



GWICH'IN LAND AND WATER BOARD

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Reasons for Decision

File Number:	G03L3-001	Type:	"B" Municipal Water Licence
Applicant:	Hamlet of Fort McPherson		
Activity:	Construction of a New Solid Waste Disposal Facility, Fort McPherson, NT.		
Board Meeting:	July 24, 2018		

1.0 Background

In accordance with Municipal Water Licence G03L3-001¹ Part H, the Hamlet of Fort McPherson submitted to the Gwich'in Land and Water Board (GLWB or the Board) for approval a proposal to construct a new Solid Waste Disposal Facility (SWDF) ² The documents were circulated for public review on July 3, 2018. By July 19 the following reviewers had submitted comments³:

- Environment and Climate Change Canada (ECCC)
- GTC Department of Cultural Heritage (GTC DCH)
- Gwich'in Renewable Resources Board (GRRB)
- Government of the Northwest Territories Environment and Natural Resources (GNWT ENR)

2.0 Decision

On July 24, 2018 the Gwich'in Land and Water Board met to consider the project description report, aerial images and engineering diagrams submitted by the Hamlet of Fort McPherson under part H of Municipal Water Licence G03L3-001. The Board has decided not to approve the proposal and provides the following Reasons for Decision and Direction.

¹See GLWB (www.glwb.com) Online Registry for [Water Licence G03L3-001](#)

² See GLWB Online Registry for [Project Description Report](#), [Aerial images](#), and [Engineering Diagrams](#)

³ See GLWB Online Registry for [Review Comment Summary Table](#)

3.0 Reasons for Decision

3.1 Water Licence Amendment Application Required

During the preliminary file review Board staff determined that the proposed construction activities would require Board approval under Part H of Water Licence G03L3-001. Staff Reviewed the 2003 preliminary screening report and past submissions to the Board, which suggested that the proposed activities and location of the proposed SWDF were of the same nature as those considered during initial scoping activities. However, during the public review period, staff further noted that the definition of Solid Waste Disposal Facilities is highly specific and would need to be changed to reflect the proposed development. (*"Solid Waste Disposal Facilities" comprises the area and associated structures designed to contain solid wastes as described in Section 4.3 of the "Fort McPherson Water License Background Report", December 13, 2013 Stantec*⁴). During the review period, GNWT ENR also suggested that a Water Licence Amendment might be required, and requested the Board clarify if the within the footprint of the currently issued Water Licence project description (ENR Comment 4).

Section 4.3 of Stantec's 2013 report describes the SWDF as generally being located adjacent to the Sewage Lagoon on Lot SK-193, while further details, photos and tables within section 4.3 of the 2013 report provide specific descriptions and locations of each of the SWDF components. The Board ascertained that although the proposed SWDF would still be located on Lot SK-193, and still be adjacent to the lagoon, it would no longer reflect the descriptions provided in Table 4-1. The Board concluded that this would ultimately result in a change to the areal extent of the current Water Licence, and it would require a change to the *Solid Waste Disposal Facilities* definition. As such, the Board has decided that the proposed activities will require additional screening under Section 125 of the *Mackenzie Valley Resource Management Act*, and amendment to the existing Water Licence.

3.2 Additional Information Required

The Board notes that the construction of a new SWDF has been contemplated by the Hamlet of Fort McPherson for more than a decade, and that a number of recommendations have been provided to the Hamlet during this time:

- During the 2003 renewal of Fort McPherson's municipal Water Licence, the Hamlet identified that the Solid Waste Disposal Facility (SWDF) was nearing capacity and committed to undertaking incremental improvements to the infrastructure⁵. In 2004, EarthTech prepared a Waste Study Report⁶ for the Hamlet that concluded that the SWDF had a lifespan of less than 20 years, and ideally should be replaced within three years; it recommended that detailed geotechnical information should be collected for the site in order to prepare appropriate development plans.
- In 2006, the Hamlet completed a Solid Waste Planning Study⁷. This study recommended improvements to bulky waste and tire collection, appropriate hazardous waste segregation and treatment, and prohibition of burning at the new location. It also suggested that Operations and Maintenance Plans be developed for the existing SWDF and landfarm area, and that detailed land survey and geotechnical study should be completed prior to any construction.
- In 2008, the Hamlet presented to the Board for approval a Landfill Design Report⁸. This report was

