

**City Of Winnipeg  
Water Waste Department**

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

1'st Quarter Sampling	February 15, 2011			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	mg/L	0.0010	0.0010	<0.0010	<0.0010
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0590	0.0020
Tetraethyl Lead	ug/L	5.0	5.0	<5.0	<5.0
Total Oil and Grease	mg/L	2.0	1.0	71.8	<1.0
Toxaphene	mg/L	0.00010	0.00010	<0.00010	<0.00010
Tributyltin	ug/L	0.005	0.005	<0.005	<0.005
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: Tributyltin Chloride-D27	%	50-150	50-150	98	97
Surrogate: 1,2-Dichloroethane-d4	%	70-125	70-125	100	100
Surrogate: 4-Bromofluorobenzene	%	72-125	72-125	100	101
Surrogate: Dibromofloromethane	%	71-125	71-125	100	99
Surrogate: Toluene-d8	%	75-125	75-125	101	101
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00137	0.00137
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000159	0.000019
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0028	<0.0010
Cobalt (Co)-Total	mg/L	0.00020	0.00020	0.00055	0.00036
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.142	0.0172
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00236	0.000466
Mercury (Hg)-Total	ng/L	1.0	1.0	162	3.9
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00603	0.00605
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0081	0.0074
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0015	<0.0010
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.120	0.0348
<b>Dioxins and Furans</b>					
2378 TeCDD	pg/L	0.50	0.50	<0.50	<0.50
12378 PeCDD	pg/L	0.70	0.50	<0.70	<0.50
123478 HxCDD	pg/L	0.40	0.30	<0.40	<0.30
123678 HxCDD	pg/L	0.60	0.50	<0.60	<0.50
123789 HxCDD	pg/L	0.50	0.40	<0.50	<0.40
1234678 HpCDD	pg/L	0.50	0.40	7.07	<0.40
OCDD	pg/L	1.0	0.50	56.7	10.1
Total TCDD	pg/L	0.50	0.50	<0.50	<0.50
Total PeCDD	pg/L	0.70	0.50	<0.70	<0.50
Total HxCDD	pg/L	0.60	0.50	<0.60	<0.50
Total HpCDD	pg/L	0.50	0.40	7.07	<0.40
Total PCDDs	pg/L	1.0	0.50	63.7	10.1
2378 TeCDF	pg/L	0.40	0.40	<0.40	<0.40
12378 PeCDF	pg/L	0.40	0.40	<0.40	<0.40
23478 PeCDF	pg/L	0.30	0.30	<0.30	<0.30
123478 HxCDF	pg/L	0.60	0.20	<0.60	<0.20
123678 HxCDF	pg/L	0.40	0.20	<0.40	<0.20
123789 HxCDF	pg/L	0.40	0.20	<0.40	<0.20
234678 HxCDF	pg/L	0.40	0.20	<0.40	<0.20
1234678 HpCDF	pg/L	0.70	0.80	<0.70	<0.80
1234789 HpCDF	pg/L	0.90	0.80	<0.90	<0.80
OCDF	pg/L	0.70	0.70	5.33	<0.70
Total TCDF	pg/L	0.40	0.40	<0.40	<0.40
Total PeCDF	pg/L	0.40	0.40	<0.40	<0.40

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Total HxCDF	pg/L	0.60	0.20	<0.60	<0.20
Total HpCDF	pg/L	0.90	0.80	<0.90	<0.80
Total PCDFs	pg/L	0.90	0.80	5.33	<0.80
Total TEQ (ND=0) (WHO Calc)	pg/L			0.09	0
Total TEQ (ND=0.5DL) (WHO Calc)	pg/L			0.93	0.68
Total TEQ (ND=DL) (WHO Calc)	pg/L			1.78	1.37
Surrogate: 13C12 2378 TeCDD	%	25-164	25-164	82	82
Surrogate: 13C12 12378 PeCDD	%	25-181	25-181	73	72
Surrogate: 13C12 123478 HxCDD	%	32-141	32-141	83	73
Surrogate: 13C12 123678 HxCDD	%	28-130	28-130	69	74
Surrogate: 13C12 1234678 HpCDD	%	23-140	23-140	94	72
Surrogate: 13C12 OCDD	%	17-157	17-157	83	59
Surrogate: 13C12 2378 TeCDF	%	24-169	24-169	84	66
Surrogate: 13C12 12378 PeCDF	%	25-185	25-185	65	60
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	72	71
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	57	52
Surrogate: 13C12 123678 HxCDF	%	26-123	26-123	97	81
Surrogate: 13C12 234678 HxCDF	%	28-136	28-136	90	79
Surrogate: 13C12 123789 HxCDF	%	29-147	29-147	86	76
Surrogate: 13C12 1234678 HpCDF	%	28-143	28-143	87	69
Surrogate: 13C12 1234789 HpCDF	%	26-138	26-138	95	78
Surrogate: 37C14 2378 TeCDD	%	35-197	35-197	84	75
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	40	0.40	<40	<0.40
1,2,4-Trichlorobenzene	ug/L	40	0.40	<40	<0.40
1,2-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1,3-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1,4-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1-Chloronaphthalene	ug/L	40	0.40	<40	<0.40
1-Methylnaphthalene	ug/L	40	0.40	<40	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,4-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,5-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4,5-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4,6-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4-Dichlorophenol	ug/L	30	0.30	<30	<0.30
2,4-Dimethylphenol	ug/L	50	0.50	<50	<0.50
2,4-Dinitrophenol	ug/L	100	1.0	<100	<1.0
2,4-Dinitrotoluene	ug/L	40	0.40	<40	<0.40
2,6-Dichlorophenol	ug/L	50	0.50	<50	<0.50
2,6-Dinitrotoluene	ug/L	40	0.40	<40	<0.40
2-Chloronaphthalene	ug/L	40	0.40	<40	<0.40
2-Chlorophenol	ug/L	30	0.30	<30	<0.30
2-Methylnaphthalene	ug/L	40	0.40	<40	<0.40
2-Methylphenol	ug/L	50	0.50	<50	<0.50
2-Nitrophenol	ug/L	50	0.50	<50	<0.50
3&4-Methylphenol	ug/L	50	0.50	160	<0.50
3,3'-Dichlorobenzidine	ug/L	40	0.40	<40	<0.40
4,6-Dinitro-2-methylphenol	ug/L	200	2.0	<200	<2.0
4-Bromophenyl phenyl ether	ug/L	40	0.40	<40	<0.40

