



**Sault Ste. Marie
Public Utilities Commission**

**Water Quality
Annual Summary Report**

2006



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NON-COMPLIANCE WITH TERMS AND CONDITIONS OF THE CERTIFICATE OF APPROVAL 24

PUC Services Inc. is pleased to present this annual performance report for the City of Sault Ste. Marie municipal water supply. This report will provide:

- ◆ *A summary of the quantity of water supplied during the reporting period compared to the rated capacity specified in the certificate of approval, including monthly average and maximum daily flows;*
- ◆ *A summary of the chemicals used in the treatment process.*
- ◆ *A summary of the results of the chemical and bacteriological sampling programs associated with the plant.*
- ◆ *A summary of all issues with regards to compliance or non-compliance during the year 2006.*

A copy of this report is made available to the general public at the Sault Ste. Marie PUC Services Inc. business office and at the Sault Ste. Marie Water Treatment Plant. An electronic version may be obtained by e-mailing Dan Tonon Manager, Water Treatment Operations, PUC Services Inc. dan.tonon@ssmpuc.com

System Description

The province's Drinking Water Protection Regulation requires this report to be published for the information of the consumers served by this system. A written report detailing compliance with all terms and conditions of the Certificate of Approval is to be completed annually and made available not later than February 28 of the following year.

PUC Services Inc. operates, maintains and manages the Sault Ste. Marie water supply on behalf of the City's Public Utilities Commission.

The PUC Services Inc. business office is located at 765 Queen Street East. Regular business hours are 08:30 to 16:30, Monday to Friday. The telephone number is (705) 759-6500.

The PUC Operations Control Centre is located at the A.S. Boniferno Water Filtration Plant, 2059 Second Line West. The licensed operators at this facility monitor and control all aspects of water production and quality, through the use of a modern computer based control system.

Water for Sault Ste. Marie is obtained from two principle sources: surface water from Lake Superior and ground water from six deep wells. Raw water from the intake at Gros Cap is pumped to the water treatment plant where a process of filtration and chlorination prepares the water for consumption. Water from the deep wells is chlorinated prior to being pumped to the distribution system. Total production capacity from the combined sources is 78,000 cubic metres per day. On a typical day our customers consume about 35,000 cubic metres of water. Three water storage reservoirs located in the distribution system hold up to 52000 cubic metres of water [or 1-1/2 days-average consumption].



Compliance with Terms and Conditions of the Certificate of Approval

Water Quality

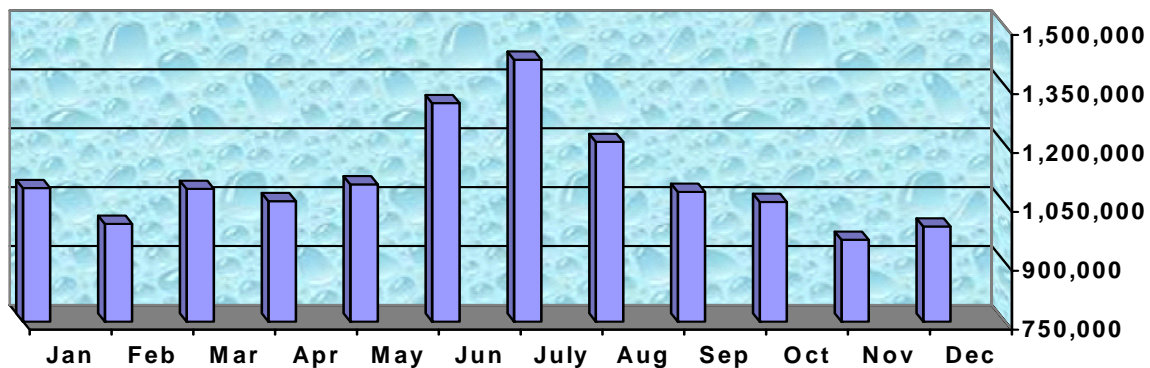
Included in this report is a summary of the water quality analysis results for the period January 1st to December 31st 2006. Some parameters are only monitored on an annual basis. The following table shows the number of reportable exceedences reported under O. Reg. 170/03.

Facility	Date	Adverse Condition	Re-sample Result	Comment
Lorna Well #1	Mar. 3/06	High Sodium results of 31.2 mg/L	32.0 mg/L	This is a 5 year test in which notifications to SAC and AHU must be notified if results are over 20.0 mg/L
Shannon Pump Station	Jun.7/06	Low Combined Chlorine in distribution of <0.25 mg/L	Flushed mains & Chlorine residual > 1.00mg/L	Distribution sample maintained free chlorine residual throughout flushing.
Shannon Well	July 27/06	High Sodium results of 30.3 mg/L	28.0 mg/L	This is a 5 year test in which notifications to SAC and AHU must be notified if results are over 20.0 mg/L
Shannon Well	Aug. 17/06	High Benzo (A) Pyrene of 0.06 ug/L	0.01 ug/L	Well was resampled and shutdown until results were obtained. Results came back within regulatory requirements.
Lorna Well #2	Oct 15/06	High Sodium results of 32.0 mg/L	32.1 mg/L	This is a 5 year test in which notifications to SAC and AHU must be notified if results are over 20.0 mg/L

All other parameters tested for under the tables of the ODWS for volatile organics, inorganics and pesticides showed no exceedences.

This report also includes results for the heterotrophic plate count taken on 25% of the distribution water samples. HPC is a method of measuring the aerobic bacterial content in water. Levels of bacteria detected by this test should not exceed 200 colonies per ml. of sample. HPC testing can be used to monitor disinfection efficiency at water treatment plants and to measure water quality deterioration in distribution systems and in reservoirs.

Water Consumption for 2006 (cubic meters)



System Updates

The following activities were conducted through the course of the past year in order to ensure ongoing continued high water quality and maintenance of the water supply facilities:

- Roof drain maintenance completed from a section of the roof that was replaced at the water treatment plant.
- Goulais pump station chlorinator rebuilt.
- Lorna pump station chlorinator rebuilt.
- VoIP wireless mobile telephone system installed at the water treatment plant.
- Identifying isolation protocol and contingency plans for the shut down of internal plant processes in the event of emergency contamination.
- Implemented a departmental protocol for lock-out/tag-out practices.
- Prepared P&I drawings for the Gros Cap pump station.
- Completed a rebuild on the raw water level control valve at the water treatment plant.
- Completed the annual report and PTTW documentation.
- Annual inspection by the Ministry Provincial Drinking Water Inspectors.
- Repairs completed to inside and outside lighting and to several heaters within the water treatment plant and Zone 1 booster station.
- Completed system wide lubrication and thrust bearing oil changed for all process pump motors.
- Installed a sampling hydrant at the top end of the Dryland Water Services location and implemented a microbiological/chemical sampling protocol as well as a pressure monitoring study on the system as per requirements of the MOE Provincial Officers Orders.
- Rebuilt alum flash mixers.
- Rebuilt chlorine scales and made repairs/calibrated SCADA signal.
- Replaced damaged floor tiles on filter floor.
- Installation of submersible pump for Lorna well #2 as well as liner repair.
- Installations of a water lubrication system and pump motor replacement at the Shannon pump station.
- Replacement of flow meter on filter #4.
- Repairs to VFD at Steelton pump station.
- General repairs to Lorna pump station, such as heaters, chlorinators and plumbing.
- Thermal imaging scans on water production equipment throughout the system.
- Wiring repairs on highlift pumps at the water treatment plant.
- Maintenance of battery charger for Zone 1 generators.
- Consultations with Conservation Authority personnel in regards to Gros Cap source protection plans as well as data collection for future review.

