

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Town of Melita
PROPOSAL NAME: Town of Melita Land Application of Biosolids
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Biosolids Application
CLIENT FILE NO.: 108.30

OVERVIEW:

Manitoba Sustainable Development received an Environment Act Proposal on August 11, 2016 for the removal of biosolids and sludge solids from the primary and secondary cells of the Town of Melita's wastewater treatment lagoon located on portions of NW31-3-26 WPM and NE 36-3-27 WPM. The biosolids and sludge solids will be removed from the lagoon site, transported to privately owned farmlands, and land applied in accordance with provincial regulatory requirements. The registered land owner of the parcels of land involved has been contacted and is willing to have the biosolids and sludge solids applied to the agricultural land. The parcels of land where the biosolids and sludge solids may be applied are located within: NE and SE of 36-3-27 WPM, NW 25-3-27 WPM; and 26-3-27 WPM.

The Department, on September 7, 2016, placed copies of the Proposal in the Public Registries located at Legislative Library (200 Vaughan Street), the Winnipeg Millennium Public Library and online at <http://www.gov.mb.ca/conservation/eal/registries/108.3melita/index.html>. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members on September 8, 2016. A notice of the Environment Act proposal was also placed in Melita New Era on Friday, September 16, 2016. The newspaper and TAC notifications invited responses until October 17, 2016.

COMMENTS FROM THE PUBLIC:

No comments were received during the public comment period.

SUMMARY of COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

No.	Technical Advisory Committee Member	Response Provided	Date Received
1	Canadian Environmental Assessment Agency	No response	
2	Manitoba Agriculture – Land Use Branch	No response	
3	Manitoba Sustainable Development –		
	<ul style="list-style-type: none"> • Compliance and Enforcement Branch • Climate Change and Air Quality Branch • Wildlife and Fisheries Branch • Parks and Protected Spaces Branch • Forestry Branch • Indigenous Relations Branch • Lands Branch • Water Quality Management Section • Groundwater Management Section • Office of Drinking • Water Use Licensing Section • Water Control Works Licensing Section • Regional Services Branch 	No concerns No response No concerns No concerns No response No response No concerns Yes No response No concerns No concerns Yes No response	September 14, 2016 September 27, 2016 October 3, 2016 October 17, 2016 October 14, 2016 October 11, 2016 September 8, 2016 September 9, 2016
4	Manitoba Sport, Culture, and Heritage – Heritage Branch	Yes	September 21, 2016
5	Manitoba Growth, Enterprise and Trade –		
	<ul style="list-style-type: none"> • Energy Development Branch • Petroleum Branch • Office of Fire Commissioner • Work Place Safety & Health 	No response No response No response No response	
6	Manitoba Infrastructure –		
	<ul style="list-style-type: none"> • Highway Planning and Design Branch 	No concerns	October 12, 2016
7	Manitoba Indigenous and Municipal Relations	No concerns	September 9, 2016
8	Manitoba Health, Seniors and Active Living – Environmental Health Unit	No concerns	September 13, 2016

A copy of the responses and the additional information provided can be viewed at the following link:

<http://www.gov.mb.ca/conservation/eal/registries/108.3melita/index.html>

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Sustainable Development–Water Quality Management Section

- *“In the proposal, Appendix B, Table 11 – Application Rate Calculation Worksheet, the proponent has used Olsen phosphorous values (7.69 and 1.89). For biosolids, application rates need to be calculated based on total phosphorus. From Laboratory results, the primary cell total phosphorus value is 5440 mg/kg and the secondary is 2870 mg/kg.*
- *In the proposal, Appendix B, Table 8 – Biosolid Characteristics for Primary and Secondary Cells, the N:P Ratio and Phosphorus calculations should be based on total phosphorus and not Olsen phosphorous values.*
- *Each application of biosolid should be calculated to meet the Nutrient Management Regulation (62/2008) which requires that in nutrient management zone N1, N2, and N3 where Olsen soil test P, within the top 15 cm, is from 60 to <120 ppm the maximum allowable nutrient application is at 2 times the crop removal rate of P2O5. If Olsen soil test P is 120 to <180 ppm the maximum allowable nutrient application is 1 times the crop removal rate of P2O5.*
- *A 3rd order drain runs through section NE 36-03-27w. As per the Nutrient Management Regulation (62/2008) a Nutrient Buffer Zone of 3m if vegetated and 8m if not covered must be observed. The Nutrient Buffer Zone should be measured from the water body’s high water mark or the top of the outermost bank on that side of the water body, whichever is further from the water.*
- *A 7th order drain runs through section NE and SE 36-03-27w. As per the Nutrient Management Regulation (62/2008) a Nutrient Buffer Zone of 3m if vegetated and 8m if not covered must be observed. The Nutrient Buffer Zone should be measured from the water body’s high water mark or the top of the outermost bank on that side of the water body, whichever is further from the water.*
- *Maps indicate that section NW 26-03-27w may contain a wetland that supports hydrophytic vegetation. As per the Nutrient Management Regulation (62/2008) a Nutrient Buffer Zone around a wetland of the distance between the water’s edge and the high water mark must be observed.*
- *The total area of the setbacks from drains due to the Nutrient Buffer Zones mentioned above are excluded from the land base calculations used to determine the area of land necessary to apply approximately 30,000m³ of biosolids.*
- *Some of the land identified in the Proposal’s Proposed Project Area (Appendix B- Table 1: Soil Series and Extent of Acres within Proposed Project Area (PPA), Appendix 1: Maps) contains soil with an Agricultural Capability rating of Class 6. However the text of the proposal indicates Class 6 will be avoided when spreading. These areas to avoid should be communicated to the spreading operator, Class 6 soils are Nutrient Management Zone N4 and no nutrients should be applied to this soil as per the Nutrient Management Regulation (62/2008). The total*

area of Class 6 soils Zone N4 must be excluded from the land base calculations used to determine the area of land necessary to apply approximately 30,000m³ of biosolids.

