

# PEACE RIVER REGIONAL DISTRICT ELECTORAL AREA DIRECTORS COMMITTEE MEETING

## A G E N D A

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for the meeting to be held on Thursday, July 17, 2014 in the  
Regional District Office Boardroom, 1981 Alaska Avenue,  
Dawson Creek, BC, commencing at 10 a.m.

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1. Call to Order: Director Goodings to Chair the meeting
2. Director's Notice of New Business:
3. Adoption of Agenda:
4. Adoption of Minutes:
  - M-1 Electoral Area Directors' Committee Meeting Minutes of May 21, 2104.
  - M-2 Electoral Area Directors' Committee Meeting Minutes of June 19, 2104.
5. Business Arising from the Minutes:
6. Delegations:
7. Correspondence:
  - C-1 July 14, 2014 e-mail from Derek Sturko, Deputy Minister, Ministry of Agriculture regarding Invitation to *Agricultural Land Commission Act* Consultation Session
8. Reports:
  - R-1 July 15, 2014 Report from Chris Cvik, Chief Administrative Officer regarding Sub-regional Water Function and Sub-regional Septage Handling Function
  - R-2 Building Bylaw No. 1996, 2011
9. New Business:
10. Diary:
11. Adjournment:



**PEACE RIVER REGIONAL DISTRICT**  
**SPECIAL ELECTORAL AREA DIRECTORS' COMMITTEE**  
**MEETING MINUTES**

**M-1**

DATE: May 21, 2014  
TIME: 9 a.m.  
PLACE: Regional District Office Boardroom, Dawson Creek, BC  
PRESENT:

Directors: Karen Goodings, Electoral Area 'B' and Meeting Chair  
Arthur Hadland, Electoral Area 'C'  
Leonard Hiebert, Electoral Area 'D'  
Jerrilyn Schembri, Director, Electoral Area 'E'

Alternate Directors: Joe Breti, Electoral Area 'D'  
Cheryl Shuman, City of Dawson Creek  
Alec Brownlee, District of Chetwynd

Staff: Chris Cvik, Chief Administrative Officer  
Shannon Anderson, Deputy Chief Administrative Officer  
Bruce Simard, General Manager of Development Services  
Jo-Anne Frank, Corporate Officer  
Fran Haughian, Communications Manager / Commission Liaison  
Fred Cornelssen, Building Inspector 2  
Barb Coburn, Recording Secretary

Guest: Tracey Lorenson, Paragon Strategic Services Ltd., Facilitator

Others: Alva Stewart, Charlie Lake  
Brenda Briggs, Charlie Lake  
Walter Stewart, Charlie Lake  
Ethelann Stewart, Baldonnel  
Melvin Stewart, Baldonnel  
Faye Meek, Charlie Lake  
Gordon Meek, Charlie Lake  
Randy Torgimson, North Rolla  
Val Torgimson, North Rolla  
Jim Ross, Chetwynd  
Jonny Wakefield, Alaska Highway News  
Jill Earl, Northeast News

Call to Order Chair Goodings called the meeting to order at 9 a.m. and introduced Tracey Lorenson, of Paragon Strategic Services Ltd., the facilitator for the meeting today and Chris Cvik, the Regional District's new CAO. She explained that the purpose of the Special Electoral Area Directors' Committee meeting is to discuss the building bylaw and come to a consensus and move forward.

Ms. Lorenson explained that the goal of the discussion today is to ensure there is clear understanding about each other's perspectives and the content of the proposed building bylaw. She stated that if there is going to be a building bylaw in place, that the Directors will have to make tough choices. This is not intended to be staff versus directors or public; or directors versus the general public. It is meant to provide an opportunity to have an in-depth discussion regarding the bylaw.

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## M-1

Discussions ensued regarding the need for a building bylaw, what the challenges are and what means would be appropriate to regulate and monitor construction within the Regional District. Concerns were expressed around the monitoring of construction in order to meet a general obligation to ensure safety for residents and emergency personnel is met. The Regional District has a legal liability to ensure safety and fire code regulations are met and the Building Bylaw needs to be updated to match those requirements. It was also noted that before a new building bylaw is drafted or considered, the matter should be put to a referendum seeking the public's opinion on whether they wish to have a building bylaw regulatory service, in any form.

The various forms of the building bylaw were discussed at length. It was suggested that the previous Bylaw 1189, 1999 would be sufficient to meet the needs of the region. That bylaw identified a specific area that a building permit was required and outside that area, a building permit was issued on a voluntary basis. There were also concerns expressed about new construction in the areas of the region that are outside the boundary. There is construction occurring that should have regular inspections but are in the areas that are not covered by the requirement for a building permit. Some of the construction of concern are:

- 4.5 acres lots
- respect for the agriculture land and environment
- work camps
- industry construction
- new subdivisions and associated requirements
- new construction within established subdivisions
- any construction that would have an impact on the electoral areas or member municipalities.

It was noted that people who live in the rural areas do so to get away from the urban environment and do not appreciate being regulated as would be the case in a municipality. It was decided that Building Bylaw 1189, 1999 could meet the basic requirements for now, if it was update only to reflect any changes to current statutes or other government practices.

MOVED by Director Schembri, SECONDED by Director Hadland,

That the Electoral Area Directors Committee recommend to the Regional Board that

- a) the content of Bylaw 1189, 1999 be re-instated, under a new name and number; and
- b) resolution number RD/13/11/11, as follows:

*"That a referendum question be prepared for the next election in each of the Regional District Electoral Areas as follows:*

*"Do you want the Peace River Regional District to establish a building inspection bylaw complete with inspection services?"*

be rescinded.

CARRIED

### 9) Adjournment

MOVED by Director Hadland, SECONDED by Director Schembri,  
That the meeting adjourn.

CARRIED

The meeting adjourned at 11 a.m.

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Karen Goodings, Chair

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Barb Coburn, Recording Secretary

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**PEACE RIVER REGIONAL DISTRICT  
ELECTORAL AREA DIRECTORS' COMMITTEE  
MEETING MINUTES**

**M-2**

DATE: June 19, 2014  
TIME: 10 a.m.  
PLACE: Regional District Office Boardroom, Dawson Creek, BC  
PRESENT:

Directors: Karen Goodings, Electoral Area 'B' and Meeting Chair  
Arthur Hadland, Electoral Area 'C'  
Leonard Hiebert, Electoral Area 'D'  
Jerrilyn Schembri, Electoral Area 'E'

Staff: Chris Cvik, Chief Administrative Officer  
Shannon Anderson, Deputy Chief Administrative Officer  
Barb Coburn, Recording Secretary

Guests: Kathy Sawchuk, Superintendent, School District 59  
Allan Van Tassel, Director of Operations, School District 59

Call to Order: Chair Goodings called the meeting to order at 10:05 a.m.

Vary the Agenda: MOVED by Director Hadland, SECONDED by Director Schembri,  
That the agenda be varied to deal with D-1 at this time.

CARRIED.

DELEGATIONS:

D-1: The Chair introduced Kathy Sawchuk, Superintendent and Allan Van Tassel, Director of  
School District 59: Operations for School District No. 59 who are here today to update the Directors on the status of  
bussing in the south Peace region.

Ms. Sawchuk briefly explained that the transportation portion of the total School District budget is being reduced annually; and therefore, they have devised a contingency plan. She also explained that, due to the declining enrolment, School District No. 59 receives funding protection from the Province. They have been able to set aside a portion of that funding in a reserve to assist with potential future funding shortfalls as part of the contingency plan. Some of the funds were used to upgrade infrastructure, such as heating systems, roofing and to the implementation of an energy management plan.

