# SCREENING PART 2 FORM
# PROJECT SPECIFIC INFORMATION REQUIREMENTS (PSIR)

## 1. SUBMISSIONS

The Proponent must submit all information pertaining to the Project as a whole. The information requirements below are designed for the purpose of environmental assessment and are not limited to the scope of a single permit or license application.

**IMPORTANT:** Please be advised of the following:

1. NIRB does not accept references to an ftp or web sites as a submission.

2. The Proponent must provide NIRB with 1 (one) electronic copy and 1 (one) hardcopy of the required information in English.

3. All maps should be shapefiles, be legible, and should include grids, be of appropriate scale, indicate the scale, include latitude and longitude references, NTS Maps numbers, title, legend and a north arrow. To the extent possible, avoid hand-drawn demarcations and faxed maps; and,

4. Please complete all required information in each section below. If the required information is not applicable to the project proposal, please indicate this in the response with "n/a". If the request has been provided in a different section or report, please note the section or report where the response can be found.

## 2. GENERAL PROJECT INFORMATION REQUIREMENTS

### Project Coordinates and Maps

1. The preferred method for submitting project coordinates information is through the use of a Geographic Information System (GIS) compatible digital file. Although an ESRI ArcView 3.x shape file (in decimal degrees) is the preferred interchange format, the NIRB has the capacity to receive over 100 GIS and CAD related formats, including MapInfo and AutoCAD, provided proper format and projection metadata is also submitted. The NIRB requires coordinates for the project proposal which reflect the entire project area as defined by:

    - Area/sites of investigation;

- See attached map
    - Boundaries of the foreseen land use permit/right-of-way area(s) to be applied for;

- See attached maps. Boundaries of INAC landuse permit, new camp and airstrip upgrade commercial lease, new road commercial lease, quarry permit.
  - Location of any proposed infrastructure or activity(s); and
  - See attached maps
  - Boundaries of the mineral claim block(s) where proposed activities will be undertaken.
- The property boundaries are approximately 66° 00’ 00” - 68° 00’ 00 / 88° 00’ 00” - 94° 00’ 00
- Camps are already established at:

| CAMPS | Nad83 Zone 15 Easting | Nad83 Zone 15 Northing | DD Latitude | DD Longitude |
|---|---|---|---|---|
| Hayes Camp | 564613 | 7394173 | 66o39'30" | 91o33'11" |
| Ingot Camp | 516500 | 7386100 | 66o35'40" | 92o37'34" |
| Crater Camp | 677781 | 7478788 | 67o22'19" | 88o51'21" |
| Bullion Camp | 494850 | 7363850 | 66o23'30" | 93o07'30" |
| Herc Strip Cache | 564271 | 7393425 | 66o39'10" | 92o32'41" |

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

3. Map of any camp site including locations of camp facilities.
4. Map of the project site indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife and wildlife habitat.

Maps are enclosed of the project area, proposed camp locations, areas of exploration interest.

**Project General Information**

5. Discuss the need and purpose of the proposed project.
   - The need and purpose of the project is to evaluate the mineral potential for gold in the Committee Bay Greenstone Belt, within the claim area. Exploration over the past 18 years as included sampling, staking, geophysics, prospecting, mapping and drilling. Drilling is expected to commence in May 2011 with up to 7 diamond drills and 2 RC drills.
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).

   There are no alternatives to the proposed project activities. The exploration is low impact and every effort will be made to minimize any impacts to the environment. Activities will be conducted in such a manner to avoid disturbance to wildlife. Any archaeological sites that are discovered will be left undisturbed, their location will be recorded and submitted to the GN and the KIA.
7. Provide a schedule for all project activities.
   - See attached detailed schedule
8. List the acts, regulations and guidelines that apply to project activities.
   - Article 13 - Nunavut Land Claims Agreement
   - NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide
   - for Applicants
   - NWTWB - Guidelines for Contingency Planning
   - DFO - Freshwater Intake End of Pipe Fish Screen Guideline
   - Fisheries Act - s.35
   - GN - Environment Protection- Spill Contingency Regulations

- Canadian Drinking Water Quality Guidelines
- Public Health Act Camp Sanitation Regulations
- Public Health Act Water Supply Regulations
- Nunavut Waters and Nunavut Surface Rights Tribunal Act
- Territorial Land Use Act and Regulations

9. List the approvals, permits and licenses required to conduct the project.
    - Current INAC LUP amendment
    - Current NWB licence amendment
    - 2 Kitikmeot land use license renewals
    - 2 INAC commercial leases
    - 1 INAC quarry permit
    - NIRB Screening Decision

**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
    - Clear Span Bridge

      Yes. We proposed to install a 30ft clear span bridge at Hayes Camp
    - Culvert Maintenance
    - Ice Bridge
    - Routine Maintenance Dredging
    - Installation of Moorings

    Please see DFO's OS for specific definitions of these activities available from DFO's web-site at http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/index-eng.htm
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.

