



P.O. Box 1500
4923 52nd Street
Yellowknife, NT
X1A 2R3

June 28th, 2017

INAC-CARD Bullmoose/Ruth Remediation Project

RE: Land Use Permit MV2016X0013 – Bullmoose/Ruth Remediation Project

Dear Mr. Ogilvie,

An inspection of INAC-CARD Bullmoose/Ruth Remediation Project was completed by Resource Management Officers Tim Morton, Devin Penney, and Co-op Student Yee Ting Choy on June 21st, 2017. The inspection was conducted to ensure compliance with the terms and conditions of the land use permit MV2016X0013, Quarry Permit 2017QP0002, approved management plans and Inspector's Order issued on May 26th, 2017 following the May 23rd, 2017 inspection.

With the exception of a few conditions that will take time to complete, the conditions in the Inspector's Orders were complied with and operational improvements have been made on site. The attached inspection report contains details and photos that were taken during the inspection.

If you have any questions or concerns please contact me at (867) 669-2442 or Devin Penney at (867) 669-2468.

Thank you,

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

cc. MVLWB – via email
INAC Resource and Land Management – via email
INAC Communications – via email
GNWT Lands – via email



INSPECTION DATE – June 21st 2017

ENVIRONMENTAL INSPECTION REPORT (MV2016X0013)

Permittee:	CARD Bullmoose-Ruth	December 4 th 2021	May 23 rd 2017
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Land Use Permit No.	MV2016X0013	Permit Expiry Date	Last Previous Inspection
Quarrying Permit No.	2017QP0002		
Contractor:	Rowe's Outcome JV	Subcontractor:	

Location(s) Inspected:	Bullmoose/Ruth Remediation Project Federal land use areas
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Current Stage of Operation:	Quarrying Activity and Camp Facilities
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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/Equipment Storage	Quarry		
A	Location and Area	A	A*		
B	Time	A	A		
C	Type and Size of Equipment	A	A		
D	Methods & Techniques	A	A		
E	Type, Location, Capacity, and Operation of All Facilities	A	A		
F	Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land	A*	A		
G	Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material	A	A		
H	Wildlife and Fish Habitat	A	A		
I	Storage and Handling of Refuse and Sewage	A	A		
J	Historical / Archaeological Sites	A	A		
K	Objects and Places of Recreational, Scenic, and Ecological Value	A	A		
L	Security Deposit	N/A	N/A		
M	Fuel Storage	A	A		
N	Methods and Techniques for Debris and Brush Disposal	A	A		
O	Restoration of Lands	A	A		
P	Display of Permits and Permit Numbers	A	A		
Q	Biological and Physical Protection of the Land	A	A		
R	Sections 8 to 12 / 14 to 16 M.V.L.U.R.	A	A		
S	Quarrying Methods	N/A	U		Over-quarrying at the Ruth Site



ENVIRONMENTAL INSPECTION REPORT Pg. 2 (Continued)

Date:	June 21 st 2017	Permit #:	MV2016X0013
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Explanatory Remarks:

An inspection of INAC-CARD Bullmoose/Ruth remediation project was completed by Resource Management Officers Tim Morton, Devin Penney, and Co-op Student Yee Ting Choy on June 21st, 2017. The Inspectors were accompanied by Lyndon Kipling (Rowe's Construction – Field Operations Supervisor) and Jason Mauchan (Rowe's Construction – Environmental Representative). In addition to ensuring compliance with the terms and conditions of the land use permit MV2016X0013, Quarry Permit 2017QP0002 and approved management plans, the inspection was conducted as a follow-up to the previous inspection on May 23rd, where numerous issues and noncompliance with permit conditions were found and resulted in an Inspector's Order. Compliance with the Inspector's Order is required in order to rectify the issues found on site.

Unlike the previous inspection, the camp was in operation and there were personnel on site. As such, wastewater was being discharged. The wastewater was being discharged after treatment through a pipe at multiple points and into the surrounding area, which was covered by wood shavings (Photo #1). A point had been set up on the pipe just prior to discharge where samples of the sewage could be taken (Photo #2). As required by Order condition #3, a site presence had been established at all project locations associated with the land use permit.

