



Environment Environnement
Canada Canada

Environmental Protection Branch
Qimugjuk Building 969
P.O. Box 1870
Iqaluit, NU X0A 0H0
Tel: (867) 975-4631
Fax: (867) 975-4645

March 11, 2010

Our file: 4517 000 024
NWB file: 1BR-LON0813

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0A 1J0

Via email: licensing@nunavutwaterboard.org

RE: 1BR-LON0813 – FOX-2 Longstaff Bluff DEW Line Site Spill Contingency Plan

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 the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

UMA Engineering Ltd./AECOM Canada Ltd. has submitted a Spill Contingency Plan (Plan) for the FOX-2 Longstaff Bluff DEW Line Site, as part of Water License 1BR-LON0813, issued by the Nunavut Water Board. The FOX-2 DEW Line site is owned by the Department of National Defence and is located at 68°38'99"N 71°13'76"W.

Upon review of the Plan, EC provides the following comments and recommendations for the Nunavut Water Board's consideration:

- The proponent should provide a general list of substances that could potentially be spilled at the FOX-2 site. Personnel should be made aware of the properties of the products that they handle and have access to material safety data sheets (MSDS) and other sources of information. This information should be included in the Plan. A copy of the Plan should be posted at any location where these products are stored and at each fuel cache and refuel station.
- In Section 1.2.1 Fuel Storage Facility, the Plan does not confirm whether tanks are bermed, nor describe berm capacity. Even if tanks are double walled, leakage from a valve could occur and the clean-up would be considerably more extensive if unbermed. EC recommends the use of secondary containment, such as self-supporting insta-berms, for storage of all barreled fuel rather than relying on natural depressions to contain spills.
- Please note the new CEPA Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations that came into force on June 12, 2008. These regulations apply to both outside, aboveground and underground storage tank systems (including the piping and other tank associated equipment) under federal jurisdiction containing petroleum and allied petroleum products that have a capacity greater than 230 litres. This includes tanks located on federal or Aboriginal lands. Exceptions are pressurized tanks, mobile tanks, tanks regulated by the National Energy Board, and outdoor, aboveground storage tank systems that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or emergency generator. All storage tank system owners must identify their tank

systems to EC and installation of new systems must comply with the regulation's design requirements. Further information on these regulations can be found at www.ec.gc.ca/st-rs.

- In Section 2.1, The Plan should include the following statement “**all spills** of oil, fuel, or other deleterious material, **regardless of size**, are to be reported to the NWT-NU 24hr Spill Line (867)920-8130”.
- Section 2.1, Reporting Procedures, should include reportable spill quantities (see table Schedule 1 below).

Schedule 1 – Reportable Quantities

TDG Class	Substance	Reportable Quantities for NWT/NU 24-Hour Spill Reports
1.0 2.3 6.2 6.2 7.0 None	Explosives Compressed gas (toxic/corrosive) Infectious substances Sewage and wastewater (unless otherwise authorization) Radioactive materials Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.0	Flammable liquid	≥ 100 L
4.1 4.2 4.3	Flammable solid Substances liable to spontaneously combustible Water reactant substances	≥ 25 kg
5.1	Oxidizing substances	≥ 50 L or 50 kg
5.2 9.0	Organic peroxides Environmentally hazardous substances intended for disposal	≥ 1 L or 1 kg
6.1 8.0 9.0	Toxic substances Corrosive substances Miscellaneous Products, Substances or Organisms	≥ 5 L or 5 kg
9.0	PCB mixtures of 5 or more parts per million	≥ 0.5 L or 0.5 kg
None	Other contaminants, e.g., crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater, etc.	≥ 100 L or 100 kg
None	Sour natural gas (i.e., contains H ₂ S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more
3.0 None	Flammable liquid Vehicular fluid	≥ 20 L When released on a frozen water body used as a working surface

Report releases/potential releases of any size that:

- are near or into an open water body;
- are near or into a designated sensitive environment or sensitive habitat;
- pose an imminent threat to human health or safety; or
- pose an imminent threat to a listed species at risk or its critical habitat.

Note: L = litre; kg = kilogram; PCB = polychlorinated biphenyls; ppm = parts per million.

- In Section 2.3, please provide information regarding disposal and transportation method of any contaminated and/or hazardous material to be removed from the site.

- In Section 3, a map of the site, including fuel storage area and locations of spill kits, should be included prior to the commencement of camp activities.
- Section 4 should be updated prior to the commencement of camp activities.
- In Section 5, Table 3 should include shovels, pumps, and barrels as part of their spill response kit.
- In Appendix A, Sections 18.5 and 18.6 of the Plan should be completed with location, nearest medical services, and all personnel information prior to the commencement of camp activities.
- A section should be included in the Plan that provides direction regarding response action for spills on various types of terrain (e.g. spills on land, water, snow/ice, muskeg, etc.)
- The spill plan should identify what specific and potential risks are involved in the different stages of clean-up and provide specific guidance for response.
- Environment Canada recommends that a Spill Response Form be attached to the document. It is noted that Appendix A: *Contractor's Emergency Response Plan*, does not include all 59 pages of the document, and the Spill Response Form may have been contained in this document.

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) 975-4631 or by email at paula.c.smith@ec.gc.ca

Yours truly,

Original signed by

Paula C. Smith
Environmental Assessment Coordinator
Environmental Assessment – North
Environmental Protection Operations

cc: Carrie Spavor, (Environmental Assessment Coordinator, Iqaluit, NU)
Carey Ogilvie (Head, EA-North, EPO, Yellowknife, NT)
Ron Bujold (Environmental Assessment Technician, EPO, Yellowknife, NT)