

- Boundaries of the mineral claim block(s) where proposed activities will be undertaken.

FOX-D (Kivitoo) was an Intermediate Distant Early Warning (DEW) Line Site constructed in 1957 and operated until October 1963. The site is located on the Davis Strait. The site is located 50 km to the west of the nearest community, Qikiqtarjuaq, Nunavut. The site is accessible by fixed wing aircraft, helicopter, and sealift. The proposed site activities will take place within the boundaries detailed below:

NW: Latitude: (67°57'42.31"N) Longitude: (64°55'13.18"W)
 NE: Latitude: (67°56'25.39"N) Longitude: (64°51'1.34"W)
 SE: Latitude: (67°55'41.33"N) Longitude: (64°51'44.69"W)
 SW: Latitude: (67°55'45.36"N) Longitude: (64°57'58.30"W)

Additional Site Maps and Drawings as well as further details on site activities are available in the Remedial Action Plan (RAP) which can be found in Appendix 4.

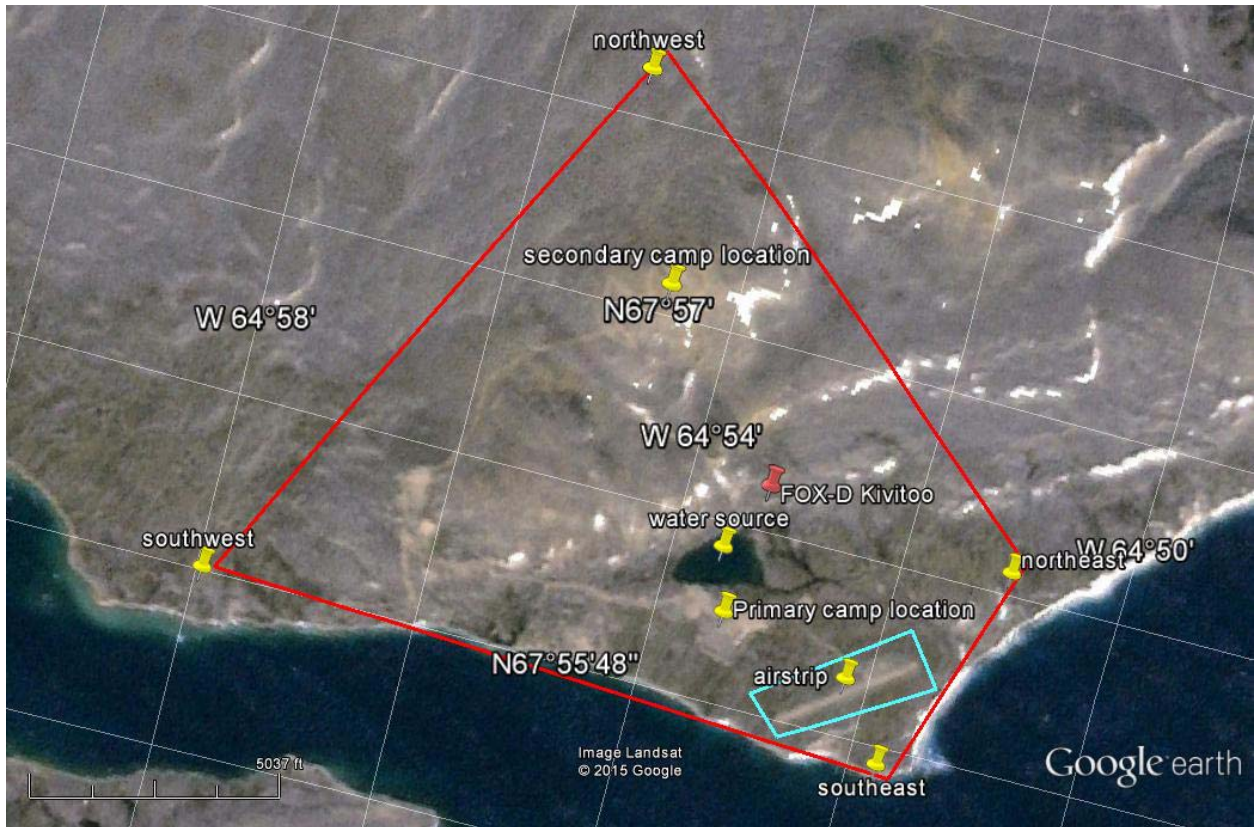
2. Map of the project site within a regional context indicating the distance to the closest communities.

The site is located on the Davis Strait. The site is located 50 km to the west of the nearest community, Qikiqtarjuaq, Nunavut.

3. Map of any camp site including locations of camp facilities.

Primary Camp:
 Latitude: (67°56'3.42"N) Longitude: (64°53'24.56"W)

Secondary Camp :
 Latitude: (67°57'2.23"N) Longitude: (64°54'35.47"W)



4. Map of the project site indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife and wildlife habitat.

Please consult maps that are located in the back section of the Remedial Action Plan which can be found in appendix 4.

Project General Information

5. Discuss the need and purpose of the proposed project.

The purpose of the project is to eliminate/reduce the hazards (human health and environmental) associated with the former Intermediate Distant Early Warning (DEW) Line site. The hazards at the site include PCBs, heavy metals, asbestos, petroleum hydrocarbons, and physical hazards associated with the site infrastructure and debris.

6. Discuss alternatives to the project and alternative methods of carrying out the project, including the no-go alternative. Provide justification for the chosen option(s).

Alternative methods for carrying out the project are discussed in the Remedial Action Plan (Appendix ____). The Remedial Action Plan also provides justification for the methods chosen based on eliminating/reducing the hazard and the associated costs.

7. Provide a schedule for all project activities.

Construction

Proposed Start Date: ____July/2016____ Proposed Completion Date: ____September/2016____
(month/year) (month/year)

Operation

Proposed Start Date: ____ July/2017 ____ Proposed Completion Date: ____ October/2018 ____
(month/year) (month/year)

Closure

Proposed Start Date: ____ June/2019 ____ Proposed Completion Date: ____ August/2019 ____
(month/year) (month/year)

Post - Closure

Proposed Start Date: ____ September/2019 ____ Proposed Completion Date: ____ March/2020 ____

A detailed project schedule is included in appendix 7.

