



P.O. Box 1500  
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Yellowknife, NT  
X1A 2R3

June 1<sup>st</sup> 2017

Indigenous and Northern Affairs Canada – CARD  
P.O. Box 1500  
4923 52<sup>nd</sup> Street  
Yellowknife, NT  
X1A 2R3

Attention: Mr. Carey Ogilvie, INAC CARD

**RE: Land Use Permit MV2016X0011 – Tundra Mine Remediation Project – Inspection**

Dear Mr. Ogilvie,

An inspection of the Tundra Mine Remediation project was completed by Resource Management Officer Tim Morton and Co-op Student Yee Ting Choy on May 31<sup>st</sup> 2017. The inspection was conducted to ensure compliance with the terms and conditions of the land use permit MV2016X0011, quarrying operations, and approved management plans.

The attached inspection report contains details and pictures that were taken during the inspection.

If you have any questions or concerns, please contact Tim Morton at (867) 669-2442.

Thank you,

Tim Morton  
Resource Management Officer (Inspector)  
Resource and Land Division  
Aboriginal Affairs and Northern Development Canada

CC. MVLWB – via email  
INAC/CARD – via email  
INAC Resource and Lands – via email



**ENVIRONMENTAL INSPECTION REPORT (MV2016X0011)**

Permittee:	INAC – CARD	October 19 <sup>th</sup> 2021	March 21 <sup>st</sup> 2017
		Permit Expiry Date	Last Previous Inspection

Land Use Permit No.	MV2016X0011		
Quarrying Permit No.	2016QP0005		
Contractor:	Nahanni Construction /Delta Engineering	Subcontractor:	

Location(s) Inspected:	Camp/Fuel Storage/Equipment Lay Down/Haz Waste Storage /Active and Inactive Quarries
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Current Stage of Operation:	Active Remediation
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Program Modifications Approved:	None
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Condition of Operation "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "N/I" - Not Inspected

	Operating Condition	Aspect Inspected				
		Camp Support Facilities Quarries				
A	Location and Area	<b>U</b>				c#4
B	Timing as Permitted	A				
C	Equipment as Approved (Type & Size )	A				
D	Methods & Techniques	A				
E	Facilities	<b>A*</b>				c#15
F	Erosion (Control or Prevention )	<b>U</b>				c#30, c#31
G	Chemicals	A				
H	Wildlife and Fisheries Habitat (Protection )	A				
I	Wastes	<b>A*</b>				c#40
J	Historical / Archaeological Sites	A				
K	Ecological Resources	N/A				
M	Fuel Storage	<b>A*</b>				c#48, c#55
N	Brush Disposal	A				
O	Restoration of Lands	A				
P	Permits	A				
Q	Biological and Physical Protection of Land	A				
R	Sections 8 to 12 / 14 to 16 M.V.L.U.R.	A				
S	Quarrying Methods	<b>U</b>				



## ENVIRONMENTAL INSPECTION REPORT Pg. 2 (Continued)

Date:	May 31 <sup>st</sup> 2017	Permit #:	MV2016X0011
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Explanatory Remarks -

An inspection of the Tundra remediation project was conducted by Resource Management Officer Tim Morton and Co-op student Yee Ting Choy on May 31<sup>st</sup> 2017. The Inspectors were accompanied by Rob Osborne (AECOM – Site Representative), Murray Somers (CARD – Project Officer), and Kristin Moore (CARD – Project Officer). The inspection was carried out to ensure compliance under the applicable land use permits, quarry permits, and management plans.

The remediation project was fully operational at the time of the inspection. There were an estimated 40-45 people onsite and multiple activities taking place such as active quarrying, water treatment plant setup, road maintenance, surveying, and water sampling. The Inspector noted that the three cell sewage system had a significant amount of water within all three cells (Photo #1). The amount of water within the cells was caused by the recent freshet and precipitation in the area. The Inspector noted that the levels in each cell were decreasing and did not have any concerns with the amount of freeboard remaining in the cells.

