Pelly Lake Remediation Project

Winter Trail Spill Response Plan

1. Purpose

The purpose of this spill response plan it to outline ways to prevent, respond, and report spills during the transportation of materials along the winter trail. The plan will apply to all employees, and subcontractors involved in the loading, transporting, unloading and staging of materials from the Pelly Lake jobsite.

2. Definitions

Reportable Spill: is a discharge into the natural environment, from or out of a structure, vehicle, or other container, that may cause, is causing or has caused an adverse effect and/or that is in excess of an amount, concentration, level or rate of release expressly authorized by an approval or the regulations or be a danger to public safety. In more general terms, a spill is essentially any accidental, abnormal, or inadvertent release of a pollutant discharged into the natural environment from or out of a man-made container.

Non-Reportable Spill: Non-reportable spills include spills that occur indoors, that are contained by impervious surfaces; spills that do not release to the outdoors (to air, water, ground) and do not reach a waterbody and do not have the potential to cause an adverse effect. Note: Reporting to external agencies is not required.

Natural environment: means the air, land and water or any combination or part thereof.

Contaminant: means any solid, liquid, gas, odour, heat, sound, vibration, radiation, or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect.

Pollutant: means a contaminant of any solid, liquid, gas, or odour other than heat, sound, vibration, or radiation, and includes any substance from which a pollutant is derived.

Adverse effect: means one or more of,

a) Damage to the natural environment, hindering its use;
b) injury or damage to property or to plant or animal life;
c) harm or material discomfort to any person;
d) an adverse effect on the health of any person;
e) impairment of the safety of any person;
f) rendering any property or plant or animal life unfit for use by man;
g) loss of enjoyment of normal use of property; and
h) interference with the normal conduct of business.

3. Roles and Responsibilities

3.1 Project Manager

- Ensure adequate equipment, materials, and PPE are supplied and ensure they are maintained in good condition.
- approve Winter trail spill response and emergency plans that consider workplace hazards including materials storage and handling, spill prevention and preparation etc.
- Review safe work procedures for the site.
- Ensure the Project team has been notified of all spills with as much detail as possible.
- Assist in notification to external agencies if required.
- If the spill meets the definition of reportable spills, ensure to notify the Project Team as soon as possible
- Ensure all spills are investigated and that corrective and preventative actions are implemented to prevent future occurrences

3.2 Superintendent

- Ensure crews have adequate equipment, materials and PPE and it is in good condition.
- Review and practice site spill response plans.
- Review safe operations procedures for the site.
- Ensure the Project team has been notified of all spills and assist with gathering information surrounding the circumstance as needed.
- Assist the Project team in determining if notification to external agencies is required.
- If the spill meets the definition of reportable spills, ensure to notify the Project team as soon as possible.
- Assist in the investigation determining cause, corrective and preventative actions

3.3 Site Personnel

- Work safely in accordance with corporate Health and Safety Policies and Program.
- Participate in spill training including general response procedures and notification requirements.
- Follow instructions and training provided by the employer.
- Personnel, and their supervisors, will be trained in techniques to effectively contain a spill.
- Notify their Supervisor as reasonably as practicable upon causing or discovering a spill.
- Assist in the spill response containment and clean up.

4. Spill Risk Assessment

4.1 Materials Transported

- Contaminated Materials and Equipment from the Pelly Lake Remediation Site
- Hydrocarbons, and Lead impacted materials

4.2 Potential Spill Sources

- Leaking bags, tarps
- Hydraulic or fuel system failures
- Improperly loaded or secured material

4.3 Environmental Sensitivities

- Frozen lakes and waterways
- Snow- and ice-covered terrain
- Remote tundra environment

5. Spill Prevention Measures

- All loads shall be secured using sealed containment or tarped
- Pre trip inspections to be conducted and documented
- Secondary containment used during fueling
- No fueling permitted on lakes, near waterways, or within environmentally sensitive areas (refer to PEL SOP)
- GPS tracking used to confirm routing and compliance with fueling restrictions (refer to PEL SOP, “refuelling only be performed on land”)

6. Spill Response Equipment

- All fuel is stored in secondary containment
- Spill response equipment materials will be located in each vehicle and at the caboose.