**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).
    - Our camps are fly in/fly out only. Personnell and goods are bought to site in the winter/spring via our permitted ice airstrip and Hercules aircraft. Summer mobilisation is by twin otter aircraft on our existing natural airstrip. We propose to grade and lengthen the current esker airstrip to allow for larger aircraft. Helicopters are also commonly used throughout the season.
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.
    - The current airstrip is a natural esker airstrip which has been in use since 1992. See maps for location.
14. If an airstrip is being constructed, provide the following information:
    i. Discuss design considerations for permafrost
        - The proposed airstrip will be graded and levelled and lengthened to 3000'. The centre of the airstrip is slightly higher topographically and will be cut down, slightly lowering the current permafrost surface. Any cut material will be used to level the ends of the airstrip building ontop of the current permafrost. In addition, a small quarry located onsite (see maps) will be

required to extract 5000 cubic metres of ¾ crush material to cover the surface of the airstrip.

ii. Discuss construction techniques
    - Construction will utilise new heavy equipment brought in for the purpose, eg grader, small screening plant, packer, trucks.

iii. 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).
    - Natural esker material derived from the esker will be used. This material is inert and does not pose an ARD or ML hazard. The rush will be sourced from esker cobbles and local till boulders of granite.

iv. Describe dust management procedures.
    - N/A

v. Provide a map showing location of proposed airstrip.

15. Describe expected flight altitudes, frequency of flights and anticipated flight routes.
    - The airstrip, once in use by the end of the 2011 season will be used by twin otter and buffalo aircraft 3 times a week when camp is in operation. Altitutes will be around 20,000' until landing. Flight routes will be from Rankin Inlet, Yellowknife, Repulse Bay or Kugaaruk to Hayes Camp.

**Camp Site**

16. Describe all existing and proposed camp structures and infrastructure
    - Currently, Hayes camp supports ~ 60 people in stick built wooden tents and common areas. We propose to increase camp capacity to house 100 people at a time. We propose to install a new commercial kitchen and dry facilities (stick built, weatherhaven, alaska structure or similar), followed by new work area (shop, core processing facitilites), 2 new enviro fuel tanks, new generators, new Waste water treatment plant, sludge press and water treatment plant, and new compliant incinerator. We proposed to grade and lengthen the current esker airstrip. In addition, we propose to build and all-weather road from Hayes camp to the Three Bluffs gold deposit.
17. Describe the type of camp:
    a. Mobile
    b. Temporary
    c. Seasonal
    d. Permanent
    e. Other
18. Describe the maximum number of personnel expected on site, including the timing for those personnel involved with the project.
    - 100

**Equipment**

19. Provide a list of equipment required for the project and discuss the uses for the equipment.
    - See attached list
20. If possible, provide digital photos of equipment.

**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.
    - Domestic water is drawn from Sand spit lake ( see map). A mesh screen is places over the end of the water intake line to prevent fish entrapment. Water for drill is drawn from ponds that are part of the Hayes River system (see map).
22. Describe the estimated rate of water consumption ($m^3$/day).
    - We request an increase from 214 m3 to 295 m3 per day to support increased drill rigs.
23. Describe how waste water will be managed. If relevant, provide detail regarding location of sumps, including capacity of sumps and monitoring.
    - Currently, waste water is sumped at Hayes Camp. We propose to install a new WWTP to treat all domestic grey water and sewage.
24. If applicable, discuss how surface water and underground water will be managed and monitored.

**Waste Water (Grey water, Sewage, Other)**

25. Describe the quantities, treatment, storage, transportation, and disposal methods for the following (where relevant):
    - Sewage – 0.05 cubic metres/day, currently pacto toilets/bagged water will be incinerated. Once the new WWTP is installed, the sewage will be treated by the WWTP.
    - Camp grey water – 15 cubic metres/day, currently treating in a sump. Once new WWTP is installed, the grey water will be treated in the WWTP.
    - Combustible solid waste – incinerated on site
    - Non-combustible solid waste, including bulky items/scrap metal – stored onsite and shipped off site to Rankin Inlet or Yellowknife for disposal.
    - Hazardous waste or oil – Minimal amount expected, currently stored onsite and shipped off site to Rankin Inlet or Yellowknife for disposal. We propose to install a new waste oil furnace in the new shop/core shack and once in place, used oil/fuel etc will be burnt in the WOF.
    - Bulky items/scrap metal – minimal amount anticipated, recycled for other uses at camp as much as possible. At the end of the season taken to Rankin Inlet for disposal
    - Contaminated soils/snow – minimal amounts expected. . Contaminated snow will be collected in empty drums and allowed to melt. Absorbent matting will be used to absorb any hydrocarbon and the water will evaporate over the course of the summer. Contaminated soil will be collected in empty drums and will either be shipped from site or placed in a lined container to allow for landfarming.
    - Empty barrels/ fuel drums empty drums will be removed from site on a regular basis.
    - Any other waste produced

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.

**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.
    - See attached Fuel Inventory and map. All fuels will be mobilised to camp by Hercules, twin otter, or buffalo (or similar) aircraft.
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.
    - There has been a lot of discussion surrounding the use of secondary containment. NCG has purchased terra-berms for use as secondary containment at all in use drums (behind tents etc). During the 2011 season, the larger mail fuel cache at Hayes camp will be bermed with insta-berm or similar. NCG is investigating methods of cover for the main caches
29. Describe the method of fuel transfer and the method of refuelling.
    - Fuel will be transferred to site in sealed drums. A hand operated pump will be used for refuelling. All refuelling stations will have spill kits. Once the enviro fuel tanks are installed and in use, we will use the fuel truck for transfer.
30. Describe spill control measures in place.
    - See attached NCG SCP