Water Treatment Plant Production – Chemical Usage								
	<i>Influent Flow</i>	<i>Effluent Flow</i>	<i>Chlorine</i>	<i>Cl. Dosage</i>	<i>Ammonia</i>	<i>Amm. Dosage</i>	<i>Alum</i>	<i>Alum Dosage</i>
2006	<i>(cu..m.)</i>	<i>(cu..m.)</i>	<i>(kg)</i>	<i>(mg./L)</i>	<i>(l)</i>	<i>(mg./L)</i>	<i>(l)</i>	<i>(mg./L)</i>
Jan.	573,904	570,580	862	1.50	809	0.37	5,254	5.95
Feb.	519,132	515,952	773	1.49	773	0.39	4,770	5.97
Mar.	562,638	559,988	851	1.51	851	0.39	5,219	6.03
Apr.	559,247	555,246	805	1.44	805	0.37	5,131	5.96
May	603,892	588,023	812	1.35	812	0.36	5,675	6.11
Jun.	830,503	819,194	1,085	1.31	1,085	0.34	8,211	6.43
Jul.	774,589	743,628	1,136	1.47	1,136	0.39	7,600	6.38
Aug.	597,734	560,051	952	1.59	952	0.44	5,760	6.26
Sep.	434,883	414,529	684	1.57	645	0.40	3,918	5.77
Oct.	450,543	437,055	712	1.58	712	0.42	5,661	8.04
Nov.	349,618	347,767	553	1.58	555	0.41	4,888	8.95
Dec.	394,287	393,785	616	1.56	614	0.40	5,176	8.40

Certificate of Approval – Process Wastewater Monthly Composite Samples								
MONTH	Temp	pH	Total Cl₂	Aluminum	Ammonia	Suspended Solids	Turbidity	Total P
2006	°C		mg/L	mg/L	mg/L NH₃-N	mg/L	NTU	mg/L
Jan.	11.5	8.83	0.21	3.25	0.10	17.7	6.0	N.D
Feb.	8.0	9.17	0.35	4.11	0.05	47.0	20.6	N.D
Mar.	8.0	8.93	0.31	4.15	0.04	13.0	7.55	N.D
Apr.	8.0	8.87	0.36	5.40	0.03	24.6	10.2	N.D
May	9.0	8.87	0.28	3.42	0.02	187.9	9.70	N.D
Jun.	14.0	9.13	0.24	2.31	0.02	5.3	3.53	N.D
Jul.	19.0	8.96	0.20	1.55	0.05	19.5	5.56	N.D
Aug.	20.0	9.2	0.15	4.14	0.03	27.2	7.28	N.D
Sep.	16.0	10.1	0.28	3.52	0.03	37.1	11.7	N.D
Oct.	14.0	8.0	0.29	3.05	0.01	16.7	3.54	N.D
Nov.	12.0	9.6	0.19	2.62	0.03	10.2	5.13	N.D
Dec.	10.5	8.8	0.27	5.3	0.05	4.0	7.66	N.D
Yearly Avg.	12.4	9.0	0.27	3.72	0.03	33.4	11.52	N.D
Max.	20.0	10.1	0.36	5.40	0.10	187.9	49.30	N.D
Min.	7.8	8.0	0.15	2.31	0.01	4.0	3.53	N.D
<i>DL=detection limit phosphorous = 0.003 mg/l, ammonia = 0.01 mg/l</i>								

Note: N.D. represents 'Non-Detectible'

Capacity Assessment – System 2006									
Gros Cap Intake					Water Treatment Plant				
Month	Min	Max	Avg.	% of	Month	Min	Max	Avg.	% of
Rated Capacity m3/day				75,000	Rated Capacity m3/day				40,000
Jan.	18,029	20,946	19,009	27.9	Jan.	17,766	20,075	18,513	50.2
Feb.	18,043	23,144	19,097	30.8	Feb.	17,582	22,119	18,540	55.3
Mar.	18,017	21,995	18,763	29.3	Mar.	15,011	21,441	18,150	53.6
Apr.	17,294	22,078	19,042	29.4	Apr.	17,330	21,520	18,642	53.8
May	14,395	28,699	19,960	38.3	May	14,257	27,543	19,480	68.9
Jun.	15,345	35,387	28,322	47.2	Jun.	14,787	34,419	27,683	86.0
Jul.	6,916	39,306	25,561	52.4	Jul.	6,860	38,172	24,987	95.4
Aug.	11,328	26,038	19,650	34.7	Aug.	11,261	25,458	19,282	63.6
Sep.	7,716	26,624	14,643	35.5	Sep.	7,469	26,623	14,496	66.5
Oct.	5,191	22,207	14,707	29.6	Oct.	5,818	21,821	14,534	54.6
Nov.	1,548	16,741	11,721	22.3	Nov.	1,617	16,707	11,654	41.8
Dec.	4,688	20,291	12,883	27.1	Dec.	4,689	19,494	12,718	48.7
Goulais Pump Station					Steelton Pump Station				
Month	Min	Max	Avg.	% of	Month	Min	Max	Avg.	% of
Rated Capacity m3/day (Pump 1)				6,606	Rated Capacity m3/day				8,208
Jan.	0	5,270	4,706	80.0	Jan.	6,513	6,516	6,515	79.4
Feb.	1234	5,343	5,095	80.9	Feb.	6,385	6,516	6,511	79.4
Mar.	5,196	5,343	5,316	80.9	Mar.	6,362	6,517	6,511	79.4
Apr.	5,091	5,346	5,302	80.9	Apr.	720	6,517	6,089	79.4
May	5,279	5,335	5,309	79.9	May	3,784	6,518	6,400	79.4
Jun.	5,265	5,353	5,308	81.0	Jun.	5,138	6,516	6,447	79.4
Jul.	4,833	5,615	5,478	85.0	Jul.	4,688	7,194	6,935	87.6
Aug.	5,543	5,607	5,574	84.9	Aug.	5,198	7,193	7,122	87.6
Sep.	4,970	5,587	5,525	84.6	Sep.	0	7,193	6,212	87.6
Oct.	4,593	5,748	5,484	87.0	Oct.	0	6,887	4,586	83.9
Nov.	5,170	5,212	5,189	78.9	Nov.	5,314	5,684	5,537	69.2
Dec.	4,635	5,657	5,154	85.6	Dec.	4,718	6,072	5,731	74.0
Shannon Pump Station					Lorna Pump Station				
Month	Min	Max	Avg.	% of	Month	Min	Max	Avg.	% of
Rated Capacity m3/day				7,000	Rated Capacity m3/day (Pump 1)				7,280
Jan.	0	0	0	0	Jan.	0	6,089	5,433	83.6
Feb.	0	0	0	0	Feb.	1,974	6,483	5,572	89.1
Mar.	0	0	0	0	Mar.	3,382	6,030	5,483	82.8
Apr.	0	0	0	0	Apr.	640	7,123	5,255	97.8
May	0	0	0	0	May	0	5,781	4,696	79.4
Jun.	0	0	0	0	Jun.	1,086	5,294	4,337	72.7
Jul.	0	5,528	3,252	79.0	Jul.	0	7,581	6,017	104.1
Aug.	0	5,512	3,029	78.7	Aug.	3,771	5,678	5,327	78.0
Sep.	0	5,438	4,860	77.7	Sep.	5,453	5,511	5,499	74.9
Oct.	202	5,306	4,894	75.8	Oct.	4,578	5,500	5,349	75.5
Nov.	0	5,191	4,698	74.2	Nov.	4,893	4,965	4,916	68.2
Dec.	0	5,320	4,439	76.0	Dec.	0	5,059	3,962	69.5

