

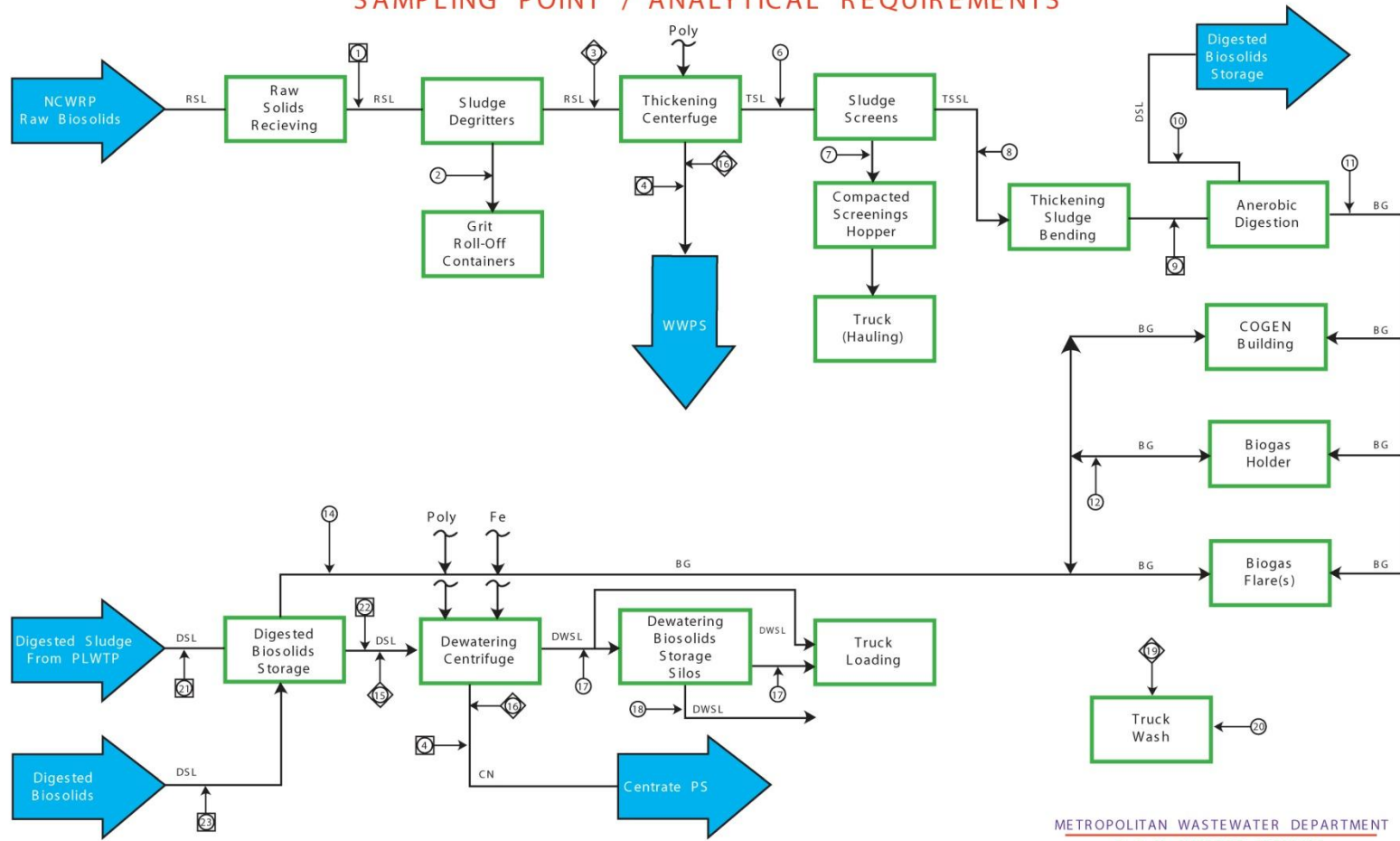
IV. Metro Biosolids Center (MBC) Data

- A. MBC Diagrams
- B. Return Stream Data Summary
- C. Digester and Digested Sludge Data Summary
- D. Gas Production
- E. Chemical Usage
- F. Graphs of Chemical Usage
- G. Solids Handling Annual Report
- H. Results of "Title 22" Sludge Hazardous Waste Tests

A. MBC Diagrams



METROPOLITAN BIOSOLIDS CENTER PROCESS FLOW DIAGRAM SAMPLING POINT / ANALYTICAL REQUIREMENTS



METROPOLITAN WASTEWATER DEPARTMENT
O & M SUPPORT SERVICES

- GRAB SAMPLER
- ⊠ AUTOSAMPLER
- ◇ ANALYZER/METER

LOCATION	DESCRIPTION	LOCATION	DESCRIPTION	LOCATION	DESCRIPTION
1	Raw Solids Sampler (73 AU 9040): Volatile Solids, Total Solids, pH, Alkalinity	9	Thickened Sludge (73 AU 9050): Total Solids, Volatile Solids, Temperature, pH, Alkalinity, Volatile Acids, Iron	16	Centrate (Dewatering & Thickening) Analyzers: Total Suspended Solids
2	Grit: Volatile Solids, % Moisture	10	Anaerobically Digested Sludge: % Total Solids, % Volatile Solids, Temperature, pH, Alkalinity, Volatile Acids	17	Dewatered Biosolids: Total Solids, Volatile Solids, pH, TKN, PCB, Trace Metals
3	Thickened Sludge Feed Loop (76 DE 2140): Total Solids, Volatile Solids	11	Biogas from Digestion: Methane (CH ₄), Carbon Dioxide (CO ₂), Hydrogen Sulfide (H ₂ S)	18	Dewatered Biosolids Cake: Total Solids, Volatile Solids, pH, TKN, PCB, Trace Metals
4	Centrate (Dewatering & Thickening) Sampler (76 AU 2635): Total Suspended Solids, pH, BOD ₅	12	Biogas to Biogas Holder: Methane (CH ₄), Carbon Dioxide (CO ₂), H ₂ S	19	Truck Wash: (87 AIT 901): Cl ₂ Residue
5	Thickened Biosolids: Total Solids, Volatile Solids, pH	13	Biogas from Digestion: Methane (CH ₄), Carbon Dioxide (CO ₂)	20	Truck Wash: BOD ₅ , Coliform
6	Thickened Screenings: Volatile Solids, % Moisture	14	Dewatering Centrifuge Feed Loop (76 DE 2502): Total Solids	21	Digested Sludge from PLWTP (80 AU 9009): Total Solids, Volatile Solids, pH, Iron
7	Thickened Screen Sludge: Total Sludge, Volatile Solids	15		22	Digested Sludge from DBST (80 AU 2115): Total Solids, Volatile Solids, pH
8				23	Digester Samplers: Digester#1 80 AU 9006, Digester#2 9007, Digester#3 9008
					Total Solids, Volatile Solids, pH, Alkalinity, Iron

Revision Date: 02/11/04

B. Return Stream Data Summary

This section presents the results of analyses of the Metro Biosolids Center (MBC) return stream (MBC_COMBCN) for 2012. This return stream is continuously sampled by a flow proportioned, autosampler connected to the return stream lines at MBC. Each 24-hour¹³ composite is collected and analyzed for pH, BOD, TSS, TVSS, TS, and TVS daily. An aliquot is preserved and added to a monthly (calendar month) composite for analysis of trace metals.

The data is presented in tables of monthly averages and graphs of the monthly averages of select parameters. Tables of daily values for select parameters (such as TSS, Flow, etc.) along with graphs are also provided.

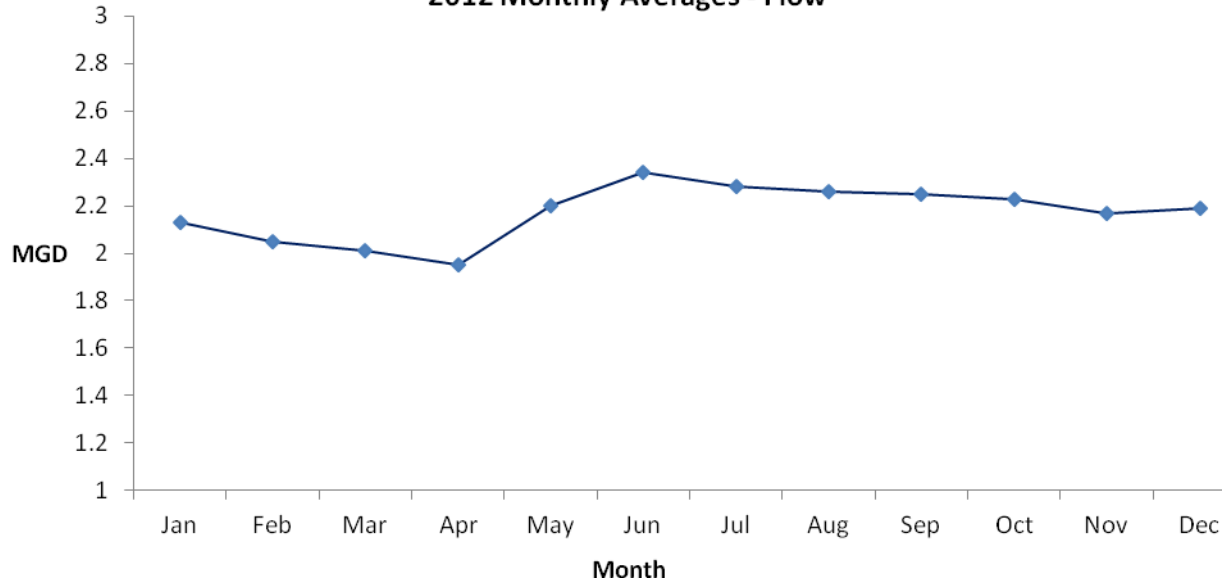


¹³ approximately midnight to midnight each day.

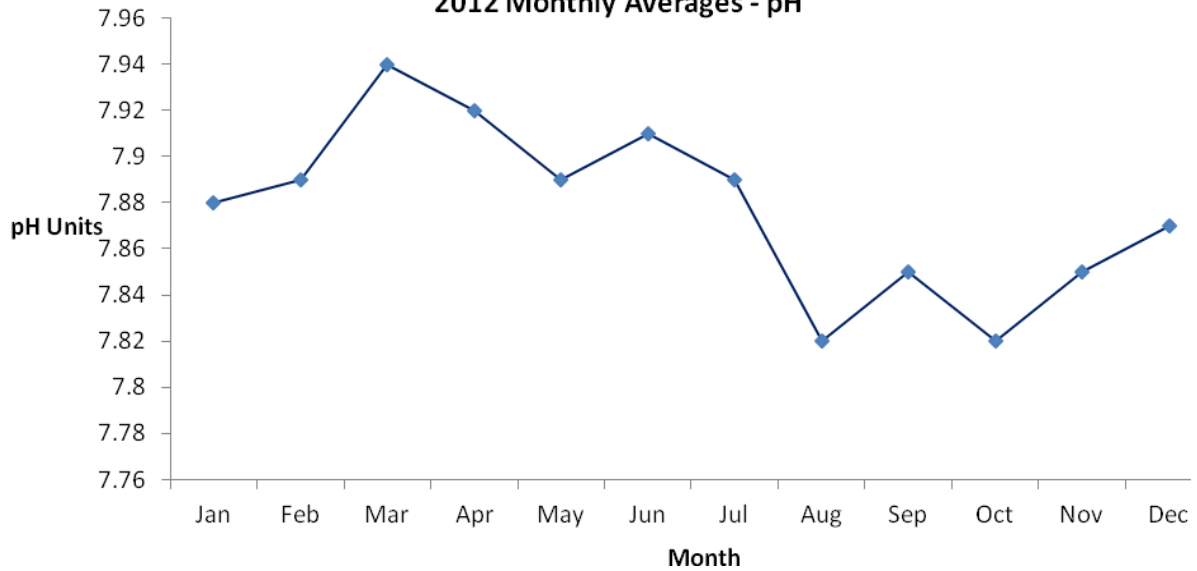
Metro Biosolids Center
 Sludge Project - Annual Summary
 Combined Sludge Centrate
 From 01-JAN-2012 to 31-DEC-2012

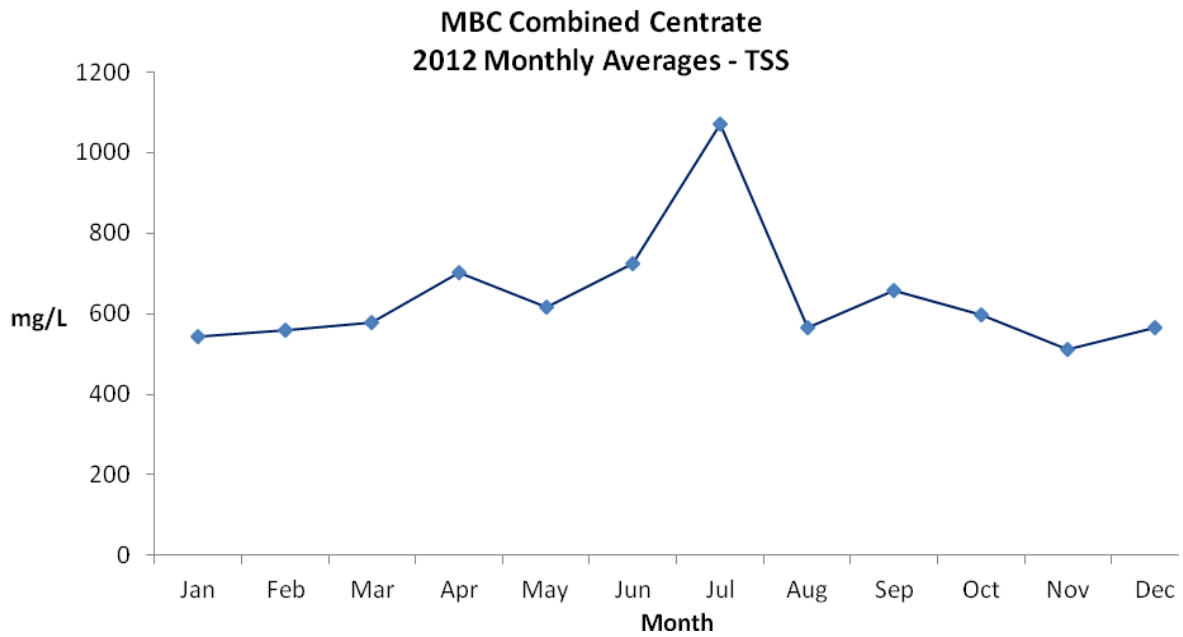
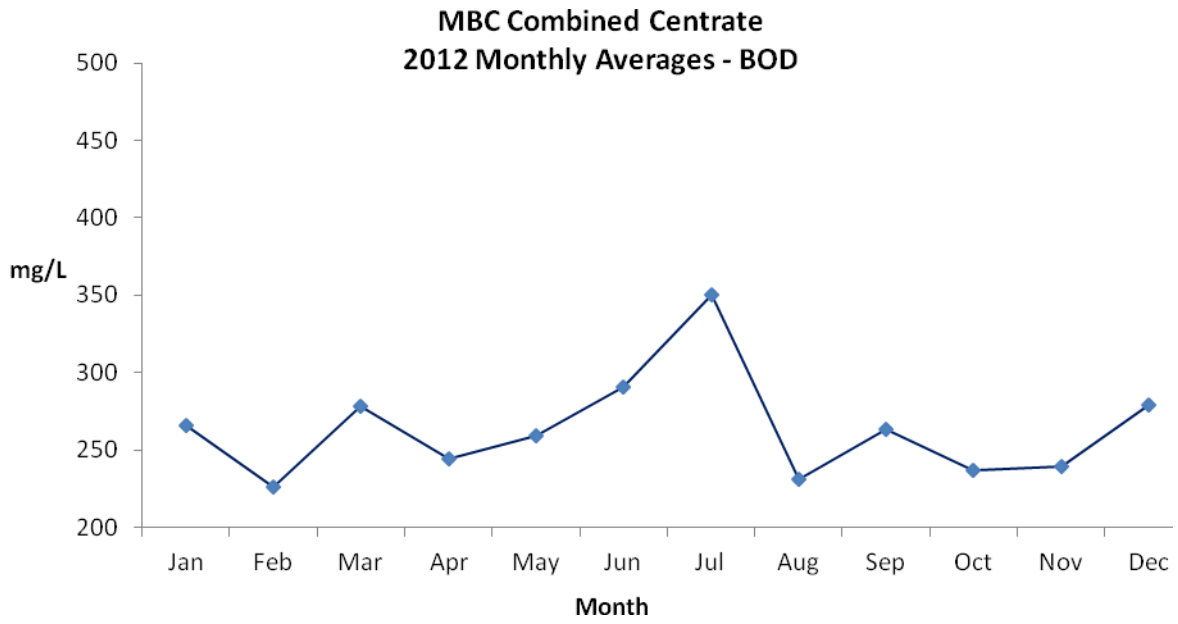
	FLOW	PH	BOD	TSS	VSS	TS	TVS	TSS Mass Emmissions (lbs/Day)
	MGD	pH Units	mg/L	mg/L	mg/L	Wt%	Wt%	
JANUARY -2012	2.13	7.88	266	543	423	0.33	38	9646
FEBRUARY -2012	2.05	7.89	226	558	410	0.33	40	9540
MARCH -2012	2.01	7.94	278	579	447	0.31	42	9706
APRIL -2012	1.95	7.92	244	703	526	0.32	47	11433
MAY -2012	2.20	7.89	259	615	476	0.34	51	11284
JUNE -2012	2.34	7.91	291	725	527	0.37	50	14149
JULY -2012	2.28	7.89	350	1070	775	0.42	53	20346
AUGUST -2012	2.26	7.82	231	565	418	0.40	51	10649
SEPTEMBER -2012	2.25	7.85	263	659	485	0.39	51	12366
OCTOBER -2012	2.23	7.82	237	597	430	0.36	48	11103
NOVEMBER -2012	2.17	7.85	239	512	376	0.31	44	9266
DECEMBER -2012	2.19	7.87	279	565	418	0.30	44	10319
Average	2.17	7.88	264	641	476	0.35	47	11651

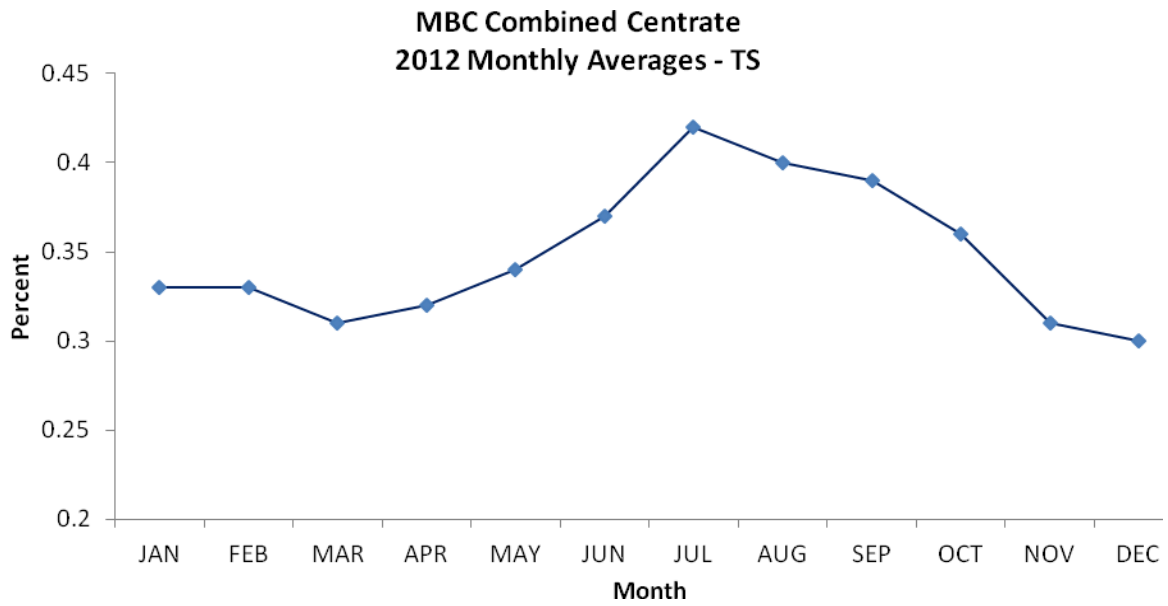
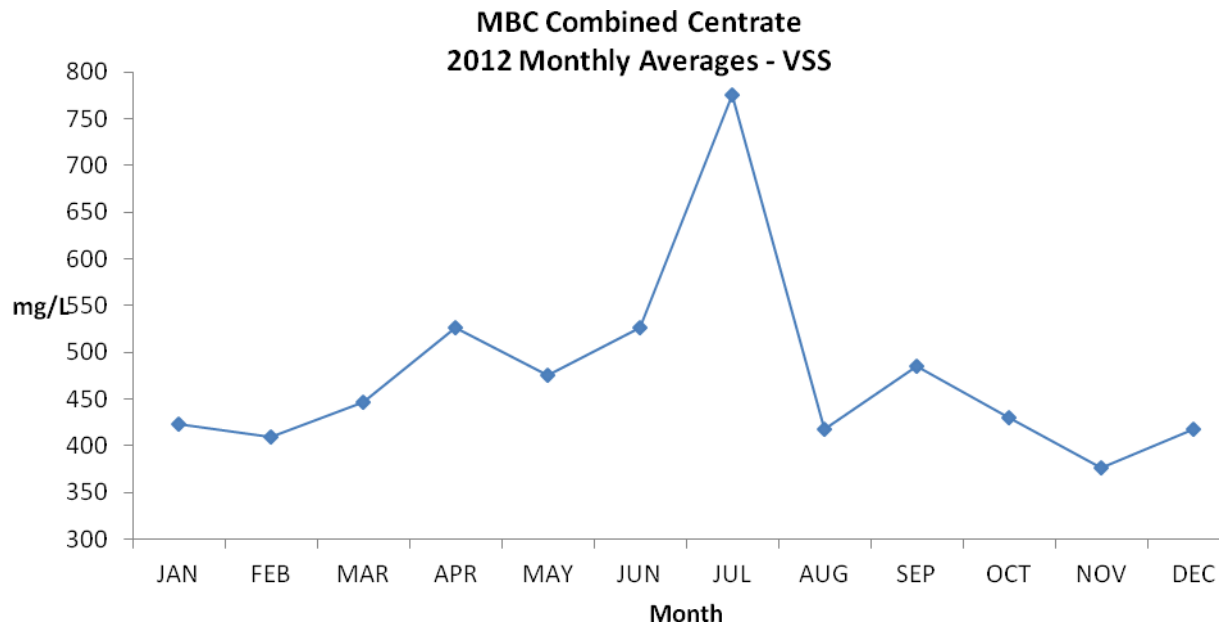
**MBC Combined Centrate
2012 Monthly Averages - Flow**

