

Technical Advisory Committee Comments

Tundra Oil & Gas Limited - North Solution Gas Gathering Flowline Project

File No. 6135.00

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Memorandum

Date: January 14, 2022

To: Eshetu Beshada
Acting Engineering Manager
Environmental Approvals Branch
Eshetu.Beshada@gov.mb.ca

From: Brian Kiss
Habitat Mitigation Biologist
Wildlife, Fisheries and Resource
Enforcement Branch
Brian.Kiss@gov.mb.ca

Subject: File: 5960.10 – Tundra Oil & Gas Limited – North Solution Gas Gathering Flowline Project

The Wildlife component of the Wildlife, Fisheries and Resource Enforcement Branch has reviewed the Environment Act Proposal for File 6135.0 and offers the following comments and suggestions:

- 5.9.3 – What process will be followed and mitigation applied if stick nests or dens are observed along the RoW during construction?
- 5.9.5 - Overall, we appreciate that efforts were made to avoid sensitive wildlife areas, including some route deviations due to the presence of sharp-tailed grouse lek sites. We also appreciate that no construction will occur during the spring lekking period. Despite this mitigation, we request that grouse activity on the lek within SE-35-009-29W1, located 86 m from the RoW, be monitored for at least two years post-construction to determine continued use. If the lek is not being used post-construction, it may indicate that natural reclamation has not been successful and progressive efforts are needed. Areas used for lekking can spread some distance from what is likely stated as a centroid, and the surround habitat is an important feature of lek selection and nesting activity as well. We understand that various other factors may influence lek occupation, but regardless, the portion of the RoW immediately adjacent to the lek site should be monitored and reclaimed to pre-construction conditions.
- 6.4.4.3 - The Water Branch, within Agriculture and Resource Development, is the appropriate project area for consultations to determine the need for suitable compensation for lasting impacts to wetlands.
- 8.4 - We appreciate that post-construction assessments are being considered to evaluate vegetation reclamation and invasive species presence. We recommend that such monitoring plans and resulting reports should be required as a licence condition.

DATE: December 30, 2021

TO: Elise Dagdick
Environmental Approvals Branch
1007 Century St, Winnipeg, MB
R3H 0W4

FROM: Joy Kennedy
Water Quality Management Section
Manitoba Agriculture and Resource
Development

SUBJECT: TUNDRA OIL & GAS LIMITED – NORTH SOLUTION GAS GATHERING
FLOWLINE PROJECT, FILE: 6135.00

- The proposal indicates a potential risk is a reduction in surface water quality due to an accidental release. The Water Quality Management Section recommends the proponent be required to clarify details of plans to detect, stop and control the migration of contaminant, and clean up a spill.
- The proponent indicates a flowline test using methanol as the test medium. Can the proponent discuss/explore alternatives to using methanol that are less toxic to surface water?
- At each of the two (2) river crossings, the proponent should be required to collect samples for total suspended solids (TSS) not to exceed 5mg/L or 25 mg/L induced change from Pipestone Creek background as per the Manitoba Water Quality Standards, Objectives and Guidelines Regulation (196/2011).
- The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director.



DATE: January 25, 2022

TO: Elise Dagdick, B.Sc.
Environment Officer
Environmental Approvals Branch
Environment, Climate, and Parks

FROM: Groundwater Management Section
Water Branch
Environment, Climate, and Parks

FILE: 5.07.04.02

REFERENCE: File 6135.00, Tundra Oil & Gas Limited – North Solution Gas Gathering Flowline Project

In response to a request for a review and comment on an Environment Act Proposal (EAP), submitted by Tundra Oil & Gas Limited (Tundra) – Environmental Assessment, North Solution Gas Gathering Flowline Project (the "Project"), Kola and Cromer to Sinclair, Southwestern Manitoba - File 6135.00, the Groundwater Management Section has conducted a review of the Tundra EAP prepared by Matrix Solutions Inc., Version 1.0, and dated November 2021.

