

TOWN OF FORT FRANCES

Operations and Facilities Executive Committee

AGENDA - April 6, 2016, 8:30 AM

MEETING - Civic Centre

Session #007

	Page
1. <u>Call to Order</u>	
2. <u>Disclosure of pecuniary interest and the general nature thereof</u>	
3. <u>Approval of Previous Committee Minutes</u>	
3.1 Minutes from the meeting of this Committee on March 24, 2016.	2 - 3
4. <u>Non-agenda Items</u>	
5. <u>New Business</u>	
5.1 Amendment to Municipal - Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) to include Pesticides, Solvents & Fertilizers.	4 - 7
5.2 February 2016 Drinking Water Systems Monthly Summary Report	8 - 15
6. <u>Information</u>	
6.1 Fort Frances Wastewater Treatment Facility February 2016 Monthly Report.	16 - 21
6.2 2016 Tonnage at the landfill site - updated March 31st, 2016	22
6.3 Aircraft Landings 2016 - as of March 31, 2016	23 - 24
7. <u>Adjourn / Next Meeting Date</u>	

TOWN OF FORT FRANCES

MINUTES

SESSION NO. #006

March 24, 2016

The meeting of Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Civic Centre on March 24, 2016 from 8:25 a.m. to 9:05 a.m.

PRESENT: Paul Ryan, Chairperson, Doug Kitowski, June Caul, Mark McCaig, CAO and Doug Brown.

ALSO PRESENT: Guests - Travis Rob (8:25 a.m. to 8:45 a.m.)

1. Call to Order

The meeting was called to order at 8:25 a.m.

2. Disclosure of pecuniary interest and the general nature thereof

None

3. Approval of Previous Committee Minutes

3.1 Minutes from the meeting of this Committee on March 9, 2016 the minutes were approved as circulated.

4. Non-agenda Items

4.1 Tender for Airport Well

4.2 Tender Issues

5. Items Referred from Council

5.1 J. Byzewski Property - Eighth Street West - Mark McCaig updated the Operations and Facilities Executive Committee on the request for on-site septic requested by Jordan Byzewski for the development of the property along Eighth Street West between Walker Avenue and Cornwall Avenue. There was discussion on this request and comparison to the 2005 development of Minnie Avenue North. There was no further action. Travis Rob left the meeting at 8:45 a.m.

6. Adjourn / Next Meeting Date

The meeting adjourned at 9:05 a.m.

7.

Non-agenda Items:

7.1 Tender for Airport Well - Tender award of 16-OF-05 - Groundwater Well at the Airport Property - Doug Brown handed out an administration report. The report was reviewed and will be forwarded to Council for approval.

7.2 Tender Issues - Councillor Kitowski requested additional clarification on the Colonization Road East Project Tender Package.

Executive Committee Chair

D. Brown, Manager of Operations & Facilities

March 31, 2016

Report To: Mayor & Council

From: Doug Brown, Manager Operations & Facilities

SUBJECT: Amendment to Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) to include Pesticides, Solvents & Fertilizers

On May 11, 2015 the Town entered into a Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) for management of end-of-life paints and coatings from future MHSW event days. At this time it is proposed to amend the existing agreement with Product Care Association to include Pesticides, Solvents and Fertilizers which are considered phase 1 MHSW materials similar to old paint cans containing leftover paint and other coatings.

On an annual basis a Municipal Hazardous or Special Waste (MHSW) event day takes place where the general public drops off household hazardous waste materials. In 2015 the Town's MHSW provider, Miller Environmental Group collected and managed (end-of-life) 280 Kgs - pesticides, 222.60 Kgs- solvents and 0 Kgs. Fertilizers. The 2016 MHSW event day is scheduled for Saturday September 17, 2016.

On October 28, 2015 Waste Diversion Ontario (WDO) has approved the Product Care Association (PCA) Industry Stewardship Plan (ISP) for the management of end-of-life of Pesticides, Solvents and Fertilizers. At this time the Town must enter into an agreement directly with Product Care Association to continue to receive reimbursement for Pesticides, Solvents and Fertilizers at a rate of \$2.2 per kg or \$2,200 per tonne.

The target date for the return of the signed agreement to PCA was scheduled to be April 1, 2016.

The Operations & Facilities Executive Committee recommends the following:

- 1) That the Town amend the existing Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) to include the management of end-of-life for Pesticides, Solvents and Fertilizers from future MHSW event days.
- 2) That the Mayor and Clerk be authorized to execute the amended Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA).

