

4 December 2020

**Mavis Cli-Michaud, Chair**

Mackenzie Valley Land and Water Board  
4922-48th Street  
7th Floor YK Centre Mall  
PO Box 2130  
Yellowknife, NT, X1A 2P6

**APPLICATION FOR NEW TYPE A WATER LICENCE AND LAND USE PERMIT FOR THE CONFIRMATION AND EXPLORATION PROGRAM AT THE PINE POINT MINE PROJECT**

Dear Ms. Cli-Michaud,

Pine Point Mining Limited (PPML) is pleased to submit the attached applications for a new Type A Water Licence and Type A Land Use Permit for a Confirmation and Exploration program in the Pine Point Property to the Mackenzie Valley Land and Water Board (MVLWB). PPML is currently permitted for mineral exploration, use of heavy machinery and vehicles, use and storage of fuel, and construction and maintenance of trails and access roads for PPML's Pine Point property. This application is intended to replace the existing authorizations and add additional scope. This cover letter provides some background and supporting information for our application.

**Existing Authorizations**

Mineral exploration at PPML's Pine Point property is currently authorized by the following:

- Type B Water Licence MV2020L2-0008, expiring 8 October 2022
- Type A Land Use Permit MV2018C0005, expiring 19 September 2022
- Type A Land Use Permit MV2017C0024, expiring 19 July 2022

**Need for a Type A Water Licence**

While increased water use for drilling and the camp will be required to accommodate the intensified exploration proposed, a Type A Water Licence is primarily required because PPML requires short-term groundwater tests that involve movements of water beyond the threshold of a Type B Water Licence. The purpose of the dewatering testing is to obtain hydrogeological parameters that will enable quantitative models of groundwater movement to be developed and flow rates for the aquifers to be determined. This information will be used in the development of the water management plan for the Pine Point Project.

## **Application Contents**

A combined Type A Water Licence application and Type A Land Use Permit application are submitted and includes the following documents:

- Water Licence Application Form for non-federal areas (to replace MV2020L2-0008), requesting a 7-year Type A Water Licence (water within federal lands will not be used nor used for deposit of waste, specifically to avoid a split-interest scenario)
- Land Use Permit Application Form (to replace MV2018C0005 and MV2017C0024), requesting a 5-year Type A Land Use Permit
- Project Description for Confirmation and Exploration Program
- Maps depicting the land use area and related GIS data
- Screening Level Environmental Impact Assessment
- Studies Undertaken to Date including Traditional Knowledge
- Wildlife Protection Plan
- Water Withdrawal Plan
- Bedrock Sampling Management Plan Framework (submitted for discussion only, will require further updates prior to initiating bedrock sampling)
- Groundwater Management Plan Framework (submitted for discussion only, will require further updates prior to initiating groundwater sampling)
- Waste Management Plan (will require further updates following issuance of the authorizations)
- Spill Contingency Plan (will require further updates following issuance of the authorizations)
- Engagement Plan (new version with minor updates) and Record that confirm involvement of affected communities
- Closure and Reclamation Plan
- Closure Cost Estimate (using the RECLAIM Model and incorporating liabilities from the existing authorizations MV2018C0005, MV2017C0024 and MV2020L2-0008)
- Draft Water Licence conditions
- Draft Land Use Permit conditions
- A cheque of \$30.00 for Water Licence application fees to the Receiver General for Canada
- A cheque for \$1,387 for the water use fees to the Government of the Northwest Territories (calculated based on the understanding that water returned to source does not count towards the water use fees, as per Section 8(5) of the Waters Regulations, and as will be the case for groundwater testing; water use fee calculator v1.5 sheet is included in the package)
- A cheque of \$150.00 for Land Use Permit application fees to the Receiver General for Canada
- Proof of corporate registration

## Engagement

PPML has made efforts to engage with affected communities and to incorporate feedback; these engagement efforts have been summarized in the Engagement Record. However, to reduce spread of COVID-19, engagement efforts in 2020 have obviously been limited by the travel and meeting in person restrictions currently in place in NWT. PPML continues to proactively provide virtual meeting options to engagement communities.

