

**City Of Winnipeg  
Water Waste Department**

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

1'st Quarter Sampling	February 18, 2014			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	
Mercury (Hg)-Total	ng/L	1.0	1.0	89.3	6.1	
Oil and Grease (I.R.)	mg/L	1.0	1.0	63.9	33.1	
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0535	<0.0010	
Xylenes (Total)	mg/L	0.0015	0.0015	<0.0015	<0.0015	
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070	
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030	
Trihalomethanes (total)	mg/L	0.0010	0.0010	0.0063	0.0044	
Toxaphene	ug/L	1.5	1.5	<1.5	<1.5	
Ammonia, Total (as N)	mg/L		1.0	NA	32.1	
Ammonia, Un-ionized (as N)	mg/L		0.010	NA	0.024	
Chlorine, Total	mg/L		0.10	NA	<0.10	
Tri-n-butyltin Cation	ug/L	0.050	0.050	<0.050	<0.050	
Trout Bioassay	Pass/Fail			NA	Fail	
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	86.9	66.6	
Surrogate: Decachlorobiphenyl	%	50-150	50-150	85.1	91.6	
Surrogate: Tetrachloro-m-xylene	%	50-150	50-150	86.6	92.7	
Surrogate: Tri-n-propyltin	%	31-137	31-137	94.0	82.0	
<b>Total Metals by ICP-MS</b>						
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00096	0.00062	
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000107	0.000013	
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0022	<0.0010	
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.10100	0.02040	
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.002340	0.000381	
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00298	0.00218	
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0105	0.0083	
Selenium (Se)-Total	mg/L	0.0010	0.0010	<0.0010	<0.0010	
Zinc (Zn)-Total	mg/L	0.0020	0.0020	0.1250	0.0390	
<b>Dioxins and Furans</b>						
2378 TCDD	pg/L	1.0	0.53	<1.0	<0.53	
12378 PeCDD	pg/L	0.53	0.33	<0.53	<0.33	
123478 HxCDD	pg/L	0.51	0.25	<0.51	<0.25	
123678 HxCDD	pg/L	0.45	0.22	<0.45	<0.22	
123789 HxCDD	pg/L	0.42	0.21	<0.42	<0.21	
1234678 HpCDD	pg/L	0.97	0.27	4.5	0.44	
OCDD	pg/L	0.49	0.19	44.2	1.62	
2378 TCDF	pg/L	0.49	0.27	<0.49	<0.27	
12378 PeCDF	pg/L	0.45	0.23	<0.45	<0.23	
23478 PeCDF	pg/L	0.37	0.20	<0.37	<0.20	
123478 HxCDF	pg/L	0.85	0.16	<0.85	<0.16	
123678 HxCDF	pg/L	0.68	0.14	<0.68	<0.14	
234678 HxCDF	pg/L	0.83	0.16	<0.83	<0.16	
123789 HxCDF	pg/L	1.1	0.22	<1.1	0.42	
1234678 HpCDF	pg/L	0.38	0.16	0.96	<0.16	
1234789 HpCDF	pg/L	0.64	0.24	<0.64	<0.24	
OCDF	pg/L	0.49	0.27	3.09	<0.27	
Total TCDD	pg/L	1.0	0.53	<1.0	2.20	
Total PeCDD	pg/L	0.53	0.33	<0.53	<0.33	
Total HxCDD	pg/L	0.51	0.25	0.75	<0.25	
Total HpCDD	pg/L	0.97	0.27	4.74	<0.27	
Total TCDF	pg/L	0.49	0.27	<0.49	<0.27	

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Total PeCDF	pg/L	0.45	0.23	<0.45	<0.23
Total HxCDF	pg/L	1.1	0.22	1.4	0.86
Total HpCDF	pg/L	0.64	0.24	0.96	<0.24
Surrogate: 13C12 2378 TCDD	%	20-175	20-175	72.0	84.0
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	94.0	94.0
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	72.0	91.0
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	73.0	83.0
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	71.0	92.0
Surrogate: 13C12 OCDD	%	13-138	13-138	61.0	99.0
Surrogate: 13C12 2378 TCDF	%	22-152	22-152	79.0	94.0
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	87.0	100.0
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	95.0	102.0
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	73.0	90.0
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	81.0	94.0
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	73.0	91.0
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	79.0	100.0
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	78.0	97.0
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	78.0	105.0
Surrogate: 37C14 2378 TCDD	%	31-191	31-191	81.0	83.0
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.0237	0.000486
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			1.17	0.583
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			2.26	1.12
<b>EPA 8270 Extractables</b>					
1-Chloronaphthalene	ug/L	4.0	4.0	<4.0	<4.0
1-Methylnaphthalene	ug/L	4.0	4.0	<4.0	<4.0
1,2-Dichlorobenzene	ug/L	4.0	4.0	<4.0	<4.0
1,2,3-Trichlorobenzene	ug/L	4.0	4.0	<4.0	<4.0
1,2,4-Trichlorobenzene	ug/L	4.0	4.0	<4.0	<4.0
1,3-Dichlorobenzene	ug/L	4.0	4.0	<4.0	<4.0
1,4-Dichlorobenzene	ug/L	4.0	4.0	<4.0	<4.0
2-Chloronaphthalene	ug/L	4.0	4.0	<4.0	<4.0
2-Chlorophenol	ug/L	3.0	3.0	<3.0	<3.0
2-Methylnaphthalene	ug/L	4.0	4.0	<4.0	<4.0
2-Methylphenol	ug/L	5.0	5.0	<5.0	<5.0
2-Nitrophenol	ug/L	5.0	5.0	<5.0	<5.0
2,3,4-Trichlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,3,4,5-Tetrachlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,3,4,6-Tetrachlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,3,5-Trichlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,3,5,6-Tetrachlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,4-Dichlorophenol	ug/L	3.0	3.0	<3.0	<3.0
2,4-Dimethylphenol	ug/L	5.0	5.0	<5.0	<5.0
2,4-Dinitrophenol	ug/L	20	20	<20	<20
2,4-Dinitrotoluene	ug/L	4.0	4.0	<4.0	<4.0
2,4,5-Trichlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,4,6-Trichlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,6-Dichlorophenol	ug/L	5.0	5.0	<5.0	<5.0
2,6-Dinitrotoluene	ug/L	4.0	4.0	<4.0	<4.0
3,3'-Dichlorobenzidine	ug/L	4.0	4.0	<4.0	<4.0
3&4-Methylphenol	ug/L	50	50	237	<5.0
4-Bromophenyl phenyl ether	ug/L	4.0	4.0	<4.0	<4.0
4-Chloro-3-methylphenol	ug/L	5.0	5.0	<5.0	<5.0

