SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOONENT: City of Brandon  
PROPOSAL NAME: Biosolids to Farmland  
CLASS OF DEVELOPMENT: Class 2  
TYPE OF DEVELOPMENT: Waste Disposal  
CLIENT FILE NO.: 3144.1

OVERVIEW:

An Environment Act Proposal, dated May 31, 2000, respecting a Biosolids to Agricultural Land Proposal submitted by the City of Brandon, was received by the Department on June 15, 2000. While the Proposal was submitted by the City of Brandon, the effort was coordinated by Brent Hansen Environmental out of Brandon, with the proposal document and technical input prepared by LW Diamond Environmental out of Alberta. An initial review of the Proposal indicated that the supplied agreements entered into between the City of Brandon and the agreeing landowners were invalid and therefore required correction. Following the advertisement of the Proposal, and while new agreements with the landowners were being pursued, one of the landowners withdrew his land, with the lost acreage made up by another landowner. The new information on the altered Proposal, bundled with the newly signed agreements, was received by the Department on July 31, 2000. This alteration to the initial Proposal required a re-advertisement of the Proposal.

The City of Brandon proposes to annually de-sludge their sludge treatment and holding cells located at the municipal wastewater treatment lagoon facility, and to apply the sludge as a biosolid to neighbouring agricultural land. The lands proposed for receiving the biosolids in October, 2000, are:

65 ha on the SE1/4 of Sec. 30, Twp 11, Rge 18 WPM in the R.M of Elton
65 ha on the SE1/4 of Sec. 13, Twp 11, Rge 18 WPM in the R.M. of Elton; and
32 ha on the SW1/4 of Sec. 11, Twp 11, Rge 20 WPM in the R.M. of Daly.

The initial Proposal was advertised in the Brandon Sun on July 1, 2000. As well, copies of the Proposal were placed in Public Registries at: the Environment Library (Main) in Winnipeg; the Centennial Public Library in Winnipeg; and the Western Manitoba Regional Library in Brandon. The closing date for the receipt of public comments was specified as July 28, 2000. The altered Proposal was subsequently advertised on September 2, 2000, with the closing date for the receipt of public comments specified as September 18, 2000.

Copies of the initial Proposal, and the amended Proposal, were sent to the applicable members of the interdepartmental Technical Advisory Committee for their review and comment by no later than July 28, 2000, and September 18, 2000, respectively.
COMMENTS FROM THE PUBLIC:
The Rural Municipality of Elton commented that the Council’s only concern is whether sufficient protection is granted to the Elton Municipality to restore the roads to the satisfaction of the Council. If this concern is cleared with the Council, they would have no concerns with the Proposal.

Disposition
The comments were referred to the proponent for consideration and response. The Proponent responded that he is accepting full responsibility. Final arrangements are presently being pursued between the Proponent and the Rural Municipalities.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Rural Development commented that if the Proposal will not create any problems with regard to nutrient, pathogen or heavy metal accumulation in the soils and groundwater of the receiving areas, then they would have no objections to the Proposal.

Historic Resources Branch commented that they have no concerns with regard to this project’s potential to impact heritage resources.

Manitoba Agriculture and Food commented:
- Should the “Marvin” land be SE Sec 13, Twp 11, Rge 18 WPM as indicated in the text or SW as indicated on the ownership map?
- There is some concern about the appropriateness of:
  - the Tadpole Series on the “Clark Land”;
  - the Lowton Series on the “Marion Land”; and
  - the Grayson Series and the Arizona Series on “Hebert Land”;
- The Cactus and Hummerton Series may be appropriate at reduced application rates due to their coarse nature.
- If these lands are eliminated and, if setbacks from the property lines, water courses, poorly drained potholes, etc. are required, is there an adequate amount of land available?
- The application rates should be based on the soil test levels for available nutrients (generally nitrogen). At the time of sampling for this Proposal, the soils were high in nitrate-nitrogen and medium to high in phosphate. Therefore relatively little nitrogen would be required depending on the crop to be grown. Presumably, by the time of a fall application, the soil nitrate levels will have dropped due to uptake by
this year’s crop and application rates will be based on soil tests at that time relative to next year’s cropping plans.

