



**Mackenzie Valley Land and Water Board**  
**7th Floor - 4910 50th Avenue**  
**P.O. Box 2130**  
**YELLOWKNIFE NT X1A 2P6**  
**Phone (867) 669-0506**  
**FAX (867) 873-6610**

### Staff Report

<b>Company:</b> Hamlet of Enterprise	
<b>Location:</b> Enterprise, NT	<b>Application:</b> MV2008L3-0004
<b>Date Prepared:</b> August 14, 2009	<b>Meeting Date:</b> August 27, 2009
<b>Subject:</b> New Type B Water Licence	

#### 1. Purpose/Report Summary

The purpose of this report is to present a request for a new type B water licence by the Hamlet of Enterprise to the Mackenzie Valley Land and Water Board (the Board).

#### 2. Background

- November 26, 2008 – application received;
- July 20, 2009 – application deemed complete;
- August 11, 2009 – comment due date; and
- August 27, 2009 – presented to the Board.

#### 3. Discussion

The Hamlet of Enterprise is requesting this Water Licence for the operation and maintenance of the solid waste facility and the sewage lagoon. Water will still be transported from the Hay River to Enterprise.

This is a new water licence but there are many outstanding issues with the current state of the facilities. A shorter period is recommended for the Water Licence to allow sufficient time for investigation, reporting, review, and to enable approval of subsequent undertakings. It is understood that the existing facility will not be able to support long-term activities and new sites will have to be chosen; therefore, having a water licence with a longer term is unrealistic.

**4. Comments**

Various organizations have supplied comments that have been worked into the draft terms and conditions of the Water Licence. The Hamlet of Enterprise has had an opportunity to review these comments and there are no concerns.

**5. Review Comments**

Please see the attached Comment Summary Table.

**6. Security**

No security is recommended for this Water Licence.

**7. Conclusion**

The draft Preliminary Screening is attached for the Board's review and approval. The draft terms and conditions, along with the Surveillance Network Program, have also been attached for review.

**8. Recommendation**

The Board staff recommends that the Board approve the water licence for the Hamlet of Enterprise for a period of five years.

**9. Attachments**

- Comment Summary Table
- Application
- Preliminary Screening Report
- Cover Page with terms and conditions
- Draft Approval Letter

Respectfully submitted,



Tyree Mullaney  
Regulatory Officer

# Reviewer Comments– Hamlet of Enterprise, NT – MV2008L3-0004

<b>Reviewer</b>	<b>Comment</b>	<b>Mitigation</b>
<p>Indian and Northern Affairs Canada, Robert Jenkins, A/Manager</p>	<p>Comments taken from the letter dated August 11, 2009</p> <p>“Recommend that proper signage be installed at the Sewage Disposal Facility. Signage indicating the truck discharge location, the sewage lagoon and the SNP sites should be installed and maintained.</p> <p>An SNP Station is recommended at the outer edge of the sewage lagoon, where it exfiltrates through the wetland. The location of the SNP station should be chosen in consultation with the INAC Inspector.</p> <p>It is recommended that an SNP station be added downstream of the solid waste facility to monitor any run off from the facility.</p> <p>It is recommended that an Abandonment and Restoration Plan be submitted for review prior to abandoning any water supply, sewage, or solid waste disposal facilities.”</p>	<p>Comments have been added to the Water Licence.</p>
<p>Environment Canada, Jane Fitzgerald, Environmental Assessment Coordinator</p>	<p>Comments taken from letter dated August 11, 2009</p> <p>“Environment Canada recommends that the following conditions be applied for the duration of the licence:</p> <p><b>General</b></p> <p>The Hamlet must ensure that any effluent discharged must be in compliance with Section 36(3) of the <i>Fisheries Act</i>. According to the <i>Fisheries Act</i>, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited. An Operations and Maintenance Manual should be submitted for approval as a condition of the water licence. Generally the plan should include:</p>	<p>Comments have been added to the Water Licence.</p>

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	<p>A description of how facilities are operated and maintained;                      How often these tasks are performed; and                      Who is responsible for their completion.</p> <p>A Closure and Reclamation Plan for the existing solid waste and sewage treatment facilities should be submitted for approval as a condition of the water licence, no later than 9 months prior to closure of the facilities.</p> <p>The submission of an annual report as a condition of the license, including monitoring results and updates to plans.</p> <p><b>Fuel Storage and Spill Contingency</b>                      The Spill Contingency Plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.</p> <p>Secondary containment or surface liners (drip pans, fold a tanks, etc.) should be placed under all containers or vehicle fuel tank inlet and outlet points, hose connections and hose ends during fuel or hazardous substance transfers. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario).</p> <p>Transfer operations should be attended by trained personnel at all times.</p> <p>Please note that any spill of fuel or hazards materials, adjacent to or into a water body, <b>regardless of quantity</b>, shall be reported immediately to the NWT 24-hour Spill Line, <b>(867) 920-8130</b>.                      A minimum 1 m of freeboard should be maintained within the sewage lagoon at all times.</p>	

