The Corporation of the City of Kawartha Lakes Agenda

Lindsay-Ops Landfill Public Review Committee Meeting

2020-159
Wednesday, January 8, 2020
3:00 P.M.
Weldon Room
City Hall
26 Francis Street, Lindsay, Ontario K9V 5R8

Members:

Councillor Pat Dunn
Chris Appleton
Karen Buckley
Barry Hodgson
Lloyd Robertson
Larry Scrivens
Ken Trodd

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		Pages
1.	Call to Order	
2.	Election of Officers	
3.	Adoption of Agenda	
4.	Disclosures of Pecuniary Interest	
5.	Approval of the Minutes of the Previous Meeting	3 - 7
6.	Reports	
6.1	PRC Activity Summary Spreadsheet	8 - 8
7.	Landfill Complaints	
8.	Leachate Outbreaks	
9.	Other New Business	
9.1	New Lindsay Ops Landfill ECA	
9.2	Options for tire collection	
10.	Public Comment Period	
11.	Next Meeting	
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The Corporation of the City of Kawartha Lakes Minutes

Lindsay-Ops Landfill Public Review Committee Meeting

2019-158
Wednesday, November 13, 2019
3:00 P.M.
Weldon Room
City Hall
26 Francis Street, Lindsay, Ontario K9V 5R8

Members: Chris Appleton Barry Hodgson Larry Scrivens Ken Trodd

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1. Call to Order

The meeting was called to order at 2:59 pm.

2. Adoption of Agenda

Moved By L. Scrivens Seconded By K. Trodd

Carried

3. Disclosures of Pecuniary Interest

There were no declarations of pecuniary interest disclosed.

4. Approval of the Minutes of the Previous Meeting

Moved By C. Appleton **Seconded By** B. Hodgson

Carried

5. Reports

5.1 PRC Activity Summary Spreadsheet

6. Landfill Complaints

No complaints.

7. Leachate Outbreaks

No leachate outbreaks.

8. Other New Business

8.1 2019 Work Summary and 2020 Work Plan

Staff and the PRC reflected back on the work that was accomplished in 2019 and spoke about upcoming work in 2020. In 2020 the PRC will work with staff on implementing the goals outlined in the 2019 Waste Strategy Update.

Moved By K. Trodd

Seconded By B. Hodgson

Resolved that the PRC supports the 2019 Work Summary and 2020 Work Plan.

Carried

9. Public Comment Period

No comments.

10. Next Meeting

The next meeting will be Wednesday, January 8 at 3:00pm. in the Weldon Room, City Hall.

11. Adjournment

Moved By K. Trodd Seconded By B. Hodgson

Carried

2019 Work Summary

Goal	Completed in 2019
Integrated Waste Management Strategy	 PRC provided comment, feedback, and suggestions throughout 2019 on the Integrated Waste Management Strategy Update. March- PRC provided feedback on Strategy progress from 2015 to 2019 April- PRC reviewed public survey questions, participated in brainstorming activities for future initiatives May- PRC supported recommendations to council to make the mattress recycling program permanent and to continue the construction and demolition pilot throughout 2020 July- PRC reviewed results of the public consultation process (survey results and comments from public meeting) September- PRC reviewed and provided feedback on the first draft of Strategy Update October- PRC supported the second draft of Strategy Update for council approval
2019 Biomonitoring Report	PRC had the opportunity to view the draft Biomonitoring report before it was finalized to provide comments and ask questions.
2018 Annual Monitoring Report	A copy of the 2018 Annual Monitoring Report was provided to the PRC. At the June meeting the PRC viewed a PowerPoint presentation on the reporting results in 2018.
Review of Ministry of the Environment, Conservation and Parks (MECP) Correspondence	PRC reviewed all MECP correspondence regarding the annual monitoring report and any inspection reports. • February- PRC provided inspection report by the MECP for the north expansion area of the Lindsay Ops Landfill • April- PRC provided MECP surface water comments on the 2017 Annual Monitoring Report • September- PRC provided MECP groundwater comments on the 2015, 2016, 2017, and 2018 Annual Monitoring Reports as well as an inspection report by the MECP for the storm water management system
Development of 2020 Work Plan	The PRC developed a 2020 work plan for council approval at the November meeting.