## Monitoring of Waste and Effluent

Waste produced by camp and drilling operations will be managed through the Waste Management Plan and through land use permit conditions. During the short-term groundwater testing, PPML proposes to manage and monitor water quality through the Groundwater Management Plan, a framework for which is included within the water licence application. Seepage water and groundwater encountered during bedrock sampling will be managed through the Bedrock Sampling Management Plan.

The Guidelines for Aquatic Effects Monitoring Programs (MVLWB/GNWT 2019) indicate that AEMPs are generally required for mining and milling operations requiring a Type A Water Licence and may also be required for other undertakings based on the specific project activities. More specifically, the guidelines indicate that an AEMP may be required for any project where a change or effect to the aquatic environment is reasonably expected, resulting from direct deposit of waste to the receiving environment. The proposed exploration does not include discharge of waste to a receiving environment. A summary of the anticipated sources of waste and how they will be managed is provided in the table below (details are provided in the Waste Management Plan), indicating that no change to the aquatic environment is expected. As exploration does not involve the direct deposit of waste to receiving waters, and wastes will be managed such that effects to the receiving environment are not expected, an AEMP is not considered necessary. Other exploration projects of a similar scale that also did not require an AEMP include the Kennady Diamonds Kennady North Project (MV2013L2-0005) and Fortune Minerals' NICO Project (MV2004L2-0005) and it is the expectation that a similar process will be followed for this Project.

Source of Waste	Anticipated Volume of Waste	Proposed Management
Drill cuttings from exploration drilling (core drilling and sonic drilling)	Maximum of 264 m <sup>3</sup> /day at peak drilling for core drilling and 10 m <sup>3</sup> /day for peak sonic drilling	Non-toxic material to be placed in a natural or excavated sump at least 100 m from a watercourse for evaporation and backfilling prior to closure, as per the land use permit conditions and the Waste Management Plan.
Large Diameter Drilling (for dewatering test)	49 m <sup>3</sup> /day	Non-toxic material to be placed in a natural or excavated sump at least 100 m from a watercourse for evaporation and backfilling prior to closure, as per the land use permit conditions and the Waste Management Plan and Groundwater Management Plan.
Dewatering Test	3,600 m <sup>3</sup> /day for the duration of the groundwater testing	Water will be stored on surface in an existing open pit, or re-injected underground after testing, following criteria in the Groundwater Management Plan.
Camp (greywater and sewage)	Up to 56 m <sup>3</sup> /day	Greywater deposited in a surface sump at least 100 m from a watercourse for evaporation and backfilled prior to closure, as per the Waste Management Plan and the land use permit conditions. Sewage will be trucked to a licenced facility for disposal. Alternatively, a Wastewater Treatment Plant may be installed where treated water will be subject to discharge criteria and deposited to a sump and sludge will be deposited in a landfill (with no releases to the aquatic environment).

Source of Waste	Anticipated Volume of Waste	Proposed Management
Seepage from Metallurgical Testing	Small volumes are anticipated, if any	The remaining excavated material from each site will be placed back into the blasted area. Overburden material stockpiled adjacent to the excavation will be returned to the pit and graded to restore natural drainage, as per the Bedrock Sampling Management Plan. The test pits will be set back 100 m from watercourses.

m<sup>3</sup>/day = cubic metres per day.

As the details of the groundwater testing (including locations and number of tests) are not yet defined and as the testing is anticipated to be of short duration (likely less than one week per site), PPML suggests that the quantity and quality of this water and criteria for any water that is re-injected underground be defined in the Groundwater Management Plan rather than a Surveillance Network Program. A similar example is the construction of the Tlicho All-Season Road Water Licence (W2016L8-0001), where construction-phase water monitoring was included in the Water Monitoring Plan rather than an SNP.

A summary of environmental effects, and the associated mitigation and monitoring is provided in the Screening Level Environmental Assessment.