Well Production – Chemical Usage					
Month	Flows	Chlorine	Ammonia	Cl. Dosage	Amm. Dosage
2006	(cu.m.)	(Kg.)	(Kg.)	(mg./L)	(mg./L)
Goulais Pump Station					
Jan.	145,897	205	343	1.41	0.46
Feb.	142,660	178	287	1.26	0.39
Mar.	164,791	204	339	1.24	0.40
Apr.	159,065	201	249	1.26	0.31
May	164,566	231	314	1.41	0.37
Jun.	159,251	204	287	1.28	0.35
Jul.	169,813	271	346	1.60	0.40
Aug.	172,801	287	296	1.66	0.34
Sep.	165,747	265	275	1.60	0.32
Oct.	169,991	280	285	1.65	0.33
Nov.	155,669	263	273	1.69	0.34
Dec.	159,781	236	317	1.48	0.39
Steelton Pump Station					
Jan.	201,975	294	405	1.45	0.39
Feb.	182,307	254	366	1.39	0.39
Mar.	201,842	293	415	1.45	0.40
Apr.	182,680	247	345	1.35	0.37
May	198,389	308	445	1.55	0.44
Jun.	193,414	264	457	1.36	0.46
Jul.	214,996	303	523	1.41	0.48
Aug.	220,766	295	443	1.34	0.39
Sep.	186,353	261	406	1.40	0.43
Oct.	142,169	199	308	1.40	0.42
Nov.	166,097	261	453	1.57	0.53
Dec.	177,669	286	541	1.61	0.60
Shannon Pump Station					
Jan.	0	0	0	0	0
Feb.	0	0	0	0	0
Mar.	0	0	0	0	0
Apr.	0	0	0	0	0
May	0	0	0	0	0
Jun.	0	0	0	0	0
Jul.	100,805	132	115	1.31	0.22
Aug.	93,887	125	124	1.33	0.26
Sep.	145,785	184	205	1.26	0.28
Oct.	151,702	209	235	1.38	0.30
Nov.	140,945	180	195	1.28	0.27
Dec.	137,624	171	220	1.24	0.31
Lorna Pump Station					
Jan.	168,438	274	357	1.63	0.41
Feb.	156,026	296	310	1.90	0.39
Mar.	169,975	265	352	1.56	0.41
Apr.	157,656	220	283	1.40	0.35
May	145,566	263	334	1.80	0.45
Jun.	130,123	231	277	1.78	0.42
Jul.	186,525	325	296	1.74	0.31
Aug.	165,133	242	194	1.47	0.23
Sep.	164,959	226	150	1.37	0.18
Oct.	165,830	251	181	1.51	0.21
Nov.	147,492	215	223	1.46	0.30
Dec.	122,849	158	191	1.29	0.30

Schedule 10 – Microbiological					
S.S.M. WTP	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	13	13	13	13
<i>Total Coliform</i>	0	0	0	0	0
<i>E. Coli</i>	0	0	0	0	0
<i>Fecal coliform</i>	0	0	0	0	0
<i>H.P.C. taken/# less than</i>	<500	13/13	13/13	13/13	13/13
Goulais Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	13	13	13	13
<i>Total Coliform</i>	0	0	0	0	0
<i>E. Coli</i>	0	0	0	0	0
<i>Fecal coliform</i>	0	0	0	0	0
<i>H.P.C. taken/# less than</i>	<500	13/13	13/13	13/13	13/13
Steelton Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	13	13	13	13
<i>Total Coliform</i>	0	0	0	0	0
<i>E. Coli</i>	0	0	0	0	0
<i>Fecal coliform</i>	0	0	0	0	0
<i>H.P.C. taken/# less than</i>	<500	13/13	13/13	13/13	13/13
Shannon Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	0	0	11	13
<i>Total Coliform</i>	0	-	-	0	0
<i>E. Coli</i>	0	-	-	0	0
<i>Fecal coliform</i>	0	-	-	0	0
<i>H.P.C. taken/# less than</i>	<500	-	-	11/11	13/13
Lorna Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	16	13	20	14
<i>Total Coliform</i>	0	0	0	0	0
<i>E. Coli</i>	0	0	0	0	0
<i>Fecal coliform</i>	0	0	0	0	0
<i>H.P.C. taken/# less than</i>	<500	16/16	13/13	20/20	14/14
Distribution System	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	286	287	285	281
<i>Total Coliform</i>	0	0	0	0	0
<i>E. Coli</i>	0	0	0	0	0
<i>Fecal coliform</i>	0	0	0	0	0
<i>H.P.C. taken/# less than</i>	<500	74/74	78/78	75/75	74/74

Schedule 24 – Volatile Organic						
SSM WTP	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	-	-	-
<i>Benzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>Carbon Tetrachloride</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichlorobenzene</i>	0.0005	0.2	<0.0005	-	-	-
<i>1,4-Dichlorobenzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichloroethane</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,1-Dichloroethylene</i>	0.0005	0.014	<0.0005	-	-	-
<i>Dichloromethane</i>	0.0005	0.05	<0.0005	-	-	-
<i>Monochlorobenzene</i>	0.0005	0.08	<0.0005	-	-	-
<i>Tetrachloroethylene</i>	0.0005	0.03	<0.0005	-	-	-
<i>Trichloroethylene</i>	0.0005	0.05	<0.0005	-	-	-
<i>Vinyl chloride</i>	0.0005	0.002	<0.0005	-	-	-

Schedule 24 – Volatile Organic						
Goulais P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	-	-	-
<i>Benzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>Carbon Tetrachloride</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichlorobenzene</i>	0.0005	0.2	<0.0005	-	-	-
<i>1,4-Dichlorobenzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichloroethane</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,1-Dichloroethylene</i>	0.0005	0.014	<0.0005	-	-	-
<i>Dichloromethane</i>	0.0005	0.05	<0.0005	-	-	-
<i>Monochlorobenzene</i>	0.0005	0.08	<0.0005	-	-	-
<i>Tetrachloroethylene</i>	0.0005	0.03	<0.0005	-	-	-
<i>Trichloroethylene</i>	0.0005	0.05	<0.0005	-	-	-
<i>Vinyl chloride</i>	0.0005	0.002	<0.0005	-	-	-

Schedule 24 – Volatile Organic						
Steelton P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	-	-	-
<i>Benzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>Carbon Tetrachloride</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichlorobenzene</i>	0.0005	0.2	<0.0005	-	-	-
<i>1,4-Dichlorobenzene</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,2-Dichloroethane</i>	0.0005	0.005	<0.0005	-	-	-
<i>1,1-Dichloroethylene</i>	0.0005	0.014	<0.0005	-	-	-
<i>Dichloromethane</i>	0.0005	0.05	<0.0005	-	-	-
<i>Monochlorobenzene</i>	0.0005	0.08	<0.0005	-	-	-
<i>Tetrachloroethylene</i>	0.0005	0.03	<0.0005	-	-	-
<i>Trichloroethylene</i>	0.0005	0.05	<0.0005	-	-	-
<i>Vinyl chloride</i>	0.0005	0.002	<0.0005	-	-	-

Schedule 24 – Volatile Organic						
Shannon P/S	dl	MAC	Q1	Q2	Q3	Q4
Date Sampled	-	-	-	-	24-Jul-06	-
Benzene	0.0005	0.005	-	-	<0.0005	-
Carbon Tetrachloride	0.0005	0.005	-	-	<0.0005	-
1,2-Dichlorobenzene	0.0005	0.2	-	-	<0.0005	-
1,4-Dichlorobenzene	0.0005	0.005	-	-	<0.0005	-
1,2-Dichlorethane	0.0005	0.005	-	-	<0.0005	-
1,1-Dichloroethylene	0.0005	0.014	-	-	<0.0005	-
Dichloromethane	0.0005	0.05	-	-	<0.0005	-
Monochlorobenzene	0.0005	0.08	-	-	<0.0005	-
Tetrachloroethylene	0.0005	0.03	-	-	<0.0005	-
Trichloroethylene	0.003	0.10	-	-	<0.0005	-
Vinyl chloride	0.0005	0.002	-	-	<0.0005	-

Schedule 24 – Volatile Organic						
Lorna-1 P/S	dl	MAC	Q1	Q2	Q3	Q4
Date Sampled	-	-	01-Mar-06	-	-	-
Benzene	0.0005	0.005	<0.0005	-	-	-
Carbon Tetrachloride	0.0005	0.005	<0.0005	-	-	-
1,2-Dichlorobenzene	0.0005	0.2	<0.0005	-	-	-
1,4-Dichlorobenzene	0.0005	0.005	<0.0005	-	-	-
1,2-Dichlorethane	0.0005	0.005	<0.0005	-	-	-
1,1-Dichloroethylene	0.0005	0.014	<0.0005	-	-	-
Dichloromethane	0.0005	0.05	<0.0005	-	-	-
Monochlorobenzene	0.0005	0.08	<0.0005	-	-	-
Tetrachloroethylene	0.0005	0.03	<0.0005	-	-	-
Trichloroethylene	0.0005	0.05	<0.0005	-	-	-
Vinyl chloride	0.0005	0.002	<0.0005	-	-	-

