

**City Of Winnipeg  
Water Waste Department**

**South End Water Pollution Control Centre Quarterly Monitoring Report**

1'st Quarter Sampling	February 14, 2012			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	ug/L	1.0	1.0	<1.0	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0608	<0.0010
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070
Total Oil and Grease	mg/L	2.0	2.0	64.3	<2.0
Toxaphene	ug/L	1.0	1.0	<1.0	<1.0
Tributyltin	ug/L	0.0050	0.01	<0.0050	<0.01
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%			82.0	83.4
Surrogate: Decachlorobiphenyl	%			119.0	135.0
Surrogate: Tetrachloro-m-xylene	%			106.0	88.2
Surrogate: Tributyltin Chloride-D27	%			28.0	8.4
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00180	0.00090
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000615	0.000054
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0105	0.0014
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.16900	0.02660
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00750	0.000824
Mercury (Hg)-Total	ng/L	1.0	1.0	84.4	10.0
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.01950	0.00634
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0184	0.0119
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0031	<0.0010
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.2650	0.0588
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	0.94	0.74	<0.94	<0.74
12378 PeCDD	pg/L	1.2	0.60	<1.2	<0.60
123478 HxCDD	pg/L	0.88	0.46	<0.88	<0.46
123678 HxCDD	pg/L	0.84	0.45	1.50	<0.45
123789 HxCDD	pg/L	0.88	0.47	1.10	<0.47
1234678 HpCDD	pg/L	1.3	0.76	22.8	1.28
OCDD	pg/L	2.2	2.1	201	8.3
Total TCDD	pg/L	0.94	0.74	<0.94	5.19
Total PeCDD	pg/L	1.2	0.60	21.7	<0.60
Total HxCDD	pg/L	0.88	0.47	<0.88	<0.47
Total HpCDD	pg/L	1.3	0.76	50.8	1.28
2378 TCDF	pg/L	0.93	0.75	<0.93	<0.75
12378 PeCDF	pg/L	0.48	0.45	<0.48	<0.45
23478 PeCDF	pg/L	0.45	0.40	0.49	<0.40
123478 HxCDF	pg/L	0.51	0.26	<0.51	<0.26
123678 HxCDF	pg/L	0.53	0.27	<0.53	<0.27
123789 HxCDF	pg/L	0.72	0.40	<0.72	<0.40
234678 HxCDF	pg/L	0.57	0.29	<0.57	0.31
1234678 HpCDF	pg/L	0.62	0.21	3.19	0.29
1234789 HpCDF	pg/L	0.94	0.36	<0.94	0.45
OCDF	pg/L	1.2	1.2	9.6	<1.2
Total TCDF	pg/L	0.93	0.75	<0.93	1.15
Total PeCDF	pg/L	0.48	0.45	0.57	<0.45
Total HxCDF	pg/L	0.72	0.40	<0.72	0.83
Total HpCDF	pg/L	0.94	0.36	7.84	<0.36

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Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.323	0.0466
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			2.08	0.990
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			3.31	1.83
Surrogate: 13C12 2378 TCDD	%			98.0	97.0
Surrogate: 13C12 12378 PeCDD	%			59.0	89.0
Surrogate: 13C12 123478 HxCDD	%			83.0	86.0
Surrogate: 13C12 123678 HxCDD	%			79.0	84.0
Surrogate: 13C12 1234678 HpCDD	%			88.0	86.0
Surrogate: 13C12 OCDD	%			111.0	104.0
Surrogate: 13C12 2378 TCDF	%			93.0	99.0
Surrogate: 13C12 12378 PeCDF	%			65.0	91.0
Surrogate: 13C12 23478 PeCDF	%			59.0	89.0
Surrogate: 13C12 123478 HxCDF	%			79.0	84.0
Surrogate: 13C12 123678 HxCDF	%			74.0	81.0
Surrogate: 13C12 234678 HxCDF	%			74.0	81.0
Surrogate: 13C12 123789 HxCDF	%			79.0	82.0
Surrogate: 13C12 1234678 HpCDF	%			82.0	90.0
Surrogate: 13C12 1234789 HpCDF	%			81.0	78.0
Surrogate: 37C14 2378 TCDD	%			95.0	90.0
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2,4-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	0.43
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,6-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dichlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2,4-Dimethylphenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dinitrophenol	ug/L	15	1.0	<15	<1.0
2,4-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Chlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Methylphenol	ug/L	5.0	0.50	<5.0	<0.50
2-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
3&4-Methylphenol	ug/L	5.0	0.50	216	<0.50
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
4-Bromophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Chloro-3-methylphenol	ug/L	5.0	0.50	<5.0	<0.50
4-Chloroaniline	ug/L	4.0	0.40	<4.0	<0.40
4-Chlorophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40

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4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
5-Nitroacenaphthene	ug/L	4.0	0.40	<4.0	<0.40
Acenaphthene	ug/L	2.0	0.20	<2.0	<0.20
Acenaphthylene	ug/L	2.0	0.20	<2.0	<0.20
Anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)pyrene	ug/L	0.50	0.050	<0.50	<0.050
Benzo(b)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(ghi)perylene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(k)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Biphenyl	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethoxy)methane	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroisopropyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	20	2.0	24	<2.0
Butylbenzyl phthalate	ug/L	4.0	0.40	<4.0	<0.40
Camphene	ug/L	4.0	0.40	<4.0	<0.40
Chrysene	ug/L	2.0	0.20	<2.0	<0.20
Cresols (total)	ug/L	10	1.0	216	<1.0
Dibenzo(a,h)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Dibenzofuran	ug/L	2.0	0.20	<2.0	<0.20
Diethylphthalate	ug/L	2.0	0.20	4.5	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
Diphenyl ether	ug/L	4.0	0.40	<4.0	<0.40
Diphenylamine	ug/L	4.0	0.40	<4.0	<0.40
Fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Fluorene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorobenzene	ug/L	0.40	0.040	<0.40	<0.040
Hexachlorobutadiene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorocyclopentadiene	ug/L	4.0	0.40	<4.0	<0.40
Hexachloroethane	ug/L	4.0	0.40	<4.0	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	2.0	0.20	<2.0	<0.20
Indole	ug/L	4.0	0.40	60.5	<0.40
Isophorone	ug/L	4.0	0.40	<4.0	<0.40
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	ug/L	4.0	0.40	<4.0	<0.40
N-Nitroso-di-n-propylamine	ug/L	4.0	0.40	<4.0	<0.40
Pentachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
Perylene	ug/L	2.0	0.20	<2.0	<0.20
Phenanthrene	ug/L	2.0	0.20	<2.0	<0.20
Phenol	ug/L	5.0	0.50	72.2	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%			0.0	83.4
Surrogate: 2,4,6-Tribromophenol	%			135.5	94.9
Surrogate: Nitrobenzene d5	%			102.3	89.6
Surrogate: p-Terphenyl d14	%			61.7	79.4
Surrogate: Phenol d5	%			59.1	43.4

