

### Review Comment Table

<b>Board:</b>	GLWB
<b>Review Item:</b>	Town of Inuvik - Solid Waste Disposal Facility - Operations and Maintenance Plan (G17L3-001)
<b>File(s):</b>	<a href="#">G17L3-001</a>
<b>Proponent:</b>	Town of Inuvik
<b>Document(s):</b>	<a href="#">SWDF Operations and Maintenance Plan</a> (9.4 MB)
<b>Item For Review Distributed On:</b>	
<b>Reviewer Comments Due By:</b>	Jan 24, 2018
<b>Proponent Responses Due By:</b>	Feb 16, 2018
<b>Item Description:</b>	In accordance with Water Licence G17L3-001, Part E, The Town of Inuvik has submitted to the Gwich'in Land and Water Board for approval an updated Operations and Maintenance Plan for its Solid Waste Disposal Facilities . The Board is considering the submission and appreciates any comments or recommendations from reviewers.
<b>General Reviewer Information:</b>	The Board encourages reviewers to submit comments and/or recommendations on SWDF Operations and Maintenance Plan through the Online Review System, no later than Wednesday January 24, 2018. Note that all documents that have been uploaded to this review are also available on our public registry. If you have questions or require assistance with the ORS, please contact Board staff identified below.
<b>Contact Information:</b>	AlecSandra Macdonald 867-777-4954

## Comment Summary

Town of Inuvik (Proponent)				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	General File	<p><b>Comment</b> (<a href="#">doc</a>) Town of Inuvik Cover Letter - with figures</p> <p><b>Recommendation</b></p>		
Environment and Climate Change Canada: Gabriel Bernard-Lacaille				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
2	General File	<p><b>Comment</b> (<a href="#">doc</a>) ECCC Comments Cover Letter</p> <p><b>Recommendation</b></p>		
1	ECCC 1 - Surface water runoff and leachate Management	<p><b>Comment</b> The management of surface water runoff and leachate within the footprint of the solid waste facility is unclear. Section 3.14 indicates that runoff will be sampled monthly during periods of flow under the Surveillance Network Program (SNP). Section 9.9 goes on to state that all water accumulated on site will be tested prior to discharge. Based on Figure 1, which indicates the locations of SNP sampling stations, there appears to be no SNP sampling stations within the facility footprint. In addition, there is no description of how water is collected and tested within the site footprint prior to any discharge.</p> <p><b>Recommendation</b> ECCC recommends that the Town of Inuvik (the Proponent) clarify the management of surface water and leachate. To do so, the Proponent should,</p>	<p><b>Apr 23:</b> The facility relies on surface water naturally draining away from the landfill (refer to Figure 2 in the Operations and Maintenance (O&amp;M) plan). The current Licence for the facility does not require a landfill liner or an engineered stormwater system. Runoff from the solid waste site is sampled monthly during periods of flow under the Surveillance Network Program. The portion of text in Section 9.9 referring to ponding water is an error. This section will be revised to reflect actual site conditions by removing reference to sampling ponding water onsite.</p>	

		at a minimum, describe controls in place to prevent runoff from the surrounding area from entering the solid waste facility and how any surface water and leachate present within the site footprint is collected, tested and discharged.		
GNWT - ENR: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
2	General File	<b>Comment</b> ( <a href="#">doc</a> ) ENR Letter with Comments and Recommendations <b>Recommendation</b>		
1	Topic 1: Bears and Wildlife Control	<b>Comment</b> The 2016 ENR Inspection Report specifies (p. 6 of 19) that bears remain a nuisance at the Solid Waste Disposal Facility (SWDF) causing salvaging restrictions by the Town of Inuvik in recent years. As such, ENR Renewable Resources Officers are responding to many bear calls in the summer season to deter nuisance bears at the SWDF. ENR notes that the MVLWB municipal template for SWDF's requires in Section 13, details on strategies (other than cover placement and fencing) used to manage wildlife at the facility. While Section 3.15.7 of the current Town of Inuvik Solid Waste Disposal Facilities Operations and Maintenance Plan (the Plan) specifies that the presence of bears, or other animals at the site, shall be reported to the MSM and to the GNWT (ENR local Inuvik office); however, no detailed management strategies to prevent or reduce bear or	<b>Apr 23:</b> Issues with wildlife inside landfills, specifically bears, are a common safety and ecological issue throughout Canada. In an effort to address the concern above, the following additional measures (beyond those currently included in the O&M manual) have been discussed with the Town and shall be incorporated into the O&M Manual. 1. The Town is currently in the process of completing a Solid Waste Disposal Fencing Plan (as required in Water Licence G17L3-001 by July 1, 2019). It is planned to have this fencing installed (complete with electrified bear fence component) once the plan and design are completed. 2. The Town has approximately five motion triggered auditory deterrents (commonly referred to as "bear screamers"). These are mobile units that will be set-up around the active area of the landfill and activated at the end of the workday to	

		wildlife intrusions to the SWDF were provided in the Plan. <b>Recommendation</b> 1) ENR recommends that clear strategies to address bear, or other wildlife, nuisance issues at the SWDF be created, implemented and included within the Plan.	deter scavenging animals with a motion triggered siren.	
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**GTC Department of Cultural Heritage : Sharon Snowshoe**

