

TOWN OF FORT FRANCES

Operations and Facilities Executive Committee

AGENDA - April 20, 2016, 8:30 AM

MEETING - Civic Centre

Session #008

| | 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 April 6, 2016. | 3 - 4 |
| 4. <u>Non-agenda Items</u> | |
| 5. <u>Items Referred from Council</u> | |
| 5.1 Request from Asselin Transportation & Storage Ltd. | 5 - 7 |
| 6. <u>New Business</u> | |
| 6.1 Request from Liane Toriseva, J.W. Walker Teacher for In-Kind GIS Services | 8 - 10 |
| 6.2 March 2016 Drinking Water Systems Monthly Summary Report | 11 - 18 |
| 6.3 Tender No. 16-OF-07 - Road Reconstruction, Watermain and Sewer Replacement Review of Liquidate Damages per day amount - see attached letter from Hatch Mott MacDonald | 19 - 21 |
| 7. <u>Information</u> | |
| 7.1 Operations and Facilities Division - Environmental Area - Operations Statistics - January 2016 | 22 - 24 |
| 7.2 Operations and Facilities Division - Environmental Area - Operations Statistics - February 2016 | 25 - 27 |
| 7.3 Operations and Facilities Division - Environmental Area - Operations Statistics - March 2016 | 28 - 30 |
| 7.4 Fort Frances Wastewater Treatment Facility March 2016 Monthly Report | 31 - 36 |
| 7.5 Sewer & Water Data for 2016 - updated March 31, 2016 | 37 |

8. Adjourn / Next Meeting Date

TOWN OF FORT FRANCES

MINUTES

SESSION NO. #007

April 6, 2016

The meeting of Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Civic Centre on April 6, 2016 from 9:01 a.m. to 9:20 a.m.

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

ALSO PRESENT: Mayor Avis

1. Call to Order

The meeting was called to order at 9:01 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 24, 2016 the minutes were approved as circulated.

4. Non-agenda Items

None

5. New Business

- 5.1 Amendment to Municipal - Industry Stewardship Plan (ISP) Material Service Agreement with Product Care Association (PCA) to include Pesticides, Solvents & Fertilizers - the administration report was reviewed and will be forwarded to Council for approval.
- 5.2 February 2016 Drinking Water Systems Monthly Summary Report - the February 2016 Drinking Water System Monthly Report was reviewed and will be forwarded to Council for approval.

6. Information

- 6.1 Fort Frances Wastewater Treatment Facility February 2016 Monthly Report - the OCWO Monthly Report for February 2016 was reviewed and will be forwarded to Council as information only. No action required.
- 6.2 2016 Tonnage at the landfill site - updated March 31, 2016 - the Landfill Site Spreadsheet was reviewed and will be forwarded to Council as information only. No action required.
- 6.3 Aircraft Landings 2016 - as of March 31, 2016 - the Airport Statistics Spreadsheet was reviewed and will be forwarded to Council as information only. No action required.

7. Adjourn / Next Meeting Date

The meeting adjourned at 9:20 a.m.

Executive Committee Chair

D. Brown, Manager of Operations & Facilities

April 12, 2016

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: Re: Request from Asselin Transportation & Storage Ltd. to Transfer Sanitary Sewage from New Gold Camp Site to our Sanitary Sewer Collection System for Treatment

Please find attached the letter dated April 1st, 2016 from Asselin Transportation & Storage Ltd. requesting permission to transfer sanitary sewage from the New Gold property into the Town's sanitary sewer collection system for treatment. This request was referred to the O & F executive committee for review and recommendation.

Basically, Asselin would be given the authority to transfer sanitary sewage from their haulage truck into a sanitary manhole near the gravity high flow section of the Sanitary Sewer collection system. For example the 1st manhole north 5th Street on Keating Avenue. Where Asselin will throttle the flow of sewage (3000 or 13.64 cu. meters) into the sanitary sewer manhole to ensure that no property owners are negatively affected.

Presently, there is no rate outlined in the Town's user fee by-law for wastewater to be transferred directly into the sanitary sewer collection system for treatment. However the Town has a rate for potable water set at \$ 25.38 per cubic meter. The 2015 actual cost to treat and discharge a cubic meter of wastewater was \$ 1.92 where the published 2016 non-residential rate is \$ 2.51. Emo is charging \$ 1.83 per cubic meter based on the information provided by Asselin.

It is difficult to determine the amount of wastewater that is going to be discharged into the sanitary sewer collection system. In March the STP treated and discharged on average 7,463.39 cubic meters of wastewater per day. Where one load represents 0.18% of the hydraulic loading per day thus is considered kind of insignificant. I also gave Asselin permission to dump loads in the Town's sanitary sewer collection system prior to establishing the new rate, as Emo refused wastewater from the New Gold Mine site camp as a result of a treatment capacity issue. It was clearly understood by Asselin that it would be responsible to pay the rate established and approved by the Town for these loads. At

the time of writing this report only 3 loads have been received and transferred into the sanitary sewer collection system from the mine site for treatment.

At this time one needs to establish a new rate per cubic meter for wastewater.

| | |
|---|---|
| Asselin pays Emo | \$ 1.83 per cubic meter or \$25.00 per load |
| Based on actual Costs 2015 costs | \$ 1.92 per cubic meter or \$ 26.19 per load |
| Based on 2016 non- residential rate | \$ 2.51 per cubic meter or \$ 34.24 per load |
| Based on 47.63 % of 2016 cost of Potable water rate from a fire hydrant | \$12.03 per cubic meter or \$ 164.09 per load |

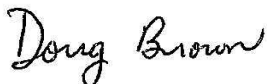
I am of the opinion that the hydraulic loading is insignificant where the Town should make a profit and there should be no cost to any of the existing water/wastewater customers. However the rate should be high enough to be a deterrent to wastewater haulers where this becomes an acceptable practice or service provided by the Town. This service should only be used as a last resort when there are no alternatives or options available. This appears to be the case in this situation.

It is recommended that the rate per cubic meter be set at \$12.03 per cubic meter or \$164.09.

The Operations & Facilities Executive Committee recommends the following;

- 1) That the rate per cubic meter of wastewater be set at \$ 12.03 where the user fee by-law is revised.
- 2) That only wastewater from holding tanks be authorized to be transferred & discharged into the gravity high flow section of the Sanitary Sewer collection system.
- 3) That each request is reviewed and approved by the Operations & Facilities Division.