Mr. Van Tassel reviewed the current process for the scheduling of busses. Changes are constantly being made to the bus schedule as schools close, families move in or out of the district, etc. A recent third-party review determined that bussing in the South Peace School District is operating efficiently. A few suggestions are being reviewed for possible implementation in the future. It will be a challenge to accommodate students in the One Island Lake area.

The School District is currently in Phase 4 of the four-phase plan that the district has been implementing over the past three years. Most of the closed schools have been have sold. Efforts are on-going for the sale of Tate Creek School to the community. At this time O'Brien school is being utilized by the City of Dawson Creek and the School District.

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DELEGATIONS (CONTINUED):

D-1 (continued)  
School District 59      A discussion ensued regarding teacher recruitment, the affect work camps have on the district, the various formulas being used to determine school requirements, and the efforts of the district to lobby for changes. School District No. 59 is 'holding its own'; therefore, the delegates thanked the Directors for the offer to assist with funding for bussing but declined any assistance from the Regional District at this time.

The Directors thanked the delegates for the update and wished them success with their plans for the future. The delegates left the meeting at 10:50 a.m.

ADOPTION OF AGENDA:

June 19, 2014 Agenda      MOVED by Director Hadland, SECONDED by Director Hiebert,  
That the Electoral Area Directors' Committee agenda for the June 19, 2014 meeting, be adopted, including items of new business:  
Call to Order: Director Goodings to Chair the meeting  
Director's Notice of New Business:  
Adoption of Agenda:  
Adoption of Minutes:  
M-1      Electoral Area Directors' Committee Meeting Minutes of May 22, 2014  
Business Arising from the Minutes:  
Delegations:  
D-1      Kathy Sawchuk, Superintendent and Allan Van Tassel, Director of Operations, regarding Changes to School Bus Transportation within School District No. 59.  
Correspondence:  
C-1      Email from Leah Mellott, General Manager, Electoral Area Administration, Regional District of North Okanagan, regarding her General Manager position.  
Reports:  
R-1      June 13, 2014 report from Jodi MacLean, Assistant Manager of Development Services regarding One Island Lake Water Monitoring.e  
New Business:  
NB-1      Primer Letter  
NB-2      Highway Patrols at Pink Mountain  
NB-3      Powerful Coalition Forming - the Flip Side  
NB-4      Proactive Bylaw Enforcement  
NB-5      Invasive Plant Manager update  
Diary:  
Adjournment:

CARRIED.

ADOPTION OF MINUTES:

M-1  
EADC Meeting Minutes of  
May 22, 2014      MOVED by Director Hadland, SECONDED by Director Schembri,  
That the Electoral Area Directors Committee minutes of May 22, 2014 be adopted.

CARRIED.

CORRESPONDENCE:

C-1  
General Manager, Electoral  
Area Administration      MOVED by Director Hadland, SECONDED by Director Hiebert,  
That staff investigate the General Manager, Electoral Area Administration position and prepare a report for the next Electoral Area Directors' Committee meeting.

CARRIED.

REPORTS:

R-1                                      The Directors reviewed the report from the BC Lake Stewardship and Monitoring Program on One Island Lake. It was noted that the report was well done and very interesting. The Directors requested that a copy of the report be distributed to all Directors.

Adjournment                      MOVED by Director Hadland, SECONDED by Director Hiebert,  
That the meeting adjourn.

CARRIED

The meeting adjourned at 12:40 p.m.

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Karen Goodings, Chair

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Barb Coburn, Recording Secretary

From: Correspondence Unit AGRI:EX [<mailto:MCU@gov.bc.ca>]

Sent: July-14-14 1:28 PM

To: prrd dc

Subject: TIME SENSITIVE INVITATION FROM THE DEPUTY MINISTER OF AGRICULTURE: Agricultural Land Commission Act Consultation Session

Importance: High

File: 0280-30

Ref: 180334

Karen Goodings

Chair

Peace River Regional District

E-Mail: [prrd.dc@prrd.bc.ca](mailto:prrd.dc@prrd.bc.ca)

Dear Ms. Goodings:

The Ministry of Agriculture is seeking input from industry, local government and other interested groups on potential amendments to the regulation subordinate to the *Agricultural Land Commission Act*.

We are interested in your perspective on this matter and invite you to participate in a consultation session in your region. In order to allow the best use of our time together, most consultation sessions will include a number of representatives from different organizations.

To ensure that those invited to this session have an opportunity to participate in the conversation and provide comments, please limit the number of attendees from your organization to 4.

We encourage you to solicit input on the consultation material from your member municipalities and to consider including representatives from them and/or any Agricultural Advisory Committees as part of your delegation. You are also welcome to submit written submissions from your Regional District and/or your member municipalities during the consultation.

Venue:	Pomeroy Hotel, 11308 Alaska Road, Fort St. John
Date and Time:	July 31, 2014; 11 a.m.-1 p.m.
Groups present at your session:	Northern Rockies Regional Municipality

Materials: Background information on changes to the *Agriculture Land Commission Act*, and a copy of the consultation questions will be e-mailed to you under a separate cover in the next few days. If you have any questions, please contact Natasha Thambirajah by telephone at 250 356-1686.

Please R.S.V.P. to this invitation by e-mail to [ALCAMEetings@gov.bc.ca](mailto:ALCAMEetings@gov.bc.ca) by July 17, 2014 and ensure you specify how many people from your organization are attending.

Sincerely,

Derek Sturko

Deputy Minister

**July 17, 2014**



# Peace River Regional District REPORT

R-1

To: Electoral Area Directors Committee (EADC)

Date: July 15, 2014

From: Chris Cvik, CAO

**Subject:** Sub-Regional Water Function and Sub-Regional Septage Handling Function

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## RECOMMENDATIONS:

**Recommendation 1.** That EADC supports the creation of a sub-regional water function that includes all four electoral areas within the service area.

**Recommendation 2.** That EADC supports the creation of a sub-regional sewage function that includes all four electoral areas within the service area.

**Recommendation 3.** That EADC supports the use of the Alternative Approval Process (AAP) for the creation of the sub-regional water function and sub-regional sewage function.

**Recommendation 4.** That the Electoral Area Directors Committee forwards this report to the Board for consideration and support.

## BACKGROUND/RATIONALE:

At the February 27, 2014, PRRD Board Meeting, the Deputy CAO presented a report to the Board asking for direction on a Wastewater Truck & Haul Dumping Facility and also on a Public Potable Water Tankloader Option for Area C. A copy of the report is attached for background information.

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Staff Initials:

Dept. Head:

CAO:

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The Board resolution is shown below:

R-4  
February 20, 2014 –  
Shannon Anderson,  
Deputy Chief  
Administrative Officer

FORT ST. JOHN RURAL AREA WATER AND SEWER SERVICING OPTIONS

RD/14/02/10 (27)  
MOVED by Director Hadland, SECONDED by Alternate Director Brownlee,  
That staff be directed to investigate the creation of a service establishment bylaw to  
provide a water service in Electoral Area 'C'.

CARRIED.

RD/14/02/11 (27)  
MOVED by Director Hadland, SECONDED by Director Hiebert,  
That staff be directed to further investigate the following options for providing public  
wastewater handling facilities to serve residences in Electoral Area 'C':

- Partner with private enterprise
- Partner with the City of Fort St. John
- Facility owned and operated by the Regional District

DEFEATED.

Director Johanssen entered the meeting at 11:40 a.m.

RD/14/02/12 (27)  
MOVED by Director Hadland, SECONDED by Director Bumstead,  
That staff conduct a feasibility study, including identifying associated costs, on  
proceeding with a Regional District owned and operated public wastewater handling  
facility to serve residences in Electoral Area 'C'.

