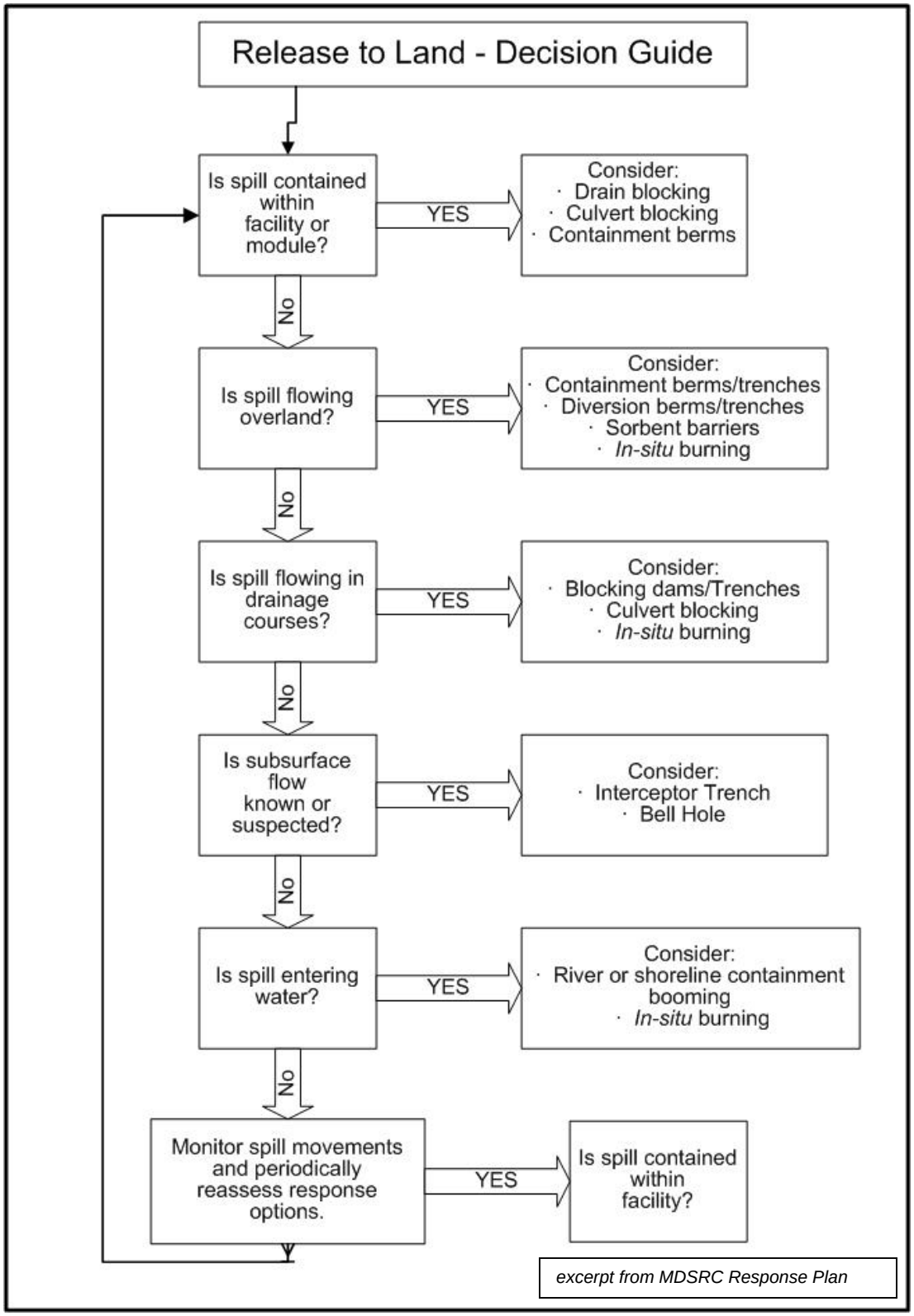
11.5 CAMP FIRES

11.5.1 Emergency Response Procedure (Camp Fire) **MUSTER AREA: SHOP BUILDING**	**Procedure:** 1. Ensure personal safety. Consider the following prior to responding: • Sound the fire alarm. • Assess the fire; if it is small enough, extinguish with fire extinguisher • Shut door(s) and window(s) in the room you are evacuating • If smoke builds up, stay low to the ground • Notify the incident commander immediately • Evacuate and remain at the muster area until instructed to do otherwise by incident commander 2. Incident Commander • Take a radio for communication. • Ensure that the fire alarm has been sounded throughout the camp. • Quickly go to the fire scene to assume command • Meet with the Emergency Response Team to assess action already taken and further action required. 3. Medic (on site rep if not medic) • Evacuate to the muster area with your first aid pack • Take a radio for communication • Treat any burns or other related injuries • If required, transport patient(s) to hospital via ECV or helicopter, depending on nature of injury 4. Emergency Response Team Members Shell Onsite Rep: _____ Camp Supervisor: _____ Medic: _____ _____ • Ensure that each member has a radio for communication • As first line of defense, shut the breaker to the trailer(s) off • Check each room to ensure that all camp personnel have vacated the trailers • Report to the incident commander for a head count and debriefing • If it is safe to do so, extinguish the fire • Take a head count of camp personnel • If required and safe to do so, locate missing personnel

11.6 SPILLS

11.6.1 Release to Land - Decision Guide



11.6.2 Sewage Spill Emergency Response Plan

The campsite is located between a small lake and a channel of the Mackenzie River. The sewage treatment plant is self-contained. There is a bypass line from the lift station to an existing lagoon so that any overflow from the lift station goes to the lagoon. If treated water is not up to specification; it will be diverted to the lagoon. The water from the lagoon will then be treated through the sewage plant at a later date for completion to specification.

Transportation

There will be transportation of sludge from the sewage treatment plant to the treatment plant in Inuvik.

Maintenance and Control

This contingency plan is project specific and will be reviewed:

- As changes to applicable environmental legislation come into effect
- To take into account changes in environmental factors and in facility characteristics and policy
- During any onsite training exercises
- After each and every sewage incident.

Changes to phone numbers and names of those individuals identified in this contingency plan will be made on an as required and when required basis.

The prioritized response goals are:

- Protect Human Life (yours, fellow worker, & public)
- Protect The Environment
- Minimize Asset Loss
- Regain Steady State Operations to minimize business impact (consider both revenue & reputation)

The objectives of a spill response are:

- Safety of People, Environment, and Facilities
- Source Control
- Containment of released materials
- Recovery and Storage of released materials.

Procedure

1. SAFETY

Ensure personal safety

- Ensure your own personal safety from existing and potential hazards and fellow worker safety.
- If the spill is within the treatment plant area, follow Sewage Treatment Golden Rules.

2. ISOLATE AND DENY ENTRY

Isolate the area and deny / restrict entry

- Utilize vehicles or barricades for temporary control.
- Establish / adjust control perimeters.

3. NOTIFICATIONS

Immediately notify the following

- Shell's on site supervisor

Notify the following as soon as practical

- DAR/Construction Manager
- Northwest Territory Emergency Spill Response Line

4. COMMAND / MANAGEMENT

Order depends on specific factors

- Assign Incident Command System roles as resources become available.
- Initiate response to incident, taking existing conditions into account.
- Ensure safety precautions and operating plans and conditions are reviewed with the crew.
- Determine a need for roadblocks.
- Ensure proper permits are executed.

5. IDENTIFICATION AND HAZARD ASSESSMENT

Identify the Hazards and Assess the Risks

- Determine chemical makeup of substance (i.e.: WHMIS, TDG Placards, PIN Nos.).
- MSDS (Material Safety Data Sheets – Chemical).
- Placards and labels (colours, markings).
- Shipping papers (Bill of Lading, Way Bill, etc).
- Technical information (CANUTEC).
- Other (specialists, monitoring devices).

