

July 22, 2019

File: MV2019F0015 and MV2019L8-0008

Ms. JoAnne Deneron Mackenzie Valley Environmental Impact Review Board 200 Scotia Center Box 938, 5102 - 50th Avenue Yellowknife NT X1A 2N7

Email: jdeneron@reviewboard.ca

Dear Ms. Deneron,

# Re: Notice of Preliminary Screening Determination – Application for Land Use Permit and Water Licence Taltson Winter Road – Northwest of Fort Smith, NT

The Mackenzie Valley Land and Water Board (Board) met on July 22, 2019 and considered the Applications from Northwest Territories Power Corporation (NTPC) for Type A Land Use Permit (Permit) MV2019F0015 and Type B Water Licence (Licence) MV2019L8-0008 for the Taltson Winter Road Project in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board conducted a preliminary screening based on these Applications and the public review. Based on the evidence provided, the Board is satisfied the screening has been completed as per section 125 of the MVRMA and has decided **not to refer** the project to environmental assessment. The Preliminary Screening Report includes the Board's reasons for decision, as required by section 121 of the MVRMA (attached).

To fulfill the pause period established by section 125 of the MVRMA, the Board understands that any referral to environmental assessment must take place by end of day on Thursday August 1, 2019. If the Board does not receive notice of referral, it will proceed with the issuance of Permit MV2019F0015 and Licence MV2019L8-0008 on Friday August 2, 2019.

Our Board and staff look forward to continued communications throughout the pause period. If you have any questions or concerns regarding this letter, please contact Shelagh Montgomery at (867) 766-7457 or email <u>smontgomery@mvlwb.com</u>.

Yours sincerely,

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Mavis Cli-Michaud Chair, MVLWB

Copied to: Shannon Allerston, Regulatory Specialist, MVLWB Mark Cliffe-Phillips, Executive Director, Review Board <u>preliminaryscreening@reviewboard.ca</u> Mathew Miller, NTPC Leslie Wiltzen, Inspector, GNWT-Lands Distribution List;

Attached: Preliminary Screening Report, including Reasons for Decision

### **Preliminary Screening Report Form**

Preliminary screener: MVLWB	EIRB
<b>Reference / File</b> number: MV2008F0027, MV2019F0015, MV2019L8-0008	Reference number:
TITLE: Winter Road, Fort Smith to Taltson Hydroelectric Facility ORGANIZATION: Northwest Territories Power Corporation MEETING DATE: July 22, 2019	
Type of Development:	New

(CHECK ALL THAT APPLY)

Amend, EIRB Ref. # Requires permit, licence, or authorization Does not require permit, licence, or authorization

## **Project Summary:**

The proposed Taltson Winter Road is approximately 56 km long; the start point is a temporary laydown area at the northeast corner of the Fort Smith airport, and the road ends at a temporary laydown area at the southern end of the Taltson Facility airfield. It consists of 11 over land portions (portages) and 10 over ice portions (lakes/rivers). The total length of portages is approximately 45.3 km (81%) and the total length of lakes/rivers is 10.7 km (19%).

Equipment with a low ground bearing pressure will be initially used to travel the route and compact the existing snow cover. Water will be required for construction of overland sections, construction of ramps, and for maintenance of over ice sections. Depending on snow type and humidity, varying amounts of water will be required to obtain adequate compaction over land construction. Construction of the overland sections can begin earlier in the season than over ice sections. Vegetation clearing will be minimized to brushing and danger tree removal only. Once the ice thickness is proven to be adequate, the ice sheet will be cleared of all insulating snow. Both natural and artificial methods of growing the ice can be employed to achieve the desirable ice thickness to support hauling operations. If open water remains at crossings, temporary culverts will be installed, and a minimum cover of 30 cm snow/ice constructed over the top. Culverts will be removed at the end of the season.

The Operations and Maintenance Plan identifies the need for up to 250 m<sup>3</sup>/day from the Slave River and up to 30m<sup>3</sup>/day from all other sources (Little Bent Tree Lake, Thetul River, Kenneth River, Lake 2-0, Powell Lake, Lake 5-0, Lake 7-0, and Gertrude Lake) for a total volume use of up to 9,200 m<sup>3</sup> per season. Daily water use will not exceed 299 m<sup>3</sup>.