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	Units	MDL-Raw	MDL-Final	Raw Sewage	Final Effluent
				Grab	Grab
4-Chloroaniline	ug/L	4.0	4.0	<4.0	<4.0
4-Chlorophenyl phenyl ether	ug/L	4.0	4.0	<4.0	<4.0
4-Nitrophenol	ug/L	5.0	5.0	<5.0	<5.0
4,6-Dinitro-2-methylphenol	ug/L	20	20	<20	<20
5-Nitroacenaphthene	ug/L	4.0	4.0	<4.0	<4.0
Acenaphthene	ug/L	2.0	2.0	<2.0	<2.0
Acenaphthylene	ug/L	2.0	2.0	<2.0	<2.0
Anthracene	ug/L	2.0	2.0	<2.0	<2.0
Benzo(a)anthracene	ug/L	2.0	2.0	<2.0	<2.0
Benzo(a)pyrene	ug/L	0.50	0.50	<0.50	<0.50
Benzo(b)fluoranthene	ug/L	2.0	2.0	<2.0	<2.0
Benzo(ghi)perylene	ug/L	2.0	2.0	<2.0	<2.0
Benzo(k)fluoranthene	ug/L	2.0	2.0	<2.0	<2.0
Biphenyl	ug/L	4.0	4.0	<4.0	<4.0
Bis(2-chloroethoxy)methane	ug/L	4.0	4.0	<4.0	<4.0
Bis(2-chloroethyl)ether	ug/L	4.0	4.0	<4.0	<4.0
Bis(2-chloroisopropyl)ether	ug/L	4.0	4.0	<4.0	<4.0
Bis(2-ethylhexyl)phthalate	ug/L	20	20	<20	<20
Butylbenzyl phthalate	ug/L	4.0	4.0	<4.0	<4.0
Camphene	ug/L	4.0	4.0	<4.0	<4.0
Chrysene	ug/L	2.0	2.0	<2.0	<2.0
Di-n-butylphthalate	ug/L	20	20	<20	<20
Di-n-octylphthalate	ug/L	4.0	4.0	<4.0	<4.0
Dibenzo(a,h)anthracene	ug/L	2.0	2.0	<2.0	<2.0
Dibenzofuran	ug/L	2.0	2.0	<2.0	<2.0
Diethylphthalate	ug/L	2.0	2.0	4.3	<2.0
Dimethylphthalate	ug/L	2.0	2.0	<2.0	<2.0
Diphenyl ether	ug/L	4.0	4.0	<4.0	<4.0
Diphenylamine	ug/L	4.0	4.0	<4.0	<4.0
Fluoranthene	ug/L	2.0	2.0	<2.0	<2.0
Fluorene	ug/L	2.0	2.0	<2.0	<2.0
Hexachlorobenzene	ug/L	0.40	0.40	<0.40	<0.40
Hexachlorobutadiene	ug/L	2.0	2.0	<2.0	<2.0
Hexachlorocyclopentadiene	ug/L	4.0	4.0	<4.0	<4.0
Hexachloroethane	ug/L	4.0	4.0	<4.0	<4.0
Indeno(1,2,3-cd)pyrene	ug/L	2.0	2.0	<2.0	<2.0
Indole	ug/L	4.0	4.0	78.0	<4.0
Isophorone	ug/L	4.0	4.0	<4.0	<4.0
N-Nitroso-di-n-propylamine	ug/L	4.0	4.0	<4.0	<4.0
Naphthalene	ug/L	2.0	2.0	<2.0	<2.0
Nitrobenzene	ug/L	4.0	4.0	<4.0	<4.0
Pentachlorophenol	ug/L	5.0	5.0	<5.0	<5.0
Perylene	ug/L	2.0	2.0	<2.0	<2.0
Phenanthrene	ug/L	2.0	2.0	<2.0	<2.0
Phenol	ug/L	5.0	5.0	113.0	<5.0
Pyrene	ug/L	2.0	2.0	<2.0	<2.0
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	117.1	79.4
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	121.3	81.7
Surrogate: Nitrobenzene d5	%	50-130	50-130	116.1	87.0
Surrogate: p-Terphenyl d14	%	50-150	50-150	98.2	103.0
Surrogate: Phenol d5	%	30-130	30-130	88.8	66.9