Schedule 24 – Volatile Organic						
Lorna-2 P/S	dl	MAC	Q1	Q2	Q3	Q4
Date Sampled	-	-	-	-	-	12-Oct-06
Benzene	0.0005	0.005	-	-	-	<0.0005
Carbon Tetrachloride	0.0005	0.005	-	-	-	<0.0005
1,2-Dichlorobenzene	0.0005	0.2	-	-	-	<0.0005
1,4-Dichlorobenzene	0.0005	0.005	-	-	-	<0.0005
1,2-Dichlorethane	0.0005	0.005	-	-	-	<0.0005
1,1-Dichloroethylene	0.0005	0.014	-	-	-	<0.0005
Dichloromethane	0.0005	0.05	-	-	-	<0.0005
Monochlorobenzene	0.0005	0.08	-	-	-	<0.0005
Tetrachloroethylene	0.0005	0.03	-	-	-	<0.0005
Trichloroethylene	0.0005	0.05	-	-	-	<0.0005
Vinyl chloride	0.0005	0.002	-	-	-	<0.0005

Schedule 23 - Inorganic Parameters						
SSM WTP	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	01-May-06	24-Jul-06	12-Oct-06
<i>Antimony</i>	0.001	0.006	0.001	-	-	-
<i>Arsenic</i>	0.001	0.025	<0.001	-	-	-
<i>Barium</i>	0.01	1.0	<0.01	-	-	-
<i>Boron</i>	0.05	5.0	<0.050	-	-	-
<i>Cadmium</i>	0.0001	0.005	<0.0001	-	-	-
<i>Chromium</i>	0.001	0.05	<0.001	-	-	-
<i>Fluoride</i>	0.03	1.5	0.07	-	-	-
<i>Mercury</i>	0.0001	0.001	<0.0001	-	-	-
<i>Nitrite (quarterly)</i>	0.02	1.0	<0.02	<0.02	<0.02	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	0.34	0.35	0.35	0.35
<i>Sodium</i>	0.005	200	1.55	-	-	-
<i>Selenium</i>	0.005	0.01	<0.005	-	-	-
<i>Uranium</i>	0.005	0.02	<0.005	-	-	-

<i>Operational guideline for aluminum residual is less than 0.100 mg/l</i>					
SSM WTP	<i>Discharge Residual</i>	Q1	Q2	Q3	Q4
<i>Date Sampled</i>		2006	2006	2006	2006
<i>Al Residual(mg/l)- avg</i>	< 0.100	0.033	0.049	0.083	0.035
<i>Al Residual(mg/l)- max</i>		0.058	0.195	0.130	0.074
<i>Al Residual(mg/l)- min</i>		0.015	0.024	0.023	0.013

Schedule 23 - Inorganic Parameters						
Goulais P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	01-May-06	24-Jul-06	12-Oct-06
<i>Antimony</i>	0.001	0.006	<0.001	-	-	-
<i>Arsenic</i>	0.001	0.025	<0.001	-	-	-
<i>Barium</i>	0.01	1.0	0.040	-	-	-
<i>Boron</i>	0.05	5.0	<0.050	-	-	-
<i>Cadmium</i>	0.0001	0.005	<0.0001	-	-	-
<i>Chromium</i>	0.001	0.05	0.02	-	-	-
<i>Fluoride</i>	0.03	1.5	0.07	-	-	-
<i>Mercury</i>	0.0001	0.001	<0.0001	-	-	-
<i>Nitrite (quarterly)</i>	0.02	1.0	<0.02	<0.02	<0.02	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	0.77	0.81	0.89	0.91
<i>Sodium</i>	0.005	200	10.9	-	-	-
<i>Selenium</i>	0.005	0.01	<0.005	-	-	-
<i>Uranium</i>	0.005	0.02	<0.005	-	-	-

Schedule 23 - Inorganic Parameters						
Steelton P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	01-May-06	24-Jul-06	16-Oct-06
<i>Antimony</i>	0.001	0.006	<0.001	-	-	-
<i>Arsenic</i>	0.001	0.025	<0.001	-	-	-
<i>Barium</i>	0.01	1.0	0.04	-	-	-
<i>Boron</i>	0.05	5.0	<0.05	-	-	-
<i>Cadmium</i>	0.0001	0.005	<0.0001	-	-	-
<i>Chromium</i>	0.001	0.05	0.002	-	-	-
<i>Fluoride</i>	0.03	1.5	0.08	-	-	-
<i>Mercury</i>	0.0001	0.001	<0.0001	-	-	-
<i>Nitrite (quarterly)</i>	0.02	1.0	<0.02	<0.02	<0.02	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	0.77	0.85	0.89	0.86
<i>Sodium</i>	0.005	200	8.69	-	-	-
<i>Selenium</i>	0.005	0.01	<0.005	-	-	-
<i>Uranium</i>	0.005	0.02	<0.005	-	-	-

Schedule 23 - Inorganic Parameters						
Shannon P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	-	-	24-Jul-06	12-Oct-06
<i>Antimony</i>	0.001	0.006	-	-	<0.001	-
<i>Arsenic</i>	0.001	0.025	-	-	0.003	-
<i>Barium</i>	0.01	1.0	-	-	0.040	-
<i>Boron</i>	0.05	5.0	-	-	0.240	-
<i>Cadmium</i>	0.0001	0.005	-	-	<0.0001	-
<i>Chromium</i>	0.001	0.05	-	-	0.001	-
<i>Fluoride</i>	0.03	1.5	-	-	0.24	-
<i>Mercury</i>	0.0001	0.001	-	-	<0.0001	-
<i>Nitrite (quarterly)</i>	0.02	1.0	-	-	<0.02	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	-	-	<0.03	<0.03
<i>Sodium</i>	0.005	20	-	-	30.3/28.0	-
<i>Selenium</i>	0.005	0.01	-	-	<0.005	-
<i>Uranium</i>	0.005	0.02	-	-	<0.005	-

Schedule 23 - Inorganic Parameters						
Lorna-1 P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	-	01-Mar-06	01-May-06	24-Jul-06	09-Nov-06
<i>Antimony</i>	0.001	0.006	<0.001	-	-	-
<i>Arsenic</i>	0.001	0.02	0.002	-	-	-
<i>Barium</i>	0.01	1.0	0.04	-	-	-
<i>Boron</i>	0.05	5.0	0.07	-	-	-
<i>Cadmium</i>	0.0001	0.005	<0.0001	-	-	-
<i>Chromium</i>	0.001	0.05	<0.001	-	-	-
<i>Fluoride</i>	0.03	1.5	0.16	-	-	-
<i>Mercury</i>	0.0001	0.001	<0.0001	-	-	-
<i>Nitrite (quarterly)</i>	0.02	1.0	<0.02	<0.02	<0.02	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	<0.03	<0.03	<0.03	<0.03
<i>Sodium</i>	0.005	20	31.2/32.0	-	-	-
<i>Selenium</i>	0.005	0.01	<0.005	-	-	-
<i>Uranium</i>	0.005	0.02	0.007	-	-	-

Schedule 23 - Inorganic Parameters						
Lorna-2 P/S	<i>dl</i>	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	-	-	-	-	-	12-Oct-06
<i>Antimony</i>	0.001	0.006	-	-	-	<0.001
<i>Arsenic</i>	0.001	0.025	-	-	-	0.002
<i>Barium</i>	0.01	1.0	-	-	-	0.05
<i>Boron</i>	0.05	5.0	-	-	-	0.11
<i>Cadmium</i>	0.0001	0.005	-	-	-	<0.0001
<i>Chromium</i>	0.001	0.05	-	-	-	<0.001
<i>Fluoride</i>	0.03	1.5	-	-	-	0.26
<i>Mercury</i>	0.0001	0.001	-	-	-	<0.0001
<i>Nitrite (quarterly)</i>	0.02	1.0	-	-	-	<0.02
<i>Nitrate (quarterly)</i>	0.03	10.0	-	-	-	<0.03
<i>Sodium</i>	0.005	20	-	-	-	32.3/32.1
<i>Selenium</i>	0.005	0.01	-	-	-	<0.005
<i>Uranium</i>	0.005	0.02	-	-	-	0.008

Distribution Sample – Maximum Residence Time in the Distribution System						
Sub 4 Treated	<i>dl</i>	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	-	-	01-Mar-06	01-May-06	24-Jul-06	12-Oct-06
<i>Lead (annually)</i>	0.001	0.01	<0.001	-	-	-
<i>Trihalomethanes</i>	0.002	0.10	0.005	0.007	0.005	0.007

