

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Central Manitoba Resource Management Ltd.

**PROPOSAL NAME:** Swansfleet Farms Irrigation Project

**CLASS OF DEVELOPMENT:** Two

**TYPE OF DEVELOPMENT:** Water Development and Control

**CLIENT FILE NO.:** 5271.00

### **OVERVIEW:**

The Proposal was received on May 24, 2007. It was dated May 22, 2007. The advertisement of the Proposal was as follows:

“A Proposal has been filed by Central Manitoba Resource Management Ltd. on behalf of Swansfleet Farms Ltd. to irrigate up to 400 ha (1000 acres) annually in rotation on a land base of 1324 ha (3272 acres). The project land is located in three areas:

- Site 1: along the Cypress River north of the community of Swan Lake in the Rural Municipality of Lorne, involving a land base of 590 ha (1460 acres). This site would use groundwater from a well in NE 10-6-10W at a rate of 50.5 litres/second, with an annual use of 148 cubic decametres (120 acre-feet).
- Site 2: along the Cypress River northwest of Holland in the Rural Municipality of Victoria, involving a land base of 490 ha (1209 acres). This site would use water from a reservoir to be constructed in NW 25-7-12W that would be filled from the Cypress River during the spring runoff period. Annual water use would be 250 cubic decametres (200 acre-feet).
- Site 3: west of the community of Cypress River in the Rural Municipality of South Cypress, involving a land base of 244 ha (603 acres). This site would use groundwater from several wells in NE 14-7-13W at a combined rate of 50.5 litres per second, with an annual use of 167 cubic decametres (135 acre-feet).”

The Proposal was advertised in the Treherne Times on Monday, June 18, 2007 and in the Baldur Glenboro Gazette on Tuesday, June 19, 2007. It was placed in the Main, Millennium Public Library (Winnipeg), Eco-Network and Portage la Prairie City Library public registries, and in the offices of the rural municipalities of Lorne, Victoria and South Cypress as public registry locations. It was distributed to TAC members on June 7, 2007. The closing date for comments from members of the public and TAC members was July 10, 2007.

**COMMENTS FROM THE PUBLIC:**

No public comments were received.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:****Manitoba Conservation – Sustainable Resource Management Branch**

1. The proponent should re-vegetate any disturbed native areas with native species and monitor all disturbed sites to make sure that invasive species such as leafy spurge don't become established.
2. The information from the Conservation Data Centre (CDC) database indicates that there may be no occurrences of species of concern for site #1 but there may be five species occurrences [little-seed rice grass (*Piptatherum micranthum*), silky townsend-daisy (*Townsendia exscapa*), saltbrush (*Atriplex argentea*), whorled milkweed (*Asclepias verticillata*), and prairie skink (*Eumeces septentrionalis*)] for sites 2 and 3. It is the responsibility of the proponent to inspect all potentially affected sites prior to and during construction to determine if any listed species may be affected. Information from CDC is based on minimal survey effort in the study area and it should not be regarded as a final statement on the occurrence of any species of concern nor can it substitute for on-site surveys for species that will be affected by the development. The proponent needs to be aware that if rare or endangered species are present, removal or destruction of individuals or their habitat may be in contravention of Subsection 10(1) "Prohibition" of The Endangered Species Act (Manitoba). In addition, for such species as the prairie skink which is listed also under the federal Species at Risk Act, the Act prohibits any activities that kill or otherwise harm COSEWIC listed plant or animal species and prohibits destruction of their habitat. If species of concern are present, the proponent must contact the Biodiversity Conservation Section of the Wildlife and Ecosystem Protection Branch (Ronald Hempel, 945-6998) to discuss possible mitigation options. Note: all proponents who conduct biological surveys in conjunction with their developments are asked to share that data with the Biodiversity Conservation Section. This will provide important updates to the Manitoba CDC database.
3. Killing or harming migratory birds and disturbance, destruction or taking of their nests or eggs is prohibited under the Migratory Birds Convention Act. The proponent is responsible for ensuring that no migratory birds will be harmed and no active nests of migratory birds will be destroyed as a result of the development. If migratory birds or their nests may be harmed by this development, the proponent must contact the Canadian Wildlife Service for further direction.
4. Approval is subject to necessary Crown Lands Act allocation where applicable. In respect of Crown Land, no land tenure is granted by way of an environmental approval. Applicant must apply for applicable Crown Lands Act Permit / Lease which will be subject to the standard Crown Land & Property Agency review process.

