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May 31, 2010

Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard:

Project No: 1BR-PEL0510

Regarding: Response to Letter Dated May 4, 2010 to Douglas Craig

AECOM is proving the following clarifications and additional information as per the request in the letter from the Nunavut Water Board dated May 4, 2010 regarding the renewal application for the landfill monitoring at the CAM-4, Pelly Bay DEW Line site. Please see the following responses to the requests for information:

An updated Spill Contingency Plan that reflects the current status of the site.
See attached.

The 2009 Annual Report including the results of the 2009 Monitoring Program.
The 2009 Annual Monitoring Report for the CAM-4 site has been received by DCC, but it has not yet been sent to the NWB. As has been the case for the past several years, the monitoring reports for all of the former DEW Line sites undergoing long term monitoring are submitted as a package once all of the reports have been received by DCC and reviewed by the Environmental Working Group, which includes representatives from the NTI.

As builts for the Tier II Soil Disposal Facility and Non-Hazardous Waste Landfill.
See attached.

The Tier II Soil Disposal Facility has some leeching and staining present, the applicant should address whether this is expected and is due to upper layer flow or whether Tier II contaminants are leaching.

There is no leaching present at the Tier II Soil Disposal Facility. There was some seepage noted; however, seepage is not the same as leaching. Seepage is a geotechnical engineering term used to indicate areas where there is water or fluid moving through the soil pore spaces. Leaching is caused by percolation of surface water through a landfill and indicates that there are contaminants present, which based on the monitoring data for this facility, there is not. The Tier II Facility at CAM-4 has been closed for only 3 years, and it has not yet reached a completely frozen state, which could allow

for some seepage through the cover materials, over top of the covering liner. Typically, complete freezing occurs after approximately 5 years. The staining observed is due to the high iron content of the granular covering materials.

Provide criteria used to determine whether a constructed facility has failed and therefore requires immediate repair.

A failure of constructed facility requiring immediate repair could only be caused by a catastrophic event. The intent of the landfill monitoring program is to identify even small changes, when compared to both the baseline and background data, that could indicate that the landfill is not performing as designed, so that appropriate maintenance measures can be taken, if required. The detection limits selected for the landfill monitoring criteria are very low, and were intended to give a very early indication if there are any issues associated with the constructed facilities.

Will the applicant be implementing the various recommendations made in the March 4, 2009 Summary of Recommendations Letter?

Most of the recommendations presented in the EWG Summary of Recommendations Letter were implemented. Regarding the Station Area Non-Hazardous Waste Landfill, soil and groundwater samples were collected as part of the routine landfill monitoring program in 2009, therefore no additional samples were required, and the EWG did not request additional work after the 2009 season. Background information, including the site investigation reports, was provided to the EWG previously, and no further background information was provided.

Regarding the DCC Tier II Soil Disposal Facility, updated site plans were provided showing the locations of the sampling points.

The arsenic result for the Upper Site Landfill was provided to the EWG.

We trust the information provided is sufficient. Please feel free to contact the undersigned if you have any further questions or comments.

AECOM Canada Ltd.

Eva Schulz, P.Ag.
Environmental Scientist
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Encl. Spill Contingency Plan, As-built Drawings
cc: Nahed Farah, DCC

Spill Contingency Plan

1. Contact Information

The Spill Contingency Plan (SCP) was prepared for the CAM-4, Pelly Bay landfill monitoring team. The SCP is effective as of June 1, 2010 and will be available as a stand-alone document to all team members and will also be posted on-site in the camp.

The landfill monitoring is being conducted as a follow up to the DEW Line Clean Up Project, as represented by the Department of National Defence and Defence Construction Canada. To request additional information, or additional copies of the SCP, please contact:

Environmental Officer – DEW Line Clean Up Project
Defence Construction Canada
Constitution Square, Suite 1720
350 Albert Street
Ottawa, ON K1A 0K3

2. Introduction

The following contingency plan presents the prescribed course of action to be taken in the case of an unanticipated spill event occurring during the landfill monitoring program at the CAM-4 site. The plan will enable the site team to maximize the effectiveness of the environmental protection response and meet all regulatory requirements for reporting to the appropriate authorities.

2.1 Scope and Purpose

The purpose of the plan is to:

- Provide a clear statement of the procedures to be followed in response to a spill;
- Minimize the potential environmental impact of a spill by establishing a pre-determined action plan;
- Protect the health and ensure the safety of the personnel involved in the Spill Response activities;
- Provide a reporting network for spills;
- Ensure site restoration;
- Identify the roles and responsibilities involved in the spill response activities; and
- Identify sufficient personnel, materials and equipment needed to make an adequate response to a spill.

