



Sahtu Land and Water Board

Staff Report

Division: Water Program	Report No. 5
Date Prepared: February 20, 2015	File No. S12L3-006
Meeting Date: March 5-6, 2015	
Subject: Deline Solid Waste Disposal Facility and Sewage Lagoon Closure and Reclamation Plan - Version 2	

1. Purpose/Report Summary

To inform the Board about the Closure and Reclamation Plan for the old Deline Landfill and Sewage Lagoon Facility.

2. Background

2.1 Project Overview

Part G, Item 1 of Water Licence S12L3-006 requires the submission of a Closure and Reclamation Plan (CRP) at least six months prior to the closure of any water and/or waste disposal facility. A CRP for the Solid Waste Facility was submitted to the Board March 14, 2013, reviewed by 20 agencies and found to be inadequate. April 19, 2013 the Board indicated that the Plan could not be accepted or approved in its current form. ENR and MACA committed to working with the Community of Deline to assist in the development of a mutually agreed upon Plan. An implementation schedule was provided on July 5, 2013, outlining the roles and responsibilities of each party in developing a suitable CRP. On July 19, 2013, the Board requested a deadline of August 1, 2014 for the submission of Closure and Reclamation Plans for the Solid Waste Site and Sewage Lagoon. An extension for the plan was granted by the Board with the revised plan submitted September 26, 2014.

The revised plan addresses the Site which consists of landfill areas and sewage lagoons that are currently in use but have exceeded their life expectancy. The Site is located approximately 1.5km northwest of the Charter Community of Deline on Commissioner's land. The Site was originally developed as a gravel pit in the early 1970s with construction of the primary sewage lagoon cell by the late 70s and the secondary lagoon cell and landfilling commencing in 1980s. A new solid waste disposal facility and sewage lagoon has been complete and is scheduled to be brought online concurrently with the closure and reclamation of the current Site.

The total Site area is approximately 19.5 ha.

Site-specific data used to develop this plan was obtained from an Environmental Site Assessment (ESA) conducted by Tetra Tech EBA in October 2013. The ESA report is provided in Appendix E.

The CRP provides an implementation plan but not a detailed schedule:

Implementation Plan

- Installation of erosion control measures within the drainage ditches, outfalls, or other structures
- Drainage of lagoon cells and Honey bag pit
- Relocation and disposal of all hazardous and non-hazardous material
- Excavation and treatment of contaminated soil on site in a bio-pile within a hazardous storage cell
- Deconstruction of the lagoon and honey bag pit
- Regrading and contouring of the site using the cut/fill method of onsite material
- Installation of clay barrier layer, followed by sand and gravel layer and seeding/re-vegetation
- Construction of drainage ditches, swales and berms
- Implementation of the groundwater monitoring program

It is anticipated that site closure will be complete 2 years from the CRP approval date.

2.2 Process Requirements

Revised Plan Received: September 26, 2014

Number of Review Agencies: 20

Review Period End Date: October 24, 2014

3. Other Agency Comments

The Closure and Reclamation Plan was circulated to 20 organizations requesting a reply by October 24, 2014. To date three organizations have responded. The following organizations offered comments on the Plan:

- **Department of Fisheries and Oceans**
 - DFO recommended that the Applicant seek input from Environment Canada regarding effluent quality as it relates to pollution prevention provisions of the *Fisheries Act*.
- **Environment Canada**
 - EC had no comments on this Plan
- **ENR**
 - ENR recommends that a “time schedule”, as specified in Part G Item 4 of the Water Licence be established and added to the CRP.
 - ENR recommends the CRP provide details on the construction/design to be used to prevent contaminants from leaching underneath the biopile area during remediation.
 - ENR recommends the CRP be updated to include details relating to vehicle fluids removal and disposal, as well as the lifecycle of vehicles used for spare parts.
 - ENR recommends provision of research and documents that the remediation of solids on site around the Charter Community of Deline will work in the expected/average climate conditions.
- **Responses from Deline (MACA)**
 - Responses to ENR were mainly noted, clarified, or agreed with.

-Preference would be to issue an addendum to the plan to address concerns versus modifying the entire document

Please see the attachments for complete comments.

All review comments were emailed to the Charter Community of Deline, MACA and ENR for their information and follow-up action as required on December 9, 2014 with a deadline for responses February 9, 2015. Responses from MACA, in consultation with the Charter Community of Deline, were received February 4, 2015 and are also attached.

5. Conclusion

Based on reviewer comments the CRP is a considerable improvement from the original Plan however additional clarification, specifically a detailed implementation schedule, is required to ensure proper reclamation and closure of Deline's Landfill and Sewage Lagoon.

6. Recommendation

It is recommended that the SLWB approve the CRP to allow MACA and ENR to begin the process of retaining a consultant to prepare tender documents, develop a detailed implementation schedule and prepare the CRP addendum. Board staff suggest giving a 90 day period for delivery, at which time, if all concerned parties are satisfied, the Plan be finalized.

7. Reference Material Attached

- 7.1 Review Comments from GNWT - ENR
- 7.2 Review Comments from Environment Canada
- 7.2 Review Comments from DFO
- 7.3 Responses from MACA/Deline to Reviewer Comments
- 7.4 Reviewer Comment and Proponent Response Table

Respectfully submitted,



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Executive Director Comments:

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