



ENVIRONMENTAL IMPACT SCREENING COMMITTEE

July 8th, 2019

EISC Registry File: [03/19-01]

Tyler Horton
Imperial Oil Ltd.
Environmental & Property Solutions
505 Quarry Park Blvd S.E.
Calgary, AB
T2C 5N1

Project Title: Tuktoyaktuk Base Remediation

Proponent: Imperial Oil Ltd.

Dear Mr. Horton:

Thank you for submitting your project description (**PD**) to the Environmental Impact Screening Committee (**EISC**) for the above-named project. The EISC mandate is derived from the *Inuvialuit Final Agreement (IFA)* section 11(36), which states that “no license or approval shall be issued that would have the effect of permitting any proposed development to proceed unless the provisions of IFA section 11(36) have been complied with”.

During its special meeting of July 8th, 2019, the EISC discussed your project proposal and reviewed the Screening Record (**Record**) compiled over the screening comment period. The EISC determined that the Record was complete for the purpose of making an EISC decision and closed the Record. After closing the Record, the EISC Chair appointed a Screening Panel (**Panel**) pursuant to Section 11 (19) of the IFA. The Panel then met to determine if the proposed development could have a significant negative environmental impact and whether the development could have a significant negative impact on present or future wildlife harvesting.

After careful deliberation, the Panel delivered an **11(17)(b)** decision:

“The development, if authorized subject to environmental terms and conditions recommended by the Screening Committee, will have no such significant negative impact and may proceed without environmental impact assessment and review under the Inuvialuit Final Agreement.” [IFA s. 11. (17)(b)]

In reaching this 11(17)(b) decision, the Panel provided the following recommendations:

General

1. The Proponent shall incorporate the comments received on this file from the Department of Environment and Natural Resources, the Department of Fisheries and Oceans and Transport Canada in its development plan and ensure that all staff and crew are aware of the regulatory requirements.
2. The Proponent shall implement all measures contained in its Project Description, the Remedial Action Plan and the following documents provided to the EISC by the Proponent:

- Developer Response to EISC Information Request 001
- Tuk Base Remediation Guideline, 2018
- Tuk Base Waste Facility acceptance letters
- Developer Response to EISC Information Request 002
- INAC: Abandoned Military Site Remediation Protocol, Volume II, Chapter 2-4, 2008

Remedial Action Plan

3. The Proponent shall amend its RAP to address the following points, and submit the amended RAP to regulatory authorities and the EISC:
 - a) Include in the RAP tabulated analytical data showing COC concentrations for all media from previous environmental site assessments;
 - b) Include a discussion on the physical and chemical properties of the contaminants of concern (COC) and their respective mobilities in an arctic environment;
 - c) Add Polycyclic Aromatic Hydrocarbons (PAHs) to the list of COC for the areas of potential environmental concern (APEC) where Petroleum Hydrocarbons are identified as COCs. The Proponent should also include metals as a COC for the sewage lagoon APEC;
 - d) Include its rationale why the Federal Contaminated Sites Action Plan (FSCAP) and Federal Interim Groundwater Quality Guidelines (FIGQGs) were not included for comparison of groundwater analytical results;
 - e) Add the referenced Imperial Oil Ltd. Preferred Operating Practices to the RAP so that the proposed methods can be better understood;
 - f) Clarify the methods by which comingled Type A and Type B soils are to be segregated for either off-site disposal or on-site treatment;
 - g) Clarify whether thermal desorption is to be employed as a remedial option. If so, the RAP should be amended to consider associated limitations;
 - h) Expand the Quality Assurance/Quality Control section to include field and trip blanks, hold times, logistical concerns or other potential issues with the potential to impact data quality related to collecting samples in an arctic environment;
 - i) Include a discussion on erosion control, particularly as it relates to work at the wharf, docks, or any other activities with the potential to disturb soil near water bodies;
 - j) Include the rationale as to why surface water sampling is not included in the proposed remedial or post-remedial monitoring activities;
 - k) Include a contingency plan in the event that post-remediation conditions present a potential risk to ecological or human receptors, or the inability to use the land as intended;
 - l) Include a description as to how reclamation efforts may be affected by the presence of salt affected fill historically placed onto the lower terrace, and a strategy to address identified issues

Review of the Record

In reaching its decision, the EISC considered the information contained in the PD and comments and advice received from reviewers during the screening comment period, which concluded July 8th, 2019. These considerations are summarized below. This summary is intended to assist the reader in understanding the EISC's reasoning and does not mean that the EISC did not consider all other relevant portions of the Record with respect to the matter.

