## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Rural Municipality of Ochre River

NAME OF DEVELOPMENT: Ochre River Wastewater Treatment Lagoon

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon

CLIENT FILE NO.: 118.20

# **OVERVIEW:**

The Proposal was received on June 17, 2002. It was dated June 10, 2002. The advertisement of the proposal was as follows:

"A Proposal has been filed by Cochrane Engineering Ltd. on behalf of the Rural Municipality of Ochre River for the construction and operation of an upgraded wastewater treatment lagoon located in SW 15-24-17W, northeast of the community of Ochre River. It is proposed to construct a third cell adjacent to the existing facility, and to construct a perimeter clay core around the entire facility to control seepage. Construction of the project is proposed in the fall of 2002. The operation of the upgraded facility would continue unchanged. Treated effluent would be discharged to a ditch connecting to the Ochre River after June 15 and before November 1 each year."

The Proposal was advertised in the Dauphin Herald on Tuesday, July 30, 2002. It was placed in the Main, Centennial, and Dauphin Public Library public registries. The Proposal was distributed to TAC members on July 22, 2002. The closing date for comments from members of the public and TAC members was August 23, 2002.

## **COMMENTS FROM THE PUBLIC:**

No public comments were received.

## **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

### **Manitoba Conservation - Sustainable Resource Management:**

- 1. Discharge should not occur prior to June 15th to minimize risk of ammonia toxicity to aquatic life in the Ochre River.
- 2. Concern has been expressed 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 licence require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director, for Ochre, Dauphin lake, and associated waterways and watersheds.

### Additional Comments:

The plans to expand the sewage lagoon and place a vertical grout curtain through the upper permeable silt zones around the present cells should improve the situation for

horizontal seepage from the established lagoon cells. It should also restrict horizontal leakage from the expanded storage. It appears that the new facility will have about twice the floor area for vertical leakage. The geology of the site consisting of the upper permeable layer of 10 feet of clayey silt followed by some 6 feet of till overlying sand and in some cases gravel units strongly suggests that there would be a potential for vertical leakage. The granular aquifer is used by the resident in the south west corner of Section 15 and by most of the residents in the Village of Ochre River. There is some good news in that the depth to the water in the local wells is close to ground surface so that the downward sewage water flow potential is going to be minimal. The granular aquifer is also very likely connected to the Ochre River channel.

Prior to proceeding "without" interior low permeability floor liners for the lagoons I recommend that the impact on the lower main aquifer zone be reviewed again.

Particularly if the situation is proceeded with as presently outlined I suggest that at least two observation wells be installed into the granular aquifer under the till layer that nominally stops at 16 feet below ground level. One well could be located some 200 feet to the south of the current lagoon and the other a similar distance to the west of the lagoon; between it and the Ochre River. It would probably be best if the upper ten feet of the granular aquifer underlying the till were screened. For these wells the part of the bore between the casing and the till soil must be carefully sealed with bentonite grout. Otherwise sewage seepage situated in the upper soil layers could flow down the casing annulus and add to the contamination in the lower aquifers.

#### Disposition:

The first two comments can be addressed through licence conditions. Additional information was requested concerning vertical seepage. Monitoring well suggestions can be addressed through licence conditions.

<u>Manitoba Conservation - Environmental Approvals</u> - Additional capacity is being proposed when a substantial portion of the loading is extraneous flow. No mention is made in the design report of truck dumping facilities. Regional staff reports that a large number of cottages are occupied in the vicinity in the summer months. There is currently no approved nearby location to accept sewage or septage from cottages.

# **Disposition:**

Additional information was requested to address these items.

<u>Historic Resources Branch</u> - No concerns. The proposal holds inaccuracies in Section 5.5 regarding historic and archaeological sites. There are 10 archaeological sites and 6

municipally designated historical sites in the RM of Ochre River. None of these sites are in SW 15-24-17WPM.

Highway Planning and Design Branch - No concerns.

Soils and Crops Branch - No concerns.

<u>Medical Officer of Health - Central Region</u> - There does not appear to be any potential for a negative impact on human health.

<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. PFRA will conduct the assessment on behalf of WED. Environment Canada, the Department of Fisheries and Oceans and Health Canada have offered to provide specialist advice. (Environment Canada indicated a desire to participate in the provincial review of the project.)

<u>Department of Fisheries and Oceans</u> - The proposed work will not likely result in the harmful alteration, disruption or destruction of fish habitat provided the work is carried out as described and the following mitigation measures are adhered to:

• Culvert outlets should be adequately protected to prevent erosion and scour of the discharge ditch and banks. Riprap material should be clean, free of fine materials, and of sufficient size to resist displacement during lagoon discharge and/or high flow events.

As such an Authorization under Section 35(2) of the Fisheries Act will not be required. DFO will not be a Responsible Authority for this project, and has no specialist advice to provide. It is our understanding that the proposal is being reviewed by Environment Canada for comment on issues dealing with Section 36(3) of the Fisheries Act.

### Disposition:

This mitigation measure can be addressed in a licence condition.

**Environment Canada** - We have an interest in the project and would like to participate in the provincial review pursuant to Clause 59 of the Canada-Manitoba Agreement on Environmental Assessment Co-operation. Our interest relates primarily to our mandate under Section 36(3) of the Fisheries Act.

Environment Canada provides the following comments for your consideration in completing the provincial review of the proposal: We recommend that the proponent be requested to provide further information and justification on the need for the new storage cell. The report indicates that hydraulic loadings to the wastewater treatment system are very high. Reduction of loadings by disconnecting residential down-spouts from the

weeping tile systems (page 4) and repairing possible sources of infiltration into sewer lines could alleviate the hydraulic overloading and possibly eliminate the need for a lagoon expansion, particularly since the population is expected to decline or remain stable. We assume that the seepage problem can be remedied independently though the installation of the engineered keyway and is not linked with the lagoon expansion.

## Disposition:

Additional information was requested concerning the matter of extraneous flows into the wastewater collection system.

# **ADDITIONAL INFORMATION:**

Additional information addressing TAC comments was requested from the Proponent's consultants on October 9, 2002. The response of March 21, 2003 is 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:

Bruce Webb, P. Eng. Environmental Approvals - Environmental Land Use Approvals (for Municipal and Industrial Approvals) July 22, 2002 Updated May 22, 2003

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