Disposition
The comments were referred to the proponent for consideration and response. The Proponent commented that the “Clark Land has been withdrawn, and a 5 metre buffer zone would be maintained away from the Lowton, Grayson and Arizona Series.

Policy Co-ordination Branch of Manitoba Conservation commented:
- There may be concerns related to the presence of micro-organisms and heavy metals, so applications over sensitive groundwater areas should likely be discouraged.
- There is the potential for shallow sand and gravel beneath portions of 7-11-19W and 7-11-19WPM. A slight possibility of sand and gravel under SW 11-11-20W.
- A well log for SE 30-11-18W indicates 22 feet of shallow sand.
- Test drilling should be done on these fields to assess the soils and subsoils and determine the suitability of these sites.

Disposition
The comments were referred to the proponent for consideration and response. The area on 7-11-19W was withdrawn by the landowner and replaced by SE1/4 of 7-11-19WPM. The proponent commented that a 5 metre buffer would be maintained away from unsuitable areas on SW 11-11-20W.

Manitoba Highways & Government Services commented that they have no objections to the Proposal. However, for the consideration of the proponent, they pointed out that:
- all trucks or hauling equipment must comply with the regulations of the Highway Traffic Act; and
- the proponent is responsible for all costs associated with cleanup of Highway property caused by spillage during the transportation of the biosolids.

Disposition
The comments were referred to the proponent for consideration and response.

Manitoba Health commented that the Environment Act Licence clauses should address:
- adequate surface and groundwater protection;
- inclusion of an odour nuisance clause;
- the gasoline regulation; and
- no irrigation of vegetable crops.

Disposition
The comments were referred to the proponent for consideration and response.
Terrestrial Quality Management commented that:
- the soils of the proposed Hebert disposal site (SW1/4 11-11-20WPM) are developed primarily on sandy textured materials. This means increased permeability, which could in turn pose a risk for groundwater contamination from sewage sludge constituents; and
- additional information should be provided, respecting the subsurface textures, to determine if there is an impermeable barrier that would reduce the risk of rapid downward movement and possible contamination of groundwater.

Disposition
The comments were referred to the proponent for consideration and response. Proponent responded. Five metre buffer zones will be maintained away from unsuitable sites.

Canadian Environmental Assessment Agency (CEAA) commented that the application of the Canadian Environmental Assessment Act with respect to this project will likely not be required.

Environment Canada commented that page 3 of the proposal provides little or no detail on a number of aspects related to the removal of sludge from the sewage lagoons, such as:
- which lagoon cells will be dredged;
- possible methods of dredging;
- mitigative measures to be implemented to minimize the discharge of suspended solids in the lagoon effluent;
- possible impacts of dredging on lagoon effluent quality; and
- effluent quality monitoring to be implemented to ensure compliance with licence limits and the Fisheries Act.
Also, they recommend that the above considerations be taken into account by the proponent in choosing a contractor and the methodology of dredging.

Disposition
The comments were referred to the proponent for consideration and response. Proponent responded and comments were referred back to TAC member.

PUBLIC HEARING:
No requests were made by the public for a public hearing.
RECOMMENDATION:
A draft Environment Act Licence, authorizing the construction and operation of the proposed Development is attached for the consideration of the Director of Environmental Approvals. It is recommended that the licence, if approved, be assigned to the Park-West Region for administration, surveillance, monitoring, ongoing compliance evaluation and enforcement responsibilities.

PREPARED BY:

C. Moche, P. Eng.
Environmental Engineer
Municipal, Industrial and Hazardous Waste Approvals Section
October 12, 2000

telephone: (204) 945-7013
fax: (204) 945-5229
e-mail: cmoche@gov.mb.ca