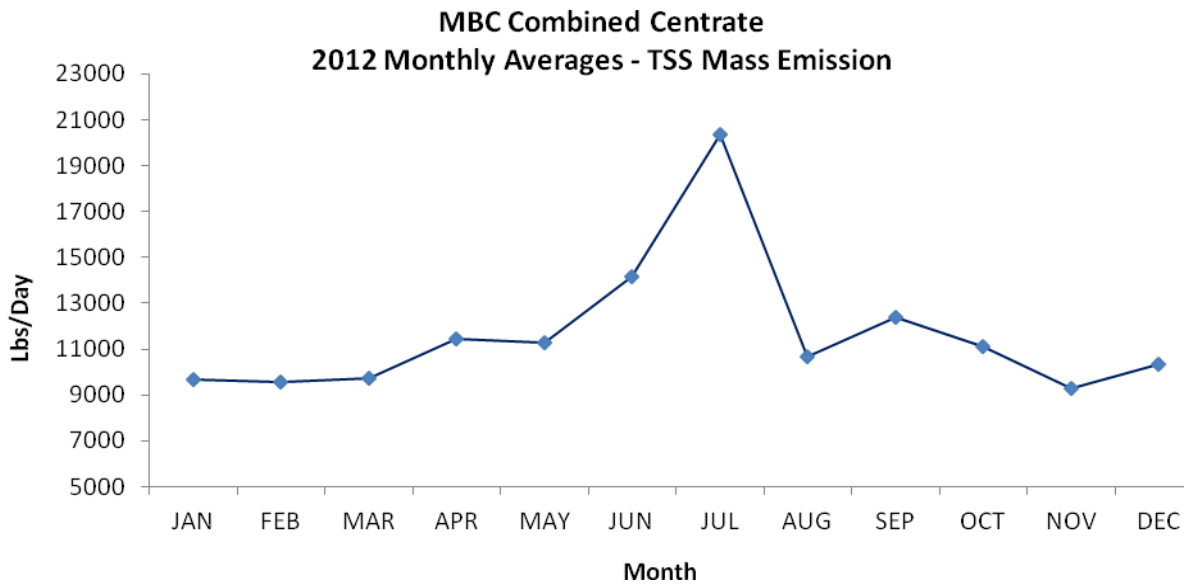
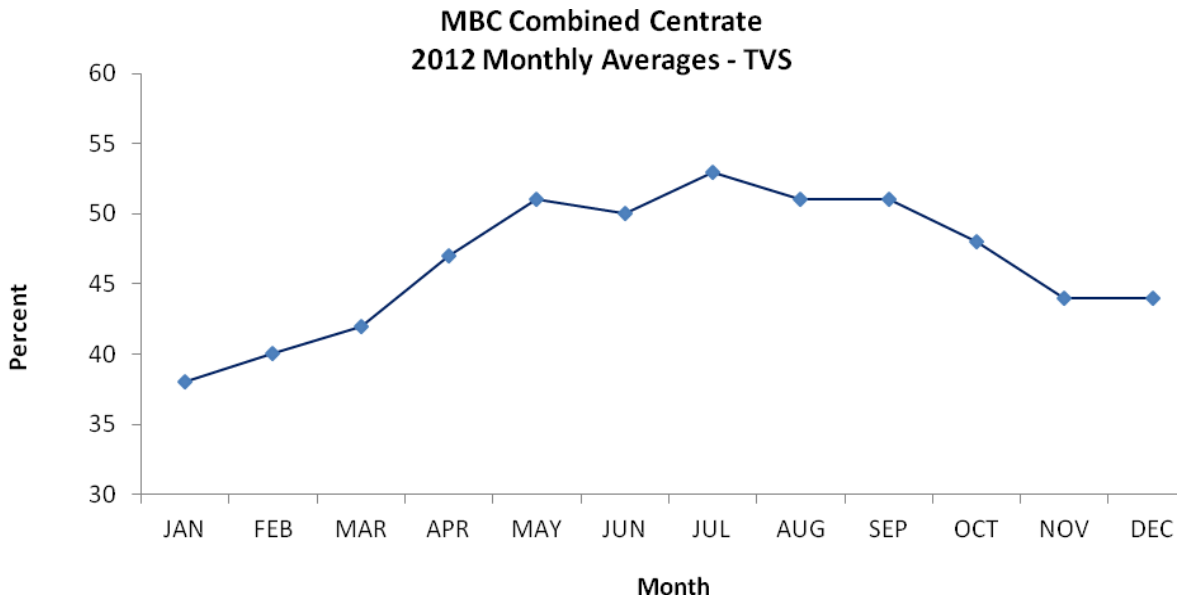


**MBC Combined Centrate
2012 Monthly Averages - pH**

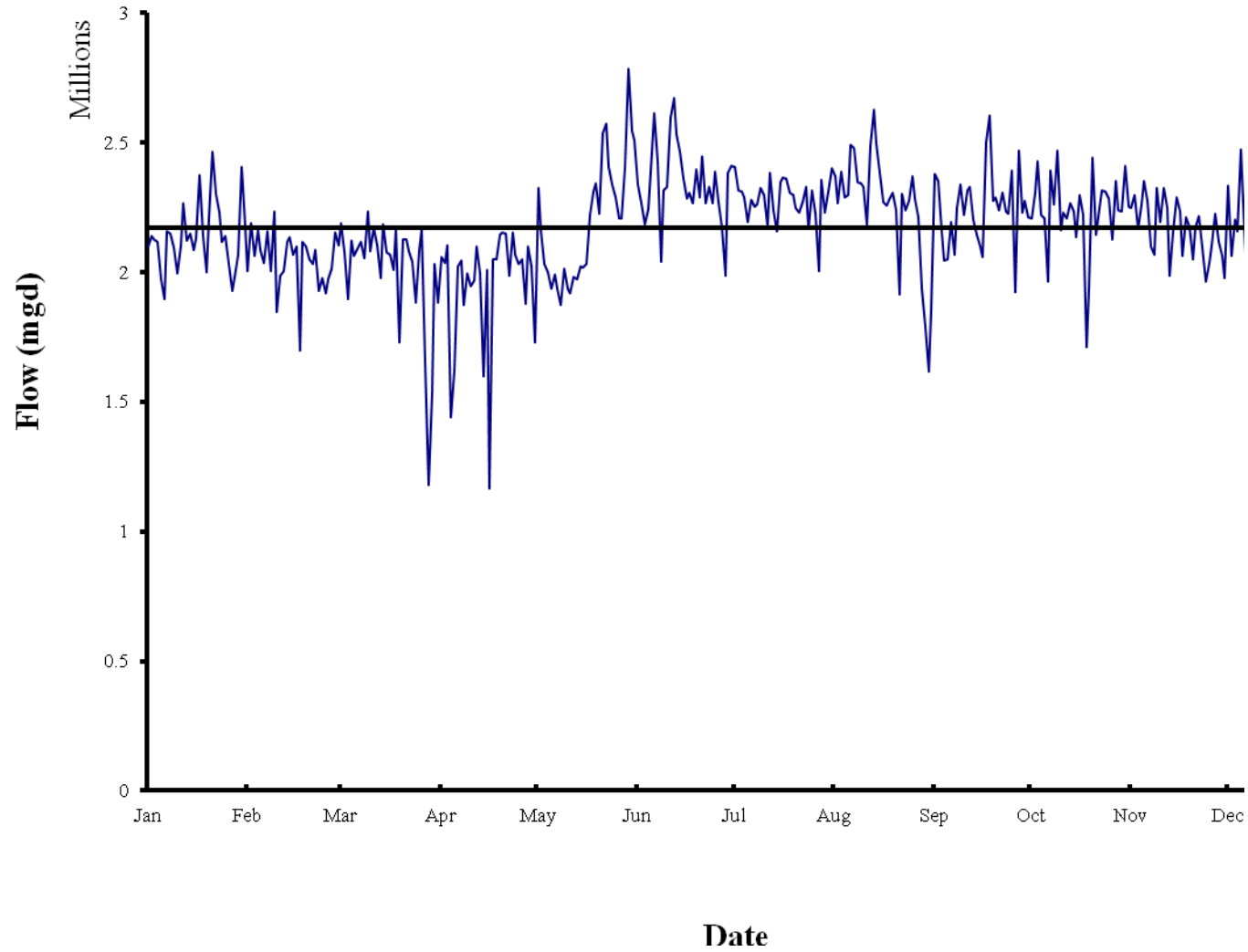








2012 MBC Return Stream Flow (mgd)



Metro Biosolids Center
2012 MBC Return Stream Daily Flows (mgd)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.10	2.00	2.19	2.06	2.33	2.34	2.40	2.37	2.38	2.21	2.25	2.33
2	2.14	2.19	2.08	2.03	2.16	2.27	2.32	2.27	2.35	2.31	2.30	2.06
3	2.13	2.06	1.90	2.10	2.03	2.18	2.31	2.39	2.16	2.43	2.17	2.20
4	2.12	2.16	2.12	1.44	2.00	2.24	2.29	2.29	2.04	2.22	2.26	2.16
5	1.97	2.09	2.06	1.62	1.94	2.39	2.19	2.30	2.05	2.21	2.35	2.47
6	1.90	2.03	2.09	2.02	1.99	2.61	2.28	2.49	2.20	1.97	2.27	2.17
7	2.16	2.16	2.12	2.05	1.93	2.42	2.25	2.48	2.07	2.39	2.10	1.87
8	2.15	2.00	2.05	1.88	1.87	2.04	2.26	2.35	2.25	2.26	2.07	2.23
9	2.10	2.23	2.23	2.00	2.02	2.31	2.32	2.34	2.34	2.47	2.32	2.09
10	2.00	1.84	2.08	1.95	1.94	2.33	2.30	2.33	2.22	2.16	2.19	2.33
11	2.10	1.99	2.17	1.97	1.92	2.59	2.18	2.18	2.32	2.23	2.32	2.32
12	2.27	2.01	2.10	2.10	1.98	2.67	2.38	2.49	2.33	2.21	2.25	2.25
13	2.12	2.12	1.98	2.00	1.97	2.53	2.24	2.63	2.20	2.26	1.99	2.24
14	2.15	2.13	2.18	1.60	2.02	2.46	2.16	2.50	2.15	2.24	2.16	2.19
15	2.09	2.07	2.08	2.01	2.02	2.36	2.35	2.38	2.10	2.13	2.29	1.87
16	2.13	2.10	2.07	1.16	2.03	2.28	2.37	2.27	2.06	2.30	2.23	2.24
17	2.37	1.70	2.01	2.05	2.22	2.31	2.36	2.25	2.50	2.22	2.06	2.31
18	2.14	2.12	2.17	2.05	2.31	2.26	2.31	2.28	2.60	1.71	2.21	2.22
19	2.00	2.10	1.73	2.14	2.34	2.40	2.30	2.31	2.28	1.93	2.18	2.25
20	2.21	2.05	2.13	2.15	2.23	2.29	2.25	2.24	2.29	2.44	2.05	2.22
21	2.46	2.03	2.12	2.15	2.54	2.44	2.23	1.92	2.24	2.14	2.17	2.22
22	2.30	2.09	2.08	1.98	2.57	2.27	2.27	2.30	2.31	2.25	2.22	2.25
23	2.23	1.93	2.04	2.16	2.41	2.33	2.33	2.24	2.24	2.31	2.10	2.23
24	2.12	1.98	1.88	2.07	2.34	2.27	2.17	2.28	2.23	2.31	1.96	2.24
25	2.14	1.92	2.09	2.03	2.29	2.39	2.31	2.37	2.39	2.28	2.04	1.89
26	2.03	1.97	2.17	2.05	2.21	2.27	2.22	2.28	1.92	2.13	2.11	1.92
27	1.93	2.01	1.65	1.88	2.21	2.17	2.00	2.21	2.47	2.35	2.23	2.25
28	1.98	2.15	1.18	2.10	2.41	1.99	2.36	1.94	2.23	2.24	2.11	2.24
29	2.07	2.10	1.54	2.02	2.79	2.38	2.23	1.79	2.27	2.24	2.06	2.24
30	2.41		2.03	1.73	2.54	2.41	2.31	1.62	2.21	2.41	1.98	2.24
31	2.18		1.88		2.51		2.40	1.85		2.25		2.27
Avg	2.13	2.05	2.01	1.95	2.20	2.34	2.28	2.26	2.25	2.23	2.17	2.19
Min	1.90	1.70	1.18	1.16	1.87	1.99	2.00	1.62	1.92	1.71	1.96	1.87
Max	2.46	2.23	2.23	2.16	2.79	2.67	2.40	2.63	2.60	2.47	2.35	2.47

POINT LOMA WASTEWATER TREATMENT PLANT
METRO BIOSOLIDS CENTER
ANNUAL SLUDGE CENTRATE COMPOSITES
Trace Metals

2012 Annual

Source:		MBC_COMBCN	MBC_COMBCN	MBC_COMBCN	MBC_COMBCN	MBC_COMBCN
Date:		31-JAN-2012	29-FEB-2012	30-MAR-2012	30-APR-2012	31-MAY-2012
Sample ID:	MDL Units	P605066	P608464	P612205	P615899	P619404
=====	=====	=====	=====	=====	=====	=====
Aluminum	47 UG/L	1130	801	1150	1660	1600
Antimony	2.9 UG/L	ND	ND	3.1	ND	ND
Arsenic	.4 UG/L	2.7	2.5	2.8	3.4	1.5
Barium	.039 UG/L	121	107	140	167	163
Beryllium	.022 UG/L	ND	ND	ND	ND	ND
Cadmium	.53 UG/L	ND	ND	ND	ND	ND
Chromium	1.2 UG/L	13	9	11	18	17
Cobalt	.85 UG/L	5.0	4.0	4.6	5.4	4.8
Copper	2 UG/L	137	125	165	238	227
Iron	37 UG/L	19200	26600	21900	31900	30900
Lead	2 UG/L	5	3	2	5	6
Manganese	.24 UG/L	223	232	222	252	273
Mercury	.005 UG/L	0.14	0.09	0.18	0.12	0.28
Molybdenum	.89 UG/L	6.7	5.2	6.6	8.2	7.6
Nickel	.53 UG/L	24	20	29	31	28
Selenium	.28 UG/L	2.89	2.64	2.89	2.36	2.62
Silver	.4 UG/L	1	ND	1	2	1
Thallium, Total Recoverable	3.9 UG/L	ND	ND	ND	ND	ND
Vanadium	.64 UG/L	9.6	4.7	6.2	9.5	7.6
Zinc	2.5 UG/L	196	160	217	326	300

Source:		MBC_COMBCN	MBC_COMBCN	MBC_COMBCN	MBC_COMBCN	MBC_COMBCN
Date:		30-JUN-2012	31-JUL-2012	31-AUG-2012	30-SEP-2012	31-OCT-2012
Sample ID:	MDL Units	P623144	P627352	P631786	P635236	P638484
=====	=====	=====	=====	=====	=====	=====
Aluminum	47 UG/L	2650	3630	1450	1600	1340
Antimony	2.9 UG/L	ND	ND	ND	ND	ND
Arsenic	.4 UG/L	3.3	4.1	2.5	2.6	2.5
Barium	.039 UG/L	238	350	171	185	177
Beryllium	.022 UG/L	ND	ND	ND	ND	ND
Cadmium	.53 UG/L	0.8	1.2	ND	1.7	ND
Chromium	1.2 UG/L	31	35	13	12	10
Cobalt	.85 UG/L	5.6	5.4	4.1	4.2	5.0
Copper	2 UG/L	333	572	225	273	219
Iron	37 UG/L	44500	68700	37500	42300	34600
Lead	2 UG/L	6	14	5	ND	9
Manganese	.24 UG/L	392	405	318	344	381
Mercury	.005 UG/L	0.33	0.49	0.11	0.31	0.17*
Molybdenum	.89 UG/L	12.4	19.7	10.3	10.1	7.8
Nickel	.53 UG/L	41	43	28	27	27
Selenium	.28 UG/L	4.01	4.48	3.13	3.82	2.39
Silver	.4 UG/L	ND	3	1	1	ND
Thallium, Total Recoverable	3.9 UG/L	ND	ND	ND	ND	4
Vanadium	.64 UG/L	10.6	16.7	6.4	9.1	7.8
Zinc	2.5 UG/L	366	730	283	333	272

*A field blank, an influent sample, and an effluent sample were spiked in this batch. The field blank spike recovery averaged 94%. The influent spike recovery averaged 146%. The effluent spike recovery averaged 41%. Method 1631E matrix spike acceptance range is listed as 71% to 125%.

ND= Not Detected
NA= Not Analyzed
NS= Not Sampled
NR= Not Required

MBC_COMBCN= Metro Biosolids Center Combined Sludge Centrate.

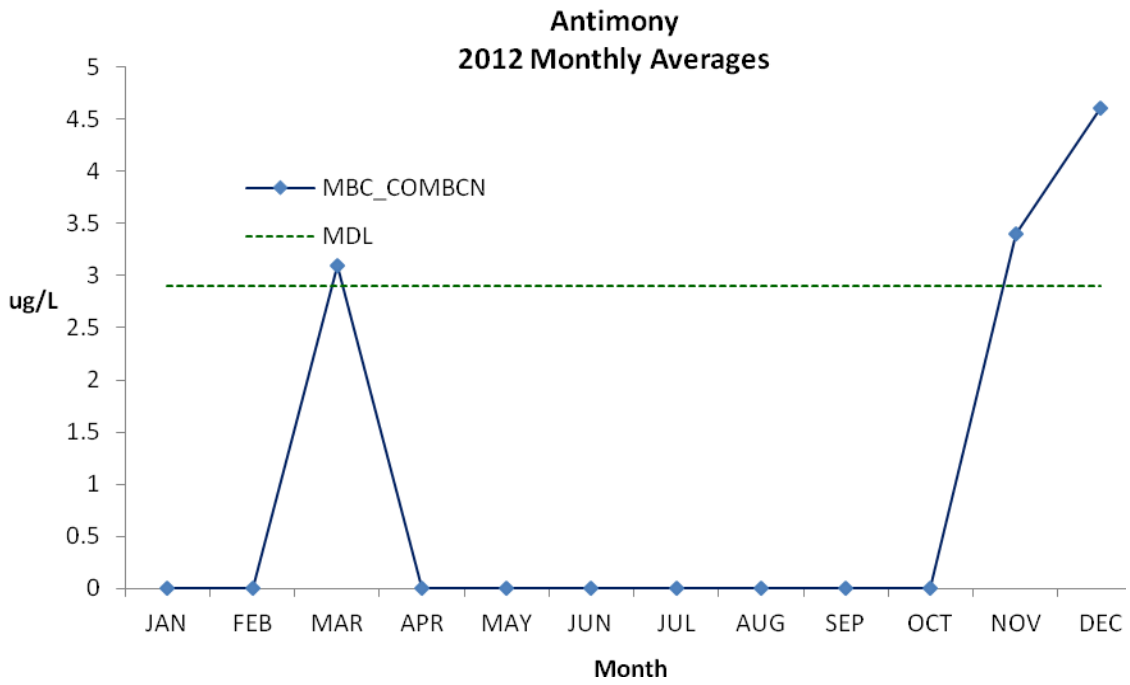
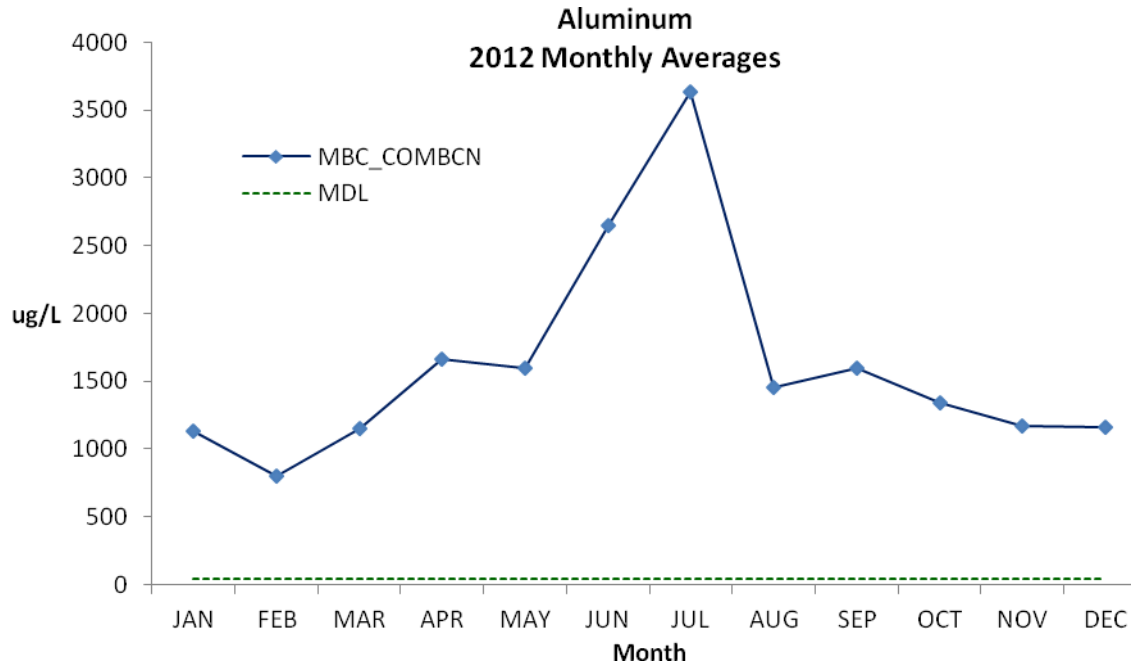
POINT LOMA WASTEWATER TREATMENT PLANT
 METRO BIOSOLIDS CENTER
 ANNUAL SLUDGE CENTRATE COMPOSITES
 Trace Metals