**Note: Units expressed in mg/L.*

Schedule 7 – Operational Checks					
S.S.M. WTP	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>		On-line	On-line	On-line	On-line
<i>Filter Turbidity (ntu) – avg.</i>		0.05	0.05	0.04	0.04
<i>Filter Turbidity (ntu) – max.</i>		1.05	0.02	0.01	0.01
<i>Filter Turbidity (ntu) – min.</i>		0.03	0.73	0.71	1.05
<i>Indicates presence of particles in water due to treatment difficulties.</i>					
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Comb. chlorine (mg/l) – avg.</i>	-	1.28	1.23	1.22	1.24
<i>Comb. chlorine (mg/l) – max.</i>	-	2.00	1.69	2.00	2.00
<i>Comb. chlorine (mg/l) – min.</i>	-	1.14	1.00	0.84	1.03
<i>Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system</i>					
<i>Samples taken are grab samples; plant has on-line continuous monitoring chlorine & turbidity analyzer.</i>					
<i>Number of samples</i>	-	13	13	13	12
<i>Temperature – avg.</i>	-	5.5	8.5	16.5	11.5
<i>Temperature – max.</i>	-	8.5	14.0	20.0	15.0
<i>Temperature – min.</i>	-	3.0	4.0	12.0	8.5
<i>Water temperature below 15^o Celsius are more palatable</i>					

Schedule 7 – Operational Checks					
Goulais Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Turbidity (ntu) – avg.</i>		0.08	0.09	0.07	0.05
<i>Turbidity (ntu) – max.</i>		0.85	0.67	2.97	0.34
<i>Turbidity (ntu) – min.</i>		0.08	0.08	0.04	0.04
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Comb. Chlorine (mg/l) – avg.</i>	-	1.20	1.24	1.39	1.39
<i>Comb. Chlorine (mg/l) – max.</i>	-	1.50	1.35	1.62	1.95
<i>Comb. Chlorine (mg/l) – min.</i>	-	0.99	0.99	1.15	1.08
Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system Samples taken are grab samples, pump station has on-line continuous monitoring chlorine & turbidity analyzer					
<i>Number of samples</i>	-	13	13	13	13
<i>Temperature – avg.</i>	-	7.0	10.0	13.0	8.5
<i>Temperature – max.</i>	-	8.5	12.0	14.0	11.0
<i>Temperature – min.</i>	-	5.5	7.0	11.5	7.5
Water temperature below 15^o Celsius are more palatable					

Schedule 7 – Operational Checks					
Steelton Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Turbidity (ntu) – avg.</i>		0.09	0.09	0.08	0.09
<i>Turbidity (ntu) – max.</i>		0.71	0.68	0.47	0.76
<i>Turbidity (ntu) – min.</i>		0.09	0.09	0.07	0.07
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Comb. Chlorine (mg/l) – avg.</i>	-	1.28	1.32	1.31	1.23
<i>Comb. Chlorine (mg/l) – max.</i>	-	1.73	2.00	2.00	2.00
<i>Comb. Chlorine (mg/l) – min.</i>	-	0.95	0.56	0.99	0.95
Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system Samples taken are grab samples, pump station has on-line continuous monitoring chlorine & turbidity analyzer					
<i>Number of samples</i>	-	13	13	13	13
<i>Temperature – avg.</i>	-	7.5	8.0	8.5	7.5
<i>Temperature – max.</i>	-	8.0	9.0	9.0	9.0
<i>Temperature – min.</i>	-	7.0	7.5	8.0	6.5
Water temperature below 15^o Celsius are more palatable					

Schedule 7 – Operational Checks					
Shannon Pump Station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Turbidity (ntu) – avg.</i>		0.12	0.12	0.11	0.10
<i>Turbidity (ntu) – max.</i>		1.27	3.93	4.48	5.00
<i>Turbidity (ntu) – min.</i>		0.10	0.10	0.09	0.09
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Comb. chlorine (mg/l) – avg.</i>	-	1.19	1.11	1.30	1.24
<i>Comb. chlorine (mg/l) – max.</i>	-	1.72	1.46	1.96	1.47
<i>Comb. chlorine (mg/l) – min.</i>	-	0.36	0.18	0.87	0.11
Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system Samples taken are grab samples, pump station has on-line continuous monitoring chlorine & turbidity analyzer					
<i>Number of samples</i>	-	13	13	11	13
<i>Temperature – avg.</i>	-	5.5	9.5	13.0	9.0
<i>Temperature – max.</i>	-	8.0	13.5	14.0	11.5
<i>Temperature – min.</i>	-	4.5	4.5	11.5	7.5
Water temperature below 15^o Celsius are more palatable					

**Note: Minimum Chlorine residuals for on-line analyzer occurred during times when the pump was off and water was not entering the distribution system.*

Schedule 7 – Operational Checks					
Lorna-1 Pump station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Turbidity (ntu) – avg.</i>		0.22	0.28	0.09	0.09
<i>Turbidity (ntu) – max.</i>		4.96	4.96	4.96	4.94
<i>Turbidity (ntu) – min.</i>		0.18	0.07	0.07	0.08
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-	On-line	On-line	On-line	On-line
<i>Comb. Chlorine (mg/l) – avg.</i>	-	1.46	1.33	1.35	1.30
<i>Comb. Chlorine (mg/l) – max.</i>	-	1.68	1.56	1.53	1.99
<i>Comb. Chlorine (mg/l) – min.</i>	-	0.62	0.18	0.30	0.47
Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system Samples taken are grab samples, pump station has on-line continuous monitoring chlorine & turbidity analyzer					
<i>Number of samples</i>	-	16	13	18	14
<i>Temperature – avg.</i>	-	7.0	10.0	12.0	8.5
<i>Temperature – max.</i>	-	8.0	12.0	13.0	11.0
<i>Temperature – min.</i>	-	6.5	7.5	11.0	7.0
Water temperature below 15^o Celsius are more palatable					

Schedule 7 – Operational Checks					
Lorna-2 Pump station	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-				
<i>Turbidity (ntu) – avg.</i>					
<i>Turbidity (ntu) – max.</i>					
<i>Turbidity (ntu) – min.</i>					
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-				
<i>Comb. Chlorine (mg/l) – avg.</i>	-				
<i>Comb. Chlorine (mg/l) – max.</i>	-				
<i>Comb. Chlorine (mg/l) – min.</i>	-				
Recommended level of at least 1.00 mg/l (combined chlorine) at discharge to maintain microbiological quality in system Samples taken are grab samples, pump station has on-line continuous monitoring chlorine & turbidity analyzer					
<i>Number of samples</i>	-				
<i>Temperature – avg.</i>	-				
<i>Temperature – max.</i>	-				
<i>Temperature – min.</i>	-				
Water temperature below 15^o Celsius are more palatable					

Schedule 7 – Operational Checks					
Distribution System	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	-	2006	2006	2006	2006
<i>Number of samples</i>	-	286	287	271	293
<i>Turbidity (ntu) – avg.</i>		0.16	0.18	0.14	0.21
<i>Turbidity (ntu) – max.</i>		1.37	1.22	2.16	2.99
<i>Turbidity (ntu) – min.</i>		0.04	0.03	0.04	0.03
Indicates presence of particles in water due to treatment difficulties.					
<i>Number of samples</i>	-	286	287	271	293
<i>Comb. Chlorine (mg/l) – avg.</i>	> 0.25	1.12	1.04	1.05	1.02
<i>Comb. Chlorine (mg/l) – max.</i>		1.73	1.45	1.58	1.55
<i>Comb. Chlorine (mg/l) – min.</i>		0.20	0.18	0.61	0.60
Recommended level of at least 0.25 mg/l (combined chlorine) to maintain microbiological quality in system Samples taken are grab samples at sample sites throughout distribution system.					
<i>Number of samples</i>	-	286	287	271	293
<i>Temperature – avg.</i>	-	6.5	9.0	15.5	11.0
<i>Temperature – max.</i>	-	16.5	18.0	21	21.0
<i>Temperature – min.</i>	-	3.5	4.0	10	5.0
Water temperature below 15^o Celsius are more palatable					