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	1.0	1.0	1.1	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	3.1	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	1.44	0.55
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	0.19	0.16
Bisphenol A	ug/L	0.20	0.20	0.28	0.26
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	4.5	<2.0
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	%	30-130	30-130	107.5	84.0
Surrogate: p-Terphenyl d14	%	50-150	50-150	127.1	100.6
<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
Surrogate: Decachlorobiphenyl	%	50-150	50-150	80.0	89.0
<b>Pesticides, Organochlorine</b>					
Aldrin	ug/L	1.0	0.10	<1.0	<0.10
a-chlordane	ug/L	1.0	0.10	<1.0	<0.10
g-chlordane	ug/L	1.0	0.10	<1.0	<0.10
alpha-BHC	ug/L	1.0	0.10	<1.0	<0.10
beta-BHC	ug/L	1.0	0.10	<1.0	<0.10
delta-BHC	ug/L	1.0	0.10	<1.0	<0.10
op-DDD	ug/L	1.0	0.10	<1.0	<0.10
pp-DDD	ug/L	1.0	0.10	<1.0	<0.10
op-DDE	ug/L	1.0	0.10	<1.0	<0.10
pp-DDE	ug/L	1.0	0.10	<1.0	<0.10
op-DDT	ug/L	1.0	0.10	<1.0	<0.10
pp-DDT	ug/L	1.0	0.10	<1.0	<0.10
Dieldrin	ug/L	1.0	0.10	<1.0	<0.10
alpha-Endosulfan	ug/L	1.0	0.10	<1.0	<0.10
beta-Endosulfan	ug/L	1.0	0.10	<1.0	<0.10
Endosulfan Sulfate	ug/L	1.0	0.10	<1.0	<0.10
Endrin	ug/L	1.0	0.10	<1.0	<0.10
Endrin Aldehyde	ug/L	1.0	0.10	<1.0	<0.10
Hexachlorobenzene	ug/L	1.0	0.10	<1.0	<0.10
Heptachlor	ug/L	1.0	0.10	<1.0	<0.10
Heptachlor Epoxide	ug/L	1.0	0.10	<1.0	<0.10
Lindane	ug/L	1.0	0.10	<1.0	<0.10
Methoxychlor	ug/L	1.0	0.10	<1.0	<0.10
Mirex	ug/L	1.0	0.10	<1.0	<0.10

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Oxychlorthane	ug/L	1.0	0.10	<1.0	<0.10
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	104.2	82.7
Surrogate: d14-Terphenyl	%	50-150	50-150	111.8	89.1
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-TP	mg/L	5.0	0.50	<5.0	<0.50
MCPA	mg/L	5.0	0.50	<5.0	<0.50
Mecoprop	mg/L	5.0	0.50	<5.0	<0.50
2,4,5-T	mg/L	5.0	0.50	<5.0	<0.50
2,4-D	mg/L	5.0	0.50	<5.0	<0.50
2,4-DP	mg/L	5.0	0.50	<5.0	<0.50
Bromoxynil	mg/L	5.0	0.50	<5.0	<0.50
Dicamba	mg/L	5.0	0.50	<5.0	<0.50
Dinoseb	mg/L	5.0	0.50	<5.0	<0.50
Picloram	mg/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	mg/L	50-130	50-130	124.1	120.2
<b>Volatile Organics plus F1</b>					
Acetone	mg/L	0.020	0.020	0.075	<0.020
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromodichloromethane	mg/L	0.00050	0.00050	0.00060	<0.00050
Bromoform	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromomethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
n-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
sec-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
tert-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Carbon Disulfide	mg/L	0.00050	0.00050	0.00246	<0.00050
Carbon tetrachloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chloroethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
Chloroform	mg/L	0.00050	0.00050	0.00567	0.00443
Chloromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
2-Chlorotoluene	mg/L	0.020	0.020	<0.020	<0.020
4-Chlorotoluene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromo-3-chloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromoethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromomethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,4-Dichlorobenzene	mg/L	0.00050	0.00050	0.00073	<0.00050
Dichlorodifluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,1-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050

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1'st Quarter Sampling Parameter	February 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
1,1-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
F1	mg/L	0.10	0.10	<0.10	<0.10
Hexachlorobutadiene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Hexane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2-Hexanone	mg/L	0.020	0.020	<0.020	<0.020
Isopropylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
4-Isopropyltoluene	mg/L	0.00050	0.00050	0.00054	<0.00050
MEK	mg/L	0.020	0.020	<0.020	<0.020
MIBK	mg/L	0.020	0.020	<0.020	<0.020
MTBE	mg/L	0.00050	0.00050	<0.00050	<0.00050
Naphthalene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Styrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Tetrachloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.00050	0.00428	<0.00050
1,2,3-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichlorofluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,2,3-Trichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3,5-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Vinyl chloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
m+p-Xylenes	mg/L	0.00050	0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 4-Bromofluorobenzene	%	70-130	70-130	100.9	97.4
Surrogate: 1,4-Difluorobenzene	%	70-130	70-130	100.7	100.0

**NOTES:**

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

*All parameters were analyzed by contract laboratory.*

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

2'nd Quarter Sampling Parameter	May 12, 2014			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
Mercury (Hg)-Total	ng/L	1.0	1.0	102.0	4.5
Oil and Grease (I.R.)	mg/L	3.0	1.0	67.5	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0417	0.0013
Xylenes (Total)	mg/L	0.0015	0.0015	<0.0015	<0.0015
Tetraethyl Lead	ug/L	0.0070	0.0152	<0.0070	<0.0152
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030
Trihalomethanes (total)	mg/L	0.0010	0.0010	0.0036	0.0036
Toxaphene	ug/L	3.0	1.5	<3.0	<1.5
Ammonia, Total (as N)	mg/L		1.0	NA	26.1
Ammonia, Un-ionized (as N)	mg/L		0.010	NA	0.027
Chlorine, Total	mg/L		0.10	NA	<0.10
Tri-n-butyltin Cation	ug/L	0.050	0.050	<0.050	<0.050
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	75.2	73.1
Surrogate: Decachlorobiphenyl	%	50-150	50-150	87.4	93.4
Surrogate: Tetrachloro-m-xylene	%	50-150	50-150	89.0	86.5
Surrogate: Tri-n-propyltin	%	31-137	31-137	98.0	84.0
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.0020	0.00118	<0.0020
Cadmium (Cd)-Total	mg/L	0.000010	0.00010	0.000138	<0.00010
Chromium (Cr)-Total	mg/L	0.0010	0.010	0.0025	<0.010
Copper (Cu)-Total	mg/L	0.00020	0.0020	0.09870	0.0105
Lead (Pb)-Total	mg/L	0.000090	0.00090	0.001930	<0.00090
Molybdenum (Mo)-Total	mg/L	0.00020	0.0020	0.00483	0.0035
Nickel (Ni)-Total	mg/L	0.0020	0.020	0.0061	<0.020
Selenium (Se)-Total	mg/L	0.0010	0.010	0.0016	<0.010
Zinc (Zn)-Total	mg/L	0.0020	0.020	0.1430	0.044
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	1.1	0.70	<1.1	<0.70
12378 PeCDD	pg/L	0.46	0.26	<0.46	<0.26
123478 HxCDD	pg/L	0.42	0.24	<0.42	<0.24
123678 HxCDD	pg/L	0.40	0.22	<0.40	<0.22
123789 HxCDD	pg/L	0.40	0.22	<0.40	<0.22
1234678 HpCDD	pg/L	0.43	0.31	6.06	0.90
OCDD	pg/L	0.56	0.15	46.4	5.72
2378 TCDF	pg/L	0.84	0.52	<0.84	<0.52
12378 PeCDF	pg/L	0.61	0.30	<0.61	<0.30
23478 PeCDF	pg/L	0.45	0.26	<0.45	<0.26
123478 HxCDF	pg/L	0.44	0.15	<0.44	<0.15
123678 HxCDF	pg/L	0.43	0.14	<0.43	<0.14
234678 HxCDF	pg/L	0.63	0.13	<0.63	0.15
123789 HxCDF	pg/L	0.64	0.18	<0.64	0.74
1234678 HpCDF	pg/L	0.20	0.13	1.36	0.36
1234789 HpCDF	pg/L	0.34	0.20	<0.34	<0.20
OCDF	pg/L	0.56	0.27	3.83	0.39
Total TCDD	pg/L	1.1	0.70	<1.1	8.57
Total PeCDD	pg/L	0.46	0.26	0.79	<0.26
Total HxCDD	pg/L	0.42	0.24	0.82	<0.24
Total HpCDD	pg/L	0.43	0.31	6.06	<0.31
Total TCDF	pg/L	0.84	0.52	<0.84	<0.52

