OIL POLLUTION EMERGENCY PLAN

FOR LAND SPILLS

EUREKA

Latitude 80° 00'N and Longitude 85° 56'W

Prepared by

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Prepared for:

Environment Canada
Atmospheric Environment Branch
Winnipeg, Manitoba

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FOR LAND BASED SPILLS

EUREKA

1 INITIAL RESPONSE TO AN OIL POLLUTION INCIDENT

The following is meant to be a checklist of activities to be followed in the event of an oil pollution incident at the Facility.

	Activities	**Responsibilities**
	Shut off flow/stop leak	Station OIC
2.	Assess the safety and take action to secure the site	Station OIC
3.	Notify Region	Station OIC
4.	Notify regulatory authorities	AEB Reg. Mgr.
5.	For a larger spill, request assistance	AEB Reg. Mgr.
6.	Arrange for public relations	AEB Reg. Mgr.
7.	Arrange for legal advice if required	AEB Reg. Mgr.

EMERGENCY TELEPHONE NUMBERS

The Spill Line	(867) 920-8130
Govt. Of Nunavut Dept. Of Sustainable Development	(867) 975-5909
Environment Canada (Emergency) Yellowknife	(867) 669-4725
Arctic Region Environmental Emergency Team (AREET) (8:00AM to 5:00PM)	(867) 669-4700

*******TO BE POSTED*******

2. PLAN MAINTENANCE

The Officer in Charge (OIC) is responsible for the distribution, maintenance and update of the Facility's Oil Pollution Emergency Plan (OPEP). This OPEP will be updated;

(a) annually, taking into account changes in the law, in environmental factors and in Facility characteristics and policy, and

(b) after every oil pollution incident and exercise

Changes in phone numbers, names of individuals etc. That do not affect the intent of the plan are to be made on a regular basis. Plan updates in accordance with the above, along with a control page, will be issued as per the OPEP distribution list. After adding new and/or removing obsolete pages, the OPEP holder will complete the following control page.

3. PLAN CONTROL PAGE

On receipt of revisions and/or amendments, the Plan holder will complete this Control Page to ensure that the Plan is always current.

Revision Number	Date Inserted	Description/Purpose	Signature

4. PLAN DISTRIBUTION

4.1 Issued to:

Environment Canada - AEB Eureka

Environment Canada – Regional H.Q. Winnipeg

Environment Canada – National H.Q. Ottawa

Department of Sustainable Development-Govt. Of Nunavut

5. INTRODUCTION

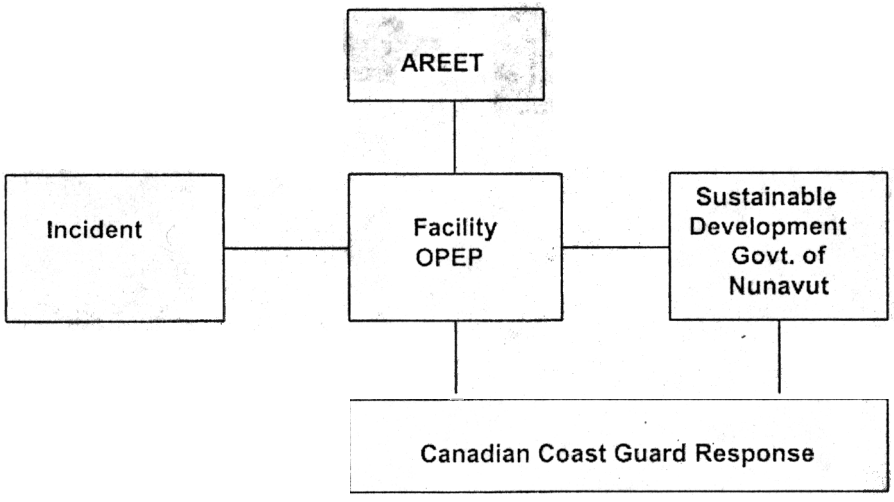
This plan is unique to the Environment Canada, Atmospheric Environment Branch Weather Station at Eureka in the Nunavut Territory (Lat: 80°00' N., Long: 85°56'W.).

The Canadian Coast Guard (CCG) will be responsible for any spills that may occur on water during re-supply. Consequently, this plan deals specifically with the preparation and response to a spill on land that could occur during the handling or use of hydrocarbon products. Since the Facility handles volatile products such as diesel fuels, gasoline and lubricants a response to Oil Pollution Incidents (OPI) will be developed for these product groups. If, in the future, other products are handled, the Plan will be amended and resubmitted to the regulatory agencies concerned. This Oil Pollution Emergency Plan (OPEP) is not intended to replace or supersede Emergency Response Plans currently in place, but to provide specific guidance on procedures, training and response for land based spills. This plan will demonstrate to the regulatory agencies that the Facility has an effective response capability.

