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22 June 2012

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Via email: licensing@nunavutwaterboard.org

RE: 120524 1BR-CLI---- New Application – Chesterfield Inlet Landfarm Project – GC-CGS – Kivalliq Regions

EC file: 4703 003 075 NWB file: 1BR-CLI----

Environment Canada (EC) has reviewed the information submitted with the above-mentioned new water license application submitted to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act 1999*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Government of Nunavut, Community and Government Services is applying for a new Type B water license from the NWB to support the development of an approximately 75 m² lined engineered landfarm at the Chesterfield Inlet Fuel Facility to remediate 150 m³ of hydrocarbon contaminated soil. No water use is associated with this project and water collected in the landfarm will be pumped back into the soil where it will evaporate. The proposed landfarm will be located adjacent to the existing Chesterfield Inlet Municipal Solid Waste Site. Construction is proposed to occur in August and September 2012 with operation through 2017.

Based on a review of the application, EC provides the following comments for the NWB's consideration:

General

- The proponent shall not deposit, nor permit the deposit of chemicals, sediment, wastes, or fuels associated with the project 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 deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- EC has available the Federal Guidelines for Landfarming Petroleum Hydrocarbon Contaminated Soils. Science Applications International Corporation (SAIC Canada), March, 2006. Information in this document addresses design, operation, monitoring, sampling, analytical methods, decommissioning/closure, record keeping and reporting requirements for

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landfarming projects. It is recommended that the consultant refer to this document as it relates to the future operations of the landfarming project.

Wildlife and Species at Risk

- EC recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.
- Section 5.1 of the *Migratory Birds Convention Act* prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- 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. E 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 these measures may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act, Migratory Birds Regulations*, and the *Species at Risk Act*. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.

If there are any proposed changes to the project EC should be notified, as further review may be necessary. Please do not hesitate to contact the undersigned 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,

Paula C. Smith

Environmental Assessment Coordinator

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