6. PROTECTIVE EQUIPMENT

Ensure proper personal protective equipment is utilized, and know the level of equipment available

- Visibility stripes, safety glasses, goggles, life jackets, gloves etc.

7. CONTAINMENT AND CONTROL

Safe defensive containment

- If safe to do so, and if possible, stop the flow of material.
- If spill frozen shovel snow-sewage or soil-sewage mixture into containers or sewage lagoon.
- Deploy absorbent pads, socks as required.
- See list of emergency spill cleanup equipment in equipment list
- Recover sorbents and place in steel drums
- Notify and request assistance if required from external NWT Emergency Spill Response Line.
- Consider what resources /materials are available within close proximity; i.e.: crawler tractor, loaders, bobcats, vacuum /water trucks, fuel bladders / fibreglass tanks.

7. DECONTAMINATION AND CLEANUP

Collect, cleanup, and sample

- Priority is to high environmentally sensitive areas (municipality water sources, waterfowl staging areas, domestic fishing areas).
- Decontaminate personnel as required if exposed to the spill. Wash hands and face with soap after clean up.

- Contaminated clothing shall be immediately removed and washed in designated washing area.
- Store the spilled material in proper containers for disposal;
- Implement remediation program for the area as required;
- Monitor the progress of remediation as required.

8. DISPOSAL

Dispose of wastes, contaminated clothing and equipment if unable to decontaminate.

- Incinerate sorbents – check Product MSDS for incineration suitability.
- Small quantities of snow-sewage or soil sewage can be disposed in the sewage lagoon.
- Warm up containers of snow and sewage mixture to room temperature in treatment plant and then over the time frame of a couple of weeks pour them into the flow equalization tank of the sewage plant. The reason for introducing the snow sewage mixture slowly and at room temperature is to avoid a large shock loading of the plant that will affect the micro organisms or ship containers to Inuvik Sewage Treatment Plant for disposal.
- Larger quantities of sewage contaminated soils may have to be treated in a contained area. Obtain remediation expertise. Note: contaminated runoff water in the treatment cell must also be contained.

10. DOCUMENTATION

Document all actions and complete reports

- Assign a recorder to log activities
- Complete and submit a follow-up spill report to the Northwest Territories Spill Report line.

11.6.3 Bulk Material Emergency Response Plan

The campsite is located between a small lake and a channel of the Mackenzie River. Bulk Materials are stored in seacans and various other containers.

Transportation

There will be drilling products transported to and from the site.

Maintenance and control

This contingency plan is project specific and will be reviewed:

- As changes to applicable environmental legislation come into effect
- To take into account changes in environmental factors and in facility characteristics and policy
- During any onsite training exercises
- After each and every incident.

Changes to phone numbers and names of those individuals identified in this contingency plan will be made on an as required and when required basis.

Prioritized Response Goals

The prioritized response goals are:

- Protect Human Life (yours, fellow worker, & public)
- Protect The Environment
- Minimize Asset Loss
- Regain Steady State Operations to minimize business impact (consider both revenue & reputation)

The objectives of a spill response are:

- Safety of People, Environment, and Facilities
- Source Control
- Containment of released materials
- Recovery and Storage of released materials.

Procedure

1. SAFETY

Ensure personal safety

- Ensure your own personnel safety from existing and potential hazards and fellow worker safety.
- In addition to standard personal protective equipment, check MSDS sheets for additional requirements

2. ISOLATE AND DENY ENTRY

Isolate the area and deny / restrict entry

- Utilize vehicles or barricades for temporary control.

- Establish / adjust control perimeters.

3. NOTIFICATIONS

Immediately notify the following organizations.

- .Shell's onsite supervisor

Notify the following as soon as practical

- Shell's DAR/Construction manager
- Northwest Territory Emergency Spill Response Line
- Indian Northern Affairs Canada - requirements as per protocol in Appendix IV
- NEB - requirements as per protocol in Appendix IV and/or spill is not contained and could result in further safety property or environmental damage.

4. COMMAND / MANAGEMENT

Order depends on specific factors

- Assign Incident Command System roles as resources become available.
- Develop the response plan.
- Ensure safety precautions and operating plans and conditions are reviewed with the crew.
- Determine a need for roadblocks.
- Ensure proper permits are executed.

5. IDENTIFICATION AND HAZARD ASSESSMENT

Identify the Hazards and Assess the Risks

- Determine chemical makeup of substance (i.e.: WHMIS, TDG Placards, PIN Nos.).
- MSDS (Material Safety Data Sheets – Chemical).
- Placards and labels (colours, markings).
- Shipping papers (Bill of Lading, Way Bill, etc).
- Technical information (CANUTEC).
- Other (specialists, monitoring devices).

6. PROTECTIVE EQUIPMENT

Ensure proper personal protective equipment is utilized, and know the level of equipment available

- Visibility stripes, safety glasses, goggles, life jackets, gloves etc.
- Check MSDS sheets for additional requirements

7. CONTAINMENT AND CONTROL

Safe defensive containment

- If safe to do so, and if possible, stop the flow of material.
- Ensure that flow is contained before starting the recovery procedure. Containment and recovery may take place at the same time
- See list of emergency spill cleanup equipment
- Shovel spilled material into plastic lined steel drums.
- If ground frozen, in spring excavate surface area to ensure all spilled material is collected
- Notify and request assistance if required from external NWT Emergency Spill Response Line.
- Consider what resources /materials are available within close proximity; i.e.: crawler tractor, loaders, bobcats, vacuum /water trucks, fuel bladders / fibreglass tanks, lost circulation material, straw bales, etc.

8. DECONTAMINATION AND CLEANUP

Collect, cleanup, and sample

- Decontaminate personnel as required if exposed to the spill
- Priority is to high environmentally sensitive areas (municipality water sources, waterfowl staging areas, domestic fishing areas).
- Store the spilled material in proper containers for disposal;
- Determine where the spilled material can be disposed off and ship material there.
- Develop remediation program for the area (if required)
- Undertake the remediation program:
- Monitor the progress of remediation as required.

9. DISPOSAL

Dispose of wastes, contaminated clothing and equipment if unable to decontaminate.

- Consider waste impacts in all decisions
- Remove the contaminated material and haul to an approved disposal site.

10. DOCUMENTATION

Document all actions and complete reports

- Assign a recorder to log activities
- Complete and submit a follow-up spill report to the Northwest Territories Spill Report line.

11.6.4 Fuel/Spill Emergency Response Plan (Water)/Coast Guard Oil Pollution Emergency Plan

Camp Farewell is located between a small lake and the Middle Channel of the Mackenzie River. Camp Farewell is 50 km downstream from Tununik Point at Longitude 69°-12'-30" and Latitude 135°-06'-04". All fuel on site is stored in tanks within secondary containment. A spill could occur during unloading fuel from barges. To minimize the severity of such an event, spill control equipment will be deployed during the unloading. The deployment of the barge booms will also be requested as a precautionary measure to immediately contain any spill that may occur at the barge. If a land spill did occur it would be contained quickly and therefore minimize the potential for contamination of the waterway

There are no communities downstream of Camp Farewell.

Transportation

Liquid fuels will be stored in closed systems during transportation. Access routes will be by barge through channels of the Mackenzie River. During the winter season, fuel will be delivered from Camp Farewell by fuel truck to project locations.

Maintenance and Control

This contingency plan is project specific and will be 1) reviewed & 2) updated:

- As changes to applicable environmental legislation come into effect
- Annually, to take into account changes in environmental factors and in facility characteristics and policy
- After every oil pollution incident and exercise.

Changes to phone numbers and names of those individuals identified in this contingency plan will be made on an as required and when required basis. The numbers are to be verified when the camp is opened and/or on an annual basis.

Organization

Shell Canada Limited utilizes the Incident Command System for all emergencies[1]. All incident responses are modeled after the Disciplined Approach. See Section 917 of Shell's Emergency Response Plan Model for detailed guidance on the Disciplined Approach and Prioritized Response Goals.