### **Preliminary Screening and Environmental Assessment**

Assuming that exploration results are positive, and that the economics are anticipated to be to be favorable, PPML plans to construct and operate a zinc and lead mine at their Pine Point Property. It is anticipated that an application to do so will require an environmental assessment by the Review Board under Section 126 of the Mackenzie Valley Resource Management Act (MVRMA). PPML is currently preparing an Environmental Assessment Initiation Package, as suggested by the Draft Environmental Assessment Initiation Guidelines for Developers of Major Projects (2018) by Mackenzie Valley Environmental Impact Review Board (MVEIRB). The Initiation Package will be submitted in late 2020. PPML anticipate that the MVEIRB will then initiate an environmental assessment using its authority under Section 126(3) of the MVRMA. As such, PPML suggests that it is the proposed mine that may lead to significant impacts, not this application for exploration. To confirm this, PPML has provided a Screening Level Environmental Impact Assessment with this application.

Some of the activities, areas, facilities and equipment included in this application have already received Preliminary Screening. As per Schedule 1 Part 1 of the Exemption List Regulations, parts of developments that were previously screened are exempt from further preliminary screening. The table below summarizes the activities and equipment that have been subject to preliminary screenings during previous applications, and Attachment A shows the area of activity for this application relative to previously screened areas for MV2017C0024 and MV2018C0005.

<b>Activity</b>	<b>Screened in 2009</b> MV2008C0023 MV2016C0023 (exempt from screening, same activities)	<b>Screened 20 July 2017<sup>1</sup></b> MV2017C0024 (amendment to MV2016C0023)	<b>Screened 20 June 2018<sup>2</sup></b> MV2018C0005 MV2018L2-0003 Independent activities from MV2017C0024	<b>Screened in 2020<sup>3</sup></b> 13 February 2020 Screening under Permit MV2017C0024	<b>Requested in this Application</b>
<b>Mineral claims (Refer to attachment A)</b>	40 Mining Leases 4 Surface Leases 5 Mineral Claims	40 Mining Leases 4 Surface Leases 13 Mineral Claims	No additional claims or leases	40 Mining leases 4 Surface Leases 106 Mineral Claims	PPML has 40 mineral leases, 106 mineral claims, and 4 surface leases for a total area of 46,473 hectares (ha)
<b>Camp</b>	Construction and maintenance of a 20-person camp facility	Construction and operation of a 35 to 49 person camp	No additions	No additions	Construction and operation of a 249 person camp
<b>Drilling program and activities</b>	Drilling and geological mapping	No additions	No additions	No additions	Drilling and geological mapping Groundwater testing Metallurgical bedrock sampling Geotechnical testing Camp expansion
<b>Fuel volume</b>	660 L of diesel 55 L of gasoline 2,300 lbs of propane	10,000 L of diesel 2,000 L of gasoline 4,000 L of aviation fuel 2,000 lbs of propane	15,480 L of diesel 1,350 L of gasoline 18,000 lbs of propane	Increase to 32,500 L of diesel, gasoline, and aviation fuel Increase to 8,000 lbs of propane	275,000 L of diesel 28,000 L of gasoline 28,000 L of aviation fuel 100,000 lbs of propane
<b>Fuel storage</b>	2 drums (200 L capacity) of diesel fuel 1 enviro-tank (1500 L capacity) of diesel fuel 1 genset tank (50 gal. capacity) of diesel fuel 1 container (205 L capacity) of gasoline 4 containers of propane (2 x 4,000 L capacity and 2 x 200 L capacity)	Increase of fuel storage accordingly to the volume above	Storage of fuel on drill pads Increase of fuel storage accordingly to the volume above	Increase of fuel storage accordingly to the volume above	Diesel 5 L to 205 L containers; tanks up to 100,000 L Gasoline 5 L to 205 L containers; tanks up to 100,000 L Aviation fuel 205 L containers Propane 20 lbs to 2,000 gallon cylinder/tank

<sup>1</sup> [MVLWB 2017](#).

<sup>2</sup> [MVLWB 2018](#).

<sup>3</sup> [MVLWB 2020](#).

