December 24, 2015 Project No: 151-01887-00

Asit Dey, P.Eng.
Environmental Engineer
MANITOBA CONSERVATION AND WATER STEWARDSHIP
Box 80, 160-123 Main Street
Winnipeg, MB R3C 1A5

Dear Mr. Dey:

RE: R.M. OF TACHÉ – COMMUNITY OF LORETTE
WASTEWATER TREATMENT LAGOON EXPANSION -
TECHNICAL ADVISORY COMMITTEE RESPONSE – FILE No: 4482.10

We are in receipt of the December 1, 2015 e-mail correspondence from Manitoba Conservation and Water Stewardship regarding the Technical Advisory Committee (TAC) comments received during the initial review period for the R.M. of Taché – Community of Lorette Environment Act Proposal (EAP). This letter intends to address and respond to the comments and requests for additional information following submission of the EAP report.

Environmental Compliance and Enforcement – Manitoba Conservation and Water Stewardship

1. As with any new system, the operation will be subject to a learning curve as the operators determine how to maintain the system within the licenced parameters.

   During the initial year or two of operation, we would request that flexibility be given to the RM to determine how the system will best operate. Ultimately,

this flexibility will allow them to decrease inputs and costs. It is reasonable to expect that during this period more frequent testing will be required to determine the system characteristics throughout the various scenarios of discharge. However, once the operators have confidence and a greater knowledge of the system, we expect that the frequency of the testing will decrease to at most, once every two weeks.

We therefore suggest that the testing mandated in the Licence not be overly restrictive in terms of the number and frequency of the samples required, as it may prove to be onerous and without value in the long-term operation of the facility.

Nelson Environmental Inc. is involved with the project, specifically with the aeration system and the phosphorus removal system. They have already completed jar testing to determine liquid aluminum sulfate (alum) dosing ratios. They will be also be involved in the commissioning of the phosphorus removal system and initially overseeing the lowering of the phosphorus levels in the effluent to below 1 mg/L.

2. The most practical alternative for the R.M. of Taché is to landfill their alum sludge at this point. In the future, the RM has the option to investigate economical uses of the alum sludge.

Environmental Approvals – Manitoba Conservation and Water Stewardship

Attached is a completed wastewater treatment facility classification form for the Lorette WWTL facility.

Notice of Alteration No. 2

As previously discussed, the phosphorus removal system will be relocated approximately 125 metres south of the previous location. We will submit an engineering drawing when available. From our discussions, we understand that no fee is applicable for this minor alteration since the Environment Act Proposal is under review.

If you have any questions regarding this TAC response or alteration notification, please contact the undersigned. We look forward to your response.

Kind regards,

WSP Canada Inc.

Jason Bunn, P.Eng.
Environmental Engineer

enclosure

cc: Ms. Christine Hutlet, CAO – R.M. of Taché

Water & Wastewater Facility Operators Certification Program

Manitoba Conservation

Application for Wastewater Treatment Facility Classification

also available online at http://www.manitoba.ca/certification

Please print clearly or type and follow the instructions on the application form.
NOTE: If using Adobe Reader text can be inserted into form and tab between fields.

This application is pursuant to the Water and Wastewater Facility Operators Regulation issued under The Environment Act.

Name of Facility:	R.M. of Tache - Community of Lorette - Wastewater Treatment Lagoon
Name of Facility Owner: (Municipality/Commission/ Company/Individual/etc)	R.M. of Tache
Civic Address of Facility:	River Lot 8, Parish of Lorette
Mailing Address of Owner:	Box 100, 1294 Dawson Road

Postal Code: R0A 0Y0	Telephone: (204) 878-3321
Contact Person: Christine Hutlet	Position: Chief Administrative Officer

Cell or Pager:	Fax: (204) 878-9977	Email: christine@rmtache.ca

Is this a REAPPLICATION? ○ Yes ◉ No

Please complete the following. The information provided will be used to classify the wastewater treatment facility under the Water and Wastewater Facility Operators Regulation. In some cases actual numbers or answers must be supplied, but in most cases it will only be necessary to check the appropriate criteria.