Aklavik Hunters and Trappers Committee (AHTC)*

The AHTC supports the comments made by the Tuktoyaktuk Hunters and Trappers Committee for the Imperial Oil, Tuk Base Remediation project.

Transport Canada (TC)*

Transport Canada reviewed the submitted project description in accordance with Transport Canada transportation policies and programs and noted that the project will need to follow the Navigation Protection Act (NPA) which is an Act of Parliament that authorizes and regulates interferences with the public right of navigation. Section 5(1) of the NPA requires owners to provide Notice to the Minister (of Transport) about certain work on navigable waters in Canada, including decommissioning programs. The Proponent will need to submit a "Notice of Works" form to the Navigation Protection Program for review as per Section 5(1) of the NPA.

Department of Environment and Natural Resources (ENR)*

ENR provided several comments and recommendations on Fuel Storage and Spill Contingency Planning and Reporting, Wildlife Disturbance and Harassment, Wildlife Sightings and Encounters, Wildlife Attractants and Waste Management, Northwest Territories Listed and Pre-listed Species at Risk, Wildlife Cumulative Effects Tracking, and Wildlife Abodes. ENR also included 'General Bear Encounter Guidelines' and a 'Flying Low' brochure for the Proponents reference.

The EISC requested further comments from ENR around the specific guidelines that were used for the Remedial Action Plan and received no response.

Department of Fisheries and Oceans (DFO)*

DFO has no concerns with respect to the project as long as the following conditions can be met;

- all new construction, repair or rebuild of a floating, cantilever or post dock where total combined footprint doesn't exceed 20 m²
- where SARA-listed shellfish occur, or critical habitat or residences of freshwater SARA-listed aquatic species occur no new temporary or permanent fill placed below the high-water mark
- all removal activities
- no in-water work will commence within the Restricted Timing Windows.
<http://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/nwt-eng.html>
- all relevant measures to avoid harm can be followed. <http://www.dfompo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>

Kavik-Stantec Inc. *

The EISC sought an independent assessment of the Proponents proposed Remedial Action Plan by the Contaminated Site experts of Kavik-Stantec Inc. in an effort to identify any specific concerns with respect to the presented RAP.

*All communications are available on the EISC Public Registry.

Reasons for Decision

Among the key considerations informing the Panel's decision are the following:

1. Nature of Activities:

- i. Imperial Oil leased and operated a Tuktoyaktuk base facility for staging and storage for Oil and Gas exploration starting in the early 1970's. The site is located on Inuvialuit 7.1(a) private lands which is approximately 1.5km southeast of Tuktoyaktuk and covers 54 ha of land. This proposed project will involve remediation of impacted soils, former landfills, debris removal, sewage lagoon decommissioning, dock removal, reclamation and revegetation, and continued monitoring of the site. The activities will take place in 2019 and 2020 and work will take place primarily in the summer season (July to September) each year. There will be a site crew of up to 25 people at a given time. The crew quarters and staging area will be located on a self-contained barge camp. Following remediation, bi-annual monitoring will occur from 2021 to the end of the lease in 2024.
- ii. The required work includes:
 - Surface debris (including the wood piles from the former wooden wharf) will be collected, removed, and disposed of off-site at a, licensed disposal facility.
 - Two buried landfills will be excavated, sorted, and disposed of as per material disposal instructions outlined below.
 - Hazardous material encountered on-site will be removed, transported off-site and disposed of at an appropriate, Imperial approved licensed disposal facility.
 - Soil impacted with light-end petroleum hydrocarbons (PHCs) will be treated onsite and used as backfill.
 - Soil impacted with heavy-end PHCs will be treated onsite and/or disposed of off-site at an Imperial approved licensed disposal facility.
 - Soils impacted with metals or PCBs will be excavated and transported to an appropriate off-site Imperial approved, licensed facility.
 - The sewage lagoon will be dewatered, backfilled and regraded.
 - The North Dock will be utilized for the Project and then will either be repurposed (pending negotiations with the ILA) or demolished.
 - The South Dock will be demolished.
 - The concrete pads may be used as treatment cells for soil remediation, repurposed by the Hamlet of Tuktoyaktuk or used as backfill on-site
- iii. Fuel:
 - A 100,000 L double walled "Enviro-Tank"
 - Storage: 100,000 L double walled enviro-tanks which has an integrated complete secondary containment. A soil berm will also be created around the tank as a partial tertiary containment.
 - All accidentally spills will be managed as per the Spill Contingency Plan provided in Appendix D which will be made available to all staff.
- iv. Waste:
 - All solid waste generated during construction will be primarily domestic waste, minor amounts of hazardous wastes and recyclables.
 - Non-hazardous, combustible kitchen waste will be incinerated as per Appendix C which follows the GNWT Waste Management guidelines.