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.
    - 5/10W30 motor oil; quantity approximately 60 litres; contained in sealed bottles until needed; used in generator in camp; used oil is burned in incinerator using an apparatus designed for burning oil.
    - Batteries (AAA, AA, C, D size); stored in camp; dead batteries removed for proper disposal.
    - Household cleaners for kitchen and bathrooms in camp; cleaners stored in camp; combustible empty containers incinerated, non-combustible containers removed for proper disposal
32. Describe any secondary containment measures to be employed, including the type of material or system used.
    - N/A
33. Describe the method of chemical transfer.
    - N/A
34. Describe spill control measures in place.
    - See attached NCG SCP

**Workforce and Human Resources/Socio-Economic Impacts**

35. Discuss opportunities for training and employment of local Inuit beneficiaries.
    - Local Inuit hires from Kugaaruk and Respulse Bay help us during the season with camp and core processing duties. All personnel are trained onsite.
36. Discuss workforce mobilization and schedule, including the duration of work and rotation length, and the transportation of workers to site.
    - Local hires work 2 weeks in and 2 weeks out, fly in /fly out. Other personnel work up to 6 weeks at a time depending on the job and time of year.
37. Discuss, where relevant, any specific hiring policies for Inuit beneficiaries.
    - NCG will hire locally where possible, in addition to purchasing locally.

**Public Involvement/ Traditional Knowledge**

38. Indicate which communities, groups, or organizations would be affected by this project proposal.
    - Rankin Inlet is 430km to the south. Kugaaruk is located 220km to the north and Repulse Bay is located 230km to the east.
39. Describe any consultation with interested Parties which has occurred regarding the development of the project proposal.
    - NCG conducts annual community consultations with Kugaaruk and Respulse in addition to meeting with Kit.I.A officers and board memebers to keep everyone updated on the project.
40. Provide a summary of public involvement measures, a summary of concerns expressed, and strategies employed to address any concerns.
    - During a Kit.I.A camp visit in 2004, concern was expressed that our small airstrip was bumpy and unsafe. We are now ready to upgrade the airstrip and make is safer.
41. Describe how traditional knowledge was obtained, and how it has been integrated into the project.
42. Discuss future consultation plans.
    - NCG plans to conduct extensive community consultation in 2011.

## 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)

   NCG proposed to permit a road corridor (see map) from Hayes Camp to the Three Bluffs exploration area. The location of the corridor is based on topography and known drainage and cover in the area. NCG will conduct hydro and snow studies during early 2011 in order to located the most ideal location for the road within the road corridor.

2. Provide a conceptual plan of the road, including example road cross-sections and water crossings.

   The road will be built up on the current surface with local esker, till and rock materials. There will be no reduction in permafrost due to the road. Once hydro studies have been undertaken in 2011, small culverts may be required to disperse melt run off and run off in high rainfall periods to avoid road washouts.

The road will cross a small ephemeral drainage at Hayes Camp (see map) and we intent to use a 30ft clear span bridge to cross.

3. Discuss the type and volume of traffic using the road/trail (i.e. type of vehicles and cargo and number of trips annually).
    - Traffic will consist of side-by-side quads, regular quads and snowmobiles, heavy equipment and pickup trucks were possible. The road will be used daily to bring workers to and from the Three Bluffs site, and to deliver goods and materials. It reduces our reliance on helicopters, is more efficient and safer in emergency situations or bad weather.
4. Discuss public access to the road.
    - The road can be used by the public. However, the location is a large distance from any community and community members rarely pass through area. Therefore public access will be minimal.
5. Describe maintenance procedures.
    - Maintance will be ongoing and seasonal with heavy equipment.
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.
    - The road will be built up on the current surface with local esker, till and rock materials. There will be no reduction in permafrost due to the road. Once hydro studies have been undertaken in 2011, small culverts may be required to disperse melt run off and run off in high rainfall periods to avoid road washouts
8. Describe the construction materials (type and sources for materials), and the acid rock drainage (ARD) and metal leaching characteristics of the construction materials.
    - Local materials will be sought along the road corridor during the 2011 season and any quarry permits required will be submitted at that time. Inert esker, till boulders and granite outcrop will be used to build up the road.
9. Discuss construction techniques, including timing for construction activities.
    - The packer, grader, loader, screener, crusher and AT trucks will be used to build the road. We expect to survey the route and start by Sept 2011. The majority of the road will be constructed during the 2012 season.
10. Indicate on a map the locations of designated refuelling areas, water crossings, culverts, and quarries/borrow sources.
    - See attached map. Any necessary culverts, other crossings besides the known clear span crossing, or quarry pits will be detailed in the fall of 2011 once the studies have been completed.
11. Identify the proposed traffic speed and measures employed to ensure public safety
    - The road will be marked and staked for its full length. Speed will not exceed 50km/hr where appropriate. Condition and speed along the road will be evaluated on a daily basis when in use.
12. Describe dust management procedures.
    - We do not expect any issues with dust.

### 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.
    - The winter ice road route (already permitted for the 2011 spring season) will be utilised again to mobilise the new drill water system to the Three Bluffs site. The road is clear with the skidder and dozer on the on ice portions. On the portage portions, snow is compacted and flooded to form a solid surface. Snow berms are used either side of the road. The location of the water source is the drill water pond (see map)
14. Describe the operating time period.
    - Preparation starts in March and is us use by April. The road would be in sporadic use till the end of May.
15. Identify the proposed traffic speed and measures employed to ensure public safety.
    - The road is staked and flagged for safety. The speed limit is 20km/hr. Condition and speed along the road will be evaluated on a daily basis when in use.
16. Discuss whether the selected route traverses any fish-bearing water bodies.
    - The ice road crosses the Hayes River system and related ponds which is locally fish bearing.

