# SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Rolling Acres Holding Co. Ltd.: Applicant
PROPOSAL NAME: Rolling Acres Colony Wastewater Treatment

Lagoon

CLASS OF DEVELOPMENT: 2

TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon

**CLIENT FILE NO.:** 4359.00

## **OVERVIEW:**

On July 9, 1998, the Department received an Environment Act Proposal (EAP) on behalf of the Rolling Acres Co. Ltd. to construct and operate a new 2-cell wastewater treatment lagoon. The Proponent proposes to locate the lagoon on the south west quarter of Section 35 - 16 - 15 WPM. The Proponent indicated that treated wastewater would be discharged between May  $15^{th}$  and October  $31^{st}$  of each year to an adjacent gully which would cause the flow to terminate within the eastern part of Section 35 - 16 - 15 WPM and the western half of Section 36 - 16 - 15 WPM.

The Proposal and supporting documentation prepared by Cochrane Engineering Ltd., identified clay till soils at the proposed site. The supporting documentation indicated that the clay till soil is expected to provide the provincial permeability requirements for wastewater treatment lagoons.

The Department, on July 28, 1998, placed copies of the EAP report in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library and the Western Manitoba Regional Library, Brandon and provided copies of the EAP report to the Canadian Environmental Assessment Agency, the Interdepartmental Planning Board and TAC members. As well, the Department placed a public notification of the EAP in the Neepawa Banner on Saturday, August 1, 1998. The newspaper and TAC notification invited responses until August 31, 1998.

On April 13, 1999, Manitoba Conservation submitted responses from the public and TAC members to the appropriate Public Registries.

On April 22, 1999 a public meeting was held in Birnie, Manitoba to provide an open forum for discussions involving public concerns over the proposed lagoon construction and operation. The Department, on April 28, 1999, sent a letter to Cochrane Engineering Ltd. regarding the questions raised at the meeting and requesting responses to each question. On April 29, 1999 Manitoba Conservation distributed copies of the April 28, 1999 letter to the appropriate Public Registries.

On September 16, 1999 Manitoba Conservation received a response to the letter request from Cochrane Engineering Ltd. On December 1, 1999 Manitoba Conservation distributed copies of the September 16, 1999 response to the appropriate Public Registries.

On January 26, 2000 Manitoba Conservation presented a letter requesting that Cochrane Engineering Ltd.; propose an alternate appropriate means of effluent disposal, assess potential disposal areas and reassess and respond again to pertinent questions of the April 28, 1999 letter from Manitoba Conservation.

On March 8, 2000 Cochrane Engineering Ltd. responded to Manitoba Conservation's letter of January 26, 2000 indicating that effluent is now proposed to be discharged by effluent irrigation on agricultural land owned by the Colony, specifically, SW 35-16-15 WPM.

On March 16, 2000 Manitoba Conservation distributed copies of the March 8, 2000 response from Cochrane Engineering Ltd. to the appropriate Public Registries. On March 16, 2000 the Environmental Management Section contacted the Groundwater Management Section, requesting comments regarding the proposed discharge of effluent by irrigation. On March 22, 2000 the Groundwater Management Section responded, indicating that, aside from also being an area proposed to have livestock manure applications, irrigating with effluent at appropriate rates would have little risk of contamination of potable groundwater supplies.

On March 29, 2000 Manitoba Conservation distributed copies of the March 8, 2000 response to the appropriate TAC members. Any comments or concerns on the information regarding the proposed alteration would be received until April 14, 2000.

Three TAC responses were received. Comments submitted by the TAC indicated that the proposed alteration, being discharge of effluent by irrigation, is acceptable.

# **COMMENTS FROM THE PUBLIC:**

<u>Name</u>	Address	<u>Date</u>	<u>Comment(s)</u>
Birnie, Vaughn	Box 15 Birnie, MB R0J 0J0	00/04/17	- General concern and request for information.
Friesen, Harry	Box 51 Birnie, MB ROJ 0J0	98/08/31	- Concern regarding proposed lagoon and manure spreading; potential impact on water supply storage pond due to topography.
O'Donnell, Janet	Birnie, MB R0J 0J0	98/08/24	- Concern regarding potential contamination of Birnie water supply, air pollution.
Scott, Brian	Box 179 Eden, MB R0J 0M0	98/08/24	- Concern regarding potential surface runoff into dugout, odour problems resulting from surface discharge.

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

## **Highways**

• No concerns.

## **Natural Resources**

# 1999

- The proponents should drill to the shale bedrock or to a point twenty feet below the bottom of the proposed lagoon to ensure that there will be no contamination of the groundwater resources of the area.
- The shallow gravel zone, mentioned in the consultants report, must be securely cutoff from the lagoon liquids.
- During discharge periods it should be ensured that the adjacent gully which is to receive the effluent is adequately containing the discharge volumes and preventing flow off the proponents property.

# Disposition:

• Spray irrigation onto land located south of the proposed lagoon location, reported to be less sensitive to environmental impact and owned by the proponent is now the proposed method of effluent discharge.