Schedule 24 – Organic Parameters						
SSM WTP	<i>dl</i>	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	(mg/l)	(mg/l)	01-Mar-06	-	-	-
<i>Alachlor</i>	0.0001	0.005	<0.0001	-	-	-
<i>Aldicarb</i>	0.009	0.009	<0.009	-	-	-
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	<0.00004	-	-	-
<i>Atrazine</i>	0.0002	0.005	<0.0002	-	-	-
<i>Azinphos-methyl</i>	0.0001	0.02	<0.0001	-	-	-
<i>Bendiocarb</i>	0.0002	0.04	<0.0002	-	-	-
<i>Benzo(a)pyrene</i>	0.00001	0.00001	<0.00001	-	-	-
<i>Bromoxynil</i>	0.0002	0.005	<0.0002	-	-	-
<i>Carbaryl</i>	0.0002	0.09	<0.0002	-	-	-
<i>Carbofuran</i>	0.0002	0.09	<0.0002	-	-	-
<i>Chlordane (Total)</i>	0.0003	0.007	<0.0003	-	-	-
<i>Chlorpyrifos</i>	0.0001	0.09	<0.0001	-	-	-
<i>Cyanazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Diazinon</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dicamba</i>	0.0002	0.12	<0.0002	-	-	-
<i>2,4-Dichlorophenol</i>	0.0005	0.9	<0.0005	-	-	-
<i>DDT</i>	0.0004	0.03	<0.0004	-	-	-
<i>2,4-D</i>	0.0002	0.1	<0.0002	-	-	-
<i>Diclofop-methyl</i>	0.0002	0.009	<0.0002	-	-	-
<i>Dimethoate</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dinoseb</i>	0.0002	0.01	<0.0002	-	-	-
<i>Diquat</i>	0.007	0.07	<0.007	-	-	-
<i>Diuron</i>	0.010	0.15	<0.010	-	-	-
<i>Glyphosate</i>	0.010	0.28	<0.010	-	-	-
<i>Heptachlor+</i>	0.0001	0.003	<0.0001	-	-	-
<i>Heptachlor epoxide</i>	0.0001	0.003	<0.0001	-	-	-
<i>Lindane (Total)</i>	0.0001	0.004	<0.0001	-	-	-
<i>Malathion</i>	0.0001	0.19	<0.0001	-	-	-
<i>Methoxychlor</i>	0.0001	0.9	<0.0001	-	-	-
<i>Metolachlor</i>	0.0001	0.05	<0.0001	-	-	-
<i>Metribuzin</i>	0.0001	0.08	<0.0001	-	-	-
<i>Paraquat</i>	0.001	0.01	<0.001	-	-	-
<i>Parathion</i>	0.0001	0.05	<0.0001	-	-	-
<i>Pentachlorophenol</i>	0.0005	0.06	<0.0005	-	-	-
<i>Phorate</i>	0.0001	0.002	<0.0001	-	-	-
<i>Picloram</i>	0.0002	0.19	<0.0002	-	-	-
<i>PCB</i>	0.00006	0.003	<0.00006	-	-	-
<i>Prometryne</i>	0.0001	0.001	<0.0001	-	-	-
<i>Simazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Temephos</i>	0.0001	0.28	<0.0001	-	-	-
<i>Terbufos</i>	0.0002	0.001	<0.0002	-	-	-
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	<0.0005	-	-	-
<i>Triallate</i>	0.0001	0.23	<0.0001	-	-	-
<i>2,4,6-Trichlorophenol</i>	0.0005	0.005	<0.0005	-	-	-
<i>Trifluralin</i>	0.0001	0.045	<0.0001	-	-	-
<i>2,4,5-T</i>	0.0002	0.28	<0.0002	-	-	-

**Note: Units expressed in mg/L.*

Schedule 24 – Organic Parameters						
Goulais P/S	<i>dl</i>	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	(mg/l)	(mg/l)	01-Mar-06	-	-	-
<i>Alachlor</i>	0.0001	0.005	<0.0001	-	-	-
<i>Aldicarb</i>	0.009	0.009	<0.009	-	-	-
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	<0.00004	-	-	-
<i>Atrazine</i>	0.0002	0.005	<0.0002	-	-	-
<i>Azinphos-methyl</i>	0.0001	0.02	<0.0001	-	-	-
<i>Bendiocarb</i>	0.0002	0.04	<0.0002	-	-	-
<i>Bromoxynil</i>	0.00001	0.00001	<0.00001	-	-	-
<i>Benzo(a)pyrene</i>	0.0002	0.005	<0.0002	-	-	-
<i>Carbaryl</i>	0.0002	0.09	<0.0002	-	-	-
<i>Carbofuran</i>	0.0002	0.09	<0.0002	-	-	-
<i>Chlordane (Total)</i>	0.0003	0.007	<0.0003	-	-	-
<i>Chlorpyrifos</i>	0.0001	0.09	<0.0001	-	-	-
<i>Cyanazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Diazinon</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dicamba</i>	0.0002	0.12	<0.0002	-	-	-
<i>2,4-Dichlorophenol</i>	0.0005	0.9	<0.0005	-	-	-
<i>DDT</i>	0.0004	0.03	<0.0004	-	-	-
<i>2,4-D</i>	0.0002	0.1	<0.0002	-	-	-
<i>Diclofop-methyl</i>	0.0002	0.009	<0.0002	-	-	-
<i>Dimethoate</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dinoseb</i>	0.0002	0.01	<0.0002	-	-	-
<i>Diquat</i>	0.007	0.07	<0.007	-	-	-
<i>Diuron</i>	0.010	0.15	<0.010	-	-	-
<i>Glyphosate</i>	0.010	0.28	<0.010	-	-	-
<i>Heptachlor+</i>	0.0001	0.003	<0.0001	-	-	-
<i>Heptachlor epoxide</i>	0.0001	0.003	<0.0001	-	-	-
<i>Lindane (Total)</i>	0.0001	0.004	<0.0001	-	-	-
<i>Malathion</i>	0.0001	0.19	<0.0001	-	-	-
<i>Methoxychlor</i>	0.0001	0.9	<0.0001	-	-	-
<i>Metolachlor</i>	0.0001	0.05	<0.0001	-	-	-
<i>Metribuzin</i>	0.0001	0.08	<0.0001	-	-	-
<i>Paraquat</i>	0.001	0.01	<0.001	-	-	-
<i>Parathion</i>	0.0001	0.05	<0.0001	-	-	-
<i>Pentachlorophenol</i>	0.0005	0.06	<0.0005	-	-	-
<i>Phorate</i>	0.0001	0.002	<0.0001	-	-	-
<i>Picloram</i>	0.0002	0.19	<0.0002	-	-	-
<i>PCB</i>	0.00006	0.003	<0.00006	-	-	-
<i>Prometryne</i>	0.0001	0.001	<0.0001	-	-	-
<i>Simazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Temephos</i>	0.0001	0.28	<0.0001	-	-	-
<i>Terbufos</i>	0.0002	0.001	<0.0002	-	-	-
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	<0.0005	-	-	-
<i>Triallate</i>	0.0001	0.23	<0.0001	-	-	-
<i>2,4,6-Trichlorophenol</i>	0.0005	0.005	<0.0005	-	-	-
<i>Trifluralin</i>	0.0001	0.045	<0.0001	-	-	-
<i>2,4,5-T</i>	0.0002	0.28	<0.0002	-	-	-