Respectfully submitted,
Operations & Facilities Division



Doug Brown, P. Eng.
Manager Operations & Facilities

Council approval of this report will ensure the following:

- 1) That the Town amend the existing Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) to include the management of end-of-life for Pesticides, Solvents and Fertilizers from future MHSW event days.
- 2) That the Mayor and Clerk be authorized to execute the amended Municipal – Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PA).



Holly Lafontaine
<holly@productcare.org>
03/10/2016 02:26 PM

To "dbrown@fort-frances.com" <dbrown@fort-frances.com>
cc "lwitherspoon@fort-frances.com"
<lwitherspoon@fort-frances.com>
bcc
Subject FW: Product Care Association's Pesticide, Solvent and
Fertilizer ISP Transition

Hi Doug,

Please see below.

Thanks,

Holly Lafontaine | Program Coordinator | Product Care Association
DIRECT: 778.372.4464 TOLL-FREE: 1.877.592.2972 x 239 FAX: 604.592.2982

From: Admin
Sent: Monday, February 29, 2016 12:45 PM
To: dbrown@fort-frances.com; Holly Lafontaine <holly@productcare.org>
Subject: Product Care Association's Pesticide, Solvent and Fertilizer ISP Transition

Dear Municipal Partner,

On October 28, 2015, Waste Diversion Ontario (WDO) approved the Product Care Association (PCA) Industry Stewardship Plan (ISP) for the end-of-life management of pesticides, solvents and fertilizers (PSF). On December 17, 2015 WDO announced that the effective date (start date) of the PSF ISP will be April 1, 2016.

As with the PCA Paint ISP, the PSF ISP has the support of a large majority of PSF stewards, by market share and PCA's objective is to ensure a smooth and uninterrupted transition of the end of life management of PSF materials from Stewardship Ontario (SO) to PCA. Below are key updates and transition activities for the PCA PSF ISP.

Service to Municipalities

- a. Service to your municipality will continue uninterrupted. Your current service provider or collection site arrangements will not change as a result of the transition.
- b. PCA is adopting the same collection site standards, policies and guidelines as exists today with SO.
- c. There is no change to how PSF materials are collected and packed at depots or events.

Municipal Reporting

- a. You will report directly to PCA, instead of SO, for event or depot services which occur on or after April 1, 2016 for PSF materials.
- b. Municipal portal and claim submission training for PSF, and downloadable documentation will be made available to you as soon as possible.

Municipal Service Agreements

- a. The amending agreement which adds PSF to the existing PCA-Municipal Paint ISP services agreement, has been reviewed by municipal representatives and approved by the WDO.
- b. Attached is your municipality's amending agreement which extends the PCA-Municipal ISP Materials Service Agreement for paint to add PSF materials.
- c. Each municipality is requested to sign and return the amending agreement to PCA by April 1, 2016.
- d. In the event the PSF amending agreement is not returned by the effective date, PCA will retroactively compensate the municipality for post-collection costs, depot hours or event claims as of the PSF ISP effective date, once the agreement is fully executed and received by PCA.
- e. SO will continue to manage and operate the MHSW program for Obligated MHSW materials other than the Paint and PSF ISPs.

Key Dates and Timelines

Transitio	Tim	Where/
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April 4, 2016

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: February 2016 Drinking Water Systems Monthly Summary Report

Please find attached the February 2016 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the February 2016 report as presented.

Respectfully submitted,
Operations & Facilities Division



Doug Brown, P. Eng.
Manager of Operations & Facilities

<p>Council approval of this report will accept the February 2016 Drinking Water Systems Monthly Summary Report and approve the report prior to it being made available to the general public.</p>
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c.c. – Doug Herr, Environmental & Facilities Supt.
Randy White, Senior WTP Operator

03CouncilwaterreportMarch 2015

February, 2016

**Monthly Summary Report
Water Systems**

**Prepared by: Randy White, ORO
Senior Water Treatment Plant Operator**

Dated: March 09, 2016

1) **Introduction -**

This report contains the major maintenance activities and operational events that occurred during the month of February 2016 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works # 26002736. This information report has been prepared for Council to better understand how the water systems they own and operate are maintained on a monthly basis. Also, this report will assist Council as Directors of the Corporation in exercising its obligation to meet a reasonable Standard of Care as outlined in Section 19 of the Safe Drinking Water Act.

2) **Flow Data**

Water Treatment Plant: See attached spreadsheet. No flow data for Airport groundwater well.

