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PROTECTING OUR ARCTIC ENVIRONMENT

SPILL CONTINGENCY PLAN

PPD BAKER LAKE LANDFARM

April 23, 2026

Nunatta Environmental Services Project 25-29

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1 INTRODUCTION

Nunatta Environmental Services Inc. has prepared this spill contingency plan on behalf of the Petroleum Products Division (PPD) of Transportation and Infrastructure Nunavut. This plan addresses potential spills at the contaminated soil landfarm in Baker Lake, Nunavut.

PPD is responsible for the management of the landfarm.

1.1 Effective Date

This spill contingency plan is effective June 1, 2026.

This is the first version of the plan.

1.2 Distribution List

The plan and the most recent revisions have been distributed to:

- The Nunavut Impact Review Board,
- The Nunavut Water Board, and
- The Hamlet of Baker Lake.

1.3 Purpose

The purpose of this plan is to outline actions in response to spills of any size. The plan identifies key personnel and their roles and responsibilities, available equipment, and resources available to respond to spills. The plan provides specific details of spill response procedures in order to minimize risks to human health and the environment.

1.4 PPD and the Environment

PPD plays a pivotal role in supporting Nunavut's communities by ensuring safe, reliable access to essential fuels. One of the key pillars of its work is Environmental Stewardship. PPD addresses environmental hazards such as spills in full compliance with regulations and operates a land farm to remediate petroleum-contaminated materials. Training for contractors emphasizes environmental safety, protection, and sustainability, ensuring long-term stewardship.

PPD contributes to the efficient and sustainable management of refined petroleum products in Nunavut, ensuring the needs of communities are met while maintaining environmental safety and compliance.

1.5 Project Background

PPD is responsible for the purchase, transportation, storage and distribution of all petroleum products in Nunavut. PPD's headquarters is in Rankin Inlet, where it also maintains the tank farm and other fuel infrastructure.

After a spill at the Baker Lake Tank Farm in 2021, Nunatta and others excavated and segregated impacted soil in a lined containment cell south of the Tank Farm. Since the time of the spill, some soil has been bioremediated and is ready for re-use, but it is likely that some soil remains impacted with petroleum hydrocarbons.

PPD has proposed to construct a landfarm to treat this remaining soil and possibly other impacted soil in the community. The Hamlet of Baker Lake has selected an area northwest of the built-up area and north of the airport for the landfarm.

The landfarm will be constructed from gravel and sand with an impermeable membrane that limits the transmission of impacts from the landfarm to the surrounding area. The plan is for the landfarm to accept only soil contaminated with hydrocarbons in which the primary petroleum is fuel oil and/or diesel fuel and/or gasoline.

2 EXISTING CONDITIONS

2.1 Site Description

A parcel of land (Lot 454, Plan 4945) has been surveyed to use as the landfarm site.

The proposed landfarm is located northwest of the hamlet of Baker Lake, in the Kivalliq Region of Nunavut. The geographical coordinates of the centre of the site are

Latitude	Longitude
64.321680° N	96.092068°W

The site is relatively flat, with a slight slope towards the southeast.

The Atlas of Canada topographic map identifies two creeks between the site and the Hamlet of Baker Lake, and Baker Lake to the south. The closest creek is 1.8 km from the site, and Baker Lake is more than 1.5 km to the southeast.

2.2 Materials Storage

Impacted soils are stored inside the lined area of the landfarm.

No other hazardous or waste materials will be stored on site. Equipment will be fuelled in Baker Lake or by fuel truck.

Materials required for landfarm maintenance (e.g., fertilizer) will be obtained as necessary and stored off-site until required.

2.3 Preventive Measures

Materials required at the site will be shipped by water or air as required. They will be unloaded and stored off-site until they are required.

As much as possible, fuelling will take place off-site in Baker Lake. Where it is necessary to fuel equipment on-site, this will be done by fuel truck.

During on- and off-site fuelling, PPD representatives, contractors and consultants will wear appropriate personal protective equipment. This will include safety glasses, steel toed boots, reflective vests and hard hats. Where necessary, flame retardant clothing and chemical gloves will be worn.