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Bisphenol A	ug/L	1.0	0.20	<1.0	0.26
Nonylphenols	ug/L	5.0	1.0	<5.0	<1.0
Nonylphenol Monoethoxylates	ug/L	10	2.0	<10	<2.0
Nonylphenol Diethoxylates	ug/L	0.50	0.10	<0.50	0.41
Total Nonylphenol Ethoxylates	ug/L	10	2.0	<10	<2.0
Octylphenol	ug/L	5.0	1.0	<5.0	<1.0
Octylphenol Monoethoxylate	ug/L	10	2.0	<10	<2.0
Octylphenol Diethoxylate	ug/L	0.50	0.10	<0.50	0.14
Total Octylphenol Ethoxylate	ug/L	10	2.0	<10	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	0.50	0.50	<0.50	<0.50
Surrogate: 2-Fluorobiphenyl	%			116.8	85.5
Surrogate: p-Terphenyl d14	%			62.9	88.4
<b>PCB</b>					
Aroclor 1016	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1221	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1232	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1242	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1248	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1254	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1260	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1262	mg/L	0.00050	0.00050	<0.00050	<0.00050
Aroclor 1268	mg/L	0.00050	0.00050	<0.00050	<0.00050
Total PCBs	mg/L	0.0015	0.0015	<0.0015	<0.0015
Surrogate: Decachlorobiphenyl	%			38.0	70.0
<b>Pesticides, Organochlorine</b>					
a-chlordane	ug/L	1.0	1.0	<1.0	<1.0
Aldrin	ug/L	1.0	1.0	<1.0	<1.0
alpha-BHC	ug/L	1.0	1.0	<1.0	<1.0
alpha-Endosulfan	ug/L	1.0	1.0	<1.0	<1.0
beta-BHC	ug/L	1.0	1.0	<1.0	<1.0
beta-Endosulfan	ug/L	1.0	1.0	<1.0	<1.0
delta-BHC	ug/L	1.0	1.0	<1.0	<1.0
Dieldrin	ug/L	1.0	1.0	<1.0	<1.0
Endosulfan Sulfate	ug/L	1.0	1.0	<1.0	<1.0
Endrin	ug/L	1.0	1.0	<1.0	<1.0
Endrin Aldehyde	ug/L	1.0	1.0	<1.0	<1.0
g-chlordane	ug/L	1.0	1.0	<1.0	<1.0
Heptachlor	ug/L	1.0	1.0	<1.0	<1.0
Heptachlor Epoxide	ug/L	1.0	1.0	<1.0	<1.0
Lindane	ug/L	1.0	1.0	<1.0	<1.0
Methoxychlor	ug/L	1.0	1.0	<1.0	<1.0
Mirex	ug/L	1.0	1.0	<1.0	<1.0
o,p-DDE	ug/L	1.0	1.0	<1.0	<1.0
op-DDD	ug/L	1.0	1.0	<1.0	<1.0
op-DDT	ug/L	1.0	1.0	<1.0	<1.0
Oxychlordane	ug/L	1.0	1.0	<1.0	<1.0
pp-DDD	ug/L	1.0	1.0	<1.0	<1.0
pp-DDE	ug/L	1.0	1.0	<1.0	<1.0

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pp-DDT	ug/L	1.0	1.0	<1.0	<1.0
Surrogate: 2-Fluorobiphenyl	%			76.6	74.8
Surrogate: d14-Terphenyl	%			62.0	82.3
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-T	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-TP	ug/L	5.0	0.50	<5.0	<0.50
2,4-D	ug/L	5.0	0.50	<5.0	<0.50
2,4-DP	ug/L	NA	NA	NA	NA
Bromoxynil	ug/L	5.0	0.50	<5.0	<0.50
Dicamba	ug/L	5.0	0.50	<5.0	<0.50
Dinoseb	ug/L	5.0	0.50	<5.0	<0.50
MCPA	ug/L	5.0	0.50	<5.0	<0.50
Mecoprop	ug/L	5.0	0.50	<5.0	<0.50
Picloram	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	%			89.1	103.2
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,1-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dibromoethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloropropane	ug/L	0.50	0.50	<0.50	<0.50
1,3-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,4-Dichlorobenzene	ug/L	0.50	0.50	1.33	0.83
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	99	<20
Benzene	ug/L	0.50	0.50	<0.50	<0.50
Bromodichloromethane	ug/L	0.50	0.50	<0.50	<0.50
Bromoform	ug/L	0.50	0.50	<0.50	<0.50
Bromomethane	ug/L	1.0	1.0	<1.0	<1.0
Carbon Disulfide	ug/L	0.50	0.50	0.92	<0.50
Carbon tetrachloride	ug/L	0.50	0.50	<0.50	<0.50
Chlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
Chloroethane	ug/L	1.0	1.0	<1.0	<1.0
Chloroform	ug/L	0.50	0.50	6.09	4.13
Chloromethane	ug/L	1.0	1.0	<1.0	<1.0
cis-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
cis-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Dibromochloromethane	ug/L	0.50	0.50	<0.50	<0.50
Dichlorodifluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Dichloromethane	ug/L	0.50	0.50	0.57	1.01
Ethyl Benzene	ug/L	0.50	0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1.0	1.0	<1.0	<1.0
Methyl Ethyl Ketone	ug/L	20	20	<20	<20
Methyl Isobutyl Ketone	ug/L	20	20	<20	<20

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MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	<0.50	<0.50
Styrene	ug/L	0.50	0.50	<0.50	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Toluene	ug/L	0.50	0.50	18	0.56
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
trans-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Trichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Trichlorofluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Trihalomethanes (total)	ug/L	2.0	2.0	6.1	4.1
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.5	1.5	<1.5	<1.5
Surrogate: 1,2-Dichloroethane d4	%			130.7	102.9
Surrogate: Toluene-d8	%			94.5	93.7
Surrogate: 4-Bromofluorobenzene	%			76.0	104.4

**NOTES:**

MDL- Method detection limit  
 mg/L- milligrams/Litre  
 ug/L- micrograms/Litre  
 ng/L- nanograms/Litre  
 pg/L- picograms/Litre  
 <- less than  
 NA- not analyzed

