NIPISSING FIRST NATION

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The Land, the People, the Future

Soil Remediation Project Briefing

Community Information Session

October 7, 2024

Overview

Work resumed on April 1, 2024 in preparation to remove **niobium ore tailings** from the Nova Beaucage processing mill that operated for seven months in 1956 in Yellek.

Ore tailings from the mill were deposited at the mill site and the former gravel borrow pit north of Highway 17 (next to the AN head office, now owned by the MTO).

The material was later removed from the sites to construct roadbeds, spread locally via grading activities around the site, and used as fill at private residences.

Work Completed to Date

Lot 24 – Bineshii Business Park
Stockpile Pad Construction

Remediation of four residential properties on NFN started in mid-July, along with work to remove contaminated material from the old Nova Beaucage Road allowance.

The material excavated from these sites is currently being stored on a vacant lot in the Bineshii Business Park that has been lined with geotextile* matting to safely contain it, and the material is securely tarped 24/7.

* Geotextile fabric is a permeable textile material that serves several functions, including separating material to prevent the mixing of different soil layers and filtration by allowing water to pass through while retaining soil particles.

NFN Residential Properties

MINISTRY OF TRANSPORTATION, ONTARIO PH-D-302 89-10

METRIC

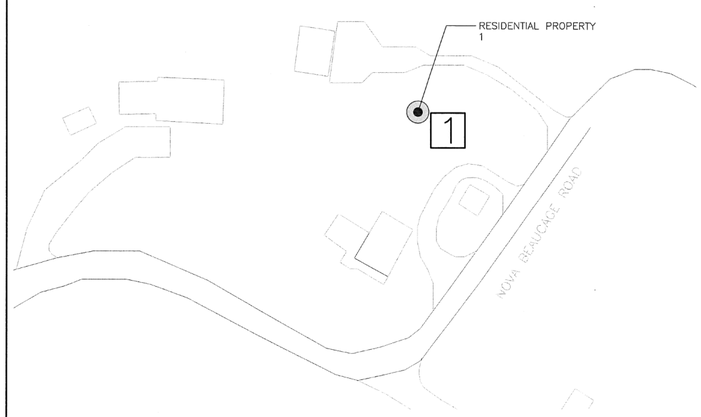
PLATE No. ----
CONT. 2022-5011
WP 5093-20-00

RESIDENTIAL PROPERTIES

SHEET 12

Ontario

N



245 NOVA BEAUCAGE ROAD

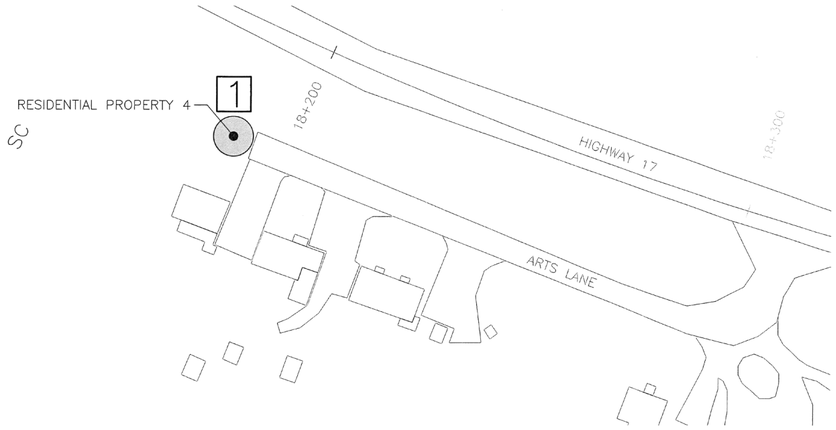
450 & 458 TED COMMANDA DRIVE

NOTES:

1. UTILITY LOCATES REQUIRED BEFORE EXCAVATION ON RESIDENTIAL PROPERTIES.
2. RESIDENTIAL PROPERTIES EXCAVATIONS TO BE BACKFILLED TO EXISTING ELEVATION WITH GRANULAR A.
3. 50mm OF TOP SOIL AND SEED AND MATRIX TO BE PLACE ON ALL DISTURBED AREAS AND BACKFILLED AREAS.