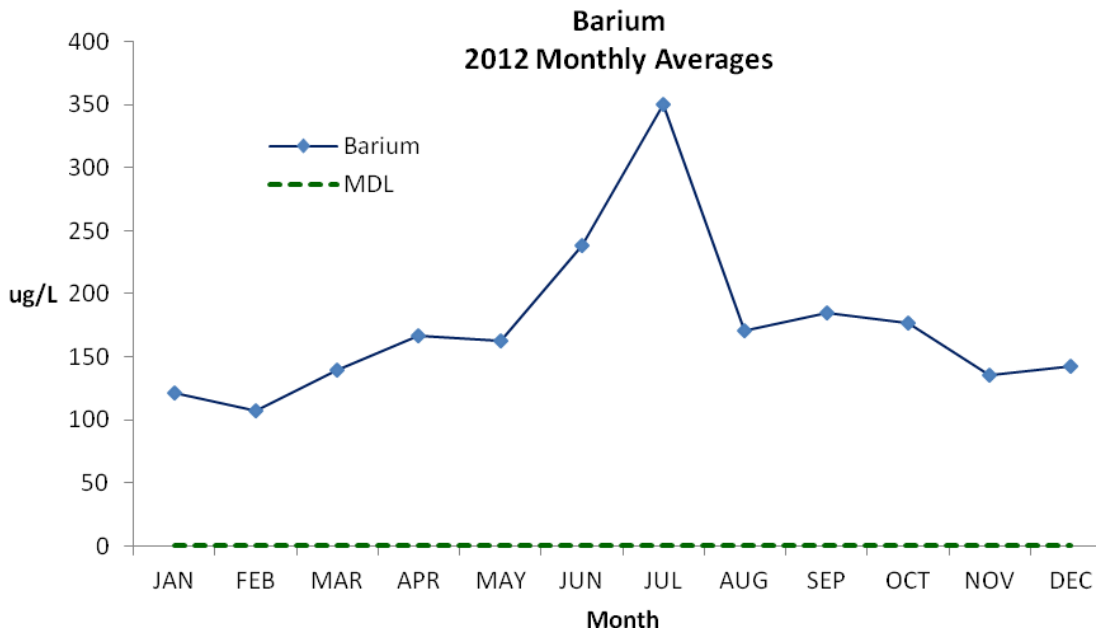
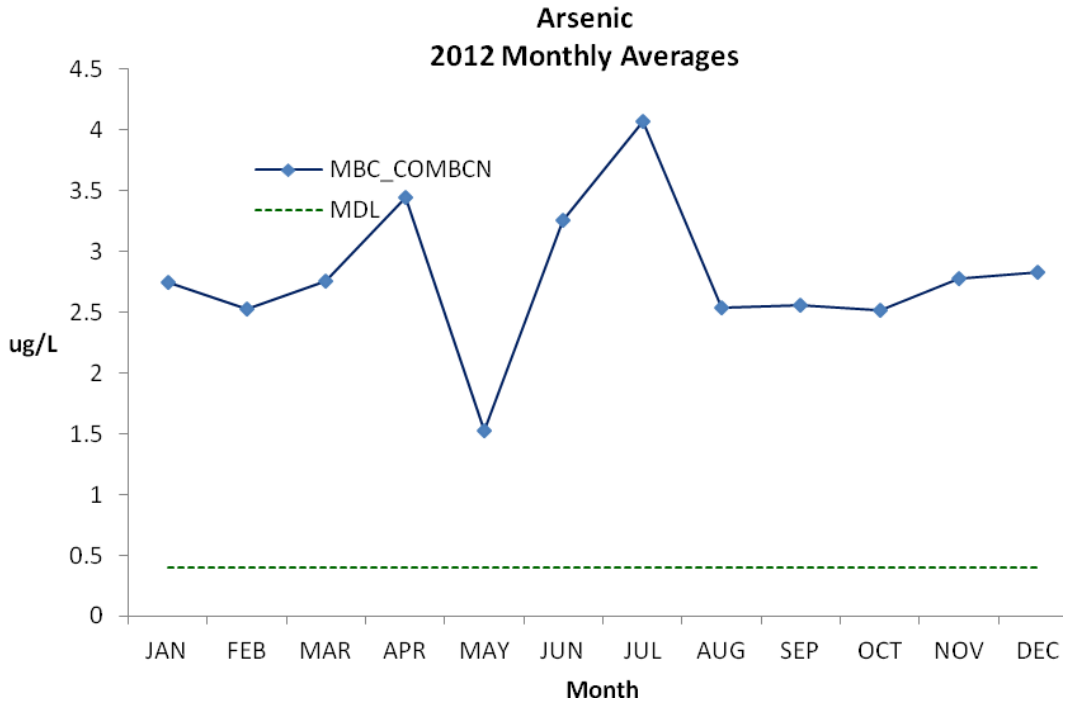
2012 Annual

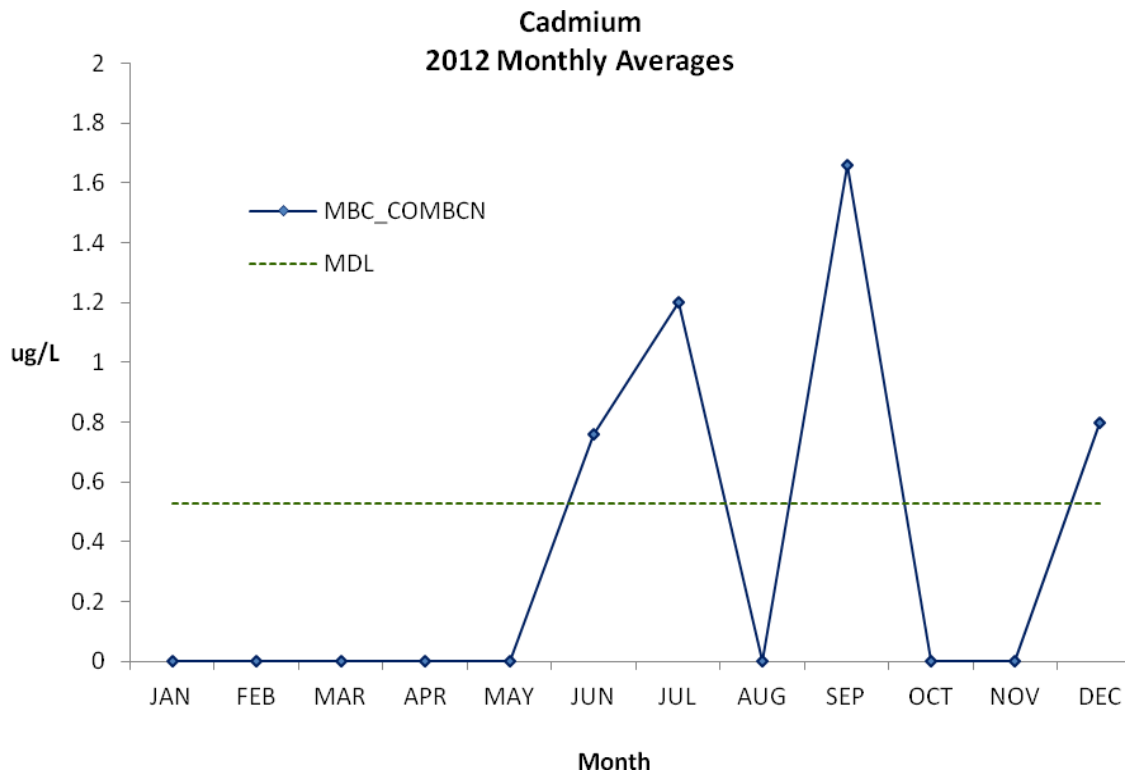
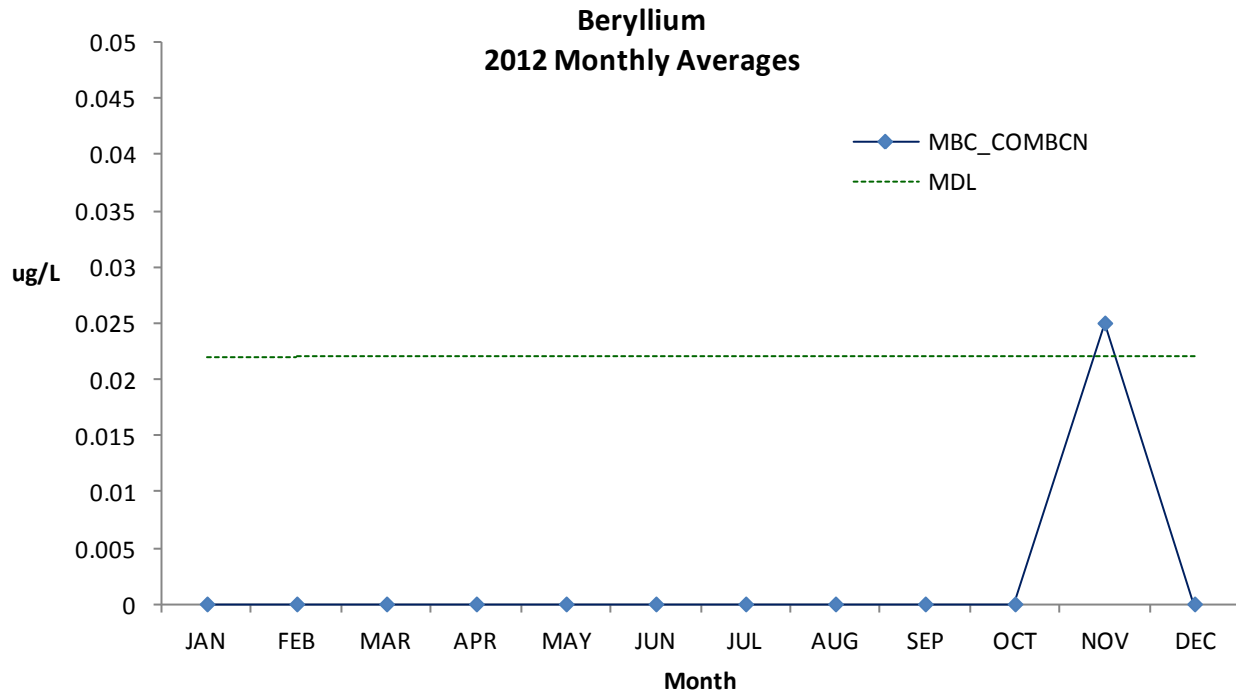
Source:		MBC_COMBCN	MBC_COMBCN
Date:		30-NOV-2012	31-DEC-2012
Sample ID:	MDL Units	P642006	P644969
=====	=====	=====	=====
Aluminum	47 UG/L	1170	1160
Antimony	2.9 UG/L	3.4	4.6
Arsenic	.4 UG/L	2.8	2.8
Barium	.039 UG/L	136	143
Beryllium	.022 UG/L	0.03	ND
Cadmium	.53 UG/L	ND	0.8
Chromium	1.2 UG/L	9	12
Cobalt	.85 UG/L	3.8	3.2
Copper	2 UG/L	154	176
Iron	37 UG/L	29200	28300
Lead	2 UG/L	11	5
Manganese	.24 UG/L	285	266
Mercury	.005 UG/L	0.15	0.13
Molybdenum	.89 UG/L	6.3	7.2
Nickel	.53 UG/L	25	27
Selenium	.28 UG/L	3.07	2.52
Silver	.4 UG/L	1	1
Thallium, Total Recoverable	3.9 UG/L	ND	ND
Vanadium	.64 UG/L	5.5	4.9
Zinc	2.5 UG/L	227	248

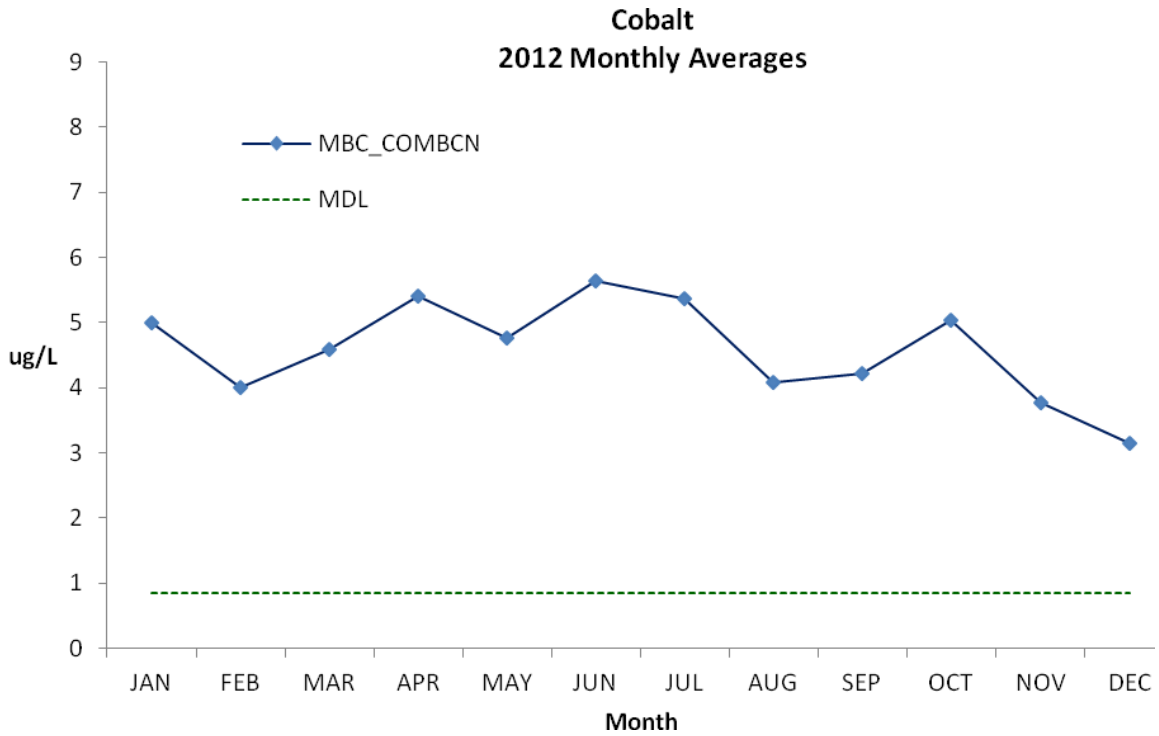
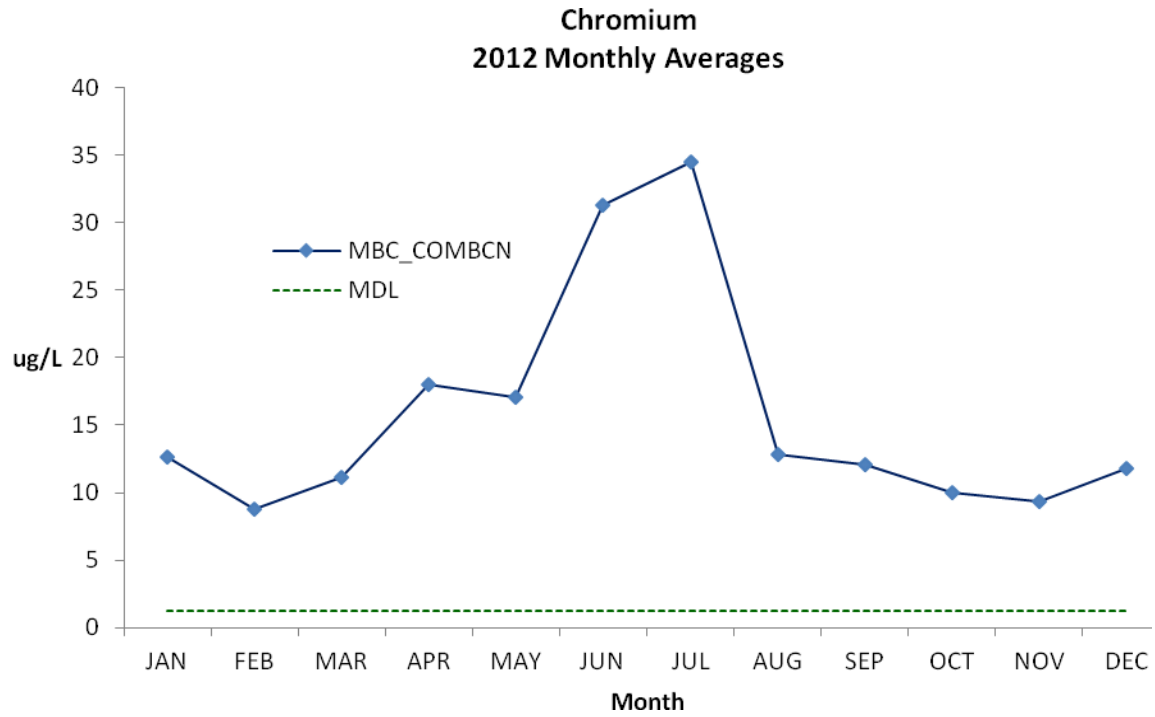
ND= Not Detected
 NA= Not Analyzed
 NS= Not Sampled
 NR= Not Required

MBC_COMBCN= Metro Biosolids Center Combined Sludge Centrate.