5. The licence should include the standard requirement that the project must comply with the terms of M.R. 188/2001, Storage and Handling of Petroleum Products and Allied Products Regulation.
6. As discussed in the proposal, the bulk storage and transfer of petroleum products used during the project should be more than 100m from surface water bodies; this also is a standard requirement of licences for irrigation systems.
7. While the proposal indicates that groundwater will be withdrawn to provide irrigation water at Sites #1 & #3, groundwater monitoring is only proposed at Site #1. Why not at Site #3 as well?
8. The proposal indicates in Section 4.3.1 that there are potential surface water impacts from pesticides used during the proposed project but the surface water & groundwater monitoring program described in Section 5.1 only includes analyses for “basic ions” (major ions?). Annual testing for pesticides in surface water runoff from the project should be conducted, preferably when there is the potential for maximum impact to the receiving waters.
9. To protect surface water quality, the best management practices identified in the proposal to address fertilizer application, pesticide application, and irrigation frequency should be incorporated as conditions of the EA licence. These conditions should include, but not be limited to the following:
  - fertilizer application - split applications and no fall application in areas with high potential for environmental impact
  - pesticide application – techniques to reduce leaching and runoff
  - irrigation frequency – more frequent application of smaller amounts of water.

Disposition:

These comments can be addressed as licence conditions.

### **Manitoba Water Stewardship – Planning and Coordination**

Due to the risk of increased runoff following irrigation nutrient management this proposal should include phosphorus in addition to nitrogen. It is recommended that in addition to nitrogen, phosphorus, if applied, should be applied near spring planting.

All of the identified land should have a soil-test phosphorus concentration of less than 60 ppm (Olsen sodium bicarbonate extraction) prior to nutrient application and irrigation. If soil tests reveal that phosphorus concentrations are above 60 ppm, then fertilizer should be applied based on residual soil-test phosphorus concentrations. Fertilizer application should not occur on lands with a soil-test phosphorus concentration of greater than 180 ppm.

Reducing the application of unnecessary phosphorus is crucial because excessive phosphorus can build up in the soil and potentially runoff into surface water. Manitoba is proposing to include phosphorus as a nutrient by which fertilizer application through manure, inorganic fertilizer, or municipal waste sludge to agricultural lands may be limited. The Province of Manitoba is committed to reducing nutrient contributions to Lake Winnipeg to 1970s levels.

Water Licensing has received an application for this project.

A Water Availability Assessment will be required from the Surface Water Management Section of Water Stewardship.

Fisheries Branch has reviewed this proposal to develop an irrigation project at three separate sites. The first site will access water from a newly established groundwater well with a total water requirement of 148 dam<sup>3</sup> (120 ac-ft) annually. The second site will be sourced from the Cypress River (diverted during the spring runoff period) to a proposed storage reservoir located in NW ¼ of 25-7-12 W with a storage capacity of 250 dam<sup>3</sup> (200 ac-ft). The third site will be sourced from three to four groundwater wells located in NE 14-7-13 W with a total water requirement of 167 dam<sup>3</sup> (135 ac-ft).

Our only concern with Sites 1 and 3 is that the withdrawal from groundwater will produce a drawdown zone that will affect the Cypress River or tributaries. The report indicates that no drawdown was observed at the Cypress River during testing. As long as the monitoring proposed in section 5.0 occurs, particularly during dry years and there is some correlation to potential affects on the Cypress River then this should provide with an opportunity to access.

With site 2 the proponent proposes to withdraw the water during the spring freshet, divert to a storage reservoir and will discontinue withdrawal before May 15<sup>th</sup> of any year. This withdrawal timeframe still infringes on the spring spawning window for southern Manitoba (April 1 – June 14<sup>th</sup>). This is a very time sensitive period due to the potential to impinge/entrain spring spawning fish eggs and larvae. The EAP indicates adherence to the end of pipe screen requirements for withdrawals however, these screening requirements are for the protection of fish 25mm and larger, which does not address many spring spawning fish eggs and larvae (e.g. walleye eggs are ~1.5-2.1 mm and fry are 5.8-8.7 mm). We request that the clause recently used in other irrigation licences, which reflects the need for the proponent to change their screening requirements if it is deemed necessary, be included for this proposal.

We would expect withdrawal rates at site 2 to fall within Water Branch's current estimate of surplus water and defer to our colleagues in Water Branch. We would further request that the withdrawal does not exceed 10% of the instantaneous stream flow at the site.