LEGEND:

- 1 PRIORITY LEVEL 1 MATERIAL
- 2 PRIORITY LEVEL 2 MATERIAL
- 3 PRIORITY LEVEL 3 MATERIAL
- EXCAVATION AREA



71 ARTS LANE

RESIDENTIAL PROPERTY CONTAMINATED EARTH EXCAVATION POINTS
NAD 83 (CSRS) – MTM ZONE 10

RESIDENTIAL PROPERTY	STREET ADDRESS	NORTHING	EASTING	SURFACE AREA	VOLUME	BASIS FOR SURFACE AREA ESTIMATE
1	245 Nova Beaucage Road	5132897.2	300235.81	19.6 m2	44 m3	Assume circle with radius of 2.5 metres. Approximate surface area of fire pit sitting area (assume importation of contaminated earth for this area).
2	450 Ted Commanda Drive	5131124.31	276335.22	50 m2	29 m3	Estimated area of assumed imported NORM fill. Elevated gamma readings at bore hole (point location).
3	458 Ted Commands Drive	5131071.09	276336.55	4 m2	10 m3	Area under porch – approximately 2m x 2m. Assume contaminated earth imported as foundation material for porch.
4	71 Art's Lane	5132760.62	302445.3	64 m2	29 m3	Approximate area of front yard adjacent to asphalt-surfaced driveway. Elevated gamma readings for boreholes within Art's Lane road allowance and back yard of 71 Art's Lane.

SCALE 1:1000

245 Nova Beaucage Road

71 Art's Lane

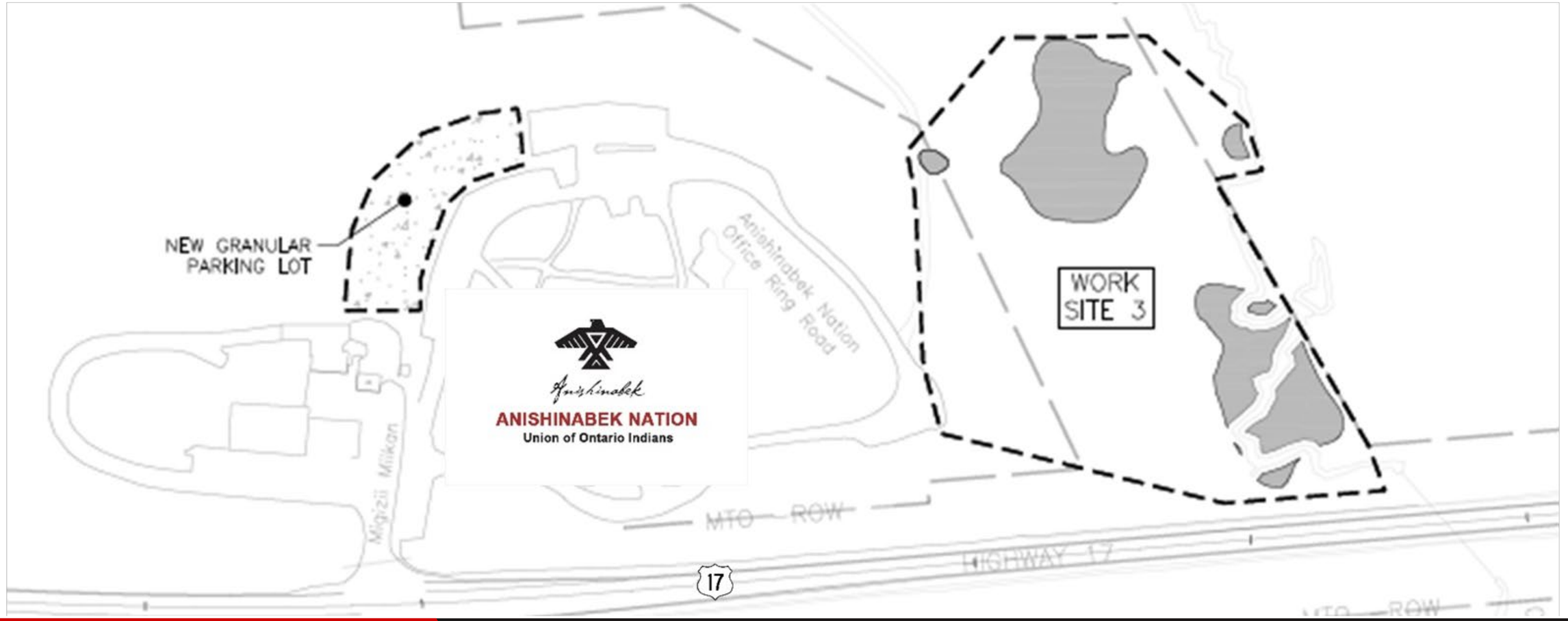
450 & 458 Ted Commanda Dr

NFN Work Sites

- **Site #1**: Former Nova Beaucage Mill Site – 15,539 tonnes of material to be removed, along with concrete pad foundation.
- **Site #2**: Section of Nova Beaucage Road at the corner of Ernest Avenue (18 tonnes) and the old Nova Beaucage Road allowance (7,080 tonnes).

