PRELIMINARY SCREENING REPORT FORM

PRELIMINARY SCREENER: Sarah Elsasser
REFERENCE / FILE NUMBER: W2012T0001
TITLE: West Island Fish Habitat Compensation Works
ORGANIZATION: Diavik Diamond Mines Inc.
MEETING DATE: February 29, 2012

EIRB REFERENCE NUMBER:

NOTE: Amendment items on this preliminary screening form are shown in italics.

Type of Development: ☒ New
(CHECK ALL THAT APPLY)
☐ Amend, EIRB Ref. #
☐ Requires permit, license or authorization
☐ Does not require permit, license or authorization

Project Summary

For the 2001 construction of the Diavik Diamond Mine to be undertaken on the East Island of Lac de Gras, an authorization (Fisheries Authorization SC980001) for the harmful alteration, disruption or destruction (HADD) of fish habitat was issued by the Department of Fisheries and Oceans (DFO). A HADD of fish habitat is prohibited under s.35(1) of the Fisheries Act, unless authorized by the Department of Fisheries and Oceans (DFO) under s.35(2) of the Fisheries Act. Such authorizations are typically only issued if it can be demonstrated that “no-net-loss of the productive capacity of fish habitat” can be achieved through habitat compensation. A hierarchy of preferences relating to no-net-loss strategies is outlined in the Policy for the Management of Fish Habitat, with compensation of “like-for-like” habitat being the preferred option – replacing lost habitat with the same type of natural habitat at or near the site where the habitat loss occurred. The conditions of the authorization were that: DDMI shall compensate for the HADD of stream habitat on the East Island through; (6.1.2) the enhancement of a stream denoted as ws 1 located on the West Island between lake w1 and Lac de Gras. The purpose of this land use application is to complete the habitat compensation project at West Island required under the Fisheries Authorization SC980001. The work to be completed is located at West Island, within the Diavik Diamond Mines mineral claims and mining leases.

Scope

Operations to conduct fish habitat compensation work at West Island as required under the DFO Fisheries Authorization SC980001 including:

A) Staging of equipment
B) Fuel storage
C) Earth-moving equipment

Minimum Latitude: N64º31’33” N  Min Longitude: W110º25’ 54” W
Maximum Latitude: N64º31’46” N  Max Longitude: W110º26’20” W
Principal Activities *(related to scoping)*
(CHECK ALL THAT APPLY)

- [ ] Construction
- [ ] Installation
- [ ] Maintenance
- [ ] Expansion
- [x] Operation
- [ ] Repair
- [ ] Water Intake
- [ ] Other: Geotechnical

- [ ] Exploration
- [ ] Industrial
- [ ] Recreation
- [ ] Municipal
- [ ] Quarry
- [ ] Linear / Corridor
- [ ] Sewage
- [ ] Decommissioning
- [ ] Abandonment
- [ ] Aerial
- [ ] Harvesting
- [ ] Camp
- [ ] Scientific/Research
- [ ] Solid Waste

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Principal Development Components *(related to scoping)*
(CHECK ALL THAT APPLY)

- [ ] Access Road
- [ ] Construction
- [ ] Abandonment/removal
- [x] Modification e.g., widening, straightening
- [ ] Automobile, Aircraft or Vessel Movement
- [ ] Blasting
- [ ] Building
- [ ] Burning
- [ ] Burying
- [x] Channeling
- [ ] Cut and Fill
- [x] Cutting of Trees or Removal of Vegetation
- [ ] Dams and Impoundments
  - [ ] Construction
  - [ ] Abandonment/removal
  - [ ] Modification
- [ ] Ditch Construction
- [x] Drainage Alteration
- [ ] Drilling other than Geoscientific
- [ ] Ecological Surveys
- [x] Excavation
- [ ] Explosive Storage
- [x] Fuel Storage
- [x] Topsoil, Overburden or Soil
  - [ ] Fill
  - [x] Removal
  - [ ] Disposal
  - [ ] Storage
- [ ] Waste Management
- [ ] Disposal of hazardous waste
- [ ] Waste generation
- [ ] Sewage
- [ ] Disposal of sewage
- [ ] Geoscientific Sampling
- [ ] Trenching
- [ ] Diamond drill
- [ ] Borehole core sampling
- [ ] Bulk soil sampling
  - [ ] Gravel
  - [ ] Hydrological Testing
  - [ ] Site Restoration
  - [ ] Fertilization
  - [ ] Grubbing
  - [ ] Planting/seeding
  - [ ] Reforestation
  - [ ] Scarify
  - [ ] Spraying
  - [ ] Recontouring
  - [x] Slashing and removal of vegetation
  - [ ] Soil Testing
  - [ ] Stream Crossing/Bridging
  - [ ] Tunneling/Underground
  - [ ] Other (describe):

