

Round 1 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-147 Review Iteration: 1

Response Period Close: 06/09/23

Proponent Response ID: PRID-2158

Comment 1

Review Comment:

Pertaining to re-using cells: is there a management, or process, plan developed for the effective and efficient re-use of each cell?

Please respond to the following questions within the management or process plan, and submit this plan to DELG for review:

- o Are gas pipes being removed, buried, or left in place? How will these pipes be avoided during operations?
- o Will any vegetation or topsoil be removed? If so, where will it go, and would any type of treatment be required?
- o How will trucks access Cells 1 & 2 to avoid destruction of existing infrastructure (i.e. leachate pipes, gas pipes, etc.)?

Proponent Response:

- Although some existing LFG collection pipes located at shallow depths or above existing grade may be removed and re-used in future LFG system expansions, the majority of existing LFG collecting pipes in place on cells 1 through 7 will be abandoned or decommissioned and left in place during the placement of additional municipal solid waste (MSW) as the elevation of the landfill is raised. Please see Tetra Tech's Landfill Gas Master Plan and associated drawings for Crane Mountain Landfill included in this submission for additional details pertaining to LFG infrastructure.
- See attached for the 2023 Crane Mountain Landfill Final Cover (capping) program drawings. As areas of the landfill are raised, the existing "final cover" installed on Cells 1, 2, 3, 6 and 7 will be removed in small, workable sections prior to placing MSW. Materials excavated above the "barrier layer" will include some topsoil vegetated with grass, frost protection material, drainage material, and riprap. These materials may be removed from the MSW containment area. These excavated materials will be stockpiled on the landfill site for use in future caps, used operationally as daily cover, or road construction on the landfill site. Care will be taken to ensure the topsoil, frost protection, and drainage layer material is not mixed with MSW during excavation, and any material that does come into contact with MSW will not be removed from the containment area. The barrier layer components of the cap (geosynthetic clay liner (GCL) or clayey material) will be removed and contained within active containment area. Existing gas venting stone will remain in place. MSW will be placed directly on the gas venting stone material.

- The Landfill containment areas, including Cells 1 and 2, will be accessed via the existing access road located between Containment Cells 7 and 9, as shown on the 2023 capping program drawings. Additional access roads will be built within the MSW containment cell footprint and on top of previously deposited MSW as needed, to access areas. Access roads will be located and constructed to avoid damaging existing infrastructure like LFG wells. There are currently no new plans to build a new access new access roads from the landfill perimeter road into the containment cell area.

Comment 2 Proponent Response ID: PRID-2154

Review Comment:

Currently, there is a leachate surge pond located where the proposed landfill cell 17 will go. Please explain what will happen with the current leachate surge pond before creating cell 17. Please include the location of the replacement leachate surge pond and subsequent piping.

Proponent Response:

When designed and constructed in 2004, the leachate surge pond was purposefully located within the approved landfill containment footprint. The leachate surge lagoon was intended to be converted to a MSW containment cell (Cell 17) once the remaining containment area was filled, and relocation of the leachate surge pond is considered outside the scope of this EIA.

Determination of this EIA will influence leachate management plans for the landfill. There are currently no detailed plans or designs for the relocation of the leachate surge pond. The landfill is considering several options for leachate management in the future. As future leachate management plans are developed, pending EIA determination, FRSC will consult with and obtain approval from all appropriate regulators, including NBDELG.

Comment 3 Proponent Response ID: PRID-2156

Review Comment:

Pertaining to the lift stations – is there an overflow on these stations if the pump is down, or can't handle the flow?

If such a situation occurred - where would the flow go?

Proponent Response:

Additional leachate production is not expected due to the Project, since this Project will not result in an increase in the overall landfill footprint. Existing lift stations and leachate collection infrastructure will continue to be utilized. Each lift house has at least two pumps and FRSC has several back-up pumps, portable gas or diesel pumps, and replacement parts on-site in the case of leachate pump mechanical issues. Each leachate lift station is designed such that leachate can be pumped directly into a truck, or to the leachate surge pond. Historically vacuum trucks with built-in suction capabilities have been hired during extreme precipitation events. These activities are considered normal operational activities at the Landfill and outside the scope of the EIA.

Comment 4 Proponent Response ID: PRID-2161

Review Comment:

Please explain how this Project will impact the objectives established in the Crane Mountain Landfill's 2022 Greenhouse Gas Management Plan - for reducing greenhouse gas emissions and increasing gas collection by 75% at the site.