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4-Chloro-3-methylphenol	ug/L	50	0.50	<50	<0.50
4-Chloroaniline	ug/L	40	0.40	<40	<0.40
4-Chlorophenyl phenyl ether	ug/L	40	0.40	<40	<0.40
4-Nitrophenol	ug/L	50	0.50	<50	<0.50
5-Nitroacenaphthene	ug/L	40	0.40	<40	<0.40
Acenaphthene	ug/L	20	0.20	<20	<0.20
Acenaphthylene	ug/L	20	0.20	<20	<0.20
Anthracene	ug/L	20	0.20	<20	<0.20
Benzo(a)anthracene	ug/L	20	0.20	<20	<0.20
Benzo(a)pyrene	ug/L	5.0	0.050	<5.0	<0.050
Benzo(b)fluoranthene	ug/L	20	0.20	<20	<0.20
Benzo(ghi)perylene	ug/L	20	0.20	<20	<0.20
Benzo(k)fluoranthene	ug/L	20	0.20	<20	<0.20
Biphenyl	ug/L	40	0.40	<40	<0.40
Bis(2-chloroethoxy)methane	ug/L	40	0.40	<40	<0.40
Bis(2-chloroethyl)ether	ug/L	40	0.40	<40	<0.40
Bis(2-chloroisopropyl)ether	ug/L	40	0.40	<40	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	200	2.0	<200	<2.0
Butylbenzyl phthalate	ug/L	40	0.40	<40	<0.40
Camphene	ug/L	40	0.40	<40	<0.40
Chrysene	ug/L	20	0.20	<20	<0.20
Cresols (total)	ug/L	100	1.0	160	<1.0
Dibenzo(a,h)anthracene	ug/L	20	0.20	<20	<0.20
Dibenzofuran	ug/L	20	0.20	<20	<0.20
Diethylphthalate	ug/L	20	0.20	<20	<0.20
Dimethylphthalate	ug/L	20	0.20	<20	<0.20
Di-n-butylphthalate	ug/L	200	2.0	<200	<2.0
Di-n-octylphthalate	ug/L	40	0.40	<40	<0.40
Diphenyl ether	ug/L	40	0.40	<40	<0.40
Diphenylamine	ug/L	40	0.40	<40	<0.40
Fluoranthene	ug/L	20	0.20	<20	<0.20
Fluorene	ug/L	20	0.20	<20	<0.20
Hexachlorobenzene	ug/L	4.0	0.040	<4.0	<0.040
Hexachlorobutadiene	ug/L	20	0.20	<20	<0.20
Hexachlorocyclopentadiene	ug/L	40	0.40	<40	<0.40
Hexachloroethane	ug/L	40	0.40	<40	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	20	0.20	<20	<0.20
Indole	ug/L	40	0.40	<40	<0.40
Isophorone	ug/L	40	0.40	<40	<0.40
Naphthalene	ug/L	20	0.40	<20	<0.40
Nitrobenzene	ug/L	40	0.20	<40	<0.20
N-Nitroso-di-n-propylamine	ug/L	40	0.40	<40	<0.40
Pentachlorophenol	ug/L	50	0.50	<50	<0.50
Perylene	ug/L	20	0.20	<20	<0.20
Phenanthrene	ug/L	20	0.20	<20	<0.20
Phenol	ug/L	50	0.50	<50	<0.50
Pyrene	ug/L	20	0.20	<20	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	0*	80
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	0*	90
Surrogate: Nitrobenzene d5	%	50-130	50-130	0*	96
Surrogate: p-Terphenyl d14	%	50-150	50-150	0*	77
Surrogate: Phenol d5	%	30-130	30-130	0*	58

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<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	0.10	0.10	1.56	1.47
Nonylphenol Monoethoxylates	ug/L	0.5	0.50	21.0	2.04
Nonylphenol Diethoxylates	ug/L	1.2	1.2	2.5	<1.2
Nonylphenol Triethoxylates	ug/L	2.0	2.0	6.2	<2.0
t-Octylphenol	ug/L	0.020	0.020	0.287	<0.020
t-Octylphenol Monoethoxylate	ug/L	0.10	0.10	0.97	0.11
t-Octylphenol Diethoxylate	ug/L	0.20	0.20	<0.20	0.34
t-Octylphenol Triethoxylate	ug/L	0.50	0.50	<0.50	<0.50
TOTAL TEQ (CCME)	ug/L			17	2.7
<b>PCB</b>					
Aroclor 1016	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1221	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1232	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1242	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1248	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1254	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1260	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1262	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1268	mg/L	0.000050	0.000050	<0.000050	<0.000050
Total PCBs	mg/L	0.000050	0.000050	<0.000050	<0.000050
Surrogate: Decachlorobiphenyl	%	50-150	50-150	80	107
<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	10	1.0	<10	<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
pp-DDT	ug/L	10	1.0	<10	<1.0
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	0*	77
Surrogate: d14-Terphenyl	%	50-150	50-150	0*	93

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<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
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	%	50-130	50-130	95	92
<b>Target Compounds by GC/MS</b>					
4,4'-Methylenebis(2-chloroaniline)	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dinitropyrene	mg/L	0.020	0.020	<0.020	<0.020
Octachlorostyrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 2-Fluorobiphenyl	%	40-130	40-130	76	56
Surrogate: p-Terphenyl d14	%	40-130	40-130	88	74
<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	1.0	1.0	<1.0	0.54
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	78	<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	0.77	<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	3.48	5.92
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	0.52
Ethyl Benzene	ug/L	0.50	0.50	1.55	<0.50
m+p-Xylenes	ug/L	1.0	1.0	6.6	<1.0
Methyl Ethyl Ketone	ug/L	20	20	<20	<20

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Methyl Isobutyl Ketone	ug/L	20	20	<20	<20
MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	1.93	<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	3.59	<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	3.5	5.9
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.5	1.5	8.5	<1.5
Surrogate: 1,2-Dichloroethane d4	%	50-150	50-150	101	101
Surrogate: Toluene-d8	%	70-130	70-130	90	97
Surrogate: 4-Bromofluorobenzene	%	50-150	50-150	98	125

**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  
 NR- not reported

*All parameters were analyzed by contract laboratory.*

*\*Surrogate diluted out: % recovery not available*

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2'nd Quarter Sampling	May 16, 2011			SEWPCC	
Parameter	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	mg/L	0.0010	0.0010	<0.0010	<0.0010
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0250	<0.0010
Tetraethyl Lead	ug/L	5.0	5.0	<5.0	<5.0
Total Oil and Grease	mg/L	1.0	1.0	52.5	<1.0
Toxaphene	mg/L	0.00010	0.00010	<0.00010	<0.00010
Tributyltin	ug/L	0.005	0.005	<0.005	<0.005
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: Tributyltin Chloride-D27	%	50-150	50-150	153	98
Surrogate: 1,2-Dichloroethane-d4	%	70-125	70-125	101	102
Surrogate: 4-Bromofluorobenzene	%	72-125	72-125	99	102
Surrogate: Dibromofloromethane	%	71-125	71-125	100	101
Surrogate: Toluene-d8	%	75-125	75-125	97	100
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00197	0.00158
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000154	0.000029
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0024	<0.0010
Cobalt (Co)-Total	mg/L	0.00020	0.00020	0.00063	0.00037
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.0908	0.00927
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00307	0.000435
Mercury (Hg)-Total	ng/L	1.0	1.0	95.9	3.9
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00696	0.00493
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0066	0.0053
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0025	0.0018
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.120	0.0376
<b>Dioxins and Furans</b>					
2378 TeCDD	pg/L	0.30	0.070	<0.30	<0.070
12378 PeCDD	pg/L	0.30	0.030	<0.30	<0.030
123478 HxCDD	pg/L	0.30	0.090	<0.30	0.317
123678 HxCDD	pg/L	0.40	0.10	<0.40	<0.10
123789 HxCDD	pg/L	0.40	0.10	<0.40	0.61
1234678 HpCDD	pg/L	0.40	0.10	7.91	1.67
OCDD	pg/L	0.90	0.30	57.6	21.1
Total TCDD	pg/L	0.30	0.070	<0.30	<0.070
Total PeCDD	pg/L	0.30	0.030	<0.30	<0.030
Total HxCDD	pg/L	0.40	0.100	<0.40	<0.100
Total HpCDD	pg/L	0.40	0.100	15.2	1.56
Total PCDDs	pg/L	0.90	0.300	72.8	22.7
2378 TeCDF	pg/L	0.20	0.030	<0.20	<0.030
12378 PeCDF	pg/L	0.10	0.020	<0.10	0.355
23478 PeCDF	pg/L	0.10	0.020	<0.10	<0.020
123478 HxCDF	pg/L	0.30	0.060	<0.30	0.653
123678 HxCDF	pg/L	0.20	0.050	<0.20	0.377
123789 HxCDF	pg/L	0.30	0.070	<0.30	0.760
234678 HxCDF	pg/L	0.20	0.060	<0.20	0.298
1234678 HpCDF	pg/L	0.30	0.080	2.77	0.904
1234789 HpCDF	pg/L	0.40	0.090	<0.40	0.428
OCDF	pg/L	0.40	0.070	6.32	1.77
Total TCDF	pg/L	0.20	0.030	<0.20	1.18
Total PeCDF	pg/L	0.10	0.020	<0.10	<0.020

