

3.0 SPILL RESPONSE REQUIREMENTS

3.1 Spill Classifications

For the purposes of NWS operations, POL spills will be classified by:

- a. Size (volume); and
- b. Type.

The categories of spill size are:

- a. Minor = less than 205 litres (less than 1x45 U.S. gallon drum); or
- b. Medium = 205 litres to 5000 litres (1 to 25 drums); or
- c. Major = more than 5000 litres.

The categories of spill type are:

- a. Land spills; and
- b. Freshwater and marine spills.

3.2 FRONTEC's Spill Response Capability

When a POL spill is reported at an NWS sites, FRONTEC will:

- a. Mobilize personnel, materials and equipment to respond immediately after receipt of the spill report or as soon as practicable. "In-house" resources will be utilized for response to minor and medium size spills and initial response to major spills.

The conditions at a spill site with respect to weather, temperature, season and availability of transportation, may impose significant delays in response times. The O&M contract SOW allows for a maximum response time of forty eight hours in all cases;

- b. Request assistance, if required, from:
 - i. other NWS sites;
 - ii. DND; and
 - iii. the Canadian Coast Guard,

and hire additional assistance, if required, from:

- iv. Northern residents;
- v. local communities; and
- vi. commercial spill response firms.

Acquisition of additional resources may be required to respond to spills which exceed the capabilities of FRONTEC's "in-house" resources; and

- c. Lend assistance to other agencies or local communities when requested.

3.7 Spill Response

Implementation of a POL spill action plan will include the following activities:

- a. Spill reporting;
- b. Stopping the fuel flow;
- c. Containment of the spilled fuel;
- d. Clean up;
- e. Disposal of clean up materials;
- f. Remediation of the spill site;
- g. Final Report; and
- h. Post-spill review

3.7.1 Spill Reporting

Following the report of a POL spill at any NWS site, the LSS Manager will forward the initial site report information in writing to:

- a. The North Warning System Control Centre (NWSCC); and
- b. FRONTEC's Environmental Coordinator at CMO.

The Environmental Coordinator will assume the position of Spill Control Manager with authority over all spill response activities as shown in Fig. 2, the Spill Response Flow Chart.

The Environmental Coordinator will contact:

- a. NWSO, which will advise on all spill response activities.
The initial reports, verbal and written, will be followed by regular verbal reports as required;
- b. 24 hour spill line for:
 - i. Northwest Territories;
 - ii. Yukon Territory;
 - iii. Canadian Coast Guard; or
 - iv. Ontario

These spill lines often have minimum volumes for reporting, meaning a spill of a given substance, under a given volume need not be reported. The Northwest Territories government lists various classes of hazardous substances with their minimum reporting volumes in the *Spill Contingency Planning and Reporting Regulations* (min. 100 L for flammable liquids). The Yukon follows the quantities listed in the federal *Transportation of Dangerous Goods Regulations* (min. 200 L for flammable liquids). Spills of gasoline or associated products under 70 L need not be reported in Labrador (*Storage and Handling of Gasoline and Associated Products Regulations, 1982*). In Ontario,

spills of fuel of less than 100 L with no suspected environmental impact need not be reported. Regardless of these minimum volumes, however, **site personnel must notify NWSCC of all spills** - the Environmental Coordinator will contact the appropriate agencies as necessary.

- c. CMO personnel, including:
 - i. Manager, Facilities Engineering;
 - ii. Manager, Operations;
 - iii. Supervisor, POL; and
 - iv. Corporate Communications and Business Affairs
- d. In cases of spills at sites BAR-DA1, BAR-E and PIN-1BD, the lease agreement requires that an immediate spill report also be made to the Inuvialuit Land Administrator.
- e. Spills on airport property at FOX-M, and spills on airport property or at the beach POL tanks at CAM-M, are to be reported to the NWT Department of Transportation.

The LSS Manager will assume the position of Spill Control Officer and authority over the Emergency Response Team (ERT) which will be dispatched to the site of the reported spill. ERT composition and responsibilities are shown in Figure 3 and Figure 4.

3.7.2 Cessation of Fuel Flow

The ERT, upon arrival at the spill site with the emergency spill response kit, will activate measures to stop further fuel flow by closing isolation valves within the POL distribution system if this has not already been done. Communications will be maintained between the ERT and the LSS Manager throughout the duration of all spill response.