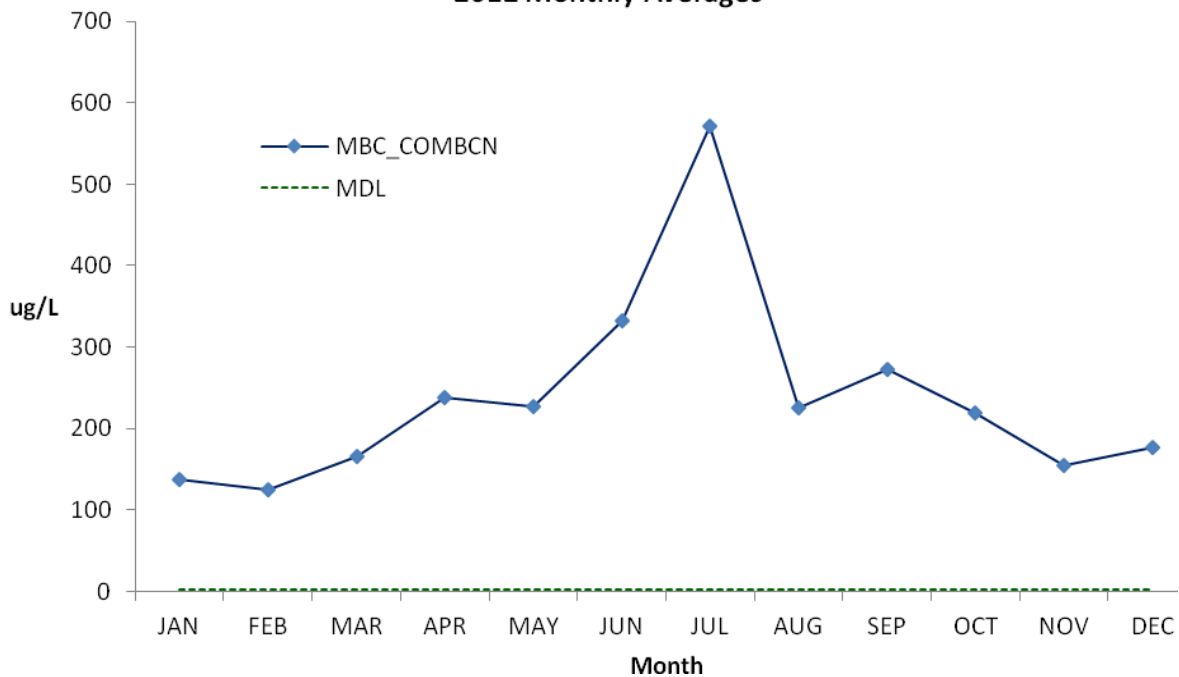




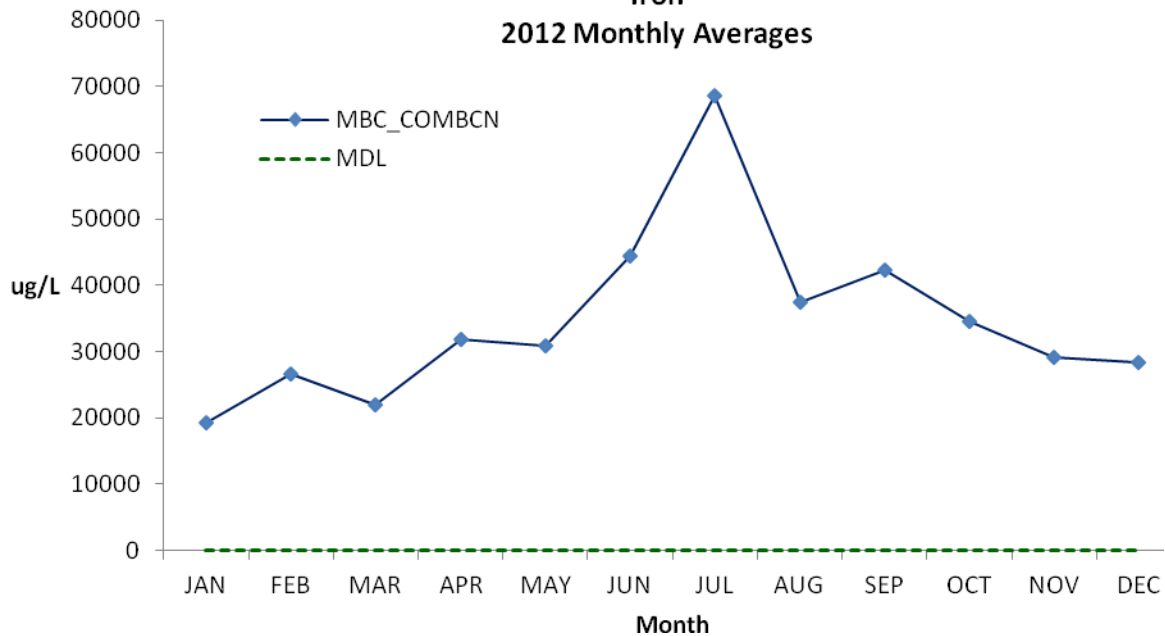


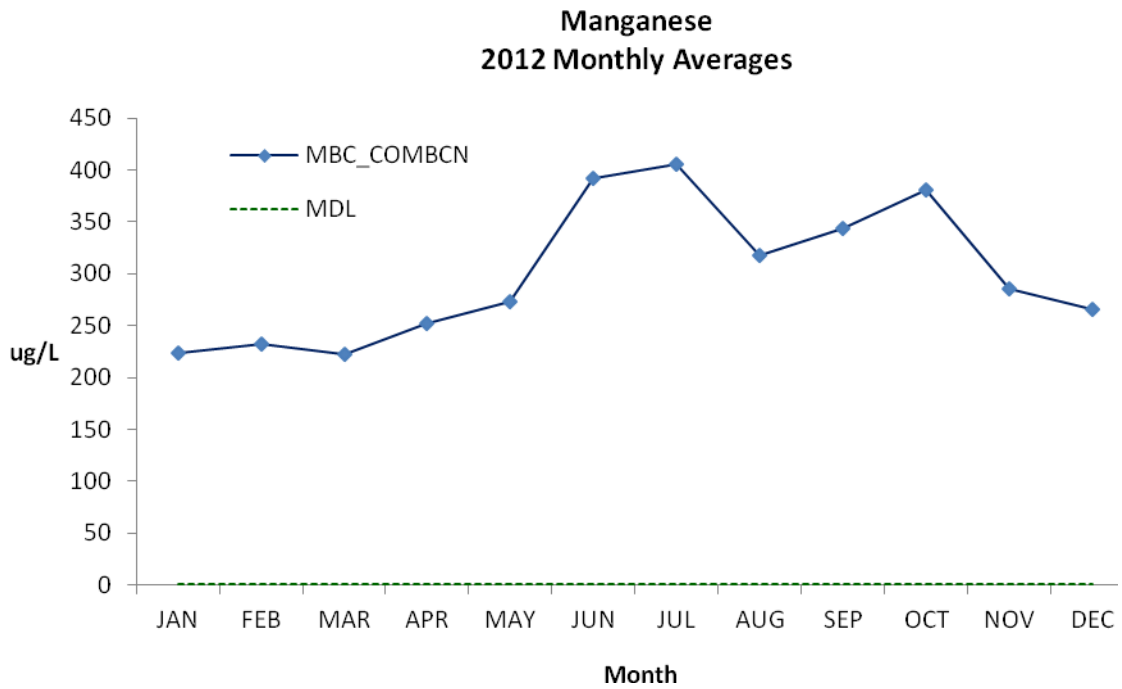
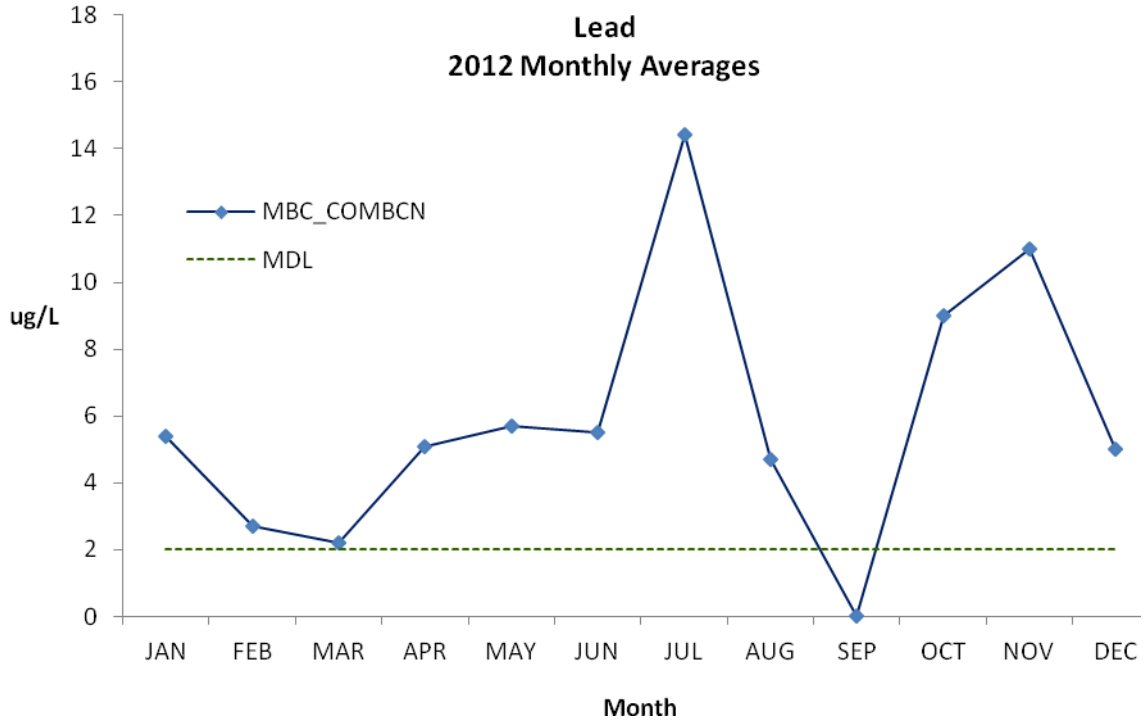


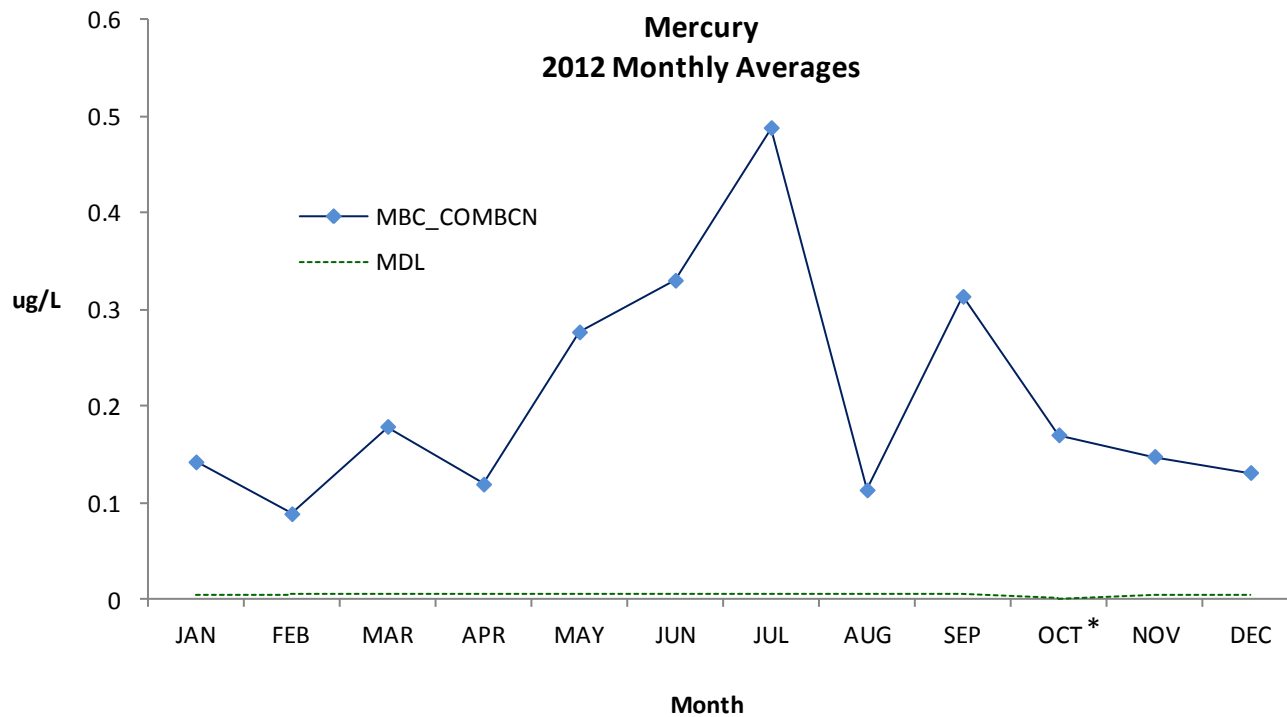
Copper
2012 Monthly Averages



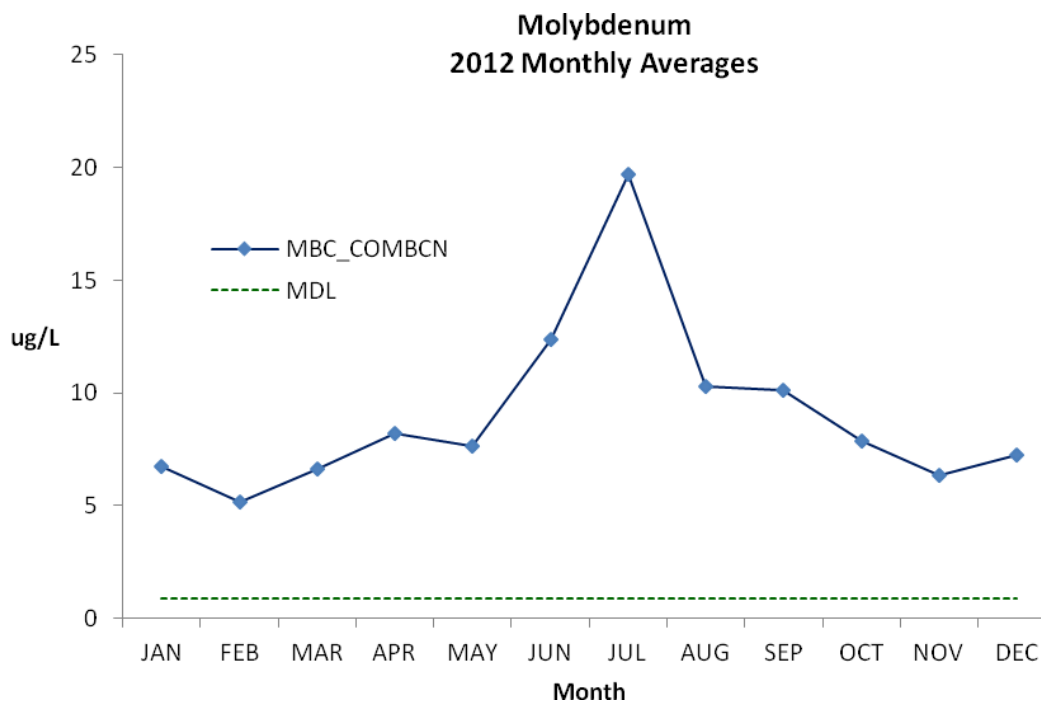
Iron
2012 Monthly Averages

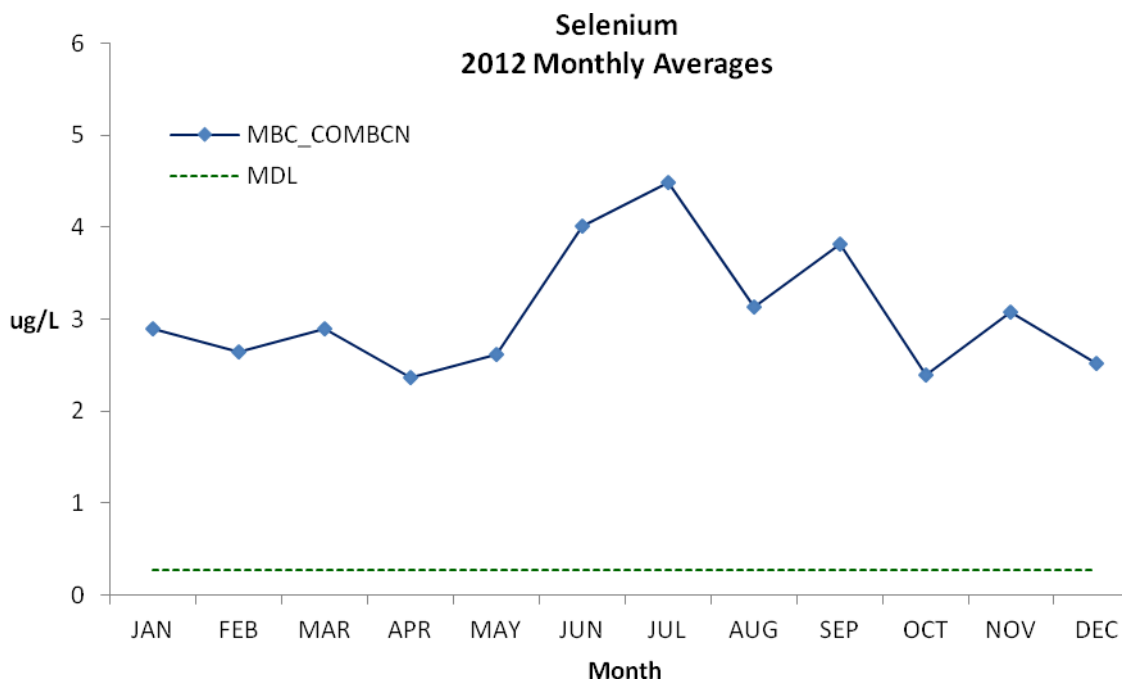
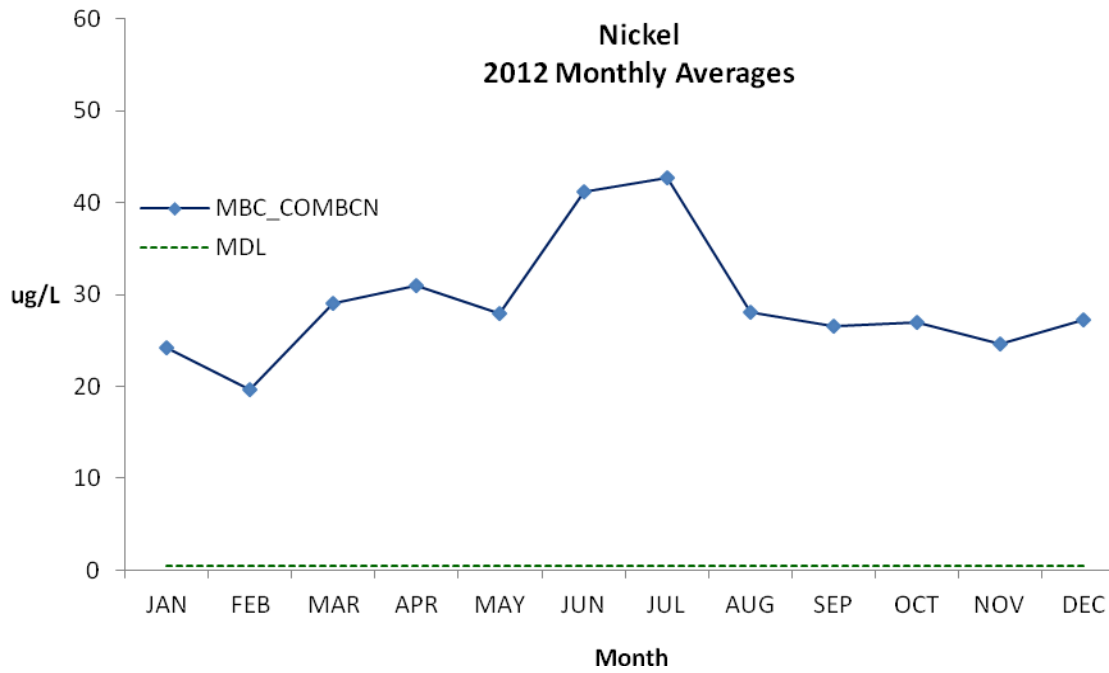




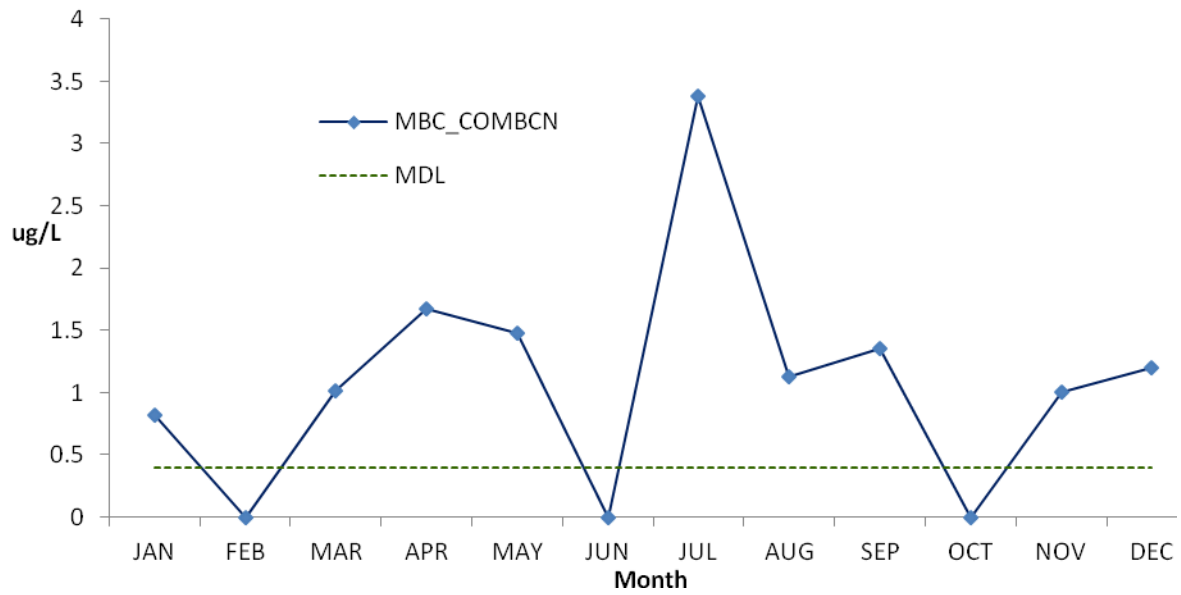


*October analysis run under different method. Result was 170 ng/L with 0.5 ng/LMDL.

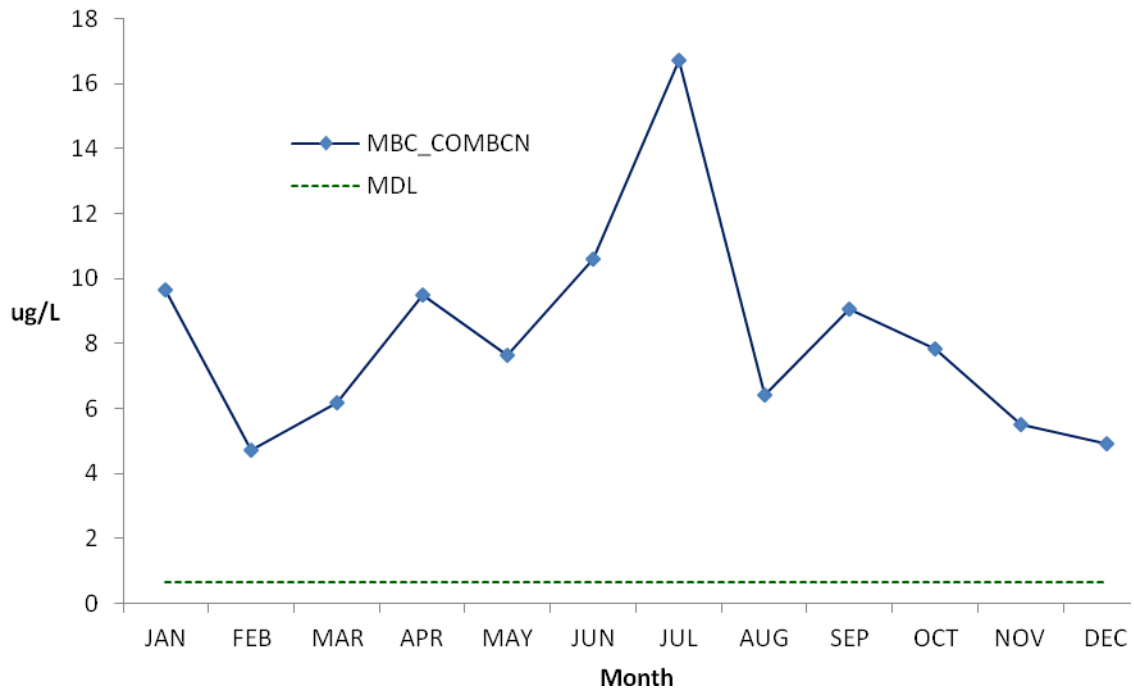


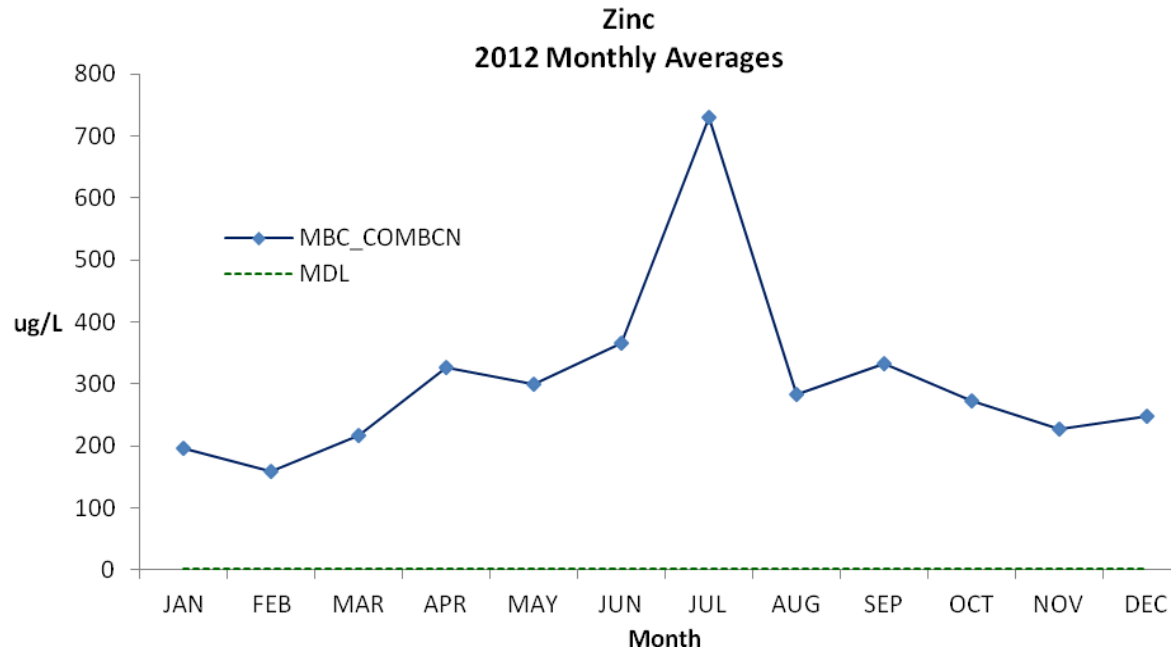


Silver 2012 Monthly Averages



Vanadium 2012 Monthly Averages





C. Digester and Digested Sludge Data Summary

MBC Digester and Digested Sludge Data Summary

Metro Biosolids Center Annual Report
 Digesters
 Year: 2012

Digester 1

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012	NOT IN SERVICE							
FEBRUARY -2012	NOT IN SERVICE							
MARCH -2012	NOT IN SERVICE							
APRIL -2012	NOT IN SERVICE							
MAY -2012	NOT IN SERVICE							
JUNE -2012	NOT IN SERVICE							
JULY -2012	NOT IN SERVICE							
AUGUST -2012	NOT IN SERVICE							
SEPTEMBER-2012	NOT IN SERVICE							
OCTOBER -2012	NOT IN SERVICE							
NOVEMBER -2012	NOT IN SERVICE							
DECEMBER -2012	NOT IN SERVICE							

Average:

Digester 2

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012	NOT IN SERVICE							
FEBRUARY -2012	NOT IN SERVICE							
MARCH -2012	NOT IN SERVICE							
APRIL -2012	NOT IN SERVICE							
MAY -2012	NOT IN SERVICE							
JUNE -2012	NOT IN SERVICE							
JULY -2012	NOT IN SERVICE							
AUGUST -2012	NOT IN SERVICE							
SEPTEMBER-2012	NOT IN SERVICE							
OCTOBER -2012	NOT IN SERVICE							
NOVEMBER -2012	NOT IN SERVICE							
DECEMBER -2012	NOT IN SERVICE							