Prioritized Response Goals

The prioritized response goals are:

- Protect Human Life (yours, fellow worker, & public)
- Protect The Environment
- Minimize Asset Loss

[1] ICS system description plus Roles & Responsibilities of all organizational positions are described in Shell's Emergency Response Manual - Model

- Regain Steady State Operations to minimize business impact (consider both revenue & reputation)

The objectives of a spill response are:

- Safety of People, Environment, and Facilities
- Source Control
- Containment of released materials
- Recovery and Storage of released materials.

PROCEDURE

1. SAFETY

Ensure personal safety

- Ensure your own personal safety from existing and potential hazards and your fellow workers' safety.

2. ISOLATE AND DENY ENTRY

Isolate the area and deny / restrict entry

- Establish / adjust control perimeters.
- Eliminate ignition sources.

3. NOTIFICATIONS

Notify the following immediately.

- Shell's onsite supervisor
- Barge Captain

Notify the following as soon as practical.

- Shell's DAR/Construction Manager
- Northwest Territory Emergency Spill Response Line
- Regional Operations Center (ROC)
- Indian Northern Affairs Canada - requirements as per protocol in Appendix IV
- NEB - requirements as per protocol in Appendix IV and/or spill is not contained and could result in further safety property or environmental damage.

4. COMMAND / MANAGEMENT

Order depends on specific factors

- The Onsite Supervisor will assume the role of Incident Commander.
- Assign Incident Command System roles, as resources become available.
- Initiate response to incident, taking existing conditions into account.
- Ensure safety precautions and operating plans and conditions are reviewed with the crew.
- Ensure proper safe work permits are executed.

5. IDENTIFICATION AND HAZARD ASSESSMENT

Identify the Hazards and Assess the Risks

- Confirm product and determine chemical makeup of substance.
- MSDS (Material Safety Data Sheets – Chemical).
- Placards and labels (colors, markings).
- Shipping papers (Bill of Lading, waybill, etc).

- Technical information (CANUTEC).
- Other (specialists, monitoring devices).

6. PROTECTIVE EQUIPMENT

Ensure proper personal protective equipment is utilized, and know the level of equipment available

- Fire retardant clothing, safety glasses, goggles, life jackets, gloves etc.
- Check MSDS sheets for additional requirements

7. CONTAINMENT AND CONTROL

Safe defensive containment

- If safe to do so, and if possible, stop the flow of product.
- Deploy primary and secondary booms to contain or divert spill to recovery area, as identified in plan. (Control Point at Camp Farewell and Farewell Downstream Control Point #1). Ensure that the spill is contained before starting the recovery procedure.
- Deploy absorbent pads, socks as required. Recover oiled sorbents and place them in containers.
- Use the oil skimmer to recover spilled fuel if spill is too large to recover with sorbents.
- Store recovered small volumes of oil/water mixture in steel drums.
- Store recovered large volumes of oil/water mixture in empty fuel tank for disposal at a later time.
- Notify and request assistance, if required, from external NWT Emergency Response Line.
- Place all resources/materials on standby that are available within close proximity, i.e. crawler tractor, loaders, bobcats, vacuum trucks, fuel bladders/fibreglass tanks, lost circulation material, straw bales etc.

8. DECONTAMINATION AND CLEANUP

Collect, cleanup, and sample

- Decontaminate personnel as required if exposed to the spill
- Priority is to high environmentally sensitive areas (shore lines within the Kendall Island Migratory Bird Sanctuary)
- Store the spilled material in proper containers for disposal
- Implement remediation program for the area as required
- Monitor the progress of remediation as required.

9. DISPOSAL

Dispose of wastes, contaminated clothing and equipment if unable to decontaminate.

- Consider waste impacts in all decisions
- Consider onsite incineration, movement to approved disposal sites etc

10. DOCUMENTATION

Document all actions and complete reports

- Assign a recorder to log activities
- Complete and submit a follow-up spill report to the Northwest Territories Spill Report line.

11. CONTINGENCY PLAN

Acknowledge role of federal, territorial and other bodies as identified in the National Contingency Plan

- Lead Agency for pollution incident (ship to shore) is the Canadian Coast Guard

- Resource Agency is considered to be the Canadian Coast Guard, who will request resources as required where available.
- Environment Canada services provided by REET (Regional Environmental Emergencies Team)

♦ SCENARIO

Fisheries and Oceans Canada - Coast Guard require an Oil Pollution Emergency Plan and Oil Pollution Incident Procedures, Equipment and Resources Scenario as required by regulation SOR/95-405. The scenario assumption is for a Level 1, category of Oil Handling Facility with a 150m^3/h maximum oil transfer rate and a Level 1 category of Oil Handling Facility with a minimum spill size of 1m^3. The maximum oil transfer rate at time of unloading will be 85m^3/h and therefore falls within Level 1 category.

➢ **Nature and amount of oil**

Shell will be unloading approximately 2,000,000 litres of diesel fuel from barge. Aviation fuel is transported in drums. All equipment coming to site will be diesel powered so amount of gasoline on site is about 6 - 45-gallon drums. The most likely spill scenario is a hose leak. The volume used in this scenario for this type of spill is 2.0 m3.

➢ **Type of ship being unloaded**

Series 1000 barges from NTCL will deliver the diesel fuel. The maximum pump rate is 85 m3/hour. The boat has a shut-off valve located on it for emergency shutdown of the fuel. The fill line is 150mm.

➢ **Tides and currents**

There are no tides in this area. Current speed in this channel of the Mackenzie River is approximately 8 knots.

➢ **Meteorological conditions**

Unloading of fuel will take place late fall at above or near freezing conditions. Some winds may be encountered (prevailing winds are from the northwest)

➢ **Environmental Sensitivities**

There are no communities near Camp Farewell. The camp is located within a bird sanctuary. Whenever possible, unloading of fuel will take place in fall when most waterfowl have already left. Wildlife monitor is onsite at all times and is equipped with a firearm that can be discharged to scare away any waterfowl in vicinity if it is deemed necessary. Any requirement for long-term bird hazing will be accomplished by setting up automatic bird scare cannons as well as having the wildlife monitor patrol the channel with a boat to assist in scaring away any waterfowl.
There will be approximately 600 meters of fuel filling line. It will go from dock, across 200 meters of gradually rising ground to a hill. From there the line will go to the fuel tanks.

➢ **Measures to minimize spill**

The measures taken to minimize the possibility of a spill are as follows:

- Five on site, supervisory people have received the two-day “Oil Spill Containment and Recovery Training (Open Water) “course and the two-day “*Response to Oil Spills in Ice conditions”* course. Any new Supervisors will also receive the training if not already done so.

- The Shell site supervisor for the unloading will become the Incident Commander if there is a spill.
- Hoses, connections and valves will be inspected on the fill line prior to use.
- Drip pans will be installed under each connection
- There will be quick shutting shut-off valves at each end.
- During diesel fuel filling operations, the fill line will be patrolled. There will be personnel at each shut-off valve. All personnel will be equipped with radios. In the event of a line break, the valves will be shut off immediately to minimize the spill.

➢ **Training**

The two-day **"Oil Spill Containment and Recovery Training (Open Water)"** course held in 2002 at Farewell, included classroom instruction, dry land equipment deployments and a Conventional and BoomVane deployment in the Mackenzie River. *Note: Fuel has not been unloaded at Farewell since 2002.*

- Day 1
  - ➢ Formal classroom training using a PowerPoint presentation and covering strategies and tactics of oil spill response
  - ➢ Description of Response Management System used by Shell Canada, Camp Farewell
  - ➢ Description and illustration of equipment usage.
  - ➢ Safety briefing
  - ➢ Dry Land deployment of equipment which gave participants hands-on experience as to how the components fitted together and operated.
- Day 2
  - Briefings
    - Safety
    - Communications
    - Commander's (describing "spill" and deployments to be effected during the field deployment exercise
  - Organizational Structure to be used in the field
    - Assignment to crews
    - Crew responsibilities
  - Field Deployment
    - Conventional deployment of 400 feet of river boom
    - BoomVane deployment of 400 feet of river boom
  - Debriefing

The two-day training courses **"Oil Spill Containment and Recovery Training (Open Water)"** and **"Response to Oil Spills in Ice Condition"** are normally held annually and

sponsored by the Mackenzie Delta Spill Response Corporation (MDSRC) and the Aurora College.