The Flowline Project is proposing to construct six, new interconnected flowline segments, totaling 46 km in length, within a 20 m wide right-of-way (ROW), starting 2 miles east of Kola, MB (12-24-10-29 W1M), with a southern leg terminating (16-32-7-29 W1M) proximate to a compressor terminal northwest of Sinclair, MB and a north-eastern leg terminating east of the Cromer, MB (13-10-9-28 W1M). The 4/5-inch fiberglass/composite and 10-inch HDPE lines will be ploughed or trenched (or directionally drilled) and built to incorporate two existing flowline segments located southwest of Cromer. The flowline will collect and transport unrefined solution natural gas from six existing battery facilities to the Steel Reef gas collection facility, located northwest of Sinclair, MB. All ROW lands are reportedly privately owned (96% of the land has been acquired, as per the EAP report date) and land usage is primarily for agriculture.

COMMENTS

Several phases of the flowline project could have potential impacts to the local groundwater, including construction, hydrostatic testing, and operation of the flowline. Depth to the base of the trenching during construction is reported to be 5.5 feet below ground surface (bgs). The Project area at select locations is within approximately 10 km of the Saskatchewan border.

A review of groundwater wells in the Section database indicates that generally, groundwater wells located with the ROW area have depths to groundwater located between ground surface and 3 meters bgs or deeper. Select groundwater wells within the larger, overall study area for the EAP have observed flowing well conditions, with water levels above ground surface and even up to or greater than 3 meters above ground surface.

Data from groundwater wells proximate to the proposed flowline ROW indicate various active wells with water production occurring between depths of approximately 15 to 25 feet bgs. Numerous residences were reported within the overall larger study area.

As noted above, groundwater wells in the local study area can be shallow and the potential exists for contamination migration through groundwater.

All spill contingency and response plans, whether during the construction, testing, or operation phases, will need to include a notification to land owners and the identification of the active groundwater wells that could potentially be impacted.

Table 5.2 provides mitigation measures for groundwater impacts, including the "field verification of registered or known water well users within 200 m of flowline construction excavation" activities, however, this does not include pre-spill planning or notification during other project phases such as testing or operation. Note that wells are not registered in Manitoba but recorded.

Section 8.1.1 indicates that Tundra or Tundra's contractors will create project-specific contingency plans in the event of accidental spills. No other details were provided, nor were plan recommendations provided. These plans should be completed prior to construction.

The actual depth of the directional drilling activities, beneath the two Pipestone Creek crossings and at the other locations along the flowline ROW are not confirmed within the EAP and should be considered in relation to the potential of aquifers at the crossing locations or the presence of shallow groundwater wells.

Specifically, the EAP does not evaluate the potential impact the flowline construction/operation might have on the current groundwater resources of the area. If there are any potential impacts, there should be an inventory of wells within the area, prior to a release occurring, and the plan should provide a description of the proposed environmental practices to be employed to prevent or mitigate adverse implications from the impacts.

Please be advised that the review with respect to groundwater conditions is completed based on the information provided by Tundra. The comments, conclusions & recommendations of the review are solely based on the information provided by others and the Section cannot guarantee that the information provided by others is accurate or complete.

Groundwater Management Section
Water Branch
Environment, Climate, and Parks
|

From: Porteous, Marianne (ARD)
Sent: December-15-21 2:17 PM
To: Dagdick, Elise (CC)
Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Hi Elise,

No concerns from the Forestry and Peatlands Branch.

Marianne

From: +WPG1195 - Mines BR (ARD)
Sent: December-29-21 4:07 PM
To: Dagdick, Elise (CC)
Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Hi Elise,

Mines Branch has no concerns, as the routing does not coincide with mineral or quarry tenure, or important aggregate resources.

Tim Davis
GIS Specialist
Mineral Tenure and Regulatory Services, ARD

From: Leonen, Leonardo (ARD)
Sent: January-12-22 1:18 PM
To: Dagdick, Elise (CC)
Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Good afternoon Elise,

Petroleum Branch has no concerns outside The Oil and Gas Act (OGA) aspect of the EAL application. Petroleum Branch is currently doing a separate review to the proponent's required OGA application. EAL is a pre-requisite (if applicable) for our flowline licence approvals.

Thank you.

Leo

From: Fagan, Paul (CC)
Sent: December-17-21 1:19 PM
To: Dagdick, Elise (CC)
Subject: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Hi Elise

Manitoba Conservation – Environmental Compliance and Enforcement has reviewed the aforementioned proposal and has no concerns at this time.

I have provided comments for the proponents consideration.