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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Total HxCDF	pg/L	0.30	0.070	1.58	<0.070
Total HpCDF	pg/L	0.40	0.090	2.77	<0.090
Total PCDFs	pg/L	0.40	0.090	10.7	2.96
Total TEQ (ND=0) (WHO Calc)	pg/L			0.13	0.35
Total TEQ (ND=0.5DL) (WHO Calc)	pg/L			0.56	0.41
Total TEQ (ND=DL) (WHO Calc)	pg/L			0.99	0.47
Surrogate: 13C12 2378 TeCDD	%	25-164	25-164	82	80
Surrogate: 13C12 12378 PeCDD	%	25-181	25-181	110	117
Surrogate: 13C12 123478 HxCDD	%	32-141	32-141	76	78
Surrogate: 13C12 123678 HxCDD	%	28-130	28-130	70	69
Surrogate: 13C12 1234678 HpCDD	%	23-140	23-140	80	74
Surrogate: 13C12 OCDD	%	17-157	17-157	82	75
Surrogate: 13C12 2378 TeCDF	%	24-169	24-169	79	77
Surrogate: 13C12 12378 PeCDF	%	25-185	25-185	80	89
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	91	94
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	64	66
Surrogate: 13C12 123678 HxCDF	%	26-123	26-123	72	70
Surrogate: 13C12 234678 HxCDF	%	28-136	28-136	71	72
Surrogate: 13C12 123789 HxCDF	%	29-147	29-147	73	73
Surrogate: 13C12 1234678 HpCDF	%	28-143	28-143	72	68
Surrogate: 13C12 1234789 HpCDF	%	26-138	26-138	84	77
Surrogate: 37C14 2378 TeCDD	%	35-197	35-197	81	83
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	40	0.40	<40	<0.40
1,2,4-Trichlorobenzene	ug/L	40	0.40	<40	<0.40
1,2-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1,3-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1,4-Dichlorobenzene	ug/L	40	0.40	<40	<0.40
1-Chloronaphthalene	ug/L	40	0.40	<40	<0.40
1-Methylnaphthalene	ug/L	40	0.40	<40	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,4-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	50	0.50	<50	<0.50
2,3,5-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4,5-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4,6-Trichlorophenol	ug/L	50	0.50	<50	<0.50
2,4-Dichlorophenol	ug/L	30	0.30	<30	<0.30
2,4-Dimethylphenol	ug/L	50	0.50	<50	<0.50
2,4-Dinitrophenol	ug/L	100	1.0	<100	<1.0
2,4-Dinitrotoluene	ug/L	40	0.40	<40	<0.40
2,6-Dichlorophenol	ug/L	50	0.50	<50	<0.50
2,6-Dinitrotoluene	ug/L	40	0.40	<40	<0.40
2-Chloronaphthalene	ug/L	40	0.40	<40	<0.40
2-Chlorophenol	ug/L	30	0.30	<30	<0.30
2-Methylnaphthalene	ug/L	40	0.40	<40	<0.40
2-Methylphenol	ug/L	50	0.50	<50	<0.50
2-Nitrophenol	ug/L	50	0.50	<50	<0.50
3&4-Methylphenol	ug/L	50	0.50	134	<0.50
3,3'-Dichlorobenzidine	ug/L	40	0.40	<40	<0.40
4,6-Dinitro-2-methylphenol	ug/L	200	2.0	<200	<2.0
4-Bromophenyl phenyl ether	ug/L	40	0.40	<40	<0.40



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	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
4-Chloro-3-methylphenol	ug/L	50	0.50	<50	<0.50
4-Chloroaniline	ug/L	40	0.40	<40	<0.40
4-Chlorophenyl phenyl ether	ug/L	40	0.40	<40	<0.40
4-Nitrophenol	ug/L	50	0.50	<50	<0.50
5-Nitroacenaphthene	ug/L	40	0.40	<40	<0.40
Acenaphthene	ug/L	20	0.20	<20	<0.20
Acenaphthylene	ug/L	20	0.20	<20	<0.20
Anthracene	ug/L	20	0.20	<20	<0.20
Benzo(a)anthracene	ug/L	20	0.20	<20	<0.20
Benzo(a)pyrene	ug/L	5.0	0.050	<5.0	<0.050
Benzo(b)fluoranthene	ug/L	20	0.20	<20	<0.20
Benzo(ghi)perylene	ug/L	20	0.20	<20	<0.20
Benzo(k)fluoranthene	ug/L	20	0.20	<20	<0.20
Biphenyl	ug/L	40	0.40	<40	<0.40
Bis(2-chloroethoxy)methane	ug/L	40	0.40	<40	<0.40
Bis(2-chloroethyl)ether	ug/L	40	0.40	<40	<0.40
Bis(2-chloroisopropyl)ether	ug/L	40	0.40	<40	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	200	2.0	<200	<2.0
Butylbenzyl phthalate	ug/L	40	0.40	<40	<0.40
Camphene	ug/L	40	0.40	<40	<0.40
Chrysene	ug/L	20	0.20	<20	<0.20
Cresols (total)	ug/L	100	1.0	130	<1.0
Dibenzo(a,h)anthracene	ug/L	20	0.20	<20	<0.20
Dibenzofuran	ug/L	20	0.20	<20	<0.20
Diethylphthalate	ug/L	20	0.20	<20	<0.20
Dimethylphthalate	ug/L	20	0.20	<20	<0.20
Di-n-butylphthalate	ug/L	200	2.0	<200	<2.0
Di-n-octylphthalate	ug/L	40	0.40	<40	<0.40
Diphenyl ether	ug/L	40	0.40	<40	<0.40
Diphenylamine	ug/L	40	0.40	<40	<0.40
Fluoranthene	ug/L	20	0.20	<20	<0.20
Fluorene	ug/L	20	0.20	<20	<0.20
Hexachlorobenzene	ug/L	4.0	0.040	<4.0	<0.040
Hexachlorobutadiene	ug/L	20	0.20	<20	<0.20
Hexachlorocyclopentadiene	ug/L	40	0.40	<40	<0.40
Hexachloroethane	ug/L	40	0.40	<40	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	20	0.20	<20	<0.20
Indole	ug/L	40	0.40	51	<0.40
Isophorone	ug/L	40	0.40	<40	<0.40
Naphthalene	ug/L	20	0.40	<20	<0.40
Nitrobenzene	ug/L	40	0.20	<40	<0.20
N-Nitroso-di-n-propylamine	ug/L	40	0.40	<40	<0.40
Pentachlorophenol	ug/L	50	0.50	<50	<0.50
Perylene	ug/L	20	0.20	<20	<0.20
Phenanthrene	ug/L	20	0.20	<20	<0.20
Phenol	ug/L	50	0.50	<50	<0.50
Pyrene	ug/L	20	0.20	<20	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	0*	66
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	0*	103
Surrogate: Nitrobenzene d5	%	50-130	50-130	0*	78
Surrogate: p-Terphenyl d14	%	50-150	50-150	0*	76
Surrogate: Phenol d5	%	30-130	30-130	0*	34