3) **Microbiological (Health Related) Water Analysis– Main Water System # 220000978**

Water Treatment Plant (treated): 5 samples taken no adverse results

Water Treatment Plant (raw): 5 samples taken no adverse results

Water Distribution System: 20 samples taken where 25% of samples were tested for heterotrophic plate count HPC no adverse results

We take microbiological samples on a weekly basis, which includes 1 raw sample, 1 treated sample and 4 distribution samples. The 4 distribution samples are taken at different locations throughout the distribution system.

4) **Microbiological (Health Related) Water Analysis– Airport Groundwater Well # 26002736**

No samples taken.

The Airport has signs posted in the men's and women's washroom stating that the water has not been tested or treated for drinking purpose in accordance with the Health Protection and Promotion Act – Section 7 of the Small Drinking Water Systems Regulation, O. Reg. 318/08 (*Amended to Safe Drinking Water Act, 2002 - Section 6 of Ontario Regulation 252/05*). The operators do a visual inspection of the warning notices at a minimum of once per week to ensure that they are legible and comply with Ontario Regulation 318/08, Section 7(5).

5) Free Available Chlorine Residual (FAC) – Main Water System – # 220000978

FAC residuals are taken at a minimum daily at both the Water Treatment Plant and within the Water Distribution System.

6) Free Available Chlorine residual (FAC) – Airport Groundwater Well System # 26002736

Signs posted, exempt from testing.

7) Maintenance Activities at the WTP

Feb. 3rd - painted pipes inside water treatment plant.

Feb. 4th - cleaned all 4 check valves on poly unit.
- cleaned top and bottom tanks on poly unit.

Feb. 8th - took clarifier #2 off line to clean and inspect.

Feb. 12th - worked on filter turbidity meters.

Feb. 16th - Lakeside here working on distribution Chlorine analyzers.

Feb. 17th - finished cleaning out clarifier #2 and did inspection.
- took grab samples off filters.
- Lakeside here working on distribution Chlorine analyzers.

Feb. 18th - Lakeside here working on distribution Chlorine analyzers.

Feb. 21st - calibrated distribution chlorine analyzer.

Feb. 23rd - transferred sludge from clarifier #1 to clarifier #2.

Feb. 24th - transferred sludge from clarifier #1 to clarifier #2.
- took grab samples off filters.
- ran the generator for approx. 1 hour

Feb. 25th - transferred sludge from clarifier #1 to clarifier #2.
- cleaned all 4 check valves on poly unit.
- cleaned top and bottom tanks on poly unit.

Feb. 29th - calibrated distribution chlorine analyzer.

8) **Water Complaints:**

- Poor Pressure – 0 complaints.
- Water quality – 0 complaints.

9) **Other Miscellaneous Information:**

Feb. 01st - took weekly routine bacti samples.

Feb. 05th - received a load of alum.

Feb. 08th - took weekly routine bacti samples.

Feb. 17th - took weekly routine bacti samples.

Feb. 22nd - took weekly routine bacti samples.

Feb. 29th - took weekly routine bacti samples

10) In order to acknowledge that all levels of responsibility within the Corporation of the Town of Fort Frances have received and reviewed this monthly report, it is necessary to sign-off in the appropriate location below:

- Randy White, ORO, Senior WTP Operator: _____
- Doug Herr, Environmental & Facilities Supt.: _____
- Doug Brown, Manager of Operations & Facilities: _____
- Mark McCaig, CAO: _____
- Paul Ryan, Chair O& F Exec Committee: _____
- Roy Avis, Mayor: _____
- June Caul, Councillor: _____
- John Albanese, Councillor: _____
- Wendy Brunetta, Councillor: _____
- Doug Kitowski, Councillor: _____
- Ken Perry, Councillor: _____

Note: Once all signatures have been obtained, the report will be distributed and made available to the public. If you have any questions, please feel free to contact myself or Randy White, Senior WTP Operator at 274-2325.

