



Staff Report

Applicant: City of Yellowknife	
Location: Yellowknife, NT	Application: MV2009L3-0007
Date Prepared: April 11, 2015	Meeting Date: April 18, 2016
Subject: Solid Waste Disposal Facility - New Landfill Cell Design Drawings	

1. Purpose/Report Summary

The purpose of this report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board) a design report for the construction of a new landfill cell at the solid waste disposal facility submitted by the City of Yellowknife (the City) to satisfy Part D, item 11 of Water Licence (Licence) MV2009L3-0007.

2. Background

- May 31, 2010 – Licence issued;
- March 7, 2016 – The City submitted drawings and specifications for construction of a new landfill cell;
- March 8, 2016 – Submission circulated for review comments and recommendations;
- March 28, 2016 – Reviewer comment deadline;
- April 6, 2016 – Response to comments received;
- **April 28, 2016 – Submission presented to the Board for decision;**
- May 30, 2022 – Licence expiry.

3. Discussion

On March 7, 2016, the City submitted a design report for the construction of a new landfill cell at the solid waste disposal facility to satisfy Part D, item 11 of Licence MV2009L3-0007. This condition states:

The Licensee shall, at least 90 days prior to construction of a new landfill cell at the Solid Waste Disposal Facilities, submit to the Board for approval, a design report that is signed and stamped by an Engineer that shall include, but not be limited to:

- a) *Final design drawings signed and stamped by an Engineer which note “issued for construction” or similar phrase clearly shown;*
- b) *Construction and materials specifications; and*
- c) *Construction Quality Assurance and Quality Control program.*

The City anticipates construction of the new landfill cell to commence at the end of May 2016. The City issued the tenders for this work at the same time that the drawings and specifications were submitted to the MVLWB for review. The City states that recommendations on cell design from the review will be incorporated in construction plans. Board staff note that the timing of the City’s submission means that they will not meet the 90 day timeframe prior to construction that is required in the Licence.

4. Comments

Not applicable.

5. Reviewer Comments

By March 28, 2016, comments and recommendations on the submission were received from the following two reviewers:

- Government of the Northwest Territories - Environment and Natural Resources submitted a no-comment letter; and
- Board staff.

The City responded on April 6, 2016. The reviewer comment summary table (attached) presents the concerns identified through the review of the submission.

6. Security

Not applicable.

7. Conclusion

Board staff concludes that this submission satisfies the requirements of the Licence and have not identified outstanding concerns which would prevent the Board from approving the submission.

8. Recommendation

Board staff recommends the Board approve the design report for the construction of a new landfill cell at the solid waste disposal facility as submitted by the City of Yellowknife.

9. Attachments

- [Cover letter for Design Report](#)
- [Design Report – Drawings](#)
- [Design Report – Specifications](#)
- Reviewer Comment Summary Table
- Draft Reasons for Decision
- Draft Decision Letter from the Board

Respectfully submitted,

Reviewed by,



Miki Ehrlich
Regulatory Officer



Jen Potten
A/Regulatory and Office Manager

Review Comment Table

Board:	MVLWB
Review Item:	City of Yellowknife - Design for New Cell at Solid Waste Facility - MV2009L3-0007
File(s):	MV2009L3-0007
Proponent:	City of Yellowknife
Document(s):	MV2009L3-0007 - City of Yellowknife - Cover letter for new landfill cell drawings and specifications (41 KB) MV2009L3-0007 - City of Yellowknife - New Landfill Cell - Specifications (1 MB) MV2009L3-0007 - City of Yellowknife - New Landfill Cell - Drawings (7 MB)
Item For Review Distributed On:	Mar 8 at 15:27 Distribution List
Reviewer Comments Due By:	Mar 28, 2016
Proponent Responses Due By:	Apr 11, 2016
Item Description:	<p>The City of Yellowknife has submitted a design package to construct a new cell at their Solid Waste Disposal Facility. This submission was made as per Part D, item 11 of Water Licence MV2009L3-0007.</p> <p>Please submit comments and recommendations regarding this submission using the Online Review System.</p> <p>If you have questions or comments regarding this review or the Online Review System please contact Miki Ehrlich at (867)766-7469 or mehrlich@mvlwb.com.</p>
General Reviewer Information:	<p>In addition to the email distribution list, the following organizations received review materials by fax:</p> <ul style="list-style-type: none"> •Fort Resolution Métis Council - Trudy King (867)394-3322 •Hay River Metis Council - Karen Lafferty, President (867)874-4472 •NWT Metis Nation - Tim Heron, NWTMN IMA Coordinator (867)872-3586

Contact Information:	Heather Scott 867-766-7463 Jen Potten 867-766-7468 Miki Ehrlich 867-766-7469
-----------------------------	--

Comment Summary

GNWT - ENR: Central Email GNWT

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	General File	Comment (doc) ENR Letter - No Comments or Recommendations at this time. Recommendation		

MVLWB: Heather Scott

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	Groundwater Monitoring Infrastructure	Comment (Submitted after Due Date) As per industry standards and guidelines in other jurisdictions, landfill design should include the design of groundwater monitoring infrastructure. As recommended by the MVLWB previously (May 22, 2015, Interim Closure and Reclamation Plan Approval Letter), groundwater monitoring infrastructure for the new landfill cell shall include: Appropriately located and spaced groundwater wells, including wells up and down-gradient from the solid waste facility, in all groundwater flow paths from the solid waste facility to receiving surface water bodies; . Consultation on the location of groundwater wells by a hydrogeologist or equivalent expert in the field of groundwater monitoring;	Apr 6: The City of Yellowknife intends to include the installation of groundwater infrastructure with the new landfill cell. In order to reduce the overall costs involved, the City did not include the installation of groundwater monitoring wells in this contract and will instead be issuing a separate contract for this work. The City's consultant on the Cell B project has experts in this field and will be designing the location of the wells for installation.	Satisfactory response.

		<p>and . Consultation of the Alberta Guidelines, in lieu of specific NWT guidelines on groundwater monitoring for municipal solid waste facilities.</p> <p>Recommendation Please provide any information with respect to the groundwater infrastructure that will be installed with this new landfill cell design.</p>		
--	--	---	--	--

March 29, 2016

Miki Ehrlich
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O. Box 2130
Yellowknife, NT
X1A 2P6

Dear Ms. Ehrlich,

**Re: City of Yellowknife
Water Licence – MV2009L3-0007
Design for New Cell of Solid Waste Facility
Request for Review and Comments**

The Department of Environment and Natural Resources, Government of the Northwest Territories has reviewed the information at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Waters Act* and the *Wildlife Act* and has no comments or recommendations for the consideration of the Board at this time.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Impact Assessment Section
Conservation, Assessment and Monitoring Division
Department of Environment and Natural Resources
Government of the Northwest Territories