8. List the acts, regulations and guidelines that apply to project activities.

- Canada Labour Code (R.S. 1985, c.L.-2)
- Canada Occupational Health and Safety Regulations (SOR/86-304)
- Environmental Protection Act (Nunavut) (R.S.N.W.T. 1988, c.E-7)
- Transportation of Dangerous Goods Act (S.C. 1992, c. 34) a 1999, c. 31
- Nunavut Land Claim Agreement (Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, 1993)
- Spill Contingency Planning and Reporting Regulations (N.W.T. Reg. 068-93)
- Migratory Birds Convention Act (1994, c. 22)
- National Fire Code of Canada (1995) a. 2002
- Ozone Depleting Substances Regulations (SOR/99-7)
- Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (CCME, 1999)
- Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME, 1999)
- CCME - Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (2002).
- Canadian Environmental Protection Act (1999, c. 33)
- Controlled Products Regulations (SOR/88-66) a. SOR/2001-254
- Transportation of Dangerous Goods Regulations (SOR/2001-286) a. SOR/2003-400
- Intra-provincial Movement of Hazardous Waste Regulations (SOR/2002-301)
- Nunavut Waters and Surface Rights Tribunal Act (2002, c. 10)
- Nunavut Environmental Guideline for Waste Asbestos (GN, 2002)
- Contaminated Sites Management Policy (INAC, 2002)
- Northern Affairs Contaminated Sites Management Policy (INAC, 2002)
- A Federal Approach to Contaminated Sites (CSMWG, 2002)
- Used Oil and Waste Fuel Management Regulations (N.W.T. Reg. 064-2003)
- INAC NCSP Project Level Risk Management Guidance Document (AANDC, 2008);
- Contaminated Sites Cost Estimating Guide (AANDC, 2012)
- Treasury Board Policy on Management of Real Property (TB, 2006)
- Risk Management Tool & Reporting Tool User Guide (INAC, 2007)
- Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil (CCME, 2008)
- Environment, Health & Safety Management System Manual (AANDC, 2012)
- Environment, Health & Safety Standard Operating Procedures Manual (INAC, 2008)
- Environment, Health & Safety Control Framework, Northern Contaminated Sites Program (INAC, 2008)
- Environment, Health & Safety Audit Program Guide (INAC, 2008)
- Construction Project Safety Management Guide, 5th Edition (PWGSC, 2008)

- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (SOR/2008-197)
- PCB Regulations (SOR/2008-273)
- Abandoned Military Site Remediation Protocol (INAC, 2009)

9. List the approvals, permits and licenses required to conduct the project.

The approvals, permits and licenses required include:

- Water Licence (appendix 2)
- Crown Land Use Permit (appendix 10)
- Inuit Owned Land Access Permit (appendix 9)

DFO Operational Statement (OS) Conformity

10. Indicate whether any of the following Department of Fisheries and Oceans (DFO) Operational Statement (OS) activities apply to the project proposal:

- Bridge Maintenance
N/A
- Clear Span Bridge
N/A
- Culvert Maintenance
Yes
- Ice Bridge
N/A
- Routine Maintenance Dredging
N/A
- Installation of Moorings
N/A

11. If any of the DFO's OS apply to the project proposal, does the Proponent agree to meet the conditions and incorporate the measures to protect fish and fish habitat as outlined in the applicable OS? If yes, provide a signed statement of confirmation.

Aboriginal and Northern Development Canada agrees to meet the conditions and incorporate the measures to protect fish and fish habitat as outlined in the applicable Operational Statements.

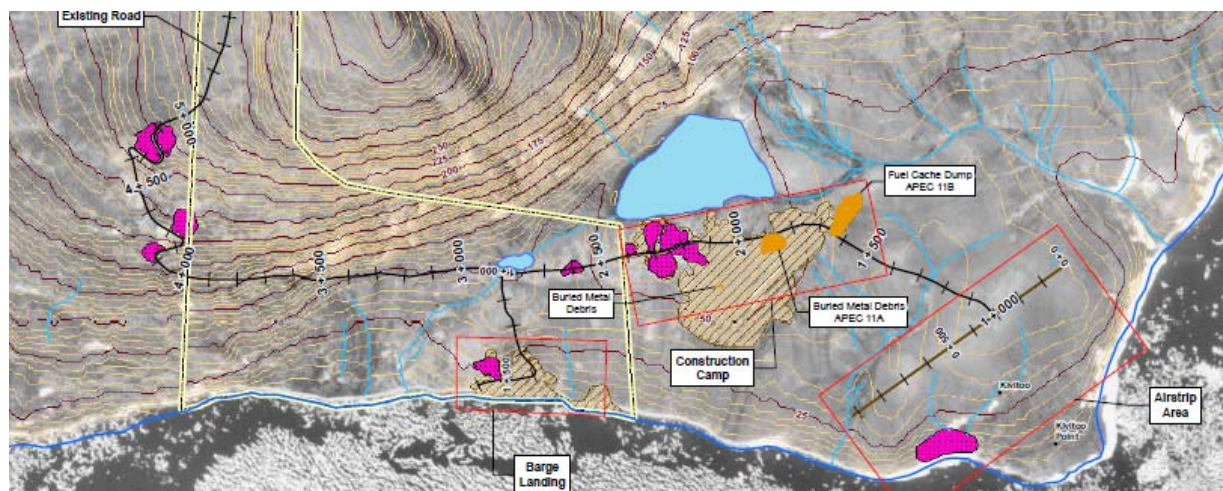

 Mark Yetman
 Senior Project Officer – Contaminated
 Sites Program

Date 2015-09-21

Transportation

12. Describe how the project site will be accessed and how supplies will be brought to site. Provide a map showing access route(s).

Equipment and materials will be mobilized to the site via sealift/barge. The sealift/barge will land at the beach area titled “Barge Landing” in the diagram below. Perishables and other material will be brought to the site on charter aircraft.



13. If a previous airstrip is being used, provide a description of the type of airstrip (ice-strip/all-weather), including its location. Describe dust management procedures (if applicable) and provide a map showing location of airstrip.

An abandoned airstrip exists at the site. This airstrip will be used throughout the remediation activities. Minor repairs to the airstrip will be completed on an as-needed basis. A map showing the location of the airstrip can be seen in the question above. Further maps can be found in the Remedial Action Plan which can be found in appendix 4.

14. If an airstrip is being constructed, provide the following information:
- Discuss design considerations for permafrost
N/A
 - Discuss construction techniques
N/A
 - Describe the construction materials, type and sources, and the acid rock drainage (ARD) and metal leaching (ML) characteristics (if rock material is required for airstrip bed).
N/A
 - Describe dust management procedures.
N/A
 - Provide a map showing location of proposed airstrip.
N/A

15. Describe expected flight altitudes, frequency of flights and anticipated flight routes.

Flights will fly at a minimum altitude of 1,100 metres and maintain a minimum horizontal distance of 1,500 metres from concentrations of birds. Flights to and from the site will occur one to two times per week.

Camp Site

16. Describe all existing and proposed camp structures and infrastructure

All existing structures will be demolished as part of the remedial activities. Details of the existing infrastructure can be found in the Remedial Action Plan which is found in Appendix 4.

Proposed infrastructure (to support remedial activities) includes:

- Temporary camp (including a sewage lagoon and incinerator for waste treatment and disposal)
- Temporary garage

17. Describe the type of camp:

a. Mobile

- Yes, camp will consist of mobile camp units transported to site

b. Temporary

- Yes, camp facility will be removed upon project completion

c. Seasonal

- Yes, camp will operate seasonally between July and September

d. Permanent

-No, the camp will be removed upon remediation of the site

e. Other

-N/A

18. Describe the maximum number of personnel expected on site, including the timing for those personnel involved with the project.