Forward the completed form to:

Director
Environmental Assessment & Licensing Branch
Manitoba Conservation
160 – 123 Main Street
Winnipeg MB R3C 1A5

Please direct questions to:

Certification Program Coordinator
Phone: (204) 945-7065
Fax: (204) 945-5229

FOR MANITOBA CONSERVATION USE ONLY

Operation ID # _____

Stakeholder ID # _____

Approval ID # _____

EO/DWO _____

Application for Wastewater Treatment Facility Classification

SYSTEM *(choose all that apply)*			
1.	New or proposed Facility seeking classification	☐	
	Proposed start of operations (month / year)		
	Existing Facility seeking classification (in operation prior to December 31, 2005)	☑	
	Facility has been in operation since (approximate month/year) 2000		
2.	The facility **WILL** employ mechanical treatment processes	◉	
	The facility **WILL NOT** employ mechanical treatment processes	○	

SIZE *(refer to Supplemental Information for point designation) (2 point minimum to 20 point maximum)*				
1.	Maximum population or part served, peak day	# 7,500		1-10
2.	Design flow average day **Estimated** ◉ or **Actual** ○ (Circle volume option & units) **OR** Peak month's flow average day **Estimated** ○ or **Actual** ○	1,516.8 ◉ m^3/day ○ gal/day _____ ○ m^3/day ○ gal/day		1-10

VARIATION IN RAW WASTE[1] *(choose all that apply) (0 point minimum to 6 point maximum)*			
1.	Variations do not exceed those normally or typically expected	☑	0
2.	Recurring deviations or excessive variations of 100-200% in strength	☐	2
	Recurring deviations or excessive variations of 100-200% in flow	☐	
	Recurring deviations or excessive variations of 100-200% in strength and flow	☐	
3.	Recurring deviations or excessive variations of more than 200% in strength	☐	4
	Recurring deviations or excessive variations of more than 200% in flow	☐	
	Recurring deviations or excessive variations of more than 200% in strength and flow	☐	
4.	Raw wastes subject to toxic waste discharges	☐	6
5.	Septage or truck-hauled waste discharge is accepted at the facility.	☐	0 - 4
	Estimated number of loads per day in peak haul times		

Application for Wastewater Treatment Facility Classification

PRELIMINARY TREATMENT *(choose all that apply)*			
1.	Facility pumping of main flow	☐	3
2.	Screening or comminution	☐	3
3.	Grit removal	☐	3
4.	Equalization	☐	1

PRIMARY TREATMENT *(choose all that apply)*			
1.	Clarifiers	☐	5
2.	Anaerobic treatment with biogas flare	☐	10
3.	Anaerobic treatment with biogas utilization facility	☐	15

SECONDARY TREATMENT *(choose all that apply)*			
1.	Fixed-film reactor	☐	10
2.	Activated sludge	☐	15
3.	Stabilization ponds without aeration (ie: sewage lagoon)	☐	5
4.	Stabilization ponds with aeration	✔	8

TERTIARY TREATMENT *(choose all that apply)*			
1.	Polishing ponds for advanced waste treatment	☐	2
2.	Chemical / physical advanced waste treatment without secondary treatment	☐	15
3.	Chemical / physical advanced waste treatment following secondary treatment	☐	10
4.	Biological or chemical / biological advanced waste treatment	☐	12
5.	Nitrification by designed extended aeration only	☐	5
6.	Ion exchange for advanced waste treatment	☐	10
7.	Reverse osmosis, electrodialysis and other membrane filtration techniques	☐	10
8.	Advanced waste treatment chemical recovery, carbon regeneration	☐	4

Application for Wastewater Treatment Facility Classification

9.	Media filtration — Cloth Disk Filter	✔	5

ADDITIONAL TREATMENT PROCESSES *(choose all that apply)*			
1.	Chemical addition: *(Please list chemicals used, 2 pts per chemical to max. of 6)* One of Aluminum Sulfate or Ferric Chloride	✔	0 - 6
2.	Dissolved air floatation (other than for sludge thickening)	☐	8
3.	Intermittent sand filter	☐	2
4.	Recirculating intermittent sand filter	☐	3
5.	Microscreens	☐	5
6.	Generation of oxygen	☐	5

SOLIDS HANDLING *(choose all that apply)*			
1.	Storage (other than for stabilization)	☐	2
2.	Stabilization by storage (including any storage afterwards)	✔	4
3.	Gravity thickening	☐	2
4.	Mechanical dewatering	☐	8
5.	Anaerobic digestion of solids	☐	10
6.	Utilization of digester gas for heating or cogeneration	☐	5
7.	Aerobic digestion of solids	☐	6
8.	Air-drying of sludge — from Cloth Disk Filter	✔	2
9.	Solids reduction (including incineration and wet oxidation)	☐	12
10.	Disposal in landfill — from Cloth Disk Filter	✔	2
11.	Solids composting	☐	10
12.	Land application of biosolids by contractor	☐	2
13.	Land application of biosolids by facility personnel	☐	10

