

Preliminary Screening Report Form

Preliminary screener: MVLWB Reference / File number: MV2016X0013 & MV2016L8-0004 TITLE: Bullmoose-Ruth Remediation Project ORGANIZATION: Department of Indian Affairs and Northern Development – Contaminants and Remediation Division MEETING DATE: December 5, 2016	EIRB Reference number:
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- Type of Development:** (CHECK ALL THAT APPLY)
- New
 - Amend, EIRB Ref. #
 - Requires permit, licence, or authorization
 - Does not require permit, licence, or authorization

Project Summary

The Bullmoose-Ruth (BMR) Remediation Project will involve the mobilization, remediation, demobilization and closure monitoring of seven historic metal mine sites located north of the East Arm portion of Great Slave Lake, including: Ruth Mine, Bullmoose Mine, Beaulieu Mine, Spectrum Mine, Chipp Mine, Storm Mine, and Joon Mine. All seven of the abandoned mine sites fall under the custodial responsibility of DIAND, and site remediation is coordinated by DIAND's Contaminants and Remediation Division (DIAND-CARD).

Access to the sites will be by a combination of winter road and small aircraft, both float-equipped and wheeled.

Activities for each site are summarized as follows:

Infrastructure/Hazards	Location
<ul style="list-style-type: none"> • Physical hazards - mine openings to be capped. • Non-hazardous waste - wood largely burned; metal to be landfilled on-site. • Hazardous waste - asbestos containing material, organic liquids, leachable lead painted material, pressurized cylinders and miscellaneous will be disposed of off-site in an approved facility. • Impacted Sediments - left in-situ. • Soils - PHC impacted soil will be taken to landfarm; co-impacted soils/tailings/waste rock will be consolidated and placed under a liner in an on-site landfill. • Tailings - removed to on-site landfill. • Waste Rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site to mitigate further acid rock drainage. • Landfill - to manage non-hazardous wastes to support remediation efforts. • Borrow Source - for construction and maintenance activities to support remediation efforts. • Camp - to support remediation efforts. • Airstrip – upgraded and maintained to support remediation efforts. 	Ruth
<ul style="list-style-type: none"> • Physical hazards - mine openings to be capped. • Non-hazardous waste - to go to on-site landfill: wood largely already burned. • Hazardous waste - asbestos containing material to be taken to an approved off-site disposal facility. • Impacted Sediments - sediments in sewage lagoon will be excavated and landfilled on-site; contaminated soil within the area of Bullmoose Creek necessitates a temporary Aquadam while the soil is excavated and removed to the landfill; and impacted sediments near the portal and wetland will be removed and landfilled. • Tailings - exposed tailings capped and submerged tailings monitored. • Portal Seepage - monitor receiving wetland to ensure it continues to reduce elevated metals concentrations and mitigate metal contamination in Bullmoose Lake; install wetland weir and fencing to maintain ecosystem. • Waste rock - potentially acid generating waste rock in areas where there is direct contact between waste rock and the local receiving environment will be placed under an engineered cover to mitigate further acid rock drainage. • Soil - PHC-impacted soil will be treated in landfarm facility; co-impacted metals and PHC soil will be landfilled and placed under liner. • Landfill and Landfarm - to manage non-hazardous wastes and PHC soils to support remediation efforts. • Borrow Source - for construction and maintenance activities to support remediation efforts. • Camp - to support remediation efforts. • Airstrip – upgraded and maintained to support remediation efforts. 	Bullmoose
<ul style="list-style-type: none"> • Physical hazards - mine openings to be capped. • Non-hazardous waste - wood, metal and empty drums to be landfilled at either Bullmoose or Ruth site. • Hazardous waste - organic liquids, miscellaneous materials (e.g. batteries) will be disposed of in an approved off-site facility. • Tailings - landfilled and placed under a liner on-site. • Waste rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site and revegetated and/or used as trench fill. • Soils - PHC impacted soils will be treated at landfarm co-impacted soil will be consolidated and placed under a liner at either the Bullmoose or Ruth landfills. 	Beaulieu