The maximum number of personnel expected to be on site is 30. Site activities will take place from July to September each year. The number of Personnel on site will be lower at the beginning and end of each season as the camp is set-up/decommissioned/winterized.

Equipment

19. Provide a list of equipment required for the project and discuss the uses for the equipment.

The equipment required to complete the remediation project includes:

- Excavator(s) to remove impacted soils for treatment and for use in trail and/or road improvements;
- Front end loader(s) to consolidate materials and for road improvements;
- Haul truck(s) to move materials to staging and treatment areas;
- Crusher(s) to develop on-site aggregate material;
- Waste incinerator(s) (both for the camp waste and for incineration of certain materials currently located on-site);
- Dozer (s) to be used for landfill construction and road improvements;
- Water truck to haul water to camp if required or for dust suppression;
- Waste compactor;
- Drum crusher;
- All-terrain vehicle (s) with trailers;
- Packer to ensure compaction is appropriate with the natural terrain;
- Generators (for remedial equipment); and,
- Other miscellaneous equipment determined by contractor.

20. If possible, provide digital photos of equipment.

N/A

Water

21. Describe the location of water source(s), the water intake methods, and all methods employed to prevent fish entrapment. Provide a map showing the water intake locations.

Water will be sourced from the Freshwater Lake located centrally on the site (GPS Coordinates 67°56'15.96"N, 64°53'33.44"W). Water will be pumped from the lake into a tank on either a truck or trailer. It will then be transported to the camp and pumped into the camp tank. The water intake hose will be covered with a screen to ensure that no fish become trapped. The exact location of this has yet to be determined. Figures are provided in the Remedial Action Plan located in Appendix 4.

22. Describe the estimated rate of water consumption (m³/day).

Total: 4.7_ m³/day

115 Litres/day/person x 30 people (max) = 3,450 Litres/day
1,250 Litres/day for miscellaneous activities (ex. washing equipment and drums)

23. Describe how waste water will be managed. If relevant, provide detail regarding location of sumps, including capacity of sumps and monitoring.

We anticipate that both black and grey water will be directed into a sewage lagoon system. This system will consist of two independently operated temporary lagoons. Each lagoon will have an individual capacity for 45 days of wastewater storage or one half of the duration of the construction season, whichever is more. Maximum fluid depth will not exceed one metre. The location of the lagoons will be a minimum of 100 metres from the construction camp or other temporary facilities and drainage paths, and downwind of the construction camp (based on the prevailing wind direction). Discharge criteria will be as follows:

- Biological Oxygen Demand (BOD) – 80 mg/kg
- Total Suspended Solids (TSS) – 100mg/kg
- Fecal Coliforms – 1 x 10⁴ CFU/100 mL
- pH – 6.0 to 9.0
- Oil and Grease – no visible sheen

24. If applicable, discuss how surface water and underground water will be managed and monitored.

N/A

Waste Water (Grey water, Sewage, Other)

25. Describe the quantities, treatment, storage, transportation, and disposal methods for the following (where relevant):

▪ Sewage

30 litres/day x 30 people (max) = 900 litres/day

The sewage will be directed into a sewage lagoon system (as described in #23 above).

▪ Camp grey water

80 litres/day x 30 people (max) = 2,400 litres/day

The camp grey water will be directed into a sewage lagoon system (as described in #23 above).

▪ Combustible solid waste

Combustible solid waste generated from camp operations will be incinerated in an on site incinerator.

▪ Non-combustible solid waste, including bulky items/scrap metal

- 14,834 m³ excavated, sorted and separated into different waste types where it is safe and practical to do so, and disposed off-site in an appropriate licensed facility.
- Buried debris that is inaccessible for excavation in Class C dumps (APECs 9 and 10) should be buried and re-stabilized in-situ. Rocks and concrete foundations from APECs 1-4 to be used as rip-rap and fill in void space at APEC 9. Area will be covered with rip rap and erosion resistant material for stability.

For further details please consult the Remedial Action Plan that is attached in Appendix 4.

- **Hazardous waste or oil**

All hazardous wastes and oil will be packaged as per Transportation of Dangerous Goods (TDG) requirements and shipped south to a facility licenced to dispose of the hazardous materials. Amounts of each Hazardous waste can be found in the Remedial Action Plan in Appendix 4.

- **Contaminated soils/snow**

Contaminated soils will be handled as described in the Remedial Action Plan (Appendix 4). To summarize:

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Contaminated soil- metals, PCB	Soil lightly contaminated with metals and PCB	Total = 194 m ³ PCB= 1 m ³ Metal= 193 m ³	Excavated, containerized, labelled in accordance with the Transportation of Dangerous Goods Act	Disposal at a southern licensed disposal facility
Contaminated Soil- PHC	Soils lightly contaminated with PHC	PHC= 3,205 m ³	Screen PHC Type A soils and treat in on-site constructed biological and/or aeration treatment unit (3,005 m ³).	Excavate PHC Type B soils (200 m ³) and place into containers, and ship off-site to a licensed disposal facility.

