SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOONENT: Donald Norman Morrison
PROPOSAL NAME: Highlander Aqua Farms Wastewater Lagoon
CLASS OF DEVELOPMENT: Class 2
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon
CLIENT FILE NO.: 4165.00

OVERVIEW:

This Proposal, dated March 11, 1996, was received by the Department on Match 15, 1996.

The Proposal is to construct and operate a wastewater treatment lagoon to treat the wastewaters arising from the operation of a proposed indoor fish farming facility. The proposal is to construct a Development being a conventional 2-cell sewage lagoon, with the provision of an additional tertiary treatment cell, if needed. Treated wastewater from the lagoon is proposed to be discharged into a natural marsh located the proponent's land in the same quarter section as the Development.

The Proposal was advertised in the Shoal Lake Star on Monday, May 6, 1996, and copies of the Proposal were placed in Public Registries at: the Resource Centre of Manitoba Environment in Winnipeg; the Centennial Public Library in Winnipeg; and the Western Manitoba Regional Library in Brandon. The closing date for the receipt of public comments was specified as May 30, 1996.

Copies of the Proposal were also sent to the applicable members of the interdepartmental Technical Advisory Committee for their review and comment by no later than May 30, 1996.

COMMENTS FROM THE PUBLIC:

No comments were received from the public following the advertisement of the Proposal.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Rural Development commented that they have no land use concerns provided that the Proponent the lagoon effluent quality is tested by the proponent and determined to be
ecologically suitable for release before it is released, and that the proponent implements the proposed added mitigation measures if the water quality proves consistently to be unsuitable for release into the marsh.

**Natural Resources** commented that:
- staging water fowl should be discouraged from attempting to overwinter at the lagoon;
- a Water Rights Licence is required if water usage exceeds 25,000 litres per day;
- the Department will be working with the proponent to complete a risk assessment in the near future on the consequences of introducing a non native fish to the fishery resource, and the results of this assessment could influence the Licence issuance or conditions.

Disposition:
The comments from Natural Resources were forwarded to the Proponent for his information and clarification. In response, the proponent said waterfowl scaring devices would be used if needed, and a Water Rights Licence will be applied for. Natural Resources advised the Department and the proponent that their risk assessment came up with a low to nil risk level, and that they therefore had no further concerns regarding the proposal.

**Historical Resources** commented that they have no concerns.

**Highways** commented that they had no concerns with the Development as proposed, but asked that we inform the applicant of some relevant permitting requirements.

Disposition:
The comments from Highways were forwarded to the Proponent for his information.

**Health** commented that:
- fencing, locked gates and warning signs are recommended;
- inclusion an odor nuisance clause in the Licence should be considered;
- there should be no discharge or run-off of effluent into a water course or municipal ditch;
- it should be ensured that the lagoon's containment design provides adequate groundwater protection;
- consideration should be given to getting baseline data on the natural wetland if the proposal is to sample and monitor the impact of the effluent on the natural wetland; and
- it is unclear as to the method of disposal of filtered solid wastes (fecal and feed particulate) from the filtering process.

Disposition:
The comments from Health were forwarded to the Proponent for his information and clarification. In response, the Proponent said that fencing, gates and signage will be incorporated, odor is not expected to be a problem, there are no open water courses in the area and runoff will be prevented from entering the municipal ditch system, the groundwater should be adequately protected by 17 metres of in-situ clay till, and the water from the wetlands will be analyzed to provide a baseline for future comparison.

**Water Quality Management** commented that:
- it is unclear from the Proposal where exactly the effluent will discharge to;
- might the recipient wetland be a significant waterfowl nesting area?;
- will the discharges into the wetland significantly increase water levels in the wetland and jeopardize nesting waterfowl?; and
- is the wetland a groundwater recharge site, and if so, what impact might this have on the quality of the aquifer?

Disposition:
The comments raised by Water Quality Management were brought to the attention of the Proponent for comment. Written comments from the Senior Groundwater Engineer at the Manitoba Water Services Board stating that due to the thickness of glacial till, and the depth of the water table, the release of the lagoon's effluent to the wetland would have no effect on the groundwater quality in the area.

**Park-West Region** commented:
- no significant impact upon the environment expected;
- no discharge of effluent off of property under the control of proponent;
- odour should be minimal and should not pose any problem;
- nearest residence is over 1300 metres away.

**Canadian Environmental Assessment Agency** commented that application of the Environmental Assessment Act in regards to this proposal will not be required.

**PUBLIC HEARING:**
No requests or recommendations were made for a public hearing on this Proposal.

**RECOMMENDATION:**
A draft Environment Act Licence is enclosed for the Director's consideration. It is recommended that the Licence, if approved, be assigned to Municipal and Industrial Approvals until the lagoon is constructed and the clay liner tested before being re-
assigned to the Park-West Region for surveillance and monitoring, ongoing compliance evaluation and enforcement responsibilities.

PREPARED BY:

C. Moche, P. Eng.
Municipal and Industrial Approvals
July 15, 1996

Telephone: (204) 945-7013
Fax: (204) 945-5229
E-mail Address: Clem_Moche@environment.gov.mb.ca