CARRIED.

As Administration works to carry out the Boards instructions from the February 27<sup>th</sup> meeting, we are suggesting that the scope of the resolution be expanded to consider a water function and sewage function for residents of all four (4) electoral areas as opposed to looking at only Electoral Area C. The rationale for this stems from the City of Fort St. John's recent actions regarding the provision of sewer service for the rural area. It begs the question on the future of rural water and sewage services that are currently being provided by other municipalities in the PRRD and their future desire to do so. Therefore, to provide a secure long term solution to the provision of water and sewage receiving facilities, it is timely to develop a utilities solution for all electoral areas.

Our suggestion is based on economies of scale and current and future demand for these functions. For example, although the recommendation calls for a water service for Area 'C', there is another project that is looking at developing potable Water Tankloader sites for Tomslake and Farmington.

Although there are a certain number of rural residents who will be opposed to the introduction of a new Water Service or Sewage Service, it makes financial sense to include all four electoral areas when considering the scope of the utilities service area. This is because having access to a safe potable water system will benefit those requiring it today as well as those that may be self-reliant today but could need access in the future. On the sewage side, rural residents are required to clean out lagoons or tanks and having access to a facility that will accept the waste is an ongoing need.

Given the suggested service area for the utilities initiative is all four electoral areas, the use of the Alternative Approval Process (AAP), is being recommended as opposed to a referendum. Under the AAP, residents who are opposed to the creation of the new services would be able to sign a petition against the service. If more than 10% of eligible voters in the service area petition against the new services, the option of going to referendums at a later date would remain available once Administration better understood the basis for the reasons behind the failure and tried to address those concerns.

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### Proposed Sub-Regional Water Function covering all four rural electoral areas

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Deliverable: Potable water for rural residents.

Development of up to ten (10) potential sites.

- Two (2) sites within the first year (Toms Lake and Farmington)
- Additional site (Fort St. John) during the second year.

Location of remaining sites (approximately seven (7) locations) will be determined based on criteria that include:

- Water supply
- Water quality
- Population around proposed site location
- Land acquisition cost
- Upgrade feasibility of existing locations
- Land accessibility of potential locations

### Proposed Sub-Regional Sewage Function covering all four rural electoral areas

Deliverable: Sewage system for rural residents – particularly those surrounding municipalities.

Develop three (3) sewage facilities.

- Fort St. John would be the first priority to address based on the December 31, 2014, announced closure of the Wastewater Transfer Station. With respect to Fort St. John, the preferred location would be the existing City facility. The alternate location would be the Charlie Lake facility.
- Dawson Creek would be the second facility and Chetwynd the third.

The proposed locations would form a triangular service pattern and are based on 'piggy-backing' off existing sewer/septage facilities and sewer treatment systems that provide necessary treatment of the residual sewer waste materials.

Administration has scheduled a meeting with administration from Dawson Creek, Fort St. John, and the District of Chetwynd to discuss the idea of developing joint facilities. NOTE: The current plan design is based on using existing lagoons. If the PRRD is required to develop a new lagoon with any new sewage facility, the financial cost of the project will increase significantly.

## STRATEGIC PLAN RELEVANCE:

The introduction of water tank loaders for Tomslake and Farmington are included in the current Strategic Priorities listing.

The introduction of a sub-regional sewage function was not identified when the Strategic Plan was approved but has become a priority item due to the decision of the City of Fort St. John to close the Wastewater transfer station.

## FINANCIAL CONSIDERATION(S):

The total estimated Capital Costs for the project is **\$19,272,500**.

The cost of implementing a rural water and sewage function for all four (4) electoral areas is estimated to be a maximum tax rate of **\$0.2789 per \$1,000** of assessed land & improvements for class 1 – residential owners.

Class 1 – Residential owners would be contributing **14.73%** towards this project through taxes whereas the bulk of the taxes for the project would be funded by Utilities, Light and Major Industry.

The estimate for the tax rate is calculated on a “worst case scenario” and does not include funding from other sources (i.e., Gas Tax, Fair Share, NDI Grants, Corporate donations/partnerships, etc.) that would reduce the cost to the taxpayer.

## COMMUNICATIONS CONSIDERATION(S):

If approved, there would be a comprehensive Communication Plan developed as part of the process to establish the two new service functions.

The creation of these two new functions is a large undertaking; however, Administration is recommending they be undertaken at the same time. This will allow for better coordination of the communication effort as residents will be able to see the larger picture all at once as opposed to a tax increase one year to pay for a water function and then a further increase the following year to address the sewage issue.

## OTHER CONSIDERATION(S):

Even though sewer and water are considered as ‘discretionary’ local services, they are two functions that **all residents** in the Electoral Areas have need for. The Electoral Area Directors will need to determine if that need is best served by the creation of sub-regional water and sewage.

Water Tankloader Facilities		Sewage Handling Facilities		Combined Water & Septage Facilities	
<i>Estimated Budget for Each of the 10 sites planned</i>		<i>Estimated Budget for Each of the 3 sites planned</i>		<i>Estimates for Both Projects Combined</i>	
<u>Capital Costs</u>		<u>Capital Costs</u>		<u>Capital Costs</u>	
Site Acquisition / Preparation	65,000	Site Acquisition / Preparation	100,000	Site Acquisition / Preparation	165,000
Engineering	75,000	Engineering	300,000	Engineering	375,000
Civil Works	80,000	Civil Works	150,000	Civil Works	230,000
Design & Installation	480,000	Design & Installation	750,000	Design & Installation	1,230,000
Sulfate Removal System	25,000	Lagoons - New and/or Upgrades	1,000,000	Sulfate Removal System	1,025,000
Software + Technology	45,000	Software + Technology	75,000	Software + Technology	120,000
Sub-Total	770,000	Sub-Total	2,375,000	Sub-Total	3,145,000
Contingency 30%	231,000	Contingency 30%	712,500	Contingency 30%	943,500
Total Capital (Each)	1,001,000	Total Capital (Each)	3,087,500	Total Capital (Each)	4,088,500
Total Capital (10 Sites)	10,010,000	Total Capital (3 Sites)	9,262,500	Total Capital (10 W + 3 S)	19,272,500
<u>Annual Budget</u>		<u>Annual Budget</u>		<u>Annual Budget</u>	
<u>Expenditures</u>		<u>Expenditures</u>		<u>Expenditures</u>	
Operating and Maintenance \$3/M3	165,000	Operations	200,000	Operations	365,000
Administration	25,000	Administration	75,000	Administration	100,000
Reserve - Operating	25,000	Reserve - Operating	25,000	Reserve - Operating	50,000
Reserve - Capital	25,000	Reserve - Capital	25,000	Reserve - Capital	50,000
Capital Borrowing (10-yr)	145,944	Capital Borrowing (10-yr)	450,153	Capital Borrowing (10-yr)	596,097
Annual Operating Costs	385,944	Annual Operating Costs	775,153	Annual Operating Costs	1,161,097
<u>Revenue</u>		<u>Revenue</u>		<u>Revenue</u>	
User Fees	80,000	User Fees	250,000		330,000
Tax Requisition (per site)	305,944	Tax Requisition (per site)	525,153	Tax Requisition (1 each)	831,097
<u>Water Tankloaders</u>		<u>Septage Handling Facilities</u>		<u>Combined Water Tankloaders &amp; Septage Handling</u>	
Service Area Maximums (10 sites)		Service Area Maximums (3 sites)		Service Area Maximums	
Maximum Annual Amount	3,059,443	Maximum Annual Amount	1,575,459	Maximum Annual Amount	4,634,902
Maximum Tax Rate	0.1841	Maximum Tax Rate	0.0948	Maximum Tax Rate	0.2789

Tax Rates are based on LAND & IMPROVEMENTS.

