



PROJECT STATUS UPDATE

The Mount Nansen Remediation Project is the care and maintenance and closure of the historic Mount Nansen Mine, located in the Traditional Territory of the Little Salmon/Carmacks First Nation (LSCFN). The Mount Nansen Remediation Limited Partnership (MNRLP) was formed between Ensero Solutions and JDS Energy & Mining to undertake the preferred remediation plan agreed upon by the Yukon Government, the Canadian Government, and the LSCFN.

The Project is currently being progressed through permitting under the Yukon Environmental and Socio-economic Assessment Board's (YESAB) Pre-submission Engagement (PSE) process. MNRLP expects active remediation work for this project to begin in 2029, following receipt of a permit from YESAB. In the meantime, MNRLP is conducting care and maintenance at the site.

2024 Project Highlights:

- Employment, training, and business contracting updates
- 2024 freshet mitigations
- Water Treatment Plant upgrades
- Solar panels
- Groundwater wells & temperature cables
- Site Closure Objectives
- LSCFN site tour
- Remediation Project Proposal development

- Holistic Human Health and Ecological Risk Assessment
- Blackened Vegetation Investigation
- Vegetation trial monitoring
- YSR Program
- CABIN Training
- Historic exploration trench remediation trial
- Mill assessments
- Sponsorships

More details below!

Thank you!

With 2024 having come to a close, the Mount Nansen Remediation Limited Partnership would like to extend our thanks to the LSCFN Chief and Council, the LSCFN Lands Department, Carmacks community members, and business owners and contractors within the Carmacks area who supported another successful year of care and maintenance at the Project. Thank you for your dedication, hard work, and expertise. Your efforts have been instrumental in working towards our shared goals, and we could not have done this without your partnership and professionalism.





Congratulations!

The MNRLP would like to extend our heartfelt congratulations to the recently-elected Chief and Council. We commend the dedication and commitment of Chief and Council to represent your community and work toward a future that honors its unique values, traditions, and aspirations.

MNRLP looks forward to continuing a respectful, transparent, and mutually beneficial relationship with LSCFN. MNRLP understands the importance of engaging with Chief and Council, LSCFN Lands Department, and the community in an open and collaborative manner, ensuring that the voices and interests of the community are at the forefront of our project planning.

We believe the Mount Nansen Remediation Project holds great potential for creating opportunities within the Carmacks community that align with sustainable practices, employment, training, and protection and restoration of cultural and environmental values.

MNRLP continues to welcome the opportunity to engage in regular dialogue with Chief and Council, LSCFN Lands Department, and the community, where we can listen, learn, and work together to ensure that our activities reflect a shared commitment to remediation of the Mount Nansen Project area.

Training Update

In 2024, various training opportunities were offered on the project, including environmental monitoring, vegetation and fish sampling, driller's helper, trench remediation work, and supporting the Heritage Resource Impact Assessment. A total of 1038 training hours have been provided to date in 2024!

As we undertake new activities at site in 2025, we will continue to offer additional training opportunities whenever possible.

Check out the Future Training Opportunities table below to see what we have planned! Keep an eye out for posters, check the LSCFN Facebook page, check the MNRLP.ca website, or contact Bev Brown for information on future opportunities.

Care & Maintenance Future Training Opportunities

Training / Course	Brief Description	# LSCFN Citizens	Hours per person	Total Hours
Advanced First Aid	OFA Level 3 or equivalent - Yukon University OFA 002 course	2	40	80
Groundwater Well Development/Sampling	Assist in developing and sampling of groundwater monitoring wells	1	80	80
Hach meter reading	Learning how to use the Hach portable meter (<1 day)	2	8	16
WTP Operator Course	Yukon University WO 001 course – Basic Small Water Systems Operations for certification under the Environmental Operators Certification Program (EOCP)	2	36	72
WTP Operator Course	Industrial Wastewater Treatment (IWWT) certification for Environmental Operators under the Environmental Operators Certification Program (EOCP)	2	100	200
Health and Safety Administrator	Northern Safety Network – National Health and Safety Administrator (NHSA) Program		TBD	
Health and Safety Officer trainee	Northern Safety Network – 3 years field experience to achieve National Construction Safety Officer (NSCO)	1	140	140
Heavy Equipment Operator Course	Yukon University – MNRLP will work with LSCFN and Yukon University to coordinate this training		TBD	
Heavy Equipment Operator – Legacy Project	Yukon University – MNRLP will work with LSCFN and Yukon University to coordinate this training		TBD	

Employment Update

There are currently four LSCFN citizens employed on the site Care and Maintenance team. These individuals hold the positions of the Care & Maintenance Supervisors (2) and Water Treatment Plant Operator-in-Training / Labourer (2).