Respectfully submitted,
Operations & Facilities Division



Doug Brown, P. Eng.
Operations & Facilities Manager

Council approval of this report will ensure:

- 1) That the rate per cubic meter of wastewater be set at \$12.03 where the user fee by-law is revised.
- 2) That only wastewater from holding tanks be authorized to be transferred and discharged into the gravity high flow section of the Sanitary Sewer collection system.
- 3) That each request is reviewed and approved by the Operations and Facilities Division.



Asselin Transportation and Storage Limited

P.O. Box 746, Fort Frances, Ontario P9A 3N1

Telephone: (807) 274-6255 or (807) 274-5859

April 1/2016

Town of Fort Frances
320 Portage Ave
Fort Frances, Ont

Attention: Lisa Slomke

Asselin Transportation at present has the contract for pumping/hauling sewage waste from the New Gold site at Chapple Township.

Emo Township has allowed us to dump this waste into their septic system to date. The volumes had not been a concern until now. They have asked us to arrange an alternate dumping location incase the volumes become too overwhelming.

We are asking that the Town of Fort Frances permit us to dispose of sewage waste if required into their sewage system. We are uncertain of the volumes at this time. Each load of sewage consists of 3000 gallons.

Please consider this request and provide a cost to us for this service.

The Emo Township has a charge of \$25.00/1000 gallons.

Regards,

Eldon Mose

Asselin Transportation

April 12, 2015

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: Request from Liane Toriseva, JW Walker Teacher for In-Kind GIS Services

Please find attached the letter dated April 7, 2016 from Liane Toriseva, JW Walker Teacher for In-Kind GIS services.

Also attached is an administration report prepared by Trish Law, GIS Expert outlining all pertinent details in regards to prepare GIS maps for JW Walker Teacher, Liane Toriseva.

On the surface the request is pretty straight forward where the cost to the Town is as follows;

| | | |
|---------------------------------|-----------------------|-----------|
| 1) Trish Law Hours | 6 hrs. @ \$ 41.97/hr. | \$ 251.82 |
| 2) Hardcopy of 11 by 17 Drawing | | \$ 11.32 |
| 3) Subtotal | | \$ 263.14 |
| 4) HST | | \$ 34.21 |
| 5) Total | | \$ 297.35 |

However, is the Town setting precedent by assisting this Teacher's request? As there are several other teachers in Fort Frances probably teaching the same course curriculum. This type of request fits closer to a Council Public Relations expenditure which has a budget amount of \$19,500 in 2016.

Respectfully Submitted
Operations & Facilities Division



Doug Brown, P. Eng.
Operations and Facilities Manager

March 8, 2016.

Report To: Doug Brown, O&F Manager

From: Trish Law, GIS Expert

SUBJECT: Mapping/GIS Request from L. Toriseva, J.W. Walker School

On April 4, 2016 I was contacted via telephone by Liane Toriseva, school teacher at J.W. Walker School with regards to obtaining some maps of specific locations and property uses for her Third Grade class. Ms. Toriseva met with myself and Douglas Herr on April 6, 2016 to discuss her request and show examples of what she was looking for.

After consideration of this request, I estimate that it will take approximately 6 hours to complete the maps Ms. Toriseva is looking for based on the maps and information she requires. Ms. Toriseva is requesting that the maps be donated to her class as an in-kind service from the Town.

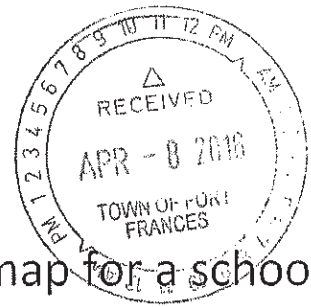
Respectively Submitted,

A handwritten signature in cursive script that reads "Trisha Law".

Trisha Law, MGIS
GIS Expert

Thursday, April 7, 2016.

Mayor and Council,



I am requesting assistance in developing a town map for a school project. As part of our curriculum we are required to teach the students to gain a better understanding of maps by creating and using them. I called the town office and got a town map. They directed me to Trish Law at Public Works. I met with Trish Law and discussed the type of map that we would need for our project. She is willing to help me but wanted me to send a letter to the mayor and council asking for permission to make the map using the town resources. I appreciate your time and consideration in regards to this matter. Please call me at J.W. Walker School (274-3616) and inform me of your decision.

Sincerely,

A handwritten signature in cursive script that reads "Liane Toriseva".

Liane Toriseva
Social Studies Teacher
J.W. Walker School

April 15, 2016

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: March 2016 Drinking Water Systems Monthly Summary Report

Please find attached the March 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 March 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 March 2016 Drinking Water Systems Monthly Summary Report and approve the report prior to it being made available to the general public.</p> |
|---|

c.c. – Doug Herr, Environmental & Facilities Supt.
Randy White, Senior WTP Operator

03CouncilwaterreportMarch 2015

March, 2016

**Monthly Summary Report
Water Systems**

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

Dated: April 15, 2016

1) **Introduction -**

This report contains the major maintenance activities and operational events that occurred during the month of March 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): 4 samples taken no adverse results

Water Treatment Plant (raw): 4 samples taken no adverse results

Water Distribution System: 16 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

- March 01st - put clarifier # 2 back on line.
- March 02nd - took grab samples off each filter.
- March 09th - tested chlorine alarms.
- March 10th - tested chlorine alarms with Lakeside.
 - tested filter 3 turbidity alarms.
 - cleaned all four (4) check valves on poly unit.
 - cleaned the top and bottom tank on the poly unit.
- March 14th - calibrated dist. Cl₂ analyzer.
- March 15th -shut down filters and cleaned flumes.
 - flushed poly lines to clarifiers.
- March 16th - took clarifier # 1 off line to drain and inspect.
- March 17th - ran generator for 1 hour.
 - cleaned the rotometers on poly unit.
- March 18th - took grab samples off each filter.
- March 23rd - tested high turbidity alarm on filter # 4.
- March 24th - changed filters in soda ash dust collector.
- March 28th - transferred sludge from clarifier # 2 to # 1.
- March 29th - calibrated distribution chlorine analyzer.

March 31st - transferred sludge from clarifier # 2 to # 1.
- cleaned the top and bottom tank on the poly unit.
- cleaned all four (4) check valves on poly unit.

8) **Water Complaints –**

- Poor Pressure – 0 complaints
- Water Quality – 1 complaint
- 331 Third St. W. - yellow water
- flushed cold water until clear.

9) **Other Miscellaneous Information:**

March 01st - water main repair bacti samples – Nelson St. (400 blk.) - 1st set.

March 02nd - Lakeside controls working on computer program.

March 03rd - Lakeside controls working on computer program.
- water main repair samples – Nelson St. (400 blk.) - 2nd set.