2.2 Site Information

It is estimated that the landfill monitoring will require minimal amounts of gasoline for the all-terrain vehicles. All fuel will be purchased in Kugaaruk, therefore, there is no need for the team to have fuel stored at the site.

2.3 Potential Safety Hazards

The most significant potential safety hazard related to a fuel spill from the ATV's at the CAM-4 site is the possible soil and water contamination from the spill. Although soil contamination is a real potential hazard, the likelihood is small, and potential spill volumes are small.

2.4 Environmental Mapping

The attached drawing shows the site plan, showing the work area locations.

2.5 Resource Inventory

The following equipment is typically on-site during a landfill monitoring program event: ATV, small spill kits, and shovels.

2.6 Training and Exercises

As the potential spill volume is small (200 L or less), no formal spill response training is typically provided. However, general spill response awareness and use of the spill clean-up materials is provided as part of the Health and Safety training for the site.

3. Response Organization

3.1 Roles and Responsibilities

The contractor will be responsible for spill response clean up in the event of a spill during the landfill monitoring activities at CAM-4. The responsibilities are described below.

- Ensure the team is aware of the spill kit location and its use.
- Ensure sufficient materials and equipment are available for adequate response to fuel and hazardous material spills.
- Verbally report all spills to the DCC Associate Project Manager as soon as practical.
- Stop or reduce discharge, if it is safe to do so.
- Make every effort to contain the spill by dyking with earth or other barriers.
- Deploy hand tools and absorbents to the spill site.
- Follow all guidelines and regulations for disposal of spilled materials and contaminated soil as established by appropriate government agencies.
- Document all events/actions.
- Report the spill to the Spill Report Line and follow up with a written spill report. This report shall summarize the initial report information; confirmation of spill volume; actions taken; future remediation/monitoring requirements; and a sketch map and/or photographs of the spill area.

3.2 Communications and Contacts

Intra-site communication is via two-way radios, and a satellite phone will be used for all other communications. The following table provides relevant contact numbers.

Resource	Location	Phone No.
24 Hour Spill Line	NWT/Nunavut	867-920-8130
Environment Canada	Environmental 24 hour Emergency	867-920-5131
Environment Canada	Enforcement Officer	867-975-4644
Government of Nunavut – Environmental Protection	Iqaluit	867-975-5907
Indian and Northern Affairs Canada – Water Resources Inspector	Nunavut Regional Office	867-975-4550
Indian and Northern Affairs Canada – Land Administration Minister	Nunavut Regional Office	867-975-4280
Department of Fisheries and Oceans	Nunavut Regional Office	867-975-8000
Defence Construction Canada (representatives for the Department of National Defence)	Deputy Project Manager – Steve Poaps	613-998-9529
	Project Manager –LCol. (Ret) David Eagles	613-998-9523

4. Action Plan

Gasoline, hydraulic fluid and oil could potentially be spilled at the CAM-4 site from the ATVs, if they leak while on-site.

4.1 Initial Action

In the event of a spill, protection of human health and safety is paramount. Contamination of personnel involved in a clean-up is a real possibility, as is contamination of the surrounding workplace and environment. The individual discovering a spill shall:

- Warn the people in the immediate vicinity and evacuate if necessary.
- Isolate or remove any ignition sources and take all safety precautions before approaching.
- Attempt to stop the leakage and contain the spill, if safe to do so.
- Deploy equipment and personnel to initiate containment and clean up, report to the DCC Associate Project Manager.
- Prepare the Government of the Northwest Territories Spill Report Form.
- Notify all other pertinent parties, including the DND and other government agencies.

5. Reporting Procedures

When reporting a spill to the 24 Hour Spill Report Line and completing the Nunavut Spill Report Form, the following information shall be included:

- Date and time of the spill;
- Name and phone number of a contact person close to the location of the spill;
- Type of contaminant spilled and quantity spilled;
- Cause of the spill;
- Whether the spill is continuing or has stopped;
- Description of the existing containment;
- Action taken to contain, recover, clean up and dispose of spilled material;
- Name, address and phone number of the person reporting the spill; and
- Name of owner or person in charge, management or control of the contaminants at the time of the spill.

The spill report is to be submitted to the INAC Water Resources Officer no later than 30 days after initially reporting the spill to the spill report line. The contact list is provided in Section 2.2.