Average:

Digester 3

	pH	Total Solids (%)	Volatile Solids (%)	Alkalinity (mg/L)	Volatile Acids (mg/L)	Methane (%)	Carbon Dioxide (%)	H2S ppm
JANUARY -2012	7.07	2.3	67.2	2490	73	61.7	38.3	18
FEBRUARY -2012	7.08	2.2	68.3	2500	71	59.9	40.1	17
MARCH -2012	7.08	2.3	68.0	2570	74	60.3	39.7	16
APRIL -2012	7.11	2.4	66.8	2620	70	60.1	39.9	22
MAY -2012	7.02	2.3	66.5	2200	67	60.0	40.0	24
JUNE -2012	6.96	2.5	66.7	2040	61	59.7	40.3	24
JULY -2012	6.92	2.4	66.4	1820	62	60.2	39.8	25
AUGUST -2012	6.95	2.7	65.7	1820	58	60.6	39.4	23
SEPTEMBER-2012	6.96	2.7	65.3	1900	64	61.0	39.1	23
OCTOBER -2012	7.05	2.6	64.4	1950	61	60.8	39.2	21
NOVEMBER -2012	7.01	2.7	64.8	2120	65	60.4	39.6	26
DECEMBER -2012	7.02	2.6	65.5	2140	61	60.7	39.3	24
Average	7.02	2.5	66.3	2181	66	60.5	39.6	22

D. Gas Production

Metro Biosolids Center Gas Report - 2012

Daily Monthly Averages

Month	GAS PRODUCTION (x1000 Cu. Ft.)			GAS CONSUMPTION (x1000 Cu. Ft.)			
	DIG 1	DIG 2	DIG 3	Total Gas Production	GAS FLARES	GAS COGENERATION	Total Gas Consumption
01			270,875.2	270,875.2	2,024	268,840	270,864
02			260,410.2	260,410.2	3,471	263,568	267,039
03			248,910.8	248,910.8	1,400	262,282	263,682
04			222,459.8	222,459.8	9,122	233,255	242,377
05			225,502.1	225,502.1	6,429	234,517	240,946
06			236,239.2	236,239.2	3,003	252,473	255,476
07			226,207.7	226,207.7	1,400	244,137	245,536
08			216,400.5	216,400.5	3,188	231,630	234,818
09			226,467.8	226,467.8	2,053	231,824	233,877
10			235,137.5	235,137.5	1,513	244,514	246,028
11			262,971.4	262,971.4	3,535	269,822	273,357
12			240,043.3	240,043.3	1,406	252,451	253,857
avg			239,302.1	239,302.1	3,212	249,109	252,322

Monthly Totals

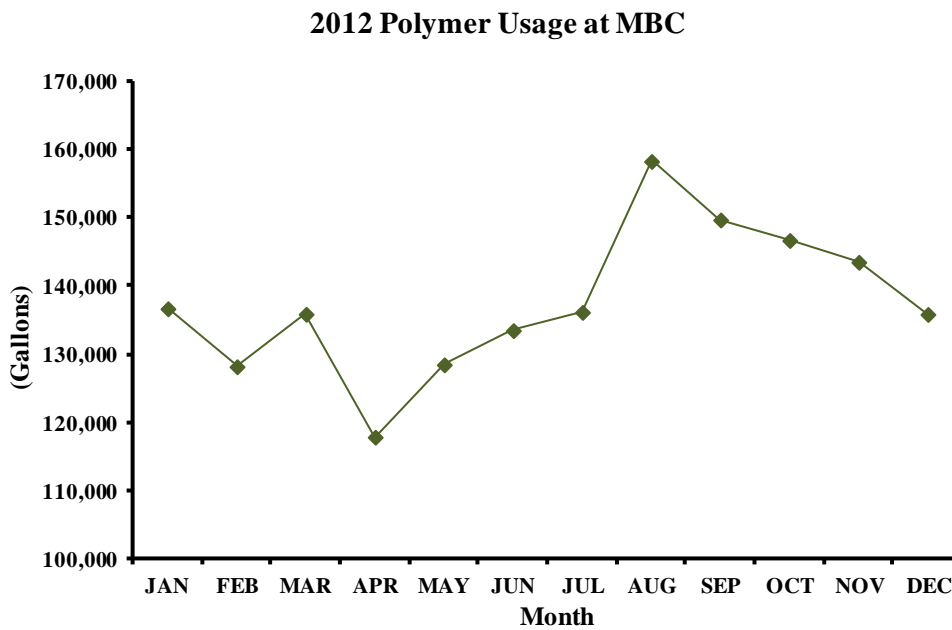
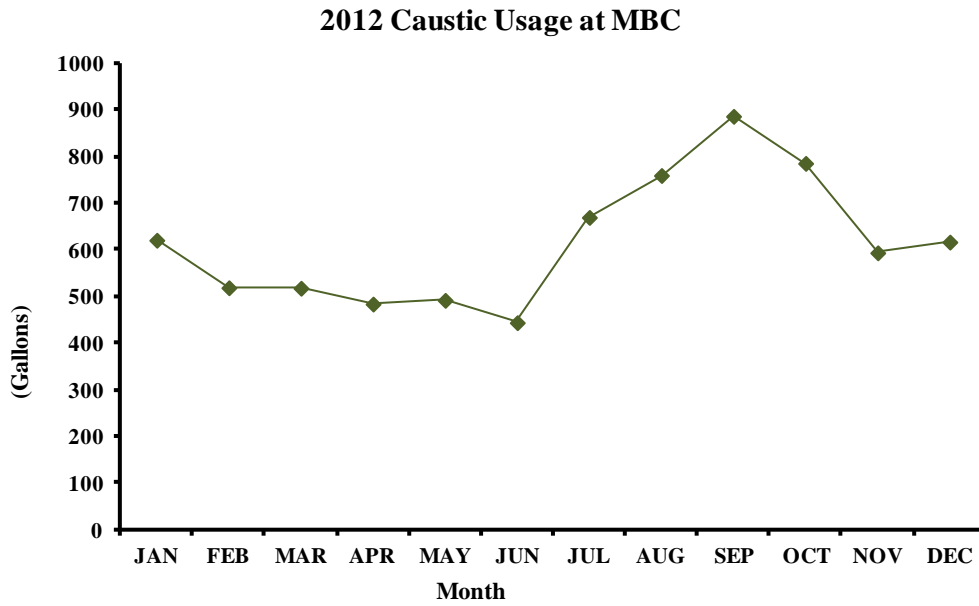
Month	GAS PRODUCTION (x1000 Cu. Ft.)			GAS CONSUMPTION (x1000 Cu. Ft.)			
	DIG 1	DIG 2	DIG 3	Total Gas Production	Gas Flares	Gas Cogeneration	Total Gas Consumption
01			8,397,132.0	8,397,132.0	62,731	8,334,041	8,396,772
02			7,551,897.0	7,551,897.0	100,664	7,643,479	7,744,143
03			7,716,236.0	7,716,236.0	43,405	8,130,740	8,174,145
04			6,673,794.0	6,673,794.0	273,658	6,997,649	7,271,307
05			6,990,566.0	6,990,566.0	154,296	5,628,415	5,782,711
06			7,087,177.0	7,087,177.0	90,087	7,574,196	7,664,283
07			7,012,439.0	7,012,439.0	43,387	7,568,239	7,611,626
08			6,708,414.0	6,708,414.0	98,842	7,180,519	7,279,361
09			6,794,035.0	6,794,035.0	61,604	6,954,713	7,016,317
10			7,289,263.0	7,289,263.0	46,915	7,579,942	7,626,857
11			7,889,141.0	7,889,141.0	106,056	8,094,658	8,200,714
12			7,441,343.0	7,441,343.0	43,589	7,825,983	7,869,572
avg			7,295,953.1	7,295,953.1	93,770	7,459,381	7,553,151
sum			87,551,437.0	87,551,437.0	1,125,234	89,512,574	90,637,808

E. Chemical Usage

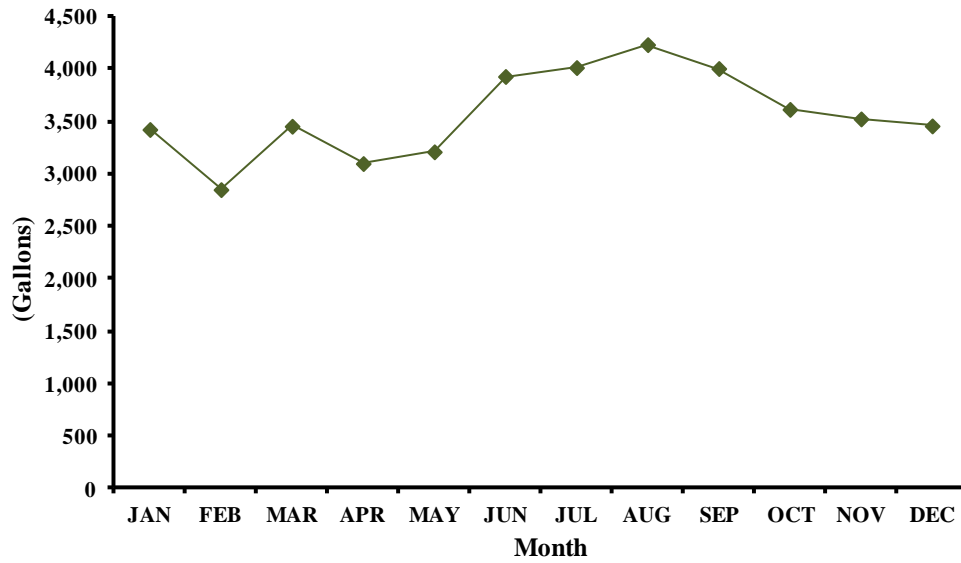
Metro Biosolids Center - Monthly Chemical Usage Report
Year: 2012

MON	Polymer Gallons	Ferric Chloride Gallons	Ferrous Chloride Gallons	Sodium Hydroxide Gallons	Hypochlorite Gallons	Sulfuric Acid Gallons
01	136,695	0	8,387	621	3,425	0
02	128,192	0	7,887	519	2,851	0
03	135,889	0	8,135	518	3,456	0
04	117,861	0	8,572	484	3,100	0
05	128,477	0	12,691	492	3,212	0
06	133,488	0	11,544	444	3,931	0
07	136,166	0	14,956	670	4,016	0
08	158,299	0	12,501	760	4,235	0
09	149,717	0	11,221	887	4,007	0
10	146,707	0	11,364	786	3,617	0
11	143,510	0	11,487	594	3,526	0
12	135,864	0	12,206	617	3,459	0
avg	137,572	0	10,913	616	3,569	0
sum	1,650,866	0	130,950	7,391	42,833	0

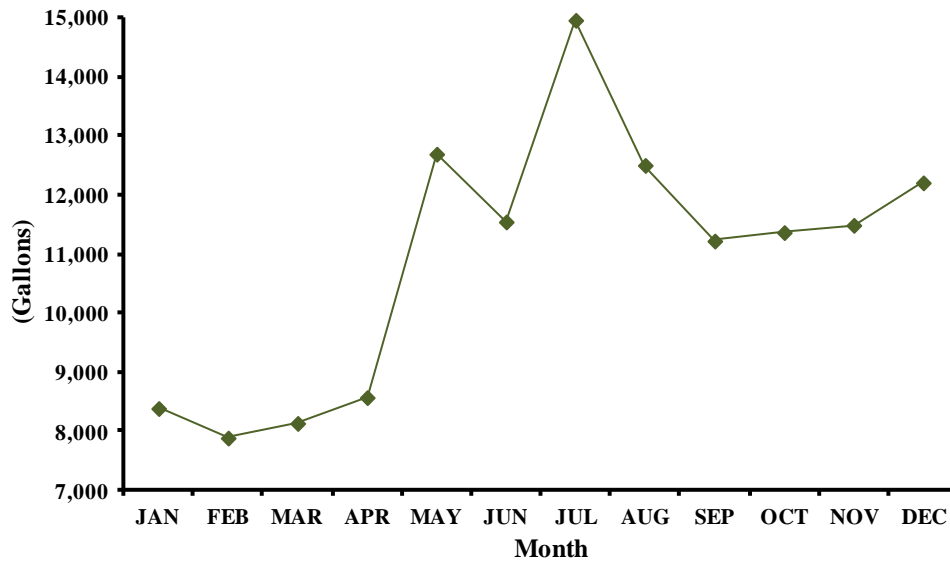
F. Graphs of Monthly Chemical Usage



2012 Sodium Hypochlorite Usage at MBC



2012 Ferrous Chloride Usage at MBC



G. Solids Handling Annual Report

2012 Annual Biosolids Beneficial Use & Disposal Report

Facilities:

Sources of biosolids:	Biosolids treatment and processing:
Point Loma Wastewater Treatment Plant (PLWWTP) 1902 Gatchell Rd., San Diego, CA	Metro Biosolids Center (MBC) 5240 Convoy Street, San Diego, CA 92111
North City Water Reclamation Plant (NCWRP) 4949 Eastgate Mall, San Diego, CA 92121	Point Loma Wastewater Treatment Plant (PLWWTP) 1902 Gatchell Rd., San Diego, CA

The Point Loma Wastewater Treatment Plant (PLWWTP) and the North City Water Reclamation Plant produced and disposed of 111,173 wet tons or 31,499 dry tons (28,576 dry metric tons) of digested sludge (biosolids) in 2012.

All digested sludge produced at the Pt. Loma WWTP was pumped to the Metro Biosolids Center (MBC) for dewatering by centrifuges. All biosolids were then hauled to a disposal site (Local Landfill) or beneficial use site. During this reporting period all of the raw sludge produced at the North City Water Reclamation Plant (NCWRP) was diverted to the Metro Biosolids Center for thickening, dewatering, digestion, and blended with the digested solids from the PLWWTP prior to dewatering. The MBC Monthly Biosolids Processing Reports include the biosolids processed from the PLWWTP and the NCWRP. Copies of the MBC Monthly Biosolids Processing Reports and the MBC Biosolids Beneficial Use and Disposal Monthly Summary Reports detailing daily biosolids processing and beneficial use/disposal are included as Enclosures 1 and 5, respectively.

All of the sludge/biosolids produced by the City of San Diego, Pt. Loma Wastewater Treatment Plant and North City Water Reclamation Plant were dewatered at the Metro Biosolids Center(MBC) and disposition is summarized in the following table.

Disposition	Wet tons (short)	Dry tons ¹⁴	Dry metric tons
Disposal in sanitary landfill	0	0	0
Beneficial reuse as Alternative Daily Cover (ADC) at landfill	87,013	24,644	22,357
Land application in Arizona	24,160	6,855	6,219

¹⁴ (based on sum of monthly total tons)

All Biosolids produced by the City of San Diego were treated to Class B standards through Anaerobic Digestion for a minimum of 15 days at a temperature of 35 to 55 degrees Centigrade (Alternative 3, Process 3). Vector Attraction requirements were achieved by reducing the volatile solids content a minimum of 38 percent (Option 1).

Land Applier: Solid Solutions, LLC
Address: 12812 Valley View St, #9, Garden Grove, CA 92845
Period: January 1, 2012 - December 31, 2012
Reuse method: Direct land application. Digested dewatered sludge from the MBC centrifuges were land applied directly to fields in Yuma County, AZ. The sludge was certified by the City of San Diego as meeting Class B pathogen and vector attraction reduction requirements of 40 CFR 503. Copies of the City of San Diego's certifications (which also serve as notification of nitrogen content) are included as Enclosure 2. Copies of Solid Solutions' certification statements are included as Enclosures 11 & 12.

The MBC provides two essential treatment processes, thickening and digestion of the raw solids from the NCWRP and dewatering of biosolids generated at the NCWRP and the PLWWTP. The digested biosolids from the PLWWTP are pumped to MBC in a 17 mile pipeline into one of the two storage tanks on site where it is blended with the digested biosolids from the NCWRP. Before these biosolids are sent to the dewatering process polymer and ferric chloride are added to condition the biosolids, which enhances the dewaterability of the biosolids and minimizes the potential of scale formation.

Eight dewatering centrifuges are used to separate the liquid and solids fractions of the conditioned biosolids. The liquid fraction, (centrate) is returned to the PLWWTP via the Rose Canyon Interceptor and the solids recovered, (cake), is pumped to one of the eight storage silos on site before it is loaded into trucks for disposal and beneficial use as Alternative Daily Cover at Otay Landfill or beneficially used for land application in Yuma County, Arizona, Tables 1B and Table 1C.

The digested biosolids, centrate and dewatered cake are sampled on a daily basis to ensure regulatory compliance and to track plant process performance. Grab samples are collected daily on the incoming biosolids from the PLWWTP and the blended biosolids, which includes the digested biosolids from the NCWRP. The operation's staff also collects a twenty-four hour composite sample from the centrate return stream from the dewatering process and from the blended centrate return stream that includes the centrate flow from the thickening and dewatering processes.

Daily grab samples of dewatered cake are collected from each individual dewatering centrifuge that are in operation during the 24 hour period, and a portion of each of these grab samples are combined to provide a daily composite of dewatered cake produced. All sampling at MBC is performed by Wastewater Plant Operators who are certified by the State of California and in conformance with established sampling techniques listed in Standard Methods.

Because the dewatered cake samples are a daily composite and the Land Applier's (Solids Solutions) samples are a monthly grab sample, the dry ton

calculations may differ slightly.

In addition to the monthly analyses of 503 and California Title 22 analyses by our California certified laboratory, and in accordance with the Arizona Department of Environmental Quality (ADEQ), grab samples were delivered to an Arizona certified laboratory. Legend Technical Services of Arizona, Inc, 17631 North 25th Avenue, Phoenix, AZ 85023, ADHS#AZ0004 provided EPA Part 503 Table 3 Metals and Nitrogen analysis. See Enclosure 14.

Biosolids used for all uses in 2012 continued to meet all regulatory requirements. Concentration of pollutants were all well below the limits listed in California Title 22 Hazardous Waste thresholds including TTL (Total Threshold Limit Concentration), STL (Soluble Threshold Limit Concentration), and 40 CFR part 503.13 Table 3 "Limits for Land Application", the lower lead limit established by the California State Health and Safety Code 25157.8. It also met the A.C.C. (Arizona Administrative Code) R18-9-1005 Table 2. Monthly Average Pollutant Concentration limits.

Additional analyses, including the rest of the "priority pollutant list"¹⁵, were performed during 2012 and the reports of these analyses are included in Enclosure 7.

Table 1.A. Landfill location used during 2012 is as follows:

Otay Landfill 1700 Maxwell Road Chula Vista, San Diego County, CA 91911	87,013 wet tons (24,644 dry tons or 22,357 dry metric tons), based on sum of monthly totals disposed of from January to December 2012 at this landfill.
--	---

No biosolids were shipped to or disposed of at a surface disposal site.

No biosolids were disposed of or reused by any other method than those listed above.

¹⁵ Includes volatile organic compounds, phenols, base/neutral organic compounds, organophosphorus pesticides, chlorinated pesticides and PCBs.

Table 1B. Biosolids Production for MBC

Table 1B. Annual Biosolids Beneficial Use & Landfill Disposal Summary

2012 Month:	Otay Landfill Biosolids (wet Tons)	Otay Landfill Beneficial Use ¹ (wet Tons)	Otay Landfill Total (wet Tons)	Cullison Farms, Yuma, AZ Beneficial Use ² (wet Tons)	Norris Farm Aztec, Yuma County, AZ Beneficial Use ² (wet Tons)	Desert Ridge Farms Yuma, AZ Beneficial Use ² (wet Tons)	Butler Diamond Farms Yuma, AZ Beneficial Use ² (wet Tons)	Total (wet Tons)	%TS	Total Dry Tons	Total Biosolids (dry metric tons)
January		7,098.14	7,098.14	1,511.28		195.94		8,805.36	29.2	2,571.17	2,332.56
February		5,983.57	5,983.57	1,243.47		737.30		7,964.34	30.7	2,445.05	2,218.15
March		6,242.67	6,242.67	2,339.72		0.00		8,582.39	29.9	2,566.13	2,328.00
April		6,527.37	6,527.37	1,325.32		374.13		8,226.82	28.6	2,352.87	2,134.52
May		7,741.17	7,741.17	1,849.03		611.23		10,201.43	27.8	2,836.00	2,572.82
June		7,140.87	7,140.87	1,805.74	0.00	415.45		9,362.06	27.6	2,583.93	2,344.14
July		7,430.75	7,430.75	472.03	1,970.72			9,873.50	27.1	2,675.72	2,427.41
August		8,090.14	8,090.14	248.42	849.92		1,120.48	10,308.96	27.7	2,855.58	2,590.58
September		7,360.76	7,360.76	1,593.85	0.00			8,954.61	27.9	2,498.34	2,266.49
October		8,520.45	8,520.45	2,051.94	0.00			10,572.39	27.8	2,939.12	2,666.37
November		7,274.94	7,274.94	1,869.64	0.00			9,144.58	28.7	2,624.49	2,380.94
December		7,602.15	7,602.15	1,574.07	0.00			9,176.22	27.8	2,550.99	2,314.26
Total:		87,012.98	87,012.98	17,884.51	2,820.64	2,334.05	1,120.48	111,172.66		31,499.39	28,576.25
Monthly Average:		7,251.08	7,251.08	1,490.38	402.95	389.01	1,120.48	9,264.39	28.4	3,068.50	2,381.35

¹ beneficial use as Alternative Daily Cover.

² beneficial use in Land Application.