March 07th - took weekly routine bacti samples.

March 14th - took weekly routine bacti samples.

March 21st - took weekly routine bacti samples.

March 29th - took weekly routine bacti samples.

March 30th - Q.M.S. meeting at plant.

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 March 2016

Flow and Operating Data

| Flow Data | MARCH | Units | 2014 | | 2015 | | 2016 | |
|--|----------------|-------|------------------|--------|------------------------|--------|-----------------------|--------|
| | | | Day of the Month | | Day of the Month | | Day of the Month | |
| Total Raw Water | m ³ | | | 254410 | | 168790 | | 156060 |
| Raw Maximum Day | m ³ | | Saturday 22nd | 11360 | Saturday 14th | 5970 | Friday 25th | 5200 |
| Raw Minimum Day | m ³ | | Sunday 09th | 5710 | Sunday 01st | 4890 | Saturday 26th | 4500 |
| Raw Average Daily Consumption | m ³ | | | 8210 | | 5440 | | 5030 |
| * Daily Instantaneous Peak Flow | L/min. | | | | | | | |
| Total Treated Water | m ³ | | | 226450 | | 126450 | | 118060 |
| Treated Water Maximim Day Consumption | m ³ | | Friday 21st | 10020 | Tuesday 10th | 5230 | Friday 04th | 5040 |
| Treated Water Minimim Day Consumption | m ³ | | Monday 10th | 4780 | Sat. 28th & Tues. 31st | 3630 | Sat. 12th & Sun. 27th | 3540 |
| Treated Water Average Day Consumption | m ³ | | | 7300 | | 4080 | | 3810 |
| Daily Average Per Household Consumption Rate | m ³ | | | 1.93 | | 1.08 | | 1.01 |
| * Daily Average Per Person Consumption Rate | m ³ | | | 0.91 | | 0.51 | | 0.48 |
| Monthly Averages - Operating Parameters WTP: | | | | | | | | |
| FAC Residual - Treated Water | mg/L | | | 1.97 | | 1.91 | | 2.16 |
| Total Chlorine Residual - Treated Water | mg/L | | | 2.28 | | 2.21 | | 2.46 |
| Aluminum Sulphate - Raw Water | mg/L | | | 34.3 | | 35.6 | | 35.0 |
| Aluminum Sulphate - Treated Water Residual | mg/L | | | 0.07 | | 0.06 | | 0.05 |
| Fluoride - Treated Water | mg/L | | | 0.63 | | 0.60 | | 0.64 |
| Soda Ash - Raw Water | mg/L | | | 34.6 | | 36.4 | | 35.0 |
| PH - Adjusted | mg/L | | | 7.12 | | 7.13 | | 7.27 |
| Temperature | C | | | 2.0 | | 2.6 | | 3.1 |
| Quantity of Chemical Used: | | | | | | | | |
| Aluminum Sulphate | kg | | | 8733.0 | | 6000.6 | | 5462.1 |
| Polyelectrolyte | kg | | | 137.5 | | 75.0 | | 62.5 |
| Chlorine Gas | kg | | | 1023 | | 614 | | 624 |
| Soda Ash - Used for PH Adjustment | kg | | | 8816.0 | | 6144.7 | | 5462.1 |
| Fluoride | kg | | | 912 | | 363 | | 549 |
| * The Canadian Average is 450 Litres (0.45 m ³) per day. * Population is 7986 * Number of Households is 3783 | | | | | | | | |