## SECTION B: Mineral Exploration /Advanced Exploration /Development

### B-1. Project Information

1. Describe the type of mineral resource under exploration.
    - To evaluate the mineral potential for gold in the claim area.

### 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 – drilling is expected to being in May 2011
    - Geophysical work (indicate ground and/or air) – both ground and airborne geophysical work will be conducted
    - Other – sampling, prospecting, mapping
3. Describe the exploration activities associated with this project:
    - Satellite remote sensing
    - Aircraft remote sensing
    - Soil sampling - 2011
    - Sediment sampling - 2011
    - On land drilling (indicate drill type) 2011
    - 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 - 2011
- 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.
    a. Location to be determined.
7. Provide flight altitudes and locations where flight altitudes will be below 610m.
    a. Airborne magnetics or IP may be conducted at 400m altitude.

**B-4. Drilling**

8. Provide the number of drill holes and depths (provide estimates and maximums where possible).
    - We expect to drill up to 60,000m with up to 7 diamond drills and 2 RC drills, 120 drillholes with a maxium depth of 400m. The majority of holes will be ~200m in depth.
9. Discuss any drill additives to be used.
    - Drill soap, salt
10. Describe method for dealing with drill cuttings.
    - See attached plans
11. Describe method for dealing with drill water.
    - See attached plans
12. Describe how drill equipment will be mobilized.
    - Drills will be flown into camp and mobilised to the site using helicopters. If snowpack allows, drills on skids may be hauled on the temporary winter trail to site.
13. Describe how drill holes will be abandoned.
    - See attached plans

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)
16. Describe expected dimensions of excavation(s) including depth(s).
17. Indicate the locations on a map.
18. Discuss the expected volume material to be removed.
19. Discuss methods used to determine acid rock drainage (ARD) and metal leaching potential and results.

**B-6. Underground Activities**

20. Describe underground access.
21. Describe underground workings and provide a conceptual plan.
22. Show location of underground workings on a map.
23. Describe ventilation system.
24. Describe the method for dealing with ground ice, groundwater and mine water when encountered.
25. Provide a Mine Rescue Plan.

**B-7. Waste Rock Storage and Tailings Disposal**

26. Indicate on a map the location and conceptual design of waste rock storage piles and tailings disposal facility.
27. Discuss the anticipated volumes of waste rock and tailings.
28. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

**B-8. Stockpiles**

29. Indicate on a map the location and conceptual design of all stockpiles.
30. Describe the types of material to be stockpiled. (i.e. ore, overburden)
31. Describe the anticipated volumes of each type of material to be stockpiled.
32. Describe any containment measures for stockpiled materials as well as treatment measures for runoff from the stockpile.
33. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

**B-9. Mine Development Activities**

34. Indicate the type(s) of mine development activity(s):
    - Underground
    - Open Pit
    - Strip Mining
    - Other
35. Describe mine activities.

- Mining development plan and methods
- Site access
- Site infrastructure (e.g. airstrip, accommodations, offshore infrastructures, mill facilities, fuel storage facilities, site service roads)
- Milling process
- Water source(s) for domestic and industrial uses, required volumes, distribution and management.
- Solid waste, wastewater and sewage management
- Water treatment systems
- Hazardous waste management
- Ore stockpile management
- Tailings containment and management
- Waste rock management
- Site surface water management
- Mine water management
- Pitting and quarrying activities (please complete Section C)
- Explosive use, supply and storage (including on site manufacturing if required)
- Power generation, fuel requirements and storage
- Continuing exploration
- Other

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

**B-10. Geology and Mineralogy**

37. Describe the physical nature of the ore body, including known dimensions and approximate shape.
    - The ore body is a banded iron formation/shear zone hosted gold desposit, current holding a resource of ~750,000 oz of gold. The current resource is 50m by ~1000 in dimension. Further drilling is expected to outline a 3.5km strike length and significantly increase the gold resource.
38. Describe the geology/ mineralogy of the ore deposit
    - The ore body host consists of sulphidic and altered iron formation, greywackes and felsic volcanics.
39. Describe the host rock in the general vicinity of the ore body.
    - The host rock consists on non-altered volcanics and grewackes.
40. Discuss the predicted rate of production.
    - N/A
41. Describe mine rock geochemical test programs which have been or will be performed on the ore, host rock, waste rock and tailings to determine acid generation and contaminant leaching potential. Outline methods and provide results if possible.

**B-11. Mine**

42. Discuss the expected life of the mine.
43. Describe mine equipment to be used.
44. Does the project proposal involve lake and/or pit dewatering? If so, describe the activity as well as the construction of water retention facilities if necessary.
45. Discuss the possibility of operational changes occurring during the mine life with consideration for timing. (e.g. open pit to underground)

46. If project proposal involves uranium mining, consider the potential for radiation exposure and radiation protection measures. Particular attention should be paid to *The Nuclear Safety and Control Act*.

**B-12. Mill**

47. If a mill will be operating on the property in conjunction with mining, indicate whether mine-water may be directed to the mill for reuse.
48. Describe the proposed capacity of the mill.
49. Describe the physical and chemical characteristics of mill waste as best as possible.
50. Will or does the mill handle custom lots of ore from other properties or mine sites?