⁴ See GLWB Online Registry for [Background Report - Dec16_13](#)

⁵ See GLWB Online Registry for [Water Licence Application - July06_03](#)

⁶ See GLWB Online Registry for [2004 Waste Study Report - Mar26_04](#)

⁷ See GLWB Online Registry for [2006 Solid Waste Planning Study - Apr01_06](#)

⁸ See GLWB Online Registry for [Landfill Design Report - Jun19_08](#)

circulated for review, and comments were received from GWNT ENR⁹, who provided the following recommendations:

1. Develop an Abandonment and Reclamation Plan be for the existing SWDF
2. Update Operations and Maintenance Plan to address drainage and leachate management, windblown debris, hazardous waste segregation and management
3. Submit for approval a landfarm management plan
4. Develop new SNP Station(s) to monitor run off from new facility

The GLWB requested that the Hamlet respond to ENR's 2008 recommendations and provide additional information, but no response was received, and construction appears to have been shelved.

Water Licence Inspection Reports from 2003 – 2016 demonstrate a weak Water Licence compliance record, and incomplete information in several key areas¹⁰. For example: Surveillance Network Program (SNP) samples have not been collected, Annual Reports are incomplete, the Operation and Maintenance plan for the Waste Disposal Facilities has not been updated since 1997, and the Spill Contingency Plan on file pertains to only the Water Intake Facility. Because of this historical performance, the Board has concerns regarding the operations and maintenance of the proposed facility as presented, and further notes that the recommendations made in past reports and during public review periods have not been incorporated into the current submission.

During the public review of the 2018 proposal, GNWT ENR and GRRB also indicated that the project report lack sufficient details, and requested the proponent provide additional information. This includes details on engineering design, construction equipment, drainage and leachate management, windblown debris, O&M for both SWDF and Landfarm cell, access control, wildlife impacts, and hazardous waste management procedures. (ENR 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18; GRRB 1, 5, 6, 7, 8)

4.0 Board Direction

In order for the GLWB to consider the proposed construction activities, the Hamlet must submit to the GLWB for approval a Water Licence amendment (or renewal) application which includes:

- An updated Project Description report including:
 - Detailed geotechnical and hydrological information;
 - Up to date engineering drawings;
 - Detailed equipment list; and
 - References to the ECCC's *Solid Waste Management for Northern and Remote Communities Guidelines*¹¹
- Updated Operation and Maintenance Plan for the new Solid Waste Disposal Facility, including the proposed Landfarm - in accordance with the MVLWB/GNWT *Municipal OMP template*¹²;
- Updated Spill Contingency Plan, in accordance with the MVLWB/GWNT *Municipal Spill Plan template*¹³; and
- A conformance table which demonstrates how the comments and recommendations received during the review of the proposed SWDF construction have been incorporated into the application.

⁹ See GLWB Online Registry for [ENR Comments on Landfill Report - Aug05 08](#)

¹⁰ See GLWB Online Registry for [Inspection Reports](#)

¹¹ See Canada.ca for [Solid Waste Management for Northern and Remote Communities Guidelines](#)

¹² See MVLWB.com for [Operation and Maintenance Plan Templates for Municipal Water Licences: Solid Waste Disposal Facility](#)

¹³ See MVLWB.com for [Operation and Maintenance Plan Templates for Municipal Water Licences: Spill Contingency Plan](#)

Should you have questions pertaining to this file, please contact AlecSandra Macdonald by email at amacdonald@glwb.com or by phone at (867) 777-4954.

Sincerely,

A handwritten signature in black ink, appearing to read 'Elizabeth Wright', with a small flourish at the end.

Elizabeth Wright
Chair, Gwich'in Land and Water Board