Note that the maximum tax rate is based on the 2014 assessments used for the budget process.

The result is that if assessments increase then the amount that could be raised would increase, but if the assessment decreased the maximum amount could still be raised which would be a higher tax rate.

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Water Tankloaders (10) and Sewage Handling Facilities (3) Sub-Regional Function (Electoral Areas Only)

Used the assessment information for the 2014 Budget - Land & Improvements

To Raise a maximum of: 4,634,902 Maximum Rate: 0.2789 Per 1000 Class 1 - Residential

Class	Taxable Assessment			Ratio	Taxes Raised			Estimated Taxes (various assessments)			
	Land	Improvements	Total		Rate	Taxes	Percent	100,000	300,000	700,000	1,000,000
1 - Residential	685,679,459	1,761,906,423	2,447,585,882	1.00	0.2789	682,626	14.73%	27.89	83.67	195.23	278.90
2 - Utilities	23,002,168	905,789,844	928,792,012	3.50	0.9761	906,633	19.56%	97.61	292.84	683.30	976.14
4 - Major Industry	405,044,034	706,098,300	1,111,142,334	3.40	0.9483	1,053,643	22.73%	94.83	284.48	663.78	948.25
5 - Light Industry	161,223,191	1,676,856,500	1,838,079,691	3.40	0.9483	1,742,962	37.61%	94.83	284.48	663.78	948.25
6 - Business	116,367,386	218,992,702	335,360,088	2.45	0.6833	229,151	4.94%	68.33	204.99	478.31	683.30
7 - Managed Forests	10,400	-	10,400	3.00	0.8367	9	0.00%	83.67	251.01	585.68	836.69
8 - Recreation/Non-Profit	2,688,411	392,900	3,081,311	1.00	0.2789	859	0.02%	27.89	83.67	195.23	278.90
9 - Farm	68,194,625	-	68,194,625	1.00	0.2789	19,019	0.41%	27.89	83.67	195.23	278.90
	1,462,209,674	5,270,036,669	6,732,246,343			4,634,902	100.00%				

Note(s):

- 1 These calculations are done based on "worse case scenario" in which the RD would pay the full amount even though there will probably be funding from other sources (ie Fair Share, Gas Tax, FCM Grants, NDI Grants, Corporate donations/partnerships, etc.). All funds raised/received will help reduce the cost to the taxpayer.
- 2 The estimated cost to build a sewage handling facility is \$3M each and a water tankloader facility is \$1M each (some will be less and some more depending on location, property availability, partnerships, operational agreements, etc.)
- 3 Total cost to pay debt payments plus pay operational/maintenance costs is estimated at \$520K/year for one sewage handling facility and \$306K for one water tankloader facility (this includes taking into consideration user fees revenue)
- 4 The maximum estimated \$4.6M per year is expected to cover the costs to build and/or upgrade and operate 10 Water Tankloader Facilities and 3 Sewage Handling Facilities throughout the region. The capital is based on 10-year borrowing terms.

*These calculations are for the estimated cost of installing and operating new water tankloader facilities or upgrading existing facilities to have a total of ten (10) "potable" water sources throughout the region.*

*Plus, to install new or partner with existing facilities for three (3) sewage discharge facilities.*

*The numbers contained here are based on the maximum taxes for these two separate services.*

**July 17, 2014**



# Peace River Regional District REPORT

To: Board and Directors

Date: February 20, 2014

From: Shannon Anderson; Deputy CAO

**Subject: Fort St John Rural Area Water and Sewer Servicing Options**

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## **RECOMMENDATION(S):**

That the Regional Board considers the servicing options described in this report and provide staff direction on the preferred option in moving forward

**BACKGROUND/RATIONALE:** Historically the City of Fort St John (FSJ) has been providing a facility that receives liquid sewer wastes from approximately 2,000 area residences, commercial businesses and industrial facilities outside the FSJ jurisdiction. In September 2013, FSJ notified the PRRD that, due to new and more strict Federal/Provincial sewage discharge requirements leading to increased FSJ liability, they are planning on closing the sewer receiving facility effective December 31<sup>st</sup> of 2014 (letter is attached). This will have a large impact on the rural community who utilize this facility for sewer service of their septic and holding tanks. It is with this in mind that the Regional Board, asked staff to provide a report on options for a waste water function in Electoral Area C. It was also indicated that staff should look at a water function at the same time.

This report will discuss options in providing facilities for wastewater sewerage and water separately along with suggestions on options for defining and granting water and/or sewer service establishment authority.

## **A. Wastewater Truck & Haul Dumping Facility Options:**

1. ***PRRD partners with Private Enterprise;*** There may be a business opportunity present that can provide the service with a willing partner(s). The PRRD may wish to enter into a partnership with a private company to construct a waste water handling facility utilizing PRRD sewer infrastructure at Charlie Lake. The lagoon system would still be used for the treatment of the liquid waste that is produced with the ownership on the liquid waste receiving facility being private. The proposed private partner would invest in the capital development and could manage/operate the entire facility by agreement. Here again any private group would still require an environmental impact assessment and Ministry of Environment approvals to build such a facility. With this in mind, it is likely that a private facility would not be operational until late 2015.
2. ***Partner with City of Fort St John;*** If agreeable to both parties, the PRRD could partner with the FSJ to upgrade the existing facility to a standard that would provide a more reliable service and provide the FSJ with a better sense of comfort in dealing with Federal and Provincial compliance issues. Further the PRRD could contribute to the operating costs, such as aiding in the requirement for an attendant and administering a potential manifest system to ensure facility liquid waste compliance. In order to process with this option, the RD need to establish service

Staff Initials:

Dept. Head:

CAO:

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authority and get elector consent to tax. Both these options would see the FSJ still receiving waste as well as owning and operating the facility.

3. **Regional District Owned and Operated Facility;** The PRRD could build and operate its own public waste water handling facility. Works could be expanded as part of the Charlie Lake lagoon upgrade that would see the construction of a facility capable of handling wastewater sewerage. While a detailed feasibility would have to be undertaken for the construction of such a facility, rough costs are estimated at \$2 to \$3 million dollars. It will take time to complete the project as the project would require an environmental impact assessment and public approval process to develop a new service function which would push project completion beyond the FSJ's December 31<sup>st</sup> 2014 deadline.
4. **Do Nothing;** The PRRD has the option of doing nothing. It is likely that, should this option be implemented, the private sector could provide the service as there is a viable business case to be made in providing the service. As a note we have received several calls from the business community interested in providing the service.