## SECTION C: Pits and Quarries

1. Describe all activities included in this project.
   - Pitting
   - Quarrying
     - We propose to excavate a small quarry in the Hayes camp esker to produce 5000m cubed of ¾ inch crush material to cover the current airstrip. Further quarries will be required for building the road. Locations and type and volumes to be determined.
   - Overburden removal
   - Road use and/or construction (please complete Section A)
     - We propose to build a road from Hayes Camp to the Three Bluffs exploration area
   - Explosives transportation and storage
   - Work within navigable waters
   - Blasting
   - Stockpiling
   - Crushing
     - Minor amounts of esker material may need to be crushed and screened for a cover of the current airstrip. Further crushing of material will be required for material to be used on the building of the new road.
   - Washing
   - Other
2. Describe any field investigations and the results of field investigations used in determining new extraction sites.
3. Identify any carving stone deposits.
4. Provide a conceptual design including footprint.
5. Describe the type and volume of material to be extracted.
6. Describe the depth of overburden.
7. Describe any existing and potential for thermokarst development and any thermokarst prevention measures.
8. Describe any existing or potential for flooding and any flood control measures.
9. Describe any existing or potential for erosion and any erosion control measures.
10. Describe any existing or potential for sedimentation and any sedimentation control measures.
11. Describe any existing or potential for slumping and any slump control measures.
12. Describe the moisture content of the ground.
13. Describe any evidence of ice lenses.
14. If blasting, describe methods employed.

15. Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), and method of storage.
16. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.
17. Discuss safety measures for the workforce and the public.

## SECTION D: Offshore Infrastructure

### D-1. Facility

1. Describe any field investigations and the results of field investigations used in selecting the site (i.e. aerial surveys, bathymetric surveys, tidal processes, shoreline erosion processes, geotechnical foundation conditions)
2. Provide a conceptual plan, profile description and drawing(s) indicating shoreline, facility footprint, tidal variations, required vessel draft, keel offset, deck height freeboard
3. Discuss how anticipated loads on the seabed foundation and on the offloading platform will be incorporated into the design.
4. Describe how vessels will manoeuvre around the facility. (e.g. pull alongside or in front)
5. Discuss the anticipated life of the facility.
6. Describe whether part of the facility or project will be located outside of the Nunavut Settlement Area and whether any other regulatory requirements must be met (e.g. CEAA).

### D-2. Facility Construction

7. Describe the types of material used for construction (i.e. granular or rock, steel piling or sheet piling, concrete). If material is granular, consider acid rock drainage potential, metal leaching potential, percentage of fines, size.
8. Describe dredging activities.
9. Indicate source of granular or rock material used in construction.
10. List quantities of the various types of material used in construction.
11. Describe construction method(s).
12. Indicate whether a site engineer will be on-site to inspect construction.
13. If proposed construction method involves dumping of fill into water, discuss measures for mitigating the release of suspended solids.

### D-3. Facility Operation

14. Describe maintenance activities associated with the facility (e.g. dredging, maintenance to account for potential settlement of facility,)
15. Discuss whether the public will have access to the facility(s) and describe public safety measures.
16. Describe cargo and container handling, transfer and storage facilities.
17. Indicate whether fuel will be transferred from barges at this site and describe the method of that fuel transfer.
18. Discuss frequency of use.

### D-4. Vessel Use in Offshore Infrastructure

19. Please complete Section H

## SECTION E: Seismic Survey

### E-1. Offshore Seismic Survey

1. Indicate whether the survey is 2D or 3D at each site.
2. Describe the type of equipment used, including:
   - Type and number of vessels including length, beam, draft, motors, accommodation capacity, operational speeds when towing and when not towing
   - Sound source (type and number of airguns)
   - Type and number of hydrophones
   - Number, length, and spacing of cables/ streamers
3. On a map, indicate the grid, number of lines and total distance covered by each line, the distance to nearby community/communities and sensitive areas (e.g., National Parks, National Wildlife Areas, Migratory Bird Sanctuaries, recognized breeding grounds or migratory routes).
4. Indicate the discharge volume of the airguns, the depth of airgun discharge, the noise levels of acoustic signal at various distances from the source (e.g.,500 metres,1000 metres), and the frequency and duration of airgun operation at each site.
5. Discuss the potential for dielectric oil to be released from the streamer array, and describe proposed mitigation measures.
6. Indicate whether additional seismic operations are required for start-up of operations, equipment testing, repeat coverage of areas.
7. Indicate whether air gun procedures will include a “ramping up” period and, if so, the proposed rate of ramping up.
8. Indicate whether the measures described in the *Statement of Canadian Practice for Mitigation of Noise in the Marine Environment* will be adhered to for this project.
9. Describe whether any part of the project will be located outside of the Nunavut Settlement Area and whether any other regulatory requirements must be met (e.g. CEAA).

### E-2. Nearshore/Onshore Seismic Survey

10. For each site, indicate whether nearshore and onshore surveys will be conducted during the ice season or once the ice has melted
11. Describe how nearshore and onshore areas will be accessed.
12. Describe the survey methods to be used (e.g. explosive charge, vibration, air or water gun, other)
13. Describe equipment to be used
14. If applicable, indicate number, depth and spacing of shot holes
15. Describe explosive wastes including characteristics, quantities, treatment, storage, handling, transportation and disposal methods.

