SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:R.M. of DeSalaberryPROPOSAL NAME:Composting FacilityCLASS OF DEVELOPMENT:1TYPE OF DEVELOPMENT:Bulk Materials Handling FacilityCLIENT FILE NO.:5562.00

OVERVIEW:

On January 16, 2012 Manitoba Conservation and Water Stewardship received a Proposal dated December 21, 2011 for the construction and operation of composting facility at NE 14-5-4 EPM in the Rural Municipality of De Salaberry. The facility will compost yard and kitchen waste collected from residents of De Salaberry.

The Department, on February 3, 2012, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Public Library, the Manitoba Eco-Network, the Millennium Public Library, and the Jake Epp Public Library in Steinbach. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. A notice of the Environment Act proposal was also placed in the Steinbach Carillon on February 9, 2012. The newspaper and TAC notifications invited responses until March 6, 2012.

COMMENTS FROM THE PUBLIC:

There were no public comments.

Disposition:

No action required.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

No concerns.

Disposition:

No action required.

Environment Canada

The following is a summary of the comments provided:

- Environment Canada (EC) requests a detailed description of proposed mitigation measures to minimise the release of untreated leachate
- EC requests details on the provisions made to ensure that the leachate collection pond is fully contained, and details on any special provision made to prevent overflows (e.g. from high rainfall events) to the environment or nearby landfill.
- EC recommends that a liner leak test be conducted to confirm that there are no leaks. EC recommends that minimum liquid levels be maintained in all cells to ensure cracking of the liner does not occur. If for some unforeseen circumstance a cell is allowed to remain empty, EC recommends that leak testing on the liner should be performed (again) prior to filling with liquid. EC recommends that liquid levels should be monitored to ensure proper levels are maintained.
- EC requests clarification from the Proponent as to the circumstances where leachate from the evaporation pond would be discharged to surface water. In addition, EC also requests clarification as to how often leachate from the evaporation pond will be sampled and analysed, and if there are plans to establish a consistent leachate sample regime.
- EC recommends that the consultant provide a detailed Operation and Maintenance instruction manual (including diagrams) which outline design compost volumes for the first year of operation, and continue throughout the design life of the facility.
- EC recommends that the Proponent develop plans to prevent, prepare for, and respond to potential contravention of the *Fisheries Act*.
- EC requests clarification on whether deterrents will be put in place to protect migratory birds and species at risk from entering the storage pond or any other project areas that may be hazardous to these species.

Additional comments, information, and advice were provided to the proponent.

Disposition:

Clauses 21 and 22 of the draft Environment Act Licence address the collection basin, and clause 30 requires the proponent to develop an operations manual. This Development is not expected to be hazardous to migratory birds and/or species at risk.

Manitoba Conservation and Water Stewardship – Air Quality Section

The following comments were provided:

- Composting of organic wastes results in the formation of products that can affect air quality such as ammonia. Odours are typically generated as well.
- <u>Odour:</u> Odour is often the most noticeable air quality concern. Most organic wastes will generate some foul odour during the composting process. Foul odour increases when the composting material is allowed to become anaerobic.
- <u>Ammonia (NH3)</u>: Ammonia acidifies rain and causes foul odours. Ammonia loss is inevitable in most composting facilities. However, those with low C:N ratios

wastes will result in the greatest ammonia losses. The smell of ammonia is an indicator that nitrogen is in excess.

• While the proposed composting process is discussed in the submitted document, the proponent should consider fine-tuning the process as the situation dictates. Examples, (1) the turning of the wind rows may be more frequent than planned if odour is detected, and (2) If ammonia odour is detected, nitrogen in the mixture is in excess and should be addressed. It is important to note that the process should be maintained aerobic to minimize the above impact hence any indication that anaerobic process is occurring, it should be addressed immediately.

Disposition

Clause 12 of the draft Environment Act Licence addresses odour, and clause 30 requires the proponent to develop an operations manual.

Manitoba Conservation and Water Stewardship – Environmental Operations Branch

The following is a summary of comments provided:

- Section 2.6.1 of the EA proposal states "The existing WDG operator would likely also operate the composting facility." The Eastern Region requests the proponent to elaborate on the extent to which the WDG operator will be trained to ensure proper operation and maintenance of the composting facility.
- Section 2.6.3 of the EA proposal describes a drainage route to the Rat River in general terms. The Eastern Region suggests that the description or map of the drainage route provide the specific location of discharge to the Rat River.
- The Eastern Region suggests that Conservation and Water Stewardship be notified and provided with the following information two full business days before discharge from the leachate pond:
 - an estimate of the quantity leachate to be discharged,
 - leachate water analyses for prescribed chemical and biological parameters.
- Section 2.6.8 of the EA Proposal outlines the operation of the facility in general terms. The Eastern Region suggests the development of an Operations Manual to ensure proper operation and maintenance of the composting facility.

Disposition

Clause 30 of the draft Environment Act Licence requires the proponent to develop an operations manual, clause 31 addresses training requirements, and clause 22 addresses potential discharge from the collection basin.

Manitoba Conservation and Water Stewardship – Lands Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship-Sustainable Resource and Policy Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship – Water Stewardship Division

The following comments were provided:

- The Water Stewardship Division requires an *Environment* Act Licence to include the following:
 - The Licencee shall obtain approval, from an Environment Officer, prior to any release of discharge from a leachate collection pond, ensuring compliance with the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* under *The Water Protection Act.*
 - Note: The proposal noted that any water discharged from the site would flow to Rat Creek, then flowing to Joubert Creek. Joubert Creek provides year round habitat for a diverse number of fish species, the effluent must comply with the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* under *The Water Protection Act.*
- The Water Stewardship Division submits the following comments:
 - The Water Stewardship Division does not object to this proposal, at this time.
 - The proponent needs to be informed of the following for information purposes:
 - Erosion and sediment control measures should be implemented until all of the sites have stabilized.
 - *The Water Rights Act* requires a person to obtain a valid licence to control water or construct, establish or maintain any "water control works." "Water control works" are defined as any dyke, dam,

surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, a person is required to submit an application for a Water Rights Licence to Construct Water Control Works. A person may contact the following Water Resource Officer to obtain an application and/or obtain information.

Disposition:

Clause 22 of the draft Environment Act Licence addresses potential discharge from the collection basin. The proponent has been made aware of the additional information presented by way of this Summary Report.

Manitoba Conservation and Water Stewardship – Wildlife & Ecosystem Protection Branch

No concerns.

Disposition

No action needed.

Manitoba Health

No health concerns.

Disposition

No action needed.

Manitoba Infrastructure and Transportation – Highway Planning and Design Branch

No concerns.

Disposition

No action needed.

Manitoba Local Government

No concerns.

Disposition

No action needed.

PUBLIC HEARING:

A public hearing is not recommended.

CROWN-ABORIGINAL CONSULTATION:

It has been determined that Crown-Aboriginal consultation is not required as this proposal is to develop a composting facility at an existing waste disposal ground. This is an existing, developed site and this proposed additional development is not expected to affect the exercise of an aboriginal or treaty right.

RECOMMENDATION:

The Proponent should be issued a Licence for the construction and operation of a composting facility in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Operations Branch of Manitoba Conservation.

A draft environment act licence is attached for the Director's consideration.

Prepared by:

Ryan Coulter, M.Sc., P.Eng. Environmental Engineer Municipal, Industrial, and Hazardous Waste Section March 23, 2012

Telephone: (204) 945-7023 Fax: (204) 945-5229 E-mail Address: ryan.coulter@gov.mb.ca