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2'nd Quarter Sampling Parameter	May 12, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Total PeCDF	pg/L	0.61	0.30	<0.61	<0.30
Total HxCDF	pg/L	0.64	0.18	1.98	1.84
Total HpCDF	pg/L	0.34	0.20	3.20	0.36
Surrogate: 13C12 2378 TCDD	%	20-175	20-175	64.0	62.0
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	112.0	78.0
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	71.0	70.0
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	88.0	84.0
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	58.0	74.0
Surrogate: 13C12 OCDD	%	13-138	13-138	39.0	72.0
Surrogate: 13C12 2378 TCDF	%	22-152	22-152	71.0	67.0
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	106.0	81.0
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	128.0	86.0
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	78.0	76.0
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	90.0	91.0
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	63.0	91.0
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	73.0	86.0
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	68.0	86.0
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	57.0	81.0
Surrogate: 37C14 2378 TCDD	%	31-191	31-191	72.0	71.0
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.0893	0.0793
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			1.16	0.702
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			2.23	1.30
<b>EPA 8270 Extractables</b>					
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
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
2,3,5-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
2,4-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	40	1.0	<40	<1.0
2,4-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
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
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
3&4-Methylphenol	ug/L	50	0.50	276	<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



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2'nd Quarter Sampling Parameter	May 12, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage	Final Effluent
				Grab	Grab
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
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
4,6-Dinitro-2-methylphenol	ug/L	40	2.0	<40	<2.0
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	0.62
Camphene	ug/L	4.0	0.40	<4.0	<0.40
Chrysene	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
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	2.5	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
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	113.0	<0.40
Isophorone	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
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	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	123.0	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	115.1	107.2
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	113.2	140.0
Surrogate: Nitrobenzene d5	%	50-130	50-130	118.7	118.1
Surrogate: p-Terphenyl d14	%	50-150	50-150	72.5	133.0
Surrogate: Phenol d5	%	30-130	30-130	57.1	54.7

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2'nd Quarter Sampling Parameter	May 12, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	<2.0	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	0.67	0.32
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	<0.10	<0.10
Bisphenol A	ug/L	0.20	0.20	<0.20	<0.20
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	2.1	<2.0
Total Octylphenol Ethoxylate	ug/L	2.0	2.0	<2.0	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	5.0	0.050	<5.0	<0.050
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	NA <sup>1</sup>	96.4
Surrogate: p-Terphenyl d14	%	50-150	50-150	NA <sup>1</sup>	104.6
<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
Surrogate: Decachlorobiphenyl	%	50-150	50-150	57.0	91.0
<b>Pesticides, Organochlorine</b>					
Aldrin	ug/L	10	0.10	<10	<0.10
a-chlordane	ug/L	10	0.10	<10	<0.10
g-chlordane	ug/L	10	0.10	<10	<0.10
alpha-BHC	ug/L	10	0.10	<10	<0.10
beta-BHC	ug/L	10	0.10	<10	<0.10
delta-BHC	ug/L	10	0.10	<10	<0.10
op-DDD	ug/L	10	0.10	<10	<0.10
pp-DDD	ug/L	10	0.10	<10	<0.10
op-DDE	ug/L	50	0.10	<50	<0.10
pp-DDE	ug/L	10	0.10	<10	<0.10
op-DDT	ug/L	10	0.10	<10	<0.10
pp-DDT	ug/L	10	0.10	<10	<0.10
Dieldrin	ug/L	10	0.10	<10	<0.10
alpha-Endosulfan	ug/L	25	0.10	<25	<0.10
beta-Endosulfan	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
Hexachlorobenzene	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