<ul style="list-style-type: none"> • Physical hazards – trenches will be filled with waste rock and capped and mine openings to be capped. • Non-hazardous waste - wood (already burned), metal and drums will be disposed of in Bullmoose or Ruth landfill. • Hazardous waste - asbestos containing material, organic liquid, pressurized cylinders, and lead paint drums will be disposed of in an approved off-site facility. • Impacted Sediments - left in-situ. • Tailings - landfilled and placed under a liner on-site. • Waste rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site and revegetated and/or used as trench fill. • Soils - PHC impacted soil to be taken to landfarm facility; co-impacted soil will be consolidated under a liner at either the Bullmoose or Ruth landfills. • Impacted Water - pumped to a soak-away pit at least 30m distant from any surface water features. 	Spectrum
<ul style="list-style-type: none"> • Physical hazards - trenches will be filled with waste rock and capped and mine openings to be capped. • Non-hazardous waste - wood, metal and drums to be disposed of in either the Bullmoose or Ruth landfill. • Hazardous waste - organic liquids, material with leachable lead paint, pressurized cylinders, and batteries/ refrigeration material will be disposed of at an approved off-site facility. • Soils - PHC impacted soil will be taken to landfarm; co-impacted soil will be consolidated under the liner at either the Bullmoose or Ruth landfill. • Waste Rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site and revegetated and/or used as trench fill. 	Joon
<ul style="list-style-type: none"> • Physical hazards - trenches will be filled with waste rock and capped and mine openings will be capped. • Non-hazardous waste - wood, metal and drums will be disposed of in either the Bullmoose or Ruth landfill. • Hazardous Waste - lead paint drums will be disposed of in an approved off-site facility. • Soils - PHC impacted soil will be taken to landfarm; co-impacted soil will be consolidated under the liner at either the Bullmoose or Ruth landfills. • Waste Rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site and revegetated and/or used as trench fill. • Impacted Water - pumped to a soak-away pit at least 30m distant from any surface water features. 	Chipp
<ul style="list-style-type: none"> • Physical hazards – trenches will be filled with waste rock and capped and mine openings to be capped. • Non-hazardous waste - wood (burned), metal and drums will be disposed of in either the Bullmoose or Ruth landfill. • Hazardous waste – batteries and lead painted drums will be disposed of at an approved off-site facility. • Soils - PHC impacted soil will be taken to landfarm; co-impacted soil will be consolidated under the liner at either the Bullmoose or Ruth landfills. • Waste Rock - potentially acid generating waste rock will be consolidated under an engineered cover on-site and/or used as trench fill. 	Storm

Fuel

The following table outlines fuel types and quantities described in the application:

Fuel Type	Total Volume/Amount
Diesel	517,500 L
Gasoline	3,690 L
Jet B Fuel	3,690 L
Propane	255 x 100lb tanks
Compressed Gas	18 Medical Oxygen x 30lb tanks 45 Oxygen x 100lb tanks 45 acetylene x 100lb tanks

Equipment

The following table outlines the equipment described in the application:

Type	Proposed use
Hard walled camp/tent walled camps or similar	Dining facilities, sleeping quarters, office complex, and first aid facilities
Float Plane Docks or similar	Personnel access to some sites, some supplies
Heavy equipment for site remediation: Wheeled and/or tracked loaders and excavators and all required attachments, rock haul trucks, tracked dozer, packers/compactors, skid-steers, mini-excavators, water trucks, vacuum trucks, explosives magazine, rock crusher/screener, air-track drill, blasting mats, rig mats, or similar equipment	Site remediation and camp operations
Heavy equipment for winter road construction: High-floatation pioneering vehicle, snowmobiles, snow cats, grader, flood truck, plow truck, ice profiler, snowdrags, span bridges or similar equipment	Winter road construction and maintenance
Light Equipment: pickup trucks, ATVs, side by sides, gators, small water craft, trailers, or similar equipment	Site remediation and camp operations
Winter Road Equipment: skidoo, snowmobiles, snow cats, grader, Hagglund, flood pumps, plow trucks and snowdrags	Personnel access to some sites, some supplies
Fixed Equipment and Tools: fuel tanks, incinerators, fuel pumps, compressors, welders, cutters, water pumps, flood pumps, gen-sets, power tools, hand tools, or similar equipment	Site remediation and camp operations

Scope

Mobilization, Remediation, Demobilization and Monitoring activities at the Bullmoose, Ruth, Beaulieu, Spectrum, Chipp, Storm, and Joon mine sites. Activities will be regulated under a land use permit and water licence.