- Solid waste will be transported to an approved facility
- Hazardous waste (fuel & lubricants) will be hauled to an approved disposal facility.
- Recyclables will be disposed at an approved recycling facility.
- All greywater and sewage will be stored on the barge during construction, and effluent will be hauled to the treatment centre in Tuktoyaktuk.

- The Remedial Action Plan will be followed.

2. Location:

- i. The site is located 1.5 km south east of Tuktoyaktuk on 7.1(a) Inuvialuit Private Lands. It is designated as a Category C Management area in the Tuktoyaktuk Community Conservation Plans.

3. Duration:

- i. Occurring between 2019-2024. Some potential for legacy contaminants to remain.

4. Timing:

- i. Soil and Excavation: July – September 2019
- ii. Ice Road/Debris Removal: January/February 2020
- iii. Soil & Landfill excavation/dock removal/surface debris removal/surface reclamation and re-vegetation: July - September 2020
- iv. Final Demobilization: January/February 2021
- v. Bi-Annual Monitoring: July 2021 – September 2024

5. Frequency:

- i. Two year of remediation and reclamation activities, followed by 3 years of bi-annual monitoring.

6. Reversibility:

- i. Project aims to remediate the site.

7. Magnitude of environmental effect:

- i. Moderate-Low if proposed mitigation measures are implemented.

8. Scale of the environmental effect:

- i. The site covers 54 ha.

9. Nature of environmental effect (potential direct, indirect, cumulative impact):

- i. Direct and indirect impacts to sensitive terrain and permafrost.

Mitigation measures:

- Minimize over UTV, truck and equipment to the extent feasible;
- Restrict all traffic to flat terrain, avoiding sensitive slopes;
- Avoid shorelines; and
- Re-contour and revegetate disturbed areas.

- ii. Direct and indirect impacts to soil quality.

Mitigation measures:

- If a result of an accidental spill, the Spill Contingency Plan (appendix D) will be followed and the spill will be reported to the NWT spill report line.
- Equipment will be clean and free of oil/grease and maintained free of fluid leaks.
- Drip pans will be placed under all equipment when not in use.

iii. Direct and indirect impacts to vegetation.

Mitigation measures:

- UTV's, trucks and equipment will be travelling on flat terrain, avoiding sensitive slopes and shorelines;
- Vegetation will be removed and/or damaged locally where necessary; to the extent possible other vegetated areas will be avoided;
- Equipment will be clean of soil and seeds to avoid accidental introduction of invasive species;
- Re-grading and revegetation of disturbed areas will occur, by native seed mixes.

iv. Direct and indirect impacts to wildlife

Mitigation measures:

- The project specific Wildlife Encounter Management Plan (Appendix G) will be implemented;
- Wildlife monitors will scout for wildlife and signs of wildlife every morning;
- Wildlife monitors will assess the proposed project area and advise of any other wildlife concerns in the project area;
- All waste will be stored temporarily in secure containments on the barge while docked at the site;
- Crews will keep the site clean at all times. Food, attractants, and waste will be temporarily stored in wildlife proof containers and removed from the site daily;
- Crews will be instructed not to feed or harass wildlife, and workers will not be allowed to hunt, trap or have dogs on the site;
- Project activities will cease if caribou or bears are spotted; activities will only resume once the animals have left the area;
- Crews will be trained in bear awareness and will follow the wildlife encounter management plan and ENR's Safety in Grizzly and Black Bear Country.

v. Direct and indirect effects to Migratory Birds

Mitigation measures:

- Active nests that are encountered will be avoided;
- Will adhere to the Migratory Bird Convention Act;
- Advise HTC's of project schedule so interference with harvesting activities are avoided.

vi. Direct and indirect impacts to water quality.

