



Ms. Dawn Keim  
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Contaminants and Remediation Directorate  
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Yellowknife, NT  
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April 14, 2025

CIRNAC-CARD Rayrock Remediation Project

**RE: Land Use Permit W2020X005, Water License W2020L8-0003 – Rayrock Remediation Project**

Dear Ms. Keim,

An inspection of CIRNAC-CARD Rayrock Remediation Project was completed by Resource Management Officer Erika Nissen and Environmental Specialist Megan Larose on March 12<sup>th</sup>, 2025. The inspection was conducted to ensure compliance with the terms and conditions of the land use permit, water licence, quarry permit, and approved management plans during the winter road season.

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.

Thank you,

Erika Nissen  
Resource Management Officer (Inspector)  
Resource and Land Management  
Crown-Indigenous Relations and Northern Affairs Canada

cc.     WLWB – via email  
       CIRNAC Resource and Land Management – via email  
       CIRNAC CARD – via email



INSPECTION DATE – March 12, 2025

**ENVIRONMENTAL INSPECTION REPORT (W2020X0005 & W2020L8-0003)**

Permittee:	CIRNAC- CARD Rayrock	November 17 <sup>th</sup> 2026	October 18, 2024
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		Permit Expiry Date	Last Previous Inspection
Land Use Permit No.	W2020X0005		
Quarrying Permit No.	2023QP0001		
Water Licence No.	W2020L8-0003		
Contractor:	Sanexen Environmental Services		

Location(s) Inspected:	Camp, Facilities, Fuel Storage, Unauthorized Wastewater Containment Structure, Rayrock Winter Road
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Current Stage of Operation:	Winter road maintenance, resupply, material and equipment mobilization to Sunmain
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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			Condition Reference
		Camp/Activities			
A	Location and Area	A			
B	Time	A			
C	Type and Size of Equipment	A			
D	Methods & Techniques	A			
E	Type, Location, Capacity, and Operation of All Facilities	A			
F	Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land	A			
G	Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material	A			
H	Wildlife and Fish Habitat	A			
I	Storage and Handling of Refuse and Sewage	A*			C54
J	Historical / Archaeological Sites	A			
K	Objects and Places of Recreational, Scenic, and Ecological Value	N/A			
L	Security Deposit	N/A			
M	Fuel Storage	A*			C64, C75
N	Methods and Techniques for Debris and Brush Disposal	A			
O	Restoration of Lands	A			
P	Display of Permits and Permit Numbers	A			
Q	Biological and Physical Protection of the Land	A			
R	Sections 8 to 12 / 14 to 16 M.V.L.U.R.	A			
S	Quarrying Methods	N/A			



## ENVIRONMENTAL INSPECTION REPORT (Continued)

Date:	March 12th, 2025	Permit #:	W2020X0005; W2020L8-0003
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**Explanatory Remarks:**

An inspection of the CIRNAC-CARD Rayrock remediation project was conducted by Erika Nissen and Megan Larose on March 12, 2025. The purpose of the inspection was to evaluate compliance with the terms and conditions stipulated in the applicable land use permit, water license, quarry permit, and approved management plans. Additionally, the inspection aimed to assess the progress of winter road construction and maintenance related to the transportation of equipment and materials to the Sunmain site.

During the winter season, the main camp at Rayrock is not operational; instead, a small winterized camp is utilized to accommodate the winter road crew (Photo #1). The wastewater management system at the winter camp differs from that of the summer camp, with greywater being disposed of in a sump and blackwater being collected in drums for offsite removal. The camp wastewater treatment building is being transported out via the winter road (Photo #2), and a larger unit will be brought in to address challenges associated with meeting the wastewater discharge EQC requirements for the 2025 summer construction season. The inspectors visited the wastewater containment structure located behind the main camp, which currently contains two portable bladder tanks—one almost full and the other partially filled (Photo #3). Snow cover impeded the ability to fully assess the condition of the bladder tanks that have overwintered at the site or the condition of the liner of the wastewater containment structure as tears were observed during the October 2024 inspection.

The inspectors also examined the large bulk fuel storage tanks on site. No significant issues were identified, although minor fluid leakage was observed beneath one of the tanks and was flagged for attention by on-site personnel (Photo #4). Contaminated snow, attributed to exhaust fumes from the light tower, was observed near the fuel tanks (Photo #5) that requires collection and proper disposal. Minor ground rutting was also observed in this area, which will require remediation.

While machinery and equipment on site were equipped with drip trays, the absorbent pads appeared worn and ineffective, and many require replacement (Photo #6). The majority of fuel drums and waste products on-site remain within secondary containment, however the proponent is advised to ensure that snow is removed from the containment and properly disposed of prior to spring melt. Efforts to verify and maintain the structural integrity of secondary containment, including walls and corners, is required. A few tears were noted in the corners of the berms on site (Photo #7).

Several fuel drums located adjacent to the winter camp were found to be outside secondary containment (Photo #8) and must be relocated into secondary containment. A large battery providing power for a fuel pump was observed on the ground, it is recommended that it be elevated off the ground and appropriately stored when not in use.