Monthly Report February 2016

Raw Water	10^3 M^3	17	5.93	5.10	5.08	5.10	5.12	5.29	5.02	4.97	5.07	5.08	5.09	5.06	5.27	5.00	5.08	4.90	5.11	5.04	5.12	4.96	5.09	5.15	5.06	5.03	5.01	5.12	5.00	5.09	4.97	147.91	5.10
Peak Instantaneous - Raw Water	L/s	n/a	59.67	59.61	59.57	59.56	59.54	59.56	59.63	59.55	59.46	59.40	59.42	59.34	59.33	59.3	59.3	59.26	59.34	59.24	59.31	59.36	59.26	59.19	59.17	62.66	61.79	61.18	59.18	59.17	59.05	1729.40	59.63
Treated Water	10^3 M^3	17	4.00	3.76	3.69	3.73	3.79	3.76	3.67	3.73	3.63	3.73	3.73	3.76	3.94	3.85	3.93	3.82	3.88	3.84	3.85	3.59	3.86	4.11	3.73	3.64	3.68	3.86	3.64	3.86	4.19	110.25	3.80
Peak Instantaneous - Treated Water	L/s	n/a	62.77	63.14	63.27	61.89	62.26	61.26	65.67	58.56	62.16	60.72	60.73	63.57	61.59	62.3	61.71	63.4	63.72	64.44	63.47	61.58	60.22	62.45	66.82	59.25	61.04	62.52	63.14	59.90	60.95	1804.50	62.22
BackWash Water	10^3 M^3	n/a	0.237	0.236	0.249	0.234	0.237	0.257	0.235	0.239	0.253	0.237	0.242	0.249	0.482	0.238	0.253	0.463	0.741	0.828	0.941	0.716	0.235	0.236	0.723	0.277	0.238	0.263	0.234	0.239	0.262	10.27	0.354
Fluoride Information																																	
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.55	0.54	0.50	0.70	0.67	0.59	0.61	0.59	0.57	0.59	0.64	0.64	0.61	0.60	0.59	0.56	0.59	0.56	0.66	0.63	0.52	0.50	0.64	0.67	0.55	0.60	0.60	0.59	0.63	17.29	0.60
Turbidity Information																																	
Raw Water	NTU	n/a	0.73	0.61	0.62	0.63	0.58	0.62	0.60	0.57	0.55	0.58	0.58	0.56	0.51	0.55	0.50	0.57	0.56	0.59	0.63	0.51	0.51	0.53	0.61	0.55	0.5	0.55	0.57	0.62	0.52	16.61	0.57
Settled Water	NTU	n/a	0.32	0.25	0.22	0.20	0.21	0.20	0.19	0.20	0.23	0.24	0.25	0.30	0.27	0.29	0.25	0.26	0.17	0.46	0.27	0.26	0.26	0.23	0.25	0.31	0.22	0.26	0.20	0.17	0.23	7.17	0.25
Treated Water	NTU	1	0.10	0.10	0.11	0.11	0.10	0.09	0.09	0.11	0.10	0.11	0.09	0.11	0.10	0.10	0.12	0.11	0.11	0.12	0.10	0.10	0.09	0.11	0.09	0.10	0.12	0.11	0.09	0.08	0.09	2.96	0.10
Other Operating Parameters																																	
pH - Treated Water	no units	6.5 to 8.5	7.74	7.80	7.14	7.25	7.24	7.21	7.17	7.28	7.30	7.26	7.28	7.19	7.15	7.12	7.17	7.26	7.17	7.19	7.22	7.27	7.28	7.21	7.26	7.31	7.22	7.12	7.17	7.20	7.14	210.32	7.25
pH - Settled water	no units	n/a	6.00	5.95	6.30	6.20	6.27	6.31	6.33	6.32	6.35	6.49	6.46	6.22	6.27	6.30	6.35	6.18	6.24	6.19	6.16	6.34	6.06	6.35	6.28	6.32	6.23	6.31	6.36	6.29	6.56	181.99	6.28
pH - Raw Water	no units	n/a	7.43	7.42	7.46	7.16	7.12	7.09	7.05	7.09	7.16	7.17	7.15	7.13	7.10	7.05	7.10	7.08	7.18	7.10	7.13	7.12	7.11	7.10	7.17	7.12	7.06	7.16	7.12	7.09	7.10	207.32	7.15
FAC - Treated Water	mg/l	0.2 to 4	2.14	1.96	2.02	2.1	2.15	2.21	2.41	2.18	2.12	2.1	2.42	2.2	2.1	2.13	2.12	2.18	2.2	2.28	2.32	2.28	2.2	2.22	2.23	2.15	2.13	2.26	2.29	2.10	63.40	2.19	
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.30	2.28	2.42	2.22	2.54	2.37	2.57	2.30	2.32	2.50	2.52	2.34	2.21	2.30	2.25	2.34	2.60	2.64	2.42	2.50	2.30	2.38	2.52	2.44	2.40	2.36	2.47	2.52	2.42	69.75	2.41
Temperature	C	15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3.00	69.0	2.38
Fluoride used (Total Daily Consumption)	kg	n/a	15.0	14.0	15.0	15.0	17.0	18.0	16.0	16.0	16.0	15.0	16.0	16.0	16.0	15.0	15.0	15.0	16.0	15.0	14.0	15.0	15.0	16.0	14.0	15.0	15.0	14.0	15.0	17.0	15.0	446.0	15.38
Chlorine used (Total Daily Consumption)	kg	n/a	20.0	20.0	19.0	20.0	20.0	21.0	19.0	19.0	19.0	20.0	20.0	19.0	20.0	21.0	19.0	19.0	17.0	22.0	20.0	18.0	20.0	20.0	19.0	20.0	19.0	20.0	19.0	19.0	19.0	567.0	19.55
Soda ash (Total Daily Consumption)	kg	n/a	207.6	178.5	177.8	178.5	179.2	185.2	175.7	174.0	177.5	177.8	178.2	177.1	184.5	175.0	177.8	171.5	178.9	176.4	179.2	173.6	178.2	180.3	177.1	176.1	175.4	179.2	175.0	178.2	174.0	5176.9	178.51
Soda Ash - Dosage	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1015.0	35.00
Alum residual - (Total Daily Consumption)	kg	n/a	207.6	178.5	177.8	178.5	179.2	185.2	175.7	174.0	177.5	177.8	178.2	177.1	184.5	175.0	177.8	171.5	178.9	176.4	179.2	173.6	178.2	180.3	177.1	176.1	175.4	179.2	175.0	178.2	174.0	5176.9	178.51
Alum residual - Dosage	mg/l	n/a	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1015.0	35.00
Alum residual - Treated Water	mg/l	0.1	0.04	0.06	0.05	0.04	0.05	0.04	0.03	0.05	0.05	0.03	0.02	0.06	0.04	0.04	0.06	0.03	0.04	0.04	0.04	0.06	0.06	0.05	0.07	0.07	0.05	0.1	0.03	0.05	0.06	1.37	0.05
Poly bags added (25 kg bags)	kg				0.5														0.5					0.5					0.5			50.0	

