



Telephone: 867-872-2558 Ext 25  
Fax: 867-872-3472

August 13, 2021

Northwest Territories Power Corporation  
4 Capital Drive  
Hay River, NT X0E 1G2

**Attention: Mathew Miller**

<b>File Number</b>	MV2020X0004
<b>Type of Operation</b>	Construction of Replacement Facilities
<b>Location</b>	Taltson Dam

Dear Mr. Miller,

An inspection of the above noted operation was conducted on July 29, 2021 by Manager of Resource Management, Katie White and Senior Water Resources Officer Wendy Bidwell.

Enclosed is a copy of the Environmental Inspection Report. Please refer to the unacceptable and noted conditions in the general comments section of this report. Your attention to this matter is appreciated.

If you have any questions, please contact me at 867-872-2558 Ext 25.

Sincerely,

A handwritten signature in blue ink, appearing to read "K White", is positioned above the printed name.

Katie White  
Manager Resource Management  
Lands  
South Slave

CC: Mackenzie Valley Land and Water Board

ENVIRONMENTAL INSPECTION REPORT

Permittee:	Northwest Territories Power Corporation	Permit Expiry Date:	July 25, 2025
Land Use Permit No.	MV2020X0004	Previous Inspection:	New
Quarrying Permit No.	2020QP0019	Inspection Date:	July 29, 2021
Location(s) Inspected:	Taltson Dam Hydroelectric Facility		
Current Stage of Operation:	Preparing for shutdown and overhaul		

Condition of Operation "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "N/I" - Not Inspected

Operating Condition	Aspect Inspected				
	Camp	Fuel Storage	Storage Areas	Waste Facility	Quarries & Berm
Location as Permitted	A	A	A	A	A
Time as Permitted	A	A	A	A	A
Equipment as Approved (Type & Size)	A	A	A	A	A
Methods & Techniques	A	A	A	A	A
Facilities	A	A	A	A	A
Erosion (Control or Prevention)	A	A	A	A	A
Chemicals	A	A	A	A	A
Wildlife and Fisheries Habitat (Protection)	A	A	A	A	A
Wastes	A	A	A	A	A
Historical / Archaeological Sites	A	A	A	A	A
Ecological Resources	A	A	A	A	A
Fuel Storage	A	U #49, #60	A	A	A
Brush Disposal	A	A	A	A	A
Restoration of Lands	N/A	N/A	N/A	N/A	N/A
Permits	A	A	A	A	A

**Explanatory Remarks -**

The Land Use Permit (LUP) Inspection was completed on July 29, 2021 in conjunction with the Water License (WL) Inspection completed by Senior Water Resources Officer, Wendy Bidwell. This was the first LUP inspection for this permit issued July 2, 2020.

**Temporary camp**

There are four temporary staff tents staged below the existing camp facilities (Figure 2). There are six 45G fuel drums for heating the tents (Figure 3). The drums are secure on wooden stands with secondary containment. Water was observed in the containment trays (Figure 4). Inspectors discussed draining the water in situ if no hydrocarbon sheen was present or containing (pumping) it into a barrel if contaminated. Connections between the drums and tents were flexible and leak free.

**Fuel storage**

There is a 30L transformer oil spill (Spill #: 2021261) located at the gate to the substation as reported to Inspectors on June 24, 2021 (Figures 5-6). Clean up of the spill will occur during the 2021 shutdown (Aug.16-31) as per the spill report. Contaminated soil will be shipped off site and disposed of at an authorized solid waste facility. Confirmation of cleanup will be sent



ENVIRONMENTAL INSPECTION REPORT

to Inspectors as per post-inspection discussions on August 6, 2021.

The temporary fuel storage and distribution area is located up hill and south of the penstock (Figures 7-9). The area is clean of leaks and staining. There were ten 45G drums of diesel fuel stored adjacent to the new backup generator facility in a secondary containment tray (Figure 10). Water was also observed in this tray. Water should be drained immediately following rain if no hydrocarbon sheen is present.

There is a fuel storage shed in the southwest corner of the airstrip containing ~33 fuel drums (Figure 11). The drums are undercover and well contained.

There were multiple 45G drums (8 x Jet A fuel, 24 x waste barrels & 27 x diesel) temporarily being stored on pallets adjacent to the runway (Figure 12). The barrels are mostly empty and are all marked adequately for removal from site. Storage of these barrels is temporary. If barrels are to be stored long term please note permit condition #49 requires “The permittee shall ensure that all fuel caches have adequate Secondary Containment.”

Drip trays were present under equipment (Figures 13-16). As with other containment trays water from recent rains was present and should be drained accordingly.