**Note: Units expressed in mg/L.*

Schedule 24 – Organic Parameters

Steeltion P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	(mg/l)	(mg/l)	01-Mar-06	-	-	-
<i>Alachlor</i>	0.0001	0.005	<0.0001	-	-	-
<i>Aldicarb</i>	0.009	0.009	<0.009	-	-	-
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	<0.00004	-	-	-
<i>Atrazine</i>	0.0002	0.005	<0.0002	-	-	-
<i>Azinphos-methyl</i>	0.0001	0.02	<0.0001	-	-	-
<i>Bendiocarb</i>	0.0002	0.04	<0.0002	-	-	-
<i>Benzo(a)pyrene</i>	0.00001	0.00001	<0.00001	-	-	-
<i>Bromoxynil</i>	0.0002	0.005	<0.0002	-	-	-
<i>Carbaryl</i>	0.0002	0.09	<0.0002	-	-	-
<i>Carbofuran</i>	0.0002	0.09	<0.0002	-	-	-
<i>Chlordane (Total)</i>	0.0003	0.007	<0.0003	-	-	-
<i>Chlorpyrifos</i>	0.0001	0.09	<0.0001	-	-	-
<i>Cyanazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Diazinon</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dicamba</i>	0.0002	0.12	<0.0002	-	-	-
<i>2,4-Dichlorophenol</i>	0.0005	0.9	<0.0005	-	-	-
<i>DDT</i>	0.0004	0.03	<0.0004	-	-	-
<i>2,4-D</i>	0.0002	0.1	<0.0002	-	-	-
<i>Diclofop-methyl</i>	0.0002	0.009	<0.0002	-	-	-
<i>Dimethoate</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dinoseb</i>	0.0002	0.01	<0.0002	-	-	-
<i>Diquat</i>	0.007	0.07	<0.007	-	-	-
<i>Diuron</i>	0.010	0.15	<0.01	-	-	-
<i>Glyphosate</i>	0.010	0.28	<0.01	-	-	-
<i>Heptachlor+</i>	0.0001	0.003	<0.0001	-	-	-
<i>Heptachlor epoxide</i>	0.0001	0.003	<0.0001	-	-	-
<i>Lindane (Total)</i>	0.0001	0.004	<0.0001	-	-	-
<i>Malathion</i>	0.0001	0.19	<0.0001	-	-	-
<i>Methoxychlor</i>	0.0001	0.9	<0.0001	-	-	-
<i>Metolachlor</i>	0.0001	0.05	<0.0001	-	-	-
<i>Metribuzin</i>	0.0001	0.08	<0.0001	-	-	-
<i>Paraquat</i>	0.001	0.01	<0.001	-	-	-
<i>Parathion</i>	0.0001	0.05	<0.0001	-	-	-
<i>Pentachlorophenol</i>	0.0005	0.06	<0.0005	-	-	-
<i>Phorate</i>	0.0001	0.002	<0.0001	-	-	-
<i>Picloram</i>	0.0002	0.19	<0.0002	-	-	-
<i>PCB</i>	0.00006	0.003	<0.00006	-	-	-
<i>Prometryne</i>	0.0001	0.001	<0.0001	-	-	-
<i>Simazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Temephos</i>	0.0001	0.28	<0.0001	-	-	-
<i>Terbufos</i>	0.0002	0.001	<0.0002	-	-	-
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	<0.0005	-	-	-
<i>Triallate</i>	0.0001	0.23	<0.0001	-	-	-
<i>2,4,6-Trichlorphenol</i>	0.0005	0.005	<0.0005	-	-	-
<i>Trifluralin</i>	0.0001	0.045	<0.0001	-	-	-
<i>2,4,5-T</i>	0.0002	0.28	<0.0002	-	-	-

**Note: Units expressed in mg/L.*

Schedule 24 – Organic Parameters						
Shannon P/S	<i>dl</i>	<i>MAC</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
<i>Date Sampled</i>	(mg/l)	(mg/l)			24-Jul-06	-
<i>Alachlor</i>	0.0001	0.005	-	-	<0.0001	-
<i>Aldicarb</i>	0.009	0.009	-	-	<0.009	-
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	-	-	<0.00004	-
<i>Atrazine</i>	0.0001	0.005	-	-	<0.0001	-
<i>Azinphos-methyl</i>	0.0001	0.02	-	-	<0.0001	-
<i>Bendiocarb</i>	0.0002	0.04	-	-	<0.0002	-
<i>Benzo(a)pyrene</i>	0.00001	0.00001	-	-	0.00006	-
<i>Bromoxynil</i>	0.0002	0.005	-	-	<0.0002	-
<i>Carbaryl</i>	0.0002	0.09	-	-	<0.0002	-
<i>Carbofuran</i>	0.0002	0.09	-	-	<0.0002	-
<i>Chlordane (Total)</i>	0.0003	0.007	-	-	<0.0003	-
<i>Chlorpyrifos</i>	0.0001	0.09	-	-	<0.0001	-
<i>Cyanazine</i>	0.0001	0.01	-	-	<0.0001	-
<i>Diazinon</i>	0.0001	0.02	-	-	<0.0001	-
<i>Dicamba</i>	0.0002	0.12	-	-	<0.0002	-
<i>2,4-Dichlorophenol</i>	0.0005	0.9	-	-	<0.0005	-
<i>DDT</i>	0.0004	0.03	-	-	<0.0004	-
<i>2,4-D</i>	0.0002	0.1	-	-	<0.0002	-
<i>Diclofop-methyl</i>	0.0002	0.009	-	-	<0.0002	-
<i>Dimethoate</i>	0.0001	0.02	-	-	<0.0001	-
<i>Dinoseb</i>	0.0002	0.01	-	-	<0.0002	-
<i>Diquat</i>	0.007	0.07	-	-	<0.007	-
<i>Diuron</i>	0.010	0.15	-	-	<0.010	-
<i>Glyphosate</i>	0.010	0.28	-	-	<0.010	-
<i>Heptachlor+</i>	0.0001	0.003	-	-	<0.0001	-
<i>Heptachlor epoxide</i>	0.0001	0.003	-	-	<0.0001	-
<i>Lindane (Total)</i>	0.0001	0.004	-	-	<0.0001	-
<i>Malathion</i>	0.0001	0.19	-	-	<0.0001	-
<i>Methoxychlor</i>	0.0001	0.9	-	-	<0.0001	-
<i>Metolachlor</i>	0.0001	0.05	-	-	<0.0001	-
<i>Metribuzin</i>	0.0001	0.08	-	-	<0.0001	-
<i>Paraquat</i>	0.001	0.01	-	-	<0.001	-
<i>Parathion</i>	0.0001	0.05	-	-	<0.0001	-
<i>Pentachlorophenol</i>	0.0005	0.06	-	-	<0.0005	-
<i>Phorate</i>	0.0001	0.002	-	-	<0.0001	-
<i>Picloram</i>	0.0002	0.19	-	-	<0.0002	-
<i>PCB</i>	0.00006	0.003	-	-	<0.00006	-
<i>Prometryne</i>	0.0001	0.001	-	-	<0.0001	-
<i>Simazine</i>	0.0001	0.01	-	-	<0.0001	-
<i>Temephos</i>	0.0001	0.28	-	-	<0.0001	-
<i>Terbufos</i>	0.0002	0.001	-	-	<0.0002	-
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	-	-	<0.0005	-
<i>Triallate</i>	0.0001	0.23	-	-	<0.0001	-
<i>2,4,6-Trichlorophenol</i>	0.0005	0.005	-	-	<0.0005	-
<i>Trifluralin</i>	0.0001	0.045	-	-	<0.0001	-
<i>2,4,5-T</i>	0.0002	0.28	-	-	<0.0002	-