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2'nd Quarter Sampling Parameter	May 16, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Low Level Nonylphenols and Ethoxylates</b>					
Nonylphenols	ug/L	0.10	0.20	2.1	0.92
Nonylphenol Monoethoxylates	ug/L	0.50	0.50	<0.50	<0.50
Nonylphenol Diethoxylates	ug/L	1.2	1.2	<1.2	<1.2
t-Octylphenol	ug/L	0.02	0.020	0.28	0.076
t-Octylphenol Monoethoxylate	ug/L	0.10	0.10	0.15	<0.10
t-Octylphenol Diethoxylate	ug/L	0.20	0.20	<0.20	<0.20
t-Octylphenol Triethoxylate	ug/L	0.50	0.50	<0.50	<0.50
TOTAL TEQ (CCME)	ug/L			2.5	1.0
<b>PCB</b>					
Aroclor 1016	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1221	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1232	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1242	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1248	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1254	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1260	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1262	mg/L	0.000050	0.000050	<0.000050	<0.000050
Aroclor 1268	mg/L	0.000050	0.000050	<0.000050	<0.000050
Total PCBs	mg/L	0.000050	0.000050	<0.000050	<0.000050
Surrogate: Decachlorobiphenyl	%	50-150	50-150	68	87
<b>Pesticides, Organochlorine</b>					
a-chlordane	ug/L	1.0	0.10	<1.0	<0.10
Aldrin	ug/L	1.0	0.10	<1.0	<0.10
alpha-BHC	ug/L	1.0	0.10	<1.0	<0.10
alpha-Endosulfan	ug/L	1.0	0.10	<1.0	<0.10
beta-BHC	ug/L	1.0	0.10	<1.0	<0.10
beta-Endosulfan	ug/L	1.0	0.10	<1.0	<0.10
delta-BHC	ug/L	1.0	0.10	<1.0	<0.10
Dieldrin	ug/L	1.0	0.10	<1.0	<0.10
Endosulfan Sulfate	ug/L	1.0	0.15	<1.0	<0.15
Endrin	ug/L	1.0	0.10	<1.0	<0.10
Endrin Aldehyde	ug/L	1.0	0.10	<1.0	<0.10
g-chlordane	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
o,p-DDE	ug/L	3.0	0.10	<3.0	<0.10
op-DDD	ug/L	1.0	0.10	<1.0	<0.10
op-DDT	ug/L	1.0	0.10	<1.0	<0.10
Oxychlordane	ug/L	1.0	0.10	<1.0	<0.10
pp-DDD	ug/L	1.0	0.10	<1.0	<0.10
pp-DDE	ug/L	1.0	0.10	<1.0	<0.10
pp-DDT	ug/L	1.0	0.10	<1.0	<0.10
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	97	80
Surrogate: d14-Terphenyl	%	50-150	50-150	103	92

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2'nd Quarter Sampling Parameter	May 16, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<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	<0.50
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	<0.50
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	%	50-130	50-130	85	95
<b>Target Compounds by GC/MS</b>					
4,4'-Methylenebis(2-chloroaniline)	mg/L	0.00050	0.00050	<0.00050	<0.00050
Dinitropyrene	mg/L	0.020	0.020	<0.020	<0.020
Octachlorostyrene	mg/L	0.00050	0.00050	<0.00050	<0.00050
Surrogate: 2-Fluorobiphenyl	%	40-130	40-130	118	90
Surrogate: p-Terphenyl d14	%	40-130	40-130	86	92
<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	0.74	<0.50
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	191	<20
Benzene	ug/L	0.50	0.50	<0.50	<0.50
Bromodichloromethane	ug/L	0.50	0.50	0.53	<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	4.25	2.9
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	<0.50
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

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2'nd Quarter Sampling Parameter	May 16, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Methyl Ethyl Ketone	ug/L	20	20	<20	<20
Methyl Isobutyl Ketone	ug/L	20	20	<20	<20
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	1.50	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	0.92	0.58
Toluene	ug/L	0.50	0.50	2.33	<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	4.8	2.9
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.50	1.5	<1.50	<1.5
Surrogate: 1,2-Dichloroethane d4	%	50-150	50-150	151	127
Surrogate: Toluene-d8	%	70-130	70-130	102	104
Surrogate: 4-Bromofluorobenzene	%	50-150	50-150	90	106

**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

NR- not reported

*All parameters were analyzed by contract laboratory.*

*\*Surrogate diluted out: % recovery not available*

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3'rd Quarter Sampling Parameter	August 9, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Miscellaneous</b>					
Chromium, Hexavalent	mg/L	0.0010	0.0010	0.0034	0.0014
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0560	<0.0010
Tetraethyl Lead	ug/L	0.0070	0.00070	<0.0070	<0.00070
Total Oil and Grease	mg/L	1.0	1.0	67.8	<1.0
Toxaphene	mg/L	0.03	0.0015	<0.03	<0.0015
Tributyltin	ug/L	0.005	0.005	0.0206	<0.005
Trout Bioassay	Pass/Fail			NA	Fail
Surrogate: Tributyltin Chloride-D27	%	50-150	50-150	317	238
<b>Total Metals by ICP-MS</b>					
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00122	0.00102
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000111	0.000019
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0024	0.0010
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.0576	0.0116
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.00222	0.000497
Mercury (Hg)-Total	ng/L	1.0	1.0	191	5.8
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00424	0.00454
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0064	0.0143
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0010	<0.0010
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.120	0.0271
<b>Dioxins and Furans</b>					
2378 TeCDD	pg/L	0.76	0.28	<0.76	<0.28
12378 PeCDD	pg/L	1.90	2.60	<1.90	<2.60
123478 HxCDD	pg/L	1.20	0.92	<1.20	<0.92
123678 HxCDD	pg/L	1.30	0.98	1.50	<0.98
123789 HxCDD	pg/L	1.30	0.95	<1.30	<0.95
1234678 HpCDD	pg/L	2.60	1.60	21.4	<1.60
OCDD	pg/L	14.0	6.80	138.0	9.50
Total TCDD	pg/L	0.76	0.28	<0.76	<0.28
Total PeCDD	pg/L	1.90	2.60	26.3	<2.60
Total HxCDD	pg/L	1.30	0.98	1.50	<0.98
Total HpCDD	pg/L	2.60	1.60	40.8	<1.60
2378 TeCDF	pg/L	0.71	0.48	<0.71	<0.48
12378 PeCDF	pg/L	1.30	1.60	1.80	<1.60
23478 PeCDF	pg/L	1.20	1.70	3.00	<1.70
123478 HxCDF	pg/L	1.50	0.82	<1.50	<0.82
123678 HxCDF	pg/L	1.50	0.85	2.20	1.00
123789 HxCDF	pg/L	1.60	0.89	<1.60	<0.89
234678 HxCDF	pg/L	1.90	1.10	<1.90	<1.10
1234678 HpCDF	pg/L	2.10	0.75	7.40	<0.75
1234789 HpCDF	pg/L	2.90	1.00	<2.90	<1.00
OCDF	pg/L	8.70	3.90	10.2	<3.90
Total TCDF	pg/L	0.71	0.48	<0.71	<0.48
Total PeCDF	pg/L	1.30	1.70	7.20	<1.70
Total HxCDF	pg/L	1.90	1.10	2.20	<1.10
Total HpCDF	pg/L	2.90	1.00	<2.90	<1.00
Total TEQ (ND=0) (WHO Calc)	pg/L			1.58	0.00284
Total TEQ (ND=0.5DL) (WHO Calc)	pg/L			3.62	2.37
Total TEQ (ND=DL) (WHO Calc)	pg/L			5.17	4.19