This plan is meant to be a working document for use by the Facility. The fundamental basis for planning will be established utilizing the development of scenarios for each class of product handled at the Facility. These scenarios are exhibited in Appendix "A".

5.1 Relationship between the Facility OPEP and Other Plans

The Facility recognizes that there are other plans or organizations that must be integrated into any response. The following chart outlines this relationship.



5.2 Sensitivity Identification

Environmental Sensitivities for the purpose of this plan are defined as follows:

Environmentally Sensitive areas are defined as areas containing natural, cultural or manmade features, which may be threatened during an oil spill. These features may represent socio-economic value (either through resource extraction or non-consumptive use of resources) and/or life support value (e.g. productive habitat).

Sensitive areas may include; threatened, vulnerable or endangered species or their habitat; areas of concentration of species; areas of cultural significance (e.g. archaeological sites); areas of socio-economic significance (e.g. marinas, recreation sites, water intakes); and, shoreline habitats sensitive to oil (e.g. marshes).

5.2.1 Environment Canada Responsibility

It is understood that Environment Canada is responsible for:

Identifying sensitivities

Developing a consistent mapping format for environmental sensitivities

- Providing relevant and up-to-date information on environmental sensitivities.

5.2.2 Facility Responsibility

The Facility will only be responsible for identifying and addressing the sensitivities in the immediate area around the facility that could be impacted by an operational spill. This is best done by relying on the knowledge of the Officer in Charge (OIC) of the facility.

5.3 Site Setting and Conditions

The following outlines the site setting, sensitivities in the immediate area and meteorological conditions that might impact on a spill response:

Site setting - Eureka is subject to very harsh weather conditions, long periods of darkness and isolation.

Sensitivities in the immediate area – The land area is predominately sedimentary sand and gravel over perma-frost and is snow and ice covered for the major portion of the year.

Wildlife are prevalent and seasonally include Arctic Wolf, Arctic Fox, Arctic Hare and Polar Bear.

Meteorological conditions – The prevailing meteorological conditions in Eureka are:

Wind – the prevailing wind is from the westerly direction during late summer and easterly for the remainder of the year.

Temperatures – Well below freezing for the majority of the year (Sept. – July)

Snow cover – snow is present for 9-10 months of the year.

Ice – Ice conditions are such that only an icebreaker can perform the annual re-supply. This is done usually in August or September.

5.4 Departmental Policies and Philosophies

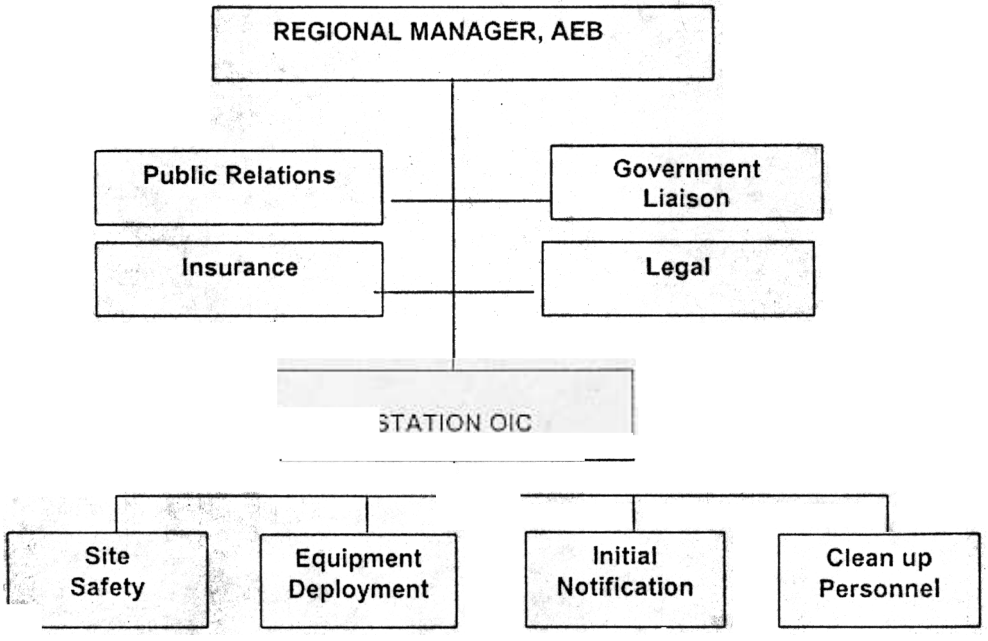
Working as it does with products that in the event of an OPI could cause damage to the environment, the Facility is acutely aware of its responsibility to protect and conserve the environment. The Facility firmly believes that the first line of defence in the protection of the environment must be the prevention of any accidental escape of any contaminant. To this end, operating procedures are regularly updated and staff are continuously trained to ensure a safe and environmentally sound operation.

To ensure safe handling and use of oil products the appropriate Material Safety Data Sheets (MSDS's) are posted, health and safety programs are stressed and personnel are made aware of the Department's concern in ensuring a clean, safe working environment for its employees.

