SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Manitoba Hydro

PROPOSAL NAME: Laurie River Generating Stations –

Wastewater Treatment Lagoon

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Waste treatment and storage – wastewater

treatment lagoons

CLIENT FILE NO.: 5632.00

OVERVIEW

The Proposal was received on December 21, 2012. It was dated December 18, 2012. The advertisement of the Proposal was as follows:

"A proposal was filed by Manitoba Hydro for the construction and operation of a wastewater treatment lagoon that will service the Laurie River Main Camp and Generating Stations 1 and 2. The wastewater treatment lagoon will be located in Section 27-83-23WPM. An existing rotating biological contactor wastewater treatment plant currently serving the generating stations will be decommissioned once the wastewater treatment lagoon is commissioned. Treated wastewater from the wastewater treatment lagoon may be discharged between June 15th and November 1st of any year into an existing drainage path that flows into a natural wetland that drains into the Laurie River."

The Proposal was advertised in the Thompson Nickel Belt News on Friday, March 15, 2013. It was placed in the following public registries:

- Legislative Library (Winnipeg)
- Millennium Public Library (Winnipeg)
- Manitoba Eco-Network (Winnipeg
- Lynn Lake Town Office (Lynn Lake)
- Online: http://www.gov.mb.ca/sd/eal/registries/5632laurie_river/index.html

The Proposal was distributed to Technical Advisory Committee (TAC) members on March 11, 2013.

The closing date for comments from members of the public and TAC members was April 15, 2013.

COMMENTS FROM THE PUBLIC

No public comments were received on the Proposal.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE

Technical Advisory Committee responses are summarized in Table 1 below. Substantive comments and their dispositions follow the table. TAC comments are provided in full in the public registries.

Table 1 Laurie River Generating Stations - Wastewater Treatment Lagoon Technical Advisory Committee Comments

No	Technical Advisory Committee Member	Response Provided
1	Canadian Environmental Assessment Agency	No response
2	Manitoba Agriculture – Land Use Branch	No response
3	Manitoba Sustainable Development –	
	Compliance and Enforcement Branch	No response
	 Climate Change and Air Quality Branch August 19, 2016 	No response
	Wildlife and Fisheries Branch	April 15, 2013
	Parks and Natural Areas Branch	No comments
	Forestry Branch	No response
	Indigenous Relations Branch	No response
	Lands Branch	April 10, 2013
	Water Science and Management Branch	
	Water Quality Management Section	No response
	Groundwater Management Section	No response
	Office of Drinking Water	April 12, 2013
	Water Use Licensing Section	No concerns
	Water Control Works Licensing Section	No response
	Northeast Region	No response
4	Manitoba Sport, Culture, and Heritage – Heritage Branch	No response
5	Manitoba Growth, Enterprise and Trade –	
	 Energy Development Branch 	No response
	Petroleum Branch	No response
	 Office of the Fire Commissioner 	No comments
	Workplace Safety and Health	No response

6	Manitoba Infrastructure –	
	Highway Planning and Design Branch	No concerns
7	Manitoba Indigenous and Municipal Relations	No response
8	Manitoba Health – Medical Officer of Health, Northern	March 15, 2013
	Health Region	

Manitoba Sustainable Development – Wildlife and Fisheries Branch

Fisheries Branch has reviewed this proposal to construct and operate a new Laurie River wastewater treatment lagoon (clay lined primary and secondary cell) approximately 69 km south of the Town of Lynn Lake.

Background Information

The project works include a gravity sewer, lift station, forcemain, access road, outfall and effluent ditch. There will also be new water and sewer pipelines installed as well as new holding tanks and related infrastructure at GS#1 and GS#2 and decommissioning of existing RBC (rotating biological contractor) and sewer pipelines. The new wastewater treatment lagoon is required as the current RBC provides minimal wastewater treatment. The project is approximately 69 km south of the Town of Lynn Lake.

