



Nunavut Regional Office
P.O. Box 2200
Iqaluit, Nunavut, X0A0H0

DRAFT March 3

March 2, 2006
Nunavut Water Board
P.O Box 119
Gjoa Haven, NU X0B 1J0

NWB File No. 1BR-mAC

Re: CAM-F Water Use Application

Dear Ms. Gagne;

The following information is provided in response to NWB letter "Guidelines for Applicant, Application for CAM-F (Sarcpa Lake) Intermediate DEW Line Clean Up" dated February 16, 2006.

1. The Applicant shall provide detailed design plans prepared by a qualified engineer complete with stamped/signed drawings and plans for construction for all facilities pertaining to the use of water or disposal of waste, including but not limited to:

a. Sewage treatment;

RESPONSE

Attached please find signed drawing Numbers **XXXXX** which were originally provided in the application in the Camp work plan as drawings Figure 4, 6 and 7

b. NWB: Waste processing area;

RESPONSE

Attached please find a signed drawing Number **XXXXX** which was originally provided in the application in the Work Plan in Appendix C as Figure 5

c. The water treatment plant shall be included as a component of this process

RESPONSE

The water treatment plant has been included as a component of this process shown on the above drawing

d. Secondary containment for fuel storage.

RESPONSE

Attached please find a signed drawing Number **XXXXX** which was originally provided in the application in the Work Plan in Appendix G as Figure 7

2. The Applicant shall provide justification for the Wastewater Discharge Criteria in Section 01561 Section 5.1 in the project specifications compared to existing Northern standards and national standards, for example the Canadian Council of Ministers of the Environment (CCME), *Canadian Environmental Quality Guidelines*.

RESPONSE

Justification for the Proposed Wastewater Discharge Criteria

The CAM-3 DEW Line Site, at Shepherd Bay, Licence (Licence Number NWB5SHE0510 signed February 17, 2005) sewage effluent targets were referenced for this project. Requirements and expectations upon the Department of National Defence (DND) DEW line site clean-up projects are frequently made while establishing Indian and Northern Affairs Canada (INAC) remediation project targets. DND has a long history of having established publicly and regulatory acceptable targets. As well, adoption of the DND criteria was foreseen as a way to simplify the approvals process.

In order to help ensure compliance to the proposed effluent requirements the project proposes a more advanced technology than that required at CAM-3.

The report “Best Available Technology for Sewage Treatment in the North (July 2003) by Feguson, Simek Clark (ISBN 0-662-34746-3) identifies four considerations when selecting a technology

- a. The effluent quality required. The quality was established through the precedent discussed above.
- b. Availability of land. The chosen technology satisfactorily balanced the availability of land and the desired “footprint” and control of the sewage treatment process
- c. Sustained access to trained operators. Lagoons were considered a desirable option because they have little operational complexity. ????
- d. Cost to build and operate the process. While the liner may result in a slightly more expensive to build than the process approved at CAM-3, the additional costs were seen to be of value in ensuring expectations were met.

It is hoped that the project’s pro-activity in sewage treatment technology does not result in the project being penalized through implementation of more stringent effluent requirements in this licence.

3. The Applicant should confirm and document the requirements of the Government of Nunavut, Department of the Environment (GN-DOE) for:

- the storage, shipping and overall management of hazardous wastes.

RESPONSE:

A discussion was held with Robert Eno , Manager Pollution Control on February 22, 2006. During that time it was confirmed that INAC does have a waste generator number (NVG 100008). It was also understood that INAC is responsible for ensuring contractors hired for the shipping and receiving of hazardous wastes are responsible. The existence of project spill and emergency response plans was discussed as was the need to be prepared to deal with emergencies. Storage of hazardous wastes for more than 180 days requires the project to have a registered storage facility under Nunavut guidelines.

- Contact information for GN-DOE,

RESPONSE:

Robert Eno
 Manager, Pollution Control
 Environnemental Protection Service
 Department of Environment
 Government of Nunavut
 Iqaluit, NU
 867-975-7748

- References to existing GN-DOE Guidelines should also be provided.

RESPONSE:

The following references were provided by GN- DOE

Guidelines in hard Copy and Disc

- NWT Environmental Guideline for Waste Batteries
- NWT Environmental Guideline for Dust Suppression
- NWT Environmental Guideline for Site Remediation
- NWT Environmental Guideline for General Management of hazardous Wastes
- NWT Environmental Guideline for Waste Solvents
- NWT Consolidation of R.R.N.W.T. 1990, c. E-23 Asphalt Paving Industry Emission Regulations
- Consolidation of the Environmental Protection Act R.S.N.W.T., 1988, c. E-7 As amended
- Consolidation of the Environmental Rights Act R. SNWT 1988, c. 83 (2nd. Supp)
- Consolidation of the Pesticide Act, R.S.N.W.T. 1988, c.P-4
- Consolidation of regulation *R.R.N.W.T. 1990, c. P-2 Pesticide Regulations* (Dated 15 July, 1992) As amended:
- Government of Nunavut Simplified Environmental Protection Act
- Consolidation of regulation R-068-93 Spill Contingency Planning and Reporting Regulations (Dated 22 July, 1993) As amended:
- Contingency Planning and Spill Reporting In Nunavut –A Guide to the new regulations

Guidelines on Disc

- Guideline :Air Quality –Sulphur Dioxide and Suspended Particulates AS AMENDED:
- Guideline :Contaminated Site Remediation As amended:
- Guideline : Industrial Waste Discharges in Nunavut As amended:
- Environmental Information Guide for Industrial Projects on Commissioner's Lands
- Guideline : Management of Ozone Depleting Substances As amended
- Guideline for Management of Waste Lead and Lead Paint
- Disposal Guidelines for Fluorescent Lamp Tubes
- Municipal Solid Wastes Suitable for Burning

The references are being forwarded to PWGSC and to Biogenie for implementation, as appropriate, in the project work plan

4. The Applicant shall provide a Monitoring Plan encompassing all site activities relating to impacts to water and disposal of waste. The plan shall also include confirmatory sampling proposed to assess the effectiveness of completed remediation and long-term monitoring.

RESPONSE

Operational Monitoring

- To b provided by PWGSC

Site confirmatory monitoring plans and QA/QC Process

A consultant with experience in the DND clean-ups has been hired to develop a plan specific to the INAC projects. References to be used in the development of the protocol include the DND DEW Line Cleanup and DIAND Resolution Island Confirmatory Sampling Protocols.

This plan will become a contractual issue. Additional information will be provided once the plan has been completed.

Long-Term Monitoring Protocol and QA/QC Process:

The long term monitoring plan anticipates sampling and visual inspection of the site in each of the first 5 years after project completion , and also in years 7, 10, 15 20 and 25.

Again, the DND DEW Line Cleanup and Resolution Island projects have existing Long-Term Monitoring Protocols that will be used to develop the most applicable monitoring plan and QA/QC process for the DIAND DEW line sites. This will ensure a degree of consistency across the program and while taking the uniqueness of these sites into account. This plan will not be finalized until the remediation project is more advanced and the monitoring needs better understood.

5. If you have any questions or require clarification, technical staff are available to discuss these guidelines.

RESPONSE: The project spoke to Sara Gagne on February 24, who provided guidance on NWB needs and potential solutions to resolving problems.

If you have any questions or comments please contact the undersigned.