Business Contracting Update

MNRLP continues to work with local and First Nation contractors to support site work and programs. Between January and end of September 2024, approximately \$556k was invoiced by LSCFN businesses and another \$976k by CDC partnerships.



2024 Freshet Mitigations

In response to the rising water level of the Tailings Storage Facility (TSF) pond, a mobile water treatment plant was commissioned and began discharging treated water on June 6th, 2024. This proactive initiative was undertaken in collaboration with the LSCFN and Crown Indigenous Relations and Northern Affairs Canada (CIRNAC). The TSF pond level was successfully drawn down to a safe operating level. Approximately 55,000 m³ of water was treated during operation of the mobile plant.

As another preventative measure, two storage tanks were constructed on-site in April 2024, in the event that the TSF water needed to be pumped to them for additional storage. The combined capacity of the tanks was 9,000m³. Fortunately, this system was never needed and the tanks were taken off-site in late September.



Water Treatment Plant Upgrades

Throughout the summer and fall of 2024, important upgrades were made to the Water Treatment Plant (WTP) at site. The works included:

- Upgrading pumps to increase the plant uptake;
- Upgrading the treatment tanks to enhance water treatment processes;
- Updating the reagent dosing system to reduce clogging in the filters; and,
- Adding an additional tank to allow for the treatment byproduct to settle.

Continuous improvements to the automation of the WTP have also been undertaken, allowing for greater consistency across operators and the improved ability to adjust to fluctuating water quality across the season.

Solar Panels



In early July 2024, MNRLP installed a battery beside the camp solar panels to allow for energy captured by solar panels to be stored and used by the bunkhouse. The camp solar array and battery system provided 100% of the camp's energy needs for 43 straight days following installation and commissioning of the system.

Groundwater Well Installations & Temperature Cables

In 2024, 15 groundwater wells were installed across the site, bringing the total project groundwater stations to 98 groundwater wells and drive-point piezometers. The purpose of the groundwater wells and piezometers is to monitor for environmental impacts in groundwater. Some wells were installed to replace the damaged wells around the pit, the Mill, the Tailings Storage Facility, and other locations. Other wells were installed in new locations to address concerns raised by LSCFN related to the groundwater monitoring network. Ground temperature cables were installed in the majority of the boreholes advanced in 2024. These cables help us understand where permafrost exists across the site.



Updating Site Closure Objectives

In July 2024, a workshop between CIRNAC, LSCFN, and MNRLP was held to collaboratively develop updated closure objectives for the Project site. The workshop built upon the original 2010 closure objectives and the draft closure objectives developed by LSCFN in 2024.

A draft report has been prepared describing the closure goals, principles, objectives, and criteria that define the successful creation of post-closure landscape at the Mount Nansen Mine that supports Indigenous, traditional, and pre-mining land uses. This is currently being reviewed by LSCFN, CIRNAC, and MNRLP. We will share more updates on this process when we can!

LSCFN Site Tour



On October 1, 2024, MNRLP hosted LSCFN and CIRNAC on a Site tour. Nine LSCFN and Carmacks community members, six MNRLP personnel, and two representatives from CIRNAC attended. During the tour, participants visited camp bunkhouse, the Tailings Storage Facility, the Water Treatment Plant, the open pit, and two of the vegetation trial plots. The tour provided MNRLP an opportunity to learn from citizens and to answer questions about the current and future project activities. A report of the site tour can be found on the MNRLP website.

A site tour is being planned for September 2025. If you're interested in joining, please reach out to Bev Brown!

Remediation Project Proposal

The Remediation Project is currently in Yukon Environmental and Socio-economic Assessment Board's (YESAB) Pre-submission Engagement (PSE) process. MNRLP is now developing a Project Proposal (Environmental and Socio-economic Effects Assessment) for the Project, to submit to YESAB. The Project Proposal will include information identified by LSCFN, other First Nations, government departments, and YESAB, during the PSE process.