Regarding the proposed river crossings within sites 1 and 2, the proponent has indicated crossings will not be trenched. From a provincial perspective we are much less concerned with trenchless crossings as long as there is an emergency frac-out plan prepared and followed when required. DFO has an operational statement for directional drilling and as long as the proposed process complies with the statement or requires review by DFO, our fisheries management interests should be met.

Finally as DFO has jurisdiction over fish habitat our above comments/recommendations do not take precedent over their review.

## Disposition:

These comments can be addressed through licence conditions. Specific information concerning phosphorus sampling was provided to the proponent for information in complying with licence conditions.

**Historic Resources Branch** No concerns.

**Mines Branch** No concerns.

**Community Planning Services Branch** This proposal is located within a project area which is administered by 2 of our regional offices. I have reviewed this proposal with respect to the land located in the R.M. of South Cypress only. My colleagues in Portage la Prairie will be reviewing and responding to the portion of the proposal located in the other municipal jurisdictions. My comments are as follows:

Municipal Approvals - The proponent should obtain the approval of the R.M. of South Cypress with respect to the following:

- a) Installation of any portions of water supply pipeline which are to be located within the rights-of-way of municipal roads, as they represent a structure located in the right-of-way which is under municipal jurisdiction.
- b) According to Policy 7 of PART I of the Cypress Planning District Development Plan, the proponent should also obtain a development permit for the installation of irrigation facilities from the local development officer (based in Carberry).

Monitoring - This portion of the project is located within the Assiniboine Delta Aquifer. Based on the sensitivity of the soil and groundwater conditions in this area, I would suggest that a fairly comprehensive program for monitoring any emerging impacts to the local groundwater should be considered, so that remedial action might be undertaken in a timely manner if problems emerge. (Note that this is similar to a recommendation I made for previous proposals in this municipality – client file no. 5125.00 and 5134.00)

If the appropriate authorities are satisfied that this proposal will be sustainable over the long term, and will not have a significant detrimental effect on regional water quality and water quantity, then I would have no concern with the issuance of a licence.

## Disposition:

Information on municipal requirements was provided to the proponent for information. The comments on monitoring can be addressed through licence conditions.

**Manitoba Infrastructure and Transportation** MIT has no major concerns but wishes that the proponent be informed of the following:

- An underground waterline agreement will be required from this Department if a crossing of Provincial Trunk Highway (PTH) 2 or Provincial Road (PR) 342 is proposed.
- A permit will be required from this Department (under The Highways and Transportation Act) for any construction or placement of structures within the control area adjacent to PR 342 (38.1m or 125' from the edge of highway right-of-way).
- A permit will be required from the Highway Traffic Board (under The Highways Protection Act) for any construction or placement of structures within the control area adjacent to PTH 2 (38.1m or 125' from the edge of highway right-of-way).
- Once available, detailed design drawings should be forwarded to this Department for review and approval.
- The proponent may contact regional planning and technical services staff concerning the above requirements.

Disposition:

This information was provided to the proponent for information.

**Canadian Environmental Assessment Agency** I have undertaken a survey of federal departments with respect to determining interest in the project noted. I can confirm that the project information provided has been distributed to all federal departments with a potential interest. I am enclosing copies of the relevant responses for your file.

Based on the responses to the federal survey, I have not yet been able to determine whether the application of the Canadian Environmental Assessment Act (CEAA) will be required for this project. Fisheries and Oceans Canada (DFO) is still in the process of determining whether an environmental assessment (EA) under the CEAA will be required. As indicated in the attached response from DFO, Prairie Farm Rehabilitation Administration (PFRA) will be providing additional information on the project that should assist DFO in making its determination. Transport Canada also requires additional information before it can determine whether or not the CEAA applies to this project. The required information is specified in the attached e-mail message. DFO, PFRA and Health Canada are willing to provide specialist advice upon request. DFO and PFRA also wish to participate in the provincial review.

Disposition:

Information to address Transport Canada's additional information request was requested from the proponent.

**ADDITIONAL INFORMATION:**

Additional information was requested on July 27, 2007 to address the comments of Transport Canada. The requested information will be provided directly to Transport Canada.

**PUBLIC HEARING:**

No requests were received for a public hearing. Accordingly, a public hearing is not recommended.

**RECOMMENDATION:**

All comments received on the Proposal pertaining to environmental issues 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 the Central Region.

**PREPARED BY:**

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