Application for Wastewater Treatment Facility Classification

DISINFECTION *(choose all that apply) (0 point minimum to 10 point maximum)*			
1.	Chlorination	☐	5
	Ultraviolet irradiation	☐	
2.	Ozonization	☐	10

EFFLUENT DISCHARGE *(choose all that apply) (0 point minimum to 10 point maximum)*			
1.	Discharge to surface water (ditch or lake or _____)	☑	0
2.	Mechanical post-aeration	☐	2
3.	Direct recycling and reuse	☐	6
4.	Land treatment and surface or subsurface disposal		4

INSTRUMENTATION *(choose one) (0 point minimum to 6 point maximum)*			
1.	SCADA or similar instrumentation systems are used to provide:		
	• Data with no process operation	◉	0
	• Data with limited process operation	○	2
	• Data with moderate process operation	○	4
	• Data with extensive or total process operation	○	6

LABORATORY CONTROL[2] *(choose all that apply) (0 point minimum to 15 point maximum)*			
1.	Bacteriological / Biological *(0 point minimum to 5 point maximum)*		
	• Lab work done outside the facility	☑	0
	• Membrane filter procedures	☐	3
	• Use of fermentation tubes or any dilution method of fecal coliform determination	☐	5
2.	Chemical / Physical *(0 point minimum to 10 point maximum)*		
	• Lab work done outside the facility	☑	0

Application for Wastewater Treatment Facility Classification

	• Push button or visual methods for simple tests such as pH or settleable solids *(List tests)*	☐	3
	• Additional procedures such as DO, COD, BOD, gas analysis, titration, solids content or volatile content *(List tests)*	☐	5
	• More advanced determinations such as specific constituents, nutrients, total oils or phenols *(List tests)*	☐	7
	• Highly sophisticated instrumentation such as atomic absorption or gas chromatograph *(List tests)*	☐	10

APPLICANT VERIFICATION	
I HEREBY DECLARE THAT ALL INFORMATION IN THIS APPLICATION IS TRUE.	
Name of Applicant[3]: (Print) Jason Bunn, P.Eng	
Title: Environmental Engineer	
Telephone: (204) 477-6650	Fax: (204) 474-2864
Email: jason.bunn@wspgroup.com	
Signature of Authorized Representative: 	Date: 07/16/2015

[1]The key concepts are frequency or intensity of deviation, or excessive variation from normal or typical fluctuations. The deviations in strength, toxicity, ratio of infiltration to inflow, or shock loads.

[2] The key concept is to credit laboratory analyses done on-site by facility personnel under the direction of an operator-in-charge with points from 0-15.

[3] Applicant must be an authorized representative of the owner/operating authority (i.e. manager, P. Eng., or overall responsible operator).

Print Application Form

Wastewater Treatment Form Supplemental Information

This is supplemental information for completing the Application for Wastewater Treatment Facility Classification Form only.

For exact definitions and text refer to Manitoba Regulation 77/2003, Water and Wastewater Facility Operators Regulation and amendment M.R. 162/2005, under The Environment Act (C.C.S.M. c E125).

A copy of the regulation is available by following the link for Manitoba Regulations at: http://www.gov.mb.ca/conservation/envapprovals/publs/index.html

Facilities are classified as follows:

Small system class
A wastewater treatment facility that otherwise meets the criteria of a class 1 wastewater treatment facility shall be classified in the small system class if

a) it treats wastewater from a population of no more than 500; and
b) no mechanical treatment processes are employed at the facility.

Classes 1 to 4
Wastewater treatment facilities shall be classified in classes 1 to 4 in accordance with the following table, on the basis of the number of classification points assessed under the classification point system set out in the Water and Wastewater Facility Operators Regulation.

Range of Classification Points	Classification
0 to 30	Class 1
31 to 55	Class 2
56 to 75	Class 3
76 or more	Class 4

Size

Points for size: (2 point minimum to 20 point maximum)

Maximum population or part served, peak day (1 point minimum to 10 point maximum). Points are assigned at 1 point per 10,000 population or part.

Design flow average day or peak month's flow average day, whichever is larger (1 point minimum to 10 point maximum). Points are assigned at 1 point per 4.5 megalitres per day or part.

Authorized Representative

Signatures for the Applicant Verification section must be an individual recognized by the Owner of the facility as able to sign official documentation (i.e. P.Eng., Manager, CAO, etc).