

## **SUMMARY OF COMMENTS / RECOMMENDATIONS**

**PROPONENTS:** Miami Colony Farms Ltd. and  
Miami Holding Co. Ltd.

**PROPOSAL NAME:** Colony Deer-Hide Tannery

**CLASS OF DEVELOPMENT:** Class 1

**TYPE OF DEVELOPMENT:** Manufacturing

**CLIENT FILE NO.:** 5257.0

### **OVERVIEW:**

On February 15, 2007 Manitoba Conservation received a new (revised) Environment Act proposal to replace a preceding Proposal that had initially been submitted by the same Proponents on March 22, 2005, respecting the establishment and operation of a deer-hide tannery at the Miami Colony located within the Rural Municipality of Thompson. Both the environmental impact assessment and the environmental impact statement were undertaken by TetrES Consultants Inc. on behalf of the proponents.

The proposal is to establish a deer-hide tannery plant designed to produce 10,000 commercial quality deer hides per year, from October to March, and located on the Miami Colony's property. During the operating season about 600,000 litres of wastewater would be generated and directed to a 37.8 million litre capacity onsite clay lined lagoon for the storage and anaerobic treatment, whereafter the treated wastewater would be applied to the colony's land comprised of 4,400 acres.

On March 6, 2007, copies of the proposal were sent to the applicable members of the interdepartmental Technical Advisory Committee, to interested federal departments via the Canadian Environmental Assessment Agency (CEAA) for their review and comment, and copies of the proposal were placed into the public Registries at Union Station (Main Floor) in Winnipeg; the Winnipeg Public Library; Manitoba Eco-Network; and the South Central Library. The closing date for comments was set at April 11, 2007.

On March 9, 2007, the Proposal was advertised in the Morden Times.

### **COMMENTS FROM THE PUBLIC:**

Only one person from the public commented, namely from Mr. Brian Schwartz, Reeve of the R.M. of Thompson, who questioned:

- Is the estimated use of 629,000 litres of groundwater still within their existing water rights Licence?

#### **Disposition:**

- Consultant advised that no licenced increase would be required.

- Can the tannery waste be mixed with the pig manure and be safely spread onto land?

#### **Disposition:**

- Consultant responded, yes, based on extremely low salt and Cl<sub>3</sub> levels predicted to be in the effluent, and the reported response of soils and plants to these compounds/materials, there should be no adverse effect. Monitoring will be undertaken to confirm these predictions.

- Who will ensure that the pre-testing of the wastewater is undertaken?

**Disposition:**

- The consultant responded, the Colony's Environmental Inspector.

- The safety plan should be more extensive than as proposed.

**Disposition:**

- The Consultant provided no response.

*(this matter is being addressed in the License through proper chemical storage of chemicals, and a requirement for an Approved Emergency response Plan )*

- In his opinion, no lagoon can be properly built and tested in 7 days.

**Disposition:**

- The Consultant responded that they were advised the lagoon was constructed over a period of several weeks, and that it was done in a manner consistent with Best Practices for such construction.

*(Subsequent new evidence established by the Department's Regional staff, established that the constructed lagoon's liner was deficient. Furthermore, the constructed lagoon had never been authorized. This prompted the Proponents to file a Notice of Alteration to the Proposal. More information is provided below.)*

- In the plan study area there is a water aquifer (water at hazard area). Is there a protection plan for this area?

**Disposition:**

- The Consultant responded that there is no known area specific Plan.

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

**Sustainable Resource Management of Manitoba Conservation** commented that:

- The proposed placement of the liquid waste stream into the manure storage facility is not acceptable for reasons of cross contamination. A separate facility should be constructed for the storage of the liquid waste.

**Disposition:**

- The Consultant disagreed on the basis of the information provided in the EIA, and requested that a 2-year co-mingling program be undertaken to demonstrate that there will be no risk. Sustainable Resource Management replied that they are still opposed to the commingling of the hog manure and the tannery liquid wastes stated that the proponents should develop separate storage facilities for the tannery liquid waste.

