

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Rural Municipality of Alexander
NAME OF DEVELOPMENT: Rural Municipality of Alexander Wastewater Treatment Lagoon (PR 313)
CLASS OF DEVELOPMENT: Two
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon
CLIENT FILE NO.: 5800.00

OVERVIEW:

The Proposal was received on October 28, 2015. It was dated October 20, 2015. The advertisement of the proposal was as follows:

“A proposal has been filed by KGS Group on behalf of the Rural Municipality of Alexander for the construction and operation of a wastewater treatment lagoon to treat truck hauled municipal wastewater originating in the Bird River and Pointe du Bois areas. The facility would be located in NE 9-16-13E, which is on the north side of Provincial Road 313 about 15 km west of Pointe du Bois. The site is currently being used as a clay borrow area by Manitoba Hydro for the Pointe du Bois Spillway Replacement Project. Additional excavation and shaping would be done to construct a two cell wastewater treatment lagoon, with an associated solids separation cell and two small sludge drying cells. Treated wastewater from the facility would be discharged once annually on adjacent forested land which drains towards Rice Creek, a tributary of the Lee River and Lac du Bonnet. Construction of the facility is proposed in 2016.”

The Proposal was advertised in the Beausejour – Lac du Bonnet Clipper on Thursday, November 12, 2015. It was placed in the Legislative Library and Millennium Public Library (Winnipeg) public registries and in the online public registry. The Proposal was distributed to TAC members on November 12, 2015. The closing date for comments from members of the public and TAC members was December 11, 2015.

COMMENTS FROM THE PUBLIC

Stephan Bouderville

In regards to the Notice of Environment act proposal that was posted in the Clipper. My wife and I live in Rice Creek Bay, which is the Bay that Rice Creek flows into. We are going to be one of the many recipients of the eventual discharge of the effluent coming out of the lagoon. I do understand this is water from the secondary cell which has been standing for 1 year and that it will be going on to a vegetation area before entering the Rice Creek tributary. I have the following questions I hope you can answer to alleviate my concerns of causing damage to the water body we live on.

- Is water tested for bacteria levels before discharge to forested area?
- How much water is to be discharged at once?
- How much area of forested area does this water travel over to get to Rice Creek?
- What is the impact on wildlife on the discharge forest area?

- Is water tested at Rice Creek falls or the bay area on a consistent basis during discharge?
- Is base line testing to be done prior to discharge?
- Who's on the hook to have this cleaned up if excessive E coli in water after discharge? (this is a high traffic area for recreational persons).
- If there is testing, where can the results be found?

I am looking forward to have the following questions answered.

Disposition:

Additional information was provided to address the questions posed, and the writer was invited to provide any additional comments on the project. No further comments were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE

Manitoba Conservation and Water Stewardship – Environmental Compliance and Enforcement Branch

1. **Section 2.5.2** includes references to the construction of a wetland and lagoon within the CL-3 site. Is the purpose of the wetland construction for restoration purposes, or is the intent to incorporate the wetland into the design of the wastewater treatment lagoon for additional treatment of nutrients?
2. **Section 2.6.3** states that effluent will be discharged to a forested area that will provide nutrient uptake and further polishing of the effluent. ECE requests the proponent to comment on the sustainability of nutrient uptake/polishing in the forested effluent dispersal area.
3. **Section 2.6.3** states that “*Since the intermittent discharge period is longer than 30 days, total phosphorus standards will be calculated as a rolling average according to the MWQSOG.*” ECE requests clarification on whether effluent samples for total phosphorus analysis (TP) will only be collected during discharge to obtain the rolling average. If this is the case, ECE is concerned that this method will not allow for the detection of TP exceedences prior to release of the effluent into the environment, which may result in non-compliance with regulatory and licence standards.

What is the rationale for basing TP concentration on a rolling average, rather than on the analysis of grab samples that are collected prior to effluent discharge?

4. **Section 4.3** discusses potential groundwater impacts within the footprint of the wastewater treatment lagoon. Were groundwater impacts and mitigation measures also considered for the effluent dispersal area, and if so, what were the conclusions?

Disposition:

Additional information was requested to address these comments.

Manitoba Conservation and Water Stewardship – Environmental Programs and Strategies Branch, Air Quality Section

- The proposal is not expected to have a significant impact on air quality provided that the measures cited are implemented.
- Air Quality Section suggests that the EA Clause regarding odour nuisance be included.

Disposition

These comments can be addressed as licence conditions.