Spill kits will be present and available whenever the site is staffed. In general, the spill kits will be transported to site in vehicles and placed in an easily accessible location.

One spill kit will also be stored at the site in a weatherproof container, e.g., a drum.

Portable drip trays will be used when fuelling equipment on site. Daily visual inspections of fuel trucks will be made when they are in use.

The spill kit will contain:

- Ten disposable large 5 mil polyethylene bags with ties.
- Four sorbent booms.
- 10 kg bag of sorbent particulate;
- 100 sheets of sorbent pads for both universal and oil only.
- Two large plastic tarps.
- One roll of duct tape;
- One utility knife.
- Field notebook and pencil.
- One Rake.
- One Pickaxe
- Two Aluminum shovels.
- Four Tyvek suits.
- Four pairs of chemical resistant gloves.
- One binder including this plan, safety data sheets, and the spill reporting form.

2.4 Copies of the Plan

A copy of this plan will be kept on site during all active operations: turning the soil, adding amendments, etc.

PPD will retain a copy of this plan at all times in its Headquarters office in Rankin Inlet.

2.5 Communications Response

PPD has established procedures for dealing with media and public inquiries. All inquiries are to be directed to the PPD project manager (see contact information elsewhere in this report). If the manager is not available, there will be another staff member available to act in this position.

If a reporter or member of the public arrives at the site unexpectedly, they should be directed by the person or persons working on site to contact the PPD project manager.

If a spill has occurred and a Spill Report needs to be filled out, the information will be available for the public to view at the Nunavut Spills Database.

3 HEALTH AND SAFETY

A standalone Health and Safety Plan (HASP) will be prepared by the consultant or contractor before maintaining, sampling or otherwise operating the landfarm. Employees of PPD, the consultant and/or contractor will receive appropriate training before work at the site. Because the landfarm site is away from the hamlet of Baker Lake and will be fenced, PPD does not expect that members of the public will be exposed to impacts from site operations.

The HASP will include consideration of relevant exposure pathways and appropriate mitigations for site workers, including:

- Inhalation,
- Ingestion, and
- Direct contact with impacted soils.

The HASP will also include consideration of potential migration of contaminants via dust or water runoff, and include plans for mitigation. Such plans may include limitations on work in high-wind conditions.

The HASP will also include requirements for personal protective equipment at the site and spill kits in vehicles.

4 ORGANIZATION AND RESPONSIBILITIES

PPD will be responsible for the management of the landfarm.

Day to day management may be contracted to an environmental consultant or contractor, depending on the work required.

Field personnel from PPD, the consultant and the contractor or any of these in combination may fulfill the requirements of this plan.

5 SPILL CONTINGENCY PLAN

The objective of this contingency plan is to protect human health and the environment by minimizing the impacts of spills.

Fuel-impacted soils will be transported and stored at the Baker Lake landfarm.

No fuel or other hazardous materials will be stored on site. Vehicles and equipment will be fuelled in the Hamlet of Baker Lake or by fuel truck on site.

Transportation of impacted soil and/or fuels will comply with the *Transportation of Dangerous Goods Act* and associated regulations.

While spills are unlikely because of these measures, it is possible that they may occur because of human error during transfer, seepage from fittings or valves or equipment failure.

Daily equipment checks and preventive maintenance will identify damage to fuel truck systems and reduce the risk of spills or leaks.

If a spill occurs, protecting human health is the most important priority.

Once immediate risks to human health are assessed and found to be acceptable, the following steps will be taken to respond to a spill.

- The responder will assess spill hazards and risks.
- Responder will remove all sources of ignition.
- Responder will stop the spill where this is possible. For example, pumps will be shut off, holes will be patched, or leaking drums will be adjusted. Responder will use personal protective equipment from spill kit as required, including Tyvek suits and chemical gloves.
- Responder will contain the spill using the spill kit. This may mean hand excavation of trenches, placement of sorbent material, or using adsorbing socks to limit the movement of non-aqueous liquids.
- Contact the PPD project manager. In consultation with the PPD project manager, determine if the spill is required to be reported to the spills line.
- Complete required spills form and any other required submittals.