*All parameters were analyzed by contract laboratory.*

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2'nd Quarter Sampling	May 8, 2012			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	ug/L	1.0	1.0	<1.0	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0580	<0.0010
Tetraethyl Lead	ug/L	0.0070	0.00090	<0.0070	<0.00090
Total Oil and Grease	mg/L	1.0	1.0	1.3	<1.0
Toxaphene	ug/L	0.10	0.10	<0.10	<0.10
Tributyltin	ug/L	0.0050	0.0050	<0.0050	<0.0050
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%			86.7	85.5
Surrogate: Decachlorobiphenyl	%			88.0	96.0
Surrogate: Tetrachloro-m-xylene	%			84.6	80.0
Surrogate: Tributyltin Chloride-D27	%			58.8	99.5
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.020	0.0020	<0.020	<0.0020
Cadmium (Cd)-Total	mg/L	0.0010	0.00010	<0.0010	<0.00010
Chromium (Cr)-Total	mg/L	0.10	0.010	<0.10	<0.010
Copper (Cu)-Total	mg/L	0.020	0.0020	0.144	0.0140
Lead (Pb)-Total	mg/L	0.0090	0.00090	0.0190	<0.00090
Mercury (Hg)-Total	ng/L	1.0	1.0	133	6.7
Molybdenum (Mo)-Total	mg/L	0.020	0.0020	<0.020	0.0040
Nickel (Ni)-Total	mg/L	0.20	0.020	<0.20	<0.020
Selenium (Se)-Total	mg/L	0.10	0.010	<0.10	<0.010
Zinc (Zn)-Total	mg/L	0.50	0.050	<0.50	<0.050
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	0.79	0.85	<0.79	<0.85
12378 PeCDD	pg/L	1.4	1.2	<1.4	<1.2
123478 HxCDD	pg/L	2.8	0.99	<2.8	<0.99
123678 HxCDD	pg/L	3.3	0.97	<3.3	<0.97
123789 HxCDD	pg/L	3.1	1.0	<3.1	<1.0
1234678 HpCDD	pg/L	1.7	0.75	15.1	1.48
OCDD	pg/L	7.2	3.3	112	3.8
Total TCDD	pg/L	0.79	0.85	3.85	5.87
Total PeCDD	pg/L	1.4	1.2	3.4	<1.2
Total HxCDD	pg/L	3.3	1.0	<3.3	<1.0
Total HpCDD	pg/L	1.7	0.75	27.5	1.48
2378 TCDF	pg/L	1.0	0.57	<1.0	<0.57
12378 PeCDF	pg/L	1.1	1.0	<1.1	<1.0
23478 PeCDF	pg/L	1.1	0.90	<1.1	<0.90
123478 HxCDF	pg/L	7.6	0.64	<7.6	<0.64
123678 HxCDF	pg/L	8.6	0.61	<8.6	<0.61
123789 HxCDF	pg/L	8.7	0.88	<8.7	<0.88
234678 HxCDF	pg/L	7.9	0.66	<7.9	<0.66
1234678 HpCDF	pg/L	1.4	0.34	2.8	<0.34
1234789 HpCDF	pg/L	1.7	0.55	<1.7	<0.55
OCDF	pg/L	4.4	1.7	14.0	<1.7
Total TCDF	pg/L	1.0	0.57	1.9	<0.57
Total PeCDF	pg/L	1.1	1.0	<1.1	<1.0
Total HxCDF	pg/L	8.7	0.88	<8.7	<0.88
Total HpCDF	pg/L	1.7	0.55	7.9	<0.55

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.185	0.0148
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			3.65	1.51
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			7.09	3.01
Surrogate: 13C12 2378 TCDD	%			77.0	80.0
Surrogate: 13C12 12378 PeCDD	%			88.0	127.0
Surrogate: 13C12 123478 HxCDD	%			72.0	81.0
Surrogate: 13C12 123678 HxCDD	%			61.0	71.0
Surrogate: 13C12 1234678 HpCDD	%			94.0	71.0
Surrogate: 13C12 OCDD	%			70.0	62.0
Surrogate: 13C12 2378 TCDF	%			74.0	85.0
Surrogate: 13C12 12378 PeCDF	%			90.0	120.0
Surrogate: 13C12 23478 PeCDF	%			86.0	126.0
Surrogate: 13C12 123478 HxCDF	%			67.0	71.0
Surrogate: 13C12 123678 HxCDF	%			55.0	71.0
Surrogate: 13C12 234678 HxCDF	%			62.0	70.0
Surrogate: 13C12 123789 HxCDF	%			76.0	74.0
Surrogate: 13C12 1234678 HpCDF	%			80.0	72.0
Surrogate: 13C12 1234789 HpCDF	%			101.0	71.0
Surrogate: 37C14 2378 TCDD	%			99.0	97.0
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2,4-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	0.53
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,6-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dichlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2,4-Dimethylphenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dinitrophenol	ug/L	10	1.0	<10	<1.0
2,4-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Chlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Methylphenol	ug/L	5.0	0.50	<5.0	<0.50
2-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
3&4-Methylphenol	ug/L	5.0	0.50	572	<0.50
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
4-Bromophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Chloro-3-methylphenol	ug/L	5.0	0.50	<5.0	<0.50
4-Chloroaniline	ug/L	4.0	0.40	<4.0	<0.40



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4-Chlorophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
5-Nitroacenaphthene	ug/L	4.0	0.40	<4.0	<0.40
Acenaphthene	ug/L	2.0	0.20	<2.0	<0.20
Acenaphthylene	ug/L	2.0	0.20	<2.0	<0.20
Anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)pyrene	ug/L	0.50	0.050	<0.50	<0.050
Benzo(b)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(ghi)perylene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(k)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Biphenyl	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethoxy)methane	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroisopropyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	20	2.0	40.9	<2.0
Butylbenzyl phthalate	ug/L	4.0	0.40	<4.0	<0.40
Camphene	ug/L	4.0	0.40	<4.0	<0.40
Chrysene	ug/L	2.0	0.20	<2.0	<0.20
Cresols (total)	ug/L	10	1.0	572	<1.0
Dibenzo(a,h)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Dibenzofuran	ug/L	2.0	0.20	<2.0	<0.20
Diethylphthalate	ug/L	2.0	0.20	2.9	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
Diphenyl ether	ug/L	4.0	0.40	<4.0	<0.40
Diphenylamine	ug/L	4.0	0.40	<4.0	<0.40
Fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Fluorene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorobenzene	ug/L	0.40	0.040	<0.40	<0.040
Hexachlorobutadiene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorocyclopentadiene	ug/L	4.0	0.40	<4.0	<0.40
Hexachloroethane	ug/L	4.0	0.40	<4.0	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	2.0	0.20	<2.0	<0.20
Indole	ug/L	4.0	0.40	135	<0.40
Isophorone	ug/L	4.0	0.40	<4.0	<0.40
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	ug/L	4.0	0.40	<4.0	<0.40
N-Nitroso-di-n-propylamine	ug/L	4.0	0.40	<4.0	<0.40
Pentachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
Perylene	ug/L	2.0	0.20	<2.0	<0.20
Phenanthrene	ug/L	2.0	0.20	<2.0	<0.20
Phenol	ug/L	5.0	0.50	186	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%			0.0	84.8
Surrogate: 2,4,6-Tribromophenol	%			147.2	98.3
Surrogate: Nitrobenzene d5	%			0.0	85.5
Surrogate: p-Terphenyl d14	%			64.8	100.7
Surrogate: Phenol d5	%			0.0	47.3