**New Camp Facility**

The new 40 person camp facility is located across the road and south of the dock (Figure 17). The septic field to service the new building was under construction at the time of inspection (Figures 18-20). Erosion and sediment control measures were well established and installed in an effective manner. There were no concerns with the new facilities.

**Site storage/lay down areas**

The Additional Storage Area is located northeast of the hydroelectric facility (Figures 21-22). There are two storage sheds on site and miscellaneous items in the yard. It was recommended that items that are no longer in use should be removed to an authorized solid waste facility as time and access permits.

The new storage/laydown area referred to as “Additional Storage B” is located across the road from the new camp septic field (Figures 25-27). Larger items for the overhaul operation are stored here on a cleared rock outcrop (culverts, cinder blocks, lumber, insulation, straw wattle rolls, fencing, piping, etc.). There were no concerns with this staging area at the time of inspection.

**Waste Facility**

Recent waste facility upgrades included signage and berms for supporting the proper sorting of materials including waste meant to be shipped off site (Figures 23-24). One wooden crate in the “General” waste area contained metals from the incinerator. Inspectors discussed stockpiling waste material left by the incinerator and removing them from site when the winter road is open.

**Quarries (Pits D, W & Z) and Hydrocarbon Contaminated Soil Containment Area**

Pit Z was observed at the southeastern end of the airstrip but was not actively being quarried at the time of inspection (Figure 28). Pit D is an active gravel quarry north of the airstrip at the western end (Figures 29-31). A crusher and screen were on site and some small stock piles were present. Pit W is an active sand quarry north of the airstrip (Figures 32-36). Some small stock piles were present. As per Quarry Permit 2020QP0019 condition #11 please

ENVIRONMENTAL INSPECTION REPORT

submit monthly reports stating amounts quarried. There were no concerns with quarrying operations.

The existing Contaminated Soil Containment area was inspected (Figure 37). Inspectors discussed possible reuse of the bermed area by excavating the decontaminated material and checking the condition of the HDPE liner. If the lining is in satisfactory condition, the area could be used for future needs and a new bermed containment area may not have to be established.

\_\_\_\_\_  
Representative Signature

  
\_\_\_\_\_  
Inspector's Signature





ENVIRONMENTAL INSPECTION REPORT

Inspection Images:

Figure 1  
Aerial image of the Taltson Dam Hydroelectric Facility.



Figure 2  
Image of temporary accommodations.







ENVIRONMENTAL INSPECTION REPORT

Figure 3  
Image of fuel storage for temporary accommodations.



Figure 4  
Image of fuel system for temporary accommodations.







ENVIRONMENTAL INSPECTION REPORT

Figure 5  
Image of reported fuel spill near substation.



Figure 6  
Image of reported fuel spill near substation.