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2'nd Quarter Sampling Parameter	May 12, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Oxychlorthane	ug/L	10	0.10	<10	<0.10
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	NA <sup>1</sup>	96.3
Surrogate: d14-Terphenyl	%	50-150	50-150	NA <sup>1</sup>	108.3
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-TP	mg/L	5.0	0.50	<5.0	<0.50
MCPA	mg/L	5.0	0.50	<5.0	<0.50
Mecoprop	mg/L	5.0	0.50	<5.0	<0.50
2,4,5-T	mg/L	5.0	0.50	<5.0	<0.50
2,4-D	mg/L	5.0	0.50	<5.0	<0.50
2,4-DP	mg/L	5.0	0.50	<5.0	<0.50
Bromoxynil	mg/L	5.0	0.50	<5.0	<0.50
Dicamba	mg/L	5.0	0.50	<5.0	<0.50
Dinoseb	mg/L	5.0	0.50	<5.0	<0.50
Picloram	mg/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	mg/L	50-130	50-130	86.6	116.0
<b>Volatile Organics plus F1</b>					
Acetone	mg/L	0.10	0.020	0.29	<0.020
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromodichloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromoform	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromomethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
n-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
sec-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
tert-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Carbon Disulfide	mg/L	0.00050	0.00050	0.00104	<0.00050
Carbon tetrachloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chloroethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
Chloroform	mg/L	0.00050	0.00050	0.00358	0.00365
Chloromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
2-Chlorotoluene	mg/L	0.020	0.020	<0.020	<0.020
4-Chlorotoluene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromo-3-chloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromoethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromomethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,4-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichlorodifluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,1-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050

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2'nd Quarter Sampling Parameter	May 12, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
1,1-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
F1	mg/L	0.10	0.10	<0.10	<0.10
Hexachlorobutadiene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Hexane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2-Hexanone	mg/L	0.020	0.020	<0.020	<0.020
Isopropylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
4-Isopropyltoluene	mg/L	0.00050	0.00050	0.00059	<0.00050
MEK	mg/L	0.020	0.020	<0.020	<0.020
MIBK	mg/L	0.020	0.020	<0.020	<0.020
MTBE	mg/L	0.00050	0.00050	<0.00050	<0.00050
Naphthalene	mg/L	0.0015	0.0015	<0.0015	<0.0015
Styrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Tetrachloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.00050	0.00348	<0.00050
1,2,3-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichlorofluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,2,3-Trichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trimethylbenzene	mg/L	0.00050	0.00050	0.00055	<0.00050
1,3,5-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Vinyl chloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
m+p-Xylenes	mg/L	0.00050	0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 4-Bromofluorobenzene	%	70-130	70-130	96.6	99.2
Surrogate: 1,4-Difluorobenzene	%	70-130	70-130	99.8	100.1

**NOTES:**

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

1 - Surrogate diluted out: % recovery not available.

*All parameters were analyzed by contract laboratory.*

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

3'rd Quarter Sampling Parameter	August 18, 2014			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
Mercury (Hg)-Total	ng/L	5.0	1.0	120	5.5
Oil and Grease (I.R.)	mg/L	1.0	1.0	30.9	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0279	<0.0010
Xylenes (Total)	mg/L	0.0015	0.0015	<0.0015	<0.0015
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030
Trihalomethanes (total)	mg/L	0.0010	0.0010	0.0039	0.0035
Toxaphene	ug/L	5.0	1.5	<5.0	<1.5
Ammonia, Total (as N)	mg/L		1.0	NA	18.3
Ammonia, Un-ionized (as N)	mg/L		0.010	NA	0.021
Chlorine, Total	mg/L		0.10	NA	<0.10
Tri-n-butyltin Cation	ug/L	0.053	0.060	<0.053	<0.060
Trout Bioassay	Pass/Fail			NA	Pass
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	97.4	107.6
Surrogate: Decachlorobiphenyl	%	50-150	50-150	92.5	88.0
Surrogate: Tetrachloro-m-xylene	%	50-150	50-150	90.4	73.5
Surrogate: Tri-n-propyltin	%	31-137	31-137	86.0	79.0
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00151	0.00094
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000123	0.000028
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0029	<0.0010
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.07770	0.01280
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00300	0.000445
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00504	0.00335
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0055	0.0040
Selenium (Se)-Total	mg/L	0.0010	0.0010	<0.0010	<0.0010
Zinc (Zn)-Total	mg/L	0.0020	0.0020	0.1120	0.0246
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	0.57	0.73	<0.57	<0.73
12378 PeCDD	pg/L	0.23	0.26	0.63	<0.26
123478 HxCDD	pg/L	0.21	0.14	0.23	<0.14
123678 HxCDD	pg/L	0.22	0.14	0.91	<0.14
123789 HxCDD	pg/L	0.22	0.14	1.15	<0.14
1234678 HpCDD	pg/L	0.56	0.15	19.6	1.50
OCDD	pg/L	0.24	0.17	164	6.84
2378 TCDF	pg/L	0.39	0.65	<0.39	<0.65
12378 PeCDF	pg/L	0.24	0.15	0.32	0.25
23478 PeCDF	pg/L	0.21	0.13	<0.21	<0.13
123478 HxCDF	pg/L	0.29	0.13	<0.29	<0.13
123678 HxCDF	pg/L	0.28	0.12	<0.28	0.16
234678 HxCDF	pg/L	0.27	0.12	0.64	<0.12
123789 HxCDF	pg/L	0.34	0.15	0.41	0.51
1234678 HpCDF	pg/L	0.27	0.15	5.22	0.26
1234789 HpCDF	pg/L	0.37	0.20	<0.37	<0.20
OCDF	pg/L	0.27	0.26	12.0	<0.26
Total TCDD	pg/L	0.57	0.73	<0.57	2.29
Total PeCDD	pg/L	0.23	0.26	2.42	<0.26
Total HxCDD	pg/L	0.22	0.14	4.36	<0.14
Total HpCDD	pg/L	0.56	0.15	42.3	<0.15
Total TCDF	pg/L	0.39	0.65	<0.39	<0.65

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3'rd Quarter Sampling Parameter	August 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Total PeCDF	pg/L	0.24	0.15	0.99	<0.15
Total HxCDF	pg/L	0.34	0.15	4.54	0.67
Total HpCDF	pg/L	0.37	0.20	5.22	<0.20
Surrogate: 13C12 2378 TCDD	%	20-175	20-175	59.0	51.0
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	55.0	74.0
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	56.0	74.0
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	63.0	84.0
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	62.0	89.0
Surrogate: 13C12 OCDD	%	13-138	13-138	66.0	102.0
Surrogate: 13C12 2378 TCDF	%	22-152	22-152	54.0	41.0
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	54.0	68.0
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	53.0	66.0
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	55.0	70.0
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	59.0	83.0
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	59.0	81.0
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	58.0	81.0
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	63.0	88.0
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	61.0	87.0
Surrogate: 37C14 2378 TCDD	%	31-191	31-191	84.0	53.0
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			1.14	0.0692
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			1.64	0.676
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			2.01	1.26
<b>EPA 8270 Extractables</b>					
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
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
2,3,5-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
2,4-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
2,4,5-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
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
3&4-Methylphenol	ug/L	5.0	0.5	75.7	<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

