B) 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.

C) The vapour plume will move in the direction of the wind. Ensure that Personnel, understand the potential hazards, the direction of flow and the approximate speed the plume is moving so that appropriate safety precautions can be put in place.

D) Maintain constant surveillance to ensure safety is strictly followed:

Shutdown transfer operation and secure the site.

Commence removal of the bulk of the product using response equipment on site.

Sensitivity Protection

In the event a land based spill which might pose a threat to the bird or animal life in the area, the following steps must be undertaken:

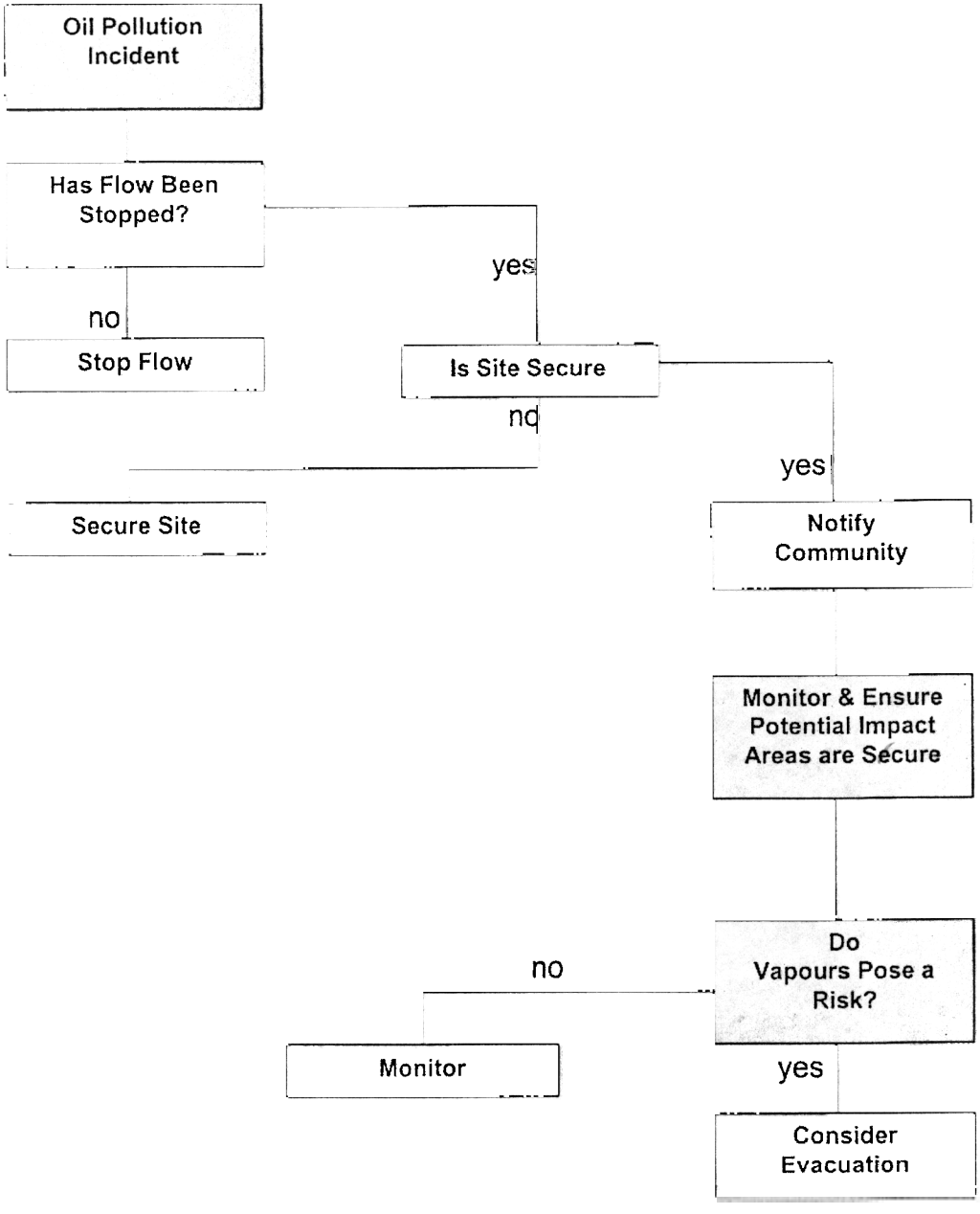
Implement hazing to scare any birds in the area

Understand the various sensitivities and know where to get the appropriate advice on treatment.

