

The Solid Waste Management Plan stated that a study regarding incineration technologies will be prepared for City Council. The Study is ongoing and no decision has been made. The study will be made available to the NWB upon its completion.

3. EC supports the use of composted sewage sludge if quality is appropriate for a landfill cover. EC recommends that testing for metals be done prior to application and that an evaluation be done of the potential for materials to be subject to wind erosion.

Response: The City has no comment on these recommendations.

4. EC recommends that a landfill O&M manual, comparable to the one prepared for the West 40 landfill, should be prepared for the new (i.e., Northwest) landfill site prior to commissioning of the new site. EC recommends that the Proponent provide an update on this activity and an estimate of when this document will be completed.

Response: O&M Manuals are prepared in conjunction with the development of new facility and are typically issued as part of the commissioning of the facility. This process will be followed for this facility.

5. EC supports the Proponent's approach detailed in the West 40 Landfill Decommissioning Technical Memorandum. EC recommends that the Board incorporate relevant sections, including Section 4 (Closure Plan), Section 5 (Post-Closure Plan), and Table 5.1 (Post-Closure Activities and Potential Issues and Solutions), into the water licence requirements.

EC requests that the Proponent provide an update on these two activities, including an estimate of when commissioning and decommissioning will occur.

Response: The City agrees to submit an updated Closure Plan, and Post-Closure Plan, and Table 5.1 60 days prior to closure and decommissioning.

The City currently does not have a schedule for the commissioning or decommissioning of the facilities.

6. EC recommends that the Proponent provide further discussion of the landfill runoff management system, specifically the management of contaminated sediments in the retention ponds after discharge of the water used to put out the landfill fire.

Response: The actions of the City with respect to the fire at the West 40 Landfill are considered emergency measures and the City is obligated to take direction from the AANDC Water Resource Officer. As this is an emergency measure and not part of the City's normal operations it should not fall within the requirements of the Water Licence.

7. The proposed maximum annual withdrawal of water from Lake Geraldine is 1,100,000 m³ relative to an approximate lake volume of 1,361,000 m³. If necessary to protect fish in Lake Geraldine, the Applicant should determine the annual lake recharge rate and ensure that the total combined annual water withdrawal from Lake Geraldine does not exceed 10% of the available water volume calculated using the appropriate maximum expected ice thickness as described in the "DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut" (2010).

Response: The Lake Geraldine Reservoir is a licenced water source with over 40 plus years of operation. The City believes that imposing a condition with no evidence to indicate that there is an issue is not warranted.

8. Given that there have been historic issues with wastewater management and that the City of Iqaluit is currently investigating the options available to improve wastewater management, EC recommends the development of an overall Wastewater Management Plan, including but not limited to:

- current wastewater management practices and facilities;
- future plans for wastewater management;
- effluent and water quality monitoring; and
- adaptive management.

Until such time as a current Wastewater Management Plan can be developed, EC recommends that the Proponent provide:

1. timelines and updates on when the wastewater management plan will be available; and
2. an update on the state of current wastewater management, and future plans.

Response: The City does not believe that the preparation of a Wastewater Management Plan would provide any measurable benefit to the City or the NWB. The City has started the process for upgrading the Wastewater Treatment plant and has already prepared a feasibility study which has been accepted by Council. Implementation of the plan is awaiting funding.

The City has submitted with its application the design drawings and the O&M Manual for the existing facility which documents the existing operations. The City has initiated a project to upgrade the wastewater treatment facility. A copy of the feasibility study is submitted with the City response. As part of the water licence renewal package, the City has submitted the results of the monitoring program within the City's water licence. The City believes it has submitted the information requested.

9. EC recommends:

- the development of the following documents prior to commissioning a new wastewater treatment system;
- operation and maintenance manual for new waste water treatment plant and system components; and
- closure plan for the new waste water treatment plant and system components; and
- the development of a closure plan if any existing wastewater treatment system components are to be decommissioned during the transition to a new wastewater treatment system.

Response: This will be incorporated into the scope of the project for a new wastewater treatment facility.

There are no plans to decommission the existing or proposed Wastewater Treatment Plant, therefore development of a closure plan for these facilities would be premature. The City recommends the following clause be added to allow the water licence to manage the potential closure of any facility.

"The Licensee shall submit to the Board for approval an Abandonment and Restoration Plan at least six (6) months prior to abandoning any facilities or upon submission of the final design drawings for the construction of new facilities to replace existing ones. Where applicable, the Plan shall include information on the following:

- a) water intake facilities;*
- b) the water treatment and waste disposal sites and facilities;*

- c) leachate prevention;
- d) an implementation schedule;
- e) maps delineating site facilities;
- f) consideration of altered drainage patterns;
- g) a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment related to water use, waste deposit to water, or appurtenant undertakings related to water use and/or deposit of waste to water, subject to the act and regulations.

10. EC recommends that effluent quality at the end of the treatment system should strive to meet or exceed the *Wastewater Systems Effluent Regulations SOR/2012-139 Fisheries Act Registration 2012-06-29*.

Specifically, EC recommends that:

- average carbonaceous biochemical oxygen demand (CBOD) is less than or equal to 25 mg/L;
- average concentration of suspended solids in the effluent is less than or equal to 25 mg/L;
- average concentration of total residual chlorine in the effluent is less than or equal to 0.02 mg/L;
- maximum concentration of un-ionized ammonia in the effluent is less than 1.25 mg/L, expressed as nitrogen (N), at 15°C ± 1°C; and
- the effluent is non-acutely lethal.

Although the new *Wastewater Systems Effluent Regulations* do not currently apply to the North, EC recommends monitoring and sampling be aligned with the requirements of the *Wastewater Systems Effluent Regulations*.

Response: The City is planning to upgrade the wastewater treatment facility to a secondary plant which should meet these requirements. The City however disagrees with adopting these standards without consideration to the recognized fact that they do not currently apply to the North and do not take into account the challenges associated with operating a wastewater facility in the Arctic.

11. EC recommends a maximum water licence term of five (5) years, instead of the proposed 25 year term. EC recommends that all plans be submitted subject to Board approval.

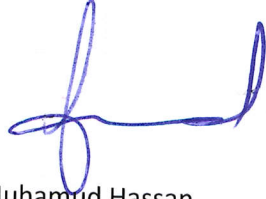
Response: As per the response from AANDC entitled "150710 3AM-IQA0612 AANDC TECHNICAL COMMENTS-ILAE, which includes the following recommendation

R 1) Aboriginal Affairs and Northern Development Canada (AANDC) recommends that the license should be renewed for five years but we are not opposed to a term of up to ten years, should the Board consider it suitable.

The City believes that a long term licence is in the best interest of both the City and the NWB, and that any changes to the operations regulated under the water licence during the licence term could be dealt with through the amendment process. The City would support a 10 year term.

If you have any questions or require further information or clarification, please contact Matthew Hamp, Director of Public Works and Engineering at 867-979-5653.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'M' followed by a horizontal line and a loop.

Muhamud Hassan
Chief Administrative Officer
City of Iqaluit