20	20 Lindsay Ops PRC Work Plan Tool
Committee Name:	Lindsay Ops Landfill Public Review Committee
Work plan for Year:	2020
Approved by Council:	

Goal	Measurement Stages	Timeline	Measurement for Success
Integrated Waste Management Strategy	Provide recommendations on the implementation of various waste management initiatives outlined in the Strategy Update for 2020	1. Ongoing	2020 Strategy Initiatives achieved
2020 Biomonitoring Report	Review biomonitoring results and report	1. April to June	Provide feedback during draft phase of report
2019 Annual Monitoring Report	Review 2019 Annual Monitoring Report and committee questions	1.May to June	Dialogue with committee to ensure ECA conditions are met
Review of Ministry of the Environment Conservation and Parks (MECP) Correspondence	Review all MECP correspondence regarding the annual monitoring report. Review of any MECP inspection reports	1. As received 2. As received	 Any Ministry correspondence is addressed in a timely manner by committee and staff for response to MECP. For committee information
Development of 2021 Work Plan	 Review and acceptance of 2021 Work Plan Staff Report to Council for approval 	November December	Approval of 2021 work plan by Lindsay Ops PRC Committee and Council

Lindsay Ops Landfill Public Review Commitee Action List

Meeting Date of Activity	Action	Responsilibity	Action Item Date:	Status
15-May-13	PRC requested operational updates on the Landfill Gas Electricity Generation.	CKL	Monthly	Jan 8 Meeting: Cover has been placed in well area. Feasibility Study extended to March 2020. Have seen increases in KWH produced since June.
15-Jan-14	That the PRC is copied on Staff Reports to Council regarding the Lindsay Ops Landfill	CKL	As Available	Jan 8 Meeting: No reports going in January.
21-Jan-15	Provide update on quarterly PCB testing (SW3/ SW13)	CKL	Quarterly	Jan 8 Meeting: No samples completed yet for 2020.
17-Jun-15	MECP Comments	CKL	As Available	Jan 8 Meeting: Meeting being scheduled to discuss groundwater and surface water monitoring at the site.
23-Nov-16	Biomonitoring	CKL	As Available	Jan 8 Meeting: No updates.
21-Jan-19	Leachate Water Quality Results	CKL	As Available	Jan 8 Meeting: See attached spreadsheet.
17-May-17	Waste Management Advisory Committee Update	CKL	As Available	Jan 8 Meeting: No meetings yet in 2020.
17-Jan-17	Updates on Blue Box markets and Legislation	CKL	As Available	Jan 8 Meeting: Markets low and expected to drop even lower. Date for transition to producer responsibility of the blue box has been set for 2023-2025.
16-May-18	Construction and Demolition and Mattress Recycling Update	CKL	As Available	Jan 8 Meeting: Budget approved for 2020.
8-Jan-20	Update on Implementation of Waste Strategy Iniatives	CKL	As Available	Jan 8 Meeting: Bylaw update to Feb COW meeting, staff to meet with Fleming College in January to start textile pilot project, work underway on other initiatives
20-Jun-18	Lindsay Ops EA Process Update	CKL	As Available	Jan 8 Meeting: No updates.

Lindsay Ops Leachate Exceeds Bylaw Value Exceeds PWOO Value	Parameters	CKL Sewer Bylaw Limits	Provincial Water Quality Objectives	Jan. Results	Feb. Resi
	, ,			LACEEUS I'	VQO Value
	Lindsay Ops	Leachate			