Escalation

In the event that the OPI is larger than can be reasonably handled by the Facility, the Regional Manager, Atmospheric Environment Branch will escalate the response by notifying the Department of Sustainable Development (DSD) to provide the necessary backup. The Facility will keep its containment equipment in place and do the best it can to recover the product as an ongoing activity until the DSD arrives on site. At this point, the Facility will assist the DSD as required.

Figure 9.4.1 (a)


Oil Pollution Incident
Has Flow Been Stopped?
yes
no
Stop Flow
Is Site Secure
no
yes
Secure Site
Notify Community
Monitor & Ensure Potential Impact Areas are Secure
Do Vapours Pose a Risk?
no
Monitor
yes
Consider Evacuation

10. REPORTING

10.1 Government Reporting

In any incident involving loss of product through discharge there is a requirement to report the incident to the following government agencies using the attached form "N.W.T. Spill Report".

10.2 Government Agencies

Spill Line (Yellowknife)	(867) 920-8130
Environment Canada Environmental Emergencies Centre Yellowknife	(867) 669-4725
Arctic Region Environmental Emergency Team (AREET)	(867) 669-4700
Department of Indian Affairs And Northern Development Yellowknife	(867) 920-8240
Department of Sustainable Development Government of Nunavut Brown Bldg., 3rd Floor Iqaluit, NT X0A 0H0	(867) 975-5909

10.3 Internal Reporting

Following an Oil Pollution Incident (OPI) and the immediate actions taken to stop the leak and assess site safety, the Station Officer In Charge (OIC) will advise the Regional Manager of the OPI and status of containment and cleanup. Regular updates of the incident should be established with the Regional Manager until the cleanup is completed.

Northwest Territories

NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 – Hour Report Line
Phone: (867) 920-8130
Fax: (867) 873-6924

A Report Date and Time	B Date and Time of spill (if known)	C ☐ Original Report ☐ Update no._____	Spill Number

D Location and map coordinates (if known) and direction (if moving)

E Partly responsible for spill

F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible)

G Cause of spill

H Is spill terminated? ☐ yes ☐ no	I If spill is continuing, give estimated rate	J Is further spillage possible? ☐ yes ☐ no	K Extent of contaminated area (in square meters if possible)

L Factors effecting spill or recovery (weather conditions, terrain, snow cover, etc.)	M Containment (natural depression, dikes, etc.)

N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials

O Do you require assistance? ☐ no ☐ yes, describe:	P Possible hazards to person, property, or environment; eg: fire, drink water, fish or wildlife

Q Comments or recommendations

FOR SPILL LINE USE ONLY

Lead agency

Spill significance

Lead Agency contact and time

.....

.....

.....

Is this file now closed? ☐ yes ☐ no

Reported by	Position. Employer, Location	Telephone
Reported to	Position. Employer, Location	Telephone

Northwest Territories

N.W.T. SPILL REPORT (Oil, Gas, Hazardous Chemicals or other Materials)

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24-Hour Report Line

Phone/ᐅᖃᒃᑲᓐᓂᑦ (403) 920-8130

Fax/ᓱᒃᑕᐅᓐᓂᑦ (403) 873-6924

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B Date and time of spill (if known)
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E Party responsible
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Lead Agency contact and time
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Is this file now closed? ☐ yes/ᐃ
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11. HEALTH AND SAFETY

Introduction

The Facility firmly believes that the health and safety of its employees, contractors and the general public is of utmost importance. The Facility has a program in place to comply with applicable health and safety requirements.