During the inspection, a drill was noted to have a fluid leak, with the drip tray beneath the machine saturated (Photos #9 and #10). A pail containing oily water was also discovered behind the drill and must be disposed of in accordance with environmental protocols (Photo #11). The equipment should be examined and maintained as necessary, the drip tray replaced, and any contaminated snow appropriately disposed of.

The inspectors flew over the progress made on the winter road construction and observed no concerns with the road's condition. Brush clearance was completed as required, and the road appeared well-maintained (Photo #12). The winter road between Rayrock and Sunmain was found to be in good condition (Photo #13). The inspectors were satisfied with the winter road's operation.

An aerial flyover of the full project site, including the confined disposal facility (CDF), confirmed that minimal winter operations have occurred in other areas of the site to date (Photo #14). Notification of an upcoming drill program near Mill Cove and the CDF had been received by inspectors on March 11, 2025.

A list of remedial actions was provided to Sanexen for follow-up on March 18, 2025, and corrective measures were communicated to the inspectors via email on March 31, 2025. The drill with the fluid



leak has been removed from the site via the winter road as it will not be required for the upcoming season, and the oily residue was disposed of (Photo #15). Drip trays around the site were replaced (Photo #16), and snow staining from the exhaust of the light tower has been identified and is being collected as the equipment is moved. Fuel previously found outside secondary containment has been relocated into secondary containment (Photo #17).

The Inspectors extend their gratitude to Marc Barrère at Sanexen for implementing corrective actions following this inspection and for Sanexen's continued commitment to regulatory compliance in the upcoming construction season.

For any inquiries or concerns, please contact Erika Nissen at (867) 669-2442.

Inspectors Signature



**Photo #1: Overview of the small winterized trailer camp set-up at Rayrock.**



**Photo #2: The old wastewater treatment plant that was in operation during the 2024 construction season. This unit will be replaced in 2025 with a larger unit.**



**Photo #3: Snow covered wastewater containment structure.**



**Photo #4: Contaminated snow from dripping liquid at the fuel tanks.**





**Photo #5: Contaminated snow and minor ground rutting located near the fuel tanks at site resulting from the exhaust from the light tower.**



**Photo #6: A drip tray that should be refreshed.**



**Photo #7: Tear in the side wall of a berm holding waste on site. All secondary containment should be inspected to ensure they function effectively prior to spring melt.**



**Photo #8: Fuel drums near the camp facilities not stored in proper secondary containment.**



**Photo #9: A saturated drip tray under drilling machinery that needs to be replaced.**



**Photo #10: Additional liquid from drilling equipment that has contaminated surrounding snow and must be addressed.**



**Photo #11: Oily water stored behind the drill that will need to be appropriately disposed of.**



**Photo #12: The entrance to the Rayrock Winter Road at the edge of the camp.**





**Photo #13: One section of the winter road at a lake crossing. An emergency shelter is present on the side of the road.**



**Photo #14: Overview of Mill Lake, the CDF, and the Mill Lake water treatment facility.**

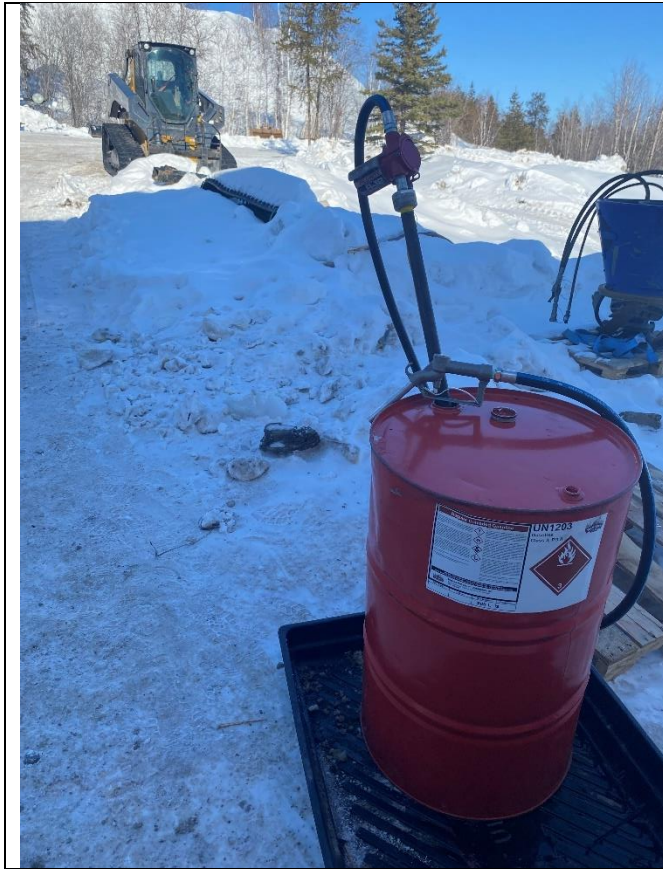


**Photo #15: Drill removed from site. Photo provided by Sanexen.**



**Photo #16: Replaced drip-tray under machinery. Snow staining from light tower exhaust still requires collection and appropriate disposal. Photo provided by Sanexen.**





**Photo #17: Fuel drum moved in to secondary containment. Photo provided by Sanexen.**