<b>ID</b>	<b>Topic</b>	<b>Reviewer Comment/Recommendation</b>	<b>Proponent Response</b>	<b>Board Staff Response</b>
1	GTC DCH Comments	<p><b>Comment</b> (<a href="#">doc</a>) &lt;p style="margin-left:10.5pt"&gt;We have reviewed the above application, and have no issues or concerns at this time. In the future, please ensure any revised documents that need review have the revisions clearly marked either in the text (for example, with comments or highlighting, or through tracked changes) or in a table at the front of the document, with clear indications in the table about what changed (for example, page number and paragraph numbers, and an indication of content shift). Reviewing the entire document again when the changes are unclear is a time burden.</p> <p><b>Recommendation</b> &lt;p style="margin-left:11.2pt"&gt;As with any application, if archaeological or heritage materials are encountered during the development within the Gwich in Settlement Area, all work must cease immediately as required by law, and the DCH and the Prince of</p>	<p><b>Apr 23:</b> The GTC-DCH indicated that the reviewer had no issues or concerns at this time.</p>	

		Wales Northern Heritage Centre in Yellowknife must then be contacted.		
<b>Gwich'in Tribal Council: Stephen Charlie</b>				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	GTC Lands and Resources - Late Submission	<p><b>Comment</b> (Submitted after Due Date)  The comments and concerns of the Gwich'in Tribal Council's (GTC) Lands &amp; Resources Dept. will mainly concentrate on the initial document and will exclude most of the Appendix. After reviewing the document in its entirety, it feels like this manual highlights the important aspects of the municipal solid waste disposal facility and all the actions needed to properly manage this essential town service. Also it should be noted that this document is easy to understand with an emphasis on plain language in most parts. Please further explain the comment "The landfill cell has no liner system and the facility relies natural attenuation for landfill leachate management" Would you be able to replace the word Attenuation (the reduction of the force, effect, or value of something) with something more plain language? Also what are the requirements in regards to landfills having no liner systems within larger populated areas in the NWT? Lastly is there any relationship between a liner system and the permafrost (I.e. Climate Change).</p>	<p><b>Apr 23:</b> The majority of these inquiries/comments deal with subjects outside the scope of an Operations and Maintenance (O&amp;M) Plan. Despite many of these being valuable questions, the O&amp;M Plan is meant to deal with the day to day operations of the facility and serve as a reference for facility staff. These questions might be more suited for a Water Licence application process. Responses are numbered / lettered to correspond to the comments above. i. (A) This statement means that leachate freely enters the environment unimpeded by any engineered barrier; therefore the facility relies on naturally occurring physical, chemical and biological processes/factors present in the environment to lessen offsite impacts whether it be through slowing the travel of contaminants or to diminish their strength. (B) AECOM would be happy to provide a "plain language" definition in brackets beside attenuation within the document. This will be as follows.  .attenuation ("the natural ability of the receiving environment to breakdown, dilute and/or otherwise slow the spread of contaminants and thereby lessening</p>	

		<p>What is the initiative for wider range of recycling? Can we do more to further recycle scrap tires, white goods, and debris? What is the statistics for Honey Bag disposal? Is there a decline/rise in the amount of honey bags? Where do most of these bags come from? Are there new ways to addressing disposal pits and covering? With the estimated 5,816 tonnes/yearly of waste (5.04 kg/capita/day) entering the landfill, would there be other estimated statistics to see the total amount of waste when stricter recycling and waste management are in place? Would we see a difference in the amount of waste if there were services that addressed food waste, recycling tin and other materials? What would be an estimated cost to further waste management initiatives? When it s explained that the space needed for the next 10 years is 193,873 cubic metres, would you be able to showcase that in map form. It s hard to get a sense of the scope when it s just a number. Also when it s mentioned that the overall capacity of the landfill is 480,000m<sup>2</sup> and this exceeds the estimated space available for the next 10 years, having a map to illustrate this scope would be beneficial. How many vehicles are deposits in the landfill yearly? Does the odor from the landfill ever become too much? And are there times when it s reached the community? There</p>	<p>their impact") (C) This is outside of the scope of the O&amp;M Manual. The current requirements in NWT do not require lined landfill systems. Based on presence/absence of a barrier layer (natural or otherwise) monitoring can be required, but no specific requirement applies when in proximity to populated areas such as Inuvik. However; general siting requirements apply for the landfill (540 metres (m) from housing, 90 m from public roads, drainage away from drinking water, outside floodplain, etc.). ii. Currently surface water samples are collected to monitor offsite impacts to surface water from two downstream locations (SNP0036-4 and SP0036-5). The addition of an upstream sample location (SNP0036-9) at Boot Creek is pending. Samples at these locations are taken monthly during period of flow (according to current Licence) to monitor impacts. iii. This is outside of the scope of the O&amp;M Manual. iv. This is outside of the scope of the O&amp;M Manual. v. This is outside of the scope of the O&amp;M Manual. A separate study would be performed to determine what reductions can theoretically be achieved via diversion. vi. This is outside of the scope of the O&amp;M Manual. Waste capacity and phasing are addressed in other plans. The O&amp;M Manual is meant to address day to day operations and serve as a resource for operations staff. The</p>	
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		<p>is a concern that the Climate Change Preparation and Adaption section (p.28) is very limited and much work should/could be done to address current climate change trends. There is basically only one paragraph on this issue.</p> <p><b>Recommendation</b> Overall the document is easily accessible and its points are easy to understand . This manual showcases the daily activities done within the landfill with background information from the City of Inuvik. There is much to learn about the local Inuvik landfill but also there are areas that should be explored more. Recycling initiatives could be explored more in ways to combat the amount of trash dumped into the area and help extend the life of the current landfill range. Also the document does lack and emphasis on Cltmate Change whereas it feels like nothing is being addressed on current climate change information.</p>	<p>O&amp;M manual states there is 480,000 cubic metres (m3) of capacity (volume) available at the site and that over the next 10 years an estimated 193,873 m3 of that available capacity (volume) will be consumed (filled with waste over those</p> <p>The majority of these inquiries/comments deal with subjects outside the scope of an Operations and</p>	
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