### E-3. Vessel Use in Seismic Survey

16. Please complete Section H.

## SECTION F: Site Cleanup/Remediation

1. Describe the location, content, and condition of any existing landfills and dumps (indicate locations on a map).
2. Identify salvageable equipment, infrastructure and/or supplies.

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.
4. Describe the degree of pollution/contamination, and list the contaminants and toxicity.
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.
6. Identify and describe all materials to be disposed of off site, including the proposed off site facilities, method of transport and containment measures.
7. Discuss the viability of landfarming, given site specific climate and geographic conditions.
8. Describe the explosive types, hazard classes, volumes, uses, location of storage (indicate on a map), and method of storage (if applicable).
9. If blasting, describe the methods employed.
10. Describe all methods of erosion control, dust suppression, and contouring and re-vegetation of lands.
11. Describe **all** activities included in this project.
    - Excavation (please complete Section B-5)
    - Road use and/or construction (please complete Section A)
    - Airstrip use and/or construction
    - Camp use and/or construction
    - Stockpiling of contaminated material
    - Pit and/or quarry (please complete Section C)
    - Work within navigable waters (please complete Section H)
    - Barrel crushing
    - Building Demolition
    - Other

## SECTION G: Oil and Natural Gas Exploration/Activities

### G-1. Well Authorization

1. Identify the location(s) of the well centre(s) by latitude and longitude. Attach a map drawn to scale showing locations of existing and proposed wells.
2. Indicate if the site contains any known former well sites.
3. Include the following information for each well:
    a. Well name
    b. Surface location
    c. Proposed bottomhole location
    d. Ground elevation (in metres)
    e. Spacing area (in units)
    f. Identify the well type:
        i. Production
        ii. Injection
        iii. Disposal
        iv. Observation
        v. Storage
        vi. Experimental
        vii. Other (specify)
    g. Identify the well classification:

i. Exploratory wildcat
ii. Exploratory outpost
iii. Development

h. Drilling operation (deviation):
i. Vertical
ii. Directional
iii. Horizontal
iv. Slant

i. Objective Zones (copy chart style below)

| Objective Formation | Fluid (oil/gas/water) | Depth (mTVD) | Core (Y/N) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

j. Proposed Total Depth in mTDV and mMD.
k. Formation of Total Depth
l. Sour well? (yes or no)
i. If Yes: Maximum $H_2S$ concentration in mol/kmol
Emergency planning zone radius in km

m. Blowout Prevention (Well Class I – VI)
n. Deviation Surveys
i. Will be run at intervals less than 150m? (yes or no)

o. Wireline logs
i. Will run logs in hole for surface casing? (yes or no)
ii. Will run a minimum of 2 porosity measuring logs? (yes or no)

**G-2. On-Land Exploration**

4. Indicate if the site contains any known:
a. Waste Dumps
b. Fuel and Chemical Storage Areas
c. Sump Areas
d. Waste Water Discharge Locations
5. Attach maps drawn to scale showing locations of existing and proposed items identified in (2) above, as well as all proposed:
a. Sumps
b. Water sources
c. Fuel and chemical storage facilities
d. Drilling mud storage areas
e. Transportation routes
6. If utilizing *fresh water*, estimate maximum drawdown and recharge capability of the river or lake from which water will be drawn.
7. Indicate if permafrost is expected to be encountered under:
a. Camp Facilities
b. Well Site
c. Access Routes
d. Sumps
e. Other: _____
8. Indicate any potential for encountering artesian aquifers or lost circulation within the surface hole (to casing depth).

9. Will drilling wastes contain detrimental substances (including, but not limited to, oil-based or invert mud and high salinity fluids)? If yes, indicate the substances and estimated volumes.
10. Indicate methods for disposal of drilling wastes:
    a. Sump
    b. Down Hole (requires NEB approval)
    c. On-Site Treatment (provide plan)
    d. Off-Site (give location and method of disposal)
11. If a sump is being used, attach the following information:
    a. scale drawings and design of sumps
    b. capacity in cubic metres
    c. berm erosion protection
    d. soil permeability and type
    e. recycling/reclaiming waters
    f. surface drainage controls
    g. abandonment procedures
12. Attach the proposed or existing contingency plan which describes the course of action, mitigative measures and equipment available for use in the event of system failures and spills of hazardous materials.
13. Attach an outline of planned abandonment and restoration procedures.

### G-3. Off-Shore Exploration

14. Will drilling wastes contain detrimental substances (including, but not limited to, oil-based or invert mud and high salinity fluids)? If yes, indicate the substances and estimated volumes.
15. Attach the proposed or existing contingency plan which describes the course of action, mitigative measures and equipment available for use in the event of system failures and spills of hazardous materials.
16. Attach an outline of planned abandonment and restoration procedures.
17. Please complete Section H.

### G-4. Rig

18. Type of Rig. Draw works, make and model
19. Derrick/Mast make and model
20. H.P. available to draw-works

## SECTION H: Marine Based Activities

### H-1. Vessel Use

1. Describe the purpose of vessel operations.
2. List classes and sizes of vessels to be used.
3. Indicate crew size.
4. Indicate operating schedule.
5. Provide a description of route to be traveled (include map).
6. Indicate whether the vessel will call at any ports. If so, where and why?