Flow Data	FEBRUARY	Units	2014		2015		2016	
			Day of the Month		Day of the Month		Day of the Month	
Total Raw Water	m ³			139720		146690		147910
Raw Maximum Day	m ³	Friday 28th	6020	Tuesday 24th	6120	Monday 1st	5930	
Raw Minimum Day	m ³	Friday 10th	4560	Monday 2nd & Thursday 12th	4850	Tuesday 16th	4900	
Raw Average Daily Consumption	m ³		4990		5240		5100	
Total Treated Water	m ³		124530		107690		110250	
Treated Water Maximum Day Consumption	m ³	Thursday 27th	5470	Saturday 28th	4470	Monday 29th	4190	
Treated Water Minimum Day Consumption	m ³	Tuesday 07th	3580	Thursday 12th	3340	Saturday 20th	3590	
Treated Water Average Day Consumption	m ³		4450		3850		3800	
Daily Average Per Household Consumption Rate	m ³		1.176		1.018		1.004	
* Daily Average Per Person Consumption Rate	m ³		0.557		0.482		0.476	
Monthly Averages - Operating Parameters WTP:								
FAC Residual - Treated Water	mg/L		1.80		1.94		2.19	
Total Chlorine Residual - Treated Water	mg/L		2.13		2.22		2.41	
Aluminum Sulphate - Raw Water	mg/L		34.0		37.5		35.0	
Aluminum Sulphate - Treated Water Residual	mg/L		0.06		0.06		0.05	
Fluoride - Treated Water	mg/L		0.57		0.57		0.60	
Soda Ash - Raw Water	mg/L		34.0		36.4		35.0	
PH - Adjusted	mg/L		7.04		7.12		7.25	
Temperature	C		2.00		2.00		2.38	
Quantity of Chemical Used:								
Aluminum Sulphate	kg		4750.5		5499.3		5176.9	
Polyelectrolyte	kg		37.5		62.5		50.0	
Chlorine Gas	kg		479		542		567	
Soda Ash - Used for PH Adjustment	kg		4750.5		5341.9		5176.9	
Fluoride	kg		473		290		446	

* The Canadian Average is 450 Litres (0.45 m³) per day.