Sanding units will be used to place sand to assist in traction over all hills and critical turns throughout the operations phase. Sand/gravel used for traction control on the portage on/off ramps, will be scraped off and left on a flat area on each portage at the end of each winter road season so that it is not washed into the lakes and streams during the spring freshet and create sedimentation issues.

Equipment required to construct and maintain the winter road include:

- Five pick-up trucks with 500L fuel tank (Feb 18, 2009 screening: had 3 light vehicles)
- One Hagglund Amphibious Vehicle (to support Ground Penetrating Radar operations)
- Two Snowcats
- One Tandem Wheel Plow Truck
- Five Tandem Wheel Water Truck w/ heated water tank (Feb 18, 2009 screening: had 1 water truck)
- One Nodwell, with heated water tank
- One Grader
- One Loader
- One Mechanics Service Truck
- One Ground Penetrating Radar

### Scope:

Use of vehicles and equipment; water withdrawal for the construction, operation, and maintenance of a winter access road; and progressive reclamation activities and associated closure and reclamation activities for the construction, maintenance and closure of a winter access road originating at Fort Smith, Northwest Territories and terminating at the Taltson Hydroelectric Facility airport.

# Land Use Eligibility - Section 18 Mackenzie Valley Land Use Regulations:

Section 18 Mackenzie Valley Land Use Regulations: 18(b)

Repair Research

Water Intake Other:

Type of Disposition	Disposition Number(s)	
<ul> <li>Mineral Claims</li> <li>Prospecting Permit(s)</li> <li>Mineral Leases</li> <li>Oil and Gas: EL/SDL/PL</li> <li>Quarry Permit</li> <li>Timber Permit</li> <li>Other:</li> </ul>	N/A as confirmed by GNWT-Lands	
Principal Activities (related to so	<b>coping)</b> (CHECK ALL THAT APPLY)	
Construction	Exploration	Decommissioning
Installation	Industrial	Abandonment
🔀 Maintenance	Recreation	Aerial
Expansion	Municipal	Harvesting
Operation	Quarry	Camp
🗌 Repair	🔀 Linear / Corridor	Scientific/

Sewage

Solid Waste

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

Access Road	🛛 Waste Management
$\boxtimes$ construction	disposal of hazardous waste
🛛 abandonment/removal	🛛 waste generation
🔀 modification e.g., widening, straightening	🖂 sewage
Automobile, Aircraft or Vessel Movement	🔀 disposal of sewage
Blasting	Geoscientific Sampling
Building	Trenching
🔀 Burning	Diamond drill
Burying	Borehole core sampling
Channelling	Bulk soil sampling
Cut and Fill	🗌 gravel
🔀 Cutting of Trees or Removal of Vegetation	hydrological Testing
Dams and Impoundments	Site Restoration
construction	fertilization
🗌 abandonment/removal	🗌 grubbing
modification	planting/seeding
Ditch Construction	reforestation
Drainage Alteration	scarify
Drilling other than Geoscientific	spraying
Ecological Surveys	re-contouring
Excavation	Slashing and removal of vegetation
Explosive Storage	Soil Testing
🗌 Fuel Storage	🔀 Stream Crossing/Bridging
Topsoil, Overburden or Soil	Tunnelling/Underground
fill	Other:
disposal	
removal	
storage	

NTS topographic map sheet numbers: 75D

# Latitude / longitude and UTM system:

The winter road will be located within: Min Lat: 60° 1' 38.95" N, Min Long: 111°23'25.36" W and Max Lat: 60°25'8.38" N and Max Long: 111°55'52.78" W