7. Describe wastes produced or carried onboard including the quantities, storage, treatment, handling and disposal methods for the following:
    a. Ballast water
    b. Bilge water
    c. Deck drainage
    d. Grey and black water
    e. Solid waste
    f. Waste oil
    g. Hazardous or toxic waste
8. List all applicable regulations concerning management of wastes and discharges of materials into the marine environment
9. Provide detailed Waste Management, Emergency Response and Spill Contingency Plans
10. Does the vessel(s) possess an Arctic Pollution Prevention Certificate? If yes, indicate the date of issue and the name of the classification society.
11. Describe the source of fresh water and potable water
12. Indicate whether ice-breaking will be required, and if so, approximately where and when? Discuss any possible impacts to caribou migration, Inuit harvesting or travel routes, and outline proposed mitigation measures.
13. Indicate whether the operation will be conducted within the Outer Land Fast Ice Zone of the East Baffin Coast. For more information on the Outer Land Fast Ice Zone, please see the Nunavut Land Claims Agreement (NLCA), Articles 1 and 16.
14. Indicate whether Fisheries or Environmental Observers or any other *Qualified Marine Observer* will be onboard during the proposed project activities. If yes, describe their function and responsibilities.
15. Describe all proposed measures for reducing impacts to marine habitat and marine wildlife (including mammals, birds, reptiles, fish, and invertebrates).
16. Describe whether any part of the project will be located outside of the Nunavut Settlement Area and whether any other regulatory requirements must be met (e.g. CEAA).

### H-2. Disposal at Sea

17. Provide confirmation you have applied for a *Disposal at Sea* permit with Environment Canada.
18. Provide a justification for the disposal at sea.
19. Describe the substance to be disposed of, including chemical and physical properties.
20. Indicate the location where the disposal is to take place.
21. Describe the frequency of disposals (disposals per day/week or month).
22. Describe the route to be followed during disposal and indicate on a map.
23. Indicate any previous disposal methods and locations.
24. Provide an assessment of the potential effects of the disposal substance on living marine resources.
25. Provide an assessment of the potential of the disposal substance, once disposed of at sea, to cause long-term physical effects.
26. Describe all mitigation measures to be employed to minimize the environmental, health, navigational and aesthetic impacts during loading, transport and disposal.

## SECTION I: Municipal and Industrial Development

1. Describe the business type, including public, private, limited, unlimited or other.

2. Describe the activity (e.g. development of quarry, development of hydroelectric facility, bulk fuel storage, power generation with nuclear fuels or hydro, tannery operations, meat processing and packing, etc.).
3. Describe the production process or service provision procedures.
4. Describe the raw materials used in this activity, the storage and transportation methods. If hazardous materials are included in raw materials, products or by-products; include safety regulations methodology.
5. Provide detailed information about the structure and/or building in which the activity will be conducted.
6. List the PPE (personal protective equipment) and tools to be used to protect personal health and safety.
7. Describe the firefighting equipment that are or will be installed.
8. Describe the noise sources, noise level in work area, technical measurements that will be adopted to abate the noise levels and regulatory requirements for noise abatement and noise levels.
9. Describe the type of gaseous emission that will be produced during this activity. Include the allowable thresholds and mitigation measures.
10. Describe odours that the activity might release and include corresponding allowable threshold. Describe mitigation measures if thresholds are exceeded.
11. Describe radiation sources that might be emitted during the activity. Include type and source and include mitigation measures. Also describe preventative measures for human exposure (i.e. PPE).
12. Discuss the employee safety and environment protection training program.
13. If the activity involves a bulk fuel storage facility, include drawings showing the bulk fuel storage facility location in proximity to natural water courses, high water marks, etc.
14. If the activity involves the development of a new quarry or expansion of an existing quarry, complete Section C.

## 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.*

- 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.

The region has been extensively glaciated, which has resulted in the formation of numerous eskers throughout the project area. The majority of the project area is low-lying, with numerous small lakes and streams; wetland and marshy ground is common. At this point, there is no evidence of ground, slope, or rock instability, or seismicity in the field area. Likewise, there is no evidence at this time of thermokarsts or ice lenses

Bedrock geology comprises Archean volcanic and plutonic rocks, including greenstone belts, overlain unconformably by Archean to proterozoic supracrustal volcanic and sedimentary rocks. Surficial geology reflects the presence of an ice divide during glacial times, and comprises several different types of till, morainal and outwash features, and eskers. A much greater percentage of the land comprises glacial till than exposed bedrock.

Permafrost is stable in the region, with a midsummer depth to the top of permafrost of one to two metres. Permafrost thickness may be up to 300 m thick throughout the area. Soils and sediments comprise a mix of glacial till, younger fluvial deposits, and wind-blown material such as peat and inorganic dust.

Water quality in the area is pristine. Climate conditions in this area can be summarized as cold winters and cool summers. However, in recent years there has been a warming trend with less snow in the winters. Noise levels in the arctic are very low. NCG does not anticipate any impacts to the water quality or climate from this program. Noise levels will increase due to the helicopter and the drill in future years.

**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.
-

Vegetation in the project area comprises arctic tundra; plants are generally less than six inches in height, and include grasses, heathers, low-bush evergreens, and arctic wildflowers. There are no trees in the area, though dwarf birch and willow may be found in sheltered areas.

The project area is not located within any migration of caribou herds. There are a small number of wolves. A small population of muskoxen may seen in the project area. Smaller mammals include wolverine, foxes, ermines, and ground squirrels (siksiks), as well as mice and voles.

The project area contains few bird species due to the lack of food. Though some bird species inhabit the area year-round (e.g. ptarmigan), most birds use the region for nesting or as a stopover on their annual migration route.