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Bisphenol A	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenols	ug/L	5.0	5.0	<5.0	<5.0
Nonylphenol Monoethoxylates	ug/L	10	10	<10	<10
Nonylphenol Diethoxylates	ug/L	0.50	0.50	1.10	<0.50
Total Nonylphenol Ethoxylates	ug/L	10	10	<10	<10
Octylphenol	ug/L	5.0	5.0	<5.0	<5.0
Octylphenol Monoethoxylate	ug/L	10	10	<10	<10
Octylphenol Diethoxylate	ug/L	0.50	0.50	<0.50	<0.50
Total Octylphenol Ethoxylate	ug/L	10	10	<10	<10
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2-Fluorobiphenyl	%			0	99.0
Surrogate: p-Terphenyl d14	%			0	110.8
<b>PCB</b>					
Aroclor 1016	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1221	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1232	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1242	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1248	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1254	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1260	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1262	mg/L	0.00020	0.00020	<0.00020	<0.00020
Aroclor 1268	mg/L	0.00020	0.00020	<0.00020	<0.00020
Total PCBs	mg/L	0.00060	0.00060	<0.00060	<0.00060
Surrogate: Decachlorobiphenyl	%			36.0	73.0
<b>Pesticides, Organochlorine</b>					
a-chlordane	ug/L	10	1.0	<10	<1.0
Aldrin	ug/L	10	1.0	<10	<1.0
alpha-BHC	ug/L	10	1.0	<10	<1.0
alpha-Endosulfan	ug/L	10	1.0	<10	<1.0
beta-BHC	ug/L	10	1.0	<10	<1.0
beta-Endosulfan	ug/L	10	1.0	<10	<1.0
delta-BHC	ug/L	10	1.0	<10	<1.0
Dieldrin	ug/L	10	1.0	<10	<1.0
Endosulfan Sulfate	ug/L	10	1.0	<10	<1.0
Endrin	ug/L	10	1.0	<10	<1.0
Endrin Aldehyde	ug/L	10	1.0	<10	<1.0
g-chlordane	ug/L	10	1.0	<10	<1.0
Heptachlor	ug/L	10	1.0	<10	<1.0
Heptachlor Epoxide	ug/L	10	1.0	<10	<1.0
Lindane	ug/L	10	1.0	<10	<1.0
Methoxychlor	ug/L	10	1.0	<10	<1.0
Mirex	ug/L	10	1.0	<10	<1.0
o,p-DDE	ug/L	25	1.0	<25	<1.0
op-DDD	ug/L	10	1.0	<10	<1.0
op-DDT	ug/L	10	1.0	<10	<1.0
Oxychlordane	ug/L	10	1.0	<10	<1.0
pp-DDD	ug/L	10	1.0	<10	<1.0
pp-DDE	ug/L	10	1.0	<10	<1.0

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pp-DDT	ug/L	10	1.0	<10	<1.0
Surrogate: 2-Fluorobiphenyl	%			0.0	88.5
Surrogate: d14-Terphenyl	%			0.0	130.6
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-T	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-TP	ug/L	5.0	0.50	<5.0	<0.50
2,4-D	ug/L	5.0	0.50	<5.0	<0.50
2,4-DP	ug/L	NA	NA	NA	NA
Bromoxynil	ug/L	5.0	0.50	<5.0	<0.50
Dicamba	ug/L	5.0	0.50	<5.0	<0.50
Dinoseb	ug/L	5.0	0.50	<5.0	<0.50
MCPA	ug/L	5.0	0.50	<5.0	<0.50
Mecoprop	ug/L	5.0	0.50	<5.0	<0.50
Picloram	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	%			95.0	120.2
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,1-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dibromoethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloropropane	ug/L	0.50	0.50	<0.50	<0.50
1,3-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,4-Dichlorobenzene	ug/L	0.50	0.50	0.52	0.79
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	69	<20
Benzene	ug/L	0.50	0.50	<0.50	<0.50
Bromodichloromethane	ug/L	0.50	0.50	<0.50	<0.50
Bromoform	ug/L	0.50	0.50	<0.50	<0.50
Bromomethane	ug/L	1.0	1.0	<1.0	<1.0
Carbon Disulfide	ug/L	0.50	0.50	<0.50	<0.50
Carbon tetrachloride	ug/L	0.50	0.50	<0.50	<0.50
Chlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
Chloroethane	ug/L	1.0	1.0	<1.0	<1.0
Chloroform	ug/L	0.50	0.50	3.43	2.64
Chloromethane	ug/L	1.0	1.0	<1.0	<1.0
cis-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
cis-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Dibromochloromethane	ug/L	0.50	0.50	<0.50	<0.50
Dichlorodifluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Dichloromethane	ug/L	0.50	0.50	0.55	0.65
Ethyl Benzene	ug/L	0.50	0.50	1.04	<0.50
m+p-Xylenes	ug/L	1.0	1.0	3.3	<1.0
Methyl Ethyl Ketone	ug/L	20	20	<20	<20
Methyl Isobutyl Ketone	ug/L	20	20	<20	<20

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2'nd Quarter Sampling Parameter	May 8, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	1.73	<0.50
Styrene	ug/L	0.50	0.50	<0.50	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Toluene	ug/L	0.50	0.50	22.5	<0.50
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
trans-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Trichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Trichlorofluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Trihalomethanes (total)	ug/L	2.0	2.0	3.4	2.6
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.5	1.5	5.0	<1.5
Surrogate: 1,2-Dichloroethane d4	%			102.2	98.5
Surrogate: Toluene-d8	%			100.7	98.1
Surrogate: 4-Bromofluorobenzene	%			89.8	101.0

**NOTES:**

MDL- Method detection limit  
 mg/L- milligrams/Litre  
 ug/L- micrograms/Litre  
 ng/L- nanograms/Litre  
 pg/L- picograms/Litre  
 <- less than  
 NA- not analyzed