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<b>Equipment</b>	4 - ¾ tonne pick-up trucks 1 - 4,000 L capacity water truck 1 D6 Cat dozer 3 pumps (20 gpm, 10 hp) 1 front-end loader 2 snowmobiles 2 all terrain vehicles 1 diamond drill (LS 70 or smaller) 2 50 kW generators.	3 Skid or track mounted drills 2 5HH, 30HH, LF70, LF90, or equivalent 3 Sloop for Equipment 3 Equipment and supply shack 3 Water pumps 3 Pump shack with fuel tank and propane bottles 3 Shack for water lines with fuel tank and propane bottles 3 Drill cuttings tank 1 Water storage tank 2 Water truck 4 D-6 Dozer 2 D-8 Dozer 3 Marooka 800 or Nodwell 3 Skidders 2 Snowcat 1 ½ to 1.5-ton truck 3 ¾-ton trucks 1 1 tonne dump truck 2 Excavator or backhoe 4 Flatbed transport truck 8 Snowmachines 8 Quads 2 Kabodas Argos Swamp Buggies 4 Loader	9 Skid or track mounted drills 25HH, 30HH, LF70, LF90, or equivalent 9 Sloop for Equipment 9 Equipment and supply shack 9 Water pumps 9 Pump shack with fuel tank and/or propane bottles 9 Drill cuttings tanks 12 Water storage tank 6 Water truck 3 D-6 Dozer 2 D-8 Dozer 9 Marooka 800 or Nodwell 2 Snowcat 25 ½ ton to 1.5 ton trucks 2 ¾ ton trucks with 2 Dump Truck 2 Excavator or backhoe 3 Flatbed transport truck 8 Snow machines 8 Quads 2 Kabotas 8 Argos 2 Swamp Buggies 4 Loader 10 Generators 2 Graders 6 Bobcats or equivalent	No additional equipment added	6 water trucks 2 booster pumps 12 mobile pump units 12 coring rigs 1 blast hole drill rig 1 drilling rig 2 sonic drill rig and support equipment 4 D-6 and D-8 Dozer 2 graders 4 loaders 4 excavators 2 telescopic lifts 4 skidders 4 mulchers 50 pickup trucks 1 welding truck 1 parts truck 2 vacuum trucks 4 dump trucks 4 transport trucks with trailer 4 Marooka or similar 3 skid steer loaders or similar 2 Kubota tractors or similar 16 Quads 12 side-by-sides 2 swamp buggies 12 Argos 16 snowmobiles and sleds 4 Snowcats 1 explosives storage magazine 1 ANFO/emulsion truck 1 high pressure/low-volume spray washer 1 mobile screen 1 mobile crusher 6 diesel generators 10 portable generators 12 portable light towers 2 fuel trucks 4 mobile Geotech logging units 12 sloops for equipment

<b>Activity</b>	<b>Screened in 2009</b> MV2008C0023 MV2016C0023 (exempt from screening, same activities)	<b>Screened 20 July 2017<sup>1</sup></b> MV2017C0024 (amendment to MV2016C0023)	<b>Screened 20 June 2018<sup>2</sup></b> MV2018C0005 MV2018L2-0003 Independent activities from MV2017C0024	<b>Screened in 2020<sup>3</sup></b> 13 February 2020 Screening under Permit MV2017C0024	<b>Requested in this Application</b>
					2 equipment and supply shacks 2 Insulated heat shacks for water lines with fuel tank and propane bottles 4 Water storage tanks 4 Mobile support units 4 Central drill water storage units 4 Mobile medic units 2 helicopters 2 incinerators 2 crew buses 1 roll off truck 1 crane 90 camp buildings

## **Financial Capacity, Security and Fees**

PPML has demonstrated adequate evidence of financial capacity and posted staged security deposits for the activities described in MV2017C0024, MV2018C0005 and MV2020-L0008. To date, PPML has posted the following security deposits totalling of \$472,583:

- MV2017C0024 - \$148,300
- MV2018C0005 - \$267,851
- MV2020L2-0008 - \$56,432

The security amounts for MV2018C0005 and MV2020L2-0008 were reviewed earlier in 2020 with the renewal of MV2018C0005 and issuance of MV2020L2-0008 as documented in Reasons for Decision (20 June 2020) . We regard this to be adequate evidence of financial capacity.