* Population is 7986

* Number of Households is 3783

March 11, 2016

Town of Fort Frances
320 Portage Avenue
Fort Frances Ontario
P9A 3M5

Attention: Mr. Doug Herr
Environmental and Facilities Superintendent

Dear Doug:

**Re: Fort Frances Wastewater Treatment Facility
February 2016 Monthly Report**

As per the operating agreement, the attached document is the February 2016 monthly report for the Fort Frances Wastewater Treatment Facility.

The report highlights the influent and effluent quality and the process parameters. Additionally, the routine operation and maintenance activities conducted by the operators are summarized.

If you have any questions regarding this report do not hesitate to contact Mr. Larry Wachter – Operations Manager.

Yours truly,



Kelly Cunningham
Senior Operator

For Larry Wachter
Operations Manager

**The Corporation of the Town of Fort Frances
Wastewater Treatment Plant
(Sewage Plant)
February 2016 Monthly Operations Report**

INTRODUCTION

In accordance with the Agreement between the Ontario Clean Water Agency (Operating Authority) and the Town of Fort Frances, the Fort Frances Sewage Treatment Plant is required to prepare a monthly report. This document covers the reporting month of February 2016; the facility performance report summarizes important information regarding the quality of the effluent, wastewater, analytical test results, maintenance operations, and relevant activities of the WWTP.

DESCRIPTION OF WORKS

Capacity of Works	9000 m ³ /day (average flow)
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

The Fort Frances Sewage Treatment Plant received and operates its operation under *Certificate of Approval Number 3-0049-96-006*, in accordance with Section 53 of the Ontario Water Resources Act. The Certificate of Approval outlines the terms and conditions and the report captures these terms and conditions in the following sections.

LABORATORY

ALS Laboratory Group – Thunder Bay is contracted to conduct the required analytical tests of the influent (raw) and effluent samples; weekly requirement.

FEBRUARY 2016 EFFLUENT QUALITY

<i>Parameters</i>	<i>Monthly Actual Concentration mg/L</i>	<i>Compliance Criteria Concentration mg/L</i>	<i>Performance Objective Concentration mg/L</i>	<i>Monthly Actual Loading, kg/d</i>	<i>Compliance Criteria Loading kg/d</i>	<i>Performance Objective Loading kg/d</i>
CBOD ₅	3.5 mg/L	25 mg/L	15 mg/L	18.5 kg/d	225 kg/d	135 kg/d
Total Suspended Solids	4.3 mg/L	25 mg/L	15 mg/L	23.2 kg/d	225 kg/d	135 kg/d
Total Phosphorus	0.11 mg/L	1.0 mg/L	0.9 mg/L	0.57 kg/d	9 kg/d	8.1 kg/d
Total Nitrogen Nitrate Nitrogen	8.91 mg/L 4.09 mg/L					
Total Cl ₂ Residual		<0.01 mg/L (when in use)				
E-Coli		19.3 count/100 ml (geometric mean)		200 count/100ml (geometric mean)		E-coli not to exceed 150 organisms/100ml (monthly geometric mean density)
pH				pH range 7.2 to 7.7; average pH was 7.4		
Temperature degrees C				Temperatures ranged from 8.5 – 9.5 average temperature of effluent at 8.8		

Compliance criteria are mandatory requirements of the C of A and performance objectives are a goal to be achieved using best reasonable efforts.

WASTEWATER LIQUID PROCESS

The average daily flow for February was 5417.8 m³/day. This represents 60% of the design average flow. Total treated flow for the month was 157117 m³.

The Fort Frances WWTP met all effluent compliance criteria for the parameters listed above and additionally was well within the recommended more stringent monthly performance objective levels as outlined in the Certificate of Approval.

INVENTORY

Chemical	End of Month Status	Units
Hypochlorite	1150 +/- @ 7.0% + 410 @ 12%	Litres
Alum	17 +/- @ 60 %	Cubic meters
Polymer	20 Bags (500 kg)	Bags (25 kg/bag)

MAINTENANCE

The operators performed the routine operations and maintenance at the treatment plant and pumping stations. The activities are highlighted as follows:

Treatment Plant:

- Alternated lead/lag pumps
- Adjusted fluidizing water to head cell and grit snail as needed
- Greased GBT, mechanical bar screen and grit snail. Lubricated drive chain on grit snail and bar screen
- Regular cleaning of head works EW basket strainer
- Regular cleaning of seal water strainer TFP 9-5
- Greased all blowers
- Changed oil blowers 2, 3, 4 and 5
- Replaced flexible coupler blower 4 outlet
- Cleaned DO probes

Pump Stations:

- Ran gensets
- Changed seal water strainers
- Cleaned bar screens
- Exercised valves in drywell at Central Avenue lift station
- Reset pumps at Boundary Road lift station

OPERATIONAL ISSUES

There were no operational issues in the report period.