The kits include:

- Hydrophobic absorbent spill pads (used for hydrocarbons)
- Hydrophilic absorbent spill pads (used for water-based spills)
- Land and water booms
- Spill pool
- Sphagsorb or floor absorbent
- Garbage bags
- Drums with lids for waste containment
- PPE (Rubber gloves, protective goggles, protective splash units, dust masks)

7. Spill Response Procedure

The immediate priority in the event of a spill is to ensure the safety of any personnel in the immediate vicinity followed by minimizing the potential impact to the environment. The implementation of spill containment measures, cleanup and remediation will only be undertaken if safe to do so.

General Steps for a Spill Response Procedure:

1. **Stand back**
2. **Assess the hazards**
3. **Get help**
4. **Prepare action steps**
5. **Get appropriate equipment**
6. **Contain the spill**
7. **Clean up the spill**
8. **Post spill action**

The priority sequence for spill response is as follows:

Before responding to any spill, it is important to first **STOP** and **THINK!**

1. **Stand Back**
   - Ensure your own safety. Don't rush in!
   - Ensure the safety of nearby personnel.
   - Notify others of the event.
   - Survey the scene from a safe distance.

2. **Assess the Hazards**
   - Survey the scene for all hazards.
   - Anyone in danger?
   - Is the spill worsening?
   - Identify the spilled material (if unknown, call for external help).

3. **Get Help**
   - Notify your supervisor and/or incident commander.
   - Ensure the superintendent, HSE department and Project Manager have been notified.
   - Provide basic information of spill – What, Who, Where, When and How.
   - Request additional staff, if required.
   - Call HSE Department for safety and technical information.
   - If the spill containment and clean-up is beyond the capabilities of the site crew, call for external assistance, as required.
   - Ensure the Regional Manager has been notified so the following can be put into action:
     - Determine if calling the Provincial Spill Line is required.

- The Regional Manager, or designate, will report the spill to the appropriate provincial agencies.
- Determine notification requirements to others such as, the municipality, the owner of the pollutant, client or any others that may be directly affected by the spill.

4. **Prepare Spill Response Plan**
   - Identify hazards and assess the risks.
   - Review the spill clean-up procedures recommended on the SDS.
   - Determine appropriate controls.
   - Establish isolation and zone delineation.
   - Strategies for containment and clean-up.
   - Determine the required personnel.
   - Decide on the adequate tools and supplies.
   - Determine the appropriate PPE for each level of responders and work zones.
   - Figure out waste staging and disposal methods.

5. **Get appropriate equipment.**
   - Locate the nearest Spill Kit and evaluate the contents.
   - Ensure you have the right PPE.
   - Ensure to have the appropriate spill absorbent and/or neutralizer.
   - Get the best suited tools for the job.
   - Do you need to get outside tools/equipment i.e. vacuum truck or other heavy equipment?
   - Attain the appropriate disposal containers.

   ❖ **IF SAFE TO DO SO and as soon as possible:**
   - **Stop the flow** (Close valves, shut off pumps and plug holes or leaks).
   - **Remove all ignition sources.**
   - **If anyone is injured or contaminated**
     - Do not rush in to get a victim. Ensure your own safety first.
     - Get help, use the buddy system.
     - Don the appropriate PPE.
     - Set up decontamination for the victim.
     - Refer to SDS for first aid instructions.

6. **Contain the Spill**
   - Ensure the decontamination area is set up prior to this step.
   - Isolate the area so that no one accidentally enters the contaminated area by: closing doors; positioning workers to warn others; danger tape; signs or any other reasonable method.
   - Ensure the spill flow has been stopped.
   - Increase the ventilation within the spill area, if indoors. Open exterior door/windows.

- Block off and protect drains, sumps, culverts, or other areas where the material may escape but are not designed for spill management. Spill socks and absorbents may be placed around drains and sumps, and/or rubberized drain mats on top of grates, as needed.
- Use dykes, berms, trenches, ditches or sorbent material from spill kits to control the movement of the spilled material.
- Avoid stepping into the spill and limit exposure to your PPE.
- Apply barriers, dilution and neutralizing agents.

7. Clean up the Spill

- Be systematic in the clean-up method.
    - Horizontal spills – work from leading edge of spill back to the source
    - Vertical spills- clean from top of spill to grade
- Use a shovel to collect impacted snow into sealable drums.
- When using absorbent and neutralizing materials allow adequate time for the materials to absorb and react.
- Always work from the perimeter to the center of the spill when placing sorbent pads and granular materials. This reduces the chance of splashing or spreading of the spilled material.
- When the spill has been absorbed, collect all the absorbent materials and place them in a disposal container, such as polyethylene bags, pails, or drums with polyethylene liners for larger quantities. Ensure to clean up the residue using tools or cleaning products best suited.