Nearest community and water body Fort Smith, NT, and the Slave River	:		
Land Status (consultation information Free Hold/Private X Con	<b>nn)</b> nmissioner's/Territorial Lands	☐ Federal Crown La (was selected in 2008 Screening)	nd
Transboundary/Transregional Implic British Columbia Nunavut Wek'èezhìi	a <b>tions</b> ] Alberta ] National Park ] Gwich'in	<ul> <li>Saskatchewan</li> <li>Inuvialuit Settlement Regio</li> <li>Sahtu</li> </ul>	🗌 Yukon n
Type of transboundary implication:	Impact / Effect	Dev	elopment
Public concern: (Describe.)			
Physical - Chemical Effects			
Impact 1) Ground Water	Mitigation		
water table alteration			
water quality changes	There is a potential for the cor use of equipment constructing winter road. This potential for Contaminated snow and ice wis snow tank at the NTPC comp summer, hydrocarbons floatin sheets. The sorbent sheets wi The contaminated water will filtration system and tested petroleum hydrocarbons F1 ar The adherence of fuel stor- environmental risk associated carrying vehicle travelling on the responsible to ensure compli- other safety and environmental	ntamination of groundwater and s g and maintaining the winter roa or risk is lowered due to the of ll be removed from the winter roa bound in Fort Smith, NT. When s g on top of the contaminated wa ll be placed into waste drums for then be filtered through a grai for BTEX (benzene, toluene, d F2 before it can be safely disch age, handling, and spill protoc with fuel/oil leaks or spills. Ther he road at a time. NTPC will assig ance with the Wildlife Managerr I policies	urface waters from the general d and from vehicles using the existing snow and ice cover. d and stored in a contaminated the snow and ice melts in the ter are recovered with sorbent disposal at a registered facility. nular activated carbon (GAC) ethylbenzene, xylenes) and harged to the environment. tools should also mitigate the re will be a limit of one diesel- in a Project Monitor who will be hent and Monitoring Plan and
infiltration changes			
other:			
□ N/A			
Impact 2) Surface Water	Mitigation		
⊠ flow or level changes	Winter road construction/main are likely to cause greater ero removed and moved away f Standard permit conditions re drainage.	tenance may impact surface wate sion than normal during the Sprin rom the depression or ravine t equire efforts to minimize erosio	er flow and levels. If snow fills ng freshet, the snow fill will be o prevent excessive erosion. n and obstructions to natural
🛛 water quality changes	There is a potential for the cor use of equipment constructing winter road. This potential for Contaminated snow and icc contaminated snow tank at th	atamination of groundwater and su g and maintaining the winter road or risk is lowered due to the e will be removed from the w e NTPC compound in Fort Smith	urface waters from the general d and from vehicles using the existing snow and ice cover. vinter road and stored in a n, NT. When the snow and ice

	melts in the summer, hydrocarbons floating on top of the contaminated water are recovered with sorbent sheets. The sorbent sheets will be placed into waste drums for disposal at a registered facility. The contaminated water will then be filtered through a granular activated carbon (GAC) filtration system and tested for BTEX (benzene, toluene, ethylbenzene, xylenes) and petroleum hydrocarbons F1 and F2 before it can be safely discharged to the environment. The adherence of fuel storage, handling, and spill protocols should also mitigate the environmental risk associated with fuel/oil leaks or spills. There will be a limit of one diesel-carrying vehicle travelling on the road at a time. NTPC will assign a Project Monitor who will be responsible to ensure compliance with the Wildlife Management and Monitoring Plan and
🛛 water quantity changes	The withdrawal of water for winter road construction may impact local surface water quantity. Water withdrawal will be under 300 m <sup>3</sup> /day. Most water will return to source or the land once the winter season is over.
drainage pattern changes	
temperature	
wetland changes/loss	
other:	
□ N/A	
Impact 3) Noise	Mitigation
🔀 noise in/near water	There will be localized increases in noise on ice surfaces. No mitigation identified.
🔀 noise increase	There will be localized increases in noise along the winter road corridor. No mitigation identified.
other:	
□ N/A	
<i>Impact</i> 4) Land	Mitigation
geologic structure changes	
Soil contamination	There is a potential for the contamination of groundwater and surface waters from the general use of equipment constructing and maintaining the winter road and from vehicles using the winter road. This potential for risk is lowered due to the existing snow and ice cover. Contaminated snow and ice will be removed from the winter road and stored in a contaminated snow tank at the NTPC compound in Fort Smith, NT. When the snow and ice melts in the summer, hydrocarbons floating on top of the contaminated water are recovered with sorbent sheets. The sorbent sheets will be placed into waste drums for disposal at a registered facility. The contaminated water will then be filtered through a granular activated carbon (GAC) filtration system and tested for BTEX (benzene, toluene, ethylbenzene, xylenes) and petroleum hydrocarbons F1 and F2 before it can be safely discharged to the environment.
	The adherence of fuel storage, handling, and spill protocols should also mitigate the environmental risk associated with fuel/oil leaks or spills. There will be a limit of one diesel- carrying vehicle travelling on the road at a time. NTPC will assign a Project Monitor who will be responsible to ensure compliance with the Wildlife Management and Monitoring Plan and other safety and environmental policies
buffer zone loss	
Soil compaction and settling	Heavy equipment and vehicle movements have the potential to increase localized soil compaction and settling. Operational best practices, light weight construction equipment, winter road design requirements, and standard conditions are designed to prevent compaction and settling.