SLUDGE SUMMARY

Asselin Transportation and Storage Limited hauled a total of 251.7 m³ of thickened digested sludge (12.0 m³/load average) to the Town of Fort Frances landfill site.

COMPLAINTS

There were no complaints during the report period.

BY-PASS REPORT(S)

There were no bypass events in the report period.

COMMENTS

Plant power consumption for the month was 627 (x 180 multiplier) kWh.
An incident report was filed regarding no flow measurement during a 6 hour power outage at the wastewater plant on February 28, 29.

REPORTS

ALS – Environmental Analytical Reports (on-file at plant)
Fort Frances WPCP Equipment Run Time Report (on-file at plant)
Bypass Report (on-file at plant as per occurrence)
Incident Report (on-file at plant as per occurrence)

Month	Sewage Flows Year 2016					Usage % Plant Capacity	Sludge Volume Hauled	Removal Efficiency	
	Avg. Day Flow	Max Day Flow	Total Treated	Total ByPass	Total Volume			CBOD5	Suspended Solids
	m3	m3	Volume ML	Volume ML	ML				Total Phosphorus
January	5668.1	5900	175712		175712	63%	249.9		
February	5417.8	5665	157117		157117	60%	251.7		
March						0%			
April						0%			
May						0%			
June						0%			
July						0%			
August						0%			
September						0%			
October						0%			
November						0%			
December						0%			
Sum				0	332829		501.6		
Average	5543		166415		166415	62%	250.8		
Max		5900	175712		175712				
C of A	9000	18000							

Month	CBOD5				Suspended Solids			Total Phosphorus			E. Coli		pH	
	Avg Raw BOD (mg/L)	Avg. Eff. CBOD (mg/L)	Avg. Load CBOD (kg/day)	Avg Raw S.S (mg/L)	Avg. Eff. S.S (mg/L)	Avg. Load S.S (kg/day)	Avg Raw T.P (mg/L)	Avg. Eff. T.P (mg/L)	Avg. Load T.P (kg/day)	Geo Mean Counts /100ml	Monthly Minimum	Monthly Maximum		
January	87.0	2.4	13.5	142.4	6.0	34.7	2.41	0.15	0.83	23.7	7.3	7.9		
February	74.3	3.5	18.5	132.5	4.3	23.2	2.1	0.11	0.57	19.3	7.2	7.7		
March														
April														
May														
June														
July														
August														
September														
October														
November														
December														
Average	80.7	3.0	16.0	137.5	5.2	29.0	2.3	0.13	0.70	21.5	7.3	7.8		
Max	87	3.5	18.5	142.4	6	34.7	2.4	0.15	0.83	23.7	7.3	7.9		
C of A		25	225		25	225		0.9	9	200	6.0	9.5		