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3'rd Quarter Sampling Parameter	August 9, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Surrogate: 13C12 2378 TeCDD	%	20-175	20-175	45	82
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	65	75
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	54	63
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	55	64
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	41	54
Surrogate: 13C12 OCDD	%	13-157	13-157	27	44
Surrogate: 13C12 2378 TeCDF	%	22-169	22-169	38	82
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	71	93
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	69	84
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	60	70
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	60	68
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	56	67
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	56	65
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	41	55
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	41	55
Surrogate: 37C14 2378 TeCDD	%	31-197	31-197	54	81
<b>EPA 8270 Extractables</b>					
1,2,3-Trichlorobenzene	ug/L	4	0.40	<4	<0.40
1,2,4-Trichlorobenzene	ug/L	4	0.40	<4	<0.40
1,2-Dichlorobenzene	ug/L	4	0.40	<4	<0.40
1,3-Dichlorobenzene	ug/L	4	0.40	<4	<0.40
1,4-Dichlorobenzene	ug/L	4	0.40	<4	<0.40
1-Chloronaphthalene	ug/L	4	0.40	<4	<0.40
1-Methylnaphthalene	ug/L	4	0.40	<4	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5	0.50	<5	<0.50
2,3,4,6-Tetrachlorophenol	ug/L	5	0.50	<5	<0.50
2,3,4-Trichlorophenol	ug/L	5	0.50	<5	<0.50
2,3,5,6-Tetrachlorophenol	ug/L	5	0.50	<5	<0.50
2,3,5-Trichlorophenol	ug/L	5	0.50	<5	<0.50
2,4,5-Trichlorophenol	ug/L	5	0.50	<5	<0.50
2,4,6-Trichlorophenol	ug/L	5	0.50	<5	<0.50
2,4-Dichlorophenol	ug/L	3	0.30	<3	<0.30
2,4-Dimethylphenol	ug/L	5	0.50	<5	<0.50
2,4-Dinitrophenol	ug/L	10	1.0	<10	<1.0
2,4-Dinitrotoluene	ug/L	4	0.40	<4	<0.40
2,6-Dichlorophenol	ug/L	5	0.50	<5	<0.50
2,6-Dinitrotoluene	ug/L	4	0.40	<4	<0.40
2-Chloronaphthalene	ug/L	4	0.40	<4	<0.40
2-Chlorophenol	ug/L	3	0.30	<3	<0.30
2-Methylnaphthalene	ug/L	4	0.40	<4	<0.40
2-Methylphenol	ug/L	5	0.50	<5	<0.50
2-Nitrophenol	ug/L	5	0.50	<5	<0.50
3&4-Methylphenol	ug/L	5	0.50	86.1	<0.50
3,3'-Dichlorobenzidine	ug/L	4	0.40	<4	<0.40
4,6-Dinitro-2-methylphenol	ug/L	20	2.0	<20	<2.0
4-Bromophenyl phenyl ether	ug/L	4	0.40	<4	<0.40
4-Chloro-3-methylphenol	ug/L	5	0.50	<5	<0.50
4-Chloroaniline	ug/L	4	0.40	<4	<0.40
4-Chlorophenyl phenyl ether	ug/L	4	0.40	<4	<0.40
4-Nitrophenol	ug/L	5	0.50	<5	<0.50
5-Nitroacenaphthene	ug/L	4	0.40	<4	<0.40

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3'rd Quarter Sampling Parameter	August 9, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Acenaphthene	ug/L	2	0.20	<2	<0.20
Acenaphthylene	ug/L	2	0.20	<2	<0.20
Anthracene	ug/L	2	0.20	<2	<0.20
Benzo(a)anthracene	ug/L	2	0.20	<2	<0.20
Benzo(a)pyrene	ug/L	0.5	0.050	<0.5	<0.050
Benzo(b)fluoranthene	ug/L	2	0.20	<2	<0.20
Benzo(ghi)perylene	ug/L	2	0.20	<2	<0.20
Benzo(k)fluoranthene	ug/L	2	0.20	<2	<0.20
Biphenyl	ug/L	4	0.40	<4	<0.40
Bis(2-chloroethoxy)methane	ug/L	4	0.40	<4	<0.40
Bis(2-chloroethyl)ether	ug/L	4	0.40	<4	<0.40
Bis(2-chloroisopropyl)ether	ug/L	4	0.40	<4	<0.40
Bis(2-ethylhexyl)phthalate	ug/L	20	2.0	<20	<2.0
Butylbenzyl phthalate	ug/L	4	0.40	<4	<0.40
Camphene	ug/L	4	0.40	<4	<0.40
Chrysene	ug/L	2	0.20	<2	<0.20
Cresols (total)	ug/L	10	1.0	86	<1.0
Dibenzo(a,h)anthracene	ug/L	2	0.20	<2	<0.20
Dibenzofuran	ug/L	2	0.20	<2	<0.20
Diethylphthalate	ug/L	2	0.20	3.4	<0.20
Dimethylphthalate	ug/L	2	0.20	<2	<0.20
Di-n-butylphthalate	ug/L	20	2.0	<20	<2.0
Di-n-octylphthalate	ug/L	4	0.40	<4	<0.40
Diphenyl ether	ug/L	4	0.40	<4	<0.40
Diphenylamine	ug/L	4	0.40	<4	<0.40
Fluoranthene	ug/L	2	0.20	<2	<0.20
Fluorene	ug/L	2	0.20	<2	<0.20
Hexachlorobenzene	ug/L	0.4	0.040	<0.4	<0.040
Hexachlorobutadiene	ug/L	2	0.20	<2	<0.20
Hexachlorocyclopentadiene	ug/L	4	0.40	<4	<0.40
Hexachloroethane	ug/L	4	0.40	<4	<0.40
Indeno(1,2,3-cd)pyrene	ug/L	2	0.20	<2	<0.20
Indole	ug/L	4	0.40	20.9	<0.40
Isophorone	ug/L	4	0.40	<4	<0.40
Naphthalene	ug/L	2	0.20	<2	<0.20
Nitrobenzene	ug/L	4	0.40	<4	<0.40
N-Nitroso-di-n-propylamine	ug/L	4	0.40	<4	<0.40
Pentachlorophenol	ug/L	5	0.50	<5	<0.50
Perylene	ug/L	2	0.20	<2	<0.20
Phenanthrene	ug/L	2	0.20	<2	<0.20
Phenol	ug/L	5	0.50	27.3	<0.50
Pyrene	ug/L	2	0.20	<2	<0.20
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	272	82
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	147	113
Surrogate: Nitrobenzene d5	%	50-130	50-130	128	84
Surrogate: p-Terphenyl d14	%	50-150	50-150	67	131
Surrogate: Phenol d5	%	30-130	30-130	76	49

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3'rd Quarter Sampling	August 9, 2011			SEWPCC	
Parameter	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	<0.10	0.31
t-Octylphenol	ug/L	1.0	1.0	<1.0	<1.0
t-Octylphenol Monoethoxylate	ug/L	2.0	2.0	<2.0	<2.0
t-Octylphenol Diethoxylate	ug/L	0.10	0.10	<0.10	0.17
<b>PCB</b>					
Aroclor 1016	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1221	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1232	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1242	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1248	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1254	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1260	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1262	mg/L	0.000100	0.000100	<0.000100	<0.000100
Aroclor 1268	mg/L	0.000100	0.000100	<0.000100	<0.000100
Total PCBs	mg/L	0.000300	0.000300	<0.000300	<0.000300
Surrogate: Decachlorobiphenyl	%	50-150	50-150	52	77
<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	10	1.0	<10	<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
pp-DDT	ug/L	10	1.0	<10	<1.0
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	0*	57
Surrogate: d14-Terphenyl	%	50-150	50-150	0*	71



