SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Rural Municipality of Whitehead

NAME OF DEVELOPMENT: Alexander Wastewater Treatment Lagoon

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon

CLIENT FILE NO.: 4887.00

OVERVIEW:

The Proposal was received on October 31, 2002. It was dated November 01, 2002. The advertisement of the proposal was as follows:

"A Proposal has been filed by Stantec Consulting Ltd. on behalf of the Rural Municipality of Whitehead for the construction and operation of a wastewater treatment lagoon located in NW 7-10-21W and SW 18-10-21W, approximately 1.3 km west of the community of Alexander. It is proposed that the facility will accommodate sewage from the community, as well as a limited amount of truck hauled septage from within the rural municipality. Provision has also been made to accommodate wastewater from a proposed water treatment plant for the community. Construction of the project is proposed for the spring and summer of 2003. Treated effluent would be discharged to a ditch connecting to the Alexander-Griswold Marsh. Discharges would take place after June 15 and before November 1 each year."

The Proposal was advertised in the Brandon Sun on Saturday, December 28, 2002. It was placed in the Main, Centennial, Eco-Network and Western Manitoba Regional Library (Brandon) public registries. The Proposal was distributed to TAC members on December 23, 2002. The closing date for comments from members of the public and TAC members was January 27, 2003.

COMMENTS FROM THE PUBLIC:

Bob Willman (Received February 19, 2003) - We don't want to see it run west because the only thing we have is evaporation or soaking into the ground. It should run east so it's in a stream and no one or nothing would be hurt. The way to do this is to remove logs in dam no. 3-4-5-6.

Disposition:

The Proposal indicates that the Alexander-Griswold marsh drains east to the Little Souris River. Additional information will be requested concerning the outlet from the marsh.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation - Sustainable Resource Management:

Discharge should not occur prior to June 15th. Discharging the wastewater into the marsh has the potential to alter the salinity and nutrient status of the marsh. The proponents should provide information on the possible effects of the softening salts and plant nutrients in the effluent on the water quality, natural vegetation and wildlife in the marsh. The proponent should actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director, for the Alexander Marsh, Assiniboine River and associated waterways and watersheds.

In sizing the lagoon the consultant used a design population of 300. The current population of the community of Alexander is approximately 300 and the community may experience additional residential growth due to the installation of sewer and water and its close proximity to Brandon. In addition, the lagoon will be the only approved liquid waste facility in the RM of Whitehead and its sizing should also reflect potential loading from existing and potential rural residential development on parcels of less than 10 acres. These factors should be reflected in the loading design.

Disposition:

The first and third comments can be addressed through licence conditions. Additional information was requested concerning marsh impacts and sizing.

Manitoba Conservation - Environmental Approvals - The proposal notes that there is perhaps a 20% chance that the proposed lagoon will not meet Manitoba Conservation's seepage requirements. This estimate is based on six test holes, only one of which was used for permeability testing. If a liner is needed, no allowance has been made for additional excavation to compensate for the additional cover material required. No plan has been provided for test hole locations. Adjacent residences, the Alexander Marsh and its outlet are not shown on a plan. Plans for the lagoon are incomplete and typical only, and not specifically for this location. No indication of groundwater contamination hazard is provided.

Disposition:

Additional information was requested to address these items.

<u>Historic Resources Branch</u> - No concerns.

Highway Planning and Design Branch - No concerns.

<u>Community Planning Services</u> - I have reviewed this proposal and would advise that I have no objections. As the proposed site is located at the margin of the Alexander-Griswold marsh, I have some question as to whether or not the proposed lagoon would be adversely affected by fluctuations in water levels within the marsh, or in the local groundwater.

I would suggest that the design and siting of the lagoon should be undertaken with a view to future expansion (i.e. adding an additional cell). It is possible that more rural residential development will occur in this municipality in future years and it may be desirable to provide for additional capacity for such growth. The municipality may want

to consider acquiring this additional land at this time, in order to avoid future difficulties with land acquisition.

In order to acquire title to the land, a subdivision application would be required. The municipality might want to start this process with our office in the near future, in order to minimize any delays with the project.

Development in this municipality is subject to the provisions of the R.M. of Whitehead Basic Planning Statement and The R.M. of Whitehead Zoning By-law. The northern portion of this proposed site is designated as "A160 Rural District" and the southern portion is designated as "AC160" Rural Conservation District (reflecting the area of the marsh). There is no specific provision in the zoning by-law to deal with the development of a sewage lagoon. The municipality may wish to consider amending its by-law to provide for such development as a conditional use (similar to many other municipalities in the region). Council may also wish to review the specific provisions of PART V (pages 17 to 19) of The Basic Planning Statement, to determine whether or not the proposal would be in conflict with the conservation objectives and policies.

Structures such as sewage lagoons would be subject to the general setback requirements of the zoning by-law (generally 125 ft. from public roads and 50 ft. from other property boundaries). As there is no dimensioned site plan provided with the proposal, I cannot comment on the setback distances, other than to advise that if these requirements cannot be met, the municipality should consider a variance of the requirement(s).

Disposition:

These comments were forwarded to the proponent's consultants for information.

Soils and Crops Branch - No concerns.

Medical Officer of Health - Central Region:

- 1. The need for fencing, gates and warning signs should be included in the license to ensure public safety, in case of unsupervised public access to the development.
- 2. Consideration of inclusion of odor nuisance clause.
- 3. Please ensure that any discharge of effluent is in compliance with Manitoba Environment's guidelines.
- 4. Please ensure containment design (in this case a clay liner) provides the best possible groundwater protection for the area.
- 5. Consideration of leachate monitoring.

Disposition:

These comments can be addressed as licence conditions.

<u>Canadian Environmental Assessment Agency</u> - Western Economic Diversification has provided notification that an environmental assessment under the Canadian Environmental Assessment Act will be required. Health Canada, Environment Canada, and the Department of Fisheries and Oceans have offered to provide specialist advice. DFO has requested additional information prior to making a firm decision on whether there will be a federal trigger. (DFO was the only federal agency indicating a desire to participate in the provincial review of the project.)

<u>Department of Fisheries and Oceans</u> - A sediment control plan is required to discuss the possibility of sediment entering the Alexander-Griswold Marsh during construction.

Disposition:

Additional information was requested on this topic.

ADDITIONAL INFORMATION:

Additional information addressing TAC comments was requested from the Proponent's consultants on February 11, 2003. The response of February 19, 2003 is attached. Further information was requested on March 17, 2003 concerning the outlet of the Alexander-Griswold Marsh, detailed design drawings, and loading projections. A response dated March 26, 2003 was provided for this second request. This response is also attached.

PUBLIC HEARING:

As no requests for a public hearing were made, a public hearing is not recommended.

RECOMMENDATION:

All comments received on the Proposal have been addressed in the additional information or can be addressed as licence conditions. Therefore, 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 assigned to Environmental Approvals until construction is completed. Once the facility is commissioned, enforcement should be assigned to the Western Region.

PREPARED BY:

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