



**Environment Environnement  
Canada Canada**

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May 11, 2005

Our file: 4105 006 144

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Your File: NWB5EKL  
Via Email at [licensing@nwb.nunavut.ca](mailto:licensing@nwb.nunavut.ca)

Dear Phyllis:

**RE: NWB5EKL – Indian and Northern Affairs Canada – FOX-C Dew Line Site  
Remediation Project, Ekalugad Fiord**

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Indian and Northern Affairs Canada (INAC) is proposing to remediate the former intermediate DEW Line Site located at Ekalugad Fiord (FOX-C) on Baffin Island. The work is being completed under the auspices of the Federal Contaminated Sites Accelerated Action Plan. Planned activities include:

- the demolition of existing infrastructure;
- packaging of hazardous materials (i.e. lead-based paints) and subsequent shipment off site;
- construction of two non-hazardous waste landfills and placement of non-hazardous wastes within;
- waste/barrel consolidation;
- construction of a landfarm facility on site for the treatment of hydrocarbon contaminated soils;
- road construction activities; and
- the establishment of a 35 person camp on site.

The work is anticipated to begin in 2005 and end in 2007.

When available, EC recommends that the following information be submitted for review:

- The location of the landfarm facility on site, especially in relation to the beach and/or any waterbodies;
- A map indicating the location of the two temporary lagoons on site;
- A map indicating the location of the greywater sump on site;
- Information regarding how frequently the monitoring wells installed at the landfarm will be monitored, as per Section 3.5.1 of the Plan



- The application states that a more detailed Spill Contingency will be submitted by the contractor. Once available, the more detailed Spill Plan should be filed with the NWB. The Spill Contingency Plan should include, but not be limited to, the following:
  - an internal reporting structure outlining the personnel within INAC and/or Public Works and Government Services Canada that should be contacted in the event of a spill or emergency situation.
  - The names and contact information for appropriate contact personnel on site.
  - The types and volumes of fuels to be stored on site, as well as the location of any fuel caches, especially in relation to waterbodies.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

#### General

- The proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
- All sumps shall be located above the high water mark of any waterbody and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Further, all sumps shall be backfilled upon completion of the field season and contoured to match the surrounding landscape.
- The application makes reference to the fact that all hazardous materials will be stored at an approved containment facility developed on site as per Environment Canada guidelines. The proponent is advised that EC does not have guidelines for the storage of all hazardous wastes, and is advised to consult other relevant regulations.
- The application states that when determining barrel contents of partially filled barrels on site, those comprising water only (i.e. less than 2% glycols or alcohols) will be discharged to the ground after minor treatment to remove organic material. Environment Canada recommends that erosion protection measures, such as the placement of gravel, be implemented at the discharge location.
- All fuel caches shall be located above the highwater mark of any waterbody and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Environment Canada recommends the use of self-supporting insta-berms for the storage of barreled fuel on location.
- Environment Canada recommends the use of drip pans, or other similar preventative measure, when refueling equipment on site.
- The proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
- **All spills** are to be documented and reported to the 24 hour Spill Line at (867) 920-8130.
- Environment Canada is proposing to repeal the existing "Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum Products on Federal Lands and Aboriginal Lands Regulations" and replace it with a regulation that has a broader scope of application. The new regulation under the *Canadian Environmental Protection Act* (CEPA) 1999, Part 9 will incorporate mandatory technical requirements (secondary containment, leak detection, corrosion protection, overfill, spill containment) and be more in line with those regulations that already exist in most provincial and territorial jurisdictions. Compliance with the proposed regulations will be mandatory, and EC will conduct inspections to ensure compliance with the regulations. The proponent is



encouraged to consult and implement the recommendations found in the 2003 CCME Guidance Document PN 1326 entitled “Environmental Code of Practice for Above Ground and Underground Storage Tank Systems containing Petroleum Product and Allied Petroleum Products”. This document provides up to date information regarding best practices for the storage of petroleum products and allied petroleum products

#### Environmental Monitoring Plan

- Section 3.1 of the Monitoring Plan should include provisions for the sampling of water used in the cleaning of equipment on site. The Plan currently has provisions for the treatment of waste soils produced during this procedure, but does not address waste wash water. This water should be sampled and if required, treated prior to disposal or shipped off site for treatment and disposal.
- The Monitoring Plan does not provide any information regarding the monitoring of the non-hazardous landfills located on site. Environment Canada recommends that there landfills be monitored visually for ponding and subsidence.
- Environment Canada recommends that, when the project is nearing completion, the proponent develop a long-term monitoring plan for the site.

#### Contingency Plans

- Section 3.0 of the Plan includes a discussion of wildlife encounters on site. The proponent should be advised that the *Migratory Bird Convention Act* and Regulations will apply to this project. Paragraph 6(a) of the *Migratory Birds Regulations* state that no one shall disturb or destroy the nests or eggs of migratory birds. The migratory bird breeding season extends from approximately June 1-July 15. These dates are approximate, and if active nests (i.e., nests containing eggs or young) are encountered outside of these dates, the proponent should avoid the area until nesting is complete (i.e., the young have left the nest).
- Table 1: Contact List should also list the Environment Canada 24 hour Emergencies Pager number (867-920-5131). This pager is manned 24 hours a day by Emergencies and Enforcement personnel.

#### Remediation Work Plan

- Section 3.3.1 of the Plan indicates that the non-hazardous waste landfill could include the placement of hydrocarbon contaminated soils, as well as Tier 1 level soils. Tier 1 level soils could include soils containing low-levels of PCBs. Given that hydrocarbons are known to increase the mobility of PCBs, EC recommends that any drainage from the non-hazardous waste landfill be monitored for PCBs.
- Section 4.1 of the Plan indicates that “the NHW [non-hazardous waste] landfill will contain an airspace volume of 10,400 m<sup>3</sup>...” Given that there are two NHW landfills to be constructed on site, is this number the total volume of both landfills or the volume of each landfill?
- Section 4.2 of the Plan indicates that excavation of hydrocarbon contaminated soils will not occur within 2 m of any watercourse or the highwater mark of the intertidal zone. Environment Canada recommends that sediment control measures be implemented when excavating within close proximity of a waterbody in order to help prevent the release of sediment.



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If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at [colette.spagnuolo@ec.gc.ca](mailto:colette.spagnuolo@ec.gc.ca).

Yours truly,

***Original signed by***

Colette Spagnuolo  
Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)  
(Robert (Bob) Martin, Indian and Northern Affairs Canada, Iqaluit)