Table 1C. 2012 Biosolids Land Application

2012 Month	%TS	Desert Ridge , Yuma City, AZ		Norris, Yuma City, AZ		Cullison, Yuma County, AZ		Butler Diamond, Yuma County, AZ		Total Monthly	Total Monthly	Total Metric
		wet tons	dry tons	wet tons	dry tons	wet tons	dry tons	wet tons	dry tons	wet tons	dry tons	dry tons
January	29.2	195.94	57.21		0.00	1,511.28	441.29		0.00	1,707.22	498.51	452.25
February	30.7	737.30	226.35		0.00	1,243.47	381.75		0.00	1,980.77	608.10	551.67
March	29.9	0.00	0.00		0.00	2,339.72	699.58		0.00	2,339.72	699.58	634.66
April	28.6	374.13	107.00		0.00	1,325.32	379.04		0.00	1,699.45	486.04	440.94
May	27.8	611.23	169.92		0.00	1,849.03	514.03		0.00	2,460.26	683.95	620.48
June	27.6	415.45	114.66		0.00	1,805.74	498.38		0.00	2,221.19	613.05	556.16
July	27.1		0.00	1,970.72	534.07	472.03	127.92		0.00	2,442.75	661.99	600.55
August	27.7		0.00	849.92	235.43	248.42	68.81	1,120.48	310.37	2,218.82	614.61	557.58
September	27.9		0.00	0.00	0.00	1,593.85	444.68		0.00	1,593.85	444.68	403.42
October	27.8		0.00	0.00	0.00	2,051.94	570.44		0.00	2,051.94	570.44	517.50
November	28.7		0.00	0.00	0.00	1,869.64	536.59		0.00	1,869.64	536.59	486.79
December	27.8		0.00	0.00	0.00	1,574.07	437.59		0.00	1,574.07	437.59	396.98
2012 Totals	Avg =28.4	2,334.05	675.15	2,820.64	769.49	17,884.51	5,100.11	1,120.48	310.37	24,159.68	6,855.12	6,218.97

Table 1D. Other Solids disposal (weights are gross wet weight)

2012 Month:	Copper Mountain Landfill Scum (Tons)	Otay Landfill Scum (Tons)	South Yuma Landfill Scum (Tons)	Otay Landfill Digester Cleanings (Tons)	Miramar Landfill Grit (Tons)	Miramar Landfill Rags & Screenings (Tons)
January	25.69				129.94	540.41
February	32.80	6.27			122.52	495.37
March	27.85				184.52	559.89
April	26.20				183.32	526.28
May	23.83				187.83	494.59
June	19.66				165.34	522.02
July	21.02	8.56			164.58	498.63
August	24.98				115.16	565.93
September	17.15				138.14	522.62
October	30.36				179.70	579.38
November	22.40				168.05	478.48
December	31.33				187.55	498.23
Total:	303.27	14.83			1,926.65	6,281.83
Average:	25.27	7.42			160.55	523.49

Point Loma Annual Monitoring Report
 Solids Report - TOTALS
 From 01-JAN-2012 To 31-DEC-2012

Month	Pt. Loma Raw sludge Gallons	Dry Tons	Pt. Loma Digested Sludge Gallons	Dry Tons	MBC Combined Centrate Gallons	Dry Tons	MBC Dewatered Sludge Wet Tons	Dry Tons
05	37,140,751	6,314	37,140,751	3,407	68,046,741	954	10,201	2,832
12	36,620,700	6,296	36,620,700	3,416	68,015,405	851	9,176	2,548
10	37,011,569	6,188	37,012,268	3,517	69,203,191	1,043	10,572	2,937
11	35,621,049	5,807	35,621,049	3,243	64,978,284	840	9,145	2,625
02	35,264,596	5,775	35,263,886	3,125	59,330,351	808	7,964	2,444
01	37,394,980	6,147	37,394,980	3,376	66,173,011	900	8,805	2,574
08	36,484,550	6,062	36,484,550	3,506	69,908,300	1,165	10,309	2,861
09	36,283,992	6,254	36,283,992	3,432	67,378,003	1,096	8,955	2,497
04	34,507,919	6,110	34,507,919	3,186	58,552,999	774	8,227	2,354
06	35,806,927	6,184	35,806,789	3,377	70,226,454	1,074	9,362	2,587
07	34,869,448	6,096	34,869,448	3,483	70,634,591	1,241	9,873	2,671
03	36,557,429	6,225	36,557,429	3,332	62,191,862	799	8,582	2,563
avg	36,130,326	6,121	36,130,313	3,367	66,219,933	962	9,264	2,624
sum	433,563,910	73,457	433,563,761	40,400	794,639,192	11,545	111,172	31,493

Point Loma Annual Monitoring Report
 Solids Report - Daily Averages by Month
 From 01-JAN-2012 To 31-DEC-2012

Year Month	Pt. Loma Raw sludge Gallons	%TS	Dry Tons	Pt. Loma Digested Sludge Gallons	%TS	Dry Tons	MBC Combined Centrate Gallons	%TS	Dry Tons	MBC Dewatered Sludge Wet Tons	%TS	Dry Tons
12-01	1,206,290	3.9	198	1,206,290	2.2	108	2,134,613	0.33	29.0	284	29.2	83.0
12-02	1,216,021	3.9	199	1,215,996	2.1	108	2,045,874	0.33	27.8	275	30.7	84.3
12-03	1,179,272	4.1	205	1,179,272	2.2	109	2,006,189	0.31	25.6	277	29.9	82.7
12-04	1,150,264	4.2	209	1,150,264	2.2	106	1,951,767	0.32	25.8	274	28.6	78.5
12-05	1,198,089	4.1	205	1,198,089	2.2	110	2,195,056	0.34	30.8	329	27.8	91.4
12-06	1,193,564	4.1	208	1,193,560	2.3	113	2,340,882	0.37	35.8	312	27.6	86.2
12-07	1,124,821	4.2	196	1,124,821	2.4	111	2,278,535	0.42	40.0	318	27.1	86.2
12-08	1,176,921	4.0	196	1,176,921	2.3	113	2,255,107	0.40	37.3	333	27.7	92.3
12-09	1,209,466	4.1	211	1,209,466	2.3	113	2,245,933	0.39	36.6	298	27.9	83.2
12-10	1,193,922	4.0	204	1,193,944	2.3	113	2,232,361	0.36	33.6	341	27.8	94.7
12-11	1,187,368	3.9	186	1,187,368	2.2	105	2,165,943	0.31	28.0	305	28.7	87.5
12-12	1,181,313	4.1	205	1,181,313	2.2	111	2,194,045	0.30	27.5	296	27.8	82.2
avg	1,184,776	4.1	202	1,184,775	2.2	110	2,170,525	0.35	31.5	304	28.4	86.0

Note: A ton is a "short ton" or 2000 lbs of dry solids.
 Values for Wet Tons of dewatered sludge are based on calculated volumes from eight positive displacement cake pumps and are subject to inaccuracies. The mechanical condition of the cake pumps and the variability of sludge concentrations can effect the overall accuracies of these reported values.

Enclosure 7 Results of other analyses of dewatered biosolids for 2012

Tables showing the analyses for metals (including priority pollutants), pH, total and volatile solids, pesticides& PCBs, and organic priority pollutant compounds of sewage biosolids samples taken in 2012.

POINT LOMA WASTEWATER TREATMENT PLANT
METRO BIOSOLIDS CENTER
2012 ANNUAL DEWATERED SLUDGE COMPOSITES
Trace Metals

Source:		MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Date:		31-JAN-2012	29-FEB-2012	31-MAR-2012	30-APR-2012	31-MAY-2012	30-JUN-2012
Sample ID:	MDL Units	P605067	P609246	P612206	P615900	P619405	P623145
=====	=====	=====	=====	=====	=====	=====	=====
Aluminum	4 MG/KG	5220	4760	4930	5230	5020	4220
Antimony	.5 MG/KG	1.5	1.2	1.9	1.7	1.6	1.8
Arsenic	.68 MG/KG	3.90	4.56	2.33	3.95	3.88	3.01
Barium	.05 MG/KG	252	167	213	241	251	352
Beryllium	.02 MG/KG	0.07	ND	0.04	0.07	0.11	0.05
Cadmium	.1 MG/KG	1.3	1.0	1.4	1.5	1.5	1.5
Chromium	.3 MG/KG	52	50	55	56	55	60
Cobalt	.2 MG/KG	3.1	2.4	2.5	2.2	2.0	2.2
Cyanides, Total	.1 MG/KG	NR	1.40	NR	NR	1.97	NR
Copper	.4 MG/KG	617	585	660	678	704	583
Iron	20 MG/KG	78600	76500	79700	79500	81500	79500
Lead	2 MG/KG	19	16	19	19	15	15
Manganese	.2 MG/KG	305	289	344	347	314	276
Mercury	.4 MG/KG	1.47	1.76	1.18	1.42	1.44	1.27
Molybdenum	.1 MG/KG	16	15	16	16	17	19
Nickel	.3 MG/KG	36	35	38	37	35	40
Selenium	.47 MG/KG	5.85	6.01	3.83	6.51	5.43	5.49
Silver	.07 MG/KG	6	6	6	5	5	5
Thallium, Total Recoverable	1 MG/KG	ND	ND	ND	ND	ND	ND
Vanadium	.2 MG/KG	39	32	32	29	26	25
Zinc	.5 MG/KG	734	833	817	731	851	889
Sulfides-Reactive	11 MG/KG	ND	ND	ND	ND	16	28
Sulfides-Total	2170 MG/KG	6990	9550	10100	11900	18300	18600
Total Nitrogen	1.1 WT%	4.85	4.74	5.21	4.94	5.04	5.10
Total Kjeldahl Nitrogen	.04 WT%	NR	4.4	NR	NR	5.0	NR
Total Volatile Solids		59.1	57.2	57.9	59.5	59.5	57.6
Total Solids	WT%	29.4	30.3	29.6	28.2	28.0	27.2
pH	PH	7.74	7.69	7.77	7.95	7.72	7.57

ND= Not Detected
NA= Not Analyzed
NS= Not Sampled
NR= Not Required

MBCDEWCN= Metro Biosolids Center Dewatered Centrifuged Sludge.

POINT LOMA WASTEWATER TREATMENT PLANT
 METRO BIOSOLIDS CENTER
 2012 ANNUAL DEWATERED SLUDGE COMPOSITES
 Trace Metals

Source:		MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Date:		31-JUL-2012	31-AUG-2012	30-SEP-2012	31-OCT-2012	30-NOV-2012	31-DEC-2012
Sample ID:	MDL Units	P627353	P631787	P635237	P638482	P642007	P644970
=====	=====	=====	=====	=====	=====	=====	=====
Aluminum	4 MG/KG	4860	4850	5220	5190	4830	4840
Antimony	.5 MG/KG	2.4	2.9	3.5	4.1	3.2	4.2
Arsenic	.68 MG/KG	4.06	3.41	4.05	3.87	4.41	5.02
Barium	.05 MG/KG	233	278	180	304	205	296
Beryllium	.02 MG/KG	0.07	0.09	0.05	0.03	0.12	0.15
Cadmium	.1 MG/KG	1.4	1.4	1.6	1.6	1.0	1.5
Chromium	.3 MG/KG	52	52	54	53	56	45
Cobalt	.2 MG/KG	2.2	2.2	3.2	2.9	2.7	1.8
Cyanides, Total	.1 MG/KG	NR	1.50	NR	1.26	NR	NR
Copper	.4 MG/KG	747	786	845	830	729	741
Iron	20 MG/KG	88700	93600	97800	102000	91900	92100
Lead	2 MG/KG	19	17	22	21	22	20
Manganese	.2 MG/KG	325	316	327	327	329	349
Mercury	.4 MG/KG	1.57	1.30	1.04	1.41	1.07	1.12
Molybdenum	.1 MG/KG	21	24	25	23	19	18
Nickel	.3 MG/KG	39	38	44	40	41	39
Selenium	.47 MG/KG	5.71	5.64	4.59	4.23	4.82	5.54
Silver	.07 MG/KG	5	5	5	6	6	5
Thallium, Total Recoverable	1 MG/KG	ND	1	2	ND	2	ND
Vanadium	.2 MG/KG	24	25	35	36	29	27
Zinc	.5 MG/KG	767	873	885	905	861	825
Sulfides-Reactive	11 MG/KG	24	138	104	137	118	85
Sulfides-Total	2170 MG/KG	21100	19000	22600	25900	17900	15400
Total Nitrogen	1.1 WT%	5.0	5.0	4.9	5.1	4.6	4.9
Total Kjeldahl Nitrogen	.04 WT%	NR	4.81	NR	4.66	NR	NR
Total Volatile Solids	WT%	58.6	57.8	59.8	58.9	59.0	60.6
Total Solids	WT%	27.0	27.3	27.1	27.9	28.9	27.7
pH	PH	7.70	7.66	7.54	7.46	7.53	7.63

ND= Not Detected
 NA= Not Analyzed
 NS= Not Sampled
 NR= Not Required

MBCDEWCN= Metro Biosolids Center Dewatered Centrifuged Sludge.

POINT LOMA WASTEWATER TREATMENT PLANT
Total Nitrogen Analysis

Annual 2012

Source:	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Date:	31-JAN-2012	29-FEB-2012	31-MAR-2012	30-APR-2012	31-MAY-2012	30-JUN-2012	31-JUL-2012
Sample:	MDL Units P605067	P609246	P612206	P615900	P619405	P623145	P627353
Total Nitrogen 1.1 WT%	4.85	4.74	5.21	4.94	5.04	5.10	4.99

Source:	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Date:	31-AUG-2012	30-SEP-2012	31-OCT-2012	30-NOV-2012	31-DEC-2012
Sample:	MDL Units P631787	P635237	P638482	P642007	P644970
Total Nitrogen 1.1 WT%	5.03	4.85	5.11	4.63	4.92

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

POINT LOMA WASTEWATER TREATMENT PLANT
 QUARTERLY SLUDGE PROJECT - ANNUAL SUMMARY

Radioactivity

Annual 2012

Analyzed by: Test America Laboratories

Source	Sample Date	Sample ID	Gross Alpha Radiation	Gross Beta Radiation
PLE	07-FEB-2012	P602738	2.5±1.6	33.5±6.2
PLE	01-MAY-2012	P613974	4.2±4.6	29.3±9.7
PLE	07-AUG-2012	P626871	8.4±6.6	24.4±6.7
PLE	02-OCT-2012	P634304	0.6±5.2	29.2±5.6
PLE	ANNUAL	AVERAGE	3.9±4.5	29.1±7.1
PLR	07-FEB-2012	P602744	3.1±2.1	29.9±7.5
PLR	01-MAY-2012	P613980	2.6±6.5	30.0±9.9
PLR	07-AUG-2012	P626877	2.0±4.5	30.4±8.3
PLR	02-OCT-2012	P634310	2.8±5.2	30.7±5.6
PLR	ANNUAL	AVERAGE	2.6±4.6	30.3±7.8
MBC_COMBCN	07-FEB-2012	P602755	1.4±3.5	57.6±9.4
MBC_COMBCN	01-MAY-2012	P613991	3.7±6.3	59.2±21.0
MBC_COMBCN	07-AUG-2012	P626888	10.3±7.6	45.8±11.0
MBC_COMBCN	02-OCT-2012	P634321	0.0±7.0	48.2±8.1
MBC_COMBCN	ANNUAL	AVERAGE	3.9±6.1	52.7±12.4

Units in picocuries per Liter (pCi/L)

Source	Sample Date	Sample ID	Gross Alpha Radiation	Gross Beta Radiation
MBCDEWCN	29-FEB-2012	P609246	1570±4350	8800±2000
MBCDEWCN	31-MAY-2012	P619405	447±4650	8940±2000
MBCDEWCN	31-AUG-2012	P631787	2190±4600	10600±2200
MBCDEWCN	31-OCT-2012	P638482	1050±4550	9430±2050
AVERAGE			1314±4556	9443±2063

Units in picocuries/liter (pCi/kg)

ND= Not Detected
 NA= Not Analyzed
 NS= Not Sampled
 NR= Not Required

MBC_COMBCN = Combined Sludge Centrate
 MBC_NC_DSL = Combined North City Digested Sludge Line
 MBC_NC_RSL = Combined North City Raw Sludge Line

METROBIOSOLIDS CENTER
 SLUDGE PROJECT - ANNUAL SUMMARY
 Chlorinated Pesticide Analysis

Annual 2012

Source Date			MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Analyte	MDL	Units	31-JAN-2012 P605067	29-FEB-2012 P609246	31-MAR-2012 P612206	30-APR-2012 P615900	31-MAY-2012 P619405
Aldrin	71000	NG/KG	ND	ND	ND	ND	ND
Dieldrin	35000	NG/KG	ND	ND	ND	ND	ND
BHC, Alpha isomer	28000	NG/KG	ND	ND	ND	ND	ND
BHC, Beta isomer	32000	NG/KG	ND	ND	ND	ND	ND
BHC, Gamma isomer	18000	NG/KG	ND	ND	ND	ND	ND
BHC, Delta isomer	28000	NG/KG	ND	ND	ND	ND	ND
p,p-DDD	18000	NG/KG	ND	ND	ND	ND	ND
p,p-DDE	28000	NG/KG	ND	ND	ND	ND	ND
p,p-DDT	35000	NG/KG	ND	ND	ND	ND	ND
o,p-DDD	28000	NG/KG	ND	ND	ND	ND	ND
o,p-DDE	52000	NG/KG	ND	ND	ND	ND	ND
o,p-DDT	71000	NG/KG	ND	ND	ND	ND	ND
Heptachlor	16000	NG/KG	ND	ND	ND	ND	ND
Heptachlor epoxide	28000	NG/KG	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	13000	NG/KG	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	48000	NG/KG	ND	ND	ND	ND	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA
Oxychlordane	28000	NG/KG	ND	ND	ND	ND	ND
Trans Nonachlor	18000	NG/KG	ND	ND	ND	ND	ND
Cis Nonachlor	52000	NG/KG	ND	ND	ND	ND	ND
Alpha Endosulfan	18000	NG/KG	ND	ND	ND	ND	ND
Beta Endosulfan	28000	NG/KG	ND	ND	ND	ND	ND
Endosulfan Sulfate	45000	NG/KG	ND	ND	ND	ND	ND
Endrin aldehyde	52000	NG/KG	ND	ND	ND	ND	ND
Toxaphene	183000	NG/KG	ND	ND	ND	ND	ND
Mirex	18000	NG/KG	ND	ND	ND	ND	ND
Methoxychlor	71000	NG/KG	ND	ND	ND	ND	ND
PCB 1016	260000	NG/KG	ND	ND	ND	ND	ND
PCB 1221	580000	NG/KG	ND	ND	ND	ND	ND
PCB 1232	220000	NG/KG	ND	ND	ND	ND	ND
PCB 1242	7000	NG/KG	ND	ND	ND	ND	ND
PCB 1248	310000	NG/KG	ND	ND	ND	ND	ND
PCB 1254	130000	NG/KG	ND	ND	ND	ND	ND
PCB 1260	86000	NG/KG	ND	ND	ND	ND	ND
PCB 1262	5000	NG/KG	ND	ND	ND	ND	ND
Aldrin + Dieldrin	71000	NG/KG	0	0	0	0	0
Hexachlorocyclohexanes	32000	NG/KG	0	0	0	0	0
DDT and derivatives	71000	NG/KG	0	0	0	0	0
Chlordane + related cmpds.	48000	NG/KG	0	0	0	0	0
Polychlorinated biphenyls	580000	NG/KG	0	0	0	0	0
Chlorinated Hydrocarbons	580000	NG/KG	0	0	0	0	0

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

METROBIOSOLIDS CENTER
 SLUDGE PROJECT - ANNUAL SUMMARY
 Chlorinated Pesticide Analysis

Annual 2012

Source Date			MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
Analyte	MDL	Units	30-JUN-2012	31-JUL-2012	31-AUG-2012	30-SEP-2012	31-OCT-2012
			P623145	P627353	P631787	P635237	P638482
Aldrin	71000	NG/KG	ND	ND	ND	ND	ND
Dieldrin	35000	NG/KG	ND	ND	ND	ND	ND
BHC, Alpha isomer	28000	NG/KG	ND	ND	ND	ND	ND
BHC, Beta isomer	32000	NG/KG	ND	ND	ND	ND	ND
BHC, Gamma isomer	18000	NG/KG	ND	ND	ND	ND	ND
BHC, Delta isomer	28000	NG/KG	ND	ND	ND	ND	ND
p,p-DDD	18000	NG/KG	ND	ND	ND	ND	ND
p,p-DDE	28000	NG/KG	ND	ND	ND	17700	14900
p,p-DDT	35000	NG/KG	ND	ND	ND	ND	ND
o,p-DDD	28000	NG/KG	ND	ND	ND	9850	9150
o,p-DDE	52000	NG/KG	ND	ND	ND	ND	ND
o,p-DDT	71000	NG/KG	ND	ND	ND	ND	ND
Heptachlor	16000	NG/KG	ND	ND	ND	ND	ND
Heptachlor epoxide	28000	NG/KG	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	13000	NG/KG	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	48000	NG/KG	ND	ND	ND	7170	ND
Alpha Chlordene		NG/KG	NA	NA	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA	NA	NA
Oxychlordane	28000	NG/KG	ND	ND	ND	ND	ND
Trans Nonachlor	18000	NG/KG	ND	ND	ND	ND	ND
Cis Nonachlor	52000	NG/KG	ND	ND	ND	ND	ND
Alpha Endosulfan	18000	NG/KG	ND	ND	ND	ND	ND
Beta Endosulfan	28000	NG/KG	ND	ND	ND	ND	ND
Endosulfan Sulfate	45000	NG/KG	ND	ND	ND	ND	ND
Endrin aldehyde	52000	NG/KG	ND	ND	ND	ND	ND
Toxaphene	183000	NG/KG	ND	ND	ND	ND	ND
Mirex	18000	NG/KG	ND	ND	ND	ND	ND
Methoxychlor	71000	NG/KG	ND	ND	ND	ND	ND
PCB 1016	260000	NG/KG	ND	ND	ND	ND	ND
PCB 1221	580000	NG/KG	ND	ND	ND	ND	ND
PCB 1232	220000	NG/KG	ND	ND	ND	ND	ND
PCB 1242	7000	NG/KG	ND	ND	ND	ND	ND
PCB 1248	310000	NG/KG	ND	ND	ND	ND	ND
PCB 1254	130000	NG/KG	ND	ND	ND	ND	ND
PCB 1260	86000	NG/KG	ND	ND	ND	ND	ND
PCB 1262	5000	NG/KG	ND	ND	ND	ND	ND
Aldrin + Dieldrin	71000	NG/KG	0	0	0	0	0
Hexachlorocyclohexanes	32000	NG/KG	0	0	0	0	0
DDT and derivatives	71000	NG/KG	0	0	0	27550	24050
Chlordane + related cmpds.	48000	NG/KG	0	0	0	7170	0
Polychlorinated biphenyls	580000	NG/KG	0	0	0	0	0
Chlorinated Hydrocarbons	580000	NG/KG	0	0	0	34720	24050

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

METROBIOSOLIDS CENTER
 SLUDGE PROJECT - ANNUAL SUMMARY
 Chlorinated Pesticide Analysis