*All parameters were analyzed by contract laboratory.*

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3'rd Quarter Sampling Parameter	August 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	ug/L	1.0	1.0	<1.0	<1.0
Phenols (4AAP)	mg/L	0.0010	0.001	0.0600	<0.001
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070
Total Oil and Grease	mg/L	1.0	1.0	2.2	<1.0
Toxaphene	ug/L	1.5	1.5	<1.5	<1.5
Tributyltin	ug/L	0.050	0.050	<0.050	<0.050
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%			92.8	96.3
Surrogate: Decachlorobiphenyl	%			117.0	104.0
Surrogate: Tetrachloro-m-xylene	%			85.8	74.5
Surrogate: Tri-n-propyltin	%			81	82
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.020	0.020	<0.020	<0.020
Cadmium (Cd)-Total	mg/L	0.0010	0.0010	<0.0010	<0.0010
Chromium (Cr)-Total	mg/L	0.10	0.10	<0.10	<0.10
Copper (Cu)-Total	mg/L	0.020	0.020	0.111	<0.020
Lead (Pb)-Total	mg/L	0.0090	0.0090	<0.0090	<0.0090
Mercury (Hg)-Total	ng/L	1.0	1.0	118	3.9
Molybdenum (Mo)-Total	mg/L	0.020	0.020	<0.020	<0.020
Nickel (Ni)-Total	mg/L	0.20	0.20	<0.20	<0.20
Selenium (Se)-Total	mg/L	0.10	0.10	<0.10	<0.10
Zinc (Zn)-Total	mg/L	0.50	0.50	<0.50	<0.50
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	2.8	1.7	<2.8	<1.7
12378 PeCDD	pg/L	3.3	1.3	<3.3	<1.3
123478 HxCDD	pg/L	1.9	0.80	<1.9	<0.80
123678 HxCDD	pg/L	2.0	0.88	<2.0	<0.88
123789 HxCDD	pg/L	2.0	0.85	<2.0	<0.85
1234678 HpCDD	pg/L	3.4	0.69	24.5	1.10
OCDD	pg/L	3.6	1.8	168	2.3
Total TCDD	pg/L	2.8	1.7	<2.8	<1.7
Total PeCDD	pg/L	3.3	1.3	3.7	<1.3
Total HxCDD	pg/L	2	0.88	<2	<0.88
Total HpCDD	pg/L	3.4	0.69	24.5	<0.69
2378 TCDF	pg/L	3.9	2.8	<3.9	<2.8
12378 PeCDF	pg/L	1.6	0.84	<1.6	<0.84
23478 PeCDF	pg/L	1.5	0.76	<1.5	<0.76
123478 HxCDF	pg/L	1.0	0.36	1.3	<0.36
123678 HxCDF	pg/L	1.0	0.35	1.5	<0.35
123789 HxCDF	pg/L	1.2	0.42	<1.2	<0.42
234678 HxCDF	pg/L	1.0	0.36	<1.0	<0.36
1234678 HpCDF	pg/L	1.3	0.55	1.6	<0.55
1234789 HpCDF	pg/L	1.9	0.81	<1.9	<0.81
OCDF	pg/L	5.9	1.2	<5.9	<1.2
Total TCDF	pg/L	3.9	2.8	<3.9	<2.8
Total PeCDF	pg/L	1.6	0.84	3.0	<0.84
Total HxCDF	pg/L	1.2	0.42	<1.2	<0.42
Total HpCDF	pg/L	1.9	0.81	3.1	<0.81

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.295	0.00
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			4.50	1.99
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			8.41	3.96
Surrogate: 13C12 2378 TCDD	%			67.0	92.0
Surrogate: 13C12 12378 PeCDD	%			55.0	84.0
Surrogate: 13C12 123478 HxCDD	%			61.0	84.0
Surrogate: 13C12 123678 HxCDD	%			61.0	80.0
Surrogate: 13C12 1234678 HpCDD	%			58.0	90.0
Surrogate: 13C12 OCDD	%			59.0	104.0
Surrogate: 13C12 2378 TCDF	%			65.0	86.0
Surrogate: 13C12 12378 PeCDF	%			56.0	86.0
Surrogate: 13C12 23478 PeCDF	%			54.0	82.0
Surrogate: 13C12 123478 HxCDF	%			58.0	78.0
Surrogate: 13C12 123678 HxCDF	%			60.0	74.0
Surrogate: 13C12 234678 HxCDF	%			57.0	74.0
Surrogate: 13C12 123789 HxCDF	%			57.0	76.0
Surrogate: 13C12 1234678 HpCDF	%			63.0	92.0
Surrogate: 13C12 1234789 HpCDF	%			52.0	81.0
Surrogate: 37C14 2378 TCDD	%			67.0	85.0
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2,4-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	0.54
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,6-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dichlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2,4-Dimethylphenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dinitrophenol	ug/L	100	1.0	<100	<1.0
2,4-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Chlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Methylphenol	ug/L	5.0	0.50	<5.0	<0.50
2-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
3&4-Methylphenol	ug/L	5.0	0.50	241	<0.50
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
4-Bromophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Chloro-3-methylphenol	ug/L	5.0	0.50	<5.0	<0.50
4-Chloroaniline	ug/L	4.0	0.40	<4.0	<0.40

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4-Chlorophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
Acenaphthene	ug/L	2.0	0.20	<2.0	<0.20
Acenaphthylene	ug/L	2.0	0.20	<2.0	<0.20
Anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)pyrene	ug/L	0.50	0.050	<0.50	<0.050
Benzo(b)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(ghi)perylene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(k)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Biphenyl	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethoxy)methane	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroisopropyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	20	2.0	<20	<2.0
Butylbenzyl phthalate	ug/L	4.0	0.40	<4.0	<0.40
Camphene	ug/L	4.0	0.40	<4.0	<0.40
Chrysene	ug/L	2.0	0.20	<2.0	<0.20
Cresols (total)	ug/L	5.5	1.0	243	<1.0
Dibenzo(a,h)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Dibenzofuran	ug/L	2.0	0.20	<2.0	<0.20
Diethylphthalate	ug/L	2.0	0.20	3.4	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
Diphenyl ether	ug/L	4.0	0.40	<4.0	<0.40
Diphenylamine	ug/L	4.0	0.40	<4.0	<0.40
Fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Fluorene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorobenzene	ug/L	0.40	0.040	<0.40	<0.040
Hexachlorobutadiene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorocyclopentadiene	ug/L	4.0	0.40	<4.0	<0.40
Hexachloroethane	ug/L	4.0	0.40	<4.0	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	2.0	0.20	<2.0	<0.20
Indole	ug/L	4.0	0.40	52.6	<0.40
Isophorone	ug/L	4.0	0.40	<4.0	<0.40
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	ug/L	4.0	0.40	<4.0	<0.40
N-Nitroso-di-n-propylamine	ug/L	4.0	0.40	<4.0	<0.40
Pentachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
Perylene	ug/L	2.0	0.20	<2.0	<0.20
Phenanthrene	ug/L	2.0	0.20	<2.0	<0.20
Phenol	ug/L	5.0	0.50	74.1	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%			72.8	87.0
Surrogate: 2,4,6-Tribromophenol	%			0.0	109.5
Surrogate: Nitrobenzene d5	%			115.6	97.1
Surrogate: p-Terphenyl d14	%			52.5	104.4
Surrogate: Phenol d5	%			59.3	59.5

