Round 2 Proponent Response

SR Number:	096012	Proponent:	Fundy Regional Service Commission
SR Title:	Crane Mountain Landfill Augmentation and Life Extension Project - Increasing Approved Height		
Project Review ID:	RRID-159	Review Iteration:	2
Response Period Close:	13/12/23		

Comment 1 **Proponent Response ID:** PRID-2397

Review Comment:
Given the increase in waste tonnage managed, has the Fundy Regional Service Commission (FRSC) considered an on-site anaerobic digestion unit at Crane Mountain Landfill?

As mentioned in the Government of New Brunswick (GNB) document 'Our Pathway Towards Decarbonization and Climate Resilience - New Brunswick's Climate Change Action Plan 2022 to 2027': the province supports the development of anaerobic digestor projects as a means to reduce waste-related GHG emissions, divert organics, convert waste into a valuable resource, and promote a circular economy.

Reducing waste-related GHG emissions, diverting organics, converting waste into valuable resources, and promoting a circular economy are also objectives of New Brunswick's Strategic Action Plan for Solid Waste Management 2023 to 2030 - A Roadmap for Transforming our Waste into Materials for Tomorrow.

Proponent Response:
FRSC is continually looking for ways to improve landfill gas (LFG) capture and utilization at Crane Mountain Landfill. FRSC was the first landfill in New Brunswick to install LFG collection system and utilization system, as noted on page 11 of the EIA registration document.

FRSC is also committed to waste diversion through various programs, including the diversion of organics. A significant amount of organics material is diverted from the landfill and turned into compost under current diversion programing, which is currently conducted on a voluntary basis.

Anaerobic digesters have been considered and studied at Crane Mountain Landfill. FRSC is currently working with Innov (the research and development branch of CCNB) on a small scale anaerobic digester unit that processes organic runoff from the composting facility. FRSC is actively exploring the feasibility of a large-scale anaerobic digester with four other New Brunswick Regional Service Commissions. FRSC is also actively exploring small modular anaerobic digesters with SEaB Energy, with a focus on supplementing the supply of LFG.

Although this height increase Project is independent of anaerobic digester projects, FRSC does not rule out the implementation of an anaerobic digester in the future. They may make economic sense as the technology advances, costs decrease, and regulations change.

FRSC is aware of changing federal regulations regarding LFG emissions and Provincial waste collection and waste management policies. While these regulations have not been finalized, FRSC will comply with all future regulations.

Please note, a cover letter containing the responses to this round of TRC comments, as uploaded on the EIA Portal, has been attached for your consideration.

Comment 2 **Proponent Response ID:** PRID-2402

Review Comment:
Pertaining to Comment 2, PRID-2154, of Round 1

The response indicates that, 'relocation of the leachate surge pond is considered outside the scope of this EIA' and that 'determination of this EIA will influence leachate management plans for the landfill and there are currently no detailed plans or designs for the relocation of the leachate surge pond'.

However, leachate management is part of this EIA and required in order to assess if the augmentation plan is acceptable.

DELG does acknowledge that when designed and constructed in 2004 that the leachate surge lagoon was intended to be converted to a MSW containment cell (Cell 17) once the remaining containment area was filled.
During the designed and construction, were there any preliminary relocation plans for the leachate surge lagoon - that would have been reviewed and approved by DELG?
Would the proponent have any records they could provide indicating that a prior review of the leachate surge lagoon has occurred and therefore an updated preliminary plan is not required as part of this EIA?

If not, please describe the process for converting the leachate surge lagoon into a MSW containment cell. Please include how leachate will be handled when the current leachate surge lagoon is being converted to Cell 17.

Proponent Response:
We are not aware of any details regarding the location of future leachate containment being determined in the past. Based on the slope of the site and existing cells and leachate collection systems, a new leachate surge lagoon or holding pond would likely be constructed outside of the waste containment area, to the east of existing containment cells. See attached sketch showing possible locations of a future leachate surge lagoon.

The existing leachate surge lagoon was constructed with a composite liner, consisting of 600 mm of re-compacted marine clay and an 80 mil thick HDPE geomembrane. This liner detail matches the approved liner detail for Crane Mountain landfill. All existing cells at Crane Mountain Landfill have the same liner as the surge lagoon.