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	<p>Environment Canada recommends that a sludge management plan be submitted for approval. EC recommends the following on sewage sludge disposal:</p> <p>Maintenance should include periodic removal and disposal of sewage sludge. Estimates should be made of the quantities of sludge likely to be produced, the required frequency of extraction from the lagoons; and operational procedures developed for environmentally sound removal and disposal. These procedures should include characterization to ensure disposal options are appropriate. Environment Canada recommends that prior to desludging occurring, the proponent submit for approval a Sewage Sludge Management Plan that clearly outlines the chemical composition.</p> <p>Environment Canada recommends that proper signage is in place indicating the locations of the sewage lagoon and wetland treatment areas.</p> <p><b>Monitoring</b> Monitoring frequency performed by the Hamlet should be sufficient to inform how the system can best be managed to optimize treatment. For example, timing of discharge will be a factor in how effectively the wetland can take up nutrients and incorporate solids; discharge should occur gradually over the warmer months to ensure that the effluent has enough treatment time in the wetland system. Appropriate signage should be erected identifying all Surveillance Network Program (SNP) stations.</p> <p><b>Solid Waste Disposal Facility</b> Waste segregation practices should be identified and used to ensure removal of salvageable items and hazardous materials</p>	

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<p>GNWT- Environment and Natural Resources, Patrick Clancy, Environmental Assessment Analyst</p>	<p>from the general wastes. Dedicated locations should be identified for hazardous wastes, including batteries and waste oil, animal carcasses, contaminated soil, and bulky metals. Signage indicating the location of the various disposal cells for each waste type in the solid waste disposal facilities should be erected.</p> <p>EC recommends that waste oil and/or fuel barrels should be stored in a lined and bermed area. Please note that all hazardous materials, including that from households, should be neutralized and stored in sealed and labelled containers. Effluent that has accumulated within the hazardous waste storage containment area should be treated as hazardous waste and decanting of snow or water from the area of the hazardous waste storage area should proceed only if the appropriate chemical analysis has determined the contents meet the requirements of Section 36(3) of the <i>Fisheries Act</i>.</p> <p>Drainage management will be needed to minimize leachate generation from the solid waste facility. As part of the O&amp;M plan, the Hamlet should identify testing and disposal of any collected leachate. These issues should be addressed prior to any discharge to ensure the requirements of the <i>Fisheries Act</i> will be met.</p> <p>Fencing of the solid waste site should be done to facilitate control of access to the landfill and to prevent the spread of debris.”</p> <p>Comments taken from the letter dated August 13, 2009</p> <p>“ENR recommends that the licencing needs to separately address and take into consideration the following three distinct aspects: 1) The Hamlet needs current Terms and Conditions that address its immediate waste collection and disposal requirements;</p>	<p>Comments added to the water licence</p>

Reviewer	Comment	Mitigation
	<p>2) The existing facility needs immediate attention to address controlled access, segregation, wildlife and other related mitigative concerns; and</p> <p>3) Given the unregulated history of these facilities, the environmental and economic sustainability, including environmental liabilities and project lifespan needs to be determined. This may include the requirement for the study and selection of an alternate waste disposal location, and related protective measures to ensure long-term economic and environmental viability.</p> <p>Hence, ENR provides the following recommendations that address these three aspects. They are provided as two distinct sets: one general in form, and the other to aid in drafting specific Terms and Conditions required for immediate use.</p> <p><u>General Recommendations</u>                      This is a new Water Licence Application, and outstanding concerns over the current state of the waste management facilities are yet to be addressed. Hence, ENR recommends a 2 year term initial for the Water Licence to allow sufficient time for investigating, reporting, review, and enable for and approve subsequent undertakings. Only upon completion of the recommended reports (as detailed below) will the Hamlet, Regulators, and other stakeholders and interveners have the information required to assess these matters and determine a suitable path forward:</p> <ul style="list-style-type: none"> <li>• This Licence should also operate under Management Plans that have been submitted;</li> <li>• Ensure that any future waste disposal and management activities comply with <i>Operations and Maintenance of Modified Solid Waste Sites in the Northwest Territories</i>; and</li> </ul>	

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	<ul style="list-style-type: none"> <li>• Comply with the immediately required Recommended Terms and Conditions also supplied in this letter.</li> </ul> <p>ENR recommends that both the short term and long term Water Licence is sensitive to the requirement that appropriate funding targets and a proposed implementation schedule are in place to ensure that the reports are undertaken and completed, to ensure that recommendations and actions are appropriately planned and implemented.</p> <p>ENR recommends that no Terms &amp; Conditions be included in the current pending Water Licence with respect to Abandonment and Reclamation of the current site, or to address the potential movement of the solid waste disposal site to a new location. The information presently available is insufficient to make these decisions.</p> <p>Appropriate studies are required to be undertaken, to investigate, report findings, and propose recommendations regarding the existing state of the facility. This will enable the planned and coordinated implementation of a long-term funded waste management infrastructure, and determination of related operating requirements for the Hamlet. This reporting must include:</p> <ul style="list-style-type: none"> <li>• Current state of the facilities. An Environmental Site Assessment should be undertaken which follows up on the work already initiated by the Proponent through the Phase 1 ESA;</li> <li>• A projected lifespan of the current facility;</li> <li>• Potential Abandonment and Reclamation requirements of the current site if deemed required, and recommendations;</li> <li>• If deemed required, the site assessment of a new facility, including and engineering study that proposes appropriate construction and mitigative requirements.</li> </ul>	