- Training attended by various staff from the MDSRC participants, local Contractors, Inuvik Fire Department and individuals from the General Public. *Shell last participated in the open water session in 2005.*
- The sessions include components on cold weather safety, material properties in cold climates, strategies and tactics for spill containment and recovery in winter conditions and waste management requirements.
- Day1
    - Safety
    - Material Properties
    - Environmental Awareness
    - Regulatory Requirements
    - Strategies, Tactics & Equipment Waste Management Considerations.
- Day 2
    - Introductions of Commander
    - Description of “Problem”
    - Safety Briefing
    - Communications Briefing
    - Assignment of Crews & duties
    - Deployment Briefing
    - Field Deployment
    - Debriefing.

➢ Training and Exercises

- Additional training and exercises are being planned by the MDSRC for subsequent years. Activity in the Mackenzie Delta will determine frequency of training required.
- Shell staff at the field location will support the trained supervisory staff in areas of labour, equipment operation and administrative duties in the event of an oil spill.
- If required, the trained MDSRC member companies and contractor staff will supplement Shell staff in a supervisory or other capacity when and where required.
- All personnel will be required to attend a Safety Briefing and Orientation prior to commencement of any activities associated with an oil spill response.

- Prior to unloading of fuel barges, a meeting will be held to review the Oil Pollution Emergency Plan.

➢ Response Time Control and Containment

- Prior to start of unloading of diesel fuel, a boom will be, at the Captain's decision, set up around the unloading barge.
- An oil spills containment and clean up boat will be on site. This boat is from Mackenzie Delta Spill Response Corporation.
- Based on environmental regulations and the nature of the soil a berm cannot be installed along the shoreline.
- Prior to start of unloading of diesel fuel a line of 3 meter long booms will be constructed on shore ready for deployment as a primary containment. If required it will be immediately deployed.
- Prior to start of unloading of diesel fuel a line of 1.6 meter booms will be constructed on shore further downstream for deployment as a secondary containment. If required, it will be immediately deployed.
- Prior to start of unloading of diesel fuel, a meeting will be held of all participants to review the oil spill plan and their responsibilities and roles to both prevent a spill and contain and clean up a spill.
- Prior to start of unloading of diesel fuel Shell owned sorbents and skimmers will be set out and ready for use.
- Responsibility for the pre-transfer work will be the Shell "Site Supervisor".

➢ Response Time Clean up

An onsite spill control boat will commence clean up operations as soon as the spill is controlled and contained. If additional resources are required they will be obtained from the trained MDSRC member companies. This group will have equipment, material and trained staff to assist in the event of any spills. Current participation in the Mackenzie Delta Spill Response Corporation includes, but is not limited to, Anadarko, BP Canada Energy, Chevron Canada Resources, ConocoPhillips Canada, Devon Canada Corporation, EnCana, Petro-Canada and Shell Canada Ltd. If necessary, the trained contractor community will be requested to respond as well. Unless and until MDSRC is fully ready to respond to large operational spills, the Coast Guard is the default responder to be contacted in case of such a spill.

- **Scenario Details**

The oil spill control boat will come complete with sorbents, boom, vane boom deployer and skimmers.

Time	Description	Person responsible
Pre Transfer	• Barge booms deployed • Spill Equipment readied • Product, hazards & controls identified • Prejob safety meeting held	Barge Captain Incident Commander Incident Commander Incident Commander
Zero	Spill occurs & discovered • Shut down pumps on barge • Radio order to shut valves on hoses	Barge Captain Incident commander
5 minutes	• Closing of valves on line	Source Control (Personnel located at each valve)
15 minutes	• Primary boom will be deployed. • First Aid (if required)	Spill Group Supervisor Medic
45 minutes	• If necessary, secondary boom will be deployed	Spill Group Supervisor
60 minutes	• Oil spill boat will start cleaning up spill • Land group will start cleaning up spill • Notifications	Spill Group Supervisor Spill Group Supervisor Incident Commander
Post Recovery	• Follow-up notifications • Decon. & Cleanup • Disposal • Incident Debrief • Documentation	Incident Commander

➢ Response Authorization

Response will be in accordance with Shell's Emergency Response plan for Camp Farewell. The onsite *Incident Commander* will be the senior Shell Onsite Representative (or alternate) with backup as required from Calgary. The onsite Spill Group Supervisor will be selected from the trained personnel available.

➢ Restart of unloading

Unloading will not be restarted until the causes of the spill have been determined and remedies to prevent a similar incident are in place. The spill will either have been cleaned-up or there will be sufficient workers to clean up the spill and unload before unloading is restarted.

➢ Oil Handling Facility Exercise Program

- The Shell Farewell Facility consists of a small camp, maintenance shop, airstrip, tank farm with a capacity of two million litres and a designated area for storage of drilling equipment and products. All fuel is stored in tanks within secondary containment. The bulk of the fuel is received by barge and transferred via pipeline from shore to the tank farm.
- Current plans include transfer of fuel from shore to tank farm on a per annum basis providing facility is in operation, and therefore any onsite training and exercise programs will only be conducted on an annual basis prior to receiving any vessels for the purpose of fuel transfer.
- Standard operating practices are to pre-boom all vessels delivering product prior to commencing transfer. Each boom deployment activity is considered an operational drill for the purpose of this exercise program.
- The Shell Farewell Facility is not open on a continuous basis. Staff may be temporarily assigned to other operating areas until such time as Camp Farewell commences operation again. Shell Canada will make every effort to ensure personnel familiar with the facility and who have participated in the training and onsite exercises are reassigned to their previous positions.
- Training will be comprised of a management tabletop session onsite on an annual basis with the second day being devoted to an operational drill and training exercise.
- An Internal Notification Exercise will be completed during the 1st Q after start up of the Camp Farewell Facility and on an annual basis thereafter.
- An External Notification Exercise will be done on an annual basis.
- Exercises with vessels delivering fuel to the Camp Farewell Facility are an integral part of this plan and are reflected in the exercise program matrix. The Canadian Coast Guard and other outside agencies will be invited to participate.
- All exercises will be evaluated and reported on a critique facilitation and incident assessment ICS Form # 115. All discrepancies will be noted and assigned as action items. Post-exercise critiques will be filed and available for audit if so required.
- This plan will be updated with amendments reflecting changes noted during exercises.

- Actual responses to spills of a product will be evaluated and reported, and will be considered as part of this program.
- The Oil Handling Facility Exercise Program will be conducted over a three-year period commencing on the date of compliance.
- Prior to unloading of any fuel barges, the Oil Pollution Emergency Plan will be reviewed.

➢ Exercise Program Matrix

Activity Description	Year 1	Year 2	Year 3
Internal Notification Exercise	During 1st Q after start-up of facility	Annually*	Annually*
External Notification Exercise	Annually*	Annually*	Annually*
Operational Drill with Vessels and Contractors	Annually*	Annually*	Annually*
Management and Supervisory Table Top	Annually*	Annually*	Annually*
Full Scale Functional Exercise		One, over the three-year cycle	

*When the site is operational.

FAREWELL EMERGENCY RESPONSE PLAN

Control Point Identifier:	Control Point Name:	Issued: DRAFT #5 Lat. 69° 12.451 N Long. 135° 05.932' W
	Farewell (Shell Canada Camp)	

Location: On the East bank of Richards Island on the middle channel of the Mackenzie River. Site is operated by Shell Canada Limited.

