed red abalone to be most sensitive species to combined effluent toxicity. Therefore, the City will use the red abalone for subsequent monitoring. The results for all combined effluent bioassays performed in 2007 are summarized in Tables T.3 and T.4.

REFERENCES

City of San Diego. (2000). Quality Assurance Manual for Bioassay Testing. Metropolitan Wastewater Department, Environmental Monitoring and Technical Services Division, San Diego, CA

Tidepool Scientific Software. (2002). ToxCalc Toxicity Information Management System Database Software

USEPA. (1993). Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. Fourth Edition. C.I. Weber (ed). Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency, Cincinnati, OH. EPA/600/4-90/027F

USEPA. (1995). Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. Chapman, G.A., D.L. Denton, and J.M. Lazorchak (eds). Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency, Cincinnati, OH, EPA/600/R-95/136

Table T.1
Results of acute toxicity tests of SBWRP effluent conducted during 2007. Data are presented as acute toxic units (TUa). The NPDES permit performance goal is 3.1[7] TUa.

Sample Date	Sample Site	Topsmelt 96-Hour Survival (TUa)
1/7/2007	SB_Outfall_00	<1.6
4/15/2007	SB_Outfall_00	<1.6
7/22/2007	SB_Outfall_00	4.5
8/19/2007	SB_Outfall_00	4.1
8/19/2007	SB_Outfall_01	<1.6
8/21/2007	SB_Outfall_00	4.2
8/21/2007	SB_Outfall_01	<1.6
10/7/2007	SB_Outfall_00	4.2
10/7/2007	SB_Outfall_01	<1.6
N		9
No. in compliance		5
Mean TUa		<2.8

[7] Reflects change in Acute Toxicity limit to 3.1 TUa correctiong an error in calculation as discussed with SDRWQCB staff.

Table T.2
Results of chronic toxicity testing of SBWRP effluent conducted during 2007. Data are presented as chronic toxic units (TUc). NPDES permit performance goal is 95.6 TUc.

Sample Date	Sample Site	Red Abalone Development (TUc)
1/16/2007	SB_Outfall_00	25.0
2/14/2007	SB_Outfall_00	23.8
3/12/2007	SB_Outfall_00	23.8
4/10/2007	SB_Outfall_00	23.8
5/15/2007	SB_Outfall_00	23.8
6/4/2007	SB_Outfall_00	23.8
7/10/2007	SB_Outfall_00	47.6
8/7/2007	SB_Outfall_00	23.8
9/11/2007	SB_Outfall_00	95.2
9/11/2007	SB_Outfall_01	23.8
10/15/2007	SB_Outfall_00	N.V.
10/15/2007	SB_Outfall_01	N.V.
10/31/2007	SB_Outfall_00	23.8
10/31/2007	SB_Outfall_01	23.8
11/13/2007	SB_Outfall_00	23.8
11/13/2007	SB_Outfall_01	23.8
12/17/2007	SB_Outfall_00	23.8
12/17/2007	SB_Outfall_01	23.8
N		16
No. in compliance		16
Mean TUc		30

Table T.3
Results of acute toxicity tests of SBWRP/IWTP combined effluent samples conducted in 2007. Data are presented as acute toxic units (TUa).

Sample Date	Topsmelt 96-Hour Survival	Mysid 96-Hour Survival
2/11/2007	-	4.6
6/17/2007	5.2	2.6
8/26/2007	4.1	4.7
10/21/2007	4.0	2.3

Table T.4
Results of chronic toxicity tests of SBWRP/IWTP combined effluent samples conducted in 2007. Data are presented as chronic toxic units (TUc).

Sample Date	Giant Kelp		Red Abalone	Topsmelt	
	Germination	Growth	Development	Survival	Growth
2/8/2007	-	-	-	23.8	23.8
2/11/2007	23.8	47.6	-	-	-
2/13/2007	-	-	47.6	-	-
5/3/2007	-	-	-	23.8	23.8
5/7/2007	23.8	47.6	47.6	-	-
8/7/2007	-	-	95.2	-	-
12/17/2007	-	-	95.2	-	-