Mitigation measures:

- Implement water quality monitoring during dock repair and removal;
- Reduce speed of excavation or change timing to coordinate with tidal flow;

- Install a surface containment boom around the work area with silt fencing installed on land;
- Implement spill contingency plan;
- Keep spill response equipment on hand;
- Fuel and hazardous materials will be kept in specified, bermed, lined areas.

vii. Direct impact to fish and fish habitat.

Mitigation measures:

- Implement water quality monitoring during dock repair and removal;
- Reduce speed of excavation or change timing to coordinate with tidal flow;
- Install a surface containment boom around the work area with silt fencing installed on land;
- Implement spill contingency plan;
- Keep spill response equipment on hand;
- Fuel and hazardous materials will be kept in specified, bermed, lined areas;
- Advise HTC's of project schedule and any possible interference with traditional fishing.

viii. Direct/indirect impacts to subsistence harvesting.

Mitigation measures:

- Advise HTC's of project schedule and any possible interference with traditional harvesting;
- Schedule annual face-to-face meeting with Tuktoyaktuk, Inuvik, and Aklavik HTC's.

10. Ecological context of environmental effect (on wildlife, habitat, biodiversity):

- There are several species observed at the site which are listed by the Government of Canada's Species at Risk Act (see section 10.2 of the project description)

11. Wildlife harvesting context of environmental effect (place, timing, etc.)

- Spring fish harvesting (305C) - Key area for subsistence fishing during the spring.
- Spring caribou harvesting (302C) - Key harvesting area for caribou in the spring.
- Spring goose harvesting (304C) - Key area for subsistence goose harvest in the spring.
- Summer caribou harvesting (306C) - Key area for subsistence harvesting of caribou during the summer.
- Summer fish harvesting (307C) - Key area for subsistence fishing during the summer.
- Summer goose harvesting (308C) Key area for subsistence goose harvesting in the summer.
- Fall caribou harvesting (309C) - Key area for subsistence caribou harvesting in the fall.
- Fall fish harvesting (310C) - Key area for subsistence fish harvesting in the fall.
- Fall seal harvesting (311C) - Key area for subsistence seal harvesting in the fall.
- Fall goose harvesting (312C) - Key area for subsistence goose harvesting in the fall.
- Winter caribou harvesting (315C) - Key area for subsistence caribou harvesting in the winter.
- Winter wolverine harvesting (314C) - Key area for subsistence wolverine harvesting in the winter.
- Critical Grizzly Bear Denning Area (322 C) - Important (from October to May) for denning grizzly bears.
- 704C Fish lakes and Rivers - Important fish habitat and important historic and present subsistence harvest area for people of Inuvik and Tuktoyaktuk.

12. Likelihood of environmental effect occurring:

- i. Low-Moderate.

13. Project addresses community concern:

- i. Community members from Tuktoyaktuk and Inuvik wanted updates throughout the project life. The Proponent stated that HTC's would be notified prior to commencing with activities.

14. Additional Information

- i. The EISC sought additional information from the Proponent following its June 6th, 2019 meeting. The Proponent provided its rationale for the development of Arctic Specific Guidelines for Soil Remediation for the Tuktoyaktuk base site and additional information regarding the waste disposal sites it expects to use. The EISC also sought an independent assessment of the Remedial Action Plan from Kavik-Stantec Inc. All documents can be found on the EISC registry.

The EISC notes that the Proponent selected its proposed Type A hydrocarbon remediation level for the site from Indian and North Affairs Canada; Abandoned Military Site Remediation Protocol (INAC 2009). The EISC observes that the planned 20,000 ppm remediation level is approximately three times that of the industrial site remediation standard of 6600 ppm adopted by the Canadian Council of Ministers of the Environment (CCME).

A copy of the decision form for this file is attached to the email notification of this decision.

Both the Decision Letter and the Decision Form for this file will be placed on the file held in the EISC Registry.

If you have any questions regarding this decision, please don't hesitate to contact me directly at 1(867)777-2828, Extension 1014.

