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RE: NWB 1BR-FOD – Defence Construction Canada – FOX-3, Dewar Lakes Project – Site Investigation

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*.

Defence Construction Canada (DCC) is applying for a water license to allow for site investigation activities at the FOX-3 (Dewar Lakes) DEW Line Site. Information acquired from this site investigation will be used to design the remediation plan for the site, scheduled to commence in 2010 and be completed in 2013. The FOX-3 DEW Line Site is located at 68°40'N, 71°14'W and is approximately 180 km north of Clyde River, NU. Work to be completed includes the establishment of a temporary camp, collection of soil samples (surface and subsurface), water samples (surface water and groundwater), waste inventories, collection of structural materials samples, geophysical surveys to determine potential locations for disposal facilities, and identification of potential borrow material areas. Defence Construction Canada intends to conduct the site investigation from July to August 2006.

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

- 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 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.
- The application indicates that collected samples may be stored on site until the project reclamation work begins in 2010. Collected samples which have chlorobiphenyl (PCB) concentrations in excess of 50 parts per million must be stored in accordance to the Regulations Respecting the Storage of Material Containing Chlorobiphenyls as specified in the Canadian Environmental Protection Act. Environment Canada can provide DCC with guidance in the application of these regulations.
- The application also states that excess fuels will be stored on site for use or disposal during the site clean-up. Given the lack of personnel on-site during the interim period between the site investigation and the scheduled remediation project, EC strongly recommends that any



fuels or hazardous materials left on site until 2010 be stored in a secure area with adequate secondary containment.

- Given the number of people associated with the camp, EC encourages the use of incinerator toilets rather than relying on sumps for the disposal of camp sewage.
- Environment Canada recommends that erosion control measures be implemented at gray water discharge points.
- 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 water body and in such a
 manner as to prevent the contents from entering any water body frequented by fish.
 Further, all sumps shall be backfilled upon completion of the field season and contoured to
 match the surrounding landscape.
- All fuel caches shall be located above the high water mark of any water body. Further, EC recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location rather than relying on natural depressions.
- Drip pans, or other similar preventative measures, shall be used when refueling equipment on site.
- The Spill Contingency Plan for the FOX-3 site should be updated to include contact information for the Environment Canada office in Iqaluit, NU. James Noble Jr. is the Enforcement and Emergencies Officer for Nunavut. He can be reached at (867) 975-4644. Environment Canada also operates a 24 hour Emergencies Pager which can be contacted outside of office house at (867) 920-5131. The proponent should note that all spills are to documented and reported to the 24-hour Spill Line at 867-920-8130.

The Canadian Wildlife Service (CWS) of Environment Canada has reviewed the above-mentioned submission and makes the following comments and recommendations pursuant to the *Migratory Birds Convention Act* (the *Act*) and *Migratory Birds Regulations* (the *Regulations*), and the *Species at Risk Act* (SARA).

- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. If active nests (i.e. nests containing eggs or young) are encountered during project activities, the area should be avoided until nesting is complete (i.e. the young have left the vicinity of the nest).
- EC recommends that aircraft used in conducting project activities (i.e., travel to and from the Dew Line Site) maintain a flight altitude of at least 610 m during horizontal (point to point) flight to avoid disturbing nesting birds, and a vertical distance of 1000 m and minimum horizontal distance of 1500 m from any observed concentrations (flocks / groups) of birds in order to reduce disturbance to resting, feeding, or moulting birds,.
- Section 35 of the Migratory Birds Regulations states that no person shall deposit or permit
 to be deposited, oil, oil wastes, or any other substance harmful to migratory birds in any
 water or any area frequented by migratory birds.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the proponents' representatives (including contractors) conducting operations in the field. Environment Canada recommends that all field operations staff be made aware of the proponents' commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds, but will not necessarily ensure that the proponent remains in compliance with the Migratory Birds Convention Act (the Act) and Migratory Birds Regulations (the Regulations). The proponent must ensure they remain in compliance with the Act and Regulations during all phases and in all undertakings related to the project.



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.

Yours truly,

Original signed by

Colette Spagnuolo Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)

