



# Sahtu Land and Water Board

## Staff Report

**Division:** Water Program

**Report No. 2**

**Date Prepared:** April 12, 2013

**File No.** S12L3-006

**Meeting Date:** April 19, 2013

**Subject:** Deline Closure and Reclamation Plan – Solid Waste Disposal Facility

### 1. Purpose/Report Summary

To inform the Board about the Closure and Reclamation Plan for the old Deline Solid Waste Disposal Facility.

### 2. Background

#### 2.1 Project Overview

Item 1 of Part G requires the submission of a Closure and Reclamation Plan at least six months prior to the closure of any water and/or waste disposal facility. The Solid Waste Disposal Facility that this Plan is intended to cover is approximately 800 metres north of the former airport, and adjacent to the sewage disposal facility. The facility was constructed in the late 70's or early 80's. A new solid waste disposal facility is under construction and is scheduled to be completed in the fall of 2013. The new facility will be brought online concurrently with the closure and reclamation of the current solid waste site.

The total site area of the current solid waste site is 80,000m<sup>2</sup>.

#### Implementation Schedule

- Removal of any non-landfillable wastes, bulk metals wastes, hazardous wastes, and contaminated soils. (Removal of the majority of hazardous and non-landfillable wastes occurred February 26 – March 1, 2013)
- Compaction and contouring of the municipal solid waste (MSW) disposal area landfill;
- Capping of the MSW disposal area(s) and potentially the bulk metal/hazardous waste storage area, with the creation of appropriate drainage systems; and
- Implementation of a post-closure monitoring and inspection program, which will include seeding/re-vegetation, re-grading as needed, and sampling surface run-off.

A monitoring and maintenance checklist has been created as part of the Plan and included as Appendix C, which will guide municipal workers on what is required to supervise the site.

#### 2.2 Process Requirements

**Plan Received:** March 14, 2013

**Number of Review Agencies: 20**  
**Review Period End Date: April 5, 2013**

### **3. Other Agency Comments**

The Closure and Reclamation Plan was circulated to 20 organizations requesting a reply by April 5, 2013. To date four organizations have responded. The following organizations offered comments on the Plan:

- **Department of Fisheries and Oceans**
  - DFO had no comments on this Plan.
  
- **Environment Canada**
  - The Plan states that public access will be restricted to the hazardous waste storage area until it is confirmed that the site has been decontaminated to meet residential uses. EC questions include; what type of sampling will be done, and to what guidelines will results be compared? Results should be reported to the Board for review;
  - More detail is needed on the proposed cover system to assess its effectiveness;
  - What methods of closure are to be used for the already decommissioned cells of the household waste and honeybag pit area?
  - EC recommends further study of the permafrost conditions in the area and their implication on closure. Also, long-term monitoring of leachate generation should be undertaken at both surface and groundwater locations.
  
- **AANDC**
  - AANDC recommends best practices sampling as part of the community water licence for the new solid waste site.
  - There should be post-closure sampling at SNP station 0555-4 to ensure site stability at the old solid waste site.
  - Runoff should be sampled yearly.
  - Are the underlying soils sufficient to prevent infiltration and groundwater contamination? Pending results, a groundwater investigation program may be required.
  - Secondary containment for hazardous waste at the new facility should be in place.
  - A review of historic spill information should be included in the Plan.
  - The Plan should include the frequency at which inspections will be conducted and where this information will be recorded.
  - What criteria will be used to determine community access post-closure?
  
- **ENR**
  - ENR and MACA believe the current Plan is inadequate and recommends that the SLWB not accept it. ENR and MACA commit to working together with the Community of Deline and the Board to develop a Plan that is acceptable to all parties.
  
- **Responses from Deline (Stantec)**
  - Responses to AANDC were mainly noted, clarified, or agreed with.
  - Criteria assessed will follow the GNWT – ENR’s Environmental Guideline for Contaminated Site Remediation for an Industrial Land Use.
  - In response to ENR and MACA, if the Board requires monitoring beyond the 2016 date, advise. Additionally, Deline still requests approval to close the site.

Please see the attachments for complete comments.

All review comments were emailed to Stantec and the Charter Community of Deline for their information and follow-up action as required. Responses from Stantec in consultation with Charter Community of Deline are also attached.

## **5. Conclusion**

Based on reviewer comments more work is necessary to develop an adequate Closure and Reclamation Plan that will ensure proper reclamation of Deline's Solid Waste Facility.

## **6. Recommendation**

It is recommended that the SLWB allow MACA and ENR to work with the community to develop a Closure and Reclamation Plan that is satisfactory to all parties. Board staff suggest giving a date for MACA and ENR to present a revised plan, at which time, if all concerned parties are satisfied, the Plan be approved.

## **7. Reference Material Attached**

- 7.1 Review Comments from AANDC
- 7.2 Review Comments from Environment Canada
- 7.2 Review Comments from GNWT – ENR/MACA
- 7.3 Review Comments from DFO
- 7.4 Responses from Stantec/Deline to Reviewer Comments

Respectfully submitted,



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