Parameters Bylaw Limits (mg/L)				1		1	1	1					1				Т
Askaleny (G.CO3)	Parameters	Bylaw Limits	Quality Objectives					,				Results					Dec Results (mg/L)
Bechman Comman	Hardness (CaCO3)	N/A	N/A	593	596	544	653	925	557	475	628	649	664	1090	666	610	580
Demand (IGO)	Alkalinity (CaCO3)	N/A	N/A	609	599	601	482	1270	528	531	693	773	759	2380	731	610	543
Tight Tigh	Biochemical Oxygen	300	N/A	<3	19	8	7	262	4	3	5	4	n/a	62	- 3	5	5
Descripted Cyagne		N/A	N/A	991	1005	972	928	1550	796	743	1045	1144	1258	4318			
COOD NA NA NA 73 92 68 56 644 40 98 78 78 78 112 6612 177 19 95 6 Ammonia NA NA 75 19 19 198 127 275 177 106 136 202 397 887 278 201 146 Ammonia NA 1.11 176 176 189 141 10 271 105 209 268 224 300 279 174 113 Ammonia NA 1.11 176 176 189 141 10 271 105 209 268 224 300 279 174 113 Ammonia NA 1.11 176 176 189 141 10 271 105 209 268 224 300 279 174 113 Ammonia NA 1.11 176 176 189 141 10 271 105 209 268 224 300 279 174 113 Ammonia NA 1.11 10 176 176 189 141 10 10 105 170 170 170 170 170 170 170 170 170 170	Dissolved Organic													1			
Coloring NA NA NA 176 199 198 127 275 107 106 138 202 307 887 278 201 144 145 141 101 174 175 175 174 175 17																	
Ammonia (N- Total NA 1.11 176 176 176 189 14.1 10 8.7 10.5 20.9 26.6 29.4 350 27.9 17.4 11.3 11.5 11.																	
Fluoride 10																	
Phenoing AAPP 1																	
Sulchate N/A N/A 45 42 48 138 10 38 34 33 22 15 121 17 49 50																	
Nimite N/A N/A 0.06 0.05		•															
Nine																	
Neglatah Ninogen 50																	
Alumnum-Total 50	Kjeldahl Nitrogen -																
Anthrony-Total 5		50	0.075*	0.27	0.12	0.12	0.68	0.13	0.1	0.08	0.15	0.1	0.07	0.62			
Arsence Total 1																	
Berlium																	
Bernium NA																	
Born																	
Cadmin Total 0.7 0.0002 0.00007 0.000070 0.																	
Calcium N/A N/A 179 175 160 211 273 184 154 184 186 180 267 182 184 185 180 Capril 184 185 Chromim-Total 2.8 0.0099 0.011 0.011 0.012 0.161 0.013 0.004 0.010 0.013 0.007 0.003 0.010 0.004 0.0011 0.0015 0.0011 0.0011 0.0015 0.0015		0.7	0.0002	< 0.00007	<0.00015	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070	< 0.000070
Chromism - Total 2.8 0.0099 0.017 0.011 0.012 0.016 0.013 0.004 0.001 0.0015 0.0011 0.0011 0.0015 0.00013 0.0013 0.0010 0.00013 0.00013 0.00013 0.00013 0.00013 0.00014 0.00014 0.00014 0.00015 0.00014																	
Copper-Total Copp		2.8	0.0099				0.161	0.013	0.004	0.001	0.013	< 0.001					
Fig.	Cobalt - Total	5	0.0009	0.0013	0.007	0.0013	0.0025	0.0052	0.0009	0.0011	0.0015	0.001	0.0011	0.0159	0.0013	0.001	0.0008
Lead - Total 1 0.005	Copper - Total	2	0.005	0.0042	0.0011	0.0011	0.0062	0.011	0.001	0.0015	0.0021	< 0.0005	< 0.0005	0.008	< 0.0005	0.0006	0.0011
Maganesium N/A N/A 35.3 38.6 35.1 30.6 59.1 23.6 21.9 40.9 44.8 52 10.4 51.3 36.6 28.5	Iron	N/A	0.3	27.7	11	5.64	21	7.96	20.9	10.8	45.5	14.4	15.1	59.6	11.8	13.9	13
Mandanese - Total 5	Lead - Total	1	0.005	0.0025	0.00012	0.0002	0.0016	0.0016	0.0004	0.0001	0.0005	< 0.0001	< 0.0001	0.0013	0.0002	0.0005	0.0002
Metrury-Total 0.01 0.0002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.00002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.0002 <0.000	Magnesium	N/A				35.1											
Molybdenum - Total 5	Manganese - Total																
Nickel - Total 2																	
Potassium N/A N/A 18.1 21.3 19.1 14.5 139 11.7 10.8 24 27.4 28.9 260 31.5 19 12.8																	
Phosphorus N/A N/A <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.																	
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Silver - Total 0.4 0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0																	
Sodium N/A N/A 121 136 123 97.6 257 81.6 73 136 149 168 740 179 124 91.6																	
Strontium N/A 10 bq/L 0.64 mg/L 0.715 mg/L 0.622 0.678 1.35 0.572 0.515 0.774 0.732 0.794 2.73 82.80% 0.679 0.6																	
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Vanadium N/A 0.006 0.0018 0.0009 0.0025 0.0074 0.0009 0.0005 0.0018 0.0007 0.001 0.0239 0.001 0.001 0.003 0.002 0.003 0.033 0.033 0.033 0.034 0.009 <0.005 0.006 <0.005 0.005 0.005 0.005 0.018 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015 <0.0015																	
Zinc - Total 2 0.03 0.023 0.009 0.03 0.035 0.034 0.009 < 0.005 0.006 < 0.005 0.006 < 0.005 0.018 < 0.005																	
Benzene 0.01 0.1 0.0023 0.0007 0.0006 < 0.5 0.0007 < 0.0005 < 0.0016 0.0006 < 0.0005 0.0018 0.0017 0.0015 0.0019																	
Tolluene 0.02 0.0008 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <														0.103			
Ethylbenzene																	
Xylene, o - N/A 0.04 0.0005 <0.0005 <0.0005 <0.0005 0.0006 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.0005 <0.																	
	,.o.,, p, 0		19/7	0.0012	10.0011	30.0011	30.0011	0.0010	10.0011	10.00.1	10.0017	10.0011	10.0011		10.0011	10.0017	40.0011
								1									