Land Owner/Tenant Contact: Crown/Shell Canada Limited

Distance to Confluence: 9.5 km* **Waterbody:** Mackenzie Bay, Beaufort Sea

- In this case, interpreted to be at the downstream Control Point

Next Downstream Control Point: Farewell Downstream Control Point #1 (9.5 km)

Waterway Details:

Width: 0.5 km

Bed Description: Sand and gravel

Bank Height/Slope: Steep bluffs behind beach. Vehicle ramp to camp plateau from Control Point beach.

Work Space Details:

Size & Location: Size will vary depending on river height. There will normally be sufficient workspace at most times of the year. August 2002 an area 10 m wide and 120 m long was available.

Helicopter Pad: Helicopter pad on camp plateau above site. Helicopter fuel is normally available at this site.

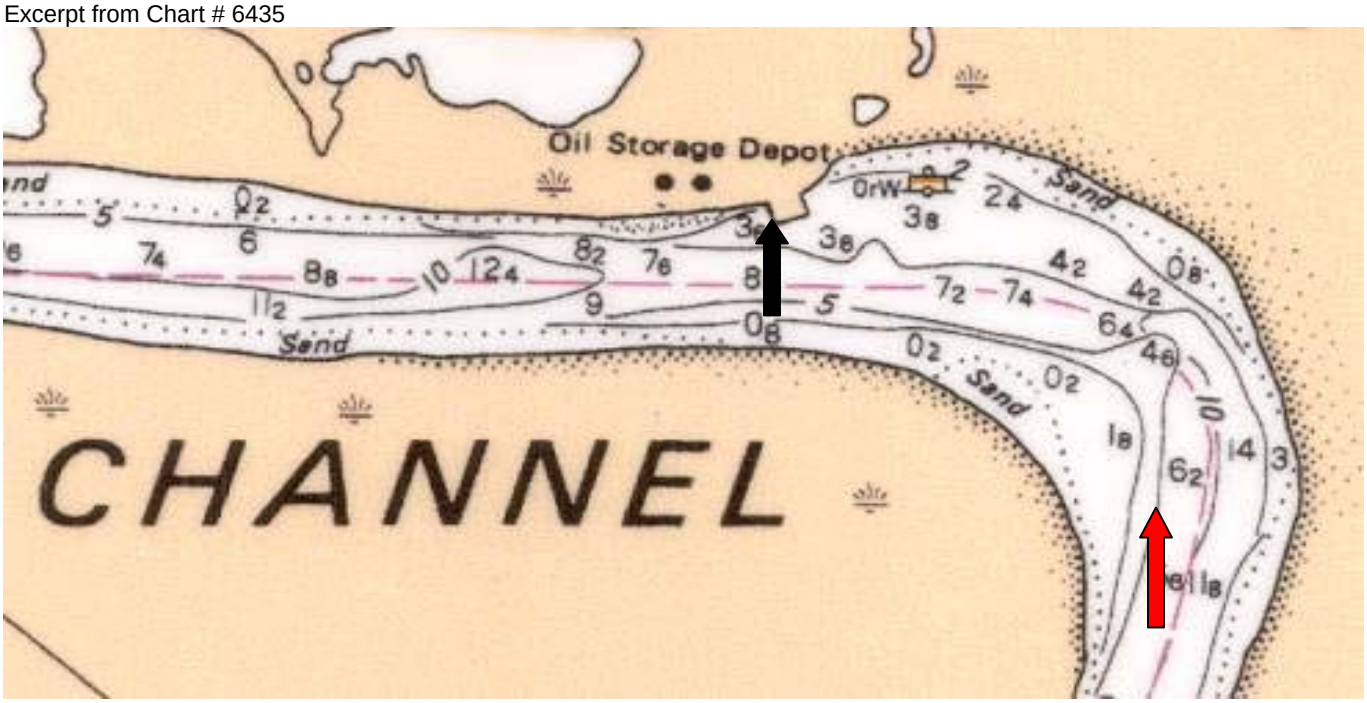
Recommended Deployment Strategy/Equipment Requirement: Boom to contain and recover at the downstream portion of the Control Point beach. 500' of boom can be deployed at most stages of river level. Deflection booms in a cascade can be deployed upstream of the site, if required. Permanent shore anchors are located at various points along the beach at this Control Point.

Other Comments: The river flow at the site is affected by tidal influences. There is a well maintained 700m gravel airstrip at this site. Survey conducted August 2002.

FAREWELL EMERGENCY RESPONSE PLAN

Control Point Identifier:	Control Point Name:	Issued: DRAFT #5 Lat. 69° 12.451 N Long. 135° 05.932' W
	Farewell (Shell Canada Camp)	

Excerpt from Chart # 6435



Red arrow indicates flow.
Black arrow indicates position and direction of photograph (August 2002).
Photograph below shows orange river boom on the beach at the Control Point and ramp to camp plateau.

FAREWELL EMERGENCY RESPONSE PLAN

Control Point Identifier:	Control Point Name:	Issued: DRAFT #4
	Farewell Downstream Control Point #1	Lat. 69° 16.138' N Long. 135° 12.331 W

Location: On a prominent point on the east bank of Richards Island on the middle channel of the Mackenzie River where the river widens as it flows into Mackenzie Bay.

Land Owner/Tenant Contact: Crown/ILA

Distance to Confluence: 0*

Waterbody: Mackenzie Bay, Beaufort Sea
This Control Point is interpreted to be at the confluence.

Next Downstream Control Point: None. Open water containment and recovery or treatment would be required downstream of this location.

Waterway Details:

Width: 1 km

Bed Description: Sand and Gravel

Bank Height/Slope: Pebble and cobble beach with dense brush behind on a gently rising slope.

Work Space Details:

Size & Location: Size will vary depending on river height. There will normally be sufficient workspace at most times of the year. During August 2002 an area 10 m wide and 120 m long was available.

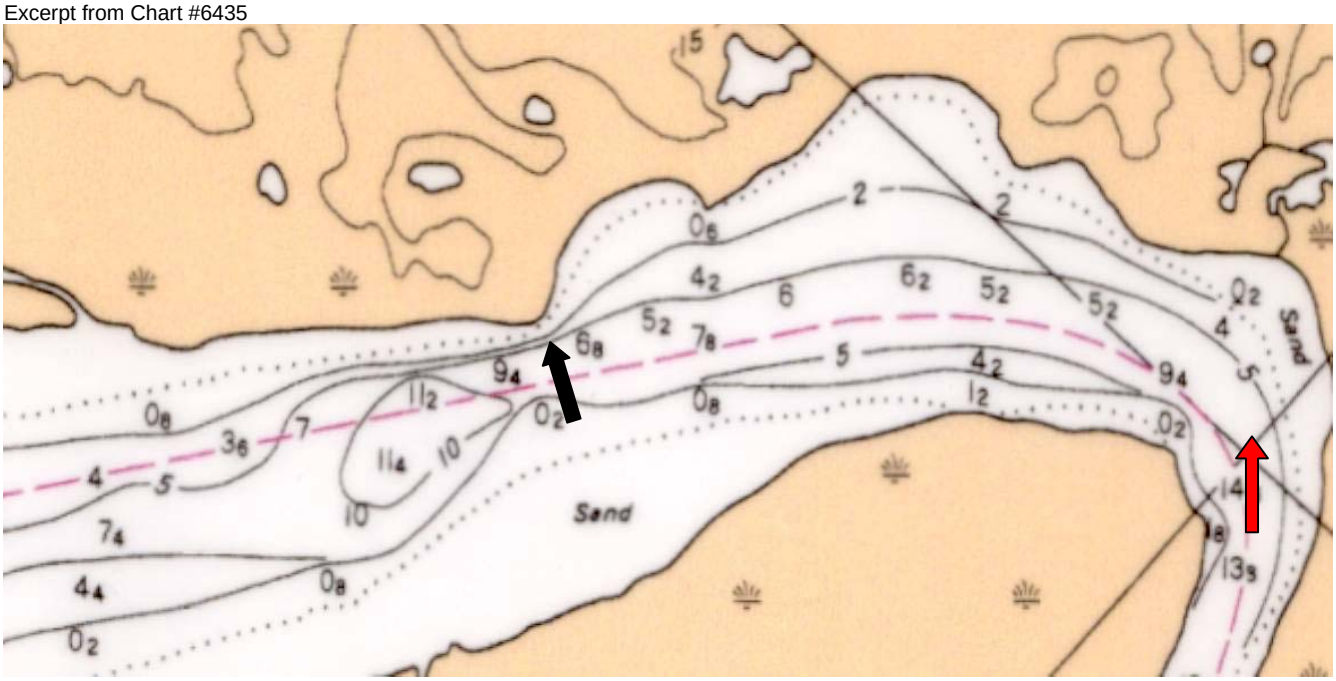
Helicopter Pad: A helicopter could operate from the beach, if required.