3.7.3 Spill Containment

The ERT will deploy materials from the spill control kit and utilize such on site equipment as may be available to contain the spill by constructing temporary berms. In cases where the spill exceeds the capabilities of on site resources, the Spill Control Manager will make arrangements for additional personnel, equipment and materials from:

- a. other NWS sites;
- b. DND;
- c. the Canadian Coast Guard;
- d. local communities; and
- e. commercial spill response contractors

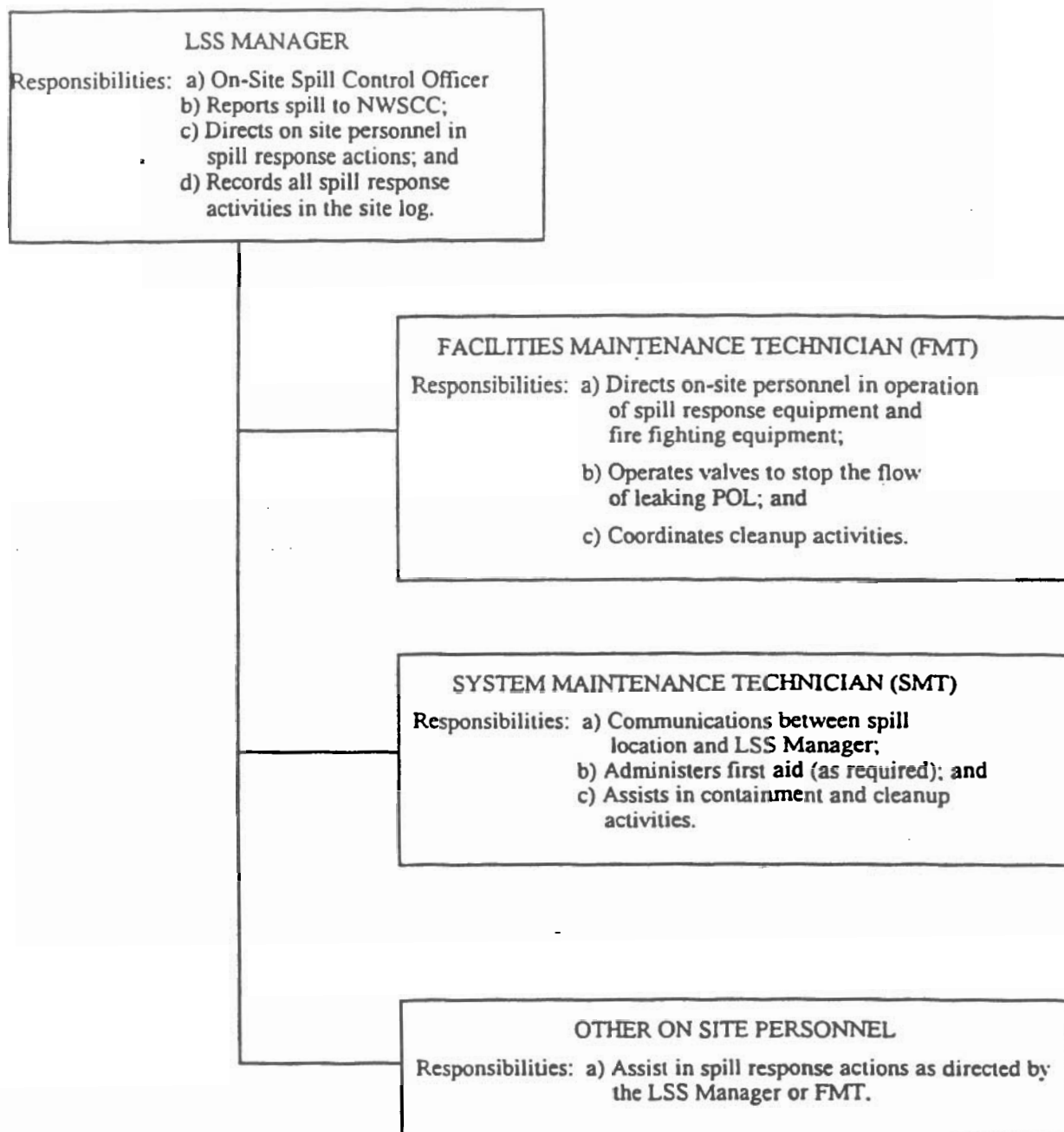
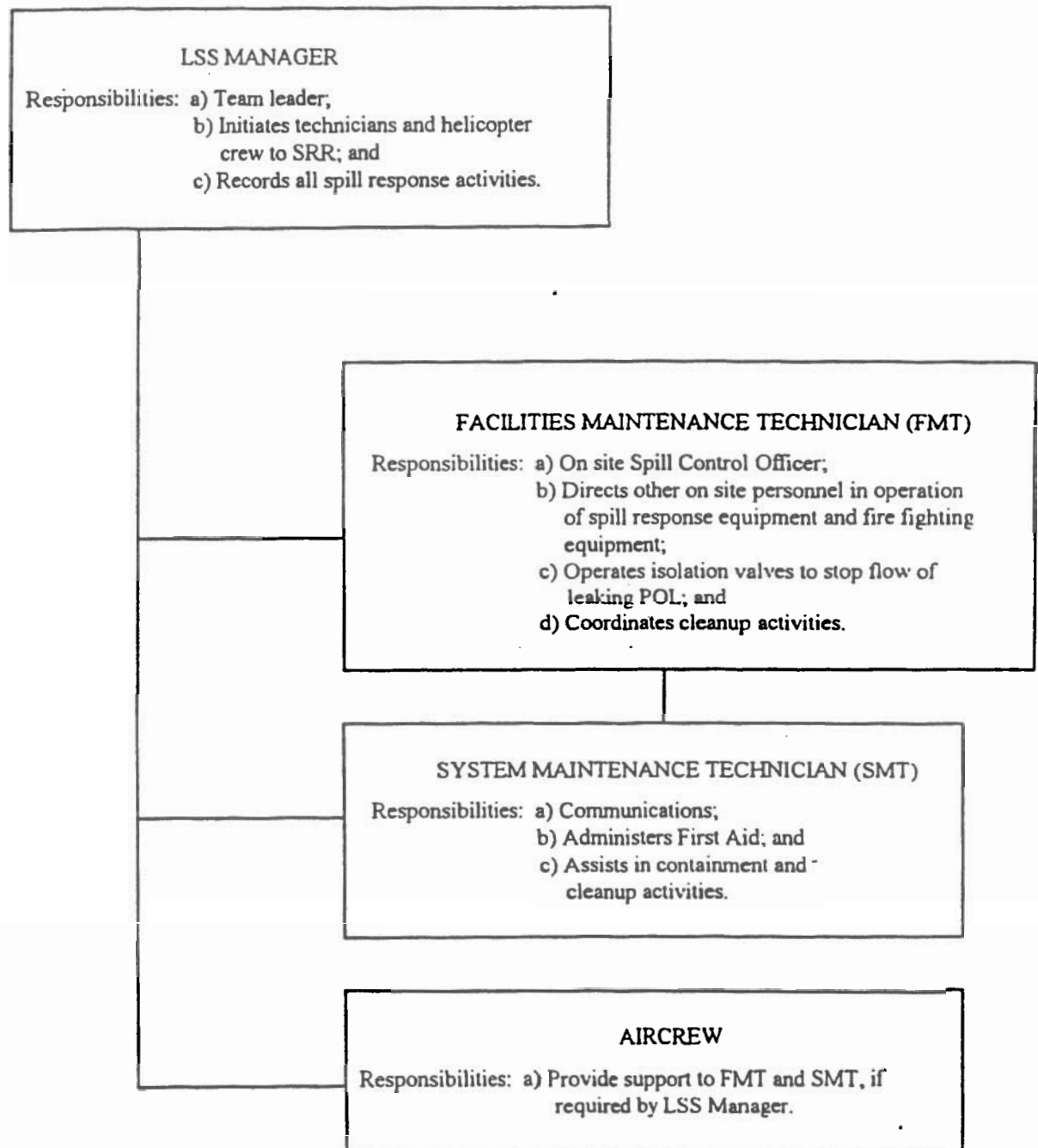
FIGURE 3 - EMERGENCY RESPONSE TEAM - ATTENDED NWS SITES

