



Summary of Tower Painting Project at North Warning System Station, FOX-MAIN (FOX-M), Hall Beach, Nunavut

North Warning System Radar Station (FOX-M), Hall Beach, Nunavut
(68° 45' 35" N 81° 11' 41" W) – Photo: *FMB01A60* & Site Map: *Serial H-H 11/2-8400-105*

NWB Water Licence: NBW6FOH0409- Type “B”

Nasittuq Corporation will be implementing a radar tower painting project at FOX-M, starting in late July and completing in mid to late August of this year. The scope of activity will encompass the blasting of the radar tower with high-pressure water jet to remove the existing paint. The tower structure will then be primed and painted. Any paint remaining on the radar tower will be considered adhered to the structure and will be encapsulated with the new paint.

The work area will be encapsulated to contain the blast water, which will then be converged to a settling reservoir where the paint chips will be allowed to settle and then removed. The collected solids will be containerized and retrograded south for disposal at an approved facility. The remaining water will be filtered and re-used until the blasting is complete. The wastewater will be analysed for lead. Disposal of the wastewater will only be allowed when the quality meets applicable standards and guidelines (Refs. 1, 2, & 3).

Based on the two identical projects implemented in 2005 at the North Warning System radar stations at CAM-3, Shepherd Bay and DYE-M, Cape Dyer respectively, both located within Nunavut, the quantity of water used was approximately 45,000 litres for each of these projects. Residual lead level in the filtered water tested in these projects was between 0.12 mg/L and 0.226 mg/L with a background of naturally occurring lead level averaging 0.039 mg/L. These levels are significantly below the CCME soil quality guidelines for residential /parkland of 140 ppm. (Ref. 2).

Nasittuq Corporation expects that the volume of water to be used for the FOX-M tower painting project will not exceed 45,000 litres. This projected water usage, when totaled with the day-to-day O&M usage will be within the annual allowable water usage (3,650 cu meters) stipulated in the FOX-M licence.

The proposed wastewater discharge point will be within close proximity to the project location for reason of convenience (Attachments: FOX-M Site Plan *Serial No.: H-H 11/2-8400-105*). This decision is also supported by the absence of valued wildlife community in the proximity (Ref. 4). Furthermore, the project location is an already disturbed area since the commissioning of the original Distant Early Warning (DEW) System project *circa* 1950's. Study (Ref. 4) also indicates no productive water bodies are within the vicinity of the project area. Wastewater discharge will be conducted in a controlled manner to minimize excessive washout, erosion and drainage alteration to the local terrain.

Nasittuq Corporation does not anticipate any residual adverse impacts on the local environment as a result of the tower painting project at FOX-M.

- References:
1. DEWLINE Clean-up Protocol (Soil), 1991.
 2. Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. CCME 2002 (update)
 3. Environmental Guideline for Waste Lead and Lead Paint (DRAFT), GNWT. April 2001
 4. Initial Environmental Evaluation of the North Warning System Project Eleven Long Range Radar Sites and the Short Range Radar Development Site. Volume One. Monenco Eyretechnics Group. 1987.