A QA/QC report summarizing all test results for the surge lagoon was provided to NBDELG in 2005. A scanned copy of this report is attached. This report shows that the leachate surge lagoon met NBDELG requirements for containment cells.

Converting the leachate surge lagoon to a containment cell will involve the following measures:

- Removal or decommissioning of pipes used to convey leachate into the surge lagoon from existing containment cells. This may require the liner be patched in the locations of the pipes.
- Removal or decommissioning of pipes from the from the surge lagoon that convey leachate into taker trucks.
- Partial removal of existing containment cell and lagoon berms, as required to make a continuous containment cell liner between Containment cell 5 and the surge lagoon (or Cell 17).
- Construction of a new composite liner between Cells 5 and the leachate surge lagoon. This new liner would match the materials and thickness of the existing liners (80 mil HDPE geomembrane and 600 mm recompacted clay) meeting NBDELG requirements. The new liner would be tied-in to the existing liners, to make one, large continuous waste containment area.
- Leachate collection layer improvements (potentially including new drainage stone, extending leachate collection pipes, etc.) to meet containment cell requirements and specifications.

All designs and plans associated with construction of a new leachate surge lagoon and re-purposing the existing leachate surge lagoon as a containment cell would be submitted to NBDELG for review and an approval to construct.

FRSC acknowledges that modification to the leachate collection system, leachate treatment system, or transportation methods in the future may require an EIA under provincial regulations.

Comment 3 **Proponent Response ID:** PRID-2399

Review Comment:
Pertaining to Comment 4, PRID-2161, of Round 1

The response indicates, 'pending successful project determination, FRSC will revise the GHG management plan in consideration of this Project. Improvements to and expansion of the LFG collection and utilization infrastructure are expected to reduce GHG emissions from the landfill'.

DELG looks forward to receiving a revised GHG Management Plan pending successful project determination and after the project is fully implemented and operational.

Please note that this revised GHG Management Plan should be submitted for review and approval through DELG's Authorizations Branch and the Approval to Operate process.

Proponent Response:
Noted

Comment 4 **Proponent Response ID:** PRID-2396

Review Comment:
In addition to achieving New Brunswick's 2030 greenhouse gas (GHG) emissions target, the province has recently committed to achieving net-zero emissions by 2050.
Going forward, all activities within New Brunswick will need to align with these objectives.

To assist the Crane Mountain Landfill meet these emission targets, please use the best available technologies and practices to reduce or eliminate GHGs from this Project.

Proponent Response:
Noted

Comment 5 **Proponent Response ID:** PRID-2401

Review Comment:
Pertaining to Comment 15, PRID-2110, of Round 1

The response indicated, 'A report on the engagement activities undertaken by FRSC will be submitted to DELG as part of the EIA process'.

When available, as per Section 7.1 of the EIA Registration document - please submit a report documenting the Indigenous Peoples engagement activities that were undertaken, as well as the results of those activities (i.e. comments received and the responses to any such comments) to DELG for review and approval before a Certificate of Determination can be issued for this project.

Proponent Response:
Please see attached report on the Indigenous Peoples engagement activities undertaken by FRSC for this project.

Comment 6 **Proponent Response ID:** PRID-2400

Review Comment:
Pertaining to Comment 16, PRID-2109, of Round 1

The response indicated, 'A report on the public involvement activities undertaken by FRSC will be submitted to DELG as part of the EIA process'.

When available, as per Section 7.2 of the EIA Registration document - please submit a report documenting the Public Involvement activities that were undertaken, as well as the results of those activities (i.e. comments received from the public and the responses to any such comments) to DELG for review and approval before a Certificate of Determination can be issued for this project.

Proponent Response:
Based on feedback, FRSC has decided to conduct an in-person public information session regarding this Project in January 2024. FRSC and GEMTEC will inform NBDELG of date, location, and time once arrangements have been finalized. A report documenting the Public Involvement activities undertaken, as well as feedback from the public, will be submitted to NBDELG for review after the January 2024 in-person public information session.