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3'rd Quarter Sampling Parameter	August 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage	Final Effluent
				Grab	Grab
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
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
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
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
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	<2.0	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
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	13	0.40	<13	<0.40
Isophorone	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
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	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	12.4	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	85.4	92.2
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	91.4	81.9
Surrogate: Nitrobenzene d5	%	50-130	50-130	100.1	97.9
Surrogate: p-Terphenyl d14	%	50-150	50-150	68.3	96.7
Surrogate: Phenol d5	%	30-130	30-130	40.1	43.5

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3'rd Quarter Sampling Parameter	August 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	2.1	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	1.16	0.54
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	0.10	0.18
Bisphenol A	ug/L	0.20	0.20	0.22	0.49
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	3.2	<2.0
Total Octylphenol Ethoxylate	ug/L	2.0	2.0	<2.0	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	98.0	70.1
Surrogate: p-Terphenyl d14	%	50-150	50-150	76.0	77.1
<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
Surrogate: Decachlorobiphenyl	%	50-150	50-150	74.0	69.0
<b>Pesticides, Organochlorine</b>					
Aldrin	ug/L	10	1.0	<10	<1.0
a-chlordane	ug/L	10	1.0	<10	<1.0
g-chlordane	ug/L	10	1.0	<10	<1.0
alpha-BHC	ug/L	10	1.0	<10	<1.0
beta-BHC	ug/L	10	1.0	<10	<1.0
delta-BHC	ug/L	10	1.0	<10	<1.0
op-DDD	ug/L	10	1.0	<10	<1.0
pp-DDD	ug/L	10	1.0	<10	<1.0
op-DDE	ug/L	10	1.0	<10	<1.0
pp-DDE	ug/L	10	1.0	<10	<1.0
op-DDT	ug/L	10	1.0	<10	<1.0
pp-DDT	ug/L	10	1.0	<10	<1.0
Dieldrin	ug/L	10	1.0	<10	<1.0
alpha-Endosulfan	ug/L	10	1.0	<10	<1.0
beta-Endosulfan	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
Hexachlorobenzene	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



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3'rd Quarter Sampling Parameter	August 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Oxychlorthane	ug/L	10	1.0	<10	<1.0
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	89.0	67.2
Surrogate: d14-Terphenyl	%	50-150	50-150	81.0	58.5
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-TP	mg/L	1.0	1.0	<1.0	<1.0
MCPA	mg/L	1.0	1.0	<1.0	<1.0
Mecoprop	mg/L	1.0	1.0	<1.0	<1.0
2,4,5-T	mg/L	1.0	1.0	<1.0	<1.0
2,4-D	mg/L	1.0	1.0	<1.0	<1.0
2,4-DP	mg/L	1.0	1.0	<1.0	<1.0
Bromoxynil	mg/L	1.0	1.0	<1.0	<1.0
Dicamba	mg/L	1.0	1.0	<1.0	<1.0
Dinoseb	mg/L	1.0	1.0	<1.0	<1.0
Picloram	mg/L	1.0	1.0	<1.0	<1.0
Surrogate: 2,4-Dichlorophenylacetic Acid	mg/L	50-130	50-130	114.8	114.5
<b>Volatile Organics plus F1</b>					
Acetone	mg/L	0.020	0.020	0.032	<0.020
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromodichloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromoform	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromomethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
n-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
sec-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
tert-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Carbon Disulfide	mg/L	0.00050	0.00050	<0.00050	<0.00050
Carbon tetrachloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chloroethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
Chloroform	mg/L	0.00050	0.00050	0.00391	0.00355
Chloromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
2-Chlorotoluene	mg/L	0.020	0.020	<0.020	<0.020
4-Chlorotoluene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromo-3-chloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromoethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromomethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,4-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichlorodifluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,1-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichloromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050

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3'rd Quarter Sampling Parameter	August 18, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
1,1-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
F1	mg/L	0.10	0.10	<0.10	<0.10
Hexachlorobutadiene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Hexane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2-Hexanone	mg/L	0.020	0.020	<0.020	<0.020
Isopropylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
4-Isopropyltoluene	mg/L	0.00050	0.00050	0.00121	0.00066
MEK	mg/L	0.020	0.020	<0.020	<0.020
MIBK	mg/L	0.020	0.020	<0.020	<0.020
MTBE	mg/L	0.00050	0.00050	<0.00050	<0.00050
Naphthalene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Styrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Tetrachloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.00050	0.00350	<0.00050
1,2,3-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichlorofluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,2,3-Trichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3,5-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Vinyl chloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
m+p-Xylenes	mg/L	0.00050	0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 4-Bromofluorobenzene	%	70-130	70-130	90.9	93.0
Surrogate: 1,4-Difluorobenzene	%	70-130	70-130	97.7	96.4

