

Access

1. As noted in comments from Vuntut Gwitchin Government (VGG) and the Porcupine Management Board, gating of roads to limit hunter access is not always successful.
 - a. Please clarify how the effectiveness of road gates will be monitored.
 - b. What type of access management adaptations will be implemented if gates don't prove effective?
2. VGG noted that during consultations in Old Crow the Proponent indicated that a 15 cm snow base would be achieved for winter roads, which would be in line with the minimum snow pack required for the Old Crow winter road (personal communication Government of Yukon, Natural Resources Officer).

Describe the rationale for the proposed 10 cm snow base and demonstrate the protective value of the 10 cm snow base given the types of vehicles that will be using the proposed roads.

Climate Change

3. Climate change may result in permafrost thaw which could impact abandoned or suspended wells. Demonstrate consideration of impacts to the wells from climate change and describe how effects will be mitigated.

Contingency Plans

4. Government of Yukon, Oil and Gas Branch, noted in their comment that you are required to provide a safety plan and contingency plans that addresses abnormal conditions or emergencies that may arise as a result of the Project. In order to assess project effects and their significance, please provide copies of the safety and contingency plans which will be provided for Government of Yukon.
5. What is the proposed contingency plan in the event that the Surface Casing Vent Flow test results in a failure?

Employment

6. In the original information request response (YOR 2020-0197-0008), the Proponent indicated that employees will be hired from Old Crow, Dawson City, Mayo, Whitehorse, and other Yukon communities. Employees may also be hired from Fort McPherson, if possible. VGG noted that there are often barriers for First Nation citizens to take advantage of project benefits. Identify local hiring and procurement plans and any proposed mitigation measures to address these barriers.

Exploration Activities

7. Comments indicate that the wells where extended flow testing is proposed have already undergone this type of testing, as per the results published in 2014 (YOR 2020-0197-0061). Please explain the purpose of the additional extended flow testing at these sites.
8. Government of Yukon, Department of Environment noted that the project proposal referenced 2010 Yukon Ambient Air Quality Standards, as opposed to the most recent 2019 standards. Please confirm that the 2019 standards will be adhered to and update the relevant documents, accordingly.
9. Yukon Conservation Society noted that the proposal does not indicate how much fluid will be disposed of, nor does it indicate what action will be taken if disposal wells fill up. How much fluid will be disposed of in the deep injection wells and what action will be taken if the disposal wells reach capacity?

Heritage Resources

10. VGG noted that the 2013 study conducted by Matrix regarding heritage resources does not address the Vuntut Gwitchin Government *Heritage Act*. Demonstrate consideration of the VGG *Heritage Act* and describe to what extent this consideration has informed the project design.

Indigenous Well-being

11. Vuntut Gwitchin Government (VGG) noted that project employment has the potential to adversely affect family dynamics, result in problematic alcohol and substance use, impact cultural continuity and adversely impact emotional well-being. Specify the measures proposed to mitigate potential adverse effects on Indigenous well-being resulting from project employment.

Reclamation

12. The proposal states that reclamation will include natural revegetation of disturbed areas. VGG noted that historic and proposed activities at the well sites may have resulted in soil removal, soil compaction and soil contamination that have the potential to hinder natural revegetation. Additional details regarding revegetation is required.
 - c. Please indicate whether soil, surface water and groundwater will be tested to ensure the reclaimed land is not contaminated.
 - d. Please describe the proposed measures to “promote successful natural revegetation” such as gouging, scarifying, dozer track-walking, mulching, and fertilizing.
 - e. Please indicate if and how the well sites and winter roads will be monitored to determine if natural revegetation has established a successful ecosystem.

Traditional Land Use

13. VGG noted that the activities related to oil and gas development in Eagle Plains may have already impacted VGFN's cultural heritage since members have been hesitant to enter the project area. Demonstrate consideration of impacts to heritage resources, including intangible Cultural Landscape, such as sense of place and knowledge transmission, and describe how these impacts will be mitigated. The Proponent is encouraged to contact Vuntut Gwitchin Government to inform their understanding of these impacts and identify effective mitigation measures.
14. VGG noted that information about Vuntut Gwitchin First Nation's past, current and desired future use of the project area has not been presented or considered in the project proposal. Demonstrate consideration of impacts to VGFN's future use of the area and describe how impacts to future traditional land use will be mitigated by the Project.
15. VGG noted that Tamarack and red ochre are culturally important resources and rare within the VGFN Traditional Territory. How will the presence of these resources be determined, and impacts mitigated?

Water

16. The following questions provide the Designated Office and Regulators with a better understanding of how the existing wells have been developed in respect to groundwater aquifers. Furthermore, if the wells are proximal to groundwater aquifers, additional information about the systems and response plans in place to deal with the potential for groundwater contamination is required:
 - a. Provide a cross-section for each well that shows the stratigraphy, well design details, depth of permafrost and presence of any aquifers.
 - b. Provide additional information on the proposed methods for detecting potential leaks and failures in the two proposed injection wells.
 - c. Update your spill response plan to include a process for dealing with leaks or failures if they were to occur in the two proposed injection wells.
17. As noted in the conformity check (YOR 2020-0197-0031), the Peel Watershed Regional Land Use Plan recommends that significant levels of winter in-stream water withdrawal in sensitive over-wintering fish habitat is prohibited. Up to 100 m³/day water withdrawal from the Ogilvie River is proposed.
 - a. Provide the Ogilvie River anticipated rate of flow during the timing of the Project and methodology applied to obtain this data.
 - b. Describe any additional measures in place to mitigate impacts to aquatic resources from water withdrawal.

18. The Designated Office understands that deep well injection and maintenance activities are not anticipated to interact with groundwater. However, a contingency plan if such interaction does occur is not provided. Please describe the monitoring program in place to ensure no interaction with groundwater and how impacts will be mitigated should interactions be observed.

Wildlife

19. Vuntut Gwitchin Government noted that the project proposal does not consider Traditional Knowledge regarding project impacts to wildlife or the proposed mitigations. Please explain how the adaptive management thresholds for caribou were established and to what extent Traditional Knowledge has informed proposed mitigations relating to wildlife, and in particular caribou and moose.
20. The re-establishment of winter roads will result in the creation of movement corridors for predators until reclamation takes place. Please describe the measures proposed to avoid the establishment of predator movement corridors.
21. Section 6.1.3.4 of the proposal states “If more than a dozen caribou are observed, or if any number of caribou are observed in the same location for longer than a 3-day period, consult a Qualified Environmental Professional (QEP) to determine if site-specific mitigations may be warranted” (YOR 2020-0197-0001, p. 55). It is not clear why these numbers have been chosen as thresholds or the conditions and triggers that would result in the need for site-specific or tailored management measures.
 - a. Please provide a rationale for the selection of the above thresholds.
 - b. Describe the site-specific measures that would be implemented in response to observations of more than a dozen caribou or caribou remaining in place for greater than three days.
 - c. Describe the specific tailored management measures that would be considered and implemented in response to pre-operation assessments.
 - d. Describe how the safe operating distances from caribou will be established.