Annual 2012

Source Date			MBCDEWCN 30-NOV-2012	MBCDEWCN 31-DEC-2012	Annual Average
Analyte	MDL	Units	P642007	P644970	
=====	=====	=====	=====	=====	=====
Aldrin	71000	NG/KG	80200	ND	6683
Dieldrin	35000	NG/KG	ND	ND	ND
BHC, Alpha isomer	28000	NG/KG	ND	ND	ND
BHC, Beta isomer	32000	NG/KG	ND	ND	ND
BHC, Gamma isomer	18000	NG/KG	ND	ND	ND
BHC, Delta isomer	28000	NG/KG	ND	ND	ND
p,p-DDD	18000	NG/KG	ND	ND	ND
p,p-DDE	28000	NG/KG	18400	12800	5317
p,p-DDT	35000	NG/KG	ND	ND	ND
o,p-DDD	28000	NG/KG	18000	27100	5342
o,p-DDE	52000	NG/KG	ND	ND	ND
o,p-DDT	71000	NG/KG	ND	ND	ND
Heptachlor	16000	NG/KG	ND	ND	ND
Heptachlor epoxide	28000	NG/KG	ND	ND	ND
Alpha (cis) Chlordane	13000	NG/KG	ND	ND	ND
Gamma (trans) Chlordane	48000	NG/KG	ND	ND	598
Alpha Chlordene		NG/KG	NA	NA	NA
Gamma Chlordene		NG/KG	NA	NA	NA
Oxychlordane	28000	NG/KG	ND	ND	ND
Trans Nonachlor	18000	NG/KG	ND	ND	ND
Cis Nonachlor	52000	NG/KG	ND	ND	ND
Alpha Endosulfan	18000	NG/KG	ND	ND	ND
Beta Endosulfan	28000	NG/KG	ND	ND	ND
Endosulfan Sulfate	45000	NG/KG	ND	ND	ND
Endrin aldehyde	52000	NG/KG	ND	ND	ND
Toxaphene	183000	NG/KG	ND	ND	ND
Mirex	18000	NG/KG	ND	ND	ND
Methoxychlor	71000	NG/KG	ND	ND	ND
PCB 1016	260000	NG/KG	ND	ND	ND
PCB 1221	580000	NG/KG	ND	ND	ND
PCB 1232	220000	NG/KG	ND	ND	ND
PCB 1242	7000	NG/KG	ND	ND	ND
PCB 1248	310000	NG/KG	ND	ND	ND
PCB 1254	130000	NG/KG	ND	ND	ND
PCB 1260	86000	NG/KG	ND	ND	ND
PCB 1262	5000	NG/KG	ND	ND	ND
=====	=====	=====	=====	=====	=====
Aldrin + Dieldrin	71000	NG/KG	80200	0	6683
Hexachlorocyclohexanes	32000	NG/KG	0	0	0
DDT and derivatives	71000	NG/KG	36400	39900	10658
Chlordane + related cmpds.	48000	NG/KG	0	0	598
Polychlorinated biphenyls	580000	NG/KG	0	0	0
=====	=====	=====	=====	=====	=====
Chlorinated Hydrocarbons	580000	NG/KG	116600	39900	17939

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

POINT LOMA WASTEWATER TREATMENT PLANT
Tributyl Tin (Sludge)

Annual 2012

Source		MBCDEWCN	MBCDEWCN
Date		31-MAY-2012	31-OCT-2012
Analyte		P619405	P638482
=====	====	=====	=====
Monobutyltin	4000 UG/KG	ND	ND
Tributyltin	2600 UG/KG	ND	ND

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

POINT LOMA WASTEWATER TREATMENT PLANT
Herbicide Analysis

Annual 2012

Source:			MBCDEWCN	MBCDEWCN	MBCDEWCN
Date:			29-FEB-2012	31-MAY-2012	31-OCT-2012
Sample:	MDL	Units	P609246	P619405	P638482
=====	=====	=====	=====	=====	=====
2,4-Dichlorophenoxyacetic acid	2.66	MG/KG	ND	ND	ND
2,4,5-TP (Silvex)	2.87	MG/KG	ND	ND	ND

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

Note: No data is reported for August2012

POINT LOMA WASTEWATER TREATMENT PLANT / METROBIOSOLIDS CENTER
Organophosphorus Pesticides

Annual 2012

Source		PLE	PLE	PLE	PLE
Date		12-JAN-2012	07-FEB-2012	11-FEB-2012	14-MAR-2012
Analyte	MDL Units	P601998	P602738	P606232	P609933
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	0.05	ND	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	NR	ND
Dichlorvos	.05 UG/L	ND	ND	NR	ND
Dimethoate	.04 UG/L	ND	ND	NR	ND
Disulfoton	.02 UG/L	ND	ND	NR	ND
Stirophos	.03 UG/L	ND	ND	NR	ND
Thiophosphorus Pesticides	.15 UG/L	0.05	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.05	0.00	0.00	0.00

Source		PLE	PLE	PLE	PLE
Date		15-APR-2012	01-MAY-2012	09-JUN-2012	11-JUL-2012
Analyte	MDL Units	P613749	P613974	P620240	P623671
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	0.15	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.15	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.15	0.00	0.00

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

POINT LOMA WASTEWATER TREATMENT PLANT / METROBIOSOLIDS CENTER
Organophosphorus Pesticides

Annual 2012

Source		PLE	PLE	PLE	PLE
Date		12-AUG-2012	05-SEP-2012	02-OCT-2012	16-NOV-2012
Analyte	MDL Units	P629010	P631933	P634304	P640594
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	0.1
Guthion	.15 UG/L	ND	ND	ND	ND
Malathion	.03 UG/L	0.07	0.04	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.07	0.04	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.07	0.04	0.00	0.10

Source		PLE	PLR	PLR	PLR
Date		10-DEC-2012	12-JAN-2012	07-FEB-2012	14-MAR-2012
Analyte	MDL Units	P642562	P602001	P602744	P609936
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
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00

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

POINT LOMA WASTEWATER TREATMENT PLANT / METROBIOSOLIDS CENTER
Organophosphorus Pesticides

Annual 2012

Source		PLR	PLR	PLR	PLR
Date		15-APR-2012	01-MAY-2012	09-JUN-2012	11-JUL-2012
Analyte	MDL Units	P613752	P613980	P620243	P623674
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
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00

Source		PLR	PLR	PLR	PLR
Date		12-AUG-2012	05-SEP-2012	02-OCT-2012	16-NOV-2012
Analyte	MDL Units	P629013	P631936	P634310	P640597
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	0.1
Guthion	.15 UG/L	ND	ND	ND	ND
Malathion	.03 UG/L	0.10	0.06	ND	ND
Parathion	.03 UG/L	ND	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.10	0.06	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.10	0.06	0.00	0.10

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

POINT LOMA WASTEWATER TREATMENT PLANT / METROBIOSOLIDS CENTER
Organophosphorus Pesticides

Annual 2012

Source		PLR	MBC_COMBCN	MBC_COMBCN	MBC_NC_DSL
Date		10-DEC-2012	01-MAY-2012	02-OCT-2012	01-MAY-2012
Analyte	MDL Units	P642565	P613991	P634321	P614045
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
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00

Source		MBC_NC_DSL	MBC_NC_RSL	MBC_NC_RSL	RAW COMP
Date		02-OCT-2012	01-MAY-2012	02-OCT-2012	01-MAY-2012
Analyte	MDL Units	P634375	P614043	P634373	P614016
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
Chlorpyrifos	.03 UG/L	ND	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00	0.00

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

POINT LOMA WASTEWATER TREATMENT PLANT / METROBIOSOLIDS CENTER
Organophosphorus Pesticides

Annual 2012

Source		RAW COMP	DIG COMP	DIG COMP
Date		02-OCT-2012	01-MAY-2012	02-OCT-2012
Analyte	MDL Units	P634346	P614030	P634360
Demeton O	.15 UG/L	ND	ND	ND
Demeton S	.08 UG/L	ND	ND	ND
Diazinon	.03 UG/L	ND	ND	ND
Guthion	.15 UG/L	ND	ND	ND
Malathion	.03 UG/L	ND	ND	ND
Parathion	.03 UG/L	ND	ND	ND
Chlorpyrifos	.03 UG/L	ND	ND	ND
Coumaphos	.15 UG/L	ND	ND	ND
Dichlorvos	.05 UG/L	ND	ND	ND
Dimethoate	.04 UG/L	ND	ND	ND
Disulfoton	.02 UG/L	ND	ND	ND
Stirophos	.03 UG/L	ND	ND	ND
Thiophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00
Demeton -O, -S	.15 UG/L	0.00	0.00	0.00
Total Organophosphorus Pesticides	.15 UG/L	0.00	0.00	0.00

Source		MBCDEWCN	MBCDEWCN
Date		31-MAY-2012	31-OCT-2012
Analyte	MDL Units	P619405	P638482
Demeton O	67 UG/KG	ND	ND
Demeton S	27 UG/KG	ND	ND
Diazinon	UG/KG	ND	ND
Guthion	33 UG/KG	ND	ND
Malathion	20 UG/KG	ND	ND
Parathion	20 UG/KG	ND	ND
Chlorpyrifos	UG/KG	ND	58.1
Coumaphos	33 UG/KG	ND	ND
Dichlorvos	17 UG/KG	ND	ND
Dimethoate	27 UG/KG	ND	ND
Disulfoton	20 UG/KG	ND	ND
Stirophos	20 UG/KG	ND	ND
Thiophosphorus Pesticides	33 UG/KG	0.0	0.0
Demeton -O, -S	67 UG/KG	0.0	0.0
Total Organophosphorus Pesticides	67 UG/KG	0.0	58.1

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

POINT LOMA WASTEWATER TREATMENT PLANT
Base/Neutrals

Annual 2012

Source Date	MDL Units	MBCDEWCN 29-FEB-2012 P609246	MBCDEWCN 31-MAY-2012 P619405	MBCDEWCN 31-AUG-2012 P631787	MBCDEWCN 31-OCT-2012 P638482
Acenaphthene	330 UG/KG	ND	ND	ND	ND
Acenaphthylene	330 UG/KG	ND	ND	ND	ND
Anthracene	330 UG/KG	ND	ND	ND	ND
Benzidine	330 UG/KG	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	330 UG/KG	ND	ND	ND	ND
Benzo[k]fluoranthene	330 UG/KG	ND	ND	ND	ND
Benzo[a]anthracene	330 UG/KG	ND	ND	ND	ND
Benzo[a]pyrene	330 UG/KG	ND	ND	ND	ND
Benzo[g,h,i]perylene	330 UG/KG	ND	ND	ND	ND
4-Bromophenyl phenyl ether	330 UG/KG	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	330 UG/KG	ND	ND	ND	ND
Bis-(2-chloroethyl) ether	330 UG/KG	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	330 UG/KG	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	330 UG/KG	ND	ND	ND	ND
2-Chloronaphthalene	UG/KG	ND	ND	ND	ND
Chrysene	330 UG/KG	ND	ND	ND	ND
Dibenzo(a,h)anthracene	330 UG/KG	ND	ND	ND	ND
Butyl benzyl phthalate	330 UG/KG	ND	ND	ND	ND
Di-n-butyl phthalate	330 UG/KG	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	330 UG/KG	66000	93100	84100	85100
Diethyl phthalate	330 UG/KG	ND	ND	ND	ND
Dimethyl phthalate	330 UG/KG	ND	ND	ND	ND
Di-n-octyl phthalate	330 UG/KG	ND	ND	ND	ND
3,3-Dichlorobenzidine	330 UG/KG	ND	ND	ND	ND
2,4-Dinitrotoluene	330 UG/KG	ND	ND	ND	ND
2,6-Dinitrotoluene	330 UG/KG	ND	ND	ND	ND
1,2-Diphenylhydrazine	UG/KG	ND	ND	ND	ND
Fluoranthene	330 UG/KG	ND	ND	ND	ND
Fluorene	330 UG/KG	ND	ND	ND	ND
Hexachlorobenzene	330 UG/KG	ND	ND	ND	ND
Hexachlorobutadiene	330 UG/KG	ND	ND	ND	ND
Hexachlorocyclopentadiene	330 UG/KG	ND	ND	ND	ND
Hexachloroethane	330 UG/KG	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	330 UG/KG	ND	ND	ND	ND
Isophorone	330 UG/KG	ND	ND	ND	ND
Naphthalene	330 UG/KG	ND	455	ND	ND
Nitrobenzene	330 UG/KG	ND	ND	ND	ND
N-nitrosodimethylamine	330 UG/KG	ND	ND	ND	ND
N-nitrosodi-n-propylamine	330 UG/KG	ND	ND	ND	ND
N-nitrosodiphenylamine	330 UG/KG	ND	ND	ND	ND
Phenanthrene	330 UG/KG	ND	657	ND	ND
Pyrene	330 UG/KG	ND	ND	ND	ND
1,2,4-Trichlorobenzene	330 UG/KG	ND	ND	ND	ND
1,3-Dichlorobenzene	330 UG/KG	ND	ND	ND	ND
1,2-Dichlorobenzene	330 UG/KG	ND	ND	ND	ND
1,4-Dichlorobenzene	330 UG/KG	ND	ND	ND	ND
PolyNuc. Aromatic Hydrocarbons	330 UG/KG	0	657	0	0
Base/Neutral Compounds	330 UG/KG	66000	94212	84100	85100
Dichlorobenzenes	330 UG/KG	0	0	0	0
Benzo[e]pyrene	UG/KG	ND	ND	ND	ND
Biphenyl	UG/KG	ND	563	229	515
2,6-Dimethylnaphthalene	UG/KG	1690	1530	1930	1460
1-Methylnaphthalene	UG/KG	402	ND	ND	ND
1-Methylphenanthrene	UG/KG	ND	ND	ND	ND
2-Methylnaphthalene	UG/KG	474	547	613	462
2,3,5-Trimethylnaphthalene	UG/KG	ND	ND	ND	ND
Perylene	330 UG/KG	ND	ND	ND	ND
Pyridine	UG/KG	ND	ND	ND	ND

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

POINT LOMA WASTEWATER TREATMENT PLANT
Phenolics

Annual 2012

Source		MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	
Date		29-FEB-2012	31-MAY-2012	31-AUG-2012	31-OCT-2012	
Analyte	MDL Units	P609246	P619405	P631787	P638482	Average
2-Chlorophenol	330 UG/KG	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	330 UG/KG	ND	ND	ND	ND	ND
2,4-Dichlorophenol	330 UG/KG	ND	ND	ND	<330	0
2,4-Dimethylphenol	330 UG/KG	ND	ND	ND	ND	ND
2,4-Dinitrophenol	330 UG/KG	ND	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	800 UG/KG	ND	ND	ND	ND	ND
2-Nitrophenol	330 UG/KG	ND	ND	ND	ND	ND
4-Nitrophenol	800 UG/KG	ND	ND	ND	ND	ND
Pentachlorophenol	800 UG/KG	ND	ND	ND	ND	ND
Phenol	330 UG/KG	3150	5700	4560	3620	4258
2,4,6-Trichlorophenol	330 UG/KG	ND	ND	ND	ND	ND
Total Chlorinated Phenols	800 UG/KG	0	0	0	0	0
Total Non-Chlorinated Phenols	800 UG/KG	5345	7260	6350	5747	6176
Phenols	800 UG/KG	5345	7260	6350	5747	6176
2-Methylphenol	330 UG/KG	1500	ND	ND	987	622
4-Methylphenol(3-MP is unresolved)	330 UG/KG	695	1560	1790	1140	1296
2,4,5-Trichlorophenol	800 UG/KG	ND	ND	ND	ND	ND
Phenols average	800 UG/KG	286	518	415	329	387

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

POINT LOMA WASTEWATER TREATMENT PLANT
Purgeables

Annual 2012

Source Date	MDL	Units	MBCDEWCN 31- JAN-2012 P605067	MBCDEWCN 29- FEB-2012 P609246	MBCDEWCN 31- MAR-2012 P612206	MBCDEWCN 30- APR-2012 P615900	MBCDEWCN 31- MAY-2012 P619405	MBCDEWCN 30- JUN-2012 P623145
Acrolein	6.4	UG/KG	ND	ND	ND	ND	ND	ND
Acrylonitrile	3.9	UG/KG	ND	ND	ND	ND	ND	ND
Benzene	2.1	UG/KG	ND	ND	ND	ND	6.9	ND
Bromodichloromethane	2.2	UG/KG	ND	ND	ND	ND	ND	ND
Bromoform	2.4	UG/KG	ND	ND	ND	ND	ND	ND
Bromomethane	6.9	UG/KG	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	3	UG/KG	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	UG/KG	ND	ND	ND	ND	ND	ND
Chloroethane	3.6	UG/KG	ND	ND	ND	ND	ND	ND
Chloroform	2.3	UG/KG	ND	ND	ND	ND	ND	ND
Chloromethane	3.4	UG/KG	ND	ND	ND	ND	ND	ND
Dibromochloromethane	2.4	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1.5	UG/KG	29.8	19.8	13.6	18.0	ND	ND
1,3-Dichlorobenzene	1.8	UG/KG	ND	ND	ND	ND	ND	3.4
1,4-Dichlorobenzene	1.5	UG/KG	101	86.8	113	121	40.4	84.8
Dichlorodifluoromethane	5.56	UG/KG	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.9	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.6	UG/KG	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	UG/KG	ND	ND	ND	ND	ND	ND
trans-1,2-dichloroethene	3.5	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	2.6	UG/KG	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	2.5	UG/KG	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	2.1	UG/KG	ND	ND	ND	ND	ND	ND
Ethylbenzene	1.4	UG/KG	463	179	208	246	274	433
Methylene chloride	3.5	UG/KG	ND	ND	ND	ND	5.6	ND
1,1,2,2-Tetrachloroethane	5.9	UG/KG	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.8	UG/KG	ND	ND	ND	ND	ND	ND
Toluene	1.2	UG/KG	51.9	35.4	61.6	81.5	73.9	44.6
1,1,1-Trichloroethane	3.2	UG/KG	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	2.8	UG/KG	ND	ND	ND	ND	ND	ND
Trichloroethene	2.6	UG/KG	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	2.2	UG/KG	ND	ND	ND	ND	ND	ND
Vinyl chloride	4.8	UG/KG	ND	ND	ND	ND	ND	ND
Halomethane Purgeable Compounds	6.9	UG/KG	0.0	0.0	0.0	0.0	0.0	0.0
Purgeable Compounds	6.9	UG/KG	645.7	321	396.2	466.5	400.8	565.8
Acetone	31.4	UG/KG	37900	27700	36400	19500	20700	34300
Allyl chloride	3.6	UG/KG	ND	ND	ND	ND	ND	ND
Benzyl chloride	4.3	UG/KG	ND	ND	ND	ND	ND	ND
2-Butanone	36.3	UG/KG	8020	5510	8620	7070	6200	7290
Carbon disulfide	4.7	UG/KG	117	89.9	112	169	121	87.2
Chloroprene	3.1	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	2.5	UG/KG	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1.3	UG/KG	28.4	19.9	24.7	36.8	30.1	108.0
Methyl Iodide	3.8	UG/KG	ND	ND	ND	ND	ND	ND
Methyl methacrylate	2.4	UG/KG	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	3.4	UG/KG	ND	ND	ND	ND	ND	ND
2-Nitropropane	45.8	UG/KG	ND	ND	ND	ND	ND	ND
ortho-xylene	1.9	UG/KG	51.7	35.6	53.5	64.1	56.4	207.0
Styrene	1.7	UG/KG	56.5	28.2	39.1	186	118	79.3
1,2,4-Trichlorobenzene	2.5	UG/KG	ND	ND	5.5	7.5	ND	14.4
meta,para xylenes	4.2	UG/KG	86.6	56.9	91.1	106.0	24.5	377.0
2-Chloroethylvinyl ether	5.5	UG/KG	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	9.7	UG/KG	30.2	26.1	12.6	48.2	31.3	23.2

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

POINT LOMA WASTEWATER TREATMENT PLANT
Purgeables

Annual 2012

Source Date	MDL	Units	MBCDEWCN 31-JUL-2012 P627353	MBCDEWCN 31-AUG-2012 P631787	MBCDEWCN 30-SEP-2012 P635237	MBCDEWCN 31-OCT-2012 P638482	MBCDEWCN 30-NOV-2012 P642007	MBCDEWCN 31-DEC-2012 P644970
Acrolein	6.4	UG/KG	ND	ND	ND	ND	ND	ND
Acrylonitrile	3.9	UG/KG	ND	ND	ND	ND	ND	ND
Benzene	2.1	UG/KG	ND	ND	ND	ND	ND	ND
Bromodichloromethane	2.2	UG/KG	ND	ND	ND	ND	ND	ND
Bromoform	2.4	UG/KG	ND	ND	ND	ND	ND	ND
Bromomethane	6.9	UG/KG	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	3	UG/KG	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	UG/KG	ND	ND	ND	ND	ND	ND
Chloroethane	3.6	UG/KG	ND	ND	ND	ND	ND	ND
Chloroform	2.3	UG/KG	ND	ND	ND	ND	ND	ND
Chloromethane	3.4	UG/KG	ND	ND	ND	ND	ND	ND
Dibromochloromethane	2.4	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1.5	UG/KG	ND	ND	ND	10.1	12.0	ND
1,3-Dichlorobenzene	1.8	UG/KG	8.8	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.5	UG/KG	96.4	23.0*	73.3	56.7	82.1	67.1
Dichlorodifluoromethane	5.56	UG/KG	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.9	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.6	UG/KG	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	UG/KG	ND	ND	ND	ND	ND	ND
trans-1,2-dichloroethene	3.5	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	2.6	UG/KG	ND	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	2.5	UG/KG	ND	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	2.1	UG/KG	ND	ND	ND	ND	ND	ND
Ethylbenzene	1.4	UG/KG	265.0	70.6	1060	282	198	150
Methylene chloride	3.5	UG/KG	8.9	ND	<3.5	ND	9.0	ND
1,1,2,2-Tetrachloroethane	5.9	UG/KG	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.8	UG/KG	ND	ND	ND	ND	ND	ND
Toluene	1.2	UG/KG	53.8	17.4	68.7	57.4	68.1	53.4
1,1,1-Trichloroethane	3.2	UG/KG	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	2.8	UG/KG	ND	ND	ND	ND	ND	ND
Trichloroethene	2.6	UG/KG	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	2.2	UG/KG	ND	ND	ND	ND	ND	ND
Vinyl chloride	4.8	UG/KG	ND	ND	ND	ND	ND	ND
Halomethane Purgeable Compounds	6.9	UG/KG	0.0	0.0	0.0	0.0	0.0	0.0
Purgeable Compounds	6.9	UG/KG	432.9	88.0	1202	406.2	369.2	270.5
Acetone	31.4	UG/KG	30500	25600	30400	15500	25100	45600
Allyl chloride	3.6	UG/KG	ND	ND	ND	ND	ND	ND
Benzyl chloride	4.3	UG/KG	ND	ND	ND	ND	ND	ND
2-Butanone	36.3	UG/KG	7300	6270	8840	4820	5920	13500
Carbon disulfide	4.7	UG/KG	100.0	60.1	244	119	139	275
Chloroprene	3.1	UG/KG	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	2.5	UG/KG	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1.3	UG/KG	37.6	ND	22.6	28.9	33.4	26.2
Methyl Iodide	3.8	UG/KG	ND	ND	ND	ND	ND	ND
Methyl methacrylate	2.4	UG/KG	ND	ND	ND	ND	ND	37.7
Methyl tert-butyl ether	3.4	UG/KG	ND	ND	ND	ND	ND	ND
2-Nitropropane	45.8	UG/KG	ND	ND	ND	ND	ND	ND
ortho-xylene	1.9	UG/KG	78.0	12.2	42.7	50.3	49.8	53.9
Styrene	1.7	UG/KG	40.9	22.7	114.0	47.9	37.9	547
1,2,4-Trichlorobenzene	2.5	UG/KG	ND	ND	ND	ND	ND	ND
meta,para xylenes	4.2	UG/KG	122	21.6	83.1	95.5	100	92.2
2-Chloroethylvinyl ether	5.5	UG/KG	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	9.7	UG/KG	25.1	9.8	30.6	ND	29.7	38.9

*= The blank for this batch had a reportable value of 1.54 ug/kg. Data not included in averages.