- **Empty barrels/ fuel drums**

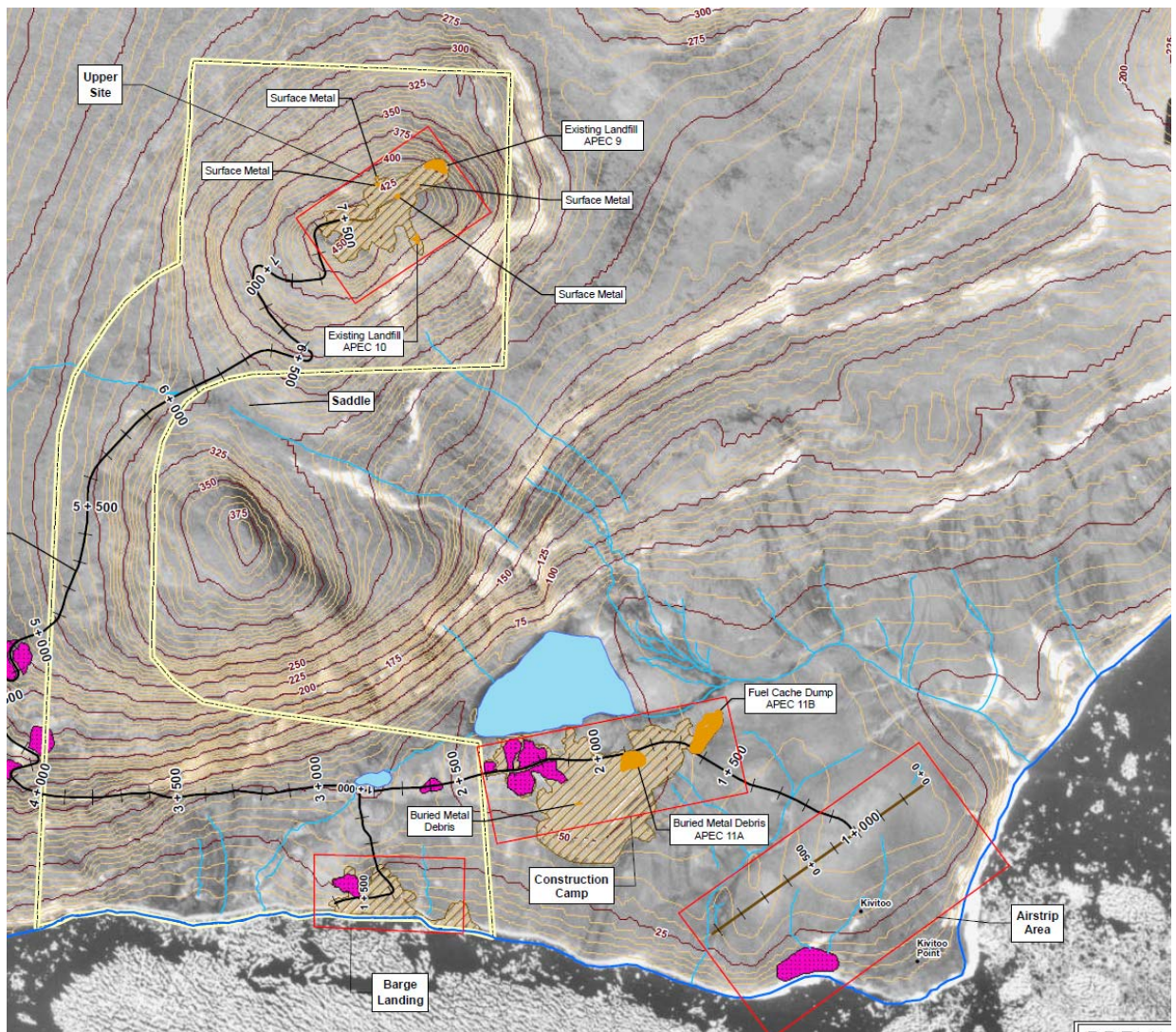
- Empty barrels/fuel drums will be handled as per the Barrel Protocol described in the Abandoned Military Site Remediation Protocol (INAC 2009) which can be found in appendix D of the Remedial Action Plan (Appendix 4).
- Barrels will be inspected, sampled, tested, have any contents removed and treated, cleaned, crushed, packaged, and then be transported south to a licenced disposal location.
- Additional barrels resulting from remedial activities will be handled in the same manner.

- **Any other waste produced**

None identified at this time.

26. If the project proposal includes a landfill or landfarm, indicate the locations on a map, provide the conceptual design parameters, and discuss waste management and contact-water management procedures.

This project will only use existing landfills that are on site and will not construct any new ones. Buried debris that is inaccessible for excavation in Class C dumps (APECs 9 and 10) will be buried and re-stabilized in-situ. Rocks and concrete foundations from APECs 1-4 to be used as rip-rap and fill in void space at APEC 9. Area will be covered with rip rap and erosion resistant material for stability. All buried and partially buried debris that are accessible will excavated, sorted and separated into different waste types where it is safe and practical to do so, and disposed off-site in an appropriate licensed facility.



Fuel

27. Describe the types of fuel, quantities (number of containers, type of containers and capacity of containers), method of storage and containment. Indicate the location on a map where fuel is to be stored, and method of transportation of fuel to project site.

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel	approximately 220 barrels	45,100 L	On pallets, 4 drums each, strapped
Gasoline	Approximately 25 barrels	5125 L	On pallets, 4 drums each, strapped
Aviation fuel	Approximately 25 barrels	5125 L	On pallets, 4 drums each, strapped
Propane	approximately 8 containers	960kg	Cylinders will be transported/stored in a cage where they are strapped to prevent movement.

Please note: These fuel numbers may change slightly once a contractor is hired.

The fuel will be stored near the camp but at least 100 metres from the camp facilities.

28. Describe any secondary containment measures to be employed, including the type of material or system used. If no secondary containment is to be employed, please provide justification.

All fuel drums will be stored together. The storage area will be inspected daily. Drums that are in use will be stored in insta-berms (or similar) to contain any spills. Spill kits and empty drums or tanks will be kept in near the storage area so that any spills can be contained and cleaned up.

29. Describe the method of fuel transfer and the method of refuelling.

An electric pump will be used to transfer fuel from the drums into the equipment or tank. All fuel transfers will be supervised and spill kits will be readily available to address any spills.

30. Describe spill control measures in place.

All fuel transfers will be supervised and spill kits will be readily available to address any spills. The exact location and contents of the spill kits will be determined once a contractor is hired.

Please refer to Environment Canada's fuel storage tank system regulations (*Storage Tank System for Petroleum and Allied Petroleum Products*) website at <http://www.ec.gc.ca/st-rs/> for details on fuel storage requirements.

Chemicals and Hazardous Materials*

**included but not limited to oils, greases, drill mud, antifreeze, calcium or sodium chloride salt, lead acid batteries and cleaners*

31. Describe the types, quantities (number of containers, the type of container and capacity of containers), method of storage and containment. Indicate the location on a map where material is to be stored, and method of transportation of materials to project site.

A small amount of oil and grease will be brought to site to complete the maintenance requirements for the equipment on site. These will be transported as per the requirements of the Transportation of Dangerous Goods (TDG) Act & Regulations. The oil and grease will be stored in the fuel storage area until used. Used oil and grease will be collected and shipped off site for disposal at a licenced disposal facility. The exact quantities of these will be determined once a contractor is hired.

32. Describe any secondary containment measures to be employed, including the type of material or system used.

The secondary containment that will be employed are insta-berms (or similar) for the products that are in use.

33. Describe the method of chemical transfer.

N/A

34. Describe spill control measures in place.

Spill kits will be readily available on all equipment and in areas that the oil and grease are being used. The exact location and contents of the spill kits will be determined once a contractor is hired.

Workforce and Human Resources/Socio-Economic Impacts

35. Discuss opportunities for training and employment of local Inuit beneficiaries.

The contract for remedial activities will contain an Aboriginal Opportunities Considerations (AOC) clause that requires the contractor to maintain a target level of Inuit employment on the project (and applies a penalty if the contractor fails to meet the target level). On past similar projects the Inuit employment level in the AOC has been in the range of 60-70%. The AOC also sets a target level of Inuit subcontracting. Past similar projects have had minimum Inuit subcontracting levels of 60-80%.

The contract will also contain a training fund that will allow the contractor access to up to 2% of the contract value, to a maximum of \$200,000, to provide training programs to local Inuit beneficiaries.