The majority of the equipment around the site that was sitting for at least two hours had drip trays placed under them as required by condition #54 of the land use permit. There were however a few pieces of equipment that did not have any drip trays under them (Photo #3). Site personnel should place drip trays under the remaining equipment to ensure that no hydrocarbon spills occur from the equipment. The staining identified during the February 23<sup>rd</sup> 2017 inspection on the fuel tank that is connected to the camp facilities had been cleaned up and no other concerns were noted with the tank (Photo #4).

The Inspector noted that there was a large amount of refuse and garbage near the camp that was not stored properly as required by condition #40 of the land use permit (Photo #5). This garbage must be removed and placed within proper containment until it can be dealt with in accordance with the approved waste management plan.

The standing water within the hazardous waste storage area appeared to have a very thick layer of hydrocarbons on top of the standing water (Photo #6). This water will need to be treated and removed from the hazardous waste storage area and the source of the spill identified and repaired. No further access by vehicles in this area should take place until the water is removed. This will avoid spreading the hydrocarbons to the surrounding environment around the storage area. The Inspector noted that there were some larger hydrocarbon stains located near the equipment laydown yard (Photo #7). This contaminated material will need to be removed and disposed of in accordance with the waste management plan.

There was a large pile of material that was being prepped for opening burning (Photo #8). The Inspector discovered some non-burnable materials within the pile such as liner, plastic, and what appeared to be Teflon runners. These materials will need to be removed before the material can be incinerated.

The water treatment plant was setup onsite however it was not operational or discharging at the time of the inspection (Photo #11). The Inspector was informed that site personnel were waiting for some replacement parts and results from the recent water samples to be received before they can commission the plant. The water level in the lower pond was lower than previous years and site personnel estimate that it will take between 10 to 14 days to complete the treatment and discharge. The Inspector requests that the pre-sample results are submitted to the Inspector at least 48 hours prior to discharge.

A large scale quarrying operation was taking place at the time of the inspection. There was a large stock pile of material located north of the camp (Photo #9) which was being removed from the A2 quarry (Photo #14). There were no concerns noted with the operations at the West Lower Pond or A2 quarries as they appeared to be well managed and within the approved areas. The Inspector recommends that a survey be completed at the A1 quarry located to the southeast of the airstrip to ensure the operation does not encroach into the authorized setback or cross into GNWT lands.

The Inspector discovered that the A3 pit had been quarried to an estimated 3 meters from the OHWM of an unnamed waterbody (Photo #12). This distance was not authorized by the Inspector and is in contravention of condition #4 of the land use permit. The A3 quarry appeared to already have been remediated and all organics have been pulled back over the area. No further quarrying can take place within the A3 quarry until a proper survey is conducted to ensure that no further encroachments into the authorized buffer takes place.

The Inspector expects that they above mentioned issues are addressed in a timely fashion. Please contact the Inspector listed below or Devin Penney (867) 669-2468 if you have any questions or concerns.

\*Original Signed\*

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Inspectors Signature



**Photo #1: Overview of the three cell sewage system.**



**Photo #2: Close up of the second cell of the sewage system. Note that the level in the cell was dropping at the time of the inspection.**



**Photo #3: Frost fighter located onsite without a drip tray.**



Photo #4: Camp fuel tank, no issues noted.



Note #5: Garbage and other debris blowing out onto the tundra.



Photo #6: Thick hydrocarbons floating on the water within the hazardous waste laydown area.



**Photo #7: Hydrocarbon staining around the equipment staging and laydown area.**



**Photo #8: Non burnable refuse placed within the burning pile.**



**Photo #9: Overview of the stock piling of quarried material located north of the camp facilities.**



**Photo #10: Site personnel spreading sodium chloride to help control dust around the site.**



**Photo #11: Overview of the water treatment plant. Note that the plant was not operational at the time of the inspection.**



**Photo #12: Overview of the A3 quarry and its proximity to the nearby waterbody.**



**Photo #13: Overview of the A1 esker quarry.**



**Photo #14: Overview of the quarrying operation at the A2 quarry near the airstrip.**