The Table below compares pros and cons for each identified liquid waste handling option:

Options	Pros	Cons
<b>1. PRRD Partners with Private Enterprise</b>	<ul style="list-style-type: none"> <li>➤ Little or No capital outlay</li> <li>➤ Quicker construction window</li> <li>➤ Public approval not required</li> <li>➤ Management of facility by qualified companies</li> </ul>	<ul style="list-style-type: none"> <li>➤ No control over operations pricing</li> <li>➤ Negative public concern over sharing an existing RD facility</li> <li>➤ May not be operational until late 2015</li> </ul>
<b>2. Partner with FSJ</b>	<ul style="list-style-type: none"> <li>➤ Certified system already exists</li> <li>➤ Qualified staffing</li> <li>➤ Rural/ Local government partnering opportunity</li> </ul>	<ul style="list-style-type: none"> <li>➤ FSJ is not interested in providing service outside their jurisdiction</li> <li>➤ No guarantee that the FSJ will continue to operate in the future</li> </ul>
<b>3. New RD operated facility</b>	<ul style="list-style-type: none"> <li>➤ Can be tied to existing RD sewer system with major upgrade required</li> <li>➤ Facility control remains with RD</li> </ul>	<ul style="list-style-type: none"> <li>➤ Large capital outlay</li> <li>➤ Delays with service establishment process</li> <li>➤ Public approval process required before construction can begin</li> <li>➤ Facility not operational until 2016/17</li> </ul>
<b>4. Do Nothing</b>	<ul style="list-style-type: none"> <li>➤ No capital outlay</li> <li>➤ Quicker construction window</li> <li>➤ Private enterprise manages service</li> </ul>	<ul style="list-style-type: none"> <li>➤ No control over operations or pricing</li> <li>➤ No guarantee that a private facility will be built.</li> </ul>



## **B. Public Potable Water Tankloader Options :**

1. ***PRRD owned and operated water facility.*** As previously mentioned the Board also asked staff to look at options in providing a PRRD water function for potable public tankloader facilities. To provide a water facility the PRRD would have to investigate and secure a water source, which most likely would be an underground well, test it for water quality and quantity, construct a potable water dispensing system and develop a user pay system.

The PRRD is considering the potential development of public tankloader facilities and have completed construction and operations feasibility studies in Farmington and Tomslake areas. Current funding experience indicates capital cost estimates to be between \$1.5 and \$2 million. Ultimately a water sourcing exercise would be undertaken and feasibility completed to determine project costs. A service area would have to be established, including public approval for the PRRD to have authority to deliver the service.

2. ***PRRD Own and Operate City of Fort St John's Existing Water Tank Loaders;*** The PRRD could approach the FSJ to see if there is any appetite to allow the PRRD to purchase and operate their existing facilities. The tankloaders have been recently upgraded and would provide continued years of service to the rural area. In the North Peace, the RD could buy water from the FSJ and dispensed it through the system on a metered basis. This option would require a water function and public approval. It is expected that user fees would cover operational expenses.
3. ***Partnership with the City of Fort St John;*** Presently the City funds the operation and delivery of water from their water tankloaders. The PRRD could contribute to the facility operating costs as most of the facility flow comes from residents and businesses within the PRRD. This option assumes the City would still own the water station.
4. **Service Establishment Authority :**  
A service establishment bylaw(s) are required to give the PRRD the authority to provide the service of sewerage or water or sewer/water. Public consent is required to establish any of these services. The most reasonable opportunity to seek public consent is by referendum vote during the November 2014 local government elections. The down side is no development or service delivery can occur before the service is established which means PRRD development investment earliest date is 2015.

Should the Board decide to build an RD sewage handling facility, the proposed service area would be in Electoral Area C

**STRATEGIC PLAN RELEVANCE:** Electoral Area C; options to address septic solids, is identified as a corporate priority

**FINANCIAL CONSIDERATION(S):** \$50,000-\$75,000 feasibility funding per facility will be required to get preliminary engineering design costs, to identify service function costs, plus the cost of acquiring public consent depending on options chosen for sewer and/or water facility development.

**COMMUNICATIONS CONSIDERATION(S):** Public meetings would be planned should there be a public approval process for respective service delivery.

**OTHER CONSIDERATION(S):** None

July 17, 2014



August 28, 2013  
File No. 5340-09

Peace River Regional District  
Box 810  
Dawson Creek, BC V1G 4H8

Attention: Regional District Board

City of Fort St. John  
10631-100th Street  
Fort St. John, BC  
Canada V1J 3Z5

(250) 787-8150 City Hall  
(250) 787-8181 Facsimile

[www.fortstjohn.ca](http://www.fortstjohn.ca)

Dear Chair Goodings and Board Members:

Reference: **City of Fort St. John Wastewater Transfer Station**

City Council, at its regular meeting of August 26, 2013, received a staff report regarding the challenges facing the City due to increased liability and responsibility that will be incurred by continuing to operate the wastewater transfer station in future years. As of 2015, strict federal environmental regulations will be implemented in addition to the existing provincial regulations which resulted in the question of service provision in the future being discussed. As the attached administration report indicates, the City's lagoons are designed to treat domestic wastewater from a municipality and the introduction of industrial wastewater into the system has detrimental effects to the City's system and its operations.

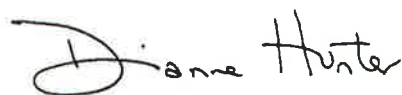
Due to the concerns identified within the report, Council resolved to reduce the wastewater transfer station's operating hours to Monday to Friday from 8:00 a.m. to 5:00 p.m. excluding statutory holidays effective October 1, 2013 and the facility will be closed and decommissioned on December 31, 2014.

The affected wastewater transfer companies will also be notified of the change in operating hours as well as the removal of this service in 2015.

This 16 month notice will allow the Regional District time to consider options with respect to offering this service on a regional basis for its constituents.

If you require additional information or clarification regarding this decision, please contact me at (250) 787-8161.

Yours truly,



Dianne Hunter  
City Manager

**July 17, 2014**

attachment



## REQUEST FOR DECISION

File #

Report To: Mayor and Council  
 From: Director of Public Works  
 Presenter: Director of Public Works  
 Subject: Administration Report No. 0196/13  
 City of Fort St. John Wastewater Transfer Station  
 Meeting: Regular Council  
 Meeting Date: 26 Aug 2013

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### RECOMMENDATION:

"THAT, due to the increasing responsibility and liability implications for the City to accept and treat Wastewater at both the Federal and Provincial government levels Council directs staff to revise the hours of operation for the Wastewater Transfer Station to Monday to Friday from 8:00 a.m. to 5:00 p.m. excluding Statutory Holidays effective October 1, 2013, THAT, Council directs staff to send notification to the Peace River Regional District and all current users of the facility advising them of this change in operating hours, AND FURTHER THAT, Council directs staff to provide formal notice to the Peace River Regional District and all current users, that the City of Fort St. John will close and decommission the Wastewater Transfer Station on December 31, 2014."

### CITY MANAGER'S COMMENTS:

Support recommendation.

Grace Fika  
 Acting City Manager

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**KEY ISSUES(S)/ CONCEPTS DEFINED:** The Wastewater Transfer Station located at 8819 - 81 Avenue is a facility that the City owns and operates which was originally designed and constructed to accept domestic Wastewater from rural residential customers. The City constructed the existing transfer station in 2001 with the current operating hours of 24 hours a day, seven days a week, 365 days per year.

July 17, 2014

In 2012, the Wastewater Transfer Station received a total of 58,000 cubic meters of wastewater which averages out to approximately 160 cubic meters per day for the year. The water is pumped from the Wastewater Transfer Station to the Sewage Lift Station and finally, pumped to the South Sewage Lagoons.

Providing users with unlimited access to the facility has been causing a number of issues that need to be brought to Council's attention.

The Wastewater Transfer Station is open to contractors to dispose of domestic wastewater any time, year round. City staff are available to respond to any issues that occur at the station between normal working hours of 8:00 a.m. to 5:00 p.m. Monday to Friday. For any operating issues outside of these hours, the City has been paying overtime rates to have staff respond. If the hours of operation were reduced to coincide with the hours that the utilities staff are working, the City would see a reduction in the station's operating costs.