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Bisphenol A	ug/L	0.20	0.20	<0.20	0.24
Nonylphenols	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	8.2	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	1.59	0.15
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	9.8	<2.0
Octylphenol	ug/L	1.0	1.0	<1.0	<1.0
Octylphenol Monoethoxylate	ug/L	2.0	2.0	<2.0	<2.0
Octylphenol Diethoxylate	ug/L	0.10	0.10	0.24	0.14
Total Octylphenol Ethoxylate	ug/L	2.0	2.0	<2.0	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	0.50	0.050	<0.50	<0.050
Surrogate: 2-Fluorobiphenyl	%			75.1	86.1
Surrogate: p-Terphenyl d14	%			129.5	90.2
<b>PCB</b>					
Aroclor 1016	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1221	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1232	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1242	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1248	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1254	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1260	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1262	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1268	mg/L	0.00010	0.00010	<0.00010	<0.00010
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030
Surrogate: Decachlorobiphenyl	%			45.0	79.0
<b>Pesticides, Organochlorine</b>					
a-chlordane	ug/L	10	1.0	<10	<1.0
Aldrin	ug/L	10	1.0	<10	<1.0
alpha-BHC	ug/L	10	1.0	<10	<1.0
alpha-Endosulfan	ug/L	16	1.0	<16	<1.0
beta-BHC	ug/L	10	1.0	<10	<1.0
beta-Endosulfan	ug/L	10	1.0	<10	<1.0
delta-BHC	ug/L	10	1.0	<10	<1.0
Dieldrin	ug/L	15	1.0	<15	<1.0
Endosulfan Sulfate	ug/L	10	1.0	<10	<1.0
Endrin	ug/L	10	1.0	<10	<1.0
Endrin Aldehyde	ug/L	10	1.0	<10	<1.0
g-chlordane	ug/L	10	1.0	<10	<1.0
Heptachlor	ug/L	10	1.0	<10	<1.0
Heptachlor Epoxide	ug/L	10	1.0	<10	<1.0
Lindane	ug/L	10	1.0	<10	<1.0
Methoxychlor	ug/L	10	1.0	<10	<1.0
Mirex	ug/L	10	1.0	<10	<1.0
o,p-DDE	ug/L	35	1.0	<35	<1.0
op-DDD	ug/L	10	1.0	<10	<1.0
op-DDT	ug/L	10	1.0	<10	<1.0
Oxychlordane	ug/L	10	1.0	<10	<1.0
pp-DDD	ug/L	10	1.0	<10	<1.0
pp-DDE	ug/L	10	1.0	<10	<1.0



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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
pp-DDT	ug/L	10	1.0	<10	<1.0
Surrogate: 2-Fluorobiphenyl	%			0.0	82.2
Surrogate: d14-Terphenyl	%			0.0	109.8
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-T	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-TP	ug/L	5.0	0.50	<5.0	<0.50
2,4-D	ug/L	5.0	0.50	<5.0	<0.50
2,4-DP	ug/L	NA	NA	NA	NA
Bromoxynil	ug/L	5.0	0.50	<5.0	<0.50
Dicamba	ug/L	5.0	0.50	<5.0	<0.50
Dinoseb	ug/L	5.0	0.50	<5.0	<0.50
MCPA	ug/L	5.0	0.50	<5.0	<0.50
Mecoprop	ug/L	5.0	0.50	<5.0	<0.50
Picloram	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	%			100.7	119.8
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,1-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dibromoethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloropropane	ug/L	0.50	0.50	<0.50	<0.50
1,3-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,4-Dichlorobenzene	ug/L	0.50	0.50	0.99	0.63
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	47	<20
Benzene	ug/L	0.50	0.50	<0.50	<0.50
Bromodichloromethane	ug/L	0.50	0.50	<0.50	<0.50
Bromoform	ug/L	0.50	0.50	<0.50	<0.50
Bromomethane	ug/L	1.0	1.0	<1.0	<1.0
Carbon Disulfide	ug/L	0.50	0.50	1.47	<0.50
Carbon tetrachloride	ug/L	0.50	0.50	<0.50	<0.50
Chlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
Chloroethane	ug/L	1.0	1.0	<1.0	<1.0
Chloroform	ug/L	0.50	0.50	5.45	4.02
Chloromethane	ug/L	1.0	1.0	<1.0	<1.0
cis-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
cis-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Dibromochloromethane	ug/L	0.50	0.50	<0.50	<0.50
Dichlorodifluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Dichloromethane	ug/L	0.50	0.50	<0.50	1.38
Ethyl Benzene	ug/L	0.50	0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1.0	1.0	<1.0	<1.0
Methyl Ethyl Ketone	ug/L	20	20	<20	<20
Methyl Isobutyl Ketone	ug/L	20	20	<20	<20

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3'rd Quarter Sampling Parameter	August 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	<0.50	<0.50
Styrene	ug/L	0.50	0.50	2.17	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Toluene	ug/L	0.50	0.50	3.62	<0.50
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
trans-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Trichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Trichlorofluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Trihalomethanes (total)	ug/L	2.0	2.0	5.5	4.0
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.5	1.5	<1.5	<1.5
Surrogate: 1,2-Dichloroethane d4	%			113.9	104.4
Surrogate: Toluene-d8	%			106.5	104.9
Surrogate: 4-Bromofluorobenzene	%			100.0	102.2

**NOTES:**

MDL- Method detection limit  
 mg/L- milligrams/Litre  
 ug/L- micrograms/Litre  
 ng/L- nanograms/Litre  
 pg/L- picograms/Litre  
 <- less than  
 NA- not analyzed