6. RESPONSE ORGANIZATION

Functional Organization

The following represents a functional organization chart for responding to an operational Oil Pollution Incident (OPI). Depending upon the size of the OPI, it may be possible for one person to fulfill several functions.



Escalation

In the event that the OPI cannot be handled internally, then the Regional Manager, Atmospheric Environment Branch will call out Dept. Of Sustainable Development (DSD) to provide the appropriate expertise to deal with a large OPI at the Facility. The Facility will use best efforts to contain and control the OPI by deploying its equipment in the immediate area. However, once DSD arrives on site, it will utilize any equipment currently deployed.

7. ROLES AND RESPONSIBILITIES

7.1 Station Officer In Charge

This person is in charge of all operations at the facility. The Station Officer In Charge (OIC) has the appropriate training and directs clean-up operations in the event of a spill. He/she is also responsible for site safety and notification of management.

7.2 Regional Manager, Atmospheric Environment Branch

Once the Regional Manager has been notified, it will be his/her responsibility to handle the appropriate public relations, insurance and legal situations, as well as ongoing liaison with other Government Departments and Governments.

In the event that the OPI is larger than can be handled by the Facility, the Regional Manager will call out Department of Sustainable Development (DSD).

8. LEGAL IMPLICATIONS

8.1 Legal

In the case of a major Oil Pollution Incident (OPI) involving potentially large expenditures for cleanup costs and contentious claims from third parties, specialized legal counsel must be consulted.

Arranging legal counsel will be the responsibility of the Regional Manager, Atmospheric Environment Branch, Winnipeg.

9. RESPONSE ACTIVITIES

Background

The Facility handles diesel fuels in bulk and various other drummed fuels such as avgas, gasoline and hydraulic fluids. The Facility personnel are familiar with the hazards associated with the products they are handling and have on hand, the appropriate Material Safety Data Sheets.

Possible Oil Spill Situations

The tank farm at Eureka is relatively new and well maintained (built early 90's). Bulk storage is for diesel fuel only and is delivered annually by Canadian Coast Guard Icebreaker. The Canadian Coast Guard have agreed to respond to any spills into the Fiord during re-supply. The concern for a land spill would be from the 4" supply line, which runs from the shore of Slidre Fiord, uphill to the tank farm. The land slopes away from the line to a small creek that supplies the Camp's potable water. The plan to prevent this possibility is simply to ensure the supply line never has fuel in it except during re-supply. Valves at the tank farm should be checked regularly to ensure they are closed and the line is not "charged".

The second possible situation is that of moving and/or positioning fuel drums. The possibility of fork truck punctures, dropped drums and leakage is magnified during handling. Oil spill response equipment should be readily at hand during all fuel drum operations to guarantee rapid response to a spill/leak.

Preparation

Prior to the reception/delivery of drummed fuels the environmental response equipment must be verified as readily available for immediate deployment if needed.

Inventory the environmental response equipment.

Product Knowledge

The Facility ensures that the necessary Material Safety Data Sheets (MSDS's) and personnel understand the properties of the products being handled at the Facility. For purposes of this section, it can be divided into response strategies for the following products.

- Products with a flashpoint less than 38 degrees C (Gasoline)
- Products with a flashpoint greater than 38 degrees C (Furnace oil, Diesel fuel, most Jet fuels)

9.4.1 Response Strategy for Products with a Flashpoint less than 38°C (Gasoline)

If an Oil Pollution Incident (OPI) involves products with a flashpoint of less than 38° C, under no circumstances attempt to contain or control the product if the spill is on water. The concentration of the vapours from the product has the potential for the development of an explosive vapour and air mixture. It is usually better not to confine such volatile products but to let them spread which will aid in their rapid evaporation. Therefore the response to gasoline and other low flashpoint (less than 38°C) products is as follows:

A) Stop the Flow. When a spill is first noticed apply a drum tourniquet to the leaking drum.

B) Place the damaged drum in a containment berm or overpack drum for safe decanting.

C) Secure the area. Shut off all vehicles, pumps etc. in the area. If a vehicle is within the area and not running, do not attempt to start it. Ensure all other potential sources of ignition are turned off.

D) In the event of a larger spill, the vapour plume will move in the same direction as the wind. Ensure that the personnel understands the potential hazards, the direction of and approximate speed the plume is moving so that appropriate, continuous safety measures may be maintained until the crisis has passed.

E) Maintain constant surveillance to ensure safety is strictly followed.

F) Do not attempt to recover product from the water.

Figure 9.4.1. (a) provides a decision tree for determining the response strategy for Low Flashpoint products.

9.4.2 Response Strategy for Products with a Flashpoint greater than 38 C (Diesel)

A) Stop the Flow when a spill is first noticed apply a drum touniquet to the leaking drum. Place the leaking drum in a containment berm or overpack drum for decanting.