Security for this application is provided in the Closure and Reclamation Plan and the RECLAIM model estimate provided with this application. We request that the MVLWB set security requirements at the exact amount calculated by the RECLAIM model, to facilitate reference back to the model.

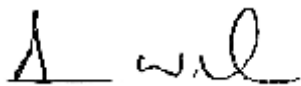
We understand that there is a \$150 fee for a land use permit application, and \$30 for the water licence renewal. In addition, water use fees for a peak of 3,980 cubic metres per day will amount to a further \$1,387. All applicable fees will be paid upon confirmation and request of the MVLWB.

## **Closure**

PPML thank you for your time on reviewing our applications and look forward to working with the MVLWB and interested parties regarding these applications. Should you have any questions or need any additional information, please feel free to contact the undersigned at 416-209-2056 or acwilliams@live.ca.

Regards,

**Pine Point Mining Limited.**



Andrew Williams  
*Environment Manager*

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## **Attachments**

Confirmation and Exploration Program Map Area Map (including areas previously screened)

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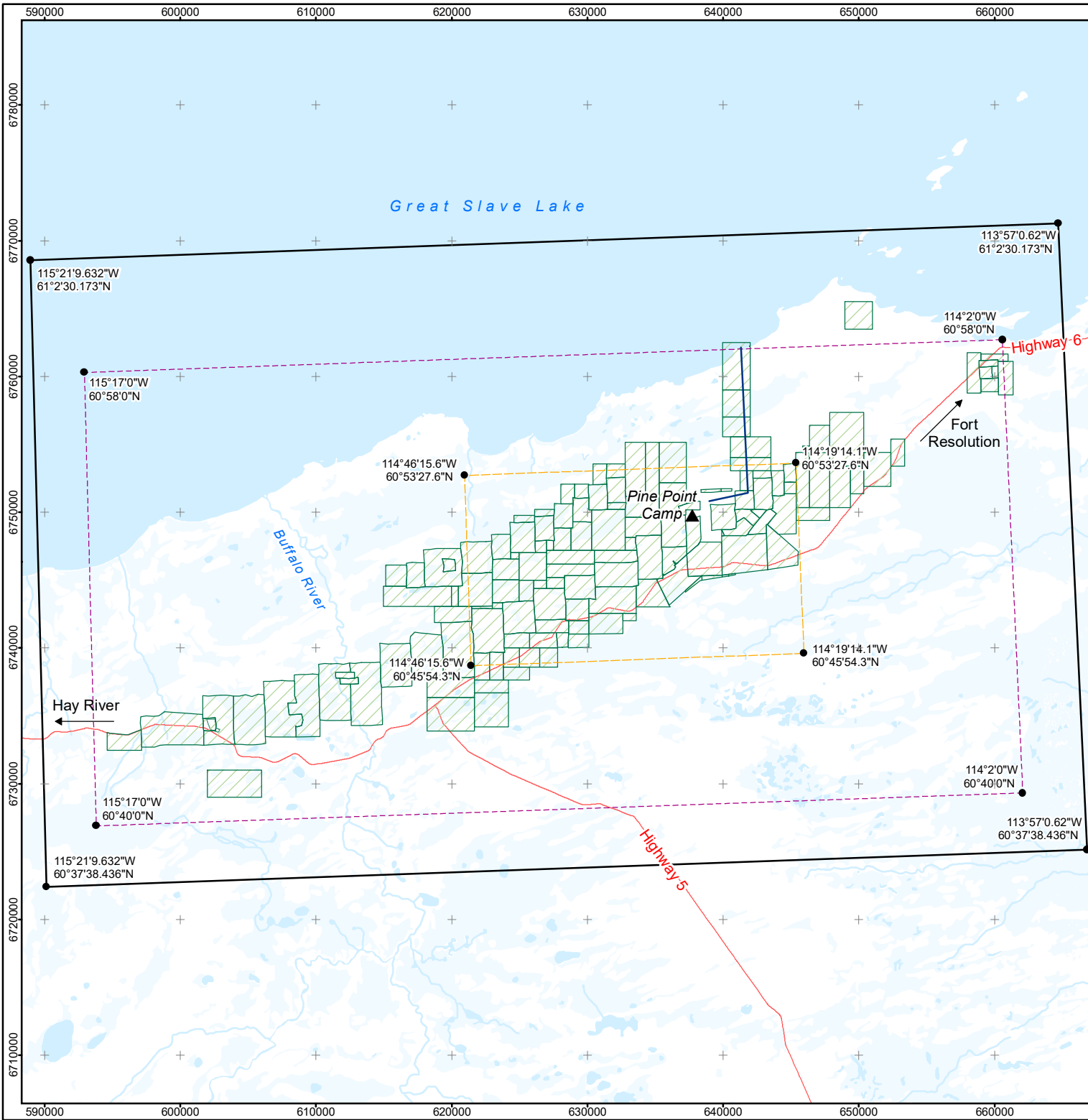
## References