NFN Work Sites

- **<u>Site #3</u>**: MTO Lands east of Anishinabek Nation head office (11,409 tonnes).



Current Status – Delays

The project has been delayed for two main reasons:

1. Fulfilling the Canadian Nuclear Safety Commission's technical requirements and staff review prior to the proposed transfer and placement of Niobium (NORM) from NFN onto the Agnew Lake Tailings Management Area (ALTMA) under the current Waste Nuclear Substance Licence held by the Ontario Ministry of Mines.

2. Public outcry/negative media attention from community leaders and residents near the proposed disposal site at Agnew Lake who were unaware of the plans and demanded consultation from the Ministry of Mines and the MTO.

Until these two issues are resolved and a disposal site is confirmed, NFN has paused any further excavation. Contaminated material from the former mill site and MTO borrow pit next to the Anishinabek Nation remains untouched.

Emerging Issue

In addition to the two issues noted, there is an emerging issue surrounding the limits of the contaminated soil that has been found at 245 Nova Beaucage Road.

The contamination exceeds the planned excavation area (firepit) and reaches into the adjacent lot to the northeast of the property.

Instead of chasing the contamination and continuing excavation without knowing where the trail will end, NFN has paused any further excavation until additional investigation/testing is completed by the environmental engineers.

Project Background

How it Started

When NFN's Land Code was being developed, the Land Office included the ore-containing sites in the Individual Agreement between NFN and Indigenous Services Canada (ISC), which listed all outstanding legacy issues to be resolved, to ensure funding for the clean-up from ISC.

When a former Environmental Officer with the Ontario Ministry of the Environment (MOE) brought the contaminated land owned by the MTO to their attention, Ontario came to the table.

NFN, ISC and the MTO worked together over the years to get the project to this point and will continue to do so until it is completed.

Timeline

In 2015, MTO committed to Nipissing First Nation, Indigenous Services Canada, and the Ministry of the Environment Conservation and Parks that it would clean up its site as a joint project with NFN.

MTO and ISC will each fund contamination cleanup and associated work done on their respective property with costs split based on the proportion of work at each contamination site.

What is Niobium?

The niobium tailings are considered a Naturally Occurring Radioactive Material (NORM).

The Canadian Nuclear Safety Commission provides the following definition:

NORM is material found in the environment that contains radioactive elements of natural origin. NORM primarily contains uranium and thorium (elements that also release radium and radon gas once they begin to decay) and potassium.

NORM material will be removed to rehabilitate the sites for future use, including placing topsoil and seeding to restore them to a natural state.

Are the tailings harmful to human health and to fish and wildlife?

A Human Health Risk Assessment was completed in 2012 to determine the potential health impacts of the rock tailings and associated naturally occurring radioactive material (NORM).

The study concluded that the risks of the tailings to human health were low. The assessment also determined that the tailings are not harmful to fish and wildlife in the area as they do not consume rock material.

Further, testing of vegetation has shown no uptake of the contamination from the soil. There are no potential health impacts for consuming fish and wildlife in the vicinity of the tailings area.

If there’s no risk to human health, why are the workers wearing protective equipment?

Workers are required to wear personal protective equipment (PPE), including disposable coveralls and gloves, to protect them from radiation exposure while handling the material and to ensure that they don’t carry any contaminated material outside of the controlled work areas on their own clothing.

All workers are scanned after removing their PPE to ensure that they are clear of contaminated soil. Masks are worn for respiratory reasons in case the material becomes airborne through handling.

All workers on site have received extensive training prior to working on the sites and are outfitted with dosimeters to monitor any potential exposure.

What are the environmental risks associated with the removal of the contaminated soil? Is the community at risk?

The risks presented by niobium are negligible and NFN has been advised that there are no health and safety risks to the community from undertaking the clean-up.

Environmental health and safety provisions in the contract include but are not limited to:

- Health and safety plans for each site,
- Dust management plans (including airborne monitoring), and
- Soils management plans

Qualified professionals are supervising the work in accordance with all plans and protection measures.

Environmental risks continued…

The naturally occurring radiation is low level and the material that is excavated will be carefully contained during transport.

All trucks transporting the material have been outfitted with specialized tarps to securely contain material to the box.

