



Communication Letter

Nipissing-Miller NORM Remediation Project

The following letter describes the general guidelines, procedures, and radiation protection measures implemented during the Nipissing-Miller Limited Partnership (NMLP) Naturally Occurring Radioactive Material (NORM) Remediation Project. The objective of the NORM Remediation Project is to safely excavate NORM from three (3) source sites (referred to as Work Sites #1 – Mill Site, #2 – Residential Properties, #2.1 – Nova Beaucage Road Allowance, and #3 – MTO Borrow Pit) and transport to the Clean Harbors facility in Corunna, Ontario (near Sarnia).

The NORM Remediation Project conforms to “As Low As Reasonably Achievable” (ALARA) principles for radiological exposures to workers, any member of the public, and the environment, with an objective to remain below the permissible Health Canada Dose Limits.

Radiation Protection Measures

The following radiation protection measures are implemented throughout the project to ensure project conformance to ALARA:

- **Training:** All workers will receive NORM Awareness and site-specific training prior to commencing works. Visitors receive safety awareness orientation, and must be accompanied by Site personnel for the duration of the visit;
- **Signage & Security:** Gates and/or fencing is in place surrounding any areas of exposed NORM soils. These areas are closed and locked when construction is not ongoing. Signage is placed on fences and at the entrances of the active Work Sites. Regular reviews are completed to ensure these measures are in place and are effective;
- **Personal Dosimetry Program:** All workers will be assigned a dosimeter to monitor radiation exposure and receive training in proper wearing and storage procedures;
- **Control Zones:** Control zones are in place to restrict access to the public and prevent the spread of contamination;
- **Scanning & Release:** All personnel, equipment, and vehicles are scanned by Radiation Protection Technicians (RPTs) with radiological survey instruments prior to exiting control zones to ensure release criteria are met;
- **Waste Storage & Disposal:** Waste materials, such as used PPE, are stored in appropriate containers and sent for disposal at an approved facility;
- **Sediment & Erosion Controls:** Mitigation measures such as silt fencing and hay bales are installed at areas where there is potential for soil erosion (eg. stockpiles and excavations);
- **Dust Controls:** Control measures are in place, such as fencing, the use of water or dust suppressants to dampen exposed surfaces, protecting exposed surfaces, slowing the pace of dust generating activities, reduce the speed of vehicular traffic, and implementing localized/spot dust monitoring if deemed necessary.
- **Air Quality Monitoring:** Real-time continuous dust monitoring is conducted at each work site to maintain particulate emissions within levels protective of public health and the environment. Worker exposure to respirable dust is measured using radiological survey instruments for Workers in close proximity to any dust-generating activity, with all monitoring data being documented. All work will be paused and appropriate actions taken in the event any exceedances are detected; and,
- **Stockpiling:** NORM stockpiles are placed on a pad of sacrificial aggregate material, covered with tarps when not being actively managed, and surrounded by dust fencing and erosion control measures (i.e. silt fencing and/or hay bales). Stockpiles are monitored for radiological dose using radiological survey equipment on a regular basis to ensure dose levels are within acceptable limits.

NORM Transportation

- **Training & PPE:** Haulage drivers are trained in NORM Awareness and provided with a personal dosimeter. Drivers are also required to follow the Receiver’s NORM Transportation Plan.
- **Haulage Truck Loading, Scanning & Release:** Trucks are loaded with NORM soils maintaining minimum freeboard (the space between the top of the load and the top of the truck bed) is essential. A six-inch freeboard is a common standard for haul

trucks traveling on public roads. This helps prevent materials from falling off the truck and becoming a source of fugitive dust. The truck bed is covered with a sealed tarp system, and loose soils are scraped/brushed off prior to release. The trucks are scanned by Radiation Protection Technicians (RPTs) with radiological survey instruments for loose and fixed contamination levels and are not released until radiological levels are within acceptable limits.

- **Access Roads & Transportation Routes:** Access roads and transportation routes to the staging/loading area are kept free of excess debris.
- **Emergency Response:** Emergency response plans are in place in the event of emergencies that arise either on-site or during the transport of NORM. The response plan includes protocol for prompt containment and management of NORM and radiological surveys by RPTs to safeguard the release and exposure to the public within appropriate criteria. In the event of an emergency, personnel involved will notify Nipissing Miller. Nipissing Miller will notify NFN, and if required, NFN will notify the Bineshii Business Park tenants. Listed below are the contacts for Nipissing Miller and NFN.
 - **Nipissing Miller:** Michel Mclean, Contracts Manager
 - **Nipissing Miller:** Mike Smith, Superintendent
 - **Nipissing Miller:** Aurora Paradis, Project Coordinator
 - **Nipissing First Nation:** Gen Couchie
 - **Nipissing First Nation:** Steve Doucette