*(A Notice of Alteration was subsequently submitted by the proponents to store the tannery wastewater in the on-site steel storage tank that had previously been used to store hog manure.*

- Input regarding the disposal of the liquid stream (containing salts and chromium) should be sought from Manitoba Agriculture, Food and Rural Initiatives (MAFRI) because of the

potential for long-term crop productivity. Applying the liquid waste at minimal rates minimal rates that would not pose a long-term risk may be technically challenging.

**Disposition:**

- The Consultant agreed. MAFRI raised no concerns with respect to the Proposal.  
*(The Licence incorporates an opportunity to re-open the Licence after two years of operation of the tannery, whereupon adjustments can be made to the Licence if necessary.)*

- Leather finishing does not appear to be addressed in the Proposal. Emissions of volatile compounds (VOC) may occur if such solvents are used.

**Disposition:**

- the Consultant responded that leather finishing is not included in the proposal.
- The proposal suggests that odours are unlikely to create a nuisance condition. However, in light of the processes involved, odour may need to be assessed further, and abatement contingencies identified to address a problem, should it occur.

**Disposition:**

- The consultant responded that air dispersion modeling undertaken by the consultant at a much larger tannery in Winnipeg indicated that only VOC emissions associated with finishing operations created an odour nuisance condition.
- Chromium emissions to the air are not addressed, even though they may occur.

**Disposition:**

- The Consultant advised that there is no process pathway for any significant chromium-containing emissions that could measurably affect local soil-chromium content.
- Manitoba Conservation livestock staff have raised concerns as to the integrity of the base of the earthen manure storage facility (proposed for storing the tannery's liquid waste)

**Disposition:**

- The Consultant responded that the earthen manure storage facility is similar to dozens of identical facilities approved by the province. *(verbal evidence obtained from Regional staff suggested the clay liner is unacceptable and is underlain by shale).*
- The Proposal calls for the co-mingling of industrial waste with livestock manure and storing them in an earthen manure storage facility (already presently constructed), but MB Conservation staff have expressed concerns with the integrity of the base. A clay or HDPE liner is required. The liquid industrial waste should be directed to a separate industrial wastewater treatment facility, and the hog manure and the industrial liquid waste streams must not be co-mingled.

**Disposition:**

- The Proponents filed a Notice of Alteration on March 20, 2008, satisfactory to all parties whereby the hog manure and the tannery wastewater would not be stored together, as originally proposed.
- Solid waste stream S-1 is proposed to be composted at an existing composting site on-site at the Colony. This composting site has however not been operated satisfactorily and has invoked enforcement action. It is recommended that this solid waste be disposed of into a licenced or permitted waste disposal ground or be otherwise specifically addressed in the Licence.

**Disposition:**

- The consultant took the advice under further consideration.
  - (*The issue has been addressed in the Licence*).
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- The proposal states that the colony would appoint one their members as an environmental Inspector, to conduct all necessary monitoring. In contrast, a third party should undertake all the required monitoring, and that a monitoring protocol be submitted for approval. The third party requirement could be removed if and when MB Conservation was confident that a member of the Colony was sufficiently trained to undertake the task.
  - It is recommended that if a licence is not issued in the immediate future, that a Stop Work Order be issued until an approved method of disposal for all waste streams is in place, and an Environment Act Licence is issued.

**Disposition:**

- The Consultant responded that both he and his client disagreed with that advice, except that a Licence should be issued

**Ecological Services of the Water Stewardship Department commented that:**

- The project will require a Water Rights Licence under the Water Rights Act.

**Disposition:**

- The consultant responded that there is no need for an additional Licence as the small volume of additional water required will be met from their existing groundwater supply system.
  - There is one intermittent creek which meanders through the site. It is unclear whether it is within the area that could receive field application of wastewater from the tannery. All applicable guidelines would need to be applied, and a sufficient buffer would need to be maintained to minimize run-off.
- Disposition:**
- The Consultant responded that field applications will occur away from the creek, and that a 500 metre buffer would be maintained between the application sites and the creek.
  - If the proponents expect any impact on groundwater reserves, or the alteration of any watercourse, a permit may be required.
  - Since the required water for the proposed development will be obtained from existing groundwater wells, appropriate backflow prevention devices should be provided on the water supply as per applicable provincial plumbing codes.