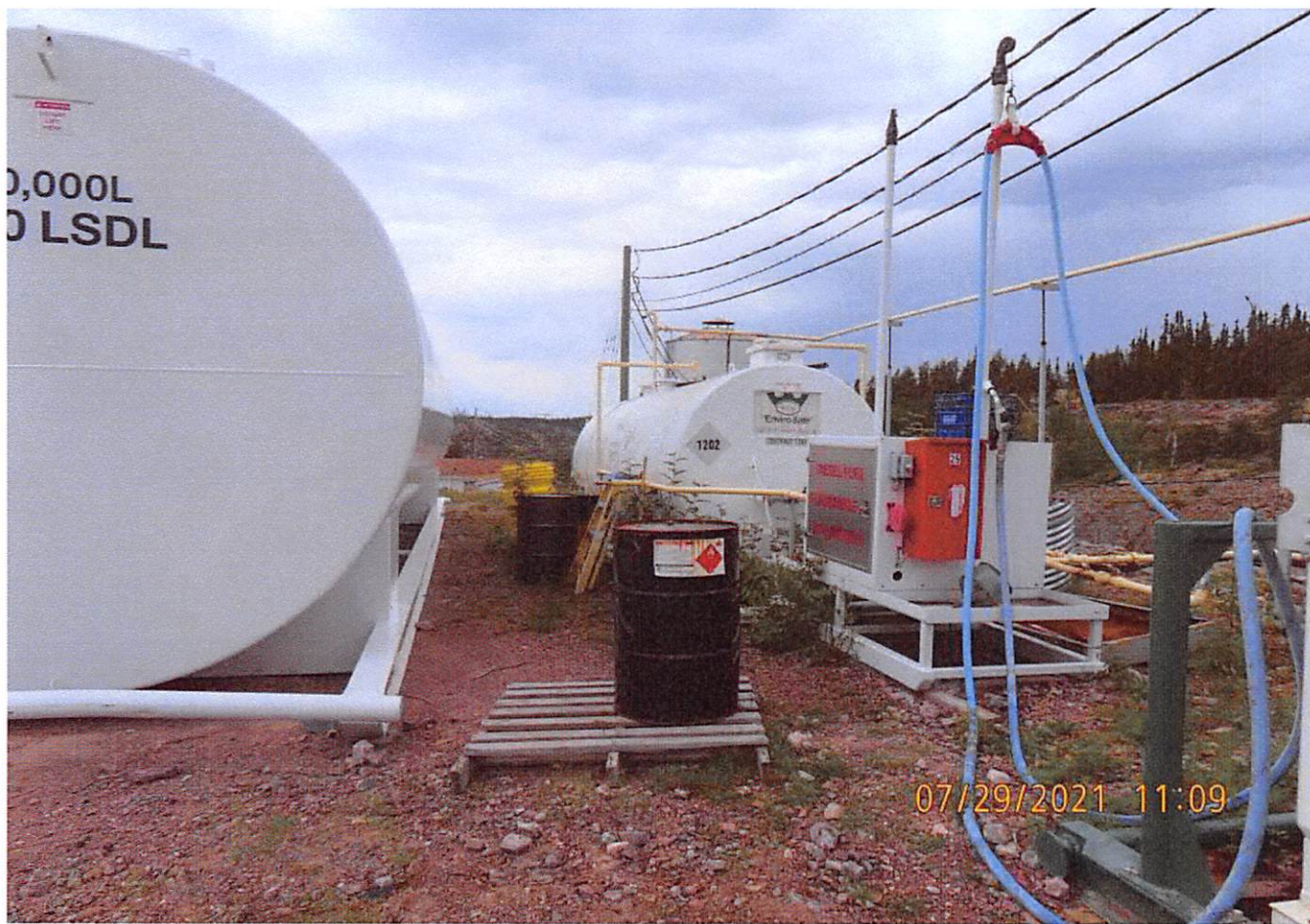


ENVIRONMENTAL INSPECTION REPORT

Figure 7  
Image of temporary fuel (diesel) storage.



Figure 8  
Image of fuel distribution system.







ENVIRONMENTAL INSPECTION REPORT

Figure 9  
Image of fuel (gas) storage & distribution.



Figure 10  
Image of 45G drums near fuel distribution system.







ENVIRONMENTAL INSPECTION REPORT

Figure 11  
Fuel storage shed located at the airstrip.



Figure 12  
Image of fuel drum storage adjacent to the airstrip.







ENVIRONMENTAL INSPECTION REPORT

Figure 13  
Image of equipment stored with drip tray.



Figure 14  
Image of equipment stored with drip trays.







ENVIRONMENTAL INSPECTION REPORT

Figure 15  
Image of equipment stored with drip tray.



Figure 16  
Image of a dump truck stored with drip trays.







ENVIRONMENTAL INSPECTION REPORT

Figure 17

Image showing the new staff lodging not in use at the time of inspection.



Figure 18

Image of the new septic field under construction at the time of inspection.







## ENVIRONMENTAL INSPECTION REPORT

Figure 19

Image of the septic line leading from the new staff lodging.



Figure 20

Image of the septic line leading to the septic field.







ENVIRONMENTAL INSPECTION REPORT

Figure 21  
Image of the "boneyard" storage buildings.



Figure 22  
Overview image of the "boneyard".







ENVIRONMENTAL INSPECTION REPORT

Figure 23  
Image of new signage leading to waste facility.



Figure 24  
Image showing modifications to waste facility and spill kit in foreground.







ENVIRONMENTAL INSPECTION REPORT

Figure 25  
Image of "Additional Storage B" area facing east.



Figure 26  
Image of "Additional Storage B" area facing southeast.







ENVIRONMENTAL INSPECTION REPORT

Figure 27  
Image of "Additional Storage B" area facing southwest.



Figure 28  
Image of "Pit Z" inactive quarry located at the northeast end of the airstrip.







ENVIRONMENTAL INSPECTION REPORT

Figure 29  
Image of “Pit D” active sand quarry north of the airstrip.



Figure 30  
Image of stockpiled material at “Pit D” active sand quarry.







## ENVIRONMENTAL INSPECTION REPORT

Figure 31

Image of "Pit D" active sand quarry facing southwest.



Figure 32

Image of "Pit W" active gravel quarry located north of the airstrip at the southwest end.







## ENVIRONMENTAL INSPECTION REPORT

Figure 33

Image of crusher & screen located at "Pit W".



Figure 34

Active faces at "Pit W".







ENVIRONMENTAL INSPECTION REPORT

Figure 35  
Image of pitrun material and screen at “Pit W”.



Figure 36  
Image of crusher at “Pit W”.







## ENVIRONMENTAL INSPECTION REPORT

Figure 37

Image of bermed Contaminated Soil Containment area located near “Pit V” north of the airstrip.

