#### SUMMARY OF COMMENTS/RECOMMENDATIONS

**PROPONENT:** Pine Creek Colony (Pine Creek Holding Co.

Ltd.)

NAME OF DEVELOPMENT: Pine Creek Colony Wastewater Treatment

Lagoon

CLASS OF DEVELOPMENT: Two

**TYPE OF DEVELOPMENT:** Wastewater Treatment Lagoon

CLIENT FILE NO.: 5281.00

## **OVERVIEW:**

The Proposal was received on July 3, 2007. It was dated June 25, 2007. The advertisement of the proposal was as follows:

"A Proposal has been filed by DGH Engineering Ltd. on behalf of Pine Creek Holding Co. Ltd. (Pine Creek Colony) for the construction and operation of a new wastewater treatment lagoon for domestic wastewater from the colony. The facility would be located in SE 18-12-12W. Treated effluent would be used for irrigation on land owned by the Colony."

The Proposal was advertised in the Central Plains Herald Leader on Friday, August 3, 2007 and the Neepawa Banner on Monday, August 6, 2007. It was placed in the Main, Millenium Public Library (Winnipeg), Eco-Network, and Portage la Prairie City Library public registries and in the office of the R. M. of North Norfolk as a registry location. The Proposal was distributed to TAC members on July 26, 2007. The closing date for comments from members of the public and TAC members was September 4, 2007.

## **COMMENTS FROM THE PUBLIC:**

No public comments.

#### COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

<u>Manitoba Conservation – Sustainable Resource and Policy Management</u> The proponent should provide assurance that discharge to agricultural land will continue to be viable over the long term operation of the new facility. Such assurance should be supported by analysis of effluent quality data and physical and chemical characteristics of the receiving soil.

#### Disposition:

Additional information was requested to address this comment.

# Manitoba Conservation - Central Region

- 1) The design appears to be appropriate for the size of the colony and the local conditions.
- 2) The proposal does not indicate that the construction of the lagoon will be under the direction of a qualified person. Are there plans for quality control during construction of the lagoon? This will be especially critical for the installation of the PVC liner since the physical integrity of the liner will depend, in part, on how well it is installed.
- 3) The proposal indicates that the treated wastewater will be discharged as irrigation water. There will be years when heavy rainfall during the summer makes it impractical to discharge treated wastewater in this fashion. Can the proponent indicate what they plan to do in the event that discharge of treated wastewater to irrigation is not practical?
- 4) The licence should include a statement about complying with the terms of M.R. 188/2001, Storage and Handling of Petroleum Products and Allied Products Regulation during the construction phase of the proposed project.

# Disposition:

Additional information was requested concerning discharges. The remaining comments can be addressed as licence conditions.

## **Manitoba Water Stewardship**

- The Water Rights Act suggests that no person shall control water or construct, establish or maintain any <u>water control works</u> unless he or she holds a valid license to do so. <u>Water control works</u> are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage.
  - If the proposal in question advocates any of these activities, please apply for a Water Rights License to Construct Water Control Works. Application forms are available from any office of Manitoba Water Stewardship.
- Pine Creek Colony needs to apply for a water rights license based on its current population. If the confirmed water source is Pine Creek, then it should be known that this creek does not have much firm flow at critical times during the year.
- Fisheries Branch has reviewed this EAP for a two-cell wastewater treatment lagoon located on SE 18-12-12 W. The proposed location is approximately 60 m south of Pine Creek. According to our Fish Inventory and Habitat Classification System, Pine

Creek has a number of forage fish species as well as white suckers and can provide year round fish habitat.

- The lagoons will be lined with a 30 mil PVC liner and the Colony is requesting that the effluent be used for irrigating 18-12-12 W and 7-12-12 W with discharge being between May 15<sup>th</sup> and October 1<sup>st</sup>. Both these sections have Pine Creek or a tributary to the creek running through them.
- As the provisions for a pipe outlet have been provided for in the engineering drawings, Fisheries Branch wants to ensure that the effluent is being used for irrigation purposes and not being discharged to Pine Creek. The primary concern with using the effluent for irrigation purposes is the proximity of water bodies within the sections and the potential for runoff depending on the timing of the application.
- As per the recommendations of the Lake Winnipeg Stewardship Board, Manitoba Water Stewardship is supportive of effluent irrigation rather than direct discharge to a waterway. However, more information is required regarding the agricultural lands available for effluent irrigation. In particular, information regarding the location of the fields, soil suitability, and the number of acres of available is required. The proponent should be advised that the Nutrient Management Regulation has been proposed to protect water quality by encouraging responsible nutrient planning and regulating the application of materials containing nutrients. The proponent should consider the requirement to manage soil test phosphorus concentrations and residual nitrate-nitrogen within the proposed limits. The proposed regulation also includes Nutrient Buffer Zones along waterways where nutrients could not be applied.

In addition, the lagoon has been sized to allow for approximately one year of storage capacity. What alternatives exist for wet years when effluent irrigation may not be possible? Has a contingency plan been prepared?

# Disposition:

Information on other regulatory requirements was provided to the proponent's consultant. Additional information was requested to address several of the above comments. A number of the other comments also can be addressed through licence conditions.

## **Historic Resources Branch** No concerns.

<u>Canadian Environmental Assessment Agency</u> I have completed a survey of federal departments with respect to determining interest in the project noted above. I can confirm that the project information that was provided has been reviewed by all federal departments with a potential interest. Based on the responses to the survey, application of the Canadian Environmental Assessment Act (the Act) will not be required for this project.

Fisheries and Oceans Canada has requested further information to complete its review. Environment Canada and Indian and Northern Affairs Canada have also provided brief comments and questions (see attached).

Disposition:

DFO's request for additional information was forwarded to the proponent's consultant. INAC comments were similar to other TAC comments, and will also be addressed through additional information.

#### **ADDITIONAL INFORMATION:**

Additional information was requested on December 19, 2007 to address TAC comments. A response was received on February 19, 2008. The response addressed the amount and suitability of land available for effluent irrigation, storage during periods of rain, and provided revised design drawings for the facility.

# **PUBLIC HEARING:**

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

## **RECOMMENDATION:**

All comments received on the Proposal that require followup have been addressed through additional information or 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 Assessment and Licensing until construction is completed. Once the facility is commissioned, enforcement should be assigned to the Central Region.

#### PREPARED BY:

Bruce Webb, P. Eng.

Environmental Assessment and Licensing - Environmental Land Use Section (for Municipal, Industrial and Hazardous Waste Section)

December 19, 2007 Updated March 5, 2008

Telephone: (204) 945-7021

Fax: (204) 945-5229

E-mail: bruce.webb@gov.mb.ca