Recommended Deployment Strategy/Equipment Requirement: Boom to contain and recover spill at the point as it is swept round the upstream bay. A cascade of deflection booms could be placed to divert a spill from the main channel, if required. 500' containment boom will be required to guide spill from anchor point to beach for recovery.

Other Comments: This site is affected by tidal influences and is exposed to winds. The point on which the Control Point stands is difficult to differentiate from the one immediately upstream. This one has a 0.3 meter square white blank sign on a metal post in the bush at the back of the beach. It can be seen in the center of the photograph. This Control Point is 9.5 km downstream of Farewell, computed at river centerline. Survey conducted August 2002.

Control Point Identifier:	Control Point Name:	Issued: DRAFT #4 Lat. 69° 16.138' N Long. 135° 12.331' W
	Farewell Downstream Control Point #1	

Excerpt from Chart #6435



Red arrow indicates flow.
Black arrow indicates position and direction of photograph (August 2002)
This Control Point is 9.5 km downstream of Farewell computed on the river's centerline.

11.6.5 Fuel Spill Emergency Response Plan (Land)

The campsite is located between a small lake and a channel of the Mackenzie River. All fuel on site is stored in tanks within secondary containment. This ERP also applies to non-fuel spills (motor oil, hydraulic oil, cooking oil etc.). A minor spill to water could develop if a land spill is not contained immediately.

Transportation

Liquid fuels will be stored in a closed system during transportation. Diesel fuel will be delivered from Camp Farewell by fuel truck. Aviation fuel will be transported in drums. All equipment coming on site will be diesel powered so amount of gasoline on site is minimal.

Maintenance and Control

This contingency plan is project specific and will be 1) reviewed & 2) updated:

- As changes to applicable environmental legislation come into effect
- Annually, to take into account changes in environmental factors and in facility characteristics and policy
- After every oil pollution incident and exercise.

Changes to phone numbers and names of those individuals identified in this contingency plan will be made on an as required and when required basis. The numbers are to be verified when the camp is opened and/or on an annual basis.

Organization

Shell Canada Limited utilizes the Incident Command System for all emergencies[2]. All incident responses are modeled after the Disciplined Approach. See Section 917 of Shell's Emergency Response Plan Model for detailed guidance on the Disciplined Approach and Prioritized Response Goals.

Prioritized Response Goals

The prioritized response goals are:

- Protect Human Life (yours, fellow worker, & public)
- Protect The Environment
- Minimize Asset Loss
- Regain Steady State Operations to minimize business impact (consider both revenue & reputation)

The objectives of a spill response are:

- Safety of People, Environment, and Facilities
- Source Control
- Containment of released materials
- Recovery and Storage of released materials.

[2] ICS system description plus Roles & Responsibilities of all organizational positions are described in Shell's Emergency Response Manual - Model

FAREWELL EMERGENCY RESPONSE PLAN

PROCEDURE

1. SAFETY

Ensure personal safety

- Ensure your own personal safety from existing and potential hazards and fellow worker safety.

2. ISOLATE AND DENY ENTRY

Isolate the area and deny / restrict entry

- Utilize vehicles or barricades for temporary control.
- Establish / adjust control perimeters.

3. NOTIFICATIONS

Immediately notify the following

- .Shell's onsite supervisor

Notify the following as soon as practical

- Shell's DAR/Construction Manager
- Northwest Territory Emergency Spill Response Line
- Indian Northern Affairs Canada
- Indian Northern Affairs Canada - requirements as per protocol in Appendix IV
- NEB - requirements as per protocol in Appendix IV and/or spill is not contained and could result in further safety property or environmental damage.

4. COMMAND / MANAGEMENT

Order depends on specific factors

- Assign Incident Command System roles as resources become available.
- Initiate the response to incident, taking existing conditions into account.
- Ensure safety precautions and operating plans and conditions are reviewed with the crew.
- Determine a need for roadblocks.
- Ensure proper permits are executed.

5. IDENTIFICATION AND HAZARD ASSESSMENT

Identify the Hazards and Assess the Risks

- Determine chemical makeup of substance (i.e.: WHMIS, TDG Placards, PIN Nos.).
- MSDS (Material Safety Data Sheets – Chemical).
- Placards and labels (colors, markings).
- Shipping papers (Bill of Lading, Way Bill, etc).
- Technical information (CANUTEC).
- Other (specialists, monitoring devices).

6. PROTECTIVE EQUIPMENT

Ensure proper personal protective equipment is utilized, and know the level of equipment available

- Fire retardant clothing, safety glasses, goggles, life jackets, gloves etc.
- Check MSDS sheets for additional requirements

7. CONTAINMENT AND CONTROL

Safe defensive containment

- If safe to do so, and if possible, stop the flow of material.

- Ensure that flow is contained before starting the recovery procedure.
- Construct dikes, dams or drainage trenches to limit size of spill and prevent fuel from migrating. Contain as close to source as safe and practical to do
- In winter, areas are usually snow covered so spill areas are easily seen. Build dikes using plastic sheeting to line face of dike. Use mechanical and hand equipment to scrape up snow/liquid mixture and place it in containers.
- See list of emergency spill cleanup equipment for clean up materials
- Isolate (deny entry via keeping safe distance from spilled material.
- Divert, disperse, dilute cover
- Pump as much liquid product as possible into empty drums or tanks for disposal.
- Deploy absorbent pads, socks as required.
- Recover oiled sorbents and place them in steel drums for burning in onsite incinerator. Sorbents should be incinerated as soon as possible to avoid spontaneous combustion.
- Immediate burning may be required to prevent the spread of fuel into water courses. If burning done, pick up the residue after-burn.
- Notify and request assistance, if required, from external NWT Emergency Response Line.
- Place all resources/materials on standby that are available within close proximity, i.e. crawler tractor, loaders, bobcats, vacuum trucks, fuel bladders/fibreglass tanks, lost circulation material, straw bales etc.

8. DECONTAMINATION AND CLEANUP

Collect, cleanup, and sample

- Decontaminate personnel as required if exposed to the spill
- Priority is to high environmentally sensitive areas (municipality water sources, waterfowl staging areas, domestic fishing areas).
- Store the spilled material in proper containers for disposal;
- Implement remediation program for the area, as required
- Collect and analyze soil samples from the remaining spill area, if required
- Monitor the progress of remediation as required.

9. DISPOSAL

Dispose of wastes, contaminated clothing and equipment if unable to decontaminate.

- Consider waste impacts in all decisions
- Remove the contaminated material and haul to an approved disposal site.

10. DOCUMENTATION

Document all actions and complete reports

- Assign a recorder to log activities
- Complete and submit a follow-up spill report to the Northwest Territories Spill Report line.

11.6.6 Fuel/Oil Spill Emergency Response Plan (Ice)

The campsite is located between a small lake and a channel of the Mackenzie River. All fuel on site is stored in tanks within secondary containment. This ERP also applies to non-fuel spills (motor oil, hydraulic oil, cooking oil etc.). Spills on or under ice are most likely to occur during transport or due to vehicle or equipment falling through the ice.