March 2016

| Operating Data | Units | *MAC | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | Total | Average |
|---|----------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------|---------|
| | | or Range | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flow rates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw Water | 10^3 M^3 | 17 | 5.14 | 5.07 | 5.05 | 5.06 | 5.19 | 4.95 | 5.01 | 5.06 | 5.03 | 5.06 | 5.09 | 4.93 | 4.87 | 5.11 | 5.05 | 5.06 | 5.06 | 4.99 | 5.05 | 5.09 | 5.07 | 5.06 | 5.05 | 5.07 | 5.20 | 4.50 | 4.96 | 5.08 | 5.02 | 4.96 | 5.17 | 156.06 | 5.03 |
| Peak Instantaneous - Raw Water | L/s | n/a | 59.08 | 60.39 | 59.21 | 59.17 | 59.30 | 59.21 | 59.23 | 59.21 | 59.14 | 59.08 | 59.05 | 59.06 | 59.06 | 59.03 | 59.01 | 59.14 | 59.48 | 59.21 | 59.06 | 59.06 | 59.08 | 59.06 | 59.08 | 59.05 | 59.06 | 59.09 | 59.13 | 59.17 | 59.14 | 62.02 | 58.40 | 1836.46 | 59.24 |
| Treated Water | 10^3 M^3 | 17 | 4.54 | 4.09 | 4.24 | 5.04 | 4.00 | 3.72 | 3.95 | 3.71 | 3.65 | 3.67 | 3.76 | 3.54 | 3.81 | 3.75 | 3.59 | 3.59 | 3.59 | 3.59 | 3.59 | 4.11 | 3.77 | 3.63 | 3.65 | 3.75 | 3.68 | 3.54 | 3.73 | 3.85 | 3.64 | 3.70 | 118.06 | 3.81 | |
| Peak Instantaneous - Treated Water | L/s | n/a | 106.15 | 64.76 | 76.79 | 66.48 | 79.86 | 69.61 | 71.28 | 73.87 | 72.88 | 70.09 | 70.1 | 73.3 | 73.34 | 71.14 | 68 | 66.44 | 67.3 | 65.13 | 64.16 | 64.69 | 68.62 | 72.19 | 69.18 | 71.6 | 72.9 | 70.69 | 66.5 | 71.9 | 70.38 | 71.2 | 71.91 | 2212.49 | 71.37 |
| BackWash Water | 10^3 M^3 | n/a | 0.233 | 0.237 | 0.262 | 0.237 | 0.239 | 0.267 | 0.230 | 0.506 | 0.270 | 0.227 | 0.234 | 0.264 | 0.217 | 0.338 | 0.236 | 0.326 | 0.482 | 0.238 | 0.267 | 0.221 | 0.239 | 0.226 | 0.221 | 0.237 | 0.226 | 0.224 | 0.234 | 0.263 | 0.225 | 0.232 | 0.262 | 8.120 | 0.262 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoride Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluoride Residual - Treated Water | mg/l | 0.5 to 0.8 | 0.69 | 0.64 | 0.61 | 0.67 | 0.59 | 0.61 | 0.57 | 0.56 | 0.61 | 0.69 | 0.59 | 0.54 | 0.52 | 0.67 | 0.65 | 0.59 | 0.71 | 0.65 | 0.65 | 0.65 | 0.66 | 0.70 | 0.70 | 0.69 | 0.61 | 0.62 | 0.60 | 0.73 | 0.74 | 0.57 | 0.70 | 19.78 | 0.64 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbidity Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw Water | NTU | n/a | 0.58 | 0.61 | 0.55 | 0.51 | 0.57 | 0.55 | 0.54 | 0.51 | 0.52 | 0.61 | 0.56 | 0.54 | 0.60 | 0.61 | 0.58 | 0.62 | 0.59 | 0.57 | 0.59 | 0.58 | 0.59 | 0.61 | 0.53 | 0.57 | 0.52 | 0.55 | 0.60 | 0.51 | 0.57 | 0.53 | 0.59 | 17.56 | 0.57 |
| Settled Water | NTU | n/a | 0.19 | 0.16 | 0.19 | 0.19 | 0.21 | 0.20 | 0.20 | 0.25 | 0.29 | 0.26 | 0.21 | 0.19 | 0.24 | 0.17 | 0.20 | 0.19 | 0.27 | 0.29 | 0.19 | 0.17 | 0.28 | 0.23 | 0.21 | 0.24 | 0.26 | 0.25 | 0.24 | 0.26 | 0.23 | 0.25 | 0.26 | 6.97 | 0.22 |
| Treated Water | NTU | 1 | 0.09 | 0.09 | 0.12 | 0.12 | 0.11 | 0.10 | 0.12 | 0.10 | 0.11 | 0.11 | 0.09 | 0.11 | 0.11 | 0.10 | 0.12 | 0.10 | 0.11 | 0.11 | 0.08 | 0.08 | 0.12 | 0.10 | 0.11 | 0.10 | 0.12 | 0.14 | 0.14 | 0.11 | 0.10 | 0.10 | 0.11 | 3.33 | 0.11 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Operating Parameters | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| pH - Treated Water | no units | 6.5 to 8.5 | 7.06 | 7.19 | 7.15 | 7.11 | 7.15 | 7.12 | 7.09 | 7.07 | 6.94 | 7.01 | 7.18 | 7.44 | 7.33 | 7.40 | 7.39 | 7.46 | 7.34 | 7.29 | 7.21 | 7.24 | 7.40 | 7.44 | 7.38 | 7.41 | 7.37 | 7.28 | 7.30 | 7.19 | 7.51 | 7.36 | 7.41 | 225.22 | 7.27 |
| pH - Settled water | no units | n/a | 6.31 | 6.36 | 6.32 | 6.17 | 6.15 | 6.19 | 6.34 | 6.19 | 6.38 | 6.16 | 5.91 | 5.87 | 5.91 | 5.88 | 5.95 | 5.89 | 6.07 | 6.08 | 6.19 | 6.16 | 6.00 | 5.98 | 5.97 | 5.92 | 5.85 | 5.82 | 5.91 | 5.93 | 5.98 | 5.97 | 5.98 | 187.79 | 6.06 |
| pH - Raw Water | no units | n/a | 7.13 | 7.14 | 7.10 | 6.99 | 7.06 | 7.03 | 6.95 | 7.11 | 6.91 | 6.93 | 7.19 | 7.40 | 7.34 | 7.26 | 7.35 | 7.17 | 7.17 | 7.20 | 7.18 | 7.22 | 7.25 | 7.12 | 7.11 | 7.23 | 7.17 | 7.15 | 7.17 | 7.30 | 7.31 | 7.16 | 7.20 | 222.00 | 7.16 |
| FAC - Treated Water | mg/l | 0.2 to 4 | 2.18 | 2.05 | 2.05 | 2.08 | 2.23 | 2.15 | 2.17 | 2.18 | 2.38 | 2.20 | 2.26 | 2.07 | 2.10 | 2.08 | 2.06 | 2.06 | 2.22 | 2.20 | 2.19 | 2.14 | 2.16 | 2.19 | 2.08 | 2.11 | 2.19 | 2.31 | 2.35 | 2.12 | 2.15 | 2.24 | 2.13 | 67.08 | 2.16 |
| Total Chlorine Residual Treated | mg/l | 0.3 to 7 | 2.44 | 2.36 | 2.25 | 2.38 | 2.37 | 2.27 | 2.48 | 2.44 | 2.52 | 2.50 | 2.58 | 2.50 | 2.44 | 2.40 | 2.44 | 2.70 | 2.60 | 2.50 | 2.56 | 2.48 | 2.60 | 2.44 | 2.38 | 2.48 | 2.35 | 2.51 | 2.55 | 2.62 | 2.46 | 2.38 | 2.38 | 76.36 | 2.46 |
| Temperature | C | 15 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 96.0 | 3.1 | |
| Fluoride used (Total Daily Consumption) | kg | n/a | 16.0 | 16.0 | 16.0 | 16.0 | 19.0 | 19.0 | 18.0 | 18.0 | 19.0 | 18.0 | 18.0 | 18.0 | 17.0 | 18.0 | 18.0 | 19.0 | 20.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 17.0 | 18.0 | 18.0 | 18.0 | 16.0 | 18.0 | 16.0 | 17.0 | 18.0 | 549.0 | 17.7 |
| Chlorine used (Total Daily Consumption) | kg | n/a | 20.0 | 20.0 | 19.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 22.0 | 20.0 | 21.0 | 20.0 | 19.0 | 20.0 | 20.0 | 21.0 | 20.0 | 19.0 | 21.0 | 20.0 | 21.0 | 20.0 | 20.0 | 20.0 | 21.0 | 20.0 | 20.0 | 20.0 | 19.0 | 21.0 | 624.0 | 20.1 | |
| Soda ash (Total Daily Consumption) | kg | n/a | 179.9 | 177.5 | 176.8 | 177.1 | 181.7 | 173.3 | 175.4 | 177.1 | 176.1 | 177.1 | 178.2 | 172.6 | 170.5 | 178.9 | 176.8 | 177.1 | 177.1 | 174.7 | 176.8 | 178.2 | 177.5 | 177.1 | 176.8 | 177.5 | 182.0 | 157.5 | 173.6 | 177.8 | 175.7 | 173.6 | 181.0 | 5462.1 | 176.2 |
| Soda Ash - 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 | 35.0 | 35.0 | 1085.0 | 35.0 |
| Alum residual - (Total Daily Consumption) | kg | n/a | 179.9 | 177.5 | 176.8 | 177.1 | 181.7 | 173.3 | 175.4 | 177.1 | 176.1 | 177.1 | 178.2 | 172.6 | 170.5 | 178.9 | 176.8 | 177.1 | 177.1 | 174.7 | 176.8 | 178.2 | 177.5 | 177.1 | 176.8 | 177.5 | 182.0 | 157.5 | 173.6 | 177.8 | 175.7 | 173.6 | 181.0 | 5462.1 | 176.2 |
| 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 | 35.0 | 35.0 | 1085.0 | 35.0 |
| Alum residual - Treated Water | mg/l | 0.1 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.03 | 0.05 | 0.04 | 0.06 | 0.05 | 0.02 | 0.06 | 0.06 | 0.09 | 0.04 | 0.04 | 0.06 | 0.03 | 0.06 | 0.06 | 0.04 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 | 0.05 | 0.06 | 0.08 | 0.06 | 1.58 | 0.05 | |
| Poly bags added (25 kg bags) | kg | | | | 0.5 | | | | | | 0.5 | | | | | | 0.5 | | | 0.5 | | | | | | 0.5 | | | | | | | | 62.5 | |

