SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSAL NAME: Grenville-Trimble-BIB-Portland Irrigation Project

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Water Development and Control

CLIENT FILE NO.: 4431.00

OVERVIEW:

The Proposal was received on April 27, 1999. It was dated April 27, 1999. The advertisement of the proposal was as follows:

“A Proposal has been filed by Central Manitoba Resource Management Ltd. (a holding company formed by Central Manitoba Irrigators Association Inc.) to irrigate 600 hectares (1530 acres) of land in sections 14, 15, 21, 22, and 23-12-7W. Water for the Development would be obtained from the Assiniboine River via the Portage Diversion. Of the land proposed for irrigation, a maximum of 315 hectares (800 acres) would be irrigated annually, involving up to 500 cubic decametres (400 acre-feet) of water annually. Construction of the water supply works and operation of the system is proposed for the summer of 1999.”

The Proposal was advertised in the Portage Herald Leader on Tuesday, May 18, 1999. It was placed in the Main, Centennial, Eco-Network and Portage Plains Regional Library (Portage la Prairie) public registries. It was distributed to TAC members on May 12, 1999. The closing date for comments from members of the public and TAC members was June 10, 1999.

COMMENTS FROM THE PUBLIC:

No public comments were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Environment - Water Quality Management In discussions with the Water Resources Branch, it appears that no decision has been made regarding issuing
additional water rights licences for irrigation projects along the diversion. It is understand that there are issues relating to the operation and maintenance of the diversion that need to be resolved first. These issues will need to be addressed prior to the issuance of an Environment Act licence.

The operation of the diversion in the spring results in the deposition of debris along the cottage properties east of the diversion. If irrigation water will be diverted from the Assiniboine during the summer months, it should be done in such a way to ensure that the Delta Beach area is not affected by debris or degraded water quality.

On page 9 of the report (Pesticide Management Plan), it states that “There are very few pesticides left on the market that pose a hazard to the groundwater (pers. Comm., Blair Geisel).” Mr. Geisel is an potato researcher and is not known to have expertise in the area of pesticide mobility or toxicology.

The report lists a number of best management practices that “could” or “should” be employed by the producers, but there is no assurance that they will be implemented. The licence should reflect the requirement for implementing and maintaining records of all recommended best management practices recommended in the agronomic assessments. Irrigation on farmland identified as sensitive to groundwater contamination should be excluded from the licence.

Much of the proposed irrigation area falls within “Groundwater Pollution Hazard” areas (Figure 4). The data presented on page 16 of the report suggests that groundwater nitrate levels, are in some cases elevated, but none currently exceed drinking water quality guidelines. On-going groundwater monitoring is recommended in the proposal (page 17). I believe this should be a condition of the license. A detailed monitoring strategy is not presented in the report. The proponent should submit a proposed monitoring strategy based on the further field investigations slated for the fall of 1999. Manitoba Environment should review this proposed monitoring strategy once it is submitted to the Department.

In section 5.1 of the proposal (page 19), it is recommended that existing wells or “deep piezometers” be used to sample water quality. The monitoring strategy needs to incorporate shallow well monitoring so that contamination can be identified early, prior to nitrate contamination reaching the deep well sampling locations.

Potential impact on fish species and fish habitat require further assessment by DFO and Fisheries Branch (MNR).

Disposition:

Comments on the maintenance concerns of the Water Resources Branch are provided below. With respect to the deposition of debris along the diversion channel, spring debris deposition results from high spring flows when the diversion control gates are raised substantially. Summer flows to supply irrigation are provided by slightly opening one control gate for a short period of time. As the gates are underflow structures, there is little likelihood that debris would enter the diversion channel during
summer operations. The removal of spring debris accumulations along the diversion channel remains an ongoing maintenance responsibility of Natural Resources.

Concerning irrigation on areas sensitive to groundwater contamination, it is likely not practical to exclude these areas through licensing. Irrigation occurs over sensitive areas in other locations such as the Assiniboine Delta Aquifer, and it would be difficult to impose general restrictions in one area and not in another area. The Proposal discusses measures to protect groundwater quality, including nutrient and pesticide management, monitoring. It is suggested that these measures will be adequate to protect groundwater quality in the underlying local sand channel aquifers.

The remaining comments concerning the implementation of best management practices and monitoring requirements can be addressed as licence conditions.

Historic Resources Branch No concerns.

Mines Branch No concerns.

Community Economic Development No concerns.

Medical Officer of Health - Central Region Health concerns involve the identification of the long term impacts (e.g. excessive nutrients, salinization, pesticide contamination) on the potability of groundwater. As there are an increasing number of projects coming forward, the need for an overall plan for groundwater protection is very important.

Disposition:
Groundwater protection is addressed in the Proposal. Among the components of the Best Management Practices Manual which is currently in preparation, a Best Management Plan for Groundwater Protection is noted. It is recommended that this document and others in the BMP package be reviewed by TAC members prior to approval. Once approved, the package would be a standard part of any future Environment Act Proposal for irrigation association projects.

Natural Resources Comments were not provided as of June 23, 1999. In discussing the project and the delay in obtaining comments with DNR staff, it was determined that Water Resources has concerns about maintenance costs along the diversion channel relating to the ongoing delivery of irrigation water using a conveyance system designed for large spring flood flows. This concern affects this project and other previous irrigation projects along the Portage Diversion which have been developed over the past 10 years. It is reported that there are DNR fisheries concerns as well.
Disposition:

Natural Resources concerns regarding the Assiniboine River Diversion Channel can be addressed directly by Natural Resources through Water Rights licensing or through agreements with the Proponent. It is anticipated that DNR fisheries comments will be similar to DFO comments reported below. The disposition of DNR concerns is discussed further in the recommendations below.

**Canadian Environmental Assessment Agency** An environmental assessment under The Canadian Environmental Assessment Act will be conducted by PFRA. Environment Canada, Natural Resources Canada and Fisheries and Oceans have offered to provide specialist advice in accordance with Section 12(3) of the Act.

**Fisheries and Oceans** The project proposes to divert water from the Portage Diversion which does support fish and fish habitat, although productivity is constrained by a variety of limitations such as fluctuating water levels, summer water temperature and oxygen levels, periodic drawdown and lack of overwintering capability. Furthermore, it would appear that the project will use a water volume which is already available from the July-August water supply provided by the normal operation of the diversion. Provided that this project does not change the operation of the diversion, and provided that the irrigation intakes will be screened in accordance with DFO’s 1995 guideline, DFO does not have any fisheries related concerns with the project. Authorization under Section 35(2) of the Fisheries Act will not be required and DFO is not a responsible authority pursuant to the Canadian Environmental Assessment Act.

Disposition:

These comments can be addressed as licence conditions.

**PUBLIC HEARING:**

As no public comments were received, a public hearing is not recommended.

**RECOMMENDATION:**

All comments received on the Proposal to date can be addressed as licence conditions. Therefore, it is recommended that the attached Draft Environment Act Licence be circulated to TAC members for review. If DNR comments are received during the TAC review, they can be incorporated in a final licence if appropriate. If necessary, finalization of the Licence can be held until DNR concerns are adequately addressed. Once finalized, it is recommended that enforcement of the Licence be assigned to the South-Central Region.
PREPARED BY:

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