Proponent Response:

FRSC is aware and acknowledges new LFG and GHG regulations and standards are in development. FRSC will comply with all current and new regulations for the management of GHG, as required. 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.

Comment 5 Proponent Response ID: PRID-2162

Review Comment:

It is understood that Tetra Tech has been retained and is currently developing a new LFG Master Plan. In consideration of achieving Net-Zero GHG emissions by 2050, please ensure that this LFG Master Plan will address the current substantial level of greenhouse gas emissions at the site. Addressing current greenhouse gas emissions in the LFG Master Plan will better align it with the Crane Mountain Landfill's 2022 Greenhouse Gas Management Plan.

Also, please be aware of (and acknowledge) the proposed Federal Regulations on reducing methane emissions from landfills;

<https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/reducing-methane-emissions-canada-municipal-solid-waste-landfills-discussion.html>

Proponent Response:

The Tetra Tech LFG Master Plan document is appended to this submission and addresses how LFG will be managed by the Landfill.

The FRSC is aware and acknowledges the proposed Federal Regulations on reducing methane emissions from landfills. FRSC will comply with all relevant LFG regulations, as required.

Comment 6 Proponent Response ID: PRID-2163

Review Comment:

Once the Landfill Gas Master Plan is available – please submit it to DELG for review and approval.

Proponent Response:

The Tetra Tech LFG Master Plan document is appended to this submission.

Comment 7 Proponent Response ID: PRID-2160

Review Comment:

Please see the attached PDF's - Initial Assessment emails sent to the relevant Aboriginal Nations.

Proponent Response:

Noted. GEMTEC and FRSC will also send Project information and invitation for comments / questions via standard mail to engage Aboriginal Nations. A summary report of the engagement activities will be sent to DELG as part of the EIA process.

Comment 8 Proponent Response ID: PRID-2159

Review Comment:

The Department of Aboriginal Affairs (DAA) has determined that there does not appear to be any adverse impacts on Aboriginal or Treaty rights. Therefore, it is DAA's view that there is no obligation regarding the Crown's Duty to Consult for this project. However, please understand that this assessment may change should additional information on potential impacts to Aboriginal and Treaty rights be brought forward.

DAA will conclude the Province's duty to consult process if no comments are received from First Nations.

Proponent Response:

Noted

Comment 9 Proponent Response ID: PRID-2151

Review Comment:

Subsection 5.5.3 discusses impacts to the viewscape from the proposal and indicates that the facility will become visible at locations where it was not visible previously.

It is not discussed in the document, but there will also be an aesthetic impact at locations where the facility is already viewable (i.e, Route 7). There is also the potential for additional lighting impacts (i.e. lights at higher elevation) to locations where the facility can currently be seen.

Please elaborate on the anticipated aesthetic impacts for locations where the facility is already viewable.

Proponent Response:

Aesthetic effects to areas where the Landfill is already viewable (i.e., Route 7) are expected to be similar to those currently observed, and are considered normal landfilling operations (i.e., disposal of municipal solid waste in constructed cells, compaction works, placement of cover materials, soaring avian species, truck traffic, etc.).

No permanent lights are located on top of current or future planned cells. Vehicle lights may be visible during winter months when daylight is lessened during Landfill operational hours – this occurrence is currently observed on site.

Comment 10 Proponent Response ID: PRID-2152

Review Comment:

Subsection 5.1.2 suggests that there will be no significant increase in fugitive emissions of windblown dust and debris as a result of the undertaking since there are existing mitigations in place to prevent this.

Although the listed mitigations appear to be appropriate, it should be acknowledged that adding to the height of the landfill may nevertheless increase the potential for windblown debris. This is due to the effect of elevation on wind exposure.

Proponent Response:

It is acknowledged in the EIA document that windblown debris is expected at any landfill site. There is an increased potential for windblown debris from wind exposure, however, significant impacts to air quality or aesthetic viewsapes in the assessment area are not expected as a result of the Project.

Comment 11 Proponent Response ID: PRID-2112

Review Comment:

Subsection 5.1.4 of the registration suggests that there will be no significant increase in fugitive emissions of odour as a result of the undertaking (based on analysis of the effect of elevation on windspeed and odour dispersion), and lists the existing mitigations in place to mitigate odour.

Although the listed mitigations appear to be appropriate, it should be acknowledged that adding to the height of the landfill may nevertheless increase the potential for odour. This is due to the effect of elevation on wind exposure and the increased surface area of the cells.