8. Post Spill Actions

- Decontaminate as needed.
- Dispose of consumable spill clean-up materials and PPE in the appropriate container.
- Label waste containers and stage waste properly.
- Decontaminate tools, equipment, and PPE to be reused.
- Restock spill kits.
- Conduct an incident investigation and determine corrective and preventative actions.
- Complete the Spill Incident Form and submit it to the HSE Department.
- Follow up with any Provincial Ministry and/or Municipality after spill report requirements.

Spill Response Kits/Equipment

Spill kits will be available on all Milestone sites and in vehicles. Spill kits will contain booms, sorbent materials, shovels and PPE, and fire extinguishers will be in close proximity to assist in responding to a possible spill incident involving flammable materials.

Spill kits will also contain an inventory sheet to assist with monthly inspections and the replenishment of spent supplies and equipment. The site supervisor is to ensure as a minimum, monthly inspections are completed and responsible for ensuring kits are replenished as required.

8. Spill Reporting

- The person responsible for or who discovers the release shall immediately contact the supervisor or Incident Commander.

- The supervisor will gather as much information as possible and provide the information to the Project Team (General Superintendent, HSE, Project Manager)
- If external reporting is required to regulatory agency, HSE will assist the superintendent with completing the verbal notification of a spill required information form (MEHS 253-1) Also found in appendix 1 of this document.
- The superintendent will then provide the information on the form to be provided and delivered to the appropriate authority.
- The initial report can then be followed up with subsequent reports once the previously unknown information becomes available.

Appendix 1

Initial/Verbal Ministry Spill Notification Required Information Form

Initial/Verbal Ministry Notification of a Spill Required Information Form

When required, prior to calling your regional Ministry, please complete this form. You will be asked to provide this information. In addition to contacting your regional representative the spill must also be immediately reported to: the local municipality, the owner of the substance (if known), the person in control of the substance (if known)

Caller's name, phone number and position:

_____

Name and phone number of the person or company in control of the product spilled:

_____

Spill location:

_____

Date/Time spill occurred/discovered:

_____

Duration of the spill (if known) and whether the spill is ongoing:

_____

What spilled and how much, including hazard level or toxicity information (see SDS)

_____

_____

Source of the spill and information on the cause:

_____

_____

Description of adverse effects that occurred or may occur: (explanation 1. on reverse)

_____

_____

Environmental conditions that affect the spill (explanation 2. on reverse)

_____

_____

What actions have been taken to respond:

_____

_____

What actions are being taken now:

_____

_____

What actions are planned to take place:

_____

_____

Are there other agencies and parties responding:

_____

Names of any provincial, federal, local and/or First Nations agencies at the spill or contacted:

_____

Guidance for Completing the Form

When to call

A spill must be reported forthwith when the pollutant

- Has entered the natural environment,
- Leaked from or out of a structure, vehicle or other container and,
- Is abnormal in quality or quantity in light of all the circumstances.

All three of these combined will define a Ministry reportable spill. For example: a small oil spill in a parking lot on a dry day, contained, absorbed and cleaned up is not reportable but on a rainy day where the oil goes down a drain or sewer, it is reportable.

Definitions

"Forthwith" means "immediately when the person knows or ought to know that the pollutant is spilled" (s.92(2) of the EPA) but this does not mean that the spill needs to be reported immediately. Forthwith should be taken to mean without undue delay, that is, as soon as possible. Reasonable delay may include setting in motion mitigative measures such as initial efforts to stop or contain the spill, the notification of first responders and potentially affected parties, and the gathering, without pause, of information critical to the Ministry's understanding and assessment of the event. This allows for the completion of this reporting form to ensure you have "all your ducks in a row" prior to notifying the Ministry.

It is strongly suggested that the first call to the Ministry be made as quickly as possible under the circumstances, even if only preliminary or sketchy details are initially available. The information on the report form is to be provided "to the best of the person's knowledge". Additional information about the spill then must be reported as more details of the event become available.

"Adverse Effects" means one or more of:

a) Damage to the natural environment, hindering its use;
b) injury or damage to property or to plant or animal life;
c) harm or material discomfort to any person;
d) an adverse effect on the health of any person;
e) impairment of the safety of any person;
f) rendering any property or plant or animal life unfit for use by man;
g) loss of enjoyment of normal use of property; and
h) interference with the normal conduct of business.

"owner of the pollutant" means the owner of the pollutant immediately before the first discharge of the pollutant. Example could be a fuel delivery truck, the name on the side of the door is the owner.