2016- tonnage at landfill site- up-dated March 31st, 2016

2016- tonnage at landfill site- up-dated March 31st, 2016											2015				2016		
MONTH	Residential Waste tonnes	Res %	ICI Waste tonnes	ICI %	Non Community Waste tonnes	Non Com %	Covering Material tonnes	2015	Average last 9 years	2016	Total Fees	Average last 9 years	Total Fees	2016-2015 Tonnes	2016-2015 Fees		
								Total Tonne	Total Tonne	Total Tonne		Fees 2007 to 2015					
JAN	127.94	34.66	232.74	63.04	8.50	2.30	0.00	372.45	359.81	369.18	\$22,076.55	\$17,555.67	\$20,490.00	-3.27	-\$1,586.55		
FEB	117.31	37.25	189.93	60.31	7.68	2.44	0.00	323.82	305.82	314.92	\$17,311.55	\$15,120.16	\$17,474.70	-8.90	\$163.15		
MAR	146.89	37.15	237.97	60.19	10.53	2.66	6.72	446.81	413.51	395.39	\$25,940.55	\$21,116.69	\$23,164.20	-51.42	-\$2,776.35		
APRIL		#DIV/0!		#DIV/0!		#DIV/0!		609.02	574.14	0.00	\$36,933.10	\$30,100.39		-609.02	-\$36,933.10		
MAY		#DIV/0!		#DIV/0!		#DIV/0!		783.04	727.97	0.00	\$40,474.95	\$37,236.70		-783.04	-\$40,474.95		
JUNE		#DIV/0!		#DIV/0!		#DIV/0!		690.69	802.40	0.00	\$43,913.10	\$38,365.69		-690.69	-\$43,913.10		
JULY		#DIV/0!		#DIV/0!		#DIV/0!		654.72	679.93	0.00	\$43,552.25	\$37,235.68		-654.72	-\$43,552.25		
AUG		#DIV/0!		#DIV/0!		#DIV/0!		642.81	630.37	0.00	\$39,041.90	\$33,782.35		-642.81	-\$39,041.90		
SEPT		#DIV/0!		#DIV/0!		#DIV/0!		719.08	646.67	0.00	\$43,223.58	\$34,032.13		-719.08	-\$43,223.58		
OCT		#DIV/0!		#DIV/0!		#DIV/0!		2,214.61	815.99	0.00	\$95,565.65	\$40,618.32		-2,214.61	-\$95,565.65		
NOV		#DIV/0!		#DIV/0!		#DIV/0!		614.90	564.84	0.00	\$33,016.35	\$28,524.43		-614.90	-\$33,016.35		
DEC		#DIV/0!		#DIV/0!		#DIV/0!		487.78	397.37	0.00	\$27,125.80	\$21,749.94		-487.78	-\$27,125.80		
Average per monthly	130.71	36.35	220.21	61.18	8.90	#DIV/0!	2.24		576.57	89.96	\$39,014.61	\$29,619.85	\$20,376.30	-63.59	-4,199.75		
Total	392.14		660.64		26.71		6.72	8559.73	6918.81	1079.49	\$468,175.33	\$355,438.14	\$61,128.90	-7480.24	-\$407,046.43		
Town of Fort Frances Tonnage	1052.78											Actual	\$61,128.90				
								increase amount of waste due to waste from Rainy Lake Hotel Demolition				Budget	\$384,888.00				
												Forecasted	\$244,515.60				
Total Tonnage	1079.49																
Residential Tonnage	392.14	36.33%															
ICI Tonnage	660.64	61.20%															
Coverage material	6.72																

Aircraft Landings 2016

As of March 31, 2016 Statistics - Page 1/2

Month	Bearskin Flights			Bearskin- Passengers			Government			Private			Med-Vacs			International			Commercial			Totals			Variance 2016-2015
	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	
January	70	76	79	261	256	311	1	6	5	3	6	5	30	43	41	3	4	2	36	42	67	143	177	194	-34
February	69	67	74	233	241	308	1	2	0	1	7	5	35	36	22	1	3	5	49	40	50	156	155	156	1
March	69	78	82	199	341	346		5	3	17	30	10	34	36	40	3	5	0	55	38	52	178	192	187	-14
1/4 Total	208	221	235	693	838	965	2	13	3	21	43	20	99	115	103	7	12	7	140	120	169	477	524	537	-47
April	81	81	74	330	276		1	2	2	23	23	18	41	22	22	2	2	1	53	47	0	201	164	164	-201
May	82	81		365	308		1	6		28	28	24	37	37	23		34	30	77	76	0	259	240	240	-259
June	80	77		322	292		11	7		36	37		31	31	35		74	89	96	69	0	328	314	314	-328
1/2 Total	208	464	467	693	1855	1841	2	26	18	21	130	99	99	224	183	7	122	127	140	346	361	477	1312	1255	-835
July	81	75		297	230		8	7		40	40	35	35	18			83	59	77	59	0	324	253	253	-324
August	79	71		297	241		4	3		39	37		31	26			73	65	87	57	0	313	259	259	-313
September	76	73		328	254		0	1		17	22		36	37			44	32	76	65	0	249	230	230	-249
3/4 Total	208	700	686	693	2777	2566	2	38	29	21	226	193	99	326	264	7	322	283	140	586	542	477	2198	1997	-1721
October	83	76		309	309		4	3		20	24		47	42			9	12	51	51	0	214	208	214	-214
November	68	80		260	286		0	3		9	8		30	28			1	3	38	39	0	146	161	161	-146
December	68	52		200	203		0	0		4	4		31	25			2	1	34	29	0	139	111	111	-139
Total	208	919	894	693	3546	3364	2	42	35	21	259	229	99	434	359	7	334	299	140	709	661	477	2697	2477	-2220