Proponent Response:

It is acknowledged in the EIA document and in the Tetra Tech LFG Master Plan (appended) that recoverable LFG volumes are not expected to exceed the capacity of the Gas Collection and Control System (GCCS) at the Landfill, and that the system will be expanded, as required. LFG is the primary source for odorous emissions. As noted in the EIA document, there is an increased potential for odorous emissions, however, significant impacts to air quality in the assessment area is not expected due to wind exposure. FRSC intends to maintain or decrease the open (uncapped) areas of the landfill and an increase in open surface area is not planned.

Comment 12 Proponent Response ID: PRID-2153

Review Comment:

Subsection 5.1.3 states that noise emissions from the facility will not be significantly impacted by the project and discusses the existing mitigations with respect to same.

Please note that the potential noise impacts appear to have been suitably considered and the mitigations appear appropriate considering the remoteness of the facility.

The potential for significant offsite noise impacts appears to be low.

Proponent Response:

Noted.

Comment 13 Proponent Response ID: PRID-2157

Review Comment:

The Monarch butterfly was identified within a 5 km radius of the Project Development Area (PDA). Is there suitable habitat for this species within the PDA, and if so - what mitigative measures are being considered to reduce potential impacts to the Monarch?

Proponent Response:

Once final cover is installed, the cap is overlain by topsoil and seeded with a standard highway mix of seed. Maintenance mowing of the capped landfill area, roadside ditching, and landscaping is undertaken as part of normal Landfill operations. No additional mowing activities are required to support the Project. The PDA does not provide suitable habitat for Monarch butterflies.

Comment 14 Proponent Response ID: PRID-2155

Review Comment:

For Table 9 - Summary of Proposed Mitigation Measures;

In the event that an active bird nest(s) is encountered, all disturbance work should temporarily stop and a buffer should be placed around the nest(s). Please consult with the Canadian Wildlife Service or the Department of Natural Resources and Energy Development's Species At Risk Section 506-453-5873, to determine the size of the buffer. Any nest discovered should not be disturbed until the chicks have fledged.

It should be noted that bird nests should never be marked using flagging tape or other similar material as this increases the risk of nest predation.

Proponent Response:

Noted.

Comment 15 Proponent Response ID: PRID-2110

Review Comment:

As per Section 7.1 of the EIA Registration document, a report documenting 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) will have to be provided to DELG for review and approval before a Certificate of Determination can be issued for this project.

Proponent Response:

Noted. A report on the engagement activities undertaken by FRSC will be submitted to DELG as part of the EIA process.

Comment 16 Proponent Response ID: PRID-2109

Review Comment:

As indicated in Section 7.2 of the EIA Registration document, 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) will have to be provided to DELG for review and approval before a Certificate of Determination can be issued for this project.

Proponent Response:

Noted. A report on the public involvement activities undertaken by FRSC will be submitted to DELG as part of the EIA process.

Comment 17 Proponent Response ID: PRID-2111

Review Comment:

In addition to the 'expected public involvement' outlined in Section 7.2 of the EIA Registration document - the project description and invitation for comments / concerns must be sent to the Crane Mountain Enhancement Inc Organization.

Proponent Response:

Noted. Email communication containing a link to the EIA document and invitation for questions / comments was sent to the Chair of Crane Mountain Enhancement Inc (CMEI), John – Francis Doubt, on August 21, 2023. At the time of this submission, no formal comments or questions from CMEI have been received by FRSC or GEMTEC in regard to this project.

Comment 18 Proponent Response ID: PRID-2148

Review Comment:

The federal environmental assessment process is set out in the Impact Assessment Act (IAA). The Physical Activities Regulations (the Regulations) under IAA set out a list of physical activities considered to be “designated projects.” For designated projects listed in the Regulations, the proponent must provide the Agency with an Initial Description of a Designated Project that includes information prescribed by applicable regulations (Information and Management of Time Limits Regulations).

Based on the information submitted to the Province of New Brunswick on the proposed Crane Mountain Landfill Augmentation and Life Extension Project, it does not appear to be described in the Regulations. Under such circumstances the proponent would not be required to submit an Initial Description of a Designated Project to the Agency. However, the proponent is advised to review the Regulations and contact the Agency if, in their view, the Regulations may apply to the proposed project.

Proponent Response:

Noted.