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3'rd Quarter Sampling Parameter	August 9, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
<b>Phenoxyacid Herbicides by GC/MS</b>					
2,4,5-T	ug/L	5.0	5.0	<5.0	<5.0
2,4,5-TP	ug/L	5.0	5.0	<5.0	<5.0
2,4-D	ug/L	5.0	5.0	<5.0	<5.0
Bromoxynil	ug/L	5.0	5.0	<5.0	<5.0
Dicamba	ug/L	5.0	5.0	<5.0	<5.0
Dinoseb	ug/L	5.0	5.0	<5.0	<5.0
MCPA	ug/L	5.0	5.0	<5.0	<5.0
Mecoprop	ug/L	5.0	5.0	<5.0	<5.0
Picloram	ug/L	5.0	5.0	<5.0	<5.0
Surrogate: 2,4-Dichlorophenylacetic Acid	%	50-130	50-130	85	83
<b>Target Compounds by GC/MS</b>					
Octachlorostyrene	mg/L	0.00050	0.000050	<0.00050	<0.000050
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	76	77
Surrogate: p-Terphenyl d14	%	50-150	50-150	88	85
<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	0.80	0.62
2-Hexanone	ug/L	20	20	<20	<20
Acetone	ug/L	20	20	93	<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	1.16	<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	7.37	4.99
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	17.6	1.84
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
MTBE	ug/L	0.50	0.50	<0.50	<0.50
o-Xylene	ug/L	0.50	0.50	<0.50	<0.50

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3'rd Quarter Sampling Parameter	August 9, 2011			SEWPCC	
	Units	MDL-Raw	MDL-Final	Raw Sewage Grab	Final Effluent Grab
Styrene	ug/L	0.50	0.50	0.79	<0.50
Tetrachloroethylene	ug/L	0.50	0.50	<0.50	<0.50
Toluene	ug/L	0.50	0.50	4.07	0.92
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	7.4	5
Vinyl chloride	ug/L	0.50	0.50	<0.50	<0.50
Xylenes (Total)	ug/L	1.50	1.5	<1.50	<1.5
Surrogate: 1,2-Dichloroethane d4	%	50-150	50-150	128	88
Surrogate: Toluene-d8	%	70-130	70-130	106	101
Surrogate: 4-Bromofluorobenzene	%	50-150	50-150	92	108

**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

NR- not reported

*All parameters were analyzed by contract laboratory.*

*\*Surrogate diluted out: % recovery not available*

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4'th Quarter Sampling Parameter	November 1, 2011				SEWPCC		
	Units	MDL-Raw1	MDL-Raw2	MDL-Final	Raw Sewage Grab 1	Raw Sewage Grab 2	Final Effluent Grab
<b>Miscellaneous</b>							
Chromium, Hexavalent	mg/L	0.0010	0.0010	0.0010	<0.0010	<0.0010	<0.0010
Phenols (4AAP)	mg/L	0.0010	0.0010	0.0010	0.0580	0.0680	0.0040
Tetraethyl Lead	ug/L	0.0070	0.0070	0.0070	<0.0070	<0.0070	<0.0070
Total Oil and Grease	mg/L	2.0	2.0	2.0	54	45	8.6
Toxaphene	mg/L	0.10	0.110	0.004	<0.10	<0.110	<0.004
Tributyltin	ug/L	0.0050	0.0050	0.0050	<0.0050	<0.0050	<0.0050
Trout Bioassay	Pass/Fail				NA	NA	Fail
Surrogate: Tributyltin Chloride-D27	%	50-150	50-150	50-150	41.1	52.4	51
<b>Total Metals by ICP-MS</b>							
Arsenic (As)-Total	mg/L	0.00020	0.00020	0.00020	0.0016	0.00177	0.00133
Cadmium (Cd)-Total	mg/L	0.000010	0.000010	0.000010	0.000226	0.00013	0.000238
Chromium (Cr)-Total	mg/L	0.0010	0.0010	0.0010	0.0076	0.0026	0.0047
Copper (Cu)-Total	mg/L	0.00020	0.00020	0.00020	0.115	0.115	0.16
Lead (Pb)-Total	mg/L	0.000090	0.000090	0.000090	0.00956	0.00308	0.00365
Mercury (Hg)-Total	ng/L	1.0	1.0	10.0	108	155	120
Molybdenum (Mo)-Total	mg/L	0.00020	0.00020	0.00020	0.0108	0.00861	0.0096
Nickel (Ni)-Total	mg/L	0.0020	0.0020	0.0020	0.0142	0.0084	0.0118
Selenium (Se)-Total	mg/L	0.0010	0.0010	0.0010	0.0014	0.0095	0.0015
Zinc (Zn)-Total	mg/L	0.0050	0.0050	0.0050	0.196	0.139	0.135
<b>Dioxins and Furans</b>							
2378 TeCDD	pg/L	1.20	0.79	0.69	<1.20	<0.79	<0.69
12378 PeCDD	pg/L	2.70	1.90	1.90	<2.70	<1.90	<1.90
123478 HxCDD	pg/L	1.70	0.92	1.20	<1.70	<0.92	<1.20
123678 HxCDD	pg/L	1.90	0.93	0.72	<1.90	<0.93	1.4
123789 HxCDD	pg/L	1.90	0.94	1.20	<1.90	<0.94	<1.20
1234678 HpCDD	pg/L	3.30	1.50	0.95	19.8	12.2	31.8
OCDD	pg/L	8.20	4.50	3.20	131.0	81.7	197.0
Total TCDD	pg/L	1.20	0.79	0.69	<1.20	<0.79	14.5
Total PeCDD	pg/L	2.70	1.90	1.40	3.3	20.8	27.8
Total HxCDD	pg/L	1.90	0.94	1.20	<1.90	1.97	<1.20
Total HpCDD	pg/L	3.30	1.50	0.95	19.8	23.3	60.4
2378 TeCDF	pg/L	0.85	0.53	0.50	<0.85	<0.53	<0.50
12378 PeCDF	pg/L	1.50	1.00	0.92	<1.50	<1.00	<0.92
23478 PeCDF	pg/L	1.40	0.91	0.91	<1.40	<0.91	<0.91
123478 HxCDF	pg/L	1.40	0.86	1.00	<1.40	<0.86	<1.00
123678 HxCDF	pg/L	1.40	0.88	1.10	<1.40	<0.88	<1.10
123789 HxCDF	pg/L	1.70	1.00	1.30	<1.70	<1.00	<1.30
234678 HxCDF	pg/L	1.40	0.91	1.10	<1.40	<0.91	<1.10
1234678 HpCDF	pg/L	1.80	0.81	0.56	2.70	1.50	3.7
1234789 HpCDF	pg/L	2.70	1.10	1.80	<2.70	<1.10	<1.80
OCDF	pg/L	4.90	2.80	1.60	9.80	5.10	13
Total TCDF	pg/L	0.85	0.53	0.50	<0.85	<0.53	<0.50
Total PeCDF	pg/L	1.50	1.00	0.92	<1.50	<1.00	1.31
Total HxCDF	pg/L	1.70	1.00	1.30	<1.70	<1.00	<1.30
Total HpCDF	pg/L	2.70	1.10	0.79	<2.70	<1.10	3.7
Total TEQ (ND=0) (WHO Calc)	pg/L				0.237	0.148	0.377
Total TEQ (ND=0.5DL) (WHO Calc)	pg/L				3.21	2.57	2.41
Total TEQ (ND=DL) (WHO Calc)	pg/L				5.88	3.86	4.21
Surrogate: 13C12 2378 TeCDD	%	20-175	20-175	20-175	73	72	88
Surrogate: 13C12 12378 PeCDD	%	21-227	21-227	21-227	63	64	76
Surrogate: 13C12 123478 HxCDD	%	21-193	21-193	21-193	50	49	66
Surrogate: 13C12 123678 HxCDD	%	25-163	25-163	25-163	51	53	64
Surrogate: 13C12 1234678 HpCDD	%	23-166	23-166	23-166	52	58	71
Surrogate: 13C12 OCDD	%	13-157	13-157	13-157	59	72	92
Surrogate: 13C12 2378 TeCDF	%	22-169	22-169	22-169	72	74	86
Surrogate: 13C12 12378 PeCDF	%	24-185	24-185	24-185	67	64	85
Surrogate: 13C12 23478 PeCDF	%	21-178	21-178	21-178	67	65	80
Surrogate: 13C12 123478 HxCDF	%	26-152	26-152	26-152	53	52	67
Surrogate: 13C12 123678 HxCDF	%	21-159	21-159	21-159	48	49	64
Surrogate: 13C12 234678 HxCDF	%	17-205	17-205	17-205	48	48	64
Surrogate: 13C12 123789 HxCDF	%	28-136	28-136	28-136	49	50	65
Surrogate: 13C12 1234678 HpCDF	%	21-158	21-158	21-158	56	59	75
Surrogate: 13C12 1234789 HpCDF	%	20-186	20-186	20-186	49	57	70
Surrogate: 37C14 2378 TeCDD	%	31-197	31-197	31-197	82	78	80