The effluent will be discharged from the secondary cell through a 200 mm HDPE pipe, flowing along ~200 m of existing drainage through 500 m of natural wetland and out to the Laurie River. The proponents propose a "trickle" discharge over a three week period as the method to achieve the 1 mg/L phosphorous limit prior to the effluent entering the river. The ammonia level in the effluent at the time of discharge is expected to be ~10 mg/L. The proponents indicate that this is the parameter posing the highest potential for direct impacts to biota in the marsh however under a theoretical extreme condition they have derived that unionized ammonia concentration would be 1.41 mg/L NH3 which is lower than the acutely toxic concentrations of ammonia for Daphnia and other aquatic organisms that might be present in the fall. The proposed lagoon will be discharged over a three week period at an approximate rate of 55 L/min or 3.3 m3/hour. At the expected discharge rate, the effluent is expected to make up the majority of the flow within the effluent drainage channel however, the effluent discharge rate is significantly less (0.37%) than that of the Laurie River (24.58 m3/s average between June-October) and would negligibly contribute flow to the Laurie River.

Fisheries Branch Comments

While we have no information in Head Office regarding fish species in Laurie River, we do know this river supports recreationally important fish species as, at least the reach from the Saskatchewan border east to the railway line, it is managed as a High Quality Management Water.

Based on the information provided it would appear that as long as the effluent meets or exceeds Manitoba Water Quality Standards, Objectives and Guidelines and they implement as necessary erosion and sediment control measures during and after

construction until the site has stabilized, any potential fisheries concerns relative to water quality should be addressed. There would be value in confirming their predictions in terms of phosphorous and particularly ammonia levels however we defer to the recommendation of our colleagues in Water Science Management on this.

They indicate that the effluent will be discharged between June 16th and October 31st which is the window used for southern Manitoba. Is it the same for northern Manitoba?

While they are replacing the raw water intake pipeline there is no indication whether the current intake will be screened to meet DFO's Freshwater Intake End-of-Pipe Fish Screen Guidelines. It is important that the intake be screened to prevent the entrainment/impingement of fish.

Disposition:

These comments can be addressed through licence conditions.

<u>Manitoba Sustainable Development – Lands Branch</u>

The Sustainable Resource and Policy Management Branch has no concerns. The Lands Branch has no concerns and notes that the Regional Forest Manager will conduct a timber assessment to assess timber dues on the affected area.

Manitoba Sustainable Development – Office of Drinking Water

The EAP notes the lagoon effluent will be treated to Manitoba standards before return to the environment. There is no other public water system anywhere within many miles of the Laurie River GS site. As such, based upon the information in the EAP, Office of Drinking Water has no concerns with the EAP or proposed development.

Manitoba Health - Medical Officer of Health, Northern Health Region

My usual comments on human health impacts of projects such as these include the potential positive impact of utilizing local resources (including human) as much as possible in completing this project, including the development of local capacity when possible. Northern resource utilization/extraction projects often have significant risks to the environment and subsequently to northern communities, but there is also great potential for a positive impact on northern health through such utilization and development of northern capacity.

ADDITIONAL INFORMATION

No additional information is needed to address Technical Advisory Committee comments on the proposal.

PUBLIC HEARING

No requests were received for a public hearing. Accordingly, a public hearing is not recommended.

CROWN-INDIGENOUS CONSULTATION

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with Indigenous communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of the Indigenous rights of that community.

The Lands Branch of Manitoba Sustainable Development undertook a Crown-Indigenous Consultation initiative with the Mathias Colomb Cree Nation and Marcel Colomb First Nation for the provincial decisions associated with the Development. A report of May 1, 2015 on the Consultation was prepared. The report identified nine potential Environment Act licence conditions to address concerns discussed in the consultation process. All identified measures have been incorporated in the draft Environment Act Licence. A copy of the finalized licence will be provided to the Lands Branch for transmission to the participating First Nations.

RECOMMENDATION

All comments received have been addressed through licence conditions. It is recommended that the Development be licensed under *The Environment Act* subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence.

It is further recommended that enforcement of the Licence be retained by the Environmental Approvals Branch until construction of the wastewater treatment lagoon expansion is completed. Enforcement of the licence then should be assigned to the Northeast Region of the Environmental Compliance and Enforcement Branch.

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