Through 2024, the project has been moving through the PSE process by:

- Engaging with LSCFN;
- Completing a gap analysis on the work that has occurred on the Site over the years; and,
- Implementing additional field studies to fill information gaps.

MNRLP is now looking forward to continued consultation with LSCFN and the community of Carmacks, as we work to finalize and submit the Project Proposal.





Holistic Human Health and Ecological Risk Assessment (HHERA)

In the summer of 2024, MNRLP and LSCFN were onsite working to gather samples to support the understanding of the risk of harvesting and consumption of traditional foods and medicines from the Mount Nansen site.

The work included the collection of fish, soil, sediment, and vegetation samples. LSCFN representatives also shared Traditional Community Knowledge and the history of on-Site uses that have been impacted by the mine.

The goal of the Holistic HHERA report is to understand the current human health and environmental risks, which will inform Care and Maintenance site activities and remediation planning, and mitigations implemented. As well, the HHERA will inform the development of the Project Proposal Report that MNRLP is preparing as part of project permitting and for submission to YESAB.

Blackened Vegetation Investigation

In summer 2024, a soil and sediment sampling program was conducted in Dome Creek immediately below the seepage pond dyke. The work further characterized metals contaminated soils in the area and will help inform the remediation plan.

Vegetation Trial Monitoring

Vegetation trial plots constructed in 2021 and 2023 were visited in early July 2024 for annual monitoring. Plants growing on the plots were assessed for survival, growth, and health. Notes were made on plants which have naturally established themselves on the plots, and other plot conditions such as erosion, signs of herbivory/other wildlife activity, and growth patterns of the plants on the rough and loose plot surfaces.



Yukon Seed & Restoration Program

In July 2024, the LSCFN Lands Department collaborated with Yukon Seed & Restoration (a Na-cho Nyak Dun Development Corporation partner) at the Victoria Creek basecamp to provide training in native plant identification, field assessments, and remediation, plant ecology with an introduction to wetlands and the basics of seed collection.

CABIN Training

In August 2024, LSCFN Lands Department provided citizens with Canadian Aquatic Biomonitoring Network (CABIN) training to monitor freshwater health in Victoria Creek watershed using standardized protocols and web access tools.



Historic Exploration Trench Remediation

The historic exploration trenches at the site were excavated by previous users in the 1990s, before MNRLP began managing the site. Although in some ways these trenches have naturally remediated over time, various trenches have been identified to be potential human and wildlife safety risk due to their steepness and depth.

In collaboration with LSCFN, a trench remediation trial program on one of the trenches took place in October 2024. The purpose of the program was to trial methodologies for excavating and re-establishing the existing vegetative mat after infilling the trenches, to improve revegetation of the infilled trenches.

The remediation team consisted of an excavator operator, two LSCFN citizens, and two MNRLP personnel.



Mill Assessments

In the summer of 2024, a structural assessment of the historic mill building was completed. The purpose of this assessment was to understand existing conditions and potential hazards, and to inform demolition planning.

A soil investigation program around the mill area was also completed in 2024. The results from this work will help to inform future remediation requirements for the area.

Lastly, a hazardous materials assessment was conducted in September 2024. The purpose of the assessment was to help plan for future mill demolition work by identifying materials that may require special handling and disposal.



Sponsorships

MNRLP sponsored the LSCFN Hawks 2023/24 and 2024/25 Whitehorse Recreational Hockey League Fees! Good luck to the Hawks in their upcoming season! Email info@mnrlp.ca for more information on sponsorships through MNRLP.

Nansen Road Upgrades (Expected 2025)

The LSCFN Lands Department and Carmacks Development Corporation have been working with the Yukon and Federal Governments to secure funding for upgrading the Nansen Access Road to improve safety. These discussions are ongoing, however the hope is that upgrades will take place in summer 2025.

April 2025 Community Meeting

A Community Meeting will be held in Carmacks in April 2025. MNRLP will provide a project update and there will be opportunity for community member to ask questions and provide comments about the project. We hope to see you there! Further details on date, time, and location will be provided shortly.