Land Use Permit:

- Use of equipment and machines;
- Use of explosives;
- Quarrying;
- Fuel Storage;
- Camp construction and maintenance; and
- Winter road construction and maintenance.

Water Licence:

- Water withdrawal for camp use, industrial use, winter road construction, compaction, and dust suppression;
- Construction, operation, maintenance, and closure of Sewage Disposal Facilities;
- Deposit of treated Sewage and Greywater to a Sump;
- Deposit of Wastewater to a Sump;
- Construction, operation, maintenance, and closure of a landfarm;
- Construction, operation, maintenance, and closure of landfills;
- Diversion and reconstruction of Bullmoose Creek;
- Remediation of hazardous and non-hazardous wastes, rock, soil, sediment, tailings, impacted water, and infrastructure; and
- Monitoring.

Land Use Eligibility - Section 18 Mackenzie Valley Land Use Regulations

DIAND's right and responsibility to access these lands for the purposes of remediation are defined and outlined in several ways as referenced below:

Access to Federal Land

NWT Devolution Agreement -

Responsibility for Waste Sites

Section 6.4(a) Subject at all times to the express provisions of this Chapter 6, the allocation of responsibility for the Management of Waste Sites among the Parties pursuant to this Agreement is based upon the following principles: Canada is responsible for the Management of Waste Sites on Public Lands which were wholly created prior to the Transfer Date;

Sites Requiring Remediation

Section 6.43 All Sites Requiring Remediation listed in Part D of the Inventory of Sites at the Transfer Date shall be excluded from the transfer of administration and control referred to in Section 3.1 and shall be included in the inventory of exclusions referred to in Section 3.34.

Right to Access GNWT Land

NWT Devolution Agreement -

Access by Canada

Section 6.62 Canada shall have the right to access Public Lands and Waters and the right to use natural resources in or on Public Lands in order to fulfill its responsibilities in respect of this Chapter 6.

Responsible Minister - Sites Requiring Remediation by DIAND

NWT Devolution Agreement - Schedule 4, Part 5

Schedule 4, Part 5, lists and describes all waste sites to which DIAND has specific responsibility. These sites are further described under Schedule 7, Part D, of the Agreement.

Type of Disposition

Disposition Number(s)

- Mineral Claims
- Prospecting Permit (s)
- Mineral Leases
- Oil and Gas: EL/SDL/PL
- Quarry Permit
- Timber Permit
- Other:

Principal Activities (related to scoping)

(CHECK ALL THAT APPLY)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Exploration | <input checked="" type="checkbox"/> Decommissioning |
| <input type="checkbox"/> Installation | <input checked="" type="checkbox"/> Industrial | <input checked="" type="checkbox"/> Abandonment |
| <input checked="" type="checkbox"/> Maintenance | <input type="checkbox"/> Recreation | <input type="checkbox"/> Aerial |
| <input type="checkbox"/> Expansion | <input type="checkbox"/> Municipal | <input type="checkbox"/> Harvesting |
| <input type="checkbox"/> Operation | <input checked="" type="checkbox"/> Quarry | <input checked="" type="checkbox"/> Camp |
| <input type="checkbox"/> Repair | <input checked="" type="checkbox"/> Linear / Corridor | <input type="checkbox"/> Scientific/ |
| <input type="checkbox"/> Research | <input checked="" type="checkbox"/> Sewage | <input checked="" type="checkbox"/> Solid Waste |
| <input checked="" type="checkbox"/> Water Intake | | |
| <input type="checkbox"/> Other: | | |