Sincerely,



Michel Lindsay
EISC Coordinator

Attachments:

- 1) EISC Decision Form
- 2) ENR Comment Letter
- 3) DFO Comment Letter
- 4) TC Comment Letter
- 5) Kavik-Stantec Inc.

cc: EISC Distribution List

EISC Distribution List

Tyler Horton, Project Manager, Imperial Oil Ltd.
Julia Krizan, Manager, IMG-Golder

Larry Carpenter, Chair, Wildlife Management Advisory Council (NWT)
 Jodie Maring, Wildlife Management Advisory Council (NT)
 Rosemin Nathoo, Wildlife Management Advisory Council (NT)
 Lindsay Staples, Chair, Wildlife Management Advisory Council (NS)
 Kaitlin Wilson, Wildlife Management Advisory Council (NS)
 Alan Kennedy, Chair, Fisheries Joint Management Committee
 Emily Way-Nee, Fisheries Joint Management Committee
 Vernon Amos, Chair, Inuvialuit Game Council
 Chanda Turner, RP, Inuvialuit Game Council
 Davonna Kasook, RP, Inuvialuit Game Council
 John Donihee, Chair, Environmental Impact Review Board
 Lenora McLeod, Coordinator, Environmental Impact Review Board
 David Livingstone, Chair, Environmental Impact Screening Committee
 Jennifer Lam, Committee Program Manager, Joint Secretariat
 Chloe Brogan, Community-Based Monitoring Program, Joint Secretariat
 Cassandra Elliott, TLK, Joint Secretariat
 Kayla Hansen-Craik, MPA, Joint Secretariat
 Paulatuk Hunters and Trappers Committee
 Aklavik Hunters and Trappers Committee
 Inuvik Hunters and Trappers Committee
 Olokhtomiut Hunters and Trappers Committee
 Sachs Harbour Hunters and Trappers Committee
 Tuktoyaktuk Hunters and Trappers Committee
 Mardy Semmler, Executive Director, Inuvialuit Water Board
 Bijaya Adhikari, Inuvialuit Water Board
 Duane Smith, Chair, Inuvialuit Regional Corporation
 Kate Darling, General Counsel, Inuvialuit Regional Corporation
 Charles Klengenber, Director of Lands, Inuvialuit Land Administration
 Glenna Noksana, Inuvialuit Land Administration
 Alec Sandra Macdonald, Regulatory Specialist, GLWB
 Erika Tramm-Tizya, Transboundary Specialist, Gwich'in Lands and Resources
 GNWT Environmental Assessment and Monitoring
 Nathen Richea Manager Water Regulatory, ENR, GNWT
 Aurora Research Institute
 Naomi Smethurst, Culture and Heritage, ECE, GNWT
 Lorraine Seale, Department of Lands, GNWT
 Dan Carmichael, Regional Superintendent, Department of Lands, GNWT
 Marsha Branigan, Environment and Natural Resources, GNWT
 Loretta Ransom, Environment and Natural Resources, GNWT
 Patrick Clancy, Environment and Natural Resources, GNWT
 Johnny Lennie, Manager Oil and Gas Planning, PR Division, GNWT
 Ian Butters, Manager, Oil and Gas Rights, GNWT
 Peter Clarkson, Regional Director, Department of the Executive, GNWT
 Don Craik, Superintendent, ITI, GNWT
 Lorie Fyfe, Regional Superintendent, Inuvik Region, MACA
 Veronique D'Amours-Gauthier, DFO
 Fisheries Protection Program, Fisheries and Oceans Canada
 Beaufort Sea Partnership
 Nelson Perry, Parks Canada Agency
 Joe Costa, Resource Management Officer, Parks Canada
 Eric Reed, Canadian Wildlife Service, ECCC
 Environmental Assessment and Marine Program for Yukon, ECCC

Mark Dahl, Senior Oceans Disposal Officer, Environment Canada
EA North NWT
Christy Wickenheiser, National Energy Board
Anne-Marie Hesse, National Energy Board
Dinah Elliott, Environmental Specialist, CIRNAC
Sarah Robertson, Senior Project Officer, CANNOR
Georgina Williston, Senior Environmental Assessment Coordinator, EC
Sarah Chan, Manager of Environmental Affairs, Department of Environment, YTG
Mike Sutor, North Yukon Regional Biologist, Department of Environment, YTG
Stephanie Muckenheim, IFA Implementation and Projects Coordinator, YTG
Cameron Eckert, Special Projects Officer, YTG
Carrie Mierau, Yukon Parks Branch, YTG
YESAB, Dawson Office