Manitoba Conservation and Water Stewardship - Lands Branch

- If/when the license is issued for the construction of the WWTL at this location the current operation land use coding (SF/D/T) will need to be amended to include Operational Crown land coding that will accommodate the new land use activity (e.g., XM). Once approved the CWS Regional Land Manager for the Eastern Region will bring the Operational Coding issue to the attention of the BPC #6 Chair, for future BPC code change recommendation.
- The proponent should be advised that any new clearing activity where timber resources will be impacted may be subject to additional timber damage appraisals. It is recommended that the proponent (RM of Alexander) contact the Eastern Regional Forester to arrange for timber accommodation planning for any impacted timber resources that may result from any additional site preparation or expansion activity; where applicable.
- In addition, any negative impacts to the remaining timber resources, as a result of the effluent discharge directly into standing timber located westerly of the cleared area, may be subject to additional timber damage appraisals where it is determined that the effluent is negatively impacting the timber resource. A monitoring program is required to evaluate forest health and reaction to the nutrient loading (effluent) into the forested area. It is recommended that an additional Follow-up Activity be added to section 6, or 6.6 be expanded to specifically monitor for effects on forest health as a result of the direct discharge of effluent into the forested areas.
- The Eastern Region would also like to highlight an existing agreement that currently directs Point du Bois Cottagers to utilize the Rural Municipality of Lac du Bonnet lagoon which Manitoba Conservation & Water Stewardship has contributed too not only in regards to the initial construction costs of that lagoon, but also an agreement that provides a 10 year commitment with yearly funding. Please note that this comment does not have bearing on the construction site of

this lagoon by the RM of Alexander, it should be noted and clarified as the usage of the Lac du Bonnet lagoon may be affected by a minimal amount with the establishment of the closer Lagoon in the RM of Alexander.

If you need further clarification please directly contact Dale Sobkowich – A/Regional Lands Manager for the Eastern Region at (204) 945 6660.

Disposition:

These comments were forwarded to the proponent's consultant for information. Comments addressing monitoring requirements can be addressed as licence conditions where appropriate considering the final configuration of the project.

Manitoba Conservation and Water Stewardship – Parks and Protected Spaces Branch

No comments or concerns to offer as the proposal does not affect any provincial parks, park reserves, ecological reserves, areas of special interest or proposed protected areas.

Manitoba Conservation and Water Stewardship – Wildlife and Fisheries Branch

No wildlife related concerns.

Manitoba Conservation and Water Stewardship – Water Science and Management Branch, Water Quality Management Section

- The following effluent standards should be in place for the RM of Alexander wastewater treatment lagoon upgrade as per the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* (196/2011).
 - CBOD 25 mg/L,
 - TSS 25 mg/L,
 - Fecal Coliforms or *Escherichia coli* 200 MPN / 100mL,
 - <1 mg/L total phosphorus or a demonstrated nutrient reduction strategy
- Based upon *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* (196/2011), the proponent should be required to meet a < 1 mg/L TP limit prior to discharge or a demonstrated nutrient reduction strategy. The proponent has proposed land application as a nutrient reduction strategy equivalent to <1 mg/L total phosphorous limit. The approach towards recycling and reusing nutrients to minimize discharge of nutrients to water is appreciated. Land application of effluent would be subject to the *Nutrient Management Regulation* (62/2008). As such, the proponent would need to know the concentration of the effluent, over the duration of the two month discharge period, to calculate an application rate. The proponent would also need to know the nutrient profile of the receiving soils. The effluent application rates would need to match a rate of uptake. This mass balance information has not been discussed in the proposal. An unknown

application of effluent on land may lead to adverse effects on soil, groundwater or vegetation. At this point, the Water Quality Management Section recommends the continued cooperation with the RM of Lac du Bonnet, as regional facilities may be able to provide more advanced wastewater treatment.

- The Water Quality Management Section appreciates the consideration the proponent has made in their proposal with regards to potential nutrient management zones N4 restriction. The soil's agricultural capability, of the proposed development area, is 3TD (50) - 7R (30) - 5W (20). This soil type indicates nutrient management zone N2 as per the *Nutrient Management Regulation (62/2008)*. As such no N4 restrictions apply. However, the agricultural capability of the soil indicates a slope between 5 and 10%; rocky bedrock outcrops, heavy clays, and wet low lying areas within the 13 ha land application area. This soil type suggests the proposed nutrient reduction strategy of land application, to meet *Manitoba Water Quality Standards, Objectives and Guidelines Regulation (196/2011)*, may not be equivalent to a <1 mg/L Total Phosphorous. Additionally, the proponent has not indicated a nutrient uptake rate. By the soil type, the Water Quality Management Section is concerned that effluent may run-off into Rice Creek with little opportunity for nutrient uptake even during a 2 month discharge period. If the effluent should simply run-off into Rice Creek, how could a proponent confidently demonstrate the effectiveness of the nutrient reduction strategy, trickle discharge, where effluent becomes run-off from 13 ha with 3TD (50) – 7R (30) – 5W (20) soils? At this point, again, the Water Quality Management Section recommends the continued cooperation with the RM of Lac du Bonnet, as regional facilities may be able to provide more advanced wastewater treatment.
- The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director.