Principal Development Components (related to scoping)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Access Road <ul style="list-style-type: none"><input checked="" type="checkbox"/> construction<input checked="" type="checkbox"/> abandonment/removal<input checked="" type="checkbox"/> modification e.g., widening, straightening | <input checked="" type="checkbox"/> Waste Management <ul style="list-style-type: none"><input checked="" type="checkbox"/> disposal of hazardous waste<input checked="" type="checkbox"/> waste generation<input checked="" type="checkbox"/> sewage<input checked="" type="checkbox"/> disposal of sewage |
| <input checked="" type="checkbox"/> Automobile, Aircraft or Vessel Movement | <input type="checkbox"/> Geoscientific Sampling |
| <input checked="" type="checkbox"/> Blasting | <input type="checkbox"/> Trenching |
| <input checked="" type="checkbox"/> Building | <input type="checkbox"/> Diamond drill |
| <input checked="" type="checkbox"/> Burning | <input type="checkbox"/> Borehole core sampling |
| <input checked="" type="checkbox"/> Burying | <input type="checkbox"/> Bulk soil sampling <ul style="list-style-type: none"><input type="checkbox"/> gravel<input type="checkbox"/> hydrological Testing |
| <input type="checkbox"/> Channelling | <input checked="" type="checkbox"/> Site Restoration <ul style="list-style-type: none"><input type="checkbox"/> fertilization<input type="checkbox"/> grubbing<input checked="" type="checkbox"/> planting/seeding<input type="checkbox"/> reforestation<input checked="" type="checkbox"/> scarify<input type="checkbox"/> spraying<input checked="" type="checkbox"/> re-contouring |
| <input type="checkbox"/> Cut and Fill | <input type="checkbox"/> Slashing and removal of vegetation |
| <input checked="" type="checkbox"/> Cutting of Trees or Removal of Vegetation | <input type="checkbox"/> Soil Testing |
| <input checked="" type="checkbox"/> Dams and Impoundments <ul style="list-style-type: none"><input checked="" type="checkbox"/> construction<input checked="" type="checkbox"/> abandonment/removal<input type="checkbox"/> modification | <input type="checkbox"/> Stream Crossing/Bridging |
| <input type="checkbox"/> Ditch Construction | <input type="checkbox"/> Tunnelling/Underground |
| <input type="checkbox"/> Drainage Alteration | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Drilling other than Geoscientific | |
| <input type="checkbox"/> Ecological Surveys | |
| <input checked="" type="checkbox"/> Excavation | |
| <input checked="" type="checkbox"/> Explosive Storage | |
| <input checked="" type="checkbox"/> Fuel Storage | |
| <input checked="" type="checkbox"/> Topsoil, Overburden or Soil <ul style="list-style-type: none"><input checked="" type="checkbox"/> fill<input type="checkbox"/> disposal<input checked="" type="checkbox"/> removal<input checked="" type="checkbox"/> storage | |

NTS topographic map sheet numbers:

85 I/7, 85I/10

Latitude / longitude and UTM system:

NAD 83

Project area:

113°36'48.346"W 62°15'7.543"N

112°11'7.161"W 62°32'35.305"N

Ruth Mine	62°27'45" N	112°34'15" W
Bullmoose Mine	62°20'47" N	112°44'50" W
Beaulieu Mine	62°24'55" N	112°54'37" W
Spectrum Mine	62°22'28" N	112°48'21" W
Chipp Mine	62°27'59" N	112°38'47" W
Storm Mine	62°30'16" N	112°56'34" W
Joon Mine	62°25'38" N	112°51'57" W

Nearest community and water body:

Yellowknife, NT

Ruth Mine – Tam Lake

Bullmoose Mine – Bullmoose Lake and Alpha Lake

Beaulieu Mine – John Lake and Hansen Lake

Spectrum Mine – Spectrum Lake

Chipp Mine – Chipp Lake

Storm Mine – Consolation Lake

Joon Mine – Strike Lake

Land Status (consultation information)

- Free Hold/Private
- Commissioner's/Territorial Lands
- Federal Crown Land
- Municipal Land

Transboundary/Transregional Implications

- British Columbia
- Alberta
- Saskatchewan
- Yukon
- Nunavut
- National Park
- Inuvialuit Settlement Region
- Wek'èezhii
- Gwich'in
- Sahtu

Type of transboundary implication: Impact / Effect Development

Public concern: _____
(Describe.)

Physical - Chemical Effects

Impact Mitigation

1) Ground Water

- water table alteration
- water quality changes

As this is a remediation project, it is expected to have an overall positive impact on groundwater quality. There is potential for impacts to groundwater from some remediation activities, including; landfill and or/landfarm seepage, waste rock seepage, sewage discharge, fuel storage and transfer, and soak-away sumps used for treating trench water.