Most of the hydrocarbons stains located around the Bullmoose camp and airstrip had been cleaned up, in compliance with condition #65 of the land use permit. All the equipment parked at the Bullmoose, Ruth, Spectrum, and Beaulieu sites now had drip trays as required by permit condition #64 and Order condition #12, an improvement from the last inspection where most parked equipment lacked drip trays (Photo #3). One parked vehicle was found to be leaking and site personnel were notified that this would need to be fixed and the resulting stained areas removed. The fuel drums located around the land use area were now being stored in compliance with permit conditions #53, #57, and #58. Several drums were bulging from increased internal pressure and these drums need to be kept upright to minimize spillage in the event of a release (Photo #4). In general, the site was much cleaner and well-kept.

A bridge had been built at Bullmoose site across Bullmoose Creek. The Inspectors observed that there were recent tire tracks running through the river and reminded site personnel that vehicles should be restricted to crossing the creek at the bridge (Photo #5).

Prior to this inspection, the Inspectors were notified that the Contractor had over-quarried at the Ruth site, having quarried outside of the permitted area outlined in Quarry Permit 2017QP0002. The over-quarried area was west of the airstrip. In response, INAC-CARD had stopped any further quarrying at the Ruth site prior to the inspection. The Inspectors notified the Contractor that if they wished to continue quarrying, they would need to apply for a new quarry permit that permits quarrying at the over-quarried areas at Bullmoose and Ruth sites. Site personnel requested that they be permitted to move and use the already quarried material stockpiled northwest of the airstrip to build a landfarm, and also to build up roads for trucks enter and remove tailings. The Inspectors relayed that they have no issue with this as long as they did not use the material excavated for the landfarm as quarry material. The Inspectors also noted that the quarry at the Bullmoose site was approaching the nearby lake and reminded site personnel to stay 100 meters back from the OHWM.

A trench had been constructed at Beaulieu site to facilitate dewatering of the flooded areas (Photo #6). This site was no longer flooded but numerous large puddles of water were present and there was water pooled in the trench (Photo #7). Unknown sheens, potentially hydrocarbons were observed in these bodies of water; the Contractor must sample these waters and submit results to the Inspectors prior to discharge (Photo #8). Once the site is fully dewatered, the camp and other associated support equipment must be moved to higher durable grounds as stated in Order condition #5.

There was considerable flooding at Joon site, resulting in marshy conditions. A silt fence had been constructed around the stockpiled quarry material near Strike Lake to prevent erosion but it was not tied into the ground. The silt fence will need to be properly tied down into the ground in order to be effective (Photo #9). The Joon Mine fuel tank was unmoved and remained within 100 meters of the OHWM of Strike Lake, contrary to condition #52 of the land use permit. Transport of the tank however,



would require its contents to be transferred into multiple smaller drums, risking a potential spill in the process. As such, the Inspectors notified site personnel that this fuel tank was permitted to remain in place.

As per Order conditions #6 and #7, the large hydrocarbon spill at Spectrum site was being cleaned up at the time of the inspection and was being supervised by Stantec (Photo #10). The old fuel drums had been removed and an excavator was lifting contaminated soil into mega bags (32 bags had been filled at this time). These mega bags and fuel drums were stored in a containment area further into the site (Photo #11). Site personnel were also cleaning up the burned material on Spectrum site and grinding down damaged metal (Photo #12).

Most of the conditions in the Inspector's Orders and the land use permit were complied with and efforts have been made to ensure that the sites were managed. As stated above, all quarrying had been halted by INAC-CARD and a new quarry permit will be required to resume quarrying at both of the unauthorized quarry areas at the Ruth and Bullmoose sites.

Please feel free to contact either Inspectors Tim Morton (867) 669-2442 or Devin Penney (867) 669-2468 if you have any questions or concerns.

_____*Original Signed*_____
Inspectors Signature



Photo #1: Set-up of sewage discharge system. The discharge pipe is covered and slowly discharges into the sawdust.



Photo #2: Close up of sewage discharge system. Note the electrical cord marking where sewage samples can be taken.



Photo #3: Drip tray placed underneath stationary vehicle.



Photo #4: Barrels of fuel. Note the visible bulging of several drums.



Photo #5: Recent tire tracks cutting through Bullmoose Creek.



Photo #6: Beaulieu Site. Note that most of the water has been drained.



Photo #7: Trench dug at Beaulieu Site to facilitate dewatering.



Photo #8: Potential hydrocarbons in the remaining water at Beaulieu Site.



Photo #9: Silt fence at Joon Site. The silt fence was not properly tied into the ground.



Photo #10: Clean up contaminated soil at Spectrum site.



Photo #11: Storage of contaminated earth and old fuel barrels at Spectrum site.



Photo 12: Clean-up of refuse at Ruth Mine site.