Site Control

In the event of an Oil Pollution Incident (OPI), an immediate assessment will be made to ensure that the site is secure. OPIs can attract curious onlookers, and the Facility must be controlled in such a way as to ensure that they are kept well outside any hazardous-area zone. Only those directly involved in the containment, control or cleanup of the OPI should be allowed in the general vicinity of the spilled product.

1. **Fires:**
   There will be at least two fully charged 20lbs. Class ABC fire extinguishers and a hand-held horn to alert personnel. This is an integral part of the response equipment.

2. **Slippery rocks, decks or other wet surfaces:**
   All persons working on shoreline treatment, must wear oil-resistant rubber, steel-toed safety boots with textured bottoms while working on a cleanup site.

3. **Work on or near water:**

   All persons working on docks, piers, jetties or in close proximity to the water must wear the appropriate Personal Flotation Devices (PFDs). Persons working on shore near water do not have to wear PFDs unless they are actually working over the water.

4. **High noise exposure:**

   Hearing protection must be worn by all personnel when operating equipment or machinery or when in areas where noise levels require personnel to raise their voices to be heard.

5. **Buddy System:**

   A buddy system must be observed at all times when workers are in the work area or working on vessels. Persons must work within sight of their assigned partner (buddy) at all times

6. **Personal Protective Equipment (PPE) requirements:**

   a) Selection of outer PPE will be based on the potential for whole body contact with the product. A potential for repeated contact will require rain gear (top/bottoms). Clothing will be kept fully zippered when handling those materials. Supervising personnel may authorize the removal of suit tops if there is no potential for upper body contact,

   b) Personnel with high body-contact potential will tape gloves and Boots,

   c) Personnel with limited skin contact potential may wear disposable clean guard garments or equivalent. Personnel with no exposure potential (inspectors, monitors etc.) need not wear protective clothing,

d) All personnel on shore cleaning operations will wear safety glasses (regular glasses will be satisfactory),

e) Personnel handling contaminated materials will wear outer chemical resistant gloves. Sleeves will be taped whenever handling heavily contaminated wet materials.

Protection of Personnel

Any significant spillage of volatile product may cause a significant threat to personnel if the vapour plume approaches a populated area. Based on the wind direction a determination of the potential area of impact will be made and personnel notified of any potential hazard.

Decontamination

Adjacent to, or near the OPI zone, decontamination stations will be established. The decontamination stations will be laid out so that personnel will pass through the station prior to leaving the contaminated area. The decontamination stations may be bermed and lined with plastic sheeting. Washing solutions may be placed near the "OPI Zone". All solutions in tubs will be clearly marked.

12. RESPONSE PREPAREDNESS

12.1 Introduction

Response preparedness includes ensuring that employees are properly trained in Oil Pollution Incident (OPI) response, containment and control and have a clear understanding of what their mandate is in the event of an OPI. This mandate should be clearly communicated to the employees and endorsed by senior management.

12.2 Responder Training

The success of any OPI response depends on a clear mandate as to expectations and adequately trained personnel. The level of training has to be tailored to the functions to be performed and the skills of the individual. In the case of the Facility, it provides specific training to the Facility employees. It is assumed that when the Department of Sustainable Development (DSD) is called in, its employees and contractors are adequately trained.

12.3 Basic Oil Spill Response Training

This program is directed towards the Facility employees and provides training in fundamental OPI response and safety. The course entitled "Oil Spill Containment and Clean up Techniques" is a videotape training session available from:

Government of the Northwest Territories
Renewable Resources, Wildlife and Economic Development (RWED)
Yellowknife, NWT

The frequency and complexity of training depends on the number of personnel that could be involved in an OPI response situation. Also, the amount

of training depends on how well the employees have learned the system and whether or not modifications to the OPI response system are needed, which would call for retraining. In this case the Facility personnel will receive initial training with an annual refresher.

A summary of Oil Spill Response Training received by the Facility employees is found in Appendix "C".

12.4 Exercise Programs

Exercise is a demonstration of capability. After the employees have been appropriately trained in response techniques, the following indicates the frequency and type of exercise.