Doug Brown/Frances
04/14/2016 07:27 AM

To "Marasco, Robert" <robert.marasco@hatch.ca>,
ravis@fort-frances.com, gpryan70@hotmail.com,
cauljune@hotmail.com, doug@kitowskitrucking.com, Mark
cc
bcc
Subject Re: Tender FF 2016 Roads- Request from Makkinga-
Liquidated Damages

Hi Rob, I don't have a problem with extending the tender close to Friday April 22. However, as you are fully aware the Liquidated damages amount of \$5000 was a result of the discussion at the March 9th O & F executive committee meeting. As you are aware Council wants the Colonization Road East Work to be completed in a timely fashion and by increasing the liquated damage amount from the industry standard of \$ 2000 to \$ 5000 would hopefully achieve this result. Did Makkinga provide any reasons why they wanted it reduced? Also by extending the project timelines doesn't achieve anything. I have copied the CAO and all members of the O & F executive committee on this email. We have a O & F Executive committee meeting on Wednesday April 20 where this issue will be reviewed. I would like your thoughts & comments on the issue in order that direction can be provided to you by the O & F executive committee on April 20. Thanks

Doug Brown, P. Eng.
Operations & Facilities Manager
320 Portage Avenue, Fort Frances, Ontario
Town of Fort Frances
Work #-807-274-9893 Ext. 306
Cell # 807-275-9755
"Marasco, Robert" <robert.marasco@hatch.ca>



"Marasco, Robert"
<robert.marasco@hatch.ca>
04/13/2016 02:45 PM

To "dbrown@fort-frances.com" <dbrown@fort-frances.com>
cc
Subject Tender FF 2016 Roads

Doug

Makkinga has asked to reduce the liquidated damages amount or extend the completion date and also wanted to know if an extension to the tender closing date is possible? I knew these requests would be coming.

Rob

NOTICE - This message from Hatch is intended only for the use of the individual or entity to which it is addressed and may contain information which is privileged, confidential or proprietary. Internet communications cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, arrive late or contain viruses. By communicating with us via e-mail, you accept such risks. When addressed to our clients, any information, drawings, opinions or advice (collectively, "information") contained in this e-mail is subject to the terms and conditions expressed in the governing agreements. Where no such agreement exists, the recipient shall neither rely upon nor disclose to others, such information without our written consent. Unless otherwise agreed, we do not assume any liability with respect to the accuracy or completeness of the information set out in this e-mail. If you have received this message in error, please notify us immediately by return e-mail and destroy and delete the message from your computer.

April 18, 2016

348468 GC
Fort Frances 2016

Town of Fort Frances
320 Portage Avenue
Fort Frances, ON P9A 3P9

Attention: Doug Brown
Manager of Operations and Facilities

Re: Town of Fort Frances
2016 Road Reconstruction, Watermain and Sewer Replacement
Tender No. 16-OF-07
Liquidated Damages

As requested by the Town of Fort Frances following the March 9th, 2016 O&F executive committee meeting we have increased the Liquidated Damages provision from \$2,000 per day to \$5,000 per day for any work not finished by the contract completion date as described in Section 00800 clause GC 8.02.09 (03).

The purpose of this clause is to protect the Owner (Town of Fort Frances) from any losses or damage that may be sustained as a result of the contractor not meeting the completion date. Losses in this case would be monetary and include the cost of additional engineering fees and expenses for Contract Administration as well as any costs that the Town might normally book or log in monitoring the administration of the contract.

It is our understanding that given the completion dates for the last two road works contracts (Tender No. 14-OF-01 and 15-OF-10) were not met, the reason for increasing the liquidated damages from \$2,000 to \$5,000 per day was to give the contractor more incentive to complete the works on time.

It is our opinion that this is not the intent of the liquidated damages clause and the daily value should be reduced between \$2,000 to \$2,500 per day which is more representative of the costs that will be incurred.

The ramifications of not reducing the daily charge could be increased tender prices by the contractors bidding the work to cover the risks of not completing the contract on time and/or contractors not bidding the work at all.

We have received some negative feedback from the contractors at both the tender site meeting and during the tender period on the liquidated damages clause.

Please advise if you would like us to reduce the daily rate by issuing an addendum during the tender period.

Yours truly,

HATCH MOTT MACDONALD



Rob Marasco
RM:rh

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
(January 2016)

STAFFING:

See Operations Statistics (January) 2016 prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics (January) 2016 prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION:

Water Main Breaks:

- Number of water main breaks: Two (2)
 - In front of 1024 York Ave. N. and Crowe Ave. - 600 blk.

Hydrant Repairs:

- Number of hydrant repairs: None

Hydrant Replacements:

- Number of hydrant replacements: None

Hydrant Installations (NEW):

- Number of new hydrant installations: None

Main Valve Repairs:

- Number of water main valve repairs: None

Water Service Breaks:

- Number of water service breaks: None

Water Service Repairs:

- Number of water service repairs: One (1)
 - 934 Kaitlyn Dr.

Main Valve Replacements:

- Number of main valve replacements: None

Water Service Turn "Off/On":

- Number of water service turn "Off/On": Six (6)
 - 418 Scott St., 700 Fifth St. W., 1027 Williams Ave., 713 Third St. W., 650 Fifth St. W. and 1144 Second St. E.