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NTS Topographic Map Sheet Numbers
(LIST ALL THAT APPLY)

NAD 83 NTS 76D9

**Latitude / Longitude and UTM System:**

Minimum Latitude: N64º31'33"  
Min Longitude : W110º25'54"

Maximum Latitude: N64º31'46"  
Max Longitude : W110º26'20"

**Nearest Community and Water Body:**

Wekweeti
Lac De Gras
### Land Status (consultation information)

- [ ] Private (Tlicho)
- [ ] Commissioners Land
- [x] Federal Crown Land
- [ ] Municipal Land

### Transboundary Implications

- [ ] British Columbia
- [ ] Alberta
- [ ] Saskatchewan
- [ ] Yukon
- [ ] Nunavut
- [ ] Wood Buffalo National Park
- [ ] Inuvialuit Settlement Region

**Type of Transboundary Implication:**

- [ ] Impact / Effect
- [ ] Development
- [ ] Public Concern

### PHYSICAL/CHEMICAL (CHECK ALL THAT APPLY)

#### IMPACT

1. **Ground Water**
   - [ ] water table alteration
   - [x] water quality changes
   - Possibility of contamination from fuel carried by vehicles transporting equipment to and from the staging area. No fuel will be stored on site. The applicant has submitted a Spill Contingency Plan outlining preventive measures and spill clean-up. Conditions 32-43 address fuel containment and spill kits.

   - [ ] infiltration changes

   - [ ] other

   - [ ] N/A

2. **Surface Water**
   - [x] flow or level changes
   - Possibility of contamination from fuel carried by vehicles transporting equipment to and from the staging area. The applicant has submitted a Spill Contingency Plan outlining preventive measures and spill clean-up. Conditions 32-43 address fuel containment and spill kits. In-stream works may cause some destabilization and/or erosion of sediment. Condition 19 addresses erosion control.

   - [ ] water quantity changes

   - [ ] Drainage pattern changes

   - [ ] temperature

   - [ ] wetland changes / loss

   - [ ] other:

   - [ ] N/A
### IMPACT 3. Noise

- noise in/near water

Noise may temporarily disturb wildlife. However, the impact is expected to be minimal, localized, and over a short duration.

- other: noise increase

- N/A

### IMPACT 4. Land

- geologic structure changes

- soil contamination

Possibility of contamination from fuel carried by vehicles transporting equipment to and from the staging area. The applicant has submitted a Spill Contingency Plan outlining preventive measures and spill clean-up. Conditions 32-43 address fuel containment and spill kits.

- buffer zone loss

- soil compaction & settling

- Destabilization / erosion

In-stream works may cause some destabilization and/or erosion of sediment. Condition 19 addresses erosion control.

- permafrost regime alteration

- other: Rutting

Overland vehicle travel may cause rutting of the ground surface. Conditions 20-22 addresses rutting of the ground surface.

- N/A

### IMPACT 5. Non Renewable Natural Resources

- resource depletion

- other:

- N/A

### IMPACT 6. Air/Climate/Atmosphere

- Other

- N/A
### BIOLOGICAL ENVIRONMENT

#### IMPACT  
1. **Vegetation**

- [ ] species composition
- [ ] species introduction
- [ ] toxin / heavy accumulation
- **other:**
- [ ] N/A

#### IMPACT
2. **Wildlife & Fish**

- [ ] effects on rare, threatened or endangered species
- [ ] fish population changes
- [ ] waterfowl population changes
- [ ] breeding disturbance
- [ ] population reduction
- [ ] species diversity change
- [ ] health changes (Identify)
Some species may avoid the area during operation. Activities are planned to occur during low or no-flow conditions, so the potential to disrupt aquatic species is reduced even further, but any behavioural changes are likely to be temporary as the activities will be completed within several weeks.