**NOTES:**

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

*All parameters were analyzed by contract laboratory.*

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4'th Quarter Sampling Parameter	November 17, 2014			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
Mercury (Hg)-Total	ng/L	1.0	1.0	72.1	6.4
Oil and Grease (I.R.)	mg/L	1.0	1.0	37.8	<1.0
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0092	<0.0010
Xylenes (Total)	mg/L	0.0015	0.0015	<0.0015	<0.0015
Tetraethyl Lead	ug/L	0.070	0.0070	<0.070	<0.0070
Total PCBs	mg/L	0.00030	0.00030	<0.00030	<0.00030
Trihalomethanes (total)	mg/L	0.0010	0.0010	0.0027	0.0025
Toxaphene	ug/L	7.5	3.0	<7.5	<3.0
Ammonia, Total (as N)	mg/L		1.0	NA	38.8
Ammonia, Un-ionized (as N)	mg/L		0.010	NA	0.035
Chlorine, Total	mg/L		0.10	NA	<0.10
Tri-n-butyltin Cation	ug/L	0.050	0.050	0.052	0.052
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	NA	53.8
Surrogate: Decachlorobiphenyl	%	50-150	50-150	80.8	99.8
Surrogate: Tetrachloro-m-xylene	%	50-150	50-150	85.9	96.1
Surrogate: Tri-n-propyltin	%	31-137	31-137	115.0	92.0
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00141	0.00064
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000226	0.000017
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0050	<0.0010
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.10800	0.02400
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.007540	0.000468
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00816	0.00345
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0137	0.0133
Selenium (Se)-Total	mg/L	0.0010	0.0010	<0.0010	<0.0010
Zinc (Zn)-Total	mg/L	0.0020	0.0020	0.2650	0.0359
<b>Dioxins and Furans</b>					
2378 TCDD	pg/L	0.48	0.40	<0.48	<0.40
12378 PeCDD	pg/L	0.67	0.21	<0.67	<0.21
123478 HxCDD	pg/L	0.54	0.25	<0.54	<0.25
123678 HxCDD	pg/L	0.49	0.23	<0.49	0.46
123789 HxCDD	pg/L	0.50	0.23	<0.50	<0.23
1234678 HpCDD	pg/L	0.58	0.21	9.09	2.10
OCDD	pg/L	0.88	0.31	77.9	4.77
2378 TCDF	pg/L	0.48	0.21	<0.48	<0.21
12378 PeCDF	pg/L	0.43	0.20	<0.43	<0.20
23478 PeCDF	pg/L	0.35	0.17	<0.35	0.27
123478 HxCDF	pg/L	0.72	0.13	<0.72	0.41
123678 HxCDF	pg/L	0.64	0.13	<0.64	0.25
234678 HxCDF	pg/L	0.71	0.14	<0.71	0.43
123789 HxCDF	pg/L	0.86	0.18	<0.86	0.46
1234678 HpCDF	pg/L	0.46	0.13	1.60	0.81
1234789 HpCDF	pg/L	0.65	0.20	<0.65	0.40
OCDF	pg/L	0.78	0.27	6.90	0.49
Total TCDD	pg/L	0.48	0.40	<0.48	<0.40
Total PeCDD	pg/L	0.67	0.21	<0.67	5.40
Total HxCDD	pg/L	0.54	0.25	<0.54	1.85
Total HpCDD	pg/L	0.58	0.21	17.2	1.93
Total TCDF	pg/L	0.48	0.21	<0.48	2.23

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4'th Quarter Sampling Parameter	November 17, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Total PeCDF	pg/L	0.43	0.20	<0.43	0.40
Total HxCDF	pg/L	0.86	0.18	<0.86	1.17
Total HpCDF	pg/L	0.65	0.20	3.25	<0.20
Surrogate: 13C12 2378 TCDD	%	20-175	20-175	86.0	70.0
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	83.0	78.0
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	76.0	84.0
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	98.0	96.0
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	68.0	75.0
Surrogate: 13C12 OCDD	%	13-138	13-138	62.0	73.0
Surrogate: 13C12 2378 TCDF	%	22-152	22-152	82.0	75.0
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	80.0	76.0
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	87.0	84.0
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	65.0	78.0
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	95.0	89.0
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	79.0	84.0
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	79.0	80.0
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	72.0	81.0
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	68.0	75.0
Surrogate: 37C14 2378 TCDD	%	31-191	31-191	73.0	64.0
Lower Bound PCDD/F TEQ (WHO 2005)	pg/L			0.114	0.0935
Mid Point PCDD/F TEQ (WHO 2005)	pg/L			1.02	0.659
Upper Bound PCDD/F TEQ (WHO 2005)	pg/L			1.90	1.00
<b>EPA 8270 Extractables</b>					
1-Chloronaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1-Methylnaphthalene	ug/L	4.0	0.40	<4.0	<0.40
1,2-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
1,3-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
1,4-Dichlorobenzene	ug/L	4.0	0.40	<4.0	<0.40
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
2,3,4-Trichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
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
2,3,5-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
2,4-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
2,4,5-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
2,6-Dichlorophenol	ug/L	5.0	0.50	<5.0	<0.50
2,6-Dinitrotoluene	ug/L	4.0	0.40	<4.0	<0.40
3,3'-Dichlorobenzidine	ug/L	4.0	0.40	<4.0	<0.40
3&4-Methylphenol	ug/L	50	0.50	198	<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

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4'th Quarter Sampling Parameter	November 17, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage	Final Effluent
				Grab	Grab
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
4-Nitrophenol	ug/L	5.0	0.50	<5.0	<0.50
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
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	29	<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
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4.0	0.40	<4.0	<0.40
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	4.0	<0.20
Dimethylphthalate	ug/L	2.0	0.20	<2.0	<0.20
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	40	0.40	56	0.41
Isophorone	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
Naphthalene	ug/L	2.0	0.20	<2.0	<0.20
Nitrobenzene	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	50	0.50	55	<0.50
Pyrene	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	104.9	82.3
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	112.6	89.2
Surrogate: Nitrobenzene d5	%	50-130	50-130	109.9	88.4
Surrogate: p-Terphenyl d14	%	50-150	50-150	88.0	71.1
Surrogate: Phenol d5	%	30-130	30-130	53.1	36.4