Frozen Water Services:

- Number of frozen water services: Three (3)
 - 229 Scott St., 800 Fifth St. W. and 650 Fifth St. W. (All froze within Owner's property)

Water Meter Installations/Replacements:

- Number of water meter installations/replacements: Three (3)
- 418 Scott St., 700 Fifth St. W. and 650 Fifth St. W.

Backflow Preventer Installations/Replacements:

- Number of backflow preventer installations/replacements: Three (3)
- 418 Scott St., 700 Fifth St. W. and 650 Fifth St. W.

Backflow Prevention - Testing:

- Number of backflow preventers tested: Three (3)
- 418 Scott St., 700 Fifth St. W. and 650 Fifth St. W.

Other Information:

- Replaced damaged fire hydrant markers

WATER TREATMENT PLANT:

- January 2016 - In receipt of the Water Treatment Plant Monthly Report.
- G. Wiedenhoft at plant to assist with maintenance and obtain some training.

SEWERAGE COLLECTION:

Wastewater Main Backups:

- Number of wastewater main backup: None

Sewer Main Repairs:

- Number of sewer main repairs: None

Sewer Service Breaks:

- Number of sewer service repairs: None

Sewer Service Repairs:

- Number of sewer service repairs: One (1)
- 505 McIrvine Rd.

Other Information:

- Summarized final costs for invoicing of private works associated with private works
- Cleaned Fifteen (15) plugged sewer services at the following locations:
 - 613 Third St. W., 428 Armit Ave. (2), 626 Third St. W., 155 Sixth St. W., 1026 Williams Ave., 1200 Scott St. (2), 556 Webster Ave., 1109 King's Hwy., 810 Third St. E., 375 Daniel Ave., 804 Wright Ave., 719 King's Hwy. and 246 Third St. W.
- January 20, 2016 - 229 Scott St. (Causeway Insurance) - Thawed the sanitary sewer service line using the low pressure steamer.
- Televised for Owner their sanitary sewer service - 218 Second St. E., 230 Third St. W. and 650 Fifth St. W.

WASTE-WATER TREATMENT FACILITY:

- January, 2016 - Received the Wastewater Treatment Facility Monthly Report.
- January 26 & 27, 2016 - Ministry of the Environment inspection.

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 0 complaints, Asselin's - 1 complaint

Sanitary Landfill (Waste Disposal Site):

Landfill Scales functioning properly during this period.

- Amount of residential waste delivered to the landfill:
 - 127,940 kgs (127.94 tonnes)
- Amount of ICI waste delivered to the landfill:
 - 232,740 kgs (232.4 tonnes)

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 0 complaints
- Amount of recycled waste diverted from the landfill:
 - Emterra - No data

Prepared By: _____

J. L. H.

Environmental & Facilities Superintendent

Date: _____

14-04-2016

Operations and Facilities Division - Environmental Area - Operations Statistics (February 2016)

STAFFING:

See Operations Statistics (February) 2016 prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics (February) 2016 prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION:

Water Main Breaks:

- Number of water main breaks: One (1)
- Nelson St. (400 blk.)

Hydrant Repairs:

- Number of hydrant repairs: One (1)
- Sixth St. W. at Cornwall Ave. N.

Hydrant Replacements:

- Number of hydrant replacements: None

Hydrant Installations (NEW):

- Number of new hydrant installations: None

Main Valve Repairs:

- Number of water main valve repairs: None

Water Service Breaks:

- Number of water service breaks: None

Water Service Repairs:

- Number of water service breaks: None

Water Service Turn "Off/On":

- Number of water service turn "Off/On": Three (3)
- 1017 Second St. E., 1110 Second St. E. and 750 Thompson St.

Frozen Water Services:

- Number of frozen water services: Two (2) - Private Property
- 808 Wright Ave. and 650 Fifth St. W.

Water Meter Installations/Replacements:

- Number of water meter installations/replacements: None

Backflow Preventer Installations/Replacements:

- Number of backflow preventer installations/replacements: None

Backflow Prevention - Testing:

- Number of backflow preventers tested: None

Other Information:

- Summarized final costs for invoicing, associated with private works
- February 19 & 26, 2016 - J. Bruyere attended a First Aid Training course (2-day) at the Memorial Sports Centre
- February 22 - 26, 2016 - T. George attended a Water Distribution course (Class 2) in Dryden, Ontario - Keewaytinook Centre.

WATER TREATMENT PLANT:

- February 2016 - In receipt of the Water Treatment Plant Monthly Report.

SEWERAGE COLLECTION:

Wastewater Main Backups:

- Number of wastewater main backup: None

Wastewater Manhole Repairs:

- Number of wastewater manhole repairs: One (1)
 - Second St. E. at Armit Ave.

Sewer Service Repairs:

- Number of sewer service repairs: None

Other Information:

- Cleaned sixteen (16) plugged sewer services at the following locations:
 - 1234 Colonization Rd. W., 625 First St. E., 1332 Sixth St. E., 408 Third St. E., 637 Second St. E. (2),
 - 650 Fifth St. W., 315 Butler Ave., 1019 Second St. E., 1375 Colonization Rd. W., 822 Second St. E.
 - 1210 Scott St., 654 Thompson St., 1010 Walker Ave., 569 Scott St. and 726 Nelson St.

Private Works:

- CCTV inspected and traced various building sewer services.
- February 23, 2016 - 1010 Walker Ave. - CCTV'd the sewer service from cleanout inside house towards the main
- February 25, 2016 - 569 Scott St.. - traced the sewer service for Union Gas - clearance for cross-bore
- Performed locates for other utilities.

WASTE-WATER TREATMENT FACILITY:

- In receipt of the Wastewater Treatment Facility Monthly Report for February 2016.

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 0 complaints, Asselin's - 3 complaints

Sanitary Landfill (Waste Disposal Site):

Landfill Scales functioning properly during this period.

- Amount of residential waste delivered to the landfill:
 - 117,310 kgs (117.31 tonnes)
- Amount of ICI waste delivered to the landfill:
 - 189,930 kgs (189.93 tonnes)

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 1 complaint
- Amount of recycled waste diverted from the landfill:
 - Emterra - No data

Prepared By: _____

Environmental & Facilities Superintendent

Date: _____

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
(March 2016)

STAFFING:

See Operations Statistics (March) 2016 prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics (March) 2016 prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION:

Water Main Breaks:

- Number of water main breaks: None

Hydrant Repairs:

- Number of hydrant repairs: None

Hydrant Replacements:

- Number of hydrant replacements: None

Hydrant Installations (NEW):

- Number of new hydrant installations: None

Main Valve Repairs:

- Number of water main valve repairs: Two (2)
 - Minnie Ave. at Scott St. (VAL484) and Eighth St. E. at Portage Ave. N. (VAL227)

Water Service Breaks:

- Number of water service breaks: One (1)
 - 922 Scott St.