FIGURE 4 - EMERGENCY RESPONSE TEAM - UNATTENDED NWS SITES

3.8 Spill Response - POL Resupply Activities

Part II Section 6.2 of the EPP describes the bulk POL resupply process for NWS sites. Transportation of the bulk POL is performed by contractors and subcontractors who must each possess their own Spill Contingency Plan.

FRONTEC will report spills related to fuel resupply and fuel transfer to NWSO, even though the contractor's spill plan may apply.

Command structure and spill response action plans for spills during site resupply are shown in Figures 5 and 6. These plans illustrate spill responses during resupply by:

- a. Sealift (e.g. vessel or barge); and
- b. Airlift (e.g. rotary wing or fixed wing aircraft).

Figures 7 through 10 depict response plans for land and freshwater/marine spills at unattended and attended NWS sites.

**FIGURE 5 - FLOW CHART FOR FUEL SPILL RESPONSE
DURING BULK POL RESUPPLY BY SEALIFT**

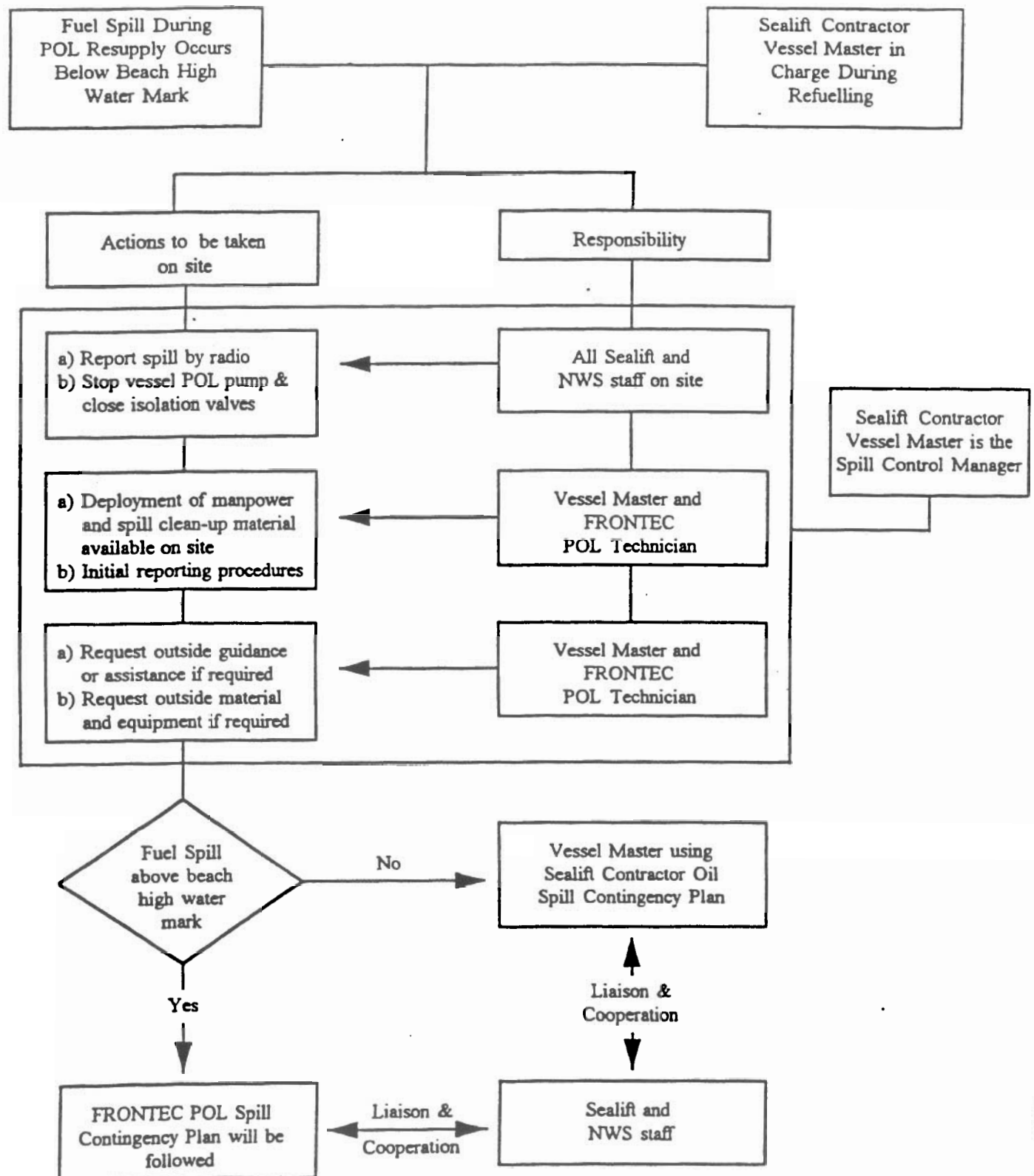


FIGURE 6 - FLOW CHART FOR FUEL SPILL RESPONSE DURING BULK POL RESUPPLY BY AIRCRAFT

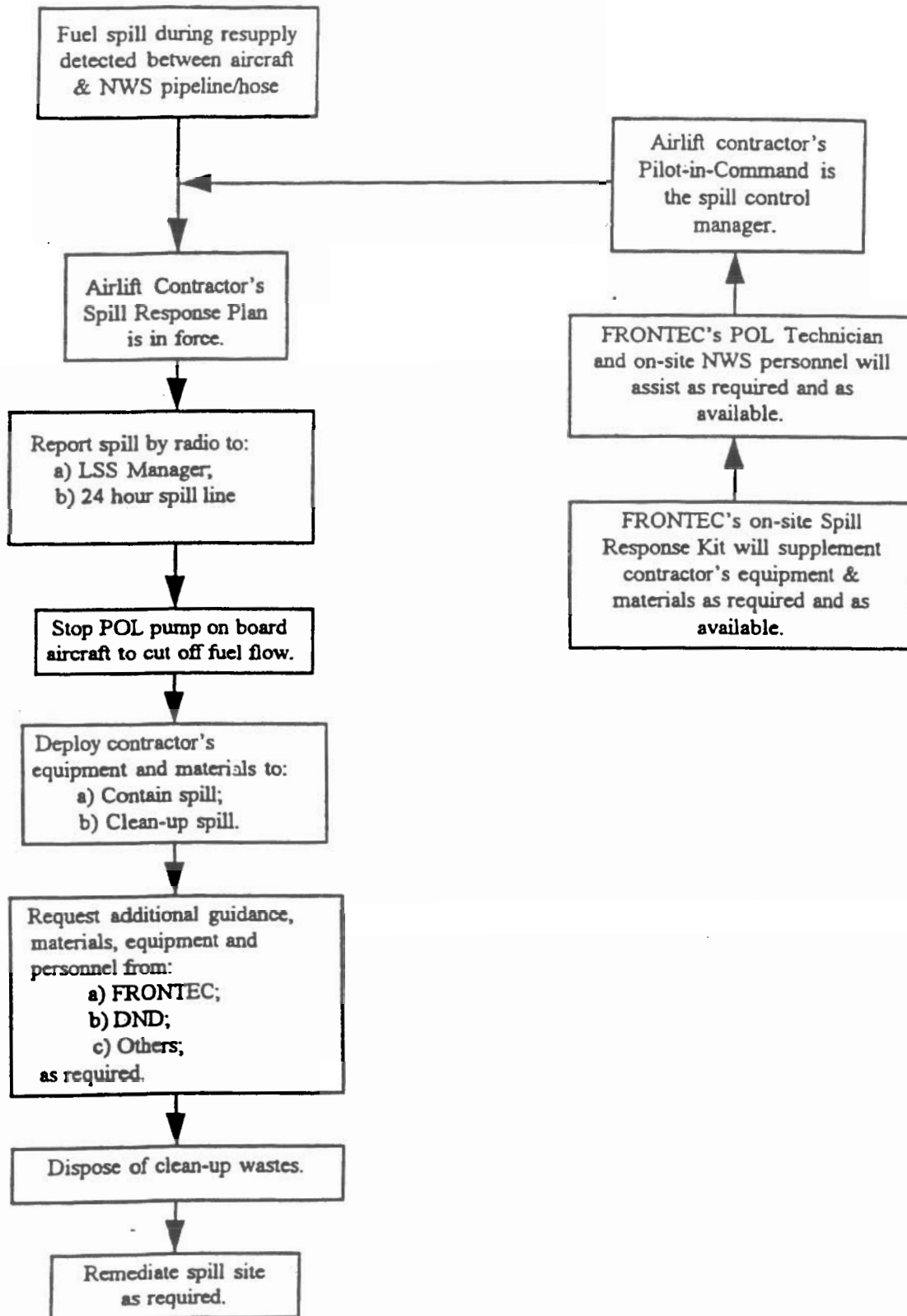
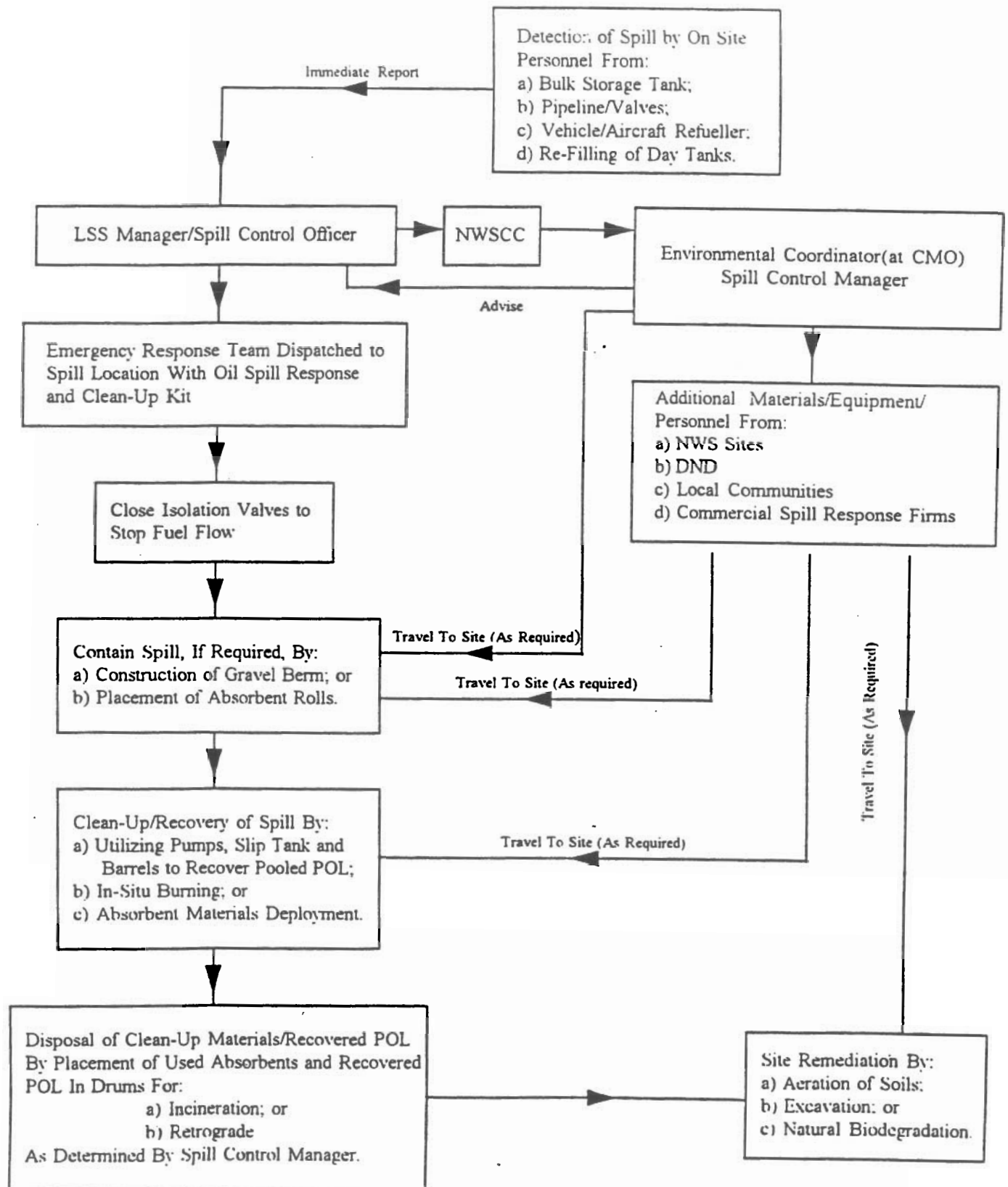
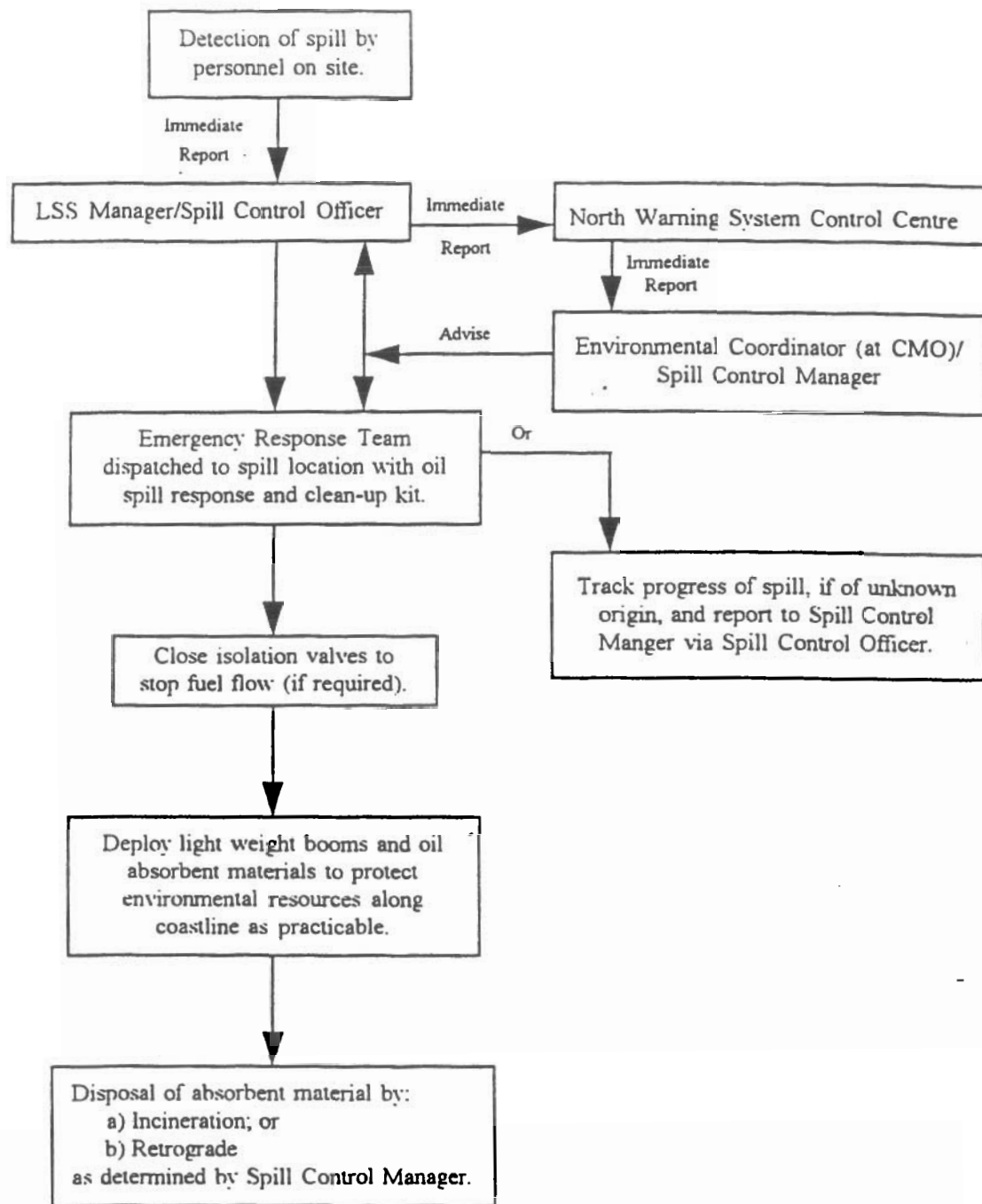