Transportation

Liquid fuels will be stored in a closed system during transportation. Diesel fuel will be delivered from Camp Farewell by fuel truck. Aviation fuel will be transported in drums. All equipment coming on site will be diesel powered so amount of gasoline on site is minimal.

Maintenance and Control

This contingency plan is project specific and will be 1) reviewed & 2) updated:

- As changes to applicable environmental legislation come into effect
- Annually, to take into account changes in environmental factors and in facility characteristics and policy
- After every oil pollution incident and exercise.

Changes to phone numbers and names of those individuals identified in this contingency plan will be made on an as required and when required basis. The numbers are to be verified when the camp is opened and/or on an annual basis.

Organization

Shell Canada Limited utilizes the Incident Command System for all emergencies[3]. All incident responses are modeled after the Disciplined Approach. See Section 917 of Shell's Emergency Response Plan Model for detailed guidance on the Disciplined Approach and Prioritized Response Goals.

Prioritized Response Goals

The prioritized response goals are:

- Protect Human Life (yours, fellow worker, & public)
- Protect The Environment
- Minimize Asset Loss
- Regain Steady State Operations to minimize business impact (consider both revenue & reputation)

The objectives of a spill response are:

- Safety of People, Environment, and Facilities
- Source Control
- Containment of released materials
- Recovery and Storage of released materials.

[3] ICS system description plus Roles & Responsibilities of all organizational positions are described in Shell's Emergency Response Manual - Model

FAREWELL EMERGENCY RESPONSE PLAN

PROCEDURE

1. SAFETY

Ensure personal safety

- Ensure your own personal safety from existing and potential hazards and fellow worker safety.

2. ISOLATE AND DENY ENTRY

Isolate the area and deny / restrict entry

- Utilize vehicles or barricades for temporary control.
- Establish / adjust control perimeters.

3. NOTIFICATIONS

Immediately notify the following

- .Shell's onsite supervisor

Notify the following as soon as practical

- Shell's DAR/Construction Manager
- Northwest Territory Emergency Spill Response Line
- Indian Northern Affairs Canada - requirements as per protocol in Appendix IV
- NEB - requirements as per protocol in Appendix IV and/or spill is not contained and could result in further safety property or environmental damage.

4. COMMAND / MANAGEMENT

Order depends on specific factors

- Assign Incident Command System roles as resources become available.
- Initiate the response to incident, taking existing conditions into account.
- Ensure safety precautions and operating plans and conditions are reviewed with the crew.
- Determine a need for roadblocks.
- Ensure proper permits are executed.

5. IDENTIFICATION AND HAZARD ASSESSMENT

Identify the Hazards and Assess the Risks

- Determine chemical makeup of substance (i.e.: WHMIS, TDG Placards, PIN Nos.).
- MSDS (Material Safety Data Sheets – Chemical).
- Placards and labels (colors, markings).
- Shipping papers (Bill of Lading, Way Bill, etc).
- Technical information (CANUTEC).
- Other (specialists, monitoring devices).

6. PROTECTIVE EQUIPMENT

Ensure proper personal protective equipment is utilized, and know the level of equipment available

- Fire retardant clothing, safety glasses, goggles, life jackets, gloves etc.
- Check MSDS sheets for additional requirements

7. CONTAINMENT AND CONTROL

Safe defensive containment

- If safe to do so, and if possible, stop the flow of material.
- Ensure that flow is contained before starting the recovery procedure.

- Construct snow/ice dikes dams to limit size of spill and prevent fuel from migrating. Contain as close to source as safe and practical to do
- In winter, areas are usually snow covered so spill areas are easily seen. Build dikes using plastic sheeting to line face of dike. Use mechanical and hand equipment to scrape up snow/liquid mixture and place it in containers.
- See list of emergency spill cleanup equipment for clean up materials
- Isolate (deny entry via keeping safe distance from spilled material).
- Pump as much liquid product as possible into vacuum trucks, empty drums or tanks for disposal.
- Deploy absorbent pads, socks as required.
- Recover oiled sorbents and place them in steel drums for disposal or burning in onsite incinerator. Sorbents should be incinerated as soon as possible to avoid spontaneous combustion.
- Scrape up all contaminated ice.
- Notify and request assistance, if required, from external NWT Emergency Response Line.
- Place all resources/materials on standby that are available within close proximity, i.e. crawler tractor, loaders, bobcats, vacuum trucks, fuel bladders/fibreglass tanks, lost circulation material, straw bales etc.

8. DECONTAMINATION AND CLEANUP

Collect, cleanup, and sample

- Decontaminate personnel as required if exposed to the spill
- Priority is to high environmentally sensitive areas (municipality water sources, waterfowl staging areas, domestic fishing areas).
- Store the spilled material in proper containers for disposal;
- Collect and analyze soil samples from the remaining spill area, if required
- Monitor the progress of remediation as required.

9. DISPOSAL

Dispose of wastes, contaminated clothing and equipment if unable to decontaminate.

- Consider waste impacts in all decisions
- Remove the contaminated material and haul to an approved disposal site.

10. DOCUMENTATION

Document all actions and complete reports

- Assign a recorder to log activities
- Complete and submit a follow-up spill report to the Northwest Territories Spill Report line.

Spills in Broken Ice

Like all spill response, this very much depends on the conditions at the time of the event.

Consideration should be given to in-situ burning. It is a severe risk to personnel safety risk attempting to contain and recover a spill in what can be a very dangerous environment. Regulatory approval will be required for in-situ burning.

Prior to ignition, conduct a thorough review of what resources could be at risk from a resulting fire. Position emergency personnel and equipment to respond to protect those resources.

If operating from shore or a secure location on the ice, a skimmer may be used to recover the spill.

Spills Under Ice

Oil under ice will attempt to follow the fastest river flows, which occur in the deepest sections of the river. Reference to a navigation chart for the river downstream of the spill site will show the location of the deep channel.

The fastest way to determine the progress of the oil under the ice is to auger holes and look for a sheen rising.

Note that as soon as the ice is penetrated this will also permit gases to escape from the oil.

The aim is to get sufficiently ahead of the oil that equipment can be staged at the site, an ice slot can be dug and, if necessary, wooden deflector walls installed prior to the arrival of the spill.

The ice slot creates an area for the spill to rise to the water surface and be retained there for recovery or, in some cases, ignition. The deflector walls are usually made of plywood sheets that stick down into the river through the ice and deflect the oil towards the slot for recovery. They serve the same purpose under the ice as deflection booms do in open water deployments.

The slot will be placed at an angle across the channel or part of the channel that the spill is expected to run through. 30° to the current flow is an optimum angle. The slot length will usually be that of the distance across the deep channel. The slot width may vary but is usually dictated by the width of the skimmer to be inserted at the downstream end. The surfaced oil will be carried to the downstream end of the slot by the water flow.

Oil Recovery

Oil may be recovered in several ways or a combination of methods. If conditions permit, a vacuum truck can skim the surfaced oil.

In good quality ice of 1 meter thickness there should be no difficulty cutting the slot wide enough to accommodate the MDSRC Canadyne Model 1230 /1 Multi Skimmer (1.22m) at the downstream end. This skimmer has a recovery capacity in excess of 20 cubic meters of oil per hour.

The MDSRC Aquaguard Model 40D rope mop skimmer is capable of recovering up to 4.5 cubic meters and hour. The rope mop can be placed to operate in long arm of the slot.