Water Service Repairs:

- Number of water service repairs: None

Water Service Turn "Off/On":

- Number of water service turn "Off/On": Sixteen (16)
 - 1018 First St. E., 1242 Colonization Rd. W., 237 Eighth St. W., 1123 Scott St. (2), 1016 Cornwall Ave.,
 - 1207 Strachan Pl., 634 Second St. W., 401 King's Hwy., 331 Second St. E., 1030 Portage Ave. N.,
 - 1125 Colonization Rd. W., 1022 Williams Ave., 525 Portage Ave., 638 First St. W.
 - and 919 Frenette Ave.

Frozen Water Services:

- Number of frozen water services: None

Water Meter Installations/Replacements:

- Number of water meter installations/replacements: None

Backflow Preventer Installations/Replacements:

- Number of backflow preventer installations/replacements: None

Backflow Prevention - Testing:

- Number of backflow preventers tested: Two (2)
 - 525 Portage Ave. and 210 Third St. E.

Other Information:

- Summarized final costs for invoicing of private works associated with private works
- Thawed water service at 307 Kings Hwy. (Couchiching F.N.)

WATER TREATMENT PLANT:

- March, 2016 - In receipt of the Water Treatment Plant Monthly Report.

SEWERAGE COLLECTION:

Wastewater Main Backups:

- Number of wastewater main backup: None

Wastewater Manhole Repairs:

- Number of wastewater manhole repairs: None

Sewer Service Repairs:

- Number of sewer service repairs: None

Other Information:

- Cleaned Seventeen (17) plugged sewer services at the following locations:
 - 1001 Victoria Ave. N., 520 First St. W., 424 First St. E., 1016 Scott St., 601 Second St. W., 874 Fourth St. E., 940 Third St. E., 512 Front St., 1007 Second St. E., 708 Portage Ave., 614 Second St. E., 436 Scott St., 808 Portage Ave., 1011 Second St., 335 First St. E., 544 Third St. W. and 316 Armit Ave.
- Commenced flushing/cleaning of the sanitary sewer mains (dead ends and trouble areas)
- CCTV inspected various building sewer services.
- March 9, 2016 - Televisé sanitary sewer service at 301 Victoria Ave. (Clinic)

WASTE-WATER TREATMENT FACILITY:

- In receipt of the Wastewater Treatment Facility Monthly Report for March 2016.

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 0 complaints, Asselin's - 4 complaints

Sanitary Landfill (Waste Disposal Site):

Landfill Scales not functioning properly during this period.

- Amount of residential waste delivered to the landfill:
 - 146,890 kgs (146.89 tonnes)
- Amount of ICI waste delivered to the landfill:
 - 237,970 kgs (237.97 tonnes)

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 0 complaints
- Amount of recycled waste diverted from the landfill:
 - Emterra - No data

Prepared By: _____

Environmental & Facilities Superintendent

Date: _____

April 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
March 2016 Monthly Report**

As per the operating agreement, the attached document is the March 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)
March 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 March 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.

MARCH 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 | 2.3 mg/L | 25 mg/L | 15 mg/L | 16.1 kg/d | 225 kg/d | 135 kg/d |
| Total Suspended Solids | 5.7 mg/L | 25 mg/L | 15 mg/L | 47.7 kg/d | 225 kg/d | 135 kg/d |
| Total Phosphorus | 0.11 mg/L | 1.0 mg/L | 0.9 mg/L | 0.94 kg/d | 9 kg/d | 8.1 kg/d |
| Total Nitrogen Nitrate Nitrogen | 9.67 mg/L 4.50 mg/L | | | | | |
| Total Cl ₂ Residual | | <0.01 mg/L (when in use) | | | | |
| E-Coli | | 21.4 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 8.0 to 9.5; average temperature of effluent was 8.8 C | | |

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 March was 7463.4 m³/day. This represents 83% of the design average flow. Total treated flow for the month was 231365 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 | 15.5 +/- @ 60 % | Cubic meters |
| Polymer | 11 Bags (275 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
- New heat trace and insulation installed on outside alum line
- Repaired digester automatic air valve
- Exercised portable diesel and Yamaha generators
- Boiler 1 off
- Flushed digester level sensor
- Greased clarifier drives
- Removed 3 buckets debris from Headcell inlet and 1 bucket debris from Teacup
- Drained and hosed Teacup and Snail
- Removed rag balls from both clarifier inlet weirs
- Replaced a shear pin in clarifier longitudinal drive 1

Pump Stations:

- Ran gensets
- Changed seal water strainers
- Cleaned bar screens

OPERATIONAL ISSUES

There were no operational issues in the report period.

SLUDGE SUMMARY

Asselin Transportation and Storage Limited hauled a total of 212.7 m³ of thickened digested sludge (11.8 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 679 (x 180 multiplier) kWh.
OCWA brought their new Maximo maintenance program online in the northwest hub.
Lakeside Controls and Dell Tech Support have been working to resolve some issues with one of the Delta V workstations.
Contractors interested in bidding on the screen and sludge handling upgrade project toured the facility.

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 | Avg. Day Flow m3 | Max Day Flow m3 | Sewage Flows Year 2016 | | | | Usage % Plant Capacity | Sludge Volume Hauled M3 | Removal Efficiency | | |
|-----------|---------------------|--------------------|-------------------------------|------------------------------|-----------------------|-------|------------------------------|----------------------------------|--------------------|------------------|--|
| | | | Total Treated Volume ML | Total ByPass Volume ML | Total Volume ML | CBOD5 | | | Suspended Solids | Total Phosphorus | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| January | 5668.1 | 5900 | 175712 | | 175712 | 63% | 249.9 | | | | |
| February | 5417.8 | 5665 | 157117 | | 157117 | 60% | 251.7 | | | | |
| March | 7463.4 | 12988 | 231365 | | 231365 | 83% | 212.7 | | | | |
| April | | | | | | 0% | | | | | |
| May | | | | | | 0% | | | | | |
| June | | | | | | 0% | | | | | |
| July | | | | | | 0% | | | | | |
| August | | | | | | 0% | | | | | |
| September | | | | | | 0% | | | | | |
| October | | | | | | 0% | | | | | |
| November | | | | | | 0% | | | | | |
| December | | | | | | 0% | | | | | |
| Sum | | | | 0 | 564194 | | 714.3 | | | | |
| Average | 6183 | | 188065 | | 188065 | 69% | 238.1 | | | | |
| Max | | 12988 | 231365 | | 231365 | | | | | | |
| C of A | 9000 | 18000 | | | | | | | | | |