**Disposition:**

- Being reviewed by the Proponents.

**Historic Resources Branch** commented that they have no concerns with regard to the project's potential to impact heritage resources.

**Canadian Environmental Assessment Agency (CEAA)** coordinated federal responses to the Proposal. In that respect:

**Environment Canada** commented that the proposal did not invoke a trigger under Section 5 of the CEAA. However they observed that:

- the proposal contained several statements that are not substantiated, or not fully explained, and no mitigation measures were proposed in the event that the expected outcomes did not materialize.

**Disposition:**

- The Consultant responded that mitigation measures that make sense would be identified at such time, if and when expected outcomes did not materialize, and would be implemented by the Colony to ensure its compliance with Licence conditions.
- Because the Proposal refers to trivalent chromium, they pointed out that hexavalent chromium is a regulated substance.
- Chromium is a heavy metal that has the potential to contaminate the soil and the groundwater. It may therefore be necessary to consider the use of a geo-membrane to line the inner surfaces of the proposed wastewater lagoon rather than lining it with clay.

**Disposition:**

- The Consultant responded that the proposed clay liner would be sufficient, and that the Colony will monitor the groundwater to ensure there are no leaks. Subsequently, late in 2007, MB Conservation determined that the Lagoon facility which for the hog manure and the tannery wastewater (which had already been constructed without authorization or liner testing, was not holding fluids and is underlain by shale).
- The proponents are also advised to be aware of degreasing Regulations under the Canadian Environmental Protection Act 1999, as well as degreasing Environmental Emergency Regulations that list several chemicals that are subject to the regulations.
- Environment Canada recommends that the animal husbandry wastes and the tannery waste stream be treated separately.

**Disposition:**

- The consultant disagreed with Environment Canada's position, and requested MB Conservation to accept a 2 year co-mingling trial.

**Health Canada** commented that:

- they recommend that the liquid waste from the tannery being intended for application to land be tested at start-up for a full suite of heavy metals, because of the likely presence of other heavy metals.

**Disposition:**

- The Consultant agreed. (*The recommendation is incorporated in the Licence.*)
- To ensure that environmental and health risks are mitigated, a review of the Materials Safety Data Sheet (MSDS) information for all the chemicals to be used should be undertaken. (*This would become part of the required Emergency Response Plan required in the Licence.*)

**Disposition:**

- The Consultant agreed.
- Tannery workers and management should be thoroughly educated about the chemical, physical and biological hazards that they may encounter and the necessary protective measures.

**Disposition:**

- The Consultant agreed.

- The EIA does not provide information on employee hygiene and welfare facilities.

**Disposition:**

- The Consultant advised that the Colony would provide these amenities and provide for special cleaning of tannery workers.

**Department of Fisheries and Oceans (DFO)** commented that by implementing effective erosion control measures to lands disturbed by this Proposal, it was their opinion that the proposed works would not likely result in the harmful alteration, disruption or destruction (HADD) of fish habitat.

**PUBLIC HEARING:**

The advertisement of the Proposal did not solicit a request from the public for a hearing.

**RECOMMENDATION:**

Generally, the Technical Advisory Committee (TAC) was very cautious with this Proposal, and had concerned with some aspects of the Proposal, particularly with the process wastewater earthen storage facility, the proper management of the land disposal plan, and the ability of the proponents to carry out a proper and thorough land application and soil and groundwater monitoring and management program in the absence of any training and experience or credentials in such matters. These concerns were largely mitigated through the Notice of Alteration which eliminated the earthen wastewater storage facility. Accordingly, a draft Environment Act Licence has been developed to address the remaining concerns of the TAC, including the requirement that monitoring of the wastewater and affected soils be undertaken by a qualified person. The draft Licence also calls for a review of the overall Licence following the completion and assessment of the second year of wastewater and soil monitoring activities.

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