The proponent is reminded that all petroleum storage facilities (worksite tanks, mobile tanks etc.) are required to be in compliance with the Petroleum Storage Regulation and facilities are permitted under said regulation where required.

All wastewater (sewage, greywater) at worksites and staging areas etc. is required to be in compliance with the Onsite Wastewater Management Systems Regulation. MR 83/2003

In the event of an emergency spill or release during construction activities ensure reportable releases are reported to our Environmental Emergency Response line at 204 944-4888, Toll Free 1-855-944-4888

Regards

Paul Fagan B.Sc.
Environment Officer - Western
Manitoba Conservation & Climate
Environmental Compliance and Enforcement

From: +WPG530 - Drinking Water - Approvals (CC)
Sent: December-13-21 3:19 PM
To: Dagdick, Elise (CC)
Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

No concerns.
Office of Drinking Water (ODW)

Cory Vitt, CMMA M.Eng. P.Eng.
Approvals Engineer
Office of Drinking Water
Department of Conservation and Climate

From: Butterfield, Tamara (CC)
Sent: December-13-21 10:21 AM
To: Dagdick, Elise (CC)
Cc: Nicklin, Darren (CC)
Subject: FW: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Hi Elise,

I have reviewed the EA proposal, if water is being used for Hydrostatic Testing or for any other use (i.e. dust suppression), the proponents should contact the Drainage and Water Rights Licensing Branch for Water Use Licensing requirements.

Thanks,

Tamara

From: Nicklin, Darren (CC)
Sent: January-10-22 10:06 AM
To: Dagdick, Elise (CC)
Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Hello Elise,

If works are carried out as described below:

For Class I, II, and dry Class III wetlands, the flowline will be ploughed-in, buried, and the wetland contours will be reclaimed to the original condition.

Class III wetlands holding water and Class IV wetlands within the RoW will be bored under (using horizontal directional drilling [HDD]) to avoid impacts to overwintering amphibians.

There are no concerns

Darren Nicklin

Senior Water Resource Officer
Conservation and Climate

From: Kelly, Jason (CC)

Sent: December-13-21 8:20 AM

To: Dagdick, Elise (CC)

Subject: RE: Request for Review/Comment - Environment Act Proposal – - File 6135.00 - Due January 14, 2021

Parks has no comments or concerns.

DATE: 2022-01-04

TO: Elise Dagdick
Environmental Approvals Branch
Conservation and Climate
1007 Century Street
Winnipeg, MB R3H 0W4

FROM: Reid GRAHAM
Impact Assessment Archaeologist
Archaeological Assessment Services Unit
Historic Resources Branch
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T: (204) 945-2118
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SUBJECT: Environmental Act Proposal File 6135.00 – North Solution Gas Gathering
Flowline Project
HRB File #: AAS-21-17840

Concerns

Further to your e-mail regarding the above noted heritage screening request, the Archaeological Assessment Services Unit (AASU) has examined the project footprint in conjunction with Branch records for areas of potential concern. There are concerns with the current proposed plan to impact potential heritage resource sites. The proposed flowline crosses several major water courses and known heritage resource sites. These factors, to name a few, suggest that any planned development within the area has the potential to impact heritage resources, therefore, the Historic Resources Branch has concerns with the project at this time.

Legislation

Under Section 12(2) of The Heritage Resources Act, if there is reason to believe that heritage resources or human remains are known, or thought likely to be present, on lands that are to be damaged or destroyed by reason of any work, activity, or project that is being proposed to be carried out, then the proponent is required to conduct at his/her own expense, a heritage resource impact assessment (HRIA) and mitigation, if necessary, prior to the project's start.

The developer must contract a qualified archaeological consultant to conduct a Heritage Resources Impact assessment (HRIA) of the proposed development location, in order to identify and assess any heritage resources that may be negatively impacted by development. If desirable, the Branch will work with the developer/land owners and its consultant to draw up terms of reference for the project.

HRIA Expectations

The proponent, Tundra Oil & Gas Limited, and their chosen heritage consultant are currently completing the HRIA for the proposed project, and have developed a Heritage Resource Protection Plan (HRPP). The AASU will continue to work with the proponent on the terms of reference for this project and potential mitigation strategies.

Historic Resources Branch
Archaeological Assessment Services