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

4 <sup>th</sup> Quarter Sampling Parameter	November 1, 2011			SEWPCC			
	Units	MDL-Raw1	MDL-Raw2	MDL-Final	Raw Sewage Grab 1	Raw Sewage Grab 2	Final Effluent Grab
<b>EPA 8270 Extractables</b>							
1,2,3-Trichlorobenzene	ug/L	4	4	4	<4	<4	<4
1,2,4-Trichlorobenzene	ug/L	4	4	4	<4	<4	<4
1,2-Dichlorobenzene	ug/L	4	4	4	<4	<4	<4
1,3-Dichlorobenzene	ug/L	4	4	4	<4	<4	<4
1,4-Dichlorobenzene	ug/L	4	4	4	<4	<4	<4
1-Chloronaphthalene	ug/L	4	4	4	<4	<4	<4
1-Methylnaphthalene	ug/L	4	4	0.40	<4	<4	<0.40
2,3,4,5-Tetrachlorophenol	ug/L	5	5	5	<5	<5	<5
2,3,4,6-Tetrachlorophenol	ug/L	5	5	5	<5	<5	<5
2,3,4-Trichlorophenol	ug/L	5	5	5	<5	<5	<5
2,3,5,6-Tetrachlorophenol	ug/L	5	5	5	<5	<5	<5
2,3,5-Trichlorophenol	ug/L	5	5	5	<5	<5	<5
2,4,5-Trichlorophenol	ug/L	5	5	5	<5	<5	<5
2,4,6-Trichlorophenol	ug/L	5	5	5	<5	<5	<5
2,4-Dichlorophenol	ug/L	3	3	3	<3	<3	<3
2,4-Dimethylphenol	ug/L	5	5	5	<5	<5	<5
2,4-Dinitrophenol	ug/L	10	10	10	<10	<10	<10
2,4-Dinitrotoluene	ug/L	4	4	4	<4	<4	<4
2,6-Dichlorophenol	ug/L	5	5	5	<5	<5	<5
2,6-Dinitrotoluene	ug/L	4	4	4	<4	<4	<4
2-Chloronaphthalene	ug/L	4	4	4	<4	<4	<4
2-Chlorophenol	ug/L	3	3	3	<3	<3	<3
2-Methylnaphthalene	ug/L	4	4	0.40	<4	<4	<0.40
2-Methylphenol	ug/L	5	5	5	<5	<5	<5
2-Nitrophenol	ug/L	5	5	5	<5	<5	<5
3&4-Methylphenol	ug/L	5	5	0.5	152	181	46.6
3,3'-Dichlorobenzidine	ug/L	4	4	0.40	<4	<4	<0.40
4,6-Dinitro-2-methylphenol	ug/L	20	20	20	<20	<20	<20
4-Bromophenyl phenyl ether	ug/L	4	4	4	<4	<4	<4
4-Chloro-3-methylphenol	ug/L	5	5	5	<5	<5	<5
4-Chloroaniline	ug/L	4	4	4	<4	<4	<4
4-Chlorophenyl phenyl ether	ug/L	4	4	4	<4	<4	<4
4-Nitrophenol	ug/L	5	5	5	<5	<5	<5
5-Nitroacenaphthene	ug/L	4	4	4	<4	<4	<4
Acenaphthene	ug/L	2	2	0.20	<2	<2	<0.20
Acenaphthylene	ug/L	2	2	0.20	<2	<2	<0.20
Anthracene	ug/L	2	2	0.20	<2	<2	<0.20
Benzo(a)anthracene	ug/L	2	2	0.20	<2	<2	<0.20
Benzo(a)pyrene	ug/L	0.5	0.5	0.050	<0.5	<0.5	<0.050
Benzo(b)fluoranthene	ug/L	2	2	0.20	<2	<2	<0.20
Benzo(ghi)perylene	ug/L	2	2	0.20	<2	<2	<0.20
Benzo(k)fluoranthene	ug/L	2	2	0.20	<2	<2	<0.20
Biphenyl	ug/L	4	4	4	<4	<4	<4
Bis(2-chloroethoxy)methane	ug/L	4	4	4	<4	<4	<4
Bis(2-chloroethyl)ether	ug/L	4	4	4	<4	<4	<4
Bis(2-chloroisopropyl)ether	ug/L	4	4	4	<4	<4	<4
Bis(2-ethylhexyl)phthalate	ug/L	200	20	20	<200	<20	<20
Butylbenzyl phthalate	ug/L	40	4	4	<40	<4	<4
Camphene	ug/L	4	4	4	<4	<4	<4
Chrysene	ug/L	2	2	0.20	<2	<2	<0.20
Cresols (total)	ug/L	10	10	1	152	181	47
Dibenzo(a,h)anthracene	ug/L	2	2	0.20	<2	<2	<0.20
Dibenzofuran	ug/L	2	2	2	<2	<2	<2
Diethylphthalate	ug/L	2	2	2	3.6	4.8	<2
Dimethylphthalate	ug/L	2	2	2	<2	<2	<2
Di-n-butylphthalate	ug/L	20	20	20	<20	<20	<20
Di-n-octylphthalate	ug/L	4	4	4	<4	<4	<4
Diphenyl ether	ug/L	4	4	4	<4	<4	<4
Diphenylamine	ug/L	4	4	4	<4	<4	<4
Fluoranthene	ug/L	2	2	0.20	<2	<2	<0.20
Fluorene	ug/L	2	2	0.20	<2	<2	<0.20
Hexachlorobenzene	ug/L	0.4	0.4	0.040	<0.4	<0.4	<0.040
Hexachlorobutadiene	ug/L	2	2	2	<2	<2	<2
Hexachlorocyclopentadiene	ug/L	4	4	4	<4	<4	<4
Hexachloroethane	ug/L	4	4	4	<4	<4	<4