Many of the haulers bring a considerable amount of solids (sludge) with their load which are disposed of at the station. These solids consist of inorganic and organic matter. The organic matter, although not as difficult to deal with as the inorganic, still pose issues in the treatment process at the lagoons. Organic solids received at the station are generally very anaerobic in nature thus having a high demand for oxygen. The effluent that is received at the wastewater transfer station has very little to no nutrient value which is necessary to maintain the biological balance in a sewage lagoon. The inorganic solids (gravel, sand, plastic, etc.) received at the station pose problems in the treatment process and have to be removed from the holding tanks at the Wastewater Transfer Station on a regularly scheduled maintenance program. Some of the inorganic matter makes its way to the Wastewater Transfer Station pumps causing premature wear on the pumps. The solids that manage to get pumped through create problems through the rest of the system, from the Sewage Lift Station to the aerated mix tanks located at the South Lagoons, eventually contributing to the sludge accumulation in the South Lagoon cells. At the Sewage Lift Station additional maintenance is required to deal with the solids that are pumped from the Wastewater Transfer Station. Any overflow in solids at the Sewage Lift Station are then pumped to the South Lagoons where staff again deal with the solids in the aerated mix tanks and the cells in the South Lagoons.

The South Sewage Lagoons treat approximately 70% of the City's total wastewater. The lagoons are designed to treat domestic wastewater from a municipality and are a very efficient, low cost method of treatment. With that said they are also very sensitive and require a balance of nutrients to efficiently biodegrade the organic matter found in domestic wastewater. The introduction of an industrial type of wastewater can be detrimental to the treatment process.

In 2010, Council approved recommendations made by staff for changes to the Sewer Regulation Bylaw to incorporate language pertaining to the regulations for users of the Wastewater Transfer Station. These changes were driven by the need to control what was being dumped at the station. Users of the facility are allowed to dispose of domestic wastewater only and staff were appraised that some loads entering the system were not domestic wastewater. There have been instances when an oil slick has appeared on the surface of the sewage lagoons and odours at the wastewater transfer station that indicated

that the system had received a load of wastewater contaminated with hydro carbons that compromised the delicate chemical balance maintained in a municipal sewage lagoon. As of June, 2010 only dedicated trucks displaying a permanent placard reading "Domestic Wastewater Only" are allowed to use the facility. This has reduced but not eliminated the instances where the Wastewater Transfer Station has received a load of non-domestic wastewater.

There has been an ongoing issue with enforcement of the rules at the Wastewater Transfer Station and staff have issued suspensions varying in length from one day to one week to a number of companies since June 2010. City staff have conducted random sampling of loads to try and ensure the product entering the Wastewater Transfer Station is domestic wastewater. The issue with testing these loads is two-fold. First you really need to know what it is you are testing for as there is a vast range of hydro carbons and chemicals that can be tested. Second, the costs incurred to take these samples to a lab to conduct the testing can become very expensive depending on the test requested. If staff haven't selected all of the possible products that may be in the load that was sampled, the contaminant is not identified by the lab.

In January, 2013 staff was required to start submitting monthly wastewater quality test results from the sewage lagoons to the Federal government. The testing perimeter in the new Federal regulations are more strict than what the City is currently required to meet in Provincial regulations. The monthly test results are being recorded allowing staff to see our wastewater quality and how it compares with the new parameters set forth by the Federal government. The implementation of the new Federal wastewater regulations will be fully implemented on January 1, 2015 and the City will be required to comply with these regulations as part of the operating permit. This will mean that the City will be providing monthly wastewater test results and complying with operating permits for both the Provincial and Federal governments.

On July 31, 2012, staff was required to suspend discharge from the South Lagoons to the Peace River for nearly two months because the quality of the treated wastewater did not meet the mandatory requirements in the operating permit. Wastewater discharge resumed on September 24 once the wastewater quality met the requirements of the operating permit. Staff are convinced that the degradation in wastewater quality was due to the introduction of non-domestic wastewater somewhere in the system. When non-domestic wastewater is disposed of into the transfer station or the system itself, within one day these contaminants have now moved to the South Lagoons and disseminated the biological activity. Once the lagoons receive this type of wastewater the biological process is stressed significantly, or even destroyed, leaving staff scrambling to try and rejuvenate the biological activity needed. This is accomplished by storing the wastewater, adding micro-organisms and introducing additional oxygen in the water. This comes at an additional cost to the City as the micro-organisms are expensive to purchase as well as additional electricity and extra wear on the blowers and air handling equipment. Depending on the volumes of non-domestic wastewater and the time of year that it is received, the time to re-establish the lagoons to a healthy state can vary. For the two month period in 2012 when staff had to store the wastewater at the South Lagoons due to non-compliance, the storage capacity in the lagoons was compromised. There is some room for storage and additional treatment at the South Lagoons but it is limited and that capacity can be reduced significantly if we have a wet

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summer such as we are experiencing this year.

This summer staff are again seeing a reduction in the wastewater quality at the South Lagoons. Since all flows that leave the Wastewater Transfer Station are recorded with times and volumes logged, staff has found a link between the pump run times at the Wastewater Transfer Station and a drop in the dissolved oxygen and wastewater quality at the South Lagoons. Although there hasn't been a requirement to suspend discharge from the lagoons to the river as of yet this year, the decrease in water quality is causing concerns for staff. Normally, the summer months are when lagoon systems work very efficiently and there is no need to provide additional treatment prior to discharge.

With the current operating hours there's ample opportunity to dump a load of non-domestic wastewater into the facility since it is unmanned. By reducing the hours of operation, the risk of receiving a load of non-domestic wastewater is reduced although not eliminated.

If the City fails to meet the new Federal requirements once they are fully implemented in 2015, the City will be required to apply for a "transitional authorisation" in order to continue discharging wastewater from the lagoons. The City will then be required to upgrade the lagoon system to ensure that the quality of discharge meets Federal environmental standards. This will be a large capital infrastructure cost that is not a benefit to City taxpayers. There are 12 properties within Country View Estates that would require access to dump their solids once every two years due to the design of this subdivision incorporating holding tanks although this could be accommodated by utilizing one of the abandoned lagoon cell which is currently used by Public Works annually to store solids from their sanitary flushing program.

Due to the situations identified above, staff requested Dr. Joanne Harkness, a registered professional biologist with Urban Systems to provide guidance to staff on the implications of receiving non-domestic wastewater into the City's sewerage system. Her response is attached to this report that explains the issues and concerns of treating industrial wastewater in a municipal sewage plant like the City's. The letter also outlines the City's legal responsibilities both on a Provincial and Federal level if it chooses to accept industrial wastewater.

As a first step, staff is recommending the Wastewater Transfer Station operating hours coincide with staff hours. For the City to further reduce the liability and risk of receiving non-domestic wastewater into the lagoon system, staff are requesting Council consider the closure and decommissioning of the Wastewater Transfer Station. If Council approves the recommendation as presented, the City will be better positioned to continue meeting the Provincial requirements in our operating permit as well meet the new Federal requirements.

Staff is recommending that formal notification of the closure and decommissioning of the Wastewater Transfer Station be sent to the Peace River Regional District Board to provide

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them with the opportunity to decide whether or not they wish to provide this service to their constituents as of January 1, 2015.

RELEVANT POLICY: City of Fort St. John Sewer Use Bylaw

**ALTERNATIVE RECOMMENDATION:**

"THAT, due to the increasing responsibility and liability implications for the City to accept and treat Wastewater at both the Federal and Provincial government levels Council directs staff to revise the hours of operation for the Wastewater Transfer Station to Monday to Friday from 8:00 a.m. to 5:00 p.m. excluding Statutory Holidays effective October 1, 2013, THAT, Council directs staff to send notification to the Peace River Regional District and all current users of the facility advising them of this change in operating hours, AND FURTHER THAT, Council directs staff to provide formal notice to the Peace River Regional District and all current users, that the City of Fort St. John will close and decommission the Wastewater Transfer Station on \_\_\_\_\_."