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

POINT LOMA WASTEWATER TREATMENT PLANT
Purgeables

Annual 2012

Analyte	MDL	Units	Average
Acrolein	6.4	UG/KG	ND
Acrylonitrile	3.9	UG/KG	ND
Benzene	2.1	UG/KG	0.6
Bromodichloromethane	2.2	UG/KG	ND
Bromoform	2.4	UG/KG	ND
Bromomethane	6.9	UG/KG	ND
Carbon tetrachloride	3	UG/KG	ND
Chlorobenzene	1	UG/KG	ND
Chloroethane	3.6	UG/KG	ND
Chloroform	2.3	UG/KG	ND
Chloromethane	3.4	UG/KG	ND
Dibromochloromethane	2.4	UG/KG	ND
1,2-Dichlorobenzene	1.5	UG/KG	8.6
1,3-Dichlorobenzene	1.8	UG/KG	1.0
1,4-Dichlorobenzene	1.5	UG/KG	83.9
Dichlorodifluoromethane	5.56	UG/KG	ND
1,1-Dichloroethane	1.9	UG/KG	ND
1,2-Dichloroethane	3.6	UG/KG	ND
1,1-Dichloroethene	5	UG/KG	ND
trans-1,2-dichloroethene	3.5	UG/KG	ND
1,2-Dichloropropane	2.6	UG/KG	ND
cis-1,3-dichloropropene	2.5	UG/KG	ND
trans-1,3-dichloropropene	2.1	UG/KG	ND
Ethylbenzene	1.4	UG/KG	319.1
Methylene chloride	3.5	UG/KG	2.0
1,1,2,2-Tetrachloroethane	5.9	UG/KG	ND
Tetrachloroethene	2.8	UG/KG	ND
Toluene	1.2	UG/KG	55.6
1,1,1-Trichloroethane	3.2	UG/KG	ND
1,1,2-Trichloroethane	2.8	UG/KG	ND
Trichloroethene	2.6	UG/KG	ND
Trichlorofluoromethane	2.2	UG/KG	ND
Vinyl chloride	4.8	UG/KG	ND
Halomethane Purgeable Compounds	6.9	UG/KG	0.0
Purgeable Compounds	6.9	UG/KG	463.7
Acetone	31.4	UG/KG	29100
Allyl chloride	3.6	UG/KG	ND
Benzyl chloride	4.3	UG/KG	ND
2-Butanone	36.3	UG/KG	7447
Carbon disulfide	4.7	UG/KG	136.1
Chloroprene	3.1	UG/KG	ND
1,2-Dibromoethane	2.5	UG/KG	ND
Isopropylbenzene	1.3	UG/KG	33.1
Methyl Iodide	3.8	UG/KG	ND
Methyl methacrylate	2.4	UG/KG	3.1
Methyl tert-butyl ether	3.4	UG/KG	ND
2-Nitropropane	45.8	UG/KG	ND
ortho-xylene	1.9	UG/KG	62.9
Styrene	1.7	UG/KG	109.8
1,2,4-Trichlorobenzene	2.5	UG/KG	2.3
meta,para xylenes	4.2	UG/KG	104.7
2-Chloroethylvinyl ether	5.5	UG/KG	ND
4-Methyl-2-pentanone	9.7	UG/KG	25.5

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

METROBIOSOLIDS CENTER
Dioxin and Furan Analysis, SW-846 Method 8290

Annual 2012

Analyzed by: Frontier Analytical Laboratories

Source Date	Analyte	MDL	Units	MBCDEWCN 31-JAN-2012 P605067	MBCDEWCN 29-FEB-2012 P609246	MBCDEWCN 31-MAR-2012 P612206	MBCDEWCN 30-APR-2012 P615900	MBCDEWCN 31-MAY-2012 P619405	MBCDEWCN 30-JUN-2012 P623145	MBCDEWCN 31-JUL-2012 P627353
2,3,7,8-tetra CDD	.0414	NG/KG		ND	DNQ0.72	DNQ0.56	DNQ0.65	DNQ0.57	DNQ0.55	DNQ0.73
1,2,3,7,8-penta CDD	.0563	NG/KG		3.25	DNQ3.12	DNQ4.73	DNQ2.30	DNQ3.96	DNQ3.44	DNQ3.79
1,2,3,4,7,8-hexa CDD	.0747	NG/KG		1.80	DNQ1.76	DNQ1.89	DNQ1.82	DNQ1.17	DNQ1.81	DNQ1.77
1,2,3,6,7,8-hexa CDD	.081	NG/KG		33.70	28.70	17.00	20.90	19.00	23.40	29.80
1,2,3,7,8,9-hexa CDD	.0748	NG/KG		11.00	8.86	5.59	7.01	5.73	7.11	8.57
1,2,3,4,6,7,8-hepta CDD	.138	NG/KG		306.00	236.00	211.00	258.00	221.00	288.00	295.00
octa CDD	.248	NG/KG		1670.00	1300.00	1390.00	1670.00	1340.00	1720.00	1630.00
2,3,7,8-tetra CDF	.0435	NG/KG		3.61	4.11	3.78	3.71	3.66	5.25	5.15
1,2,3,7,8-penta CDF	.0608	NG/KG		1.24	DNQ1.48	DNQ1.52	DNQ1.26	DNQ1.20	DNQ1.75	DNQ1.60
2,3,4,7,8-penta CDF	.66	NG/KG		1.54	DNQ1.33	DNQ1.69	DNQ1.70	DNQ0.97	DNQ2.00	DNQ1.33
1,2,3,4,7,8-hexa CDF	.0484	NG/KG		2.31	DNQ2.21	DNQ2.39	DNQ1.87	DNQ1.74	DNQ2.43	DNQ2.18
1,2,3,6,7,8-hexa CDF	.0487	NG/KG		1.78	DNQ1.86	DNQ2.40	DNQ1.87	DNQ1.31	DNQ2.30	DNQ3.23
1,2,3,7,8,9-hexa CDF	.0607	NG/KG		ND	DNQ0.54	DNQ0.75	DNQ0.65	DNQ0.60	DNQ0.77	ND
2,3,4,6,7,8-hexa CDF	.0531	NG/KG		2.42	DNQ2.47	DNQ2.66	DNQ2.11	DNQ1.89	DNQ2.89	DNQ2.84
1,2,3,4,6,7,8-hepta CDF	.0642	NG/KG		26.70	23.60	25.00	47.20	30.80	31.70	26.80
1,2,3,4,7,8,9-hepta CDF	.0704	NG/KG		1.64	DNQ1.63	DNQ1.94	DNQ1.90	DNQ1.44	DNQ1.73	DNQ1.55
octa CDF	.151	NG/KG		85.00	73.90	71.30	606.00	279.00	139.00	71.80

Source Date	Analyte	MDL	Units	MBCDEWCN 31-AUG-2012 P631787	MBCDEWCN 30-SEP-2012 P635237	MBCDEWCN 31-OCT-2012 P638482	MBCDEWCN 30-NOV-2012 P642007
2,3,7,8-tetra CDD	.0414	NG/KG		DNQ0.75	DNQ0.55	ND	DNQ0.69
1,2,3,7,8-penta CDD	.0563	NG/KG		DNQ3.62	DNQ3.55	DNQ3.19	DNQ2.50
1,2,3,4,7,8-hexa CDD	.0747	NG/KG		DNQ2.43	DNQ1.50	DNQ1.52	DNQ1.49
1,2,3,6,7,8-hexa CDD	.081	NG/KG		33.40	20.40	17.40	23.60
1,2,3,7,8,9-hexa CDD	.0748	NG/KG		10.20	5.84	5.99	8.15
1,2,3,4,6,7,8-hepta CDD	.138	NG/KG		370.00	246.00	230.00	259.00
octa CDD	.248	NG/KG		1990.00	1530.00	1330.00	1370.00
2,3,7,8-tetra CDF	.0435	NG/KG		5.68	4.36	3.97	4.45
1,2,3,7,8-penta CDF	.0608	NG/KG		DNQ1.66	DNQ1.15	DNQ1.22	DNQ0.99
2,3,4,7,8-penta CDF	.66	NG/KG		DNQ1.55	DNQ1.60	DNQ1.58	DNQ0.76
1,2,3,4,7,8-hexa CDF	.0484	NG/KG		DNQ2.73	DNQ2.03	DNQ1.77	DNQ1.57
1,2,3,6,7,8-hexa CDF	.0487	NG/KG		DNQ2.91	DNQ2.24	DNQ1.70	DNQ1.39
1,2,3,7,8,9-hexa CDF	.0607	NG/KG		DNQ0.85	DNQ0.93	DNQ0.63	DNQ0.49
2,3,4,6,7,8-hexa CDF	.0531	NG/KG		DNQ3.03	DNQ2.62	DNQ2.28	DNQ1.90
1,2,3,4,6,7,8-hepta CDF	.0642	NG/KG		31.40	25.20	22.70	21.00
1,2,3,4,7,8,9-hepta CDF	.0704	NG/KG		DNQ1.79	DNQ1.33	DNQ1.44	DNQ1.29
octa CDF	.151	NG/KG		81.40	62.80	58.10	58.20

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

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

H. Results of "Title 22" Sludge Hazardous Waste Tests

Title 22 CCR Summary Tables

Concentrations of Title 22 analytes (metals and organics) both on a wet weight and dry weight concentration basis for monthly composite of daily samples of sludge being hauled from the Metro Biosolids Center.

The tables list the TTLC (Total Threshold Limit Concentration) or STLC (Soluble Threshold Limit Concentration) limits in the left column for each analyte.

Definitions:

MBCDEWCN = Metro Biosolids Center dewatered sludge.

CALIFORNIA HAZARDOUS WASTE IDENTIFICATION TEST (TITLE 22)

METRO BIOSOLIDS CENTER (MBC)

		WET WEIGHT Concentration (calculated)												
ANALYTE	TILC	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
	Wet wt mg/Kg	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
		P605067	P609246	P612206	P615900	P619405	P623145	P627353	P631787	P635237	P638482	P642007	P644970	
ANTIMONY	500	0.44	0.35	0.57	0.49	0.45	0.49	0.65	0.79	0.96	1.14	0.92	1.16	
ARSENIC	500	1.1	1.4	0.7	1.1	1.1	0.8	1.10	0.9	1.1	1.1	1.3	1.4	
BARIUM	10000	74	51	63	68	70	96	63	76	49	85	59	82	
BERYLLIUM	75	0.021	< 0.006	0.012	0.020	0.031	0.014	0.019	0.025	0.014	0.008	0.035	0.042	
CADMIUM	100	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	
CHROMIUM(VI)	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
CHROMIUM(total)	2500	15	15	16	16	15	16	14	14	15	15	16	12	
COBALT	8000	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.9	0.8	0.8	0.5	
COPPER	2500	181	177	195	191	197	159	202	215	231	232	211	205	
LEAD	1000	6	5	6	5	4	4	5	5	6	6	6	6	
MERCURY	20	0.43	0.53	0.26	0.37	0.40	0.35	0.43	0.35	0.27	0.39	0.32	0.30	
MOLYBDENUM	3500	4.8	4.6	4.8	4.5	4.7	5.2	5.8	6.4	6.8	6.4	5.5	4.9	
NICKEL	2000	11	10	11	11	10	11	11	10	12	11	12	11	
SELENIUM	100	1.7	1.8	1.1	1.8	1.5	1.5	1.5	1.5	1.3	1.2	1.4	1.5	
SILVER	500	2	2	2	2	2	1	1	1	1	2	2	1	
THALLIUM	700	< 0.29	< 0.30	< 0.30	< 0.28	< 0.28	< 0.27	< 0.27	0.27	0.55	< 0.28	0.58	< 0.28	
VANADIUM	2400	11	10	9	8	7	7	6	7	10	10	8	8	
ZINC	5000	216	252	242	206	238	242	207	238	242	252	249	229	
FLUORIDE	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SULFIDES-REACTIVE	NA	< 3	NA	< 3	< 3	4	8	6	38	28	38	34	24	
SULFIDES-TOTAL	NA	2054	2894	2990	3356	5110	5059	5697	5173	6156	7212	5173	4252	
TOTAL SOLIDS (%)		29.4	30.3	29.6	28.2	28.0	27.2	27.0	27.3	27.3	27.9	28.9	27.7	

		DRY WEIGHT Concentration												
ANALYTE	TILC	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
	Wet wt mg/Kg	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
		P605067	P609246	P612206	P615900	P619405	P623145	P627353	P631787	P635237	P638482	P642007	P644970	
ANTIMONY	500	1.5	1.17	1.93	1.74	1.62	1.8	2.4	2.9	3.5	4.1	3.2	4.2	
ARSENIC	500	3.9	4.6	2.33	3.95	3.88	3.01	4.1	3.41	4.05	3.9	4.4	5.02	
BARIUM	10000	252	167	213	241	251	352	233	278	180	304	205	296	
BERYLLIUM	75	0.1	< 0.02	0.0	0.07	0.11	0.05	0.07	0.09	0.05	0.03	0.1	0.15	
CADMIUM	100	1.32	1.0	1.38	1.5	1.49	1.5	1.4	1.4	1.6	1.6	1.0	1.5	
CHROMIUM(VI)	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
CHROMIUM(total)	2500	51.9	50.3	55.2	56.2	55	59.7	52.3	52.3	53.8	52.7	55.5	45	
COBALT	8000	3.1	2.42	2.5	2.16	1.98	2.2	2.2	2.2	3.2	2.9	2.7	1.8	
COPPER	2500	617	585	660	678	704	583	747	786	845	830	729	741	
LEAD	1000	19	15.7	19.3	18.9	15.3	15.2	19	17	22	21	22	20	
MERCURY	20	1.47	1.8	0.89	1.32	1.44	1.3	1.6	1.3	1.0	1.4	1.1	1.1	
MOLYBDENUM	3500	16.4	15.1	16.3	15.9	16.7	19.1	21.4	23.6	24.8	22.9	19.1	17.8	
NICKEL	2000	36	34.5	37.9	37.4	34.9	39.8	39.2	38.2	44.4	40.3	41.4	39.3	
SELENIUM	100	5.85	6.01	3.8	6.51	5.4	5.49	5.7	5.64	4.6	4.2	4.8	5.54	
SILVER	500	6.29	6.23	5.5	5.36	5.41	5.27	5.25	4.69	4.84	5.8	5.58	5.3	
THALLIUM	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	2	< 1	2	< 1	
VANADIUM	2400	38.9	31.5	32	28.7	26	24.8	23.8	25.2	35.0	36.4	29.2	27.2	
ZINC	5000	734	833	817	731	851	889	767	873	885	905	861	825	
FLUORIDE	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SULFIDES-REACTIVE	NA	< 11	NA	< 11	< 11	16	28	24	138	104	137	118	85	
SULFIDES-TOTAL	NA	6985	9550	10100	11900	18250	18600	21100	18950	22550	25850	17900	15350	

TTLIC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

NA = Not Analyzed, NS = Not Sampled

* = The total concentration is less than 10 times the STLC, therefore by definition this substance is below hazardous concentrations.

ORGANICS

WET WEIGHT Concentration (calculated)

ANALYTE	TTLc Wet wt mg/Kg	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
		Jan-12 P605067	Feb-12 P609246	Mar-12 P612206	Apr-12 P615900	May-12 P619405	Jun-12 P623145	Jul-12 P627353	Aug-12 P631787	Sep-12 P635237	Oct-12 P638482	Nov-12 P642007	Dec-12 P644970
ALDRIN	1.4	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.023	nd	nd
CHLORDANE	2.5	nd	nd	nd	nd	nd	nd	nd	nd	0.002	nd	nd	nd
DDT,DDE,DDD	1.0	nd	nd	nd	nd	nd	nd	nd	nd	0.0081	0.0056	0.0116	0.0111
2,4-DCPAA	100	NA	NA	NA	NA	nd	NA	NA	NA	NA	nd	NA	NA
DIELDRIN	8.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ENDRIN	0.20	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
HEPTACHLOR	4.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KEPONE	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LINDANE	4	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
METHOXYCHLOR	100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MIREX	21	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PENTACHLOROPHENOL	17	NA	nd	NA	NA	NA	NA	NA	nd	NA	nd	NA	NA
PCBs (TOTAL)	50	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOXAPHENE	5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	2040	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-TCPPA	10	NA	nd	NA	NA	nd	NA	NA	NA	NA	nd	NA	NA
TOTAL SOLIDS (%)		29.4	30.3	29.6	30.1	28.9	27.7	27.0	27.3	27.1	27.9	28.9	27.7
pH	>2-<12	7.74	7.69	7.77	7.95	7.72	7.57	7.70	7.66	7.54	7.46	59.00	7.63

DRY WEIGHT Concentration

ANALYTE	TTLc Wet wt mg/Kg	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
		Jan-12 P605067	Feb-12 P609246	Mar-12 P612206	Apr-12 P615900	May-12 P619405	Jun-12 P623145	Jul-12 P627353	Aug-12 P631787	Sep-12 P635237	Oct-12 P638482	Nov-12 P642007	Dec-12 P644970
ALDRIN	1.4	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.08	nd	nd
CHLORDANE	2.5	nd	nd	nd	nd	nd	nd	nd	nd	0.007	nd	nd	nd
DDT,DDE,DDD	1.0	nd	nd	nd	nd	nd	nd	nd	nd	0.03	0.02	0.04	0.04
2,4-DCPAA	100	NA	NA	NA	NA	nd	NA	NA	NA	NA	nd	NA	NA
DIELDRIN	8.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ENDRIN	0.20	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
HEPTACHLOR	4.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KEPONE	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LINDANE	4	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
METHOXYCHLOR	100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MIREX	21	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PENTACHLOROPHENOL	17	NA	nd	NA	NA	NA	NA	NA	nd	NA	nd	NA	NA
PCBs (TOTAL)	50	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOXAPHENE	5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	2040	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-TCPPA	10	NA	nd	NA	NA	nd	NA	NA	NA	NA	nd	NA	NA

TTLc = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

WASTE EXTRACTION TEST - METALS

ANALYTE	STLC	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
	Wet wt mg/L	Jan-12 P605067	Feb-12 P609246	Mar-12 P612206	Apr-12 P615900	May-12 P619405	Jun-12 P623145	Jul-12 P627353	Aug-12 P631787	Sep-12 P635237	Oct-12 P638482	Nov-12 P642007	Dec-12 P644970
ANTIMONY	15	*	*	*	*	*	*	*	*	*	*	*	*
ARSENIC	5.0	*	*	*	*	*	*	*	*	*	*	*	*
BARIUM	100	*	*	*	*	*	*	*	*	*	*	*	*
BERYLLIUM	0.75	*	*	*	*	*	*	*	*	*	*	*	*
CADMIUM	1.0	*	*	*	*	*	*	*	*	*	*	*	*
CHROMIUM(VI)	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM(total)	560	*	*	*	*	*	*	*	*	*	*	*	*
COBALT	80	*	*	*	*	*	*	*	*	*	*	*	*
COPPER	25	*	*	*	*	*	*	*	*	*	*	*	*
LEAD	5.0	*	*	*	*	*	*	*	*	*	*	*	*
MERCURY	0.2	*	*	*	*	*	*	*	*	*	*	*	*
MOLYBDENUM	350	*	*	*	*	*	*	*	*	*	*	*	*
NICKEL	20	*	*	*	*	*	*	*	*	*	*	*	*
SELENIUM	1.0	*	*	*	*	*	*	*	*	*	*	*	*
SILVER	5.0	*	*	*	*	*	*	*	*	*	*	*	*
THALLIUM	7.0	*	*	*	*	*	*	*	*	*	*	*	*
VANADIUM	24	*	*	*	*	*	*	*	*	*	*	*	*
ZINC	250	*	*	*	*	*	*	*	*	*	*	*	*

* = The total concentrations are less than 10 times the the STLC, this substance is below STLC limits by definition.

WASTE EXTRACTION TEST - ORGANICS

ANALYTE	STLC	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN	MBCDEWCN
	Wet wt mg/L	Jan-12 P605067	Feb-12 P609246	Mar-12 P612206	Apr-12 P615900	May-12 P619405	Jun-12 P623145	Jul-12 P575132	Aug-12 P631787	Sep-12 P635237	Oct-12 P638482	Nov-12 P642007	Dec-12 P644970
ALDRIN	0.14	*	*	*	*	*	*	*	*	*	*	*	*
CHLORDANE	0.25	*	*	*	*	*	*	*	*	*	*	*	*
DDT,DDE,DDD	0.1	*	*	*	*	*	*	*	*	*	*	*	*
2,4-DCPAA	10	NA	*	NA	NA	*	NA	NA	NA	NA	*	NA	NA
DIELDRIN	0.8	*	*	*	*	*	*	*	*	*	*	*	*
ENDRIN	0.02	*	*	*	*	*	*	*	*	*	*	*	*
HEPTACHLOR	0.47	*	*	*	*	*	*	*	*	*	*	*	*
KEPONE	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LINDANE	0.4	*	*	*	*	*	*	*	*	*	*	*	*
METHOXYCHLOR	10	*	*	*	*	*	*	*	*	*	*	*	*
MIREX	2.1	*	*	*	*	*	*	*	*	*	*	*	*
PENTACHLOROPHENOL	1.7	NA	*	NA	NA	*	NA	NA	*	NA	*	NA	NA
PCBs (TOTAL)	5	*	*	*	*	*	*	*	*	*	*	*	*
TOXAPHENE	0.5	*	*	*	*	*	*	*	*	*	*	*	*
TRICHLOROETHENE	204	*	*	*	*	*	*	*	*	*	*	*	*
2,4,5-TCPPA	1	NA	*	NA	NA	NA	NA	NA	NA	NA	*	NA	NA

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

NA = Not Analyzed, NS = Not Sampled

* = The total concentrations are less than 10 times the the STLC, this substance is below STLC limits by definition.

This page intentionally left blank.