Landfills will be constructed with a liner to prevent seepage, monitoring will confirm no seepage is occurring. Landfarm leachate will be collected and tested prior to appropriate disposal. Potentially acid generating waste rock will be covered to prevent infiltration and leaching, monitoring at waste rock disposal sites will confirm and ensure environment is not impacted. Sewage will be treated, and will be required to meet Effluent Quality Criteria in the Licence prior to release to the receiving environment. Fuel storage areas and refuelling areas will be required to use secondary containment to prevent release of fuel to the environment. Soak-away sumps are expected to treat impacted water through natural attenuation, and will be monitored to confirm no impacts to groundwater are occurring.

- infiltration changes
- other:
- N/A

Impact Mitigation

2) Surface Water

- flow or level changes
- water quality changes

Changes to flow in Bullmoose Creek could result from diversion and reconstruction activities. Prior to initiating construction, the proponent will be required to submit a channel design and reconstruction plan for Board approval which describes in detail any risks associated with construction, and proposed mitigations.

As this is a remediation project, it is expected to have an overall positive impact on surface water quality. There is potential for impacts to surface water from some remediation activities, including; landfill and or/landfarm seepage, waste rock seepage, sewage discharge, and fuel storage and transfer.

Landfills will be constructed with a liner to prevent seepage, monitoring will confirm no seepage is occurring. Landfarm leachate will be collected and tested prior to appropriate disposal. Potentially acid generating waste rock will be covered to prevent infiltration and leaching, monitoring at waste rock disposal sites will confirm and ensure environment is not impacted. Sewage will be treated, and will be required to meet Effluent Quality Criteria in the Licence prior to release to the receiving environment. Fuel storage areas and refuelling areas will be required to use secondary containment to prevent release of fuel to the environment.

- water quantity changes
- drainage pattern changes
- temperature

Water will be drawn from several watercourses, but is not proposed to be of a quantity that will affect quantity of water in these watercourses. The water licence will limit total water use to 299m³ per day or less. Monitoring of water intakes will ensure water drawn does not exceed this amount.

wetland changes/loss Remediation activities will improve the wetland currently receiving water from the Bullmoose portal seep; a wetland weir and fencing will be installed to maintain and protect this ecosystem.

other:

N/A

Impact
3) Noise

Mitigation

noise in/near water Noise increase is expected due to winter road activities, and use of float-equipped aircraft. These impacts will be temporary in nature, and cease as soon as equipment passes by an area, or is turned off. No mitigation proposed.

noise increase Noise increase is expected along winter road corridor, and on project sites where equipment will be in use. These impacts will be temporary in nature; no mitigation is proposed.

other:

N/A

Impact
4) Land

Mitigation

geologic structure changes

soil contamination Remediation activities will have an overall positive impact on soils, as contaminated soil will be collected and treated to remove contaminants. There is potential for impact to soils from fuel storage and transfer. Fuel storage areas and refuelling areas will be required to use secondary containment to prevent release of fuel to the environment.

buffer zone loss

soil compaction and settling Heavy equipment and vehicle movements have the potential to increase localized soil compaction and settling. Established erosion and sediment control measures will apply. The majority of remediation activities will take place on a previously disturbed footprint. Potential impacts associated with the winter road will be mitigated by employing techniques found in the GNWT-DOT "Environmental Guidelines for the Construction, Maintenance and Closure of Winter Roads in the Northwest Territories".

destabilization/erosion Erosion/sedimentation may increase as a result of heavy equipment operation. Standard prevention techniques and established erosion and sediment control measures will apply. Where deemed beneficial, excavated regions will be filled with an appropriate material to minimize these effects; silt fences and curtains will be utilized when remedial measures are in the vicinity of water bodies. Mitigative measures will be included by the proponent in a Sediment and Erosion Control Plan.

permafrost regime alteration

explosives/scarring Explosives may be used to achieve remediation objectives. If used, it will be to stabilize overhanging rock in trenches, therefore reducing scarring impacts.

other:

N/A

Impact
5) Non-renewable natural resources

Mitigation

resource depletion Quarrying at various borrow sources will occur to provide fill to achieve closure objectives. These activities will result in an overall improvement to the natural environment, and borrow sources will be contoured prior to closure.