"THAT, due to the increasing responsibility and liability implications for the City to accept and treat Wastewater at both the Federal and Provincial government levels Council directs staff to revise the hours of operation for the Wastewater Transfer Station to Monday to Friday from 8:00 a.m. to 5:00 p.m. excluding Statutory Holidays effective October 1, 2013, AND FURTHER THAT, Council directs staff to send notification to the Peace River Regional District and all current users of the facility advising them of this change in operating hours."

"THAT, Council receives Administration Report No. 196/13 - City of Fort St. John Transfer Station for information."

<b>IMPLICATIONS OF RECOMMENDATION</b>
---------------------------------------

**COMPLIANCE WITH STRATEGIC GOALS:** A planned and sustainable community where community infrastructure is well maintained to meet the needs of both current and future generations; the natural environment is preserved, protected and enhanced; and where municipal spending and tax policies are affordable and sustainable over time.

**COMPLIANCE WITH STRATEGIC PRIORITIES:** N/A

**GENERAL:**

**ORGANIZATIONAL:**

**FINANCIAL:** As indicated above, there will be a reduction in staff overtime due to the facility being open during working hours and less maintenance requirements at both the lift station and sewage lagoons.

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A reduction in chemical cost may also be realized since the facility will not be open in the evenings and weekends, thus reducing the risk of receiving contaminated loads.

At this point in time, the revenue received from the sewage transfer station is offsetting the general operation of the facility. Any additional treatment that would be required or capital infrastructure improvements would create a deficit.

FOLLOW UP ACTION: Staff will proceed at the direction of Council.

COMMUNITY CONSULTATION: N/A

COMMUNICATION:

OTHER COMMENTS:

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Attachments:

Letter from Dr. Joanne Harkness, Urban Systems

RESPECTFULLY SUBMITTED:

Don Demers, Director of Public Works

19 Aug 2013

July 17, 2014





July 30, 2013

File: 1958.0242.13

City of Fort St. John  
10631 – 100<sup>th</sup> Street  
Fort St. John, BC V1J 3Z5

**Attention: Don Demers, Director of Public Works and Utilities**

**RE: RECEIPT OF INDUSTRIAL WASTEWATER AT THE SOUTH LAGOONS**

As requested, please find below a summary of the implications with respect to the receipt of industrial wastewater at the South Lagoons. Although the need for long-term direction on the receipt of industrial wastewater has arisen due to the release of the wastewater from the OSB plant, the comments below are intended to outline the general issues which are faced when an industrial wastewater is to be managed at a municipal wastewater facility. In addition, although the comments are focused on the City's South Lagoons, the comments will also provide direction in the event that such a situation arises at the North Lagoons.

**1.0 CHARACTERISTICS ASSOCIATED WITH INDUSTRIAL WASTEWATER AND SEWAGE**

The nature of these two types of liquid wastes (industrial and sewage) can be very different. As a general rule of thumb, sewage-related wastewater is easy to treat, with the main form of treatment being biological processes. Due to its source, sewage is a form of wastewater which is naturally in balance with respect to nutrients and the organic matter which is present can be biodegraded within a short period of time by naturally occurring micro-organisms.

By contrast, industrial wastewater is very variable in nature, and the characteristics are fully dependent on the type of industrial process which has generated the wastewater. Industrial wastewater can be very strong in nature and can contain many substances which are difficult to treat, and also difficult to treat with a biological process. An industrial wastewater is often not in balance biologically, requiring the supplementation of substances in order for treatment to occur. A classic example is a woody wastewater, which is high in carbon but limited in nitrogen and phosphorus. It is quite common for fertilizers containing nitrogen and phosphorus to be added to a woody wastewater to enable sufficient biological treatment to occur.

**2.0 TECHNICAL CONSIDERATIONS**

Due to the difference in nature between sewage and industrial wastewater, this can result in very different needs for treatment. As sewage is relatively simple to treat, processes which allow sedimentation and

**July 17, 2014**



Attention: Don Demers, Director of Public Works and Utilities  
File: 1958.0242.13  
Date: July 30, 2013  
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biological degradation are the basis of the treatment processes which are found at sewage treatment plants. Although there can be some sophisticated choices with the biological processes, the actual biology has consistencies and follows a basic principle of allowing the micro-organisms sufficient time to biodegrade simple organic substances and some nutrients.

This is not the case for industrial wastewater. Treatment can be complex, depending on the nature of the wastewater: organic, inorganic, hydrocarbons, metals, strength, etc. A wide variety of treatment processes may be required, again depending on the nature of the industrial wastewater.

Caution needs to be taken when considering the potential for an industrial wastewater to be received and treated at a sewage treatment plant, due to the potential differences in characteristics. As indicated above, a sewage treatment plant is designed to accept and treat a relatively simple and easy to biodegrade wastewater and focuses on specific parameters: solids which are largely organic and biodegradable in nature, organics which are largely readily biodegradable in nature, ammonia (and in some cases nitrate) – again both easy to biodegrade, phosphorus (in some cases) which can be treated relatively simply by biological or chemical processes, and disinfection of faecal micro-organisms. An industrial wastewater facility needs more thought, due to the nature of the waste, and could include a range of different processes, enhanced aeration, and the addition of supplements such as nutrients and chemicals.

The approach of co-treating an industrial wastewater with a sewage wastewater can be advantageous for the industrial wastewater producer, due to the potential ability to access nutrients which are present naturally in sewage. Without the presence of sewage, depending on the nature and volume of the industrial wastewater, there could be the need to add these nutrients as a supplement, such as a fertilizer, which will have an operational cost, at the very least. In addition, co-treatment can also allow microbial populations to be maintained for periods of time when the industrial wastewater is not being produced. Unlike sewage, which is released to the sewer on a “continual” basis, there could be extended periods of time when there is no industrial wastewater being produced, depending on site operations.

### **3.0 LEGAL CONSIDERATIONS**

Both Federal and Provincial legislation need to be considered, in addition to local by-laws.

#### **3.1 Federal Regulations**

With respect to the Federal regulatory framework, the Wastewater Systems Effluent Regulations was published in July 2012, and applies to any sewage treatment plant in Canada which receives 100 m<sup>3</sup>/d or more of sewage and releases the effluent to surface water. Under this regulation, the City has to meet effluent criteria for TSS, carbonaceous BOD<sub>5</sub> and un-ionised ammonia. If a municipality decides to accept an industrial wastewater, it is the municipality's responsibility to ensure that the effluent from the sewage treatment plant complies with the Federal wastewater regulation, and it is the municipality's

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responsibility to manage the sewage treatment plant (e.g. through upgrades and operations) in the event that there is an issue with the final effluent criteria as a result of accepting an industrial wastewater.

### 3.2 Provincial Regulations

By accepting any industrial wastewater, the City will become responsible to ensure that the final discharge from the sewage treatment plant and the biosolids quality meet the appropriate Provincial legislative requirements. The City operates under a Liquid Waste Management Plan, which allows some flexibility, but there is a general expectation for the Plan commitments to be based on the Municipal Wastewater Regulation, as the standard regulation in BC to manage the treatment and release of sewage wastewater and effluent.

Under the Municipal Wastewater Regulation, there are three key conditions which apply to the discharge of a non-domestic waste to a sewage treatment plant:

1. Quality – the Municipal Wastewater Regulation indicates that the non-domestic wastewater must meet the quality outlined in Schedule 1.2 of the Hazardous Waste Regulation. Local governments may require more stringent quality criteria. The relevant parts of Schedule 1.2 of the Hazardous Waste Regulation are summarised in Table 3.1.