Frequency	Type
Yearly	Paper exercise involving notification/verification of internal contacts and external contacts including the Canadian Coast Guard (CCG).
Tri-annually	Every third year there will be an equipment deployment at the Facility utilizing the Facility personnel. Where possible DSD will be invited to observe the exercise. Each exercise will be evaluated and a process put in place to review and implement those recommendations that are viable.

APPENDIX "A"
SPILL SCENARIOS

Introduction

The scenarios are used to indicate the response to a hypothetical Oil Pollution Incident (OPI) during the loading/unloading and handling of product at the Facility. It will demonstrate that effective containment and controls, can be achieved and that appropriate resources can be deployed within a specified time-frame to implement cleanup.

OPI Size

The OPI discharge size, for planning purposes is 1-2 barrels.

Product Types

This Facility handles gasoline and middle distillates. For the purpose of developing scenarios, these products have been categorized as follows:

1. Products with a flashpoint less than 38°C (Gasoline)
2. Products with a flashpoint above 38° C (middle distillate – Diesel and Jet Fuel)

Conditions:

Snow and ice conditions prevail for most of the year with long periods of darkness (Oct.-Apr.) The prevailing winds are Easterly from Sept. to July and Westerly during Aug. and Sept.

APPENDIX "A"
SCENARIO # 1

Product Type: Low flashpoint product (less than 38° C-Gasoline)

Response

The following represents the sequence of events and related times for a 1-2 barrel Oil Pollution Incident (OPI) at the Facility.

Time	Activity
0 - 10 minutes	Discover the OPI.
10 - 25 minutes	Secure the site and stop leaks.
25 - 35 minutes	Notify Reg. Mgr. Notify area personnel.
35 - 40 minutes	Notify appropriate Government agencies (Reg. Mgr.).
40 minutes +	Monitor the site / assess / deploy if appropriate.
2 hours	Almost all of the gasoline should have evaporated, however monitoring should be maintained until there is absolutely no danger of fire or explosion from the vapours.

Evaporation of gasoline and other low flash product generally happens quickly. If it is allowed to spread, this will accelerate the process.

APPENDIX "A"
SCENARIO #2

Product Type: Oil with a flashpoint above 38° C (Diesel and Jet Fuel)

Response:

The following represents the sequence of events and related times to complete containment and control for a 1-2 barrel Oil Pollution Incident (OPI) at the Facility.

Time	Activity
0 - 10 minutes	Discover the OPI.
10 - 15 minutes	Assess and secure the site.
15 - 30 minutes	Notify Regional Manager, Atmospheric Environment Branch. Notify appropriate Government Agencies and the Regional Manager.
30 minutes +	Monitor the scene and use equipment in response depot to control the discharge.

APPENDIX B
RESPONSE EQUIPMENT

Response Equipment on Site:

Containment Equipment

100 ft. of 24" containment boom

2 - Tow ropes 100 ft each

5 - Bales Sorbent Boom

1 - Sorbent Rolls

20 - Heavy Duty Garbage Bags

1 - 1000gal. Port-A-Tank

5 - Drum Tourniquets

Assorted pipe (3", 4", 6")

Plywood

Protective Clothing

6 - Personal Flotation Devices

10 - Pair Oil Resistant Work Gloves

5 - Pairs Rubber Boots

10 - Tyvek Suits

10 - Pair Safety Goggles

5 - Sets Rain Gear

Tools and Other Equipment

1 - Toolbox complete with small hand tools

4 - Shovels (round mouth)

4 - Rakes

2 - Pick axes

1- Sledge hammer 8lb.

APPENDIX "C"

THE FACILITY - PERSONNEL TRAINING

EMPLOYEE NAME	COURSES/TRAINING RECEIVED	COMMENTS

ACRONYMS

AEB	Atmospheric Environment Branch
AREET	Arctic Region Environmental Emergency Team
CCG	Canadian Coast Guard
	Department of Sustainable Development
GNWT	Government of the Northwest Territories
MSDS	Material Safety Data Sheet
	Oil Handling Facility
	Officer in charge
OPEP	Oil Pollution Emergency Plan
	Oil Pollution Incident
	Personal Protective Equipment