"person having control of a pollutant" means the person and the person's employee having the charge, management or control of a pollutant immediately before the first discharge of the pollutant. If we are refueling equipment and it overflows, we would be the person having control of a pollutant.

"pollutant" means a contaminant any solid, liquid, gas or odour other than heat, sound, vibration or radiation, and includes any substance from which a pollutant is derived.

Explanations

1. Description of adverse effects that occurred or may occur: examples of these effects may include any personal or public safety or health threats, potential impacts to well or water intakes, impacts to private property offsite from the spill location, impacts to fish and wildlife habitat or flood plain areas, other environmental impacts.
2. Environmental conditions that affect the spill: examples may include weather, traffic, surface water and groundwater conditions, windspeed and direction for spills to air, and precipitation may aggravate spills to land, etc.
3. Last four questions: the Ministry will want to know what have you done, what are you doing and what are you going to do. Including disposal of waste generated due to the spill such as contaminated soil, clean up materials and PPE etc.

Appendix 2

Authority Responsible for Environmental Emergency Notifications and Their Requirements

Northwest Territories and Nunavut

NWT and Nunavut Spill Reporting Requirements

How to report: You must immediately report a spill to the 24-Hour Spill Report Line: **Call 867.920.8130** (collect calls are accepted).

When to report: Where a discharge of a contaminant into the environment in contravention of the Act or the regulations or the provisions of a permit or license issued under the Act or the regulations occurs or a reasonable likelihood of such a discharge exists, every person causing or contributing to the discharge or increasing the likelihood of such a discharge, and the owner or the person in charge, management or control of the contaminant before its discharge or likely discharge, shall immediately report the discharge or likely discharge to the person or office designated by the regulations.

Who to report: The owner or person in charge, management or control of contaminants at the time a spill occurs shall immediately report the spill.

- Where the spill is of an amount equal to or greater than the amount set out in Schedule B.
- Where there is a reasonable likelihood of a spill in an amount equal to or greater than the amount set out in Schedule B, the owner or person in charge, management or control of the contaminants shall immediately report the potential spill.

What to Report: Initial/Verbal Report required information: A person reporting a spill shall give as much of the following information as possible:

- date and time of spill;
- location of spill;
- direction spill is moving;
- name and phone number of a contact person close to the location of spill;
- type of contaminant spilled and quantity spilled;
- cause of spill;
- whether spill is continuing or has stopped;
- description of existing contaminant;
- action taken to contain, recover, clean-up and dispose of spilled contaminant;
- name, address and phone number of person reporting spill; and
- name of owner or person in charge, management or control of contaminants at time of spill.

Applicable Legislation:

- **The Spill Contingency Planning and Reporting Regs.**
- **Sec. 5 of The Environmental Protection Act**

SCHEDULE B – NT and Nunavut

Item No.	TDGA Class	Description of Contaminant	Amount Spilled
1	1	Explosives	Any amount
2	2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L
3	2.2	Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
4	2.3	Compressed gas (toxic)	Any amount
5	2.4	Compressed gas (corrosive)	Any amount
6	3.1, 3.2, 3.3	Flammable liquid	100 L
7	4.1	Flammable solid	25 kg
8	4.2	Spontaneously combustible solids	25 kg
9	4.3	Water reactant solids	25 kg
10	5.1	Oxidizing substances	50 L or 50 kg
11	5.2	Organic Peroxides	1 L or 1 kg
12	6.1	Poisonous substances	5 L or 5 kg
13	6.2	Infectious substances	Any amount
14	7	Radioactive	Any amount
15	8	Corrosive substances	5 L or 5 kg
16	9.1 (in Part)	Miscellaneous products or substances excluding PCB mixtures	50 L or 50 kg
17	9.2	Environmentally hazardous	1 L or 1 kg
18	9.3	Dangerous wastes	5 L or 5 kg
19	9.1 (in Part)	PCB mixtures or 5 or mores parts per million	0.5 L or 0.5 kg
20	NONE	Other contaminants	100 L or 100 kg
21	3.1, 3.2, 3.3	Flammable Liquid Vehicle Fluid	20L When released on a frozen water body that is being used as a working surface

In addition, all releases of harmful substances, regardless of quantity, are to be reported to the NT spill line if the release is near or into a water body, is near or into a designated sensitive environment or sensitive wildlife habitat, poses imminent threat to human health or safety, poses imminent threat to a listed species at risk or its critical habitat, or is uncontrollable.