| | CBOD5 | | | Suspended Solids | | | Total Phosphorus | | | Nitrogen | | E. Coli |
|-----------|----------|-----------|-----------|------------------|-----------|-----------|------------------|-----------|-----------|----------|-----------|----------|
| | Avg. Raw | Avg. Eff. | Avg. Load | Avg. Raw | Avg. Eff. | Avg. Load | Avg. Raw | Avg. Eff. | Avg. Load | Avg. Raw | Avg. Eff. | Geo Mean |
| Month | BOD | CBOD | CBOD | S.S | S.S | S.S | T.P | T.P | T.P | TKN | Total N | Counts |
| | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | (kg/day) | (mg/L) | (mg/L) | /100ml |
| January | 87.0 | 2.4 | 13.5 | 142.4 | 6.0 | 34.7 | 2.41 | 0.15 | 0.83 | | | 23.7 |
| February | 74.3 | 3.5 | 18.5 | 132.5 | 4.3 | 23.2 | 2.12 | 0.11 | 0.57 | 17.3 | 8.9 | 19.3 |
| March | 65.2 | 2.3 | 16.1 | 112.4 | 5.7 | 47.7 | 1.87 | 0.11 | 0.94 | 15.1 | 9.7 | 21.4 |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| July | | | | | | | | | | | | |
| August | | | | | | | | | | | | |
| September | | | | | | | | | | | | |
| October | | | | | | | | | | | | |
| November | | | | | | | | | | | | |
| December | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Average | 75.5 | 2.7 | 16.0 | 129.1 | 5.3 | 35.2 | 2.1 | 0.12 | 0.78 | 16.2 | 9.3 | 21.5 |
| Max | 87 | 3.5 | 18.5 | 142.4 | 6 | 47.7 | 2.4 | 0.15 | 0.94 | 17.3 | 9.7 | 23.7 |
| C of A | | 25 | 225 | | 25 | 225 | | 0.9 | 9 | 200 | 6.0 | 200 |

Sewer & Water Data for 2016
up-dated March 31, 2016

| Month | Days per month | 2016 | 2016 | 2016 | 2016 | 2016 | 2015 | 2016 | 2016 | 2016 | 2016 | 2016 | 2015 | 2015 | 2016-2015 | 2016-2015 | 2016 | 2016 | |
|-----------------|-------------------|-----------------------|---------------------|-----------------------|---------------------|--------|-----------------------|-----------------------|---------------------|-----------------------|---------------------|--------|-----------------------|---------------------|-----------|------------|------------|---------------|--------|
| | | Total | daily | Couch. | Couch. | Couch. | Total | Total | daily | Couch. | Couch. | Couch. | Total | daily | Diff | Diff | Difference | Infiltration | |
| | | Sewage | Sewage | Sewage | Sewage | Sewage | Sewage | Treated | Treated | 2 Water | 2 Water | Water | Treated | Treated | Treated | Wastewater | STP-WTP | daily average | |
| | | STP | STP | Meters | Meters | % | STP | WTP | WTP | Meters | Meters | % | WTP | WTP | WTP | STP | | | |
| | | cu. meters monthly | cu. meters daily | cu. meters monthly | cu. meters daily | | cu. meters monthly | cu. meters monthly | cu. meters daily | cu. meters monthly | cu. meters daily | | cu. meters monthly | cu. meters daily | | | | | |
| January | 31 | 176710 | 5700.32 | 7600 | 245.16 | 4.30% | 161362 | | 118110.0 | 3810.0 | 16818.5 | 542.5 | 14.24% | 121570 | 3922 | -3460.0 | 15348.0 | 58600.0 | 1890.3 |
| February | 29 | 157117 | 5417.83 | 7638 | 263.38 | 4.86% | 140237 | | 110250.0 | 3801.7 | 16818.5 | 579.9 | 15.25% | 107690 | 3713 | 2560.0 | 16880.0 | 46867.0 | 1616.1 |
| March | 31 | 231365 | 7463.39 | 9648 | 311.23 | 4.17% | 173865 | | 118060.0 | 3808.4 | | 0.0 | | 126450 | 4079 | -8390.0 | 57500.0 | 113305.0 | 3655.0 |
| April | 30 | | 0.00 | | 0.00 | | 168865 | | | 0.0 | | 0.0 | | 112830 | 3761 | -112830.0 | -168865.0 | 0.0 | 0.0 |
| May | 31 | | 0.00 | | 0.00 | | 242869 | | | 0.0 | | 0.0 | | 120100 | 3874 | -120100.0 | -242869.0 | 0.0 | 0.0 |
| June | 30 | | 0.00 | | 0.00 | | 218773 | | | 0.0 | | 0.0 | | 116430 | 3881 | -116430.0 | -218773.0 | 0.0 | 0.0 |
| July | 31 | | 0.00 | | 0.00 | | 179969 | | | 0.0 | | 0.0 | | 134840 | 4350 | -134840.0 | -179969.0 | 0.0 | 0.0 |
| August | 31 | | 0.00 | | 0.00 | | 183529 | | | 0.0 | | 0.0 | | 129900 | 4190 | -129900.0 | -183529.0 | 0.0 | 0.0 |
| September | 30 | | 0.00 | | 0.00 | | 163113 | | | 0.0 | | 0.0 | | 121920 | 4064 | -121920.0 | -163113.0 | 0.0 | 0.0 |
| October | 31 | | 0.00 | | 0.00 | | 159808 | | | 0.0 | | 0.0 | | 123450 | 3982 | -123450.0 | -159808.0 | 0.0 | 0.0 |
| November | 30 | | 0.00 | | 0.00 | | 188990 | | | 0.0 | | 0.0 | | 102560 | 3419 | -102560.0 | -188990.0 | 0.0 | 0.0 |
| December | 31 | | 0.00 | | 0.00 | | 189403 | | | 0.0 | | 0.0 | | 107110 | 3455 | -107110.0 | -189403.0 | 0.0 | 0.0 |
| Total | 366 | | | | | | 2170783 | | | | | | | 1424850 | 46690 | -1424850.0 | -2170783.0 | 0.0 | 0.0 |
| Monthly Average | | | | | | | 180898.6 | | | | | | | 118737.5 | 3890.9 | -89869.2 | -133799.3 | 18231.0 | 596.8 |
| daily Average | | | | | | | | | | | | | | | 3868.77 | | | | |