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4'th Quarter Sampling Parameter	November 17, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	1.0	1.0	<1.0	<1.0
Nonylphenol Monoethoxylates	ug/L	2.0	2.0	5.5	<2.0
Nonylphenol Diethoxylates	ug/L	0.10	0.10	2.49	<0.10
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	0.14	<0.10
Bisphenol A	ug/L	0.20	0.20	0.27	0.28
Total Nonylphenol Ethoxylates	ug/L	2.0	2.0	8.0	<2.0
Total Octylphenol Ethoxylate	ug/L	2.0	2.0	<2.0	<2.0
<b>Octachlorostyrene</b>					
Octachlorostyrene	ug/L	5.0	0.50	<5.0	<0.50
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	NA <sup>1</sup>	65.0
Surrogate: p-Terphenyl d14	%	50-150	50-150	NA <sup>1</sup>	82.0
<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
Surrogate: Decachlorobiphenyl	%	65-130	65-130	74.0	88.0
<b>Pesticides, Organochlorine</b>					
Aldrin	ug/L	2.0	0.20	<2.0	<0.20
a-chlordane	ug/L	2.0	0.20	<2.0	<0.20
g-chlordane	ug/L	2.0	0.20	<2.0	<0.20
alpha-BHC	ug/L	2.0	0.20	<2.0	<0.20
beta-BHC	ug/L	2.0	0.20	<2.0	<0.20
delta-BHC	ug/L	2.0	0.20	<2.0	<0.20
op-DDD	ug/L	2.0	0.20	<2.0	<0.20
pp-DDD	ug/L	2.0	0.20	<2.0	<0.20
op-DDE	ug/L	2.0	0.20	<2.0	<0.20
pp-DDE	ug/L	2.0	0.20	<2.0	<0.20
op-DDT	ug/L	2.0	0.20	<2.0	<0.20
pp-DDT	ug/L	2.0	0.20	<2.0	<0.20
Dieldrin	ug/L	2.0	0.20	<2.0	<0.20
alpha-Endosulfan	ug/L	2.0	0.20	<2.0	<0.20
beta-Endosulfan	ug/L	2.0	0.20	<2.0	<0.20
Endosulfan Sulfate	ug/L	2.0	0.20	<2.0	<0.20
Endrin	ug/L	2.0	0.20	<2.0	<0.20
Endrin Aldehyde	ug/L	2.0	0.20	<2.0	<0.20
Hexachlorobenzene	ug/L	2.0	0.20	<2.0	<0.20
Heptachlor	ug/L	2.0	0.20	<2.0	<0.20
Heptachlor Epoxide	ug/L	2.0	0.20	<2.0	<0.20
Lindane	ug/L	3.0	0.20	<3.0	<0.20
Methoxychlor	ug/L	2.0	0.20	<2.0	<0.20
Mirex	ug/L	2.0	0.20	<2.0	<0.20

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4'th Quarter Sampling Parameter	November 17, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Oxychlorthane	ug/L	2.0	0.20	<2.0	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	NA <sup>1</sup>	62.0
Surrogate: d14-Terphenyl	%	50-150	50-150	NA <sup>1</sup>	69.9
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-TP	mg/L	5.0	0.50	<5.0	<0.50
MCPA	mg/L	5.0	0.50	<5.0	<0.50
Mecoprop	mg/L	5.0	0.50	<5.0	<0.50
2,4,5-T	mg/L	5.0	0.50	<5.0	<0.50
2,4-D	mg/L	5.0	0.50	<5.0	<0.50
2,4-DP	mg/L	5.0	0.50	<5.0	<0.50
Bromoxynil	mg/L	5.0	0.50	<5.0	<0.50
Dicamba	mg/L	5.0	0.50	<5.0	<0.50
Dinoseb	mg/L	5.0	0.50	<5.0	<0.50
Picloram	mg/L	5.0	0.50	<5.0	<0.50
Surrogate: 2,4-Dichlorophenylacetic Acid	mg/L	50-130	50-130	110.4	115.7
<b>Volatile Organics plus F1</b>					
Acetone	mg/L	0.020	0.020	0.047	<0.020
Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromodichloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromoform	mg/L	0.00050	0.00050	<0.00050	<0.00050
Bromomethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
n-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
sec-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
tert-Butylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Carbon Disulfide	mg/L	0.00050	0.00050	0.00075	<0.00050
Carbon tetrachloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Chloroethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
Chloroform	mg/L	0.00050	0.00050	0.00266	0.00245
Chloromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
2-Chlorotoluene	mg/L	0.020	0.020	<0.020	<0.020
4-Chlorotoluene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromochloromethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromo-3-chloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dibromoethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dibromomethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,4-Dichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichlorodifluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,1-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2-Dichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,2-Dichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dichloromethane	mg/L	0.0070	0.00700	<0.0070	<0.0070
1,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2,2-Dichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050

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4'th Quarter Sampling Parameter	November 17, 2014			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
1,1-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
cis-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
trans-1,3-Dichloropropene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Ethyl Benzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
F1	mg/L	0.10	0.10	<0.10	<0.10
Hexachlorobutadiene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Hexane	mg/L	0.00050	0.00050	<0.00050	<0.00050
2-Hexanone	mg/L	0.020	0.020	<0.020	<0.020
Isopropylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
4-Isopropyltoluene	mg/L	0.00050	0.00050	0.00051	0.00055
MEK	mg/L	0.020	0.020	<0.020	<0.020
MIBK	mg/L	0.020	0.020	<0.020	<0.020
MTBE	mg/L	0.00050	0.00050	<0.00050	<0.00050
Naphthalene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Styrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2,2-Tetrachloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Tetrachloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.00050	0.00583	<0.00050
1,2,3-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trichlorobenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,1-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,1,2-Trichloroethane	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichloroethene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Trichlorofluoromethane	mg/L	0.0010	0.0010	<0.0010	<0.0010
1,2,3-Trichloropropane	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,2,4-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
1,3,5-Trimethylbenzene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Vinyl chloride	mg/L	0.00050	0.00050	<0.00050	<0.00050
m+p-Xylenes	mg/L	0.00050	0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 4-Bromofluorobenzene	%	70-130	70-130	85.8	91.4
Surrogate: 1,4-Difluorobenzene	%	70-130	70-130	100.0	99.8

**NOTES:**

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

1 - Surrogate diluted out: % recovery not available.

*All parameters were analyzed by contract laboratory.*