destabilization/erosion

No deviation from the historic winter road route is planned; these routes are already disturbed. The operation will cease prior to spring break-up. Sand/gravel used for traction control on the portage on/off ramps, will be scraped off and left on a flat area on each portage at the end of each winter road season so that it is not washed into the lakes and streams during the spring freshet and create sedimentation issues. If snow fills are likely to cause greater erosion than normal during the Spring freshet, the snow fill will be removed and moved away from the depression or ravine to prevent excessive erosion. Standard permit conditions require efforts to minimize erosion and obstructions to natural drainage.

permafrost regime alteration	
explosives/scarring	
other:	
□ N/A	
Impact 5) Non-renewable natural resources	Mitigation
resource depletion	
other:	
□ N/A	
Impact 6) Air/climate/atmosphere	Mitigation
🛛 other: emissions	There will be localized increase in vehicle emissions associated with the operation of heavy equipment and movement of vehicles along the winter road route. No mitigation identified.
□ N/A	
BIOLOGICAL ENVIRONMENT	
<i>Impact</i> 1) Vegetation	Mitigation
species composition	
Species introduction	Check vehicles and equipment entering or leaving the project for dirt or plant propagules.
toxin/heavy accumulation	
✓ other: Linear Migration routes, habitat fragmentation	There will be some removal of vegetation that has overgrown the original winter road route. Vegetation clearing will be minimized to brushing and danger tree removal only.
□ N/A	
Impact 2) Wildlife and Fish	Mitigation
<pre>effects on rare, threatened or endangered species</pre>	There is a potential for impacts on listed or pre-listed species under COSEWIC and SARA. Mitigation includes the use of food handling and garbage disposal procedures that do not attract wildlife and strict speed limits, signage, and use of convoys to limit wildlife collisions. NTPC will assign a Project Monitor who will be responsible to ensure compliance with the Wildlife Management and Monitoring Plan and other safety and environmental policies.
$ig \$ fish population changes	Water withdrawal follow the DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut.
waterfowl population	

changes	
breeding disturbance	
population reduction	
species diversity change	
<ul> <li>health changes</li> <li>behavioural changes</li> </ul>	Local wildlife may avoid or be attracted to the area due to the operation of winter road construction equipment and the increased movement of traffic in the area. Strict rules for drivers will be enforced to avoid potential for wildlife habituation (e.g. feeding wildlife, leaving refuse) and accidental wildlife strikes. This impact will be localized and temporary, no additional mitigation.
☐ habitat changes / effects	The winter road alignment has been previously disturbed and minimal vegetation clearing (brushing and danger tree removal) is required to reopen the road. Road construction techniques will avoid impacts to beaver dams crossed by the winter road where possible. Encasing the dam with ice during construction supports the structure of the dam and provides load-bearing strength. Maintaining the integrity of beaver dams is critical to maintain water levels under the ice and effectively support the weight of vehicles. Beaver lodges and other features will be avoided when establishing the road alignment. Any impacts to habitat as a result of spills should be mitigated through proper equipment maintenance, training, and adherence to standard conditions and Spill and Waste Management Plans should mitigate impacts.
⊠ game species effects	The existing road alignment is used by hunters its reopening would likely further facilitate vehicle and snowmobile access, increasing harvest levels. Project staff and contractors will be prohibited from hunting, fishing, and trapping.
🔀 toxins/ heavy metals	Fish and wildlife exposure to emissions and fuel and oil spills is expected to be minimal. Proper equipment maintenance and adherence to standard conditions and Spill and Waste Management Plans should mitigate impacts.
forestry changes	
agricultural changes	
other:	
□ N/A	
Interacting Environment	
Impact 1) Habitat and Communities	Mitigation
🔀 predator-prey	The road currently functions as a convenient wildlife corridor and provides a line of sight for predators. Road design will incorporate regular 'jump-outs' along the length of the winter road to allow wildlife to safely vacate.
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:	
<b>N/</b> A	
N/A Impact 3) Cultural and Heritage	Mitigation
<ul> <li>N/A</li> <li><i>Impact</i></li> <li>3) Cultural and Heritage</li> <li>effects to historic property</li> </ul>	Mitigation
<ul> <li>N/A</li> <li><i>Impact</i> <ul> <li>Gultural and Heritage</li> <li>effects to historic property</li> <li>increased economic pressure on historic properties</li> </ul> </li> </ul>	Mitigation
<ul> <li>N/A</li> <li><i>Impact</i> <ul> <li>Cultural and Heritage</li> <li>effects to historic property</li> <li>increased economic pressure on historic properties</li> <li>change to or loss of historic resources</li> </ul> </li> </ul>	Mitigation
<ul> <li>N/A</li> <li><i>Impact</i> <ul> <li>Gultural and Heritage</li> <li>effects to historic property</li> <li>increased economic pressure on historic properties</li> <li>change to or loss of historic resources</li> <li>change to or loss of archaeological resources</li> </ul> </li> </ul>	Mitigation
<ul> <li>N/A</li> <li><i>Impact</i> <ul> <li>Cultural and Heritage</li> <li>effects to historic property</li> <li>increased economic pressure on historic properties</li> <li>change to or loss of historic resources</li> <li>change to or loss of archaeological resources</li> <li>increased pressure on archaeological sites</li> </ul> </li> </ul>	Mitigation
<ul> <li>N/A</li> <li>Impact 3) Cultural and Heritage</li> <li>affects to historic property</li> <li>affects to historic properties</li> <li>increased economic pressure on historic properties</li> <li>change to or loss of historic resources</li> <li>change to or loss of archaeological resources</li> <li>increased pressure on archaeological sites</li> <li>change to or loss of achange to or loss of archaeological sites</li> </ul>	Mitigation
N/A         Impact         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 sites         ○ change to or loss of aesthetically important sites	Mitigation The area proposed to be used in this land use permit is used by active hunters and trappers.
N/A          Impact         3)       Cultural and Heritage         affects 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 sites         effects to aboriginal lifestyle         other:	Mitigation The area proposed to be used in this land use permit is used by active hunters and trappers. A Compensation Agreement has been negotiated with Ken Schaefer, trapper.