Trucks will be scanned and inspected to ensure the truck box is tightly closed, gate locks are engaged, and tarps are securely in place.

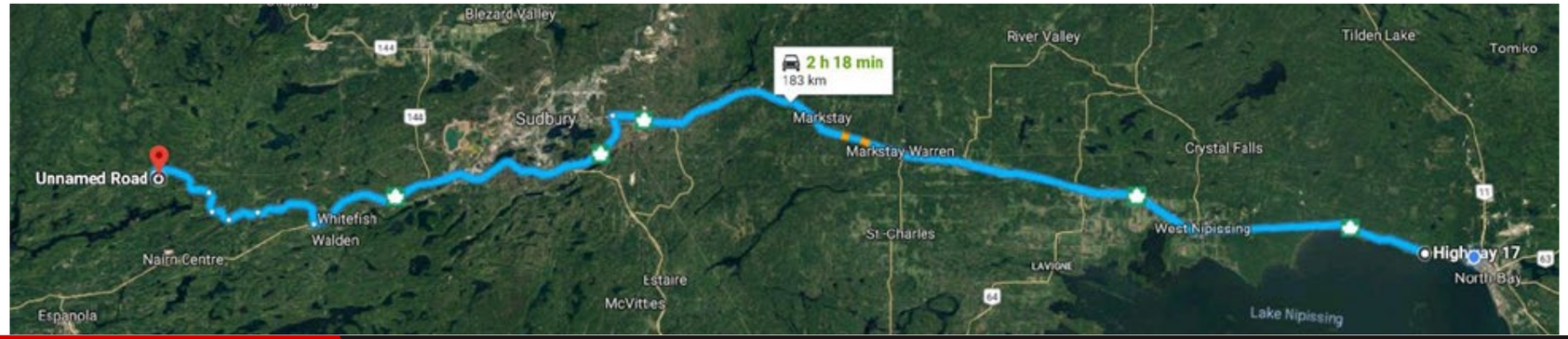
No vehicle will be released from the site until it is deemed to meet acceptable limits.

Agnew Lake Tailings Management Area

In 2016, a potential disposal location was identified at the Agnew Lake Tailings Management Area (ALTMA), northwest of Sudbury.

The ALTMA is managed by the Ministry of Mines while the Canadian Nuclear Safety Commission (CNSC) regulates the site by closely monitoring the maintenance and environmental performance.

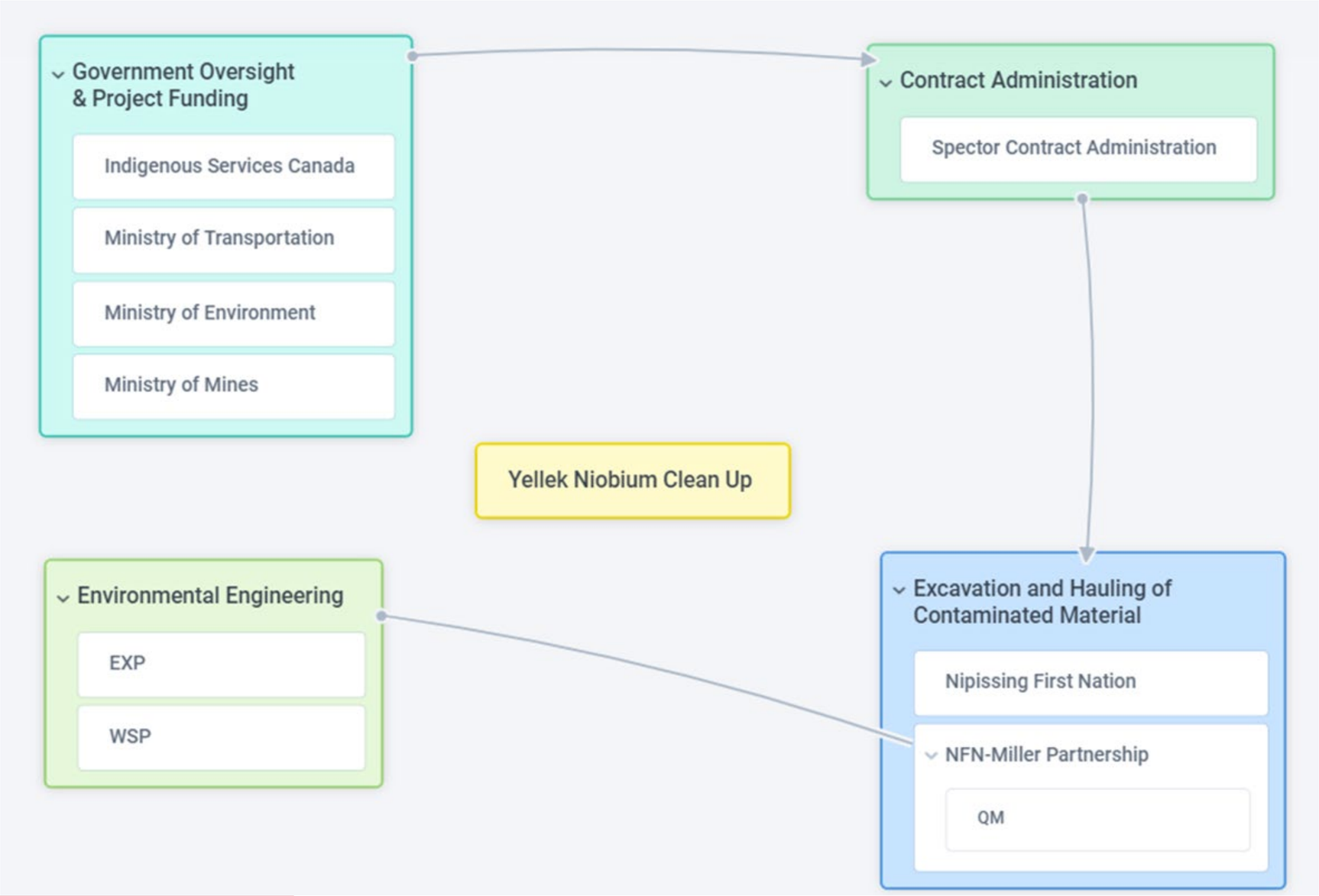
CNSC is reviewing the planned construction operations at the ALTMA in accordance with the existing Waste Nuclear Substance Licence.



