## ARVIAT INTERVENTION NON-TECHNICAL SUMMARY

Sustainable development in Canada's North is a priority for Environment Canada (EC). The Department provides scientific expertise for incorporation into decisions on developments, such that all parties working together can ensure that there is minimal impact on the natural environment, and that ecosystem integrity is maintained and preserved. Toward these goals, EC has reviewed the licence application and supporting information for the Hamlet of Arviat.

EC's submission focuses on issues related to environmental effects on or related to water quality and waste management; to the extent it may affect water quality. Overall EC was pleased with the quality of the information provided by the Hamlet of Arviat.

EC has provided technical comments and recommendations on the following topics:

## Sewage Disposal Facility

Effective management and operation of a sewage lagoon and wetland require understanding of its function and design to mitigate environmental impacts. Therefore, EC recommends that the license is issued with the conditions that the Hamlet provides the Nunavut Water Board (NWB) the following:

- as-built drawings of the lagoon and engineered features of the wetland within 12 months of the issuance of the license;
- sewage lagoon and wetland design plan and drawings within six months of the issuance of the license:
- an Abandonment and Restoration Plan within 12 months of the issuance of the license
- results from a thorough lagoon discharge and wetland hydrology study within 12 months
  of issuance of the license with implementation of the approved study to follow NWB
  approval;
- results from annual seasonal toxicity testing of effluent; and,
- a sludge management plan and an updated Sewage Facility Operation and Maintenance Plan.

## Solid Waste Facility

Appropriate containment of hazardous waste must be in place to reduce spills or leaching of wastes into the natural environment. To mitigate these hazards, EC recommends that the license is issued with the condition that the Hamlet plan for and implement the following:

- appropriate hazardous waste containment and segregation;
- monitoring of leachate from the Bulky Waste Site; and,
- an updated Solid Waste Facility Operation and Maintenance Plan to include the Bulky Waste Site.

EC also recommends that the Hamlet provide the NWB a Solid Waste Water Management Plan within six month of the issuance of the license.

## Landfarming of Contaminated Soils

The water license application states that 750 m<sup>3</sup> of diesel contaminated soils is present at the Bulky Metals Site and that there is potential for additional contaminated sites in the community. EC recommends that an inventory of contaminated soils in the community be completed, and a plan is developed for treatment and disposal of the soil within six months of issuance of the license.

EC would like to thank the NWB for the opportunity to comment on the Hamlet of Arviat's water license application and EC hopes that these technical comments and recommendations are useful to the NWB in their decision making process. EC respectfully requests the opportunity to submit additional written comments after the public hearings to address any new information brought forward at these hearings.