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

4'th Quarter Sampling	November 1, 2011				SEWPCC			
	Parameter	Units	MDL-Raw1	MDL-Raw2	MDL-Final	Raw Sewage Grab 1	Raw Sewage Grab 2	Final Effluent Grab
Indeno(1,2,3-cd)pyrene	ug/L	2	2	0.25	<2	<2	<0.25	
Indole	ug/L	4	4	4	38.7	53.7	28.3	
Isophorone	ug/L	4	4	4	<4	<4	<4	
Naphthalene	ug/L	2	2	0.20	<2	<2	<0.20	
Nitrobenzene	ug/L	4	4	4	<4	<4	<4	
N-Nitroso-di-n-propylamine	ug/L	4	4	4	<4	<4	<4	
Pentachlorophenol	ug/L	5	5	5	<5	<5	<5	
Perylene	ug/L	2	2	2	<2	<2	<2	
Phenanthrene	ug/L	2	2	0.20	<2	<2	<0.20	
Phenol	ug/L	5	5	5	31.4	35.9	6.9	
Pyrene	ug/L	2	2	0.20	<2	<2	<0.20	
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	30-130	92	112	53.7	
Surrogate: 2,4,6-Tribromophenol	%	40-150	40-150	40-150	139	112	73.9	
Surrogate: Nitrobenzene d5	%	50-130	50-130	50-130	98	88	77.3	
Surrogate: p-Terphenyl d14	%	50-150	50-150	50-150	89	126	44.4	
Surrogate: Phenol d5	%	30-130	30-130	30-130	65	52	40.9	
<b>Low Level Nonylphenols and Ethoxylates</b>								
Nonylphenols	ug/L	5.0	5.0	5.0	<5.0	<5.0	<5.0	
Nonylphenol Monoethoxylates	ug/L	10	10	10	<10	<10	<10	
Nonylphenol Diethoxylates	ug/L	0.5	0.5	0.5	<0.5	<0.5	<0.5	
t-Octylphenol	ug/L	5.0	5.0	5.0	<5.0	<5.0	<5.0	
t-Octylphenol Monoethoxylate	ug/L	10	10	10	<10	<10	<10	
t-Octylphenol Diethoxylate	ug/L	0.5	1.0	0.5	<0.5	<1.0	<0.5	
<b>PCB</b>								
Aroclor 1016	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1221	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1232	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1242	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1248	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1254	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1260	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1262	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Aroclor 1268	mg/L	0.000200	0.000200	0.000200	<0.000200	<0.000200	<0.000200	
Total PCBs	mg/L	0.000600	0.000600	0.000600	<0.000600	<0.000600	<0.000600	
Surrogate: Decachlorobiphenyl	%	50-150	50-150	50-150	55	53	64	
<b>Pesticides, Organochlorine</b>								
a-chlordane	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Aldrin	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
alpha-BHC	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
alpha-Endosulfan	ug/L	1.0	1.0	10	1.3	<1.0	<10	
beta-BHC	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
beta-Endosulfan	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
delta-BHC	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Dieldrin	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Endosulfan Sulfate	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Endrin	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Endrin Aldehyde	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
g-chlordane	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Heptachlor	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Heptachlor Epoxide	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Lindane	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Methoxychlor	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Mirex	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
o,p-DDE	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
op-DDD	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
op-DDT	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Oxychlordane	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
pp-DDD	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
pp-DDE	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
pp-DDT	ug/L	1.0	1.0	10	<1.0	<1.0	<10	
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	30-130	99	123	75	
Surrogate: d14-Terphenyl	%	50-150	50-150	50-150	103	117	74	

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

4 <sup>th</sup> Quarter Sampling	November 1, 2011				SEWPCP			
	Parameter	Units	MDL-Raw1	MDL-Raw2	MDL-Final	Raw Sewage Grab 1	Raw Sewage Grab 2	Final Effluent Grab
<b>Phenoxyacid Herbicides by GC/MS</b>								
2,4,5-T	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
2,4,5-TP	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
2,4-D	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Bromoxynil	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Dicamba	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Dinoseb	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
MCPA	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Mecoprop	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Picloram	ug/L	0.5	0.5	5.0	<0.5	<0.5	<5.0	
Surrogate: 2,4-Dichlorophenylacetic Acid	%	50-130	50-130	50-130	95	97	99	
<b>Target Compounds by GC/MS</b>								
Octachlorostyrene	mg/L	0.00050	0.000050	0.000050	<0.00050	<0.00050	<0.000050	
Surrogate: 2-Fluorobiphenyl	%	30-130	30-130	30-130	93	112	54	
Surrogate: p-Terphenyl d14	%	50-150	50-150	50-150	110	126	44	
<b>Volatile Organics</b>								
1,1,1,2-Tetrachloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,1,1-Trichloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,1,2,2-Tetrachloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,1,2-Trichloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,1-Dichloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,1-Dichloroethylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,2-Dibromoethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,2-Dichlorobenzene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,2-Dichloroethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,2-Dichloropropane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,3-Dichlorobenzene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
1,4-Dichlorobenzene	ug/L	0.50	0.50	0.50	1.21	0.72	0.70	
2-Hexanone	ug/L	20	20	20	<20	<20	<20	
Acetone	ug/L	1000	1000	1000	3000	120	<20	
Benzene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Bromodichloromethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Bromoform	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Bromomethane	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
Carbon Disulfide	ug/L	0.50	0.50	0.50	2.4	4.81	<0.50	
Carbon tetrachloride	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Chlorobenzene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Chloroethane	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
Chloroform	ug/L	0.50	0.50	0.50	3.17	3.66	2.38	
Chloromethane	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
cis-1,2-Dichloroethylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
cis-1,3-Dichloropropene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Dibromochloromethane	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Dichlorodifluoromethane	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
Dichloromethane	ug/L	0.50	0.50	0.50	7.06	13.9	2.59	
Ethyl Benzene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
m+p-Xylenes	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
Methyl Ethyl Ketone	ug/L	20	20	20	43	<20	<20	
Methyl Isobutyl Ketone	ug/L	20	20	20	<20	<20	<20	
MTBE	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
o-Xylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Styrene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Tetrachloroethylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Toluene	ug/L	0.50	0.50	0.50	4.56	4.23	0.61	
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
trans-1,3-Dichloropropene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Trichloroethylene	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Trichlorofluoromethane	ug/L	1.0	1.0	1.0	<1.0	<1.0	<1.0	
Trihalomethanes (total)	ug/L	2.0	2.0	2.0	3.2	3.7	2.4	
Vinyl chloride	ug/L	0.50	0.50	0.50	<0.50	<0.50	<0.50	
Xylenes (Total)	ug/L	1.50	1.5	1.5	<1.50	<1.5	<1.5	

**City Of Winnipeg  
Water Waste Department**

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

4 <sup>th</sup> Quarter Sampling	November 1, 2011				SEWPCC		
	Parameter	Units	MDL-Raw1	MDL-Raw2	MDL-Final	Raw Sewage Grab 1	Raw Sewage Grab 2
Surrogate: 1,2-Dichloroethane d4	%	50-150	50-150	50-150	110	121	104
Surrogate: Toluene-d8	%	70-130	70-130	70-130	105	108	104
Surrogate: 4-Bromofluorobenzene	%	50-150	50-150	50-150	105	93	104

**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

NR- not reported

*All parameters were analyzed by contract laboratory.*