other:

N/A

Impact
6) Air/climate/atmosphere

Mitigation

other:

Incineration is a proposed disposal method, and could potentially result in the release of dioxins and furans into the air if proper incineration methods aren't followed. A dual-chamber, fuel fired incinerator is proposed to be used, which, when operated properly, will mitigate this potential impact. Suitability of camp waste for incineration will be determined based on the GNWT *Used Oil and Waste Fuel Management Regulations*, the GNWT *Guideline for Industrial Waste Discharge in the NWT*, as well as Environment Canada's *Technical Document for Batch Waste Incineration*.

N/A

BIOLOGICAL ENVIRONMENT

Impact
1) Vegetation

Mitigation

species composition

species introduction

toxin/heavy accumulation

The remediation project will result in an overall reduction of toxins in the environment; contaminated soil will be collected and treated where it is determined that option will reduce environmental liability. Monitoring will confirm whether remediation techniques are reducing contaminants of concern, and will confirm that remediation techniques are not resulting in additional toxins being released to the environment.

other:

N/A

Impact
2) Wildlife and Fish

Mitigation

effects on rare, threatened or endangered species

fish population changes

Bullmoose Creek diversion could potentially impact fish. Prior to initiating construction, the proponent will be required to submit a channel design and reconstruction plan for Board approval which describes in detail any risks associated with construction, and proposed mitigations. Specifically, the plan will detail a summary of risk to fish, fish habitat, associated mitigation, salvage, timing, and minimization or avoidance of physical habitat impacts.

waterfowl population changes

breeding disturbance

population reduction

species diversity change

health changes

behavioural changes

Wildlife may avoid areas of activity where equipment is operating or workers are present. Wildlife may avoid areas impacted by winter road use. The project is of a short duration, as such, these impacts will be temporary in nature.

habitat changes / effects

Vegetation clearing may impact habitat. Care will be taken to minimize damage to habitat and disturbance to resident species. Efforts will be made to develop on previously disturbed land and limit the project footprint.

Bullmoose Creek diversion could potentially impact fish habitat. Prior to initiating construction, the proponent will be required to submit a channel design and reconstruction plan for Board approval which describes in detail any risks associated with construction, and proposed mitigations. Specifically, the plan will detail a summary of risk to fish, fish habitat, associated mitigation, salvage, timing, and minimization or avoidance of physical habitat impacts.

game species effects

Access will be temporarily improved for road traffic while the winter road is in use. Activity on the road will be monitored. The road is intended to be used for industrial purposes only, however the proponent will not be able to legally prevent private users from accessing areas using the road. The road will be operational for a short period of time during the winter, and the project will only require winter road use for 2-3 seasons. It is unlikely that the project will have a significant effect on game species in the area, and any impacts will be temporary in nature due to the short duration of the project.

toxins/ heavy metals

- forestry changes
- agricultural changes
- other:
- N/A

Interacting Environment

Impact
1) Habitat and Communities

Mitigation

- predator-prey
- wildlife habitat/ecosystem composition changes
- reduction/removal of keystone or endangered species
- removal of wildlife corridor or buffer zone
- other:
- N/A

Impact
2) Social and Economic

Mitigation

- 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: Increased access
- N/A

Concerns were raised by Mr. Ken Yoder, owner of Hearne Lake Lodge, regarding potential impacts to the lodge due to access from the winter road. Mr. Yoder requested a 500m setback from the lodge be established for the winter road to discourage access to the Lodge. The proponent committed to potentially adjusting the alignment to areas outside the 500m setback if ice conditions in the area do not represent an increased risk to health and safety or environmental protection.

Concerns were raised by Brian Sundberg, Stacey Sundberg, and Peter Graham regarding problems associated with the proposed winter road increasing access to Campbell lake. Similar concerns were raised by Mr. Ken Yoder regarding Hearne Lake. The proponent held several meetings with lease holders in the area to discuss concerns. The proponent has committed to ongoing engagement with these affected parties regarding access to areas via the winter road, and potential associated impacts. These potential impacts will be temporary in nature, and regular inspections will help mitigate potential environmental impacts.