Trucking Details

- 34,000 tonnes of material to be hauled from NFN
- MTO has contracted 16 tri-axle heavy trucks
- Trucks containing the niobium material will be securely tarped, scanned and cleaned at washing stations at the excavation site
- Each truck may only be able to make one trip per day
- Hauling has not begun and there is no set date for the hauling while issues are still being discussed and debated at the municipal level
- There is no deadline for shipping the niobium material from NFN to a disposal site. The MTO is working on finding another disposal site (if needed) to at least dispose of the material that is being stockpiled.

Project Team Resources



Project Team Resources

Project Team

–NFN Lands, Environment, Infrastructure, Special Projects & Business Operations
–Indigenous Services Canada
–Ontario Ministry of Transportation
–Ontario Ministry of the Environment, Conservation & Parks
–Ontario Ministry of Mines

Contract Administrator (Spector)

Contractors

–Nipissing Miller (General Contractor)
-Johnson Construction (Subcontractor)
-First North Enterprise (Subcontractor)
-Young Forestry Services (Subcontractor)

Support & Outside Services

–EXP, WSP & QM Environmental Engineering Firm

Health & Safety Plans

- The project team includes a Health & Safety manager, a Radiation Safety Officer (RSO), and a Radiation Protection Technician (RPT).
- All employees working on the sites will be familiar with the HASP and undertake training prior to accessing the site.
- The HASP was developed to ensure strict adherence to all applicable government regulations (related to radiation safety and radiation protection).
- In conjunction with the HASP, Nipissing Miller will employ a dust management plan and soil management plan to prevent the migration of impacted soils during construction.

Health & Safety Plans

- Airborne monitoring will be conducted throughout the lifespan of the contract. Wind direction will be monitored and activities will be stopped if required.
- Security fencing is being installed around all active construction sites. Signage will be installed around fencing.
- Trucks hauling excavated NORM to the ALTMA disposal site will only travel on designated haul roads.
- Trucks transporting unpackaged soils will be inspected to ensure the truck box is tightly closed, gate locks are engaged, and tarps are in place.
- No vehicle shall be released until it is deemed to meet acceptable limits.

Health & Safety Plans

- A 5-meter clear zone from Lake Nipissing will be maintained to avoid environmental issues, and silt fencing will be used on all work sites.
- An Environmental Qualified Person (QP) hired by the MTO will be on-site to conduct tests to ensure that all impacted soil is removed.
- NFN's Environment Manager will also be monitoring operations.
- For safety reasons, residents are asked to avoid all work areas and haul routes, and to respect fenced areas and posted signage.

Questions?