FIGURE 7 - FLOW CHART FOR LAND POL SPILL RESPONSE AT NWS ATTENDED SITES

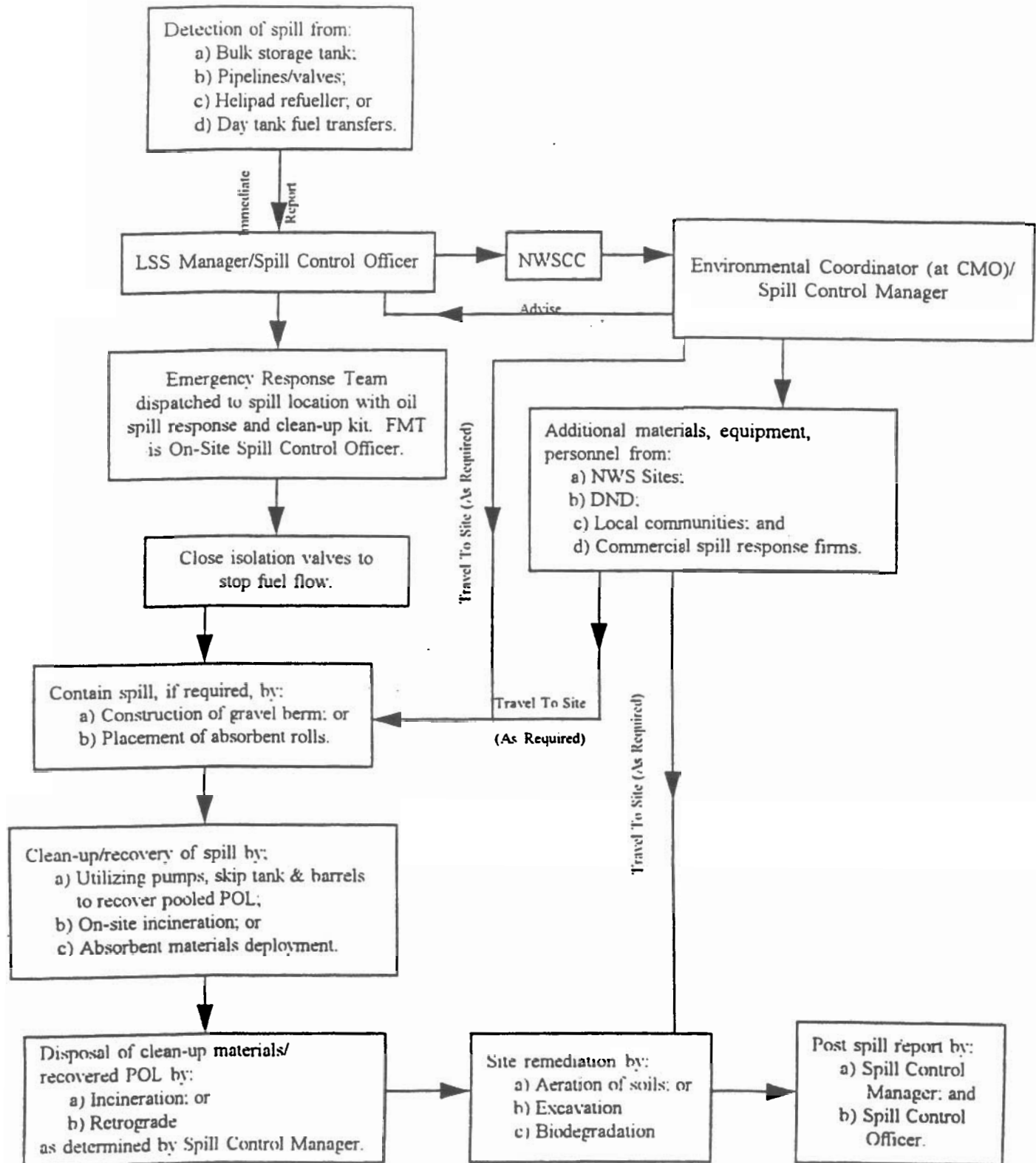


**FIGURE 8 - FLOW CHART FOR FRESHWATER AND MARINE POL SPILL
RESPONSE AT NWS ATTENDED SITES**



- NOTES: 1) Remediation of the spill affected area by:
 a) Evaporation; and
 b) Natural dispersion through wave action and wind.
- 2) Bulk fuel re-supply responses are as shown in Figures 5 & 6.
- 3) This spill response scenario assumes that the marine based POL spill originates from O&M activities of the NWS.

**FIGURE 9 - FLOW CHART FOR LAND POL SPILL RESPONSE AT NWS
UNATTENDED SITES**



NOTE: Spills detected at: a) BAR-DA1, Liverpool Bay;
b) BAR-E Horton River; or
c) PIN-1BD, Keats Point
must be reported to the Inuvialuit Land Administrator (See Annex B).

FRONTEC Contact List

NWSCC/ECF for LRR Sites	(705) 494-6011 ext 8030
NWSCC/MCF for SRR Sites	(705) 494-6011 ext 8003
Sam Cheng, Environmental Coordinator	(613) 728-2241 (H) (613) 593-2321 (Beeper)
Barb Thomson, Environmental Coordinator (Alternate)	(613) 567-0155 (H)
Dave Christian, Manager, Facilities Engineering	(613) 748-6594 (H)
Sandy Taylor, Director, Site Operations	(613) 825-7367 (H)
Jody Langelier, Deputy Manager, NWS Operations	(613) 834-9018 (H)
Hank Nemeth, Manager, Logistics	(613) 567-0338 (H)
Pete Keens, Supervisor, POL	(819) 561-6578 (H)
Kate Low, Corporate Communications & Public Affairs	(613) 727-5325 (H)
Lillian Hvatum, Manager, Northern Affairs	(403) 979-2182 (H)

24 Hour Spill Line

Northwest Territories	(403) 920-8130
Yukon	(403) 667-7244
Newfoundland and Labrador (Coast Guard)	(709) 772-2083
Ontario MOEE (reporting to MOEE is recommended by Environment Canada Spill Line)	1-800-268-6060

