

## Dey, Asit (SD)

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**From:** Dey, Asit (SD)  
**Sent:** October-20-16 7:54 AM  
**To:** 'smoffatt@kgsgroup.com'  
**Cc:** 'slewft@mts.net'; Burland Ross, Siobhan (SD); Braun, Tracey (SD); Boswick, Robert (SD)  
**Subject:** 2016-10-20\_Request for Additional Information\_Town of Melita Land Application of Biosolids\_File 108.30

**Importance:** High

Dear Mr. Shaun Moffatt:

Good morning. Based on our telephone conversation yesterday, I am sending you this email with a request for additional information.

- 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.

We will continue our review upon receipt of the required information.

Thanks,

Regards,

Asit Dey  
Environmental Approvals Branch  
Municipal and Industrial Section  
T: (204) 945-2614 F: (204) 945-5229  
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**From:** Dey, Asit (SD)  
**Sent:** October-18-16 1:06 PM  
**To:** 'smoffatt@kgsgroup.com'  
**Cc:** 'slewft@mts.net'; Burland Ross, Siobhan (SD); Braun, Tracey (SD); Boswick, Robert (SD)  
**Subject:** 2016-10-18\_Request for Additional Information\_Town of Melita Land Application of Biosolids\_File 108.30  
**Importance:** High

Hello Mr. Shaun Moffatt,

Good afternoon. The preliminary review of the above proposal has been completed. No public comments were received.

The following additional information is needed to address comments received from the Technical Advisory Committee on the proposal.

The comments are as follows:

### **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 3<sup>rd</sup> 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 7<sup>th</sup> 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 30,000m<sup>3</sup> 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 30,000m<sup>3</sup> of biosolids.

**Please find below several comments from the Technical Advisory Committee provided for your information only; responses are not required.**

### **Manitoba Sustainable Development–Water Quality Management Section**

- 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.

### **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](http://www.gov.mb.ca/conservation/waterstewardship/licensing/pdf/officer_areas_of_focus_30mar2015.pdf)

### **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 (Attn: Holly COTE; T: 204-945-7259) may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the affects of development on the heritage resources.

We will continue our review upon receipt of the required information.

Thanks,

Regards,

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