**Note: Units expressed in mg/L.*

Schedule 24 – Organic Parameters						
Lorna-1 P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	(mg/l)	(mg/l)	01-Mar-06	-	-	-
<i>Alachlor</i>	0.0001	0.005	<0.0001	-	-	-
<i>Aldicarb</i>	0.009	0.009	<0.009	-	-	-
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	<0.00004	-	-	-
<i>Atrazine+metabolites</i>	0.0002	0.005	<0.0002	-	-	-
<i>Azinphos-methyl</i>	0.0001	0.02	<0.0001	-	-	-
<i>Bendiocarb</i>	0.0002	0.04	<0.0002	-	-	-
<i>Benzo(a)pyrene</i>	0.00001	0.00001	<0.00001	-	-	-
<i>Bromoxynil</i>	0.0002	0.005	<0.0002	-	-	-
<i>Carbaryl</i>	0.0002	0.09	<0.0002	-	-	-
<i>Carbofuran</i>	0.0002	0.09	<0.0002	-	-	-
<i>Chlordane (Total)</i>	0.0003	0.007	<0.0003	-	-	-
<i>Chlorpyrifos</i>	0.0001	0.09	<0.0001	-	-	-
<i>Cyanazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Diazinon</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dicamba</i>	0.0002	0.12	<0.0002	-	-	-
<i>2,4-Dichlorophenol</i>	0.0005	0.9	<0.0005	-	-	-
<i>DDT</i>	0.0004	0.03	<0.0004	-	-	-
<i>2,4-D</i>	0.0002	0.1	<0.0002	-	-	-
<i>Diclofop-methyl</i>	0.0002	0.009	<0.0002	-	-	-
<i>Dimethoate</i>	0.0001	0.02	<0.0001	-	-	-
<i>Dinoseb</i>	0.0002	0.01	<0.0002	-	-	-
<i>Diquat</i>	0.007	0.07	<0.007	-	-	-
<i>Diuron</i>	0.010	0.15	<0.010	-	-	-
<i>Glyphosate</i>	0.010	0.28	<0.010	-	-	-
<i>Heptachlor+</i>	0.0001	0.003	<0.0001	-	-	-
<i>Heptachlor epoxide</i>	0.0001	0.003	<0.0001	-	-	-
<i>Lindane (Total)</i>	0.0001	0.004	<0.0001	-	-	-
<i>Malathion</i>	0.0001	0.19	<0.0001	-	-	-
<i>Methoxychlor</i>	0.0001	0.9	<0.0001	-	-	-
<i>Metolachlor</i>	0.0001	0.05	<0.0001	-	-	-
<i>Metribuzin</i>	0.0001	0.08	<0.0001	-	-	-
<i>Paraquat</i>	0.001	0.01	<0.001	-	-	-
<i>Parathion</i>	0.0001	0.05	<0.0001	-	-	-
<i>Pentachlorophenol</i>	0.0005	0.06	<0.0005	-	-	-
<i>Phorate</i>	0.0001	0.002	<0.0001	-	-	-
<i>Picloram</i>	0.0002	0.19	<0.0002	-	-	-
<i>PCB</i>	0.00006	0.003	<0.00006	-	-	-
<i>Prometryne</i>	0.0001	0.001	<0.0001	-	-	-
<i>Simazine</i>	0.0001	0.01	<0.0001	-	-	-
<i>Temphos</i>	0.0001	0.28	<0.0001	-	-	-
<i>Terbufos</i>	0.0002	0.001	<0.0002	-	-	-
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	<0.0005	-	-	-
<i>Triallate</i>	0.0001	0.23	<0.0001	-	-	-
<i>2,4,6-Trichlorophenol</i>	0.0005	0.005	<0.0005	-	-	-
<i>Trifluralin</i>	0.0001	0.045	<0.0001	-	-	-
<i>2,4,5-T</i>	0.0002	0.28	<0.0002	-	-	-

**Note: Units expressed in mg/L.*

Schedule 24 – Organic Parameters						
Lorna-2 P/S	dl	MAC	Q1	Q2	Q3	Q4
<i>Date Sampled</i>	(mg/l)	(mg/l)	-	-	-	12-Oct-06
<i>Alachlor</i>	0.0001	0.005	-	-	-	<0.0001
<i>Aldicarb</i>	0.009	0.009	-	-	-	<0.009
<i>Aldrin+Dieldrin</i>	0.00004	0.0007	-	-	-	<0.00004
<i>Atrazine+metabolites</i>	0.0002	0.005	-	-	-	<0.0002
<i>Azinphos-methyl</i>	0.0001	0.02	-	-	-	<0.0001
<i>Bendiocarb</i>	0.0002	0.04	-	-	-	<0.0002
<i>Benzo(a)pyrene</i>	0.00001	0.00001	-	-	-	<0.00001
<i>Bromoxynil</i>	0.0002	0.005	-	-	-	<0.0002
<i>Carbaryl</i>	0.0002	0.09	-	-	-	<0.0002
<i>Carbofuran</i>	0.0002	0.09	-	-	-	<0.0002
<i>Chlordane (Total)</i>	0.0003	0.007	-	-	-	<0.0003
<i>Chlorpyrifos</i>	0.0001	0.09	-	-	-	<0.0001
<i>Cyanazine</i>	0.0001	0.01	-	-	-	<0.0001
<i>Diazinon</i>	0.0001	0.02	-	-	-	<0.0001
<i>Dicamba</i>	0.0002	0.12	-	-	-	<0.0002
<i>2,4-Dichlorophenol</i>	0.0005	0.9	-	-	-	<0.0005
<i>DDT</i>	0.0004	0.03	-	-	-	<0.0004
<i>2,4-D</i>	0.0002	0.1	-	-	-	<0.0002
<i>Diclofop-methyl</i>	0.0002	0.009	-	-	-	<0.0002
<i>Dimethoate</i>	0.0001	0.02	-	-	-	<0.0001
<i>Dinoseb</i>	0.0002	0.01	-	-	-	<0.0002
<i>Diquat</i>	0.007	0.07	-	-	-	<0.007
<i>Diuron</i>	0.010	0.15	-	-	-	<0.010
<i>Glyphosate</i>	0.010	0.28	-	-	-	<0.010
<i>Heptachlor+</i>	0.0001	0.003	-	-	-	<0.0001
<i>Heptachlor epoxide</i>	0.0001	0.003	-	-	-	<0.0001
<i>Lindane (Total)</i>	0.0001	0.004	-	-	-	<0.0001
<i>Malathion</i>	0.0001	0.19	-	-	-	<0.0001
<i>Methoxychlor</i>	0.0001	0.9	-	-	-	<0.0001
<i>Metolachlor</i>	0.0001	0.05	-	-	-	<0.0001
<i>Metribuzin</i>	0.0001	0.08	-	-	-	<0.0001
<i>Paraquat</i>	0.001	0.01	-	-	-	<0.001
<i>Parathion</i>	0.0001	0.05	-	-	-	<0.0001
<i>Pentachlorophenol</i>	0.0005	0.06	-	-	-	<0.0005
<i>Phorate</i>	0.0001	0.002	-	-	-	<0.0001
<i>Picloram</i>	0.0002	0.19	-	-	-	<0.0002
<i>PCB</i>	0.00006	0.003	-	-	-	<0.00006
<i>Prometryne</i>	0.0001	0.001	-	-	-	<0.0001
<i>Simazine</i>	0.0001	0.01	-	-	-	<0.0001
<i>Temphos</i>	0.0001	0.28	-	-	-	<0.0001
<i>Terbufos</i>	0.0002	0.001	-	-	-	<0.0002
<i>2,3,4,6-Tetrachlorophenol</i>	0.0005	0.1	-	-	-	<0.0005
<i>Triallate</i>	0.0001	0.23	-	-	-	<0.0001
<i>2,4,6-Trichlorophenol</i>	0.0005	0.005	-	-	-	<0.0005
<i>Trifluralin</i>	0.0001	0.045	-	-	-	<0.0001
<i>2,4,5-T</i>	0.0002	0.28	-	-	-	<0.0002

**Note: Units expressed in mg/L.*

Non-compliance with Terms and Conditions of the Certificate of Approval

There were no Non-Compliance items noted by Ministry inspectors during the past year. The following comments were identified as actions requiring attention by PUC Services as a result of the last Provincial Officer's Inspection (Inspection Number 1-55LG0, dated 02-Mar-06)..

"In the interest of public safety the following actions relating to the Peoples Road distribution line are required:

1. In order to ensure the safety of the drinking water being supplied, PUC Services shall immediately begin sampling the distribution system on Peoples Road north of Fourth Line as part of the municipal system microbiological sampling requirements. At least one sample shall be collected monthly from the end of this distribution line.
2. PUC Services shall ensure that chlorine residuals are checked at the end of the distribution line serving Peoples Road north of Fourth Line on a weekly basis. This testing shall commence with the installation of a suitable sampling station, no later than June 1, 2006.
3. PUC Services shall take pressure readings from at least three locations in the distribution system on Peoples Road extending north of Fourth Line; at a point prior to the existing booster station, at a point immediately downstream of the booster station, and at the distribution end. Readings shall be taken for a one month period recording the minimum and maximum pressures every hour. A report shall be submitted to the Ministry by July 31, 2006 on the potential for backflow contamination in the remainder of the municipal drinking water system based on the pressure readings obtained. The report shall also include a summary of the microbiological and chlorine residual testing to date."

Actions Taken:

PUC Services provided immediate testing for microbiological parameters and chlorine residuals as of the date of the inspection report. A new sampling station has been installed on the municipal roadway at northern most property served by the dead end line.

PUC Services provided installation of the required pressure recorders to monitor line pressure and system integrity. PUC Services prepared a final report which was submitted to the Ministry for their approval and held meetings with the Inspectors to ensure that water quality to the Peoples Road distribution line had not been compromised. A copy of that report is available at the Sault Ste. Marie Water Treatment Plant.

PUC Services Inc.