Disposition:

Additional information was requested to address nutrient uptake with effluent discharge as proposed.

Manitoba Conservation – Office of Drinking Water

ODW reviewed the above noted EAP. The proposal notes treated wastewater will flow into a creek which flows into Lac du Bonnet, but gives no information on downstream water users. There are several public and semi-public water systems downstream of this location which use the lake and Winnipeg River as their drinking water sources. The lagoon effluent, if treated to Manitoba Standards, should not pose any problem for these water systems, however, if a major spill of untreated or partially treated wastewater from the lagoon were to occur, it could potentially cause problems for downstream water systems. As such, ODW recommends the contact information for downstream water systems be included in the Emergency Procedures plans for the lagoon system with

instructions that, if a major spill of untreated wastewater to occur, the downstream water systems be notified.

Beyond this point ODW has no other concerns with the EAP or proposed development.

Disposition:

These comments were provided to the proponent's consultant for information.

Manitoba Conservation and Water Stewardship – Water Control Works and Drainage Licensing Section

While somewhat outside of the *Water Control Works and Drainage Licensing Section's* mandate, we have concerns in principle with the proposal as it stands now:

- 1) The report talks about releasing effluent overland instead of through a properly constructed channel/outlet from the lagoons, and that there would be some percolation/absorbing of effluent into the soils and bedrock. Considering it's granitic shield rock with minor soil above, we do not believe this is adequate, especially when this is a *Special Forest* area and the lands in question are coded for *Fisheries* values. As such, we stress that a properly constructed outlet channel and containment of effluent within the treatment facility's infrastructure would be minimal requirements.
- 2) The location of the lagoons are another area of concern. They are not servicing any community directly, and over the lifespan of the project hauling costs may be prohibitive. This in conjunction with Point #1 suggest that an alternative location for the facility may be a viable long-term option.

Disposition:

Additional information was requested to address these comments.

Manitoba Infrastructure and Transportation – Highway Planning and Design Branch, Environmental Services Section

MIT has reviewed the proposal under the *Environment Act* noted above and we have the following comments:

- Under *The Highways and Transportation Act* permits are required from MIT for:
 - any new, modified or relocated access to a Provincial Road;
 - any structures (including advertising signs, wells, septic fields, etc.) on, under or above the ground within the 38.1 meter (125 ft) Controlled Area adjacent to Provincial Roads;
 - discharging of water or other liquid materials into a ditch of a Limited Access Highway, Provincial Road or Access Road;
 - Placing any trees or plantings within 15.2 metres (50 feet) of the edge of right-of-way of a Limited Access Highway, Provincial Road or Access Road.
- Agreements are also required from MIT for any piping placed under PR 313 or within the MIT's right-of-way or Controlled Areas.

For more information, please contact Murray Chornoboy, Regional Planning Technologist, at (204) 346-6287 or MurrayChornoboy@gov.mb.ca.

Thank you very much for providing us the opportunity to review the proposal.

Disposition:

These comments were provided to the proponent's consultant for information.

Canadian Environmental Assessment Agency

As the proposed project is not a designated activity under CEAA 2012, the Agency will not be providing comments on the proposal.

ADDITIONAL INFORMATION

Additional information was requested to address Technical Advisory Committee comments on the Proposal on January 29, 2016. The attached response dated February 12, 2016 was received on the same date. The response addressed numerous concerns about the discharge of effluent on forested land by proposing an alternative discharge to a large wetland area south of Provincial Road 313. This wetland area flows into Rice Creek.

This information is sufficient to address TAC concerns through licence conditions. Nutrient management can be addressed by requiring a phosphorus limit on the effluent before it is discharged to the wetland area.

PUBLIC HEARING

As no requests for a public hearing were made, 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 proposal involves the construction and operation of a wastewater treatment facility on Crown land that is currently leased by Manitoba Hydro to supply clay borrow material for dam construction. No impact is anticipated on resource use and Indigenous rights and it is concluded that Crown-Indigenous consultation is not required for the project.

RECOMMENDATION

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 is completed. Enforcement of the licence then should be assigned to the Eastern Region of the Environmental Compliance and Enforcement Branch.

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