36. Discuss workforce mobilization and schedule, including the duration of work and rotation length, and the transportation of workers to site.

The workforce will be mobilized to site from Qikiqtarjuaq via charter aircraft. Work will take place during July to September/October in every year of the project. The exact schedule will depend on the contractor hired and the sealift/barge schedules. Workers will work on a rotational schedule to be determined by the contractor.

37. Discuss, where relevant, any specific hiring policies for Inuit beneficiaries.

N/A

Public Involvement/ Traditional Knowledge

38. Indicate which communities, groups, or organizations would be affected by this project proposal.

This project is closest to Qikiqtarjuaq. Residents of Qikiqtarjuaq will be positively affected by this project and the employment/training opportunities it provides. The project will also remove hazardous materials from the environment; this will benefit human and environmental health in the area.

39. Describe any consultation with interested Parties which has occurred regarding the development of the project proposal.

A community consultation was scheduled for January 28, 2014, but was postponed and rescheduled to January 29, 2014 due to weather. The event was advertised locally over the radio and by posters. Presentation handouts were printed in English and Inuktitut. Information on AANDC's contaminated sites program were made available in English, French and Inuktitut. All information was presented on a table near the entrance. A sign-in sheet was also provided. The consultation was attended by 58 individuals from the community of Qikiqtarjuaq. A presentation was given outlining:

- AANDC's contaminated sites program;
- The bidding and tender process;
- The applicable guidelines and site criteria relevant to the FOX-D site;
- Environmental concerns at FOX-D;
- Archaeological areas of interest near the site; and,
- The proposed remedial action plan and the project timeline.

40. Provide a summary of public involvement measures, a summary of concerns expressed, and strategies employed to address any concerns.

See answer to question 39. No concerns were raised in this consultation.

41. Describe how traditional knowledge was obtained, and how it has been integrated into the project.

At the present time traditional knowledge has not been directly integrated into the project, however, community elders from Qikiqtarjuaq did attend the community consultation.

42. Discuss future consultation plans.

Additional community meetings will be held in Qikiqtarjuaq. The first will be in June/July 2016 to tell people about the plan for this summer and potential employment/training and sub-contracting opportunities. There will also be a meeting held prior to the 2017 and 2018 works (May/June) and one at the conclusion of the work in either late 2019 or early 2020. The purpose of the final meeting will be to let the community know the results of the work.

3. PROJECT SPECIFIC INFORMATION

The following table identifies the project types identified in Section 3 of the NIRB, Part 1 Form. Please complete all relevant sections.

It is the proponent's responsibility to review all sections in addition to the required sections to ensure a complete application form.

Table 1: Project Type and Information Required

Project Type	Type of Project Proposal	Information Request
1	All-Weather Road/Access Trail	Section A-1 and Section A-2
2	Winter Road/Winter Trail	Section A-1 and Section A-3
3	Mineral Exploration	Section B-1 through Section B-4
4	Advanced Mineral Exploration	Section B-1 through Section B-8
5	Mine Development/Bulk Sampling	Section B-1 through Section B-12
6	Pits and Quarries	Section C
7	Offshore Infrastructure(port, break water, dock)	Section D
8	Seismic Survey	Section E
9	Site Cleanup/Remediation	Section F
10	Oil and Natural Gas Exploration/Activities	Section B-3 and Section G
11	Marine Based Activities	Section H
12	Municipal and Industrial Development	Section I

SECTION A: Roads/Trails

A-1. Project Information

1. Describe any field investigations and the results of field investigations used in selecting the proposed route (e.g. geotechnical, snow pack)
2. Provide a conceptual plan of the road, including example road cross-sections and water crossings.
3. Discuss the type and volume of traffic using the road/trail (i.e. type of vehicles and cargo and number of trips annually).
4. Discuss public access to the road.
5. Describe maintenance procedures.
6. Describe whether any portion of the road will be located outside of the Nunavut Settlement Area and whether any other regulatory requirements must be met (e.g. CEAA).

A-2. All-Weather Road/Access Trail

7. Discuss road design considerations for permafrost.
8. Describe the construction materials (type and sources for materials), and the acid rock drainage (ARD) and metal leaching characteristics of the construction materials.
9. Discuss construction techniques, including timing for construction activities.
10. Indicate on a map the locations of designated refuelling areas, water crossings, culverts, and quarries/borrow sources.
11. Identify the proposed traffic speed and measures employed to ensure public safety.
12. Describe dust management procedures.

A-3. Winter Road/Trail

13. Describe the surface preparation, including the use of snow berms or compaction, and any flooding. If flooding is to be used, provide the location of the water source on a map.
14. Describe the operating time period.
15. Identify the proposed traffic speed and measures employed to ensure public safety.
16. Discuss whether the selected route traverses any fish-bearing water bodies.

SECTION B: Mineral Exploration /Advanced Exploration /Development

B-1. Project Information

1. Describe the type of mineral resource under exploration.

B-2. Exploration Activity

2. Indicate the type of exploration activity:
 - Bulk Sampling (underground or other)
 - Stripping (mining shallow bedded mineral deposits in which the overlying material is stripped off, the mineral removed and the overburden replaced)
 - Trenching
 - Pitting
 - Delineation drilling
 - Preliminary Delineation drilling
 - Exploration drilling
 - Geophysical work (indicate ground and/or air)
 - Other
3. Describe the exploration activities associated with this project:
 - Satellite remote sensing
 - Aircraft remote sensing
 - Soil sampling
 - Sediment sampling
 - On land drilling (indicate drill type)
 - On ice drilling (indicate drill type)
 - Water based drilling (indicate drill type)
 - Overburden removal
 - Explosives transportation and storage
 - Work within navigable waters
 - On site sample processing
 - Off site sample processing
 - Waste rock storage
 - Ore storage
 - Tailings disposal
 - Portal and underground ramp construction
 - Landfilling
 - Landfarming
 - Other

B-3. Geosciences

4. Indicate the geophysical operation type:
 - a. Seismic (please complete Section E)
 - b. Magnetic
 - c. Gravimetric
 - d. Electromagnetic
 - e. Other (specify)
5. Indicate the geological operation type:
 - a. Geological Mapping
 - b. Aerial Photography
 - c. Geotechnical Survey
 - d. Ground Penetrating Survey
 - e. Other (specify)
6. Indicate on a map the boundary subject to air and/or ground geophysical work.
7. Provide flight altitudes and locations where flight altitudes will be below 610m.

B-4. Drilling

8. Provide the number of drill holes and depths (provide estimates and maximums where possible).
9. Discuss any drill additives to be used.
10. Describe method for dealing with drill cuttings.
11. Describe method for dealing with drill water.
12. Describe how drill equipment will be mobilized.
13. Describe how drill holes will be abandoned.
14. If project proposal involves uranium exploration drilling, discuss the potential for radiation exposure and radiation protection measures. Please refer to the *Canadian Guidelines for Naturally Occurring Radioactive Materials* for more information.