*All parameters were analyzed by contract laboratory.*

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4'th Quarter Sampling	November 14, 2012			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	ug/L	1.0	1.0	<1.0	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0690	<0.0010
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070
Total Oil and Grease	mg/L	1.0	1.0	53.8	<1.0
Toxaphene	ug/L	1.5	1.5	<1.5	<1.5
Tributyltin	ug/L	0.050	0.050	<0.050	<0.050
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%			65.3	83.6
Surrogate: Decachlorobiphenyl	%			103.8	117.6
Surrogate: Tetrachloro-m-xylene	%			90.5	78.3
Surrogate: Tri-n-propyltin	%			89	55
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00118	0.00089
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000143	0.000026
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0030	0.0011
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.12400	0.02250
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00330	0.000504
Mercury (Hg)-Total	ng/L	1.0	1.0	65.7	6.5
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00460	0.00412
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0171	0.0106
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0011	<0.0010
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.1520	0.0438
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	0.57	0.59	<0.57	<0.59
12378 PeCDD	pg/L	0.85	0.93	<0.85	<0.93
123478 HxCDD	pg/L	0.25	0.32	<0.25	<0.32
123678 HxCDD	pg/L	0.30	0.39	1.01	<0.39
123789 HxCDD	pg/L	0.28	0.35	<0.28	<0.35
1234678 HpCDD	pg/L	0.34	0.40	13.0	0.91
OCDD	pg/L	0.47	0.46	85.2	5.26
Total TCDD	pg/L	0.57	0.59	1.86	4.43
Total PeCDD	pg/L	0.85	0.93	15.2	4.25
Total HxCDD	pg/L	0.30	0.39	4.23	<0.39
Total HpCDD	pg/L	0.34	0.40	9.38	<0.40
2378 TCDF	pg/L	0.31	0.34	<0.31	<0.34
12378 PeCDF	pg/L	0.49	0.49	0.53	0.50
23478 PeCDF	pg/L	0.45	0.47	<0.45	<0.47
123478 HxCDF	pg/L	0.18	0.22	0.52	<0.22
123678 HxCDF	pg/L	0.18	0.22	<0.18	<0.22
123789 HxCDF	pg/L	0.19	0.24	<0.19	<0.24
234678 HxCDF	pg/L	0.16	0.22	0.36	<0.22
1234678 HpCDF	pg/L	0.25	0.29	1.98	0.35
1234789 HpCDF	pg/L	0.31	0.35	<0.31	<0.35
OCDF	pg/L	0.33	0.32	4.20	0.64
Total TCDF	pg/L	0.31	0.34	0.60	<0.34
Total PeCDF	pg/L	0.49	0.49	<0.49	<0.49
Total HxCDF	pg/L	0.19	0.24	0.52	<0.24
Total HpCDF	pg/L	0.31	0.35	1.98	<0.35

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4'th Quarter Sampling Parameter	November 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.146	0.00177
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			1.22	0.977
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			2.06	1.92
Surrogate: 13C12 2378 TCDD	%			77.0	77.0
Surrogate: 13C12 12378 PeCDD	%			55.0	54.0
Surrogate: 13C12 123478 HxCDD	%			79.0	79.0
Surrogate: 13C12 123678 HxCDD	%			72.0	72.0
Surrogate: 13C12 1234678 HpCDD	%			60.0	68.0
Surrogate: 13C12 OCDD	%			48.0	63.0
Surrogate: 13C12 2378 TCDF	%			90.0	87.0
Surrogate: 13C12 12378 PeCDF	%			60.0	62.0
Surrogate: 13C12 23478 PeCDF	%			61.0	60.0
Surrogate: 13C12 123478 HxCDF	%			75.0	77.0
Surrogate: 13C12 123678 HxCDF	%			73.0	76.0
Surrogate: 13C12 234678 HxCDF	%			82.0	79.0
Surrogate: 13C12 123789 HxCDF	%			78.0	82.0
Surrogate: 13C12 1234678 HpCDF	%			68.0	77.0
Surrogate: 13C12 1234789 HpCDF	%			66.0	77.0
Surrogate: 37C14 2378 TCDD	%			76.0	79.0
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2,4-Trichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,3,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,5-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4,6-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dichlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2,4-Dimethylphenol	ug/L	5.0	0.50	<5.0	<0.50
2,4-Dinitrophenol	ug/L	100	1.0	<100	<1.0
2,4-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
2-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Chlorophenol	ug/L	3.0	0.30	<3.0	<0.30
2-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
2-Methylphenol	ug/L	5.0	0.50	<5.0	<0.50
2-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
3&4-Methylphenol	ug/L	5.0	0.50	164	<0.50
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
4,6-Dinitro-2-methylphenol	ug/L	5.0	0.50	<5.0	<0.50
4-Bromophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Chloro-3-methylphenol	ug/L	5.0	0.50	<5.0	<0.50
4-Chloroaniline	ug/L	4.0	0.40	<4.0	<0.40

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4'th Quarter Sampling Parameter	November 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
4-Chlorophenyl phenyl ether	ug/L	4.0	0.40	<4.0	<0.40
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
5-Nitroacenaphthene	ug/L	4.0	0.40	<4.0	<0.40
Acenaphthene	ug/L	2.0	0.20	<2.0	<0.20
Acenaphthylene	ug/L	2.0	0.20	<2.0	<0.20
Anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(a)pyrene	ug/L	0.50	0.050	<0.50	<0.050
Benzo(b)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(ghi)perylene	ug/L	2.0	0.20	<2.0	<0.20
Benzo(k)fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Biphenyl	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethoxy)methane	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroethyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-chloroisopropyl)ether	ug/L	4.0	0.40	<4.0	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	20	2.0	<20	<2.0
Butylbenzyl phthalate	ug/L	4.0	0.40	<4.0	<0.40
Camphene	ug/L	4.0	0.40	<4.0	<0.40
Chrysene	ug/L	2.0	0.20	<2.0	<0.20
Cresols (total)	ug/L	5.5	1.0	167	<1.0
Dibenzo(a,h)anthracene	ug/L	2.0	0.20	<2.0	<0.20
Dibenzofuran	ug/L	2.0	0.20	<2.0	<0.20
Diethylphthalate	ug/L	2.0	0.20	4.6	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
Diphenyl ether	ug/L	4.0	0.40	<4.0	<0.40
Diphenylamine	ug/L	4.0	0.40	<4.0	<0.40
Fluoranthene	ug/L	2.0	0.20	<2.0	<0.20
Fluorene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorobenzene	ug/L	0.40	0.040	<0.40	<0.040
Hexachlorobutadiene	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorocyclopentadiene	ug/L	4.0	0.40	<4.0	<0.40
Hexachloroethane	ug/L	4.0	0.40	<4.0	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	2.0	0.20	<2.0	<0.20
Indole	ug/L	4.0	0.40	30.5	<0.40
Isophorone	ug/L	4.0	0.40	<4.0	<0.40
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	ug/L	4.0	0.40	<4.0	<0.40
N-Nitroso-di-n-propylamine	ug/L	4.0	0.40	<4.0	<0.40
Pentachlorophenol	ug/L	5.0	0.50	<5.0	<0.50
Perylene	ug/L	2.0	0.20	<2.0	<0.20
Phenanthrene	ug/L	2.0	0.20	<2.0	<0.20
Phenol	ug/L	5.0	0.50	34.9	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%			95.5	80.0
Surrogate: 2,4,6-Tribromophenol	%			0.0	116.8
Surrogate: Nitrobenzene d5	%			110.8	91.4
Surrogate: p-Terphenyl d14	%			69.8	86.8
Surrogate: Phenol d5	%			61.5	60.1