- *In a given year, the Nutrient Management Regulation (62/2008) requires that no person shall apply sludge between November 10 and April 10.*
- *Follow-up fall (post-harvest) soil sampling (Olsen-P 0-15 cm, and nitrate-N 0-60 cm), one and two years post application is necessary to demonstrate compliance with the Nutrient Management Regulation (62/2008). For review, results should be forwarded to the Water Quality Management Section, Manitoba Sustainable Development.*
- *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.”*

Additional Information Request: The above information was forwarded to the proponent’s consultant on October 18, 2016.

Proponent’s Consultant’s Response (received on October 21, 2016): The consultant provided updated application rates and provided confirmation in relation to the buffer zones.

Disposition: The above information was forwarded to the TAC on October 21, 2016 and based on input from TAC, the draft licence has been updated with appropriate clauses.

Manitoba Sustainable Development– Water Control Works Licensing Section

“Any water control works (drains, culverts, dykes, dams, etc.) associated with this project will require licensing under the Water Rights Act – an application is attached for the proponent’s convenience. Any inquiries in this regard may be directed to the local Water Resource Officer. Their contact information may be found at:

http://www.gov.mb.ca/conservation/waterstewardship/licensing/pdf/officer_areas_of_focus_30mar2015.pdf”

Disposition: The above information was forwarded to the proponent’s consultant on October 18, 2016 for information purposes only.

Manitoba Sport, Culture, and Heritage – Heritage Branch

- *“While the potential to impact significant heritage resources was deemed low in this area, the Historic Resources Branch must be immediately contacted if an archaeological site is encountered during development. In addition to the provision concerning the possibility of encountering heritage sites, the plan should contain an outline of the appropriate measures to mitigate those impacts upon such an encounter.*

- *If at any time heritage resources are encountered in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the affects of development on the heritage resources.”*

Disposition: The above information was forwarded to the proponent’s consultant on October 18, 2016 for information purposes only.

Additional Information Request: A request for additional information from the Approvals Branch was sent out on October 20, 2016.

- *“Please submit certificates of title and land ownership agreements.*
- *It was mentioned in the Environment Act Proposal that the groundwater in the area is between 1m and 5m below surface. The draft Environment Act Licence will contain a clause that will require the licensee not to apply biosolids and sludge solids on lands with a depth of clay or clay till of less than 1.5 m between the soil surface and the water table. Please comment on how it will be ensured during the land application of sludge solids and biosolids that you are in compliance with the above clause.*
- *It appears from Figure 1 (Page 38-Site plan) that the total land base available is 615 acres. However, Table 1 (Detailed Soil Information) indicates that the total available land base is 616 acres. Please comment.”*

Proponent’s Consultant’s Response (received on October 21, 2016): The proponent’s consultant responded the followings: a) the certificates of title and land ownership would be provided upon receipt from the Town; b) verification of depth of clay in 2016 is not an option; and c) there was a rounding error with the acreage values presented in the EAP.

Disposition: The rounding error explanation is acceptable and the draft licence contains clauses that require the licensee to do the followings:

- a) provide certificates of title and land ownership agreement before land application of biosolids and sludge solid;
- b) apply biosolids or sludge solids on land with a depth of clay or clay till of not less than 1.5m between the soil surface and the water table;
- c) In addition, our analysis revealed that the application of biosolids and sludge solids on NE 36-3-27 WPM may cause groundwater pollution as the prevailing soil types within 5’ from soil surface are not able to provide the requirement to maintain a minimum of soil depth of 1.5m clay or clay till between the soil surface and the water table. Consequently, the application of biosolids and sludge solids on NE 36-3-27 WPM is not recommended. The draft licence has been updated accordingly.

PUBLIC HEARING:

A public hearing is not recommended.

CROWN-INDIGENOUS CONSULTATION:

The Government of Manitoba recognizes that 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 is for the removal of biosolids and sludge solids from the primary and secondary cells of the Town of Melita's wastewater treatment lagoon located on portions of NW31-3-26 WPM and NE 36-3-27 WPM. The biosolids and sludge solids will be removed from the lagoon site, transported to privately owned farmlands, and land applied in accordance with provincial regulatory requirements or disposed of at a licensed or permitted waste disposal ground or by other means approved by the Director.

As the biosolids and sludge solids is proposed to be land applied by injection at the calculated prescribed agronomic rates maintaining all the setback distances in accordance with the Nutrient Management Regulation, adverse effects on surface water or habitat for wildlife or fisheries are not anticipated. Since resource use is not affected by the project, there would be no infringement of Indigenous rights under Section 35 of the Constitution Act, 1982. Therefore, it is concluded that Crown-Indigenous consultation is not required for the project.

RECOMMENDATION:

The Proponent should be issued a Licence for the removal of biosolids and sludge solids from the primary and secondary cells of the Town of Melita's wastewater treatment lagoon in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Western Region of Environmental Compliance and Enforcement Branch of Manitoba Sustainable Development.

Prepared by:

Asit Dey, P. Eng.
Environmental Engineer
Municipal and Industrial Wastewater Section

October 25, 2016

Telephone: (204) 945-2614
Fax: (204) 945-5229
E-mail Address: asit.dey@gov.mb.ca