Key tactics for spill response:

On Land

- Do not flush into ditches or drainage systems.
- Block entry into waterways and contain with earth, snow or other barrier.

- Remove small spills with sorbent pads.
- On tundra use peat moss and leave in place to degrade, if practical.

On Snow and Ice

- Block entry into waterways and contain with snow or other barrier.
- Remove minor spills with sorbent pads and/or snow.
- Use ice augers and pump to recover diesel under ice.
- Slots in ice can be cut over slow moving water to contain oil.

On Water

- Contain spill as close to release point as possible.
- Use spill containment boom to concentrate slicks for recovery.
- On small spills, use sorbent pads to pick up contained oil.
- On larger spills, use skimmer on contained slicks.
- Do not deploy personnel and equipment onto mudflats or into wetlands

In general, spill cleanups will be initiated at the far end of the spill and contained moving toward the centre of the spill. Sorbent socks and pads will be used for smaller spills, while pumps and transfer hoses will be used for larger accumulations.

Hand tools such as cans, shovels, and rakes are also effective for small spills or hard to reach areas. Heavy equipment will be used if deemed necessary, and given space and time constraints. Used sorbent materials will be placed in plastic bags for future disposal.

Following clean up, any tools or equipment used will be properly washed and decontaminated, or replaced if this is not possible. Spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

Once a spill of reportable size has been contained, PPD will consult with the Government of Nunavut Department of Environment, Environment and Climate Change Canada, or other lead agency Inspector to assess the level of cleanup required. PPD understands that site-specific studies may be required.

6 NOTIFICATION AND REPORTING

The notification and reporting procedures for spills outlined below.

6.1 Report to Project Manager

The on-site staff (consultant/PPD/contractor) will notify the PPD project manager of any spill. If the spill is reported by a community member, the PPD project manager will be notified immediately. Key details of the discussion will include:

- Spill material,
- Volume,
- Areal extent of spill,
- Current status (e.g., contained, partly contained or not contained),
- Measures taken to mitigate the spill,
- Current site conditions.

6.2 Report to Spills Hotline

Spills greater than volumes outlined in Schedule B of the *Consolidation of Spill Contingency Planning And Reporting Regulations* under the *Environmental Protection Act* are required to be reported. For flammable liquids like gas and diesel, spill amounts requiring reporting are more than 100 L.

The PPD project manager will report the spill to the Spills Hotline (contact information provided in this plan). If the PPD project manager is otherwise unavailable, the on-site staff person will report the spill.

The following information should be provided to the hotline:

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

7 KEY CONTACTS

Key contacts and phone numbers are provided below.

Resource	Description	Phone	Email
Spills Hotline	Northwest Territories/Nunavut Spills reporting line.	(867) 920-8130	spills@gov.nt.ca
Project Manager	Sulaimon Ayilara, PPD Project Manager	867-645-8444	SAyilara2@gov.nu.ca
Fire Department	Baker Lake fire emergency phone number	867-793-2900	Not applicable
Emergency Contact	Baker Lake emergency phone number (non-fire)	867-793-1111	Not applicable
Environment Canada Enforcement	Curtis Didham, Ops Manager	867-222-1925	curtis.didham@ec.gc.ca
Crown-Indigenous Relations and Northern Affairs Canada – Water Resources	CIRNAC water resources manager	867-975-4550	andrew.keim@rcaanc-cirnac.gc.ca
Government of Nunavut Department of Environment	Director, Environmental Protection	(867) 975-7729	EnvironmentalProtection@gov.nu.ca
Baker Lake Hamlet Office	Sheldon Dorey, SAO	867-793-2874	sdorey@bakerlake.ca

8 REFERENCES

Government of Nunavut Department of Environment. Environmental Guideline for the Management of Contaminated Sites. December 2014. Link.

Government of Nunavut Department of Environment. Environmental Guideline, Spill Contingency Planning and Reporting Regulations. 2023. Link.

Spill Contingency Planning and Reporting Regulations, NWT Reg (Nu) 068-93. Link.

Water Resources Division, Indian and Northern Affairs Canada. Guidelines for Spill Contingency Planning. April 2007. Link.

FIGURE

SPILL REPORTING FORM