B-5. Stripping/ Trenching/ Pit Excavation

15. Discuss methods employed. (i.e. mechanical, manual, hydraulic, blasting, other)

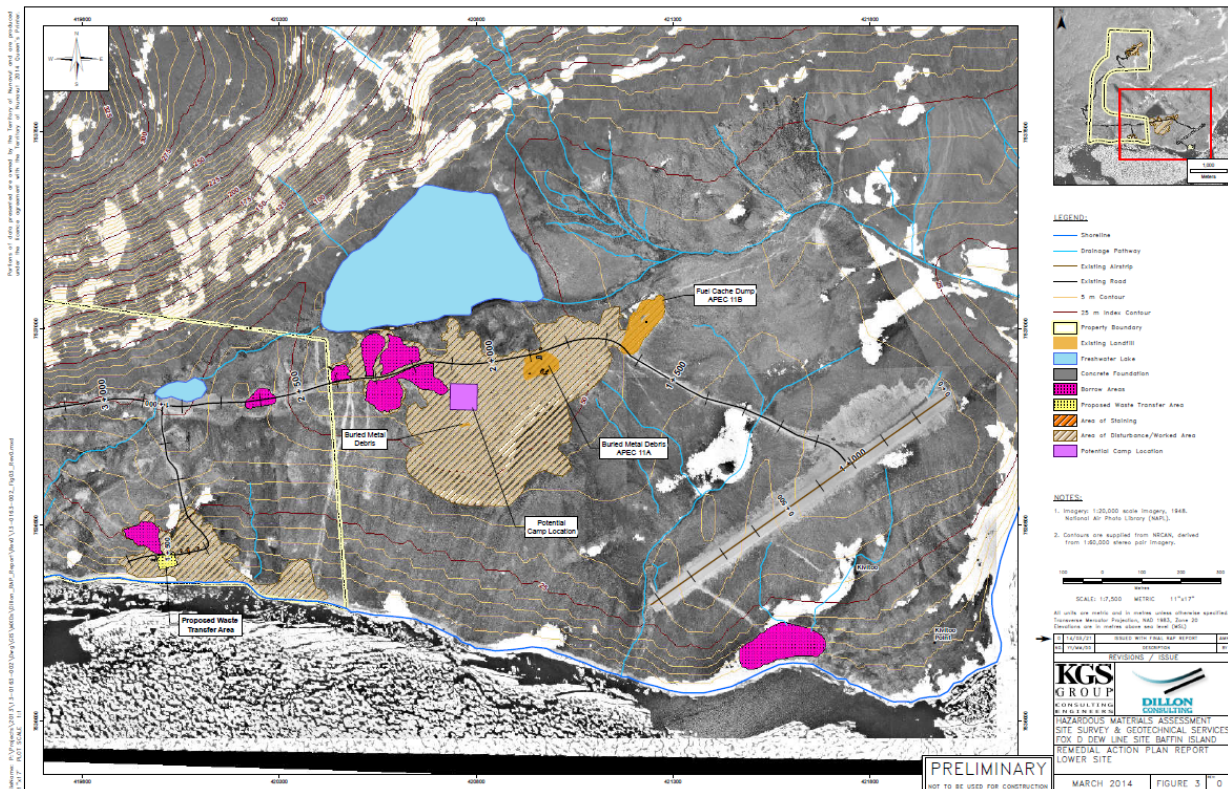
Mechanical, excavations will be completed with an excavator.

16. Describe expected dimensions of excavation(s) including depth(s).

Borrow Source	Location	Estimated Volume of Material (m ³)	Description
B1	(2+600) main road	9,000	Cleaner gravel, (less boulders/cobbles)
B2	(500) Barge road	3,000	Cleaner gravel, (less boulders/cobbles)
B3	(4+125) main road	3,200	Clean ggravel, higher amount boulders/cobbles
B4	(4+250) main road	10,000	Generally cleaner sands and gravel (some boulders/cobbles)
B5	(4+800) main road	17,000	Mixed sand, gravel and cobbles.

The sand and gravel borrow sources are estimated to contain 48,000 m³. As per the Environmental site Assessment (appendix 5), this amount is adequate for the remedial activities associated with this project.

17. Indicate the locations on a map.



18. Discuss the expected volume material to be removed.

Less than 48,000m³

19. Discuss methods used to determine acid rock drainage (ARD) and metal leaching potential and results.

If the borrow material is suspected of having acid rock drainage and metal leaching potential then it will be sampled. This is unlikely as the material used will be from the surface/near surface and no blasting will occur.

SECTION C: Pits and Quarries

1. Describe all activities included in this project.

- Pitting

None

- Quarrying

See section B-5 Above

- Overburden removal

None

- Road use and/or construction (please complete Section A)

See section A above

- Explosives transportation and storage

None

- Work within navigable waters

None

- Blasting

None

- Stockpiling

None

- Crushing

None

- Washing

None

- Other

None

2. Describe any field investigations and the results of field investigations used in determining new extraction sites.

Environmental Site Assessment (appendix 5)
Remedial Action Plan (appendix 4)

3. Identify any carving stone deposits.

None identified

4. Provide a conceptual design including footprint.

Please see diagrams in Remedial Action Plan in Appendix 4.

5. Describe the type and volume of material to be extracted.

See section B-5 above

6. Describe the depth of overburden.

None

7. Describe any existing and potential for thermokarst development and any thermokarst prevention measures.

None

8. Describe any existing or potential for flooding and any flood control measures.

None

9. Describe any existing or potential for erosion and any erosion control measures.

Borrow areas will be re-graded and sloped to prevent erosion

10. Describe any existing or potential for sedimentation and any sedimentation control measures.

None, but if any, then silt fences will be installed as required.

11. Describe any existing or potential for slumping and any slump control measures.

None

12. Describe the moisture content of the ground.

Well drained

13. Describe any evidence of ice lenses.

None

14. If blasting, describe methods employed.

Not applicable

15. Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), and method of storage.

Not applicable

16. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

If the borrow material is suspected of having acid rock drainage and metal leaching potential then it will be sampled. This is unlikely as the material used will be from the surface/near surface and no blasting will occur.