- MVEIRB (Mackenzie Valley Environmental Impact Review Board). 2018. Draft EA Initiation Guidelines for Developers of Major Projects. Accessible at: <http://reviewboard.ca/file/1132/download?token=c5tFrEgL>. Accessed October 2020.
- MVLWB/GNWT (Mackenzie Valley Land and Water Board/Government of the Northwest Territories). 2019. Guidelines for Aquatic Effects Monitoring Programs. Accessible at: [https://wlb.ca/sites/default/files/aemp\\_guidelines\\_-\\_mar\\_5\\_19.pdf](https://wlb.ca/sites/default/files/aemp_guidelines_-_mar_5_19.pdf). Accessed October 2020.
- MVLWB. 2017. Preliminary Screening Form, MV2017C0024, Mineral Exploration, Pine Point Area. Accessible at: <http://registry.mvlwb.ca/Documents/MV2017C0024/MV2017C0024%20-%20Darnley%20Bay%20Resources%20Ltd%20-%20Issuance%20-%20Preliminary%20Screening%20-%20Jul20-17.pdf> Accessed November 2020.
- MVLWM. 2018. Preliminary Screening Form, MV2018C0005 & MV2018L2-0003, Pine Point Mining Limited. Accessible at: <http://registry.mvlwb.ca/Documents/MV2018L2-0003/MV2018C0005%20MV2018L2-0003%20-%20PPML%20-%20Preliminary%20Screening%20-Jun29-18.pdf>. Accessed November 2020.
- MVLWB. 2020. Pine Point Mining Limited – Notice of Preliminary Screening Determination – Amendment Requested for Land Use Permit – Mineral Exploration – Pine Point, NT. Accessible at: <http://registry.mvlwb.ca/Documents/MV2017C0024/MV2017C0024%20-%20PPML%20-%20Preliminary%20Screening%20Notification%20to%20Review%20Board%20-%20Feb14-20.pdf> . Accessed November 2020.
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## **Attachment A – Confirmation and Exploration Program Map**

PPM-20201126-PP\_Confirmation\_and\_Exploration\_Program





**LEGEND**

-  Proposed Potable Water Line
-  Proposed Area of Activity
-  MV2017C0024 Area of Activity
-  MV2018C0005 Area of Activity
-  PPML Mineral Tenure and Surface Leases
-  Main Road
-  Waterbody
-  Watercourse
-  Wetland

**REFERENCE**

BASE DATA OBTAINED FROM CANVEC®  
 DEPARTMENT OF NATURAL RESOURCES CANADA  
 ALL RIGHTS RESERVED  
 DATUM: NAD 1983 CSRS UTM ZONE 11N  
 CREATED BY: AURORA GEOSCIENCES LTD.



FILE ID: PPM-20201019-PP\_Confirmation\_and\_Exploration\_Program

PROJECT	PINE POINT MINING LIMITED	
TITLE	<b>CONFIRMATION AND EXPLORATION PROGRAM</b>	
	PROJECT	PPM-20031-NT
	DESIGN	RM   08/04/2017
	CHECK	JM   19/11/2020
	REVIEW	SM   26/11/2020
		SCALE AS SHOWN