**Table 3.1: Pre-discharge Requirements for Release to Sanitary Sewer**

Parameter	Quality Requirement
pH	5.0 to 11.0
Toxicity (LC50 96 hour rainbow trout)	50% effluent concentration
Dissolved aluminium	2.0 mg/L
Dissolved antimony	0.5 mg/L
Dissolved arsenic	0.3 mg/L
Dissolved barium	2.5 mg/L
Dissolved boron	15.0 mg/L
Dissolved cadmium	0.1 mg/L
Dissolved hexavalent chromium	0.2 mg/L
Total chromium	1.0 mg/L
Dissolved cobalt	0.3 mg/L
Dissolved copper	0.3 mg/L
Cyanide	0.2 mg/L
Dissolved fluoride	18 mg/L
Dissolved lead	0.3 mg/L

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**Table 3.1: Pre-discharge Requirements for Release to Sanitary Sewer (cont'd...)**

Parameter	Quality Requirement
Dissolved manganese	1.0 mg/L
Total mercury	0.01 mg/L
Dissolved molybdenum	1.0 mg/L
Dissolved nickel	1.0 mg/L
Dissolved selenium	0.1 mg/L
Dissolved tin	1.0 mg/L
Dissolved zinc	0.5 mg/L
Dioxin Toxic Equivalent (TEQ)	15 pg/L
Oil	60 mg/L
Phenol	0.5 mg/L
Total polychlorinated biphenyls	0.005 mg/L
Total chlorinated phenol	0.05 mg/L
Total organic halogens	1.0 mg/L

- The municipality must regulate the non-domestic wastewater through measures such as a source control by-law that requires the wastewater to be pre-treated prior to discharge.
- In the event that there is no source control by-law, the municipality must demonstrate that a source control by-law is not required to protect the sewage treatment plant or the receiving environment.

### 3.3 Local Regulations

Municipalities can develop by-laws which define the discharges to the sewer system. This can include volumes and quality criteria, which relate specifically to an industrial waste. The City has such a by-law in place, in addition to a specific agreement with the OSB Plant which outlines the wastewater release expectations. Payment for receiving the wastewater is normally included as part of any agreement to accept an industrial wastewater. Determining the payment is complex, and can be based on flow and concentrations of various substances.

## 4.0 CONSIDERATIONS AND RECOMMENDATIONS

Industrial wastewater can be received at a sewage treatment plant, and there can be an advantage to co-treatment of the two wastes, from the point of view of the industrial wastewater producer. Two key advantages are the potential supply of essential nutrients which are present in the sewage but may be lacking in the industrial wastewater stream, and the ability to maintain microbial populations during



Attention: Don Demers, Director of Public Works and Utilities  
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downtime at the industry, resulting in a lack of wastewater production. However, with respect to the municipal wastewater producer, there is little advantage to accepting an industrial wastewater stream. The reverse can be the case, as by accepting the industrial wastewater, the municipality is agreeing to take on responsibility and liability, which has implications at both the Federal and Provincial level.

In addition, a sewage treatment plant is designed to treat a wastewater which is relatively weak in nature and readily biologically degradable. In the case of the City's South Lagoons, the sewage treatment plant is designed to treat suspended solids which are largely organic in nature and organic matter (as BOD), which is readily biodegradable. Both of these substances are found in relatively low concentrations in the raw sewage, compared with the corresponding concentrations which could be present in an industrial wastewater. These characteristics may not be consistent with an industrial wastewater. As a result, this could result in treatment issues, increased oxygen demands, toxicity risks, and the potential for regulated effluent criteria to be exceeded.

## 5.0 CLOSURE

We trust that the above information provides the City with guidance on the implications of receiving any industrial wastewater at the South Lagoons. The above information would also apply directly to any such considerations at the North Lagoons. Please do not hesitate to call if you have any questions, or require clarification on any of the above.

Yours truly,

**URBAN SYSTEMS LTD.**

A handwritten signature in blue ink that reads "Joanne Harkness".

Dr. Joanne Harkness, R.P.Bio.  
Water and Wastewater Specialist

/jh

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**July 17, 2014**

From: Office Staff [mailto:pjwaterservice@gmail.com]  
Sent: September-05-13 3:47 PM  
To: hadland@xplornet.com  
Subject: FSJ Waste Water Transfer Station

To Arthur Hadland,

We are writing this letter in response to the proposed changes regarding access to the Fort St. John Waste Transfer Station; reduction of hours of availability 8:00a – 5:00p Monday-Friday only, followed by complete closure as of December 31, 2014.

We have been in the Domestic Waste Water dumping business for 24 years and would like to thank the City of Fort St. John for providing dumping privileges to us for these many years. Our company, Alcan Sewer, hauls domestic waste water from holding/septic tanks for many residences and businesses in and around the Fort St. John area. We do not service oil patch rigs or camps but it should be noted that many of our competitors do. These other waste water haulers service everything from portable toilets at public events and camp sites to the pumping of solids from the Charlie Lake system.

We would like to bring to your attention the number of customers that our company serves as well as the areas we cover; we take approximately 260 sewer pump-out calls every month (more during spring thaw), the areas we cover include: Grandhaven, Clairmont, Fish Creek, North Hunter Subdivision, West and East Bypass roads, 101 Ave., Airport Rd., Pomeroy Subdivision/Swanson Lumber Rd., Baldonnel, Mountain View, Crestwood, McLeod Subdivision, Charlie Lake and 100 St. South. Most residences are serviced an average of every 3 weeks. We have also attached to this letter a list of businesses that we service with approximate frequency of service. We think you will agree that these businesses represent a significant contribution to the economy of Fort St. John.

The proposed changes to the hours of operation at the transfer station will result in long line ups and delays in service as all of the companies currently offering waste water hauling will be trying to operate within those new parameters. This will make it next to impossible for our company and many others to provide the same level of service, if at all. What will happen when people have to wait days for service or cannot get anyone to come out when their tanks are full? Was there thought given to overflow of sewer into basements, lawns and ditches?

It is our understanding that one of the primary reasons for the reduction of hours and the ultimate closure of the transfer station is due to contamination of the lagoons from waste water dumping by the various haulers in the area. We wonder, what is the procedure when handing out fobs (fobs being the swipe tag that allows access)? Who gets these, how are they monitored? Perhaps it would be prudent to recall all the fobs currently signed out and re-issue to only those haulers complying with the City's criteria and who are using single purpose trucks to haul and dump waste water? Another possible solution would be more frequent load sampling or having staff at the transfer station to monitor incoming trucks. Also, it could be likely that some of the contamination may be coming from shops and businesses in the industrial areas that have floor sumps and are connected to the city sewer system. Is there any monitoring of these locations?

With reference to the December 31, 2014 closure ... fifteen months is not long enough to find an alternative dump site. Are those people/businesses that are planning a move to this area going to be advised by realtors that there will

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be no sewer pumping service provided as of this date? What should be told to current customers receiving this service?

As one of the primary and frequent users of this facility we feel that there should have been some kind of consultation or communication on this matter prior to the vote by the City of Fort St. John, instead of finding out about the decision after the fact. We are hereby requesting a reconsideration regarding the reduction of hours scheduled to begin October 1st, 2013. Also, we would ask that the planned closure of the transfer station be postponed until a viable alternative is in place.

Sincerely, Jack, Dave and Ron Gilmore  
Alcan Sewer - A division of P&J Water Services (1987) Ltd.

**July 17, 2014**

Updated: January 21, 2014

## ELECTORAL AREA DIRECTORS' COMMITTEE

### DIARY ITEMS

<u>Item</u>	<u>Status</u>	<u>Notes</u>	<u>Diarized</u>
1. LED Speed Signs	Ongoing	reconsider the cost of purchasing and installing LED speed signs along remote roads	June 20, 2013
2. Fracking	Ongoing	use of water for fracking for oil and gas exploration	January 16, 2014