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4'th Quarter Sampling	November 14, 2012			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Bisphenol A	ug/L	0.20	0.20	0.28	0.31
Nonylphenols	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	3.3	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	2.03	<0.10
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	5.3	<2.0
Octylphenol	ug/L	1.0	1.0	<1.0	<1.0
Octylphenol Monoethoxylate	ug/L	2.0	2.0	<2.0	<2.0
Octylphenol Diethoxylate	ug/L	0.10	0.10	0.47	0.12
Total Octylphenol Ethoxylate	ug/L	2.0	2.0	<2.0	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	0.50	0.050	<0.50	<0.050
Surrogate: 2-Fluorobiphenyl	%			126.5	84.3
Surrogate: p-Terphenyl d14	%			80.1	80.9
<b>PCB</b>					
Aroclor 1016	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1221	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1232	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1242	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1248	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1254	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1260	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1262	mg/L	0.00010	0.00010	<0.00010	<0.00010
Aroclor 1268	mg/L	0.00010	0.00010	<0.00010	<0.00010
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030
Surrogate: Decachlorobiphenyl	%			82.0	86.0
<b>Pesticides, Organochlorine</b>					
a-chlordane	ug/L	10	0.10	<10	<0.10
Aldrin	ug/L	10	0.10	<10	<0.10
alpha-BHC	ug/L	10	0.10	<10	<0.10
alpha-Endosulfan	ug/L	10	0.10	<10	<0.10
beta-BHC	ug/L	10	0.10	<10	<0.10
beta-Endosulfan	ug/L	10	0.10	<10	<0.10
delta-BHC	ug/L	10	0.10	<10	<0.10
Dieldrin	ug/L	10	0.10	<10	<0.10
Endosulfan Sulfate	ug/L	10	0.10	<10	<0.10
Endrin	ug/L	10	0.10	<10	<0.10
Endrin Aldehyde	ug/L	10	0.10	<10	<0.10
g-chlordane	ug/L	10	0.10	<10	<0.10
Heptachlor	ug/L	10	0.10	<10	<0.10
Heptachlor Epoxide	ug/L	10	0.10	<10	<0.10
Lindane	ug/L	10	0.10	<10	<0.10
Methoxychlor	ug/L	10	0.10	<10	<0.10
Mirex	ug/L	10	0.10	<10	<0.10
o,p-DDE	ug/L	10	0.10	<10	<0.10
op-DDD	ug/L	10	0.10	<10	<0.10
op-DDT	ug/L	10	0.10	<10	<0.10
Oxychlordane	ug/L	10	0.10	<10	<0.10
pp-DDD	ug/L	10	0.10	<10	<0.10
pp-DDE	ug/L	10	0.10	<10	<0.10

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4'th Quarter Sampling Parameter	November 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
pp-DDT	ug/L	10	0.10	<10	<0.10
Surrogate: 2-Fluorobiphenyl	%			0.0	76.6
Surrogate: d14-Terphenyl	%			0.0	80.0
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-T	ug/L	0.50	0.50	<0.50	<0.50
2,4,5-TP	ug/L	0.50	0.50	<0.50	<0.50
2,4-D	ug/L	0.50	0.50	<0.50	0.64
2,4-DP	ug/L	0.50	0.50	<0.50	<0.50
Bromoxynil	ug/L	0.50	0.50	<0.50	<0.50
Dicamba	ug/L	0.50	0.50	<0.50	<0.50
Dinoseb	ug/L	0.50	0.50	<0.50	1.40
MCPA	ug/L	0.50	0.50	<0.50	<0.50
Mecoprop	ug/L	0.50	0.50	<0.50	<0.50
Picloram	ug/L	0.50	0.50	<0.50	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	%			74.4	118.4
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,1-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dibromoethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloroethane	ug/L	0.50	0.50	<0.50	<0.50
1,2-Dichloropropane	ug/L	0.50	0.50	<0.50	<0.50
1,3-Dichlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
1,4-Dichlorobenzene	ug/L	0.50	0.50	0.68	0.52
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	200	200	<200	<200
Benzene	ug/L	0.50	0.50	<0.50	<0.50
Bromodichloromethane	ug/L	0.50	0.50	<0.50	<0.50
Bromoform	ug/L	0.50	0.50	<0.50	<0.50
Bromomethane	ug/L	1.0	1.0	<1.0	<1.0
Carbon Disulfide	ug/L	0.50	0.50	3.22	<0.50
Carbon tetrachloride	ug/L	0.50	0.50	<0.50	<0.50
Chlorobenzene	ug/L	0.50	0.50	<0.50	<0.50
Chloroethane	ug/L	1.0	1.0	<1.0	<1.0
Chloroform	ug/L	0.50	0.50	<0.50	3.26
Chloromethane	ug/L	1.0	1.0	3.57	<1.0
cis-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
cis-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Dibromochloromethane	ug/L	0.50	0.50	<0.50	<0.50
Dichlorodifluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Dichloromethane	ug/L	0.50	0.50	<0.50	0.78
Ethyl Benzene	ug/L	0.50	0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1.0	1.0	<1.0	<1.0
Methyl Ethyl Ketone	ug/L	20	20	<20	<20
Methyl Isobutyl Ketone	ug/L	20	20	<20	<20

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4'th Quarter Sampling Parameter	November 14, 2012			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	<0.50	<0.50
Styrene	ug/L	0.50	0.50	0.68	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Toluene	ug/L	0.50	0.50	2.87	<0.50
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
trans-1,3-Dichloropropene	ug/L	0.50	0.50	<0.50	<0.50
Trichloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Trichlorofluoromethane	ug/L	1.0	1.0	<1.0	<1.0
Trihalomethanes (total)	ug/L	2.0	2.0	3.6	3.3
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.5	1.5	<1.5	<1.5
Surrogate: 1,2-Dichloroethane d4	%			120.8	98.6
Surrogate: Toluene-d8	%			93.7	96.8
Surrogate: 4-Bromofluorobenzene	%			99.6	103.0

**NOTES:**

MDL- Method detection limit  
 mg/L- milligrams/Litre  
 ug/L- micrograms/Litre  
 ng/L- nanograms/Litre  
 pg/L- picograms/Litre  
 <- less than  
 NA- not analyzed

*All parameters were analyzed by contract laboratory.*