Parameters	Limits	Provincial Water Quality Objectives	Jan. Results	Feb. Results	Mar. Results	April. Results	Apr. Results New Cell	May. Results	June. Results	July. Results	Aug. Results	Sept. Results	Oct. Results New Cell	Oct Results	Nov Results	Dec Results
pH (at 25 °C)	6.0 - 9.5	6.5 - 8.5	7.34	7.68	7.6	7.34	7.74	7.13	7.35	6.95	7.4	7.28	7.87	7.66	7.6	7.37
Conductivity (at 25 °C)	N/A	N/A	1750 µm ho/cm	1780 µm ho/cm	1790 µmho/cm	1590 µmho/cm	3490 µmho/cm	1370 µmho/cm	1350 µmho/cm	1860 µmho/cm	2000 µmho/cm	2160 µmho/cm	7050 µmho/cm	2110 µmho/cm	1750 µmho/cm	1540 µmho/cm
Conductivity (calculated)	N/A	N/A	1650 µm ho/cm	1720 µm ho/cm	1664 µmho/cm	1563 µmho/cm	2403 µmho/cm	1344 µmho/cm	1267 µmho/cm	1692 µmho/cm	1928 µmho/cm	2141 µmho/cm	6453 µmho/cm	2103 µmho/cm	1725 µmho/cm	1479 µmho/cm
Anion Sum	N/A	N/A	18.1 meg/L	18.5 meq/L	18.6 meq/L	16.1 meq/L	26.4 meq/L	14.4 meq/L	14.3 meq/L	18.4 meq/L	21.6 meq/L	24.1 meq/L	75.1 meq/L	22.8 meq/L	18.9 meq/L	16 meq/L
Cation Sum	N/A	N/A	20.3 meg/L	20.2 meq/L	18.2 meq/L	18.7 meq/L	34.4 meq/L	16.8 meq/L	14.3 meq/L	23 meq/L	22.8 meq/L	24.1 meq/L	88.5 meq/L	24.5 meq/L	20.1 meq/L	17.4 meq/L
% Difference	N/A	N/A	5.77%	4.51%	1.09%	7.29%	13.10%	7.78%	0.18%	11.00%	2.68%	0.02%	8.17%	3.55%	2.94%	415.00%
Ion Ratio (AS/CS)	N/A	N/A	0.891	0.914	1.02	0.864	0.769	0.856	1	0.801	0.948	1	0.849	0.931	0.943	0.92
Sodium Adsorption Ratio	N/A	N/A	2.16	2.42	2.29	1.66	3.68	1.5	1.46	2.36	2.54	2.84	9.73	3.02	2.18	1.66
TDS (calc.) / EC (actual)	N/A	N/A	0.567	0.565	0.542	0.585	0.444	0.58	0.551	0.561	0.572	0.582	0.612	0.581	0.582	0.562
Langelier Index (at 25°C)	N/A	N/A	0.875	1.19	1.08	0.845	1.77	0.635	0.78	0.543	1.05	0.903	2.12	1.27	1.14	88.0