### INTERACTING ENVIRONMENT

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>MITIGATION</th>
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<tbody>
<tr>
<td>1. Habitat and Communities</td>
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<td>□ predator-prey</td>
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<td>□ wildlife habitat / ecosystem</td>
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<td>Composition changes</td>
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<td>□ reduction / removal of keystone or endangered species</td>
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<td>□ removal of wildlife corridor or buffer zone</td>
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<td>□ other:</td>
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### IMPACT

2. Social and Economic

□ N/A
☐ planning / zoning changes or conflicts

☐ increase in urban facilities or services use

☐ rental house

☐ airport operations / capacity changes

☐ human health hazard
☐ impair the recreational use of water or aesthetic quality
☐ affect water use for other purposes
☐ affect other land use operations
☐ quality of life changes
☐ public concern
☐ other:
☒ N/A

IMPACT

MITIGATION

3. Cultural and Heritage

☐ effects to historic property
☐ increased economic pressure on historic properties
☐ change to or loss of historic resources
☐ change to or loss of archaeological resources
☐ increased pressure on archaeological sites
☐ change to or loss of aesthetically important site
☐ effects to aboriginal lifestyle
☐ other:

There are known archaeological sites within 70 m of the proposed development. The proponent has entered into a licence agreement with the Government of the Northwest Territories for access to the Territorial Archaeological Sites Database to obtain the location of these sites. Conditions 27-30 pertain to these and potential other archaeological and heritage resources.

☒ N/A
## PRELIMINARY SCREENER / REFERRING BODY INFORMATION

(CHECK ALL THAT APPLY)

<table>
<thead>
<tr>
<th>Agency/Authority</th>
<th>RA or DRA</th>
<th>ADVICE</th>
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<td>Behchoko Metis Local #64</td>
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<td>Barrenground Caribou Outfitters</td>
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REASONS FOR DECISION
(LIST ALL REASONS AND SUPPORTING RATIONALES FOR PRELIMINARY SCREENING DECISION)

DECISION:

The Wek’ezhìi Land and Water Board (The Board) is satisfied that the preliminary screening of application W2011T0002 by Diavik Diamond Mines Inc. For Operations of Fish Habitat Compensation Works at M-Lakes has been completed in accordance with Section 125 of the Mackenzie Valley Resource Management Act.

The Board is satisfied that a reasonable period of notice was given to Communities and First Nations affected by the application as required by Subsection 63(2) of the MVRMA so that they could provide comments to the Board.

The Board is also satisfied that the Tlicho Government has also been consulted in accordance with Section 63 of the MVRMA.

Having reviewed all relevant evidence on the Public Registry, including the submissions of the Applicant, the written comments received by the Board and any staff reports prepared for the Board, the Board has decided that in its opinion that:

- there is no likelihood that the proposed development might have a significant adverse impact on the environment; and
- there is no likelihood that the proposed development might be a cause of public concern.

The Board is also of the opinion that the application can proceed through the regulatory process and that any impacts of the development on the environment can be mitigated through the imposition of the terms and conditions in the attached Land Use Permit.

As a result, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope and intent of the Mackenzie Valley Resource Management Act and the Mackenzie Valley Land Use Regulations has decided that this Land Use Permit be issued subject to the terms and conditions contained therein.

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<th>PRELIMINARY SCREENING DECISION</th>
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<tr>
<td>☒ Outside Local Government Boundaries</td>
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<td>☐ The development proposal might have a significant adverse impact on the environment, refer it to the EIRB.</td>
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<td>☒ Proceed with regulatory process and/or implementation.</td>
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<td>☐ The development proposal might have public concern, refer it to the EIRB.</td>
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<td>☐ Wholly within Local Government Boundaries</td>
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<td>☐ The development proposal is likely to have a significant adverse impact on air, water or renewable resources, refer it to the EIRB.</td>
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