Species of Concern in the area, as identified under the Species at Risk Act, include wolverines.

Aquatic species in the project area are all fresh-water organisms. Fish include trout and char.

**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.

As stated previously, NCG will be conducting extensive community consultation this year. More of this information will be available following the community visits.

## 5. IDENTIFICATION OF IMPACTS AND PROPOSED MITIGATION MEASURES

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).
2. Discuss the impacts identified in the above table.
3. Discuss potential socioeconomic impacts, including human health.
4. Discuss potential for transboundary effects related to the project.
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.
6. Discuss proposed measures to mitigate all identified negative impacts.

The majority of work being proposed is not expected to impact the environment in a negative way.

Geological mapping, prospecting, and rock/soil sampling is not expected to affect the environment or wildlife population in a negative way. Positive impacts are related to the employment of local people as field assistants, prospectors, camp personnel, and wildlife monitors.

NCG's presence will positively affect local communities by providing an influx of money to local businesses and services, as well as employment for local personnel.

NCG is aware that there is considerable concern involving the potential for disturbance to caribou. NCG will conduct itself in a manner that minimizes disturbance to caribou. The helicopter used to transport crews into the field from camp will be restricted to an altitude of not less than 300 metres, when not actually taking off and landing.

When airborne geophysics is being performed, it will be conducted so as not to disturb the caribou. Airborne geophysical surveys require flight altitudes of less than 100 metres, so areas to be surveyed on a given day will be monitored prior to the survey

Waste generated by the camp will be handled in several ways. All combustible waste, including human waste, will be incinerated daily in an incinerator. Non-combustible solid waste and scrap metal will be sent to Rankin Inlet for proper disposal. Camp grey water will be collected in sump pits for settling before draining naturally into the surrounding soil. Empty fuel drums will be sent back to Rankin Inlet on a regular basis for refilling or proper disposal if warranted. Any other waste generated by the project will be disposed of in an approved manner. Once the new WWTP is installed, it will be used to treat all domestic grey water and sewage.

All fuel caches will be supplied with a complete spill kit, including highly absorbent pads and one empty drum, for the highly unlikely event of a fuel spill. Each fuel cache will also be equipped with a fire extinguisher. Small fuel caches in the field are placed in shallow natural depressions which are a minimum of 31 metres from the normal high-water mark of nearby bodies of water.

Used greases and oil will be either removed from the site for proper disposal or incinerated. All drill water will be treated in sumps to collect cuttings, allowing the water to drain into the surrounding landscape. All sumps will be located a minimum of 31 metres from the normal high-water mark of any water body. All equipment, timbers, hoses, fuel drums, etc. will be removed from the drill site following completion of the borehole. Casing may or may not be left in the borehole temporarily, depending on whether or not the borehole requires re-entry at a later date; the majority of boreholes will have casing removed after completion. Drill collars will be marked for identification purposes.

## 6. CUMULATIVE EFFECTS

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.

Since the start of our exploration on the property in 1992, NCG has seen minimal cumulative impacts thus far.

## 7. SUPPORTING DOCUMENTS

Where relevant, provide the following supporting documents:

- Abandonment and Decommissioning Plan
- Existing site photos with descriptions
- Emergency Response Plan
- Comprehensive Spill Prevention/Plan (must consider hazardous waste and fuel handling, storage, disposal, spill prevention measures, staff training and emergency contacts)
- Waste Management Plan/Program
- Monitoring and Management Plans (e.g. water quality, air pollution, noise control and wildlife protection etc.)
- 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

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

NCG submitted an Abandonment and Reclamation Plan, a Spill Contingency Plan, and other relevant plans.. Please refer to these plans for more information and details.

# TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS

| | | ENVIRONMENTAL COMPONENTS | PHYSICAL | designated environmental areas (ie. Parks, Wildlife Protected areas) | ground stability | permafrost | hydrology/ limnology | water quality | climate conditions | eskers and other unique or fragile landscapes | surface and bedrock geology | sediment and soil quality | tidal processes and bathymetry | air quality | noise levels | other VEC: | other VEC: | other VEC: | BIOLOGICAL | vegetation | wildlife, including habitat and migration patterns | birds, including habitat and migration patterns | aquatic species, incl. habitat and migration/spawning | wildlife protected areas | other VEC: | other VEC: | other VEC: | SOCIO-ECONOMIC | archaeological and cultural historic sites | employment | community wellness | community infrastructure | human health | other VSEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT ACTIVITIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **CONSTRUCTION** | Camp upgrade | | | | | M | | | | M | | m | | M | N | | | | | M | m | M | | | | | | | | p | | | | |
| | ROAD | | | | | M | M | | | M | M | M | | | N | | | | | M | M | M | | | | | | | | P | | | | |
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| | Camp | | | | | M | | | | M | | M | | M | N | | | | | M | M | M | | | | | | | | P | | | | |
| **OPERATION** | Camp | | | | | M | | | | M | | M | | M | N | | | | | M | M | M | | | | | | | | P | | | | |
| | ROAD | | | | | M | M | | | M | M | M | | | N | | | | | M | M | M | | | | | | | | P | | | | |
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| **DECOMMISSIONING** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Note: Please indicate in the matrix cell whether the interaction causes an impact and whether the impact is

P = Positive

N = Negative and non-mitigatable

M = Negative and mitigatable

U = Unknown
If no impact is expected please leave the cell blank