Impact
3) Cultural and Heritage

Mitigation

- effects to historic property
- increased economic pressure

on historic properties

change to or loss of historic resources

change to or loss of archaeological resources

An archaeological impact assessment was conducted for the Bullmoose Area Mine Sites – the proponent will respect avoidances described in the assessment. In accordance with the Mackenzie Valley Land Use Regulations, the proponent will be required to maintain a 30 meter buffer from known or suspected historical or archaeological sites.

increased pressure on archaeological sites

An archaeological impact assessment was conducted for the Bullmoose Area Mine Sites – the proponent will respect avoidances described in the assessment. In accordance with the Mackenzie Valley Land Use Regulations, the proponent will be required to maintain a 30 meter buffer from known or suspected historical or archaeological sites.

change to or loss of aesthetically important sites

effects to aboriginal lifestyle

other:

N/A

- Pursuant to Schedule 4.1 of the **Northwest Territory Métis Nation** (NWTMN) Interim Measures Agreement, the MVLWB determined that written notice was given to the NWTMN and that a reasonable period of time was allowed for NWTMN to make representations with respect to the application.
- Pursuant to subsection 1.6, paragraphs (a) and (b) of the **Akaiicho Territory Dene First Nations** (ATDFN) Interim Measures Agreement, the MVLWB determined that written notice was given to the ATDFN and that a reasonable period of time was allowed for ATDFN to make representations with respect to the Application.

Preliminary Screener / Referring Body Information

Organization	Organization	Organization
Akaitcho IMA Implementation Office	GNWT - ITI	Smith Landing First Nation
Bathurst Inlet Development Ltd.	GNWT - Lands	Snap Lake Environmental Monitoring Agency - SLEMA
Bathurst Inlet Lodge	GNWT - MACA	Stacey Sundberg
Boxxer Gold Corp.	GNWT - Prince of Wales Northern Heritage Centre	Tłı̄chǫ Government
Brian Sundberg	GNWT- OROGO	Town of Fort Smith
Canadian Northern Economic Development Agency	Golder Associates	Town of Hay River
CanNor NWT Region	Government of Canada	True North Safaris Ltd.
City of Yellowknife	Hamlet of Fort Resolution	West Point First Nation
Dene Nation	Hay River Métis Council	Workers' Safety and Compensation Commission
Deninu K'ue First Nation	INAC - Contaminants and Remediation Directorate	Yellowknives Dene First Nation
Ecology North	INAC - NWT Inspectors	Ken Yoder
Environment and Climate Change Canada	Katlodeeche First Nation	
Fisheries and Oceans Canada	Lutsel K'e Dene First Nation	
Fisheries and Oceans Canada	National Energy Board	
Fort Resolution Métis Council	North Slave Métis Alliance	
Fort Resolution Métis Council	Northwest Territory Métis Nation	
Fort Smith Métis Council	Mackenzie Valley Environmental Impact Review Board	
GNWT - DOT	Manitoba Denesuline	
GNWT - ENR	Parks Canada	
GNWT - Health	Salt River First Nations	

Reasons For Decision

DECISION

The Mackenzie Valley Land and Water Board (the Board) is satisfied that the preliminary screening of Application MV2016L8-0004 and MV2016X0013, DIAND-CARD, Bullmoose-Ruth Remediation Project, has been completed in accordance with section 125 of the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board is satisfied that communities and First Nations affected by the Application have been notified and provided adequate time to provide comment on the Application as required by land claim and self government agreements, the MVRMA, policy directions relating to Interim Measures Agreements, and any other applicable legislation and agreements.

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:

- The proposed development will not have a significant adverse impact on the environment; and
- The proposed development is not 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 and Water Licence.

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 MVRMA, Mackenzie Valley Land Use Regulations, and Mackenzie Valley Federal Areas Waters Regulations has decided that this Land Use Permit and Water Licence be issued subject to the terms and conditions contained therein.

Preliminary Screening Decision	
<input checked="" type="checkbox"/>	Outside Local Government Boundaries
<input type="checkbox"/>	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	Wholly Within Local Government Boundaries
<input type="checkbox"/>	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>

Preliminary Screening Organization

Mackenzie Valley Land and Water Board

December 5, 2016

Signatures



Floyd Adlem, A/Chair