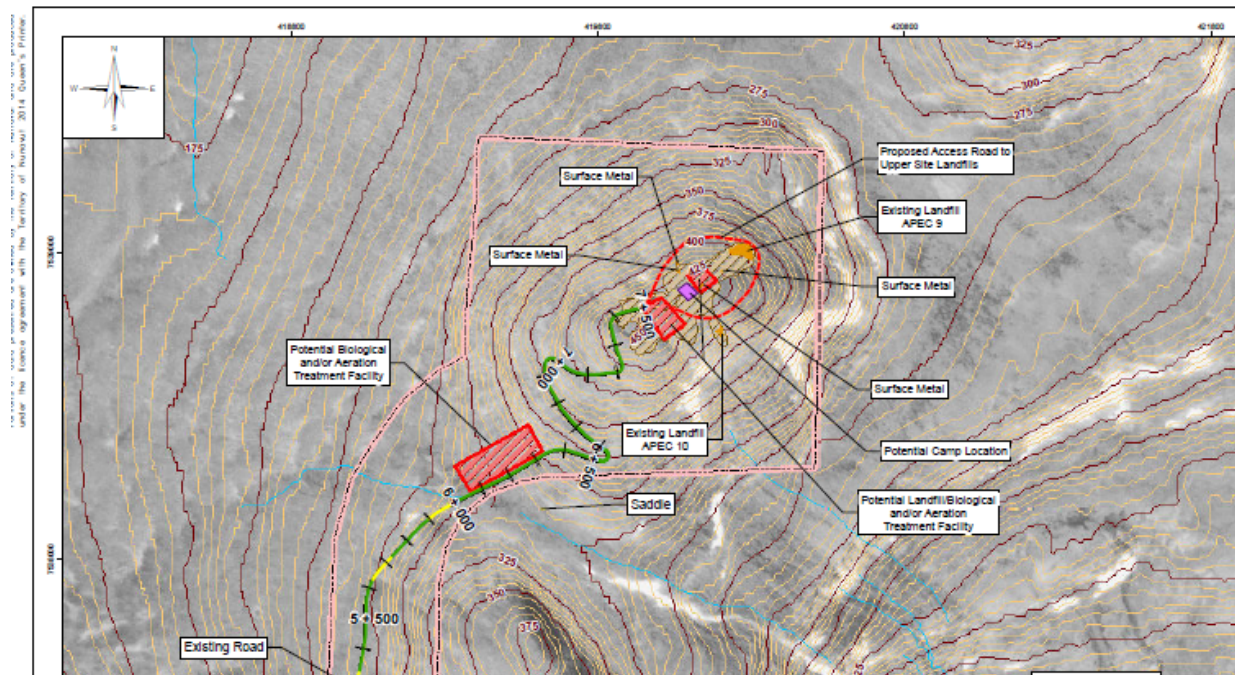
17. Discuss safety measures for the workforce and the public.

A Site Specific Health and Safety Plan (SSHSP) will be developed and implemented for the project. Public access is prohibited.

SECTION D: Site Cleanup/Remediation

1. Describe the location, content, and condition of any existing landfills and dumps (indicate locations on a map).

There are two existing Class C landfills which can be seen in the diagram below, labelled as APEC 9 and 10. Field investigations conducted by Dillon Consulting in 2013 observed minimal, isolated PCB impacts in the dump area. However, the health and safety risks associated with access and de-stabilizing the northeast slope dump (APEC 9) by de



2. Identify salvageable equipment, infrastructure and/or supplies.

None

3. Provide a list of all contaminants to be cleaned up, anticipated volumes and a map delineating contaminated areas. This includes buildings, equipment, scrap metal and debris, and barrels as well as soil, water (surface and groundwater) and sediment.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
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Hazardous materials	Asbestos containing tiles, insulation, etc., and lead-acid batteries	Total = 1.54 m ³ Asbestos= 1.32 m ³ Lead acid= 0,22m ³	Double-bagged in Yellow bags, placed in a barge container to be shipped south for proper disposal.	Disposal at a southern licensed disposal facility
PCB/Lead Amended Paint Products	PCB/Lead Amended Paint Products	0.031 m ³	Dismantle contaminated paint items and ship off-site to an appropriate disposal facility.	Dismantle contaminated paint items and ship off-site to an appropriate disposal facility.
Contaminated soil- metals, PCB	Soil lightly contaminated with metals and PCB	Total = 194 m ³ PCB= 1 m ³ Metal= 193 m ³	Excavated, containerized, labelled in accordance with the Transportation of Dangerous Goods Act	Disposal at a southern licensed disposal facility
Contaminated Soil- PHC	Soils lightly contaminated with PHC	PHC= 3,205 m ³	Screen PHC Type A soils and treat in on-site constructed biological and/or aeration treatment unit (3,005 m ³).	Excavate PHC Type B soils (200 m ³) and place into containers, and ship off-site to a licensed disposal facility.
Non-hazardous	heavy equipment, barrels, scrap metal, scrap wood, concrete, electrical equipment and plumbing parts	14,834 m ³	Treatment off-site	14,834 m ³ excavated, sorted and separated into different waste types where it is safe and practical to do so, and disposed off-site in an appropriate licensed facility.
Non-hazardous	Debris in existing class C dumps	6,645 m ³	Buried debris that is inaccessible	Buried debris that is inaccessible

			for excavation in Class C dumps (APECs 9 and 10) should be buried and re-stabilized in-situ. Rocks and concrete foundations from APECs 1-4 to be used as rip-rap and fill in void space at APEC 9. Area will be covered with rip rap and erosion resistant material for stability.	for excavation in Class C dumps (APECs 9 and 10) should be buried and re-stabilized in-situ. Rocks and concrete foundations from APECs 1-4 to be used as rip-rap and fill in void space at APEC 9. Area will be covered with rip rap and erosion resistant material for stability.
Water in barrels	Analysis of collected water in the abandoned barrels indicates that the dissolved metals meet DLCU barrel protocol.		Disposal on ground is permitted once water has been polished with an absorbent materials, additional sampling of more barrels during remediation program is required.	Disposal on ground is permitted once water has been polished with an absorbent materials, additional sampling of more barrels during remediation program is required.

Maps delineating the contaminated areas can be found in the Remedial Action Plan (RAP) (Appendix 4)

4. Describe the degree of pollution/contamination, and list the contaminants and toxicity.

The degree of contamination is low to moderate.

5. Describe technologies used for clean-up and/or disposal of contaminated materials. Include a list of all the physical, chemical and biological cleanup/ remediation methods, operational procedures, and the dosage/frequency of reagents and bacterial medium.

Only proven methods/technologies will be used. See the Remedial Action Plan (Appendix 4) for the clean-up plans.

6. Identify and describe all materials to be disposed of off site, including the proposed off site facilities, method of transport and containment measures.

See chart in question 3 above for list of materials that are being disposed of off-site. A sea lift barge will be used to ship these materials South. The exact disposal location has yet to be determined but will be once a contract is in place.

7. Discuss the viability of landfarming, given site specific climate and geographic conditions.

Landfarming has proven to be a viable option for the treatment of hydrocarbons (F1-F3) on other Distant Early Warning (DEW) Line sites. This technique is most effective on lighter end hydrocarbons and typically requires a couple of seasons to reduce contaminant levels to below criteria. Building the landfarm and starting treatment on the hydrocarbon contaminated soil will be the first priority for the contractor on this project. Completing this task first will allow for the maximum amount of treatment time.