#### 2000

• The quarter section has been identified as a potential site for application of manure from the proposed Colony livestock operations. The application of nutrients from municipal lagoon effluent must be integrated with the rates of application from livestock manure to ensure that over-application does not occur.

## Disposition:

 The Regional Director was notified of the proposal to irrigate the effluent on land which is also proposed to receive livestock manure applications. It was further indicated that integration of the applications must occur to ensure that overapplication does not occur on the quarter section.

# **Historic Resources**

• There is a cemetery located in SW 2 – 17 – 15 WPM west of the abandoned Canadian National rail line and adjacent to the proposed pipeline. ...one condition of the Environment Act licence be that if human remains, or objects believed to be human remains, are exposed during pipeline construction, work at that location be suspended until the Manager of Archeological Assessment Services, Historic Resources Branch, is contacted at (204) 945-1830 and a Branch archeologist has examined the site.

# Disposition:

• The Environment Act Licence pertaining to this project contains a clause which requires the proponent to contact the Manager of Archeological Assessment Services,

Historic Resources Branch in the event that human remains, or objects believed to be human remains, are exposed during pipeline construction.

# **Health**

- The need for fencing, gates and warning signs should be included in the proposal to ensure public safety, in case of unsupervised public access to the development.
- Consideration of inclusion of odor nuisance clause.
- Please ensure no discharge of effluent occurs into a water course or a municipal ditch system.
- Please ensure containment design (in this case a clay liner) provides the best possible groundwater protection for the area.
- Please ensure effluent discharge follows established guidelines as per Section 9.1.
- Please consider inclusion of perimeter drainage swale as part of licensing requirements to protect from surface runoff flow.

# Disposition:

- A barbed wire fence and gate are proposed in the design and required as a component of the proposed Environment Act Licence.
- The proposed Environment Act Licence includes a clause stating that the Licencee shall construct, operate and maintain the wastewater treatment lagoon in such a manner that the release of offensive odours is minimized.
- The discharge of effluent is only permissible using irrigation on to the land specified and owned by the Colony.
- The lagoon liner specifications incorporated to the Licence require that the liner meet the requirements for liners of standard lagoons in Manitoba.
- The proposed Environment Act Licence requires that effluent discharge may occur only after sampling and analysis indicate the requirements of the Licence have been attained regarding effluent quality.
- A perimeter swale is not a requirement for lagoon design.

#### **Rural Development**

• This proposed lagoon is located very close to an intermittent creek which flows to the east and land under other ownerships. The surrounding soils have some porous gravel lenses in them. Possibly this situation should be considered in the license review.

# Disposition:

• Spray irrigation onto land located south of the proposed lagoon location, reported to be less sensitive to environmental impact and owned by the proponent is now the proposed method of effluent discharge.

# **Environment-Operations Division**

• No concerns provided it is constructed and operated as per the filed proposal.

# **Environment-Water Quality/Terrestrial Quality Management** 1999

- If the effluent discharge period happens to coincide with a period of particularly heavy rainfall, is there a chance that effluent will be carried off the Colony's property and deposited onto neighboring property? What does the proponent intend to do to rectify the situation if such an event were to occur?
- Has spray irrigation been explored as a possible method of effluent discharge?

# Disposition:

- The discharge is no longer proposed to flow naturally over a specified area of the Colony.
- Spray irrigation is now the proposed method of effluent discharge.

#### 2000

• The soil conditions at this location, as stated in the letter, are suitable for this type of application and the intended area for irrigation is not directly over the sandy soils which form the local aquifer, as indicated by the included mapping. Therefore the previous concern over potential impacts to this aquifer are addressed through moving the area of disposal to the SW quarter of section 35.

#### **Canadian Environmental Assessment Agency**

• The 1998 and 2000 CEAA responses have indicated that application of The Canadian Environmental Assessment Act with respect to this proposal will not be required. Environment Canada and Natural Resources Canada would be able to provide specialist advice in accordance with Section 12(3) of the Act.

# Disposition:

• The appropriate resources shall be approached if and when their specialist advice becomes necessary.

# **PUBLIC HEARING:**

A public meeting was held on April 22, 1999 and was attended by several area residents, including those listed in the Comments From The Public section of this Summary. The letter requesting responses to public concerns prepared by Manitoba Conservation and dated April 28, 1999 was formulated based on the public concerns discussed at the public meeting.

Rolling Acres Colony Wastewater Treatment Lagoon Page - 6 -

# **RECOMMENDATION:**

An Environment Act Licence may be issued in accordance with the attached draft. Enforcement of the Licence should be assigned to the Approvals Branch until the soil testing has been completed.

# PREPARED BY:

Robert J. Boswick, P. Eng. Environmental Engineer Municipal & Industrial Approvals April 17, 2000

Telephone: (204) 945-6030

Fax: (204) 945-5229

E-mail Address: rboswick@gov.mb.ca