• 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 **Akaitcho 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

Akaitcho IMA Implementation Office Bathurst Inlet Development Ltd. Warner Bathurst Inlet Lodge Taylor BNT Gold Resources Ltd. CanNor NWT Region Paradis City of Yellowknife **Dene Nation** Deninu K'ue First Nation Det'on Cho Corporation **Environment and Climate Change Canada** Fisheries and Oceans Canada Fisheries Protection Program Triage Group Fort Resolution Metis Council King Forward Mining Mauchan **GNWT - ECE GNWT - ENR** GNWT - Health **GNWT - INF GNWT-ITI** GNWT - Lands **GNWT** - Lands **GNWT - MACA Golder Associates** Hamlet of Fort Resolution INAC-CARD **INAC-Inspectors** Katlodeeche First Nation Lutsel K'e Dene First Nation Mackenzie Valley Environmental Impact Review Board Manitoba Denesuline National Energy Board North Slave Metis Alliance Northwest Territory Metis Nation NWT & Nunavut Chamber of Mines NWT- OROGO Salt River First Nation Smith's Landing First Nation Snap Lake Environmental Monitoring Agency **Tlicho Government** Town of Fort Smith Hood Wek' eezhii Renewable Resources Board West Point First Nation Ireland WLWB Workers' Safety and Compensation Commission Yellowknives Dene First Nation

## DECISION

The Mackenzie Valley Land and Water Board (the Board) is satisfied that the preliminary screening of Application MV2019L8-0008 and MV2019F0015, Northwest Territories Power Corporation, Taltson Winter Road, Fort Smith to Taltson Hydroelectric Facility, NT 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 and the Mackenzie Valley Land Use Regulations and the *Waters Act* and 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
$\boxtimes$	Outside Local Government Boundaries
	The development proposal might have a significant adverse impact on the environment, refer it to the EIRB.
$\boxtimes$	Proceed with regulatory process and/or implementation.
	The development proposal might have public concern, refer it to the EIRB.
$\boxtimes$	Proceed with regulatory process and/or implementation.
	Wholly Within Local Government Boundaries
	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, refer it to the EIRB.
	Proceed with regulatory process and/or implementation.
	The development proposal might have public concern, refer it to the EIRB.
	Proceed with regulatory process and/or implementation.

### **Preliminary Screening Organization**

Mackenzie Valley Land and Water Board

July 22, 2019

Signatures

Mavis Cli-Michaud, Chair