NWSO Emergency Response Contact

<u>Contact</u>	<u>Designation</u>	<u>(W)</u>	<u>(H)</u>
Jim Boissonneault	R&CS 2-17	(613) 992-9743	1-613-543-3435
Capt. Z. Szabo	R&CS 2-14	992-0692	(613) 825-7646
Maj. Chan	R&CS 2-SP	996-4093	(613) 834-6741
Col. D.A. Noonan	DAEPM (R&CS)	996-5705	(613) 834-4210

Newfoundland and Labrador

Department of Environment and Lands

Goose Bay Office, Director of Government Service Centre Dave Noseworthy	(709) 896-5709
24 Hour Oil Spill Line (Coast Guard)	(709) 772-2083

Fisheries and Oceans

Goose Bay - Marine Communications & Traffic Services Centre	(709) 896-2252
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R.C.M.P.

Nain, Labrador	(709) 922-2862
Cartwright, Labrador	(709) 938-7218

Department of Tourism, Culture, and Recreation

Biologist, Goose Bay - James Schaefer	(709) 896-2732
Resource Archaeologist, Historic Resources - Martha Drake	(709) 576-2460

Canadian Wildlife Service

Wildlife Biologist, St. John's - Pierre Ryan	(709) 772-5585
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Northwest Territories

24 Hour Spill Report Line	(403) 920-8130
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Inuvialuit Land Administration	(403) 977-2202
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Indian and Northern Affairs Canada

Inuvik Region District Manager - Rudy Cockney	(403) 979-3361
Iqaluit Region District Manager - Dan Elliot	(819) 979-4405

Environment Canada - Environmental Protection Branch -NWT Division

Yellowknife, Manager - Laura Johnston

(403) 920-6060
(403) 873-8185 (fax)

Chief Environmental Engineer - Ed Collins

(403) 920-6061

Government of NWT

Environmental Protection Officer - Ken Hall

(403) 873-6476

Department of Transportation, Environmental Affairs

(403) 873-7063

Baffin Region Renewable Resources - Stations

Iqaluit - John Stevenson
Steve Pinksen
Kevin Robertson

(819) 979-5011
(819) 979-5013
(819) 979-5017

Arctic Bay

(819) 439-9945

Broughton Island

(819) 927-8966

Pond Inlet

(819) 899-8819

Iglolik

(819) 934-8999

Keewatin and Inuvik Renewable Resources - Stations

Regional Office

(403) 982-7240

Paloyoaq (Spence Bay)

(403) 561-6231

Gjoa Haven

(403) 360-7605

Cambridge Bay - Luke Coady

(403) 983-7314

Coppermine - Josh Hunter

(403) 982-7250
(403) 982-3996 (H)

Inuvik

(403) 979-7201

GNWT Prince of Wales Northern Heritage Center
Director of Culture and Heritage, Yellowknife
Charles D. Arnold

(403) 973-7551

Yukon

Renewable Resources, Parks, Resources and Regional
Planning, Director - Jay McIntyre, Whitehorse

(403) 667-5261

(403) 668-7823 (fax)

Heritage Branch - Jeff Hunston, Whitehorse

(403) 667-5363

Head of Emergency Response, George Balmer

(403) 667-3406

(403) 667-7962 (fax)

Environment Canada - 24 Hour Emergency
(Conservation and Protection, Yukon)

(403) 667-7244

Parks Canada

Departmental Operations Manager - William A. Fox

(403) 979-3248

(403) 979-4491 (fax)

Ontario

Environment Canada (Toronto)

Spill Line

(416) 346-1971

Phillip Baker

(416) 973-1059

Steven Clements

(416) 973-1061

PCB Spills, Bob Kramel

(416) 973-5858

Ontario MOEE Spill Line

1-800-268-6060

ENVIRONMENTAL EMERGENCY REPORT FR-06

SPILL REPORT

A	Report Date:	<i>Date and Time of Spill (known or suspected):</i>	
B	<i>Location and Map Coordinates (if known) and Flow Direction if moving:</i>		
C	Party Responsible/Responding:	FRONTEC Logistics	
D	<i>Substance(s) Spilled and Estimated Quantities: (metric volumes and masses required)</i>		
E	<i>Cause of Spill:</i>		
F	<i>Spill Terminated or Continuing?:</i>		
G	<i>Extent of Contaminated Area and Depth of Contamination, if possible:</i>		
H	<i>Factors Affecting Spill or Recovery: (temperature, wind, snow, ice, terrain, buildings etc.)</i>		
I	<i>Containment: (none, natural, booms, dykes, etc.)</i>		
J	<i>Action(s) Taken or Proposed to Contain, Recover, Clean-Up or Dispose of Substance:</i>		
K	<i>Assistance Required? If so, what form of assistance?:</i>		
L	<i>Hazard(s) to Persons or Property or Environment: (e.g. fire, drinking water, threat to fish or wildlife)</i>		
M	<i>Comments and/or Recommendations:</i>		
N	Reported By:	Position:	Employer:
	Location:	Telephone:	
O	Reported To:	Position:	Employer:
	Location:	Telephone:	
P	<i>Agencies Contacted, and Date and Time of Contact:</i>		