Comment 19 Proponent Response ID: PRID-2149

Review Comment:

The proponent is advised that under section 9(1) of the IAA, the Minister may, on request or on his or her own initiative, by order, designate a physical activity that is not prescribed by regulations made under paragraph 109(b) if, in his or her opinion, either the carrying out of that physical activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects, or public concerns related to those effects warrant the designation. Should the Agency receive a request for a project to be designated, the Agency would contact the proponent with further information.

Proponent Response:

Noted.

Comment 20 Proponent Response ID: PRID-2150

Review Comment:

The proposed project may be subject to sections 82-91 of IAA. Section 82 requires that, for any project occurring on federal lands, the federal authority responsible for administering those lands or for exercising any power to enable the project to proceed must make a determination regarding the significance of environmental effects of the project. The Agency is not involved in this process; it is the responsibility of the federal authority to make and document this determination.

The proponent is encouraged to contact the Agency at (902) 426-0564 if it has additional information that may be relevant to the Agency or if it has any questions or concerns related to the above matters.

Proponent Response:

Noted.

Comment 21 Proponent Response ID: PRID-2164

Review Comment:

Please note that not all TRC members were able to provide comments in time to be included in this report. Therefore, please expect additional comments. Additional comments will be forwarded along as soon as they are available.

If the responses to comments provided to date are ready before receiving additional comments, please contact me to discuss before actually submitting the responses.

Proponent Response:

Noted. This document includes comments received via the EIA Portal by August 1, 2023. It is understood additional comments may be received by the Proponent in a second iteration of TRC review.

Comment 22 Proponent Response ID: PRID-2165

Review Comment:

The Archaeological & Heritage Branch has assessed this Project as having low archaeological potential. No further assessment is required.

However, please note as per Section 9 of the Heritage Conservation Act, should any archaeological object, burial object, or human remains discovered during the project must be reported to the Minister of Tourism, Heritage and Culture as soon as practicable at (506) 453-2738.

Proponent Response:

Noted.

Comment 23 Proponent Response ID: PRID-2171

Review Comment:

Any alterations that are in or within 30 metres of a watercourse or wetland as per the Clean Water Act will require a WAWA permit.

Proponent Response:

Noted. WAWA permits will be obtained as required per the Clean Water Act.

Comment 24 Proponent Response ID: PRID-2172

Review Comment:

Please provide a Wetland Delineation Report as per the Protocols for Wetland Delineations: <https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Wetlands-TerreHumides/ProtocolForWetlandDelineation.pdf>

Proponent Response:

A Wetland Delineation Report is appended to this submission.

Comment 25 Proponent Response ID: PRID-2173

Review Comment:

Please revise the site plan to include the ground assessment of wetlands in relation to the proposed work and include all the proposed alterations and permanent impact areas within the 30 metre buffer zones of wetlands and watercourses.

Proponent Response:

The delineated wetland is presented on Figure 2 (Project Site Plan) and Figure 6 in the EIA registration document. No additional footprint outside the approved Landfill footprint is required for this project.

Review Comment:

A Wetland Compensation Plan will need to be submitted, and approved, for all wetlands permanently impacted by this project.

Please confirm - will there be any proposed permanent impacts to wetland as a result of this project.

Please note, as per the Wetlands Conservation Policy, a three-step mitigation approach is taken when reviewing proposed projects in or within 30 metres of a wetland.

The three steps include: avoidance of the wetland and its buffer to the extent possible, minimization of impacts, and mitigating the effects of the project.

If avoidance of the wetland is not possible, all permanent loss of wetland would require compensation at a 2:1 ratio.

Additional information on wetland compensation in New Brunswick can be found in the compensation general guidance document:

<https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Wetlands-TerreHumides/WetlandCompensationGeneralGuidance.pdf>

Additionally, although compensation is a last step to the Departments mitigation approach according to our Wetlands Conservation Policy, it is the responsibility of the applicant to identify and address potential avoidance and minimization efforts through the project planning phase prior to compensation being considered.

Proponent Response:

This project will not permanently impact wetlands as it pertains only to the height increase of the Landfill. The overall operation of the Landfill (considered outside the scope of this project) will permanently impact wetlands as new disposal cells are constructed. A Wetland Compensation Plan will be developed and submitted to NBDELG prior to any alterations within 30-metres of regulated wetland on-site, as required. The timeline for the submission of a Wetland Compensation Plan is dependent on the approval of this undertaking as the height increase will significantly delay the requirement for new cells to be constructed.