8. Describe the explosive types, hazard classes, volumes, uses, location of storage (indicate on a map), and method of storage (if applicable).

none

9. If blasting, describe the methods employed.

Not applicable

10. Describe all methods of erosion control, dust suppression, and contouring and re-vegetation of lands.

None required

11. Describe all activities included in this project.

- Excavation (please complete Section B-5)
See section B-5
- Road use and/or construction (please complete Section A)
See section A
- Airstrip use and/or construction
See Part 2 – Transportation Questions 12-15.
- Camp use and/or construction
See Part 2 – Camp Site Transportation Questions 16-18.
- Stockpiling of contaminated material
Contaminated materials will be consolidated and packaged for transportation. They will be stored at a staging area until they are loaded onto the barge/sealift for removal from site. Confirmatory samples will be taken from the staging area once the materials are removed to confirm that the area is not contaminated.

- Pit and/or quarry (please complete Section C)

Please see section C

- Work within navigable waters (please complete Section H)

Not applicable

- Barrel crushing

See Part 2 – Waste Water Questions 25. Empty barrels will be handled as per the Barrel Protocol described in the Abandoned Military Site Remediation Protocol (INAC 2009).

- Building Demolition

All existing structures will be demolished as part of the remedial activities. See Remedial action Plan for additional details.

- Other

None

4. DESCRIPTION OF THE EXISTING ENVIRONMENT

Describe the existing environment, including physical, biological and socioeconomic aspects. Where appropriate, identify local study areas (LSA) and regional study areas (RSA).

Please note that the detail provided in the description of the existing environment should be appropriate for the type of project proposal and its scope.

The following is intended as a guide only.

Physical Environment

Please note that a description of the physical environment is intended to cover all components of a project, including roads/trails, marine routes, etc. that are in existence at present time.

A description of the physical environment can be found in the Fox-D Final Environmental Impact Assessment which is located in appendix 5.

- Proximity to protected areas, including:
 - i. designated environmental areas, including parks;
 - ii. heritage sites;
 - iii. sensitive areas, including all sensitive marine habitat areas;
 - iv. recreational areas;

- v. sport and commercial fishing areas;
 - vi. breeding, spawning and nursery areas;
 - vii. known migration routes of terrestrial and marine species;
 - viii. marine resources;
 - ix. areas of natural beauty, cultural or historical history;
 - x. protected wildlife areas; and
 - xi. other protected areas.
- Eskers and other unique landscapes (e.g. sand hills, marshes, wetlands, floodplains).
 - Evidence of ground, slope or rock instability, seismicity.
 - Evidence of thermokarsts.
 - Evidence of ice lenses.
 - Surface and bedrock geology.
 - Topography.
 - Permafrost (e.g. stability, depth, thickness, continuity, taliks).
 - Sediment and soil quality.
 - Hydrology/ limnology (e.g. watershed boundaries, lakes, streams, sediment geochemistry, surface water flow, groundwater flow, flood zones).
 - Tidal processes and bathymetry in the project area (if applicable).
 - Water quality and quantity.
 - Air quality.
 - Climate conditions and predicted future climate trends.
 - Noise levels.
 - Other physical Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

Biological Environment

- Vegetation (terrestrial as well as freshwater and marine where applicable).
- Wildlife, including habitat and migration patterns.
- Birds, including habitat and migration patterns.
- Species of concern as identified by federal or territorial agencies, including any wildlife species listed under the *Species at Risk Act (SARA)*, its critical habitat or the residences of individuals of the species.
- Aquatic (freshwater and marine) species, including habitat and migration/spawning patterns.
- Other biological Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

Socioeconomic Environment

- Proximity to communities.
- Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project (Local Study Area) and adjacent area (Regional Study Area).
- Palaeontological component of surface and bedrock geology.
- Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations.
- Local and regional traffic patterns.
- Human Health, broadly defined as a complete state of wellbeing (including physical, social, psychological, and spiritual aspects).
- Other Valued Socioeconomic Components (VSEC) as determined through community consultation and/or literature review.

5. IDENTIFICATION OF IMPACTS AND PROPOSED MITIGATION MEASURES

An identification of impacts and proposed mitigation measures can be found in the Fox-D Final Environmental Impact Assessment which is located in appendix 5.

1. Please complete the attached Table 1 – Identification of Environmental Impacts, taking into consideration the components/activities and project phase(s) identified in Section 4 of this document. Identify impacts in Table 1 as either positive (P), negative and mitigable (M), negative and non- mitigable (N), or unknown (U).

Please see Table 1

2. Discuss the impacts identified in the above table.

Please see Fox-D Final Environmental Impact Assessment which is located in appendix 5.

3. Discuss potential socioeconomic impacts, including human health.

Please see Fox-D Final Environmental Impact Assessment which is located in appendix 5.

4. Discuss potential for transboundary effects related to the project.

None

5. Identify any potentially adverse effects of the project proposal on species listed under the *Species at Risk Act (SARA)* and their critical habitats or residences, what measures will be taken to avoid or lessen those effects and how the effects will be monitored.

Please see Fox-D Final Environmental Impact Assessment which is located in appendix 5.

6. Discuss proposed measures to mitigate all identified negative impacts.

Please see Fox-D Final Environmental Impact Assessment which is located in appendix 5.

6. CUMULATIVE EFFECTS

Cumulative impacts for this project are discussed in the Fox-D Final Environmental Impact Assessment which is located in appendix 5.

A cumulative impact (or effect) can be defined as the impact on the environment that results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can also result from individually minor but collectively significant actions taking place over a period of time.

Discuss how the effects of this project interact with the effects of relevant past, present and reasonably foreseeable projects in a regional context.

7. SUPPORTING DOCUMENTS

Where relevant, provide the following supporting documents:

- Abandonment and Decommissioning Plan

Please see Remedial Action Plan in appendix 4.

- Existing site photos with descriptions

Please see the Fox-D Final Environmental Impact Assessment which is located in appendix 5.

- Emergency Response Plan

Not available, will be completed prior to mobilizing to site.

- Comprehensive Spill Prevention/Plan (must consider hazardous waste and fuel handling, storage, disposal, spill prevention measures, staff training and emergency contacts)

Not available, will be completed prior to mobilizing to site.

- Waste Management Plan/Program

Not available, will be completed prior to mobilizing to site.

- Monitoring and Management Plans (e.g. water quality, air pollution, noise control and wildlife protection etc.)

Not available, will be completed prior to mobilizing to site.

- If project activities are located within Caribou Protection Areas or Schedule 1 Species at Risk known locations, please provide a Wildlife Mitigation and Monitoring Plan

Not Applicable

In addition, for Project Type 9 (Site Cleanup/Remediation), please provide the following additional supporting documents:

- Remediation Plan including cleanup criteria and how the criteria were derived.

Please see attached Remedial Action Plan found in appendix 4.

- Human Health Risk Assessment of the contaminants at the site.

Not available



TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS

[illegible]