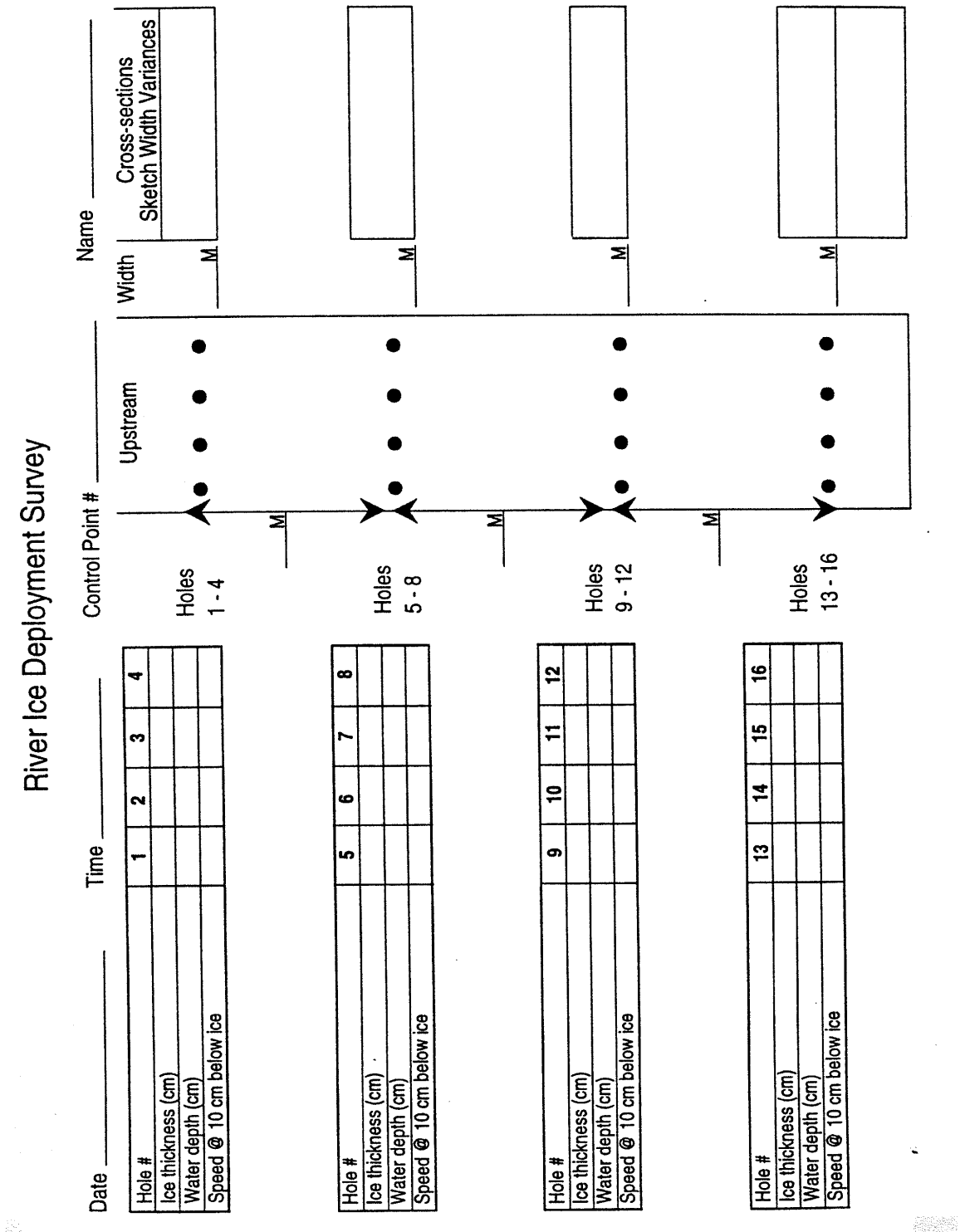
The MDSRC Morris MI-30 disc skimmer can also be utilized. It has a maximum recovery capacity of 30 cubic meters per hour. It may be placed at the funnel mouth end of the slot.

The following steps are taken to result in an ice deployment:

- Perform Ice Safety Assessment
- Deploy ice rescue crew/package
- Perform Ice Deployment Survey (Use Form shown in this Chapter) Ice auger and stream speed meter will be required
- Determine location, angle, length and width of slot
- Mark slot outline on ice
- Compute required size of ice blocks to be pulled from slot
- Mark block outlines on ice in the slot
- Auger a hole through the centre of each block to the water below the ice
- Cut slot outline
- Cut each block
- Pull blocks from slot using “T” bar and chain, starting at downstream end of slot. Spread withdrawn blocks if on ice storage area to prevent stressing ice.
- A skimmer may be installed at the downstream slot end as soon as space is available. This speed the commencement of recovery operations
- Determine the location, angle & length of deflector walls
- Install deflector walls

Tips

- Plywood may be used to cover the length of the slot in extremely cold weather that causes the slot to refreeze.
- Recovery hoses should be held above the ice surface by blocks of wood as this helps prevent the liquid in the hoses from freezing
- All equipment fuelling should be performed at a designated fuelling station prepared to prevent and capture any spill or leak.



11.6.7 Mackenzie Delta Spill Response Corporation (MDSRC)

The Mackenzie Delta Spill Response Corporation is a non-profit organization operating within the Mackenzie Delta to protect the environment by providing spill preparedness and safe, effective response services to Member Companies.

For more detailed response tactics and execution techniques, consult the MDSRC Spill Response Plan (in development at time of writing).

11.7 TRANSPORTATION RELATED EMERGENCIES

11.7.1 Emergency Response Procedure (Transportation Related Emergency) **Automotive**	**Procedure:** 1. Ensure personal safety 2. Call for help • use others involved • warn oncoming traffic 3. Notifications • ambulance if required • local police (if damage over $1,000.00) • supervisor 4. Fill out the shell automotive accident report form carried in all shell vehicles 5. Do not • admit fault or accept liability • make settlements • argue about the accident
11.7.2 **Aircraft**	**Procedure:** 1. Consider an aircraft overdue when reported as such by Air Traffic Control (ATC) or the affected Shell destination when no information is received from it or about it. • 30 minutes after its last notified estimated time of arrival (ETA) • 15 minutes after the estimated time of landing, after having received landing clearance or landing information • 15 minutes after takeoff 2. There can be two phases of response to an overdue aircraft • uncertainty - attempt to make contact or to find • alert - missing aircraft 3. An aircraft is considered missing when its position is unknown and with the supply of fuel carried, it can no longer be airborne.

11.8 EXTERNAL / CIVIL DISTRUBANCES

11.8.1 Emergency Response Procedure (External / Civil Disturbance)	**Note:** Activities or hazards outside of your area of influence could result in an emergency situation requiring response. Examples include • nearby industry • transportation accident with spill or fire • sabotage • non work related accident of injury • civil disturbances / actions **Procedure:** 1. Ensure personnel safety 2. Confirm situation and location 3. Isolate and deny entry to site 4. Notifications • supervisor • police • onsite personnel 5. Initiate incident command system (ICS) • develop an action plan • shutdown equipment as deemed necessary in an organized safe manor • evacuate to a safe muster area, ensure everyone is accounted for • monitor and assist • resume operation when it is safe to do so

12.0 CLASSIFICATION OF AN INCIDENT

12.1 Purpose

Classifying an incident provides a common understanding by Company, Industry and Government Agencies as to the severity of the incident and its potential impact on People, Property, Environment and Reputation. It is important that the Incident Commander (IC) determine the Level of Incident and its potential Level if it escalates. The Levels need to be adjusted depending on the emergency situation/status.

When the On site Shell Representative is unsure of the situation, then communication should take place with the Office Based Superintendent / Supervisor to determine the Level of Incident.

12.2 Classification Matrix

	INCIDENTS			
RISK	**ALERT**	**LEVEL 1: LOW**	**LEVEL 2: MEDIUM**	**LEVEL 3: HIGH**
IMPACT				
Worker Safety	Near Miss	People Actual severity consequence 2 on the RAM	Multiple worker injury an/or life threatening worker injury People Actual severity consequence 3 on the RAM	Worker fatality - Actual severity consequence 4 to 5 on the RAM
Public Safety	Onsite event only. No risk to public but public has a perception that they are at risk.	Onsite, with possible impact off-site Reputation Actual or Potential severity consequence 2 on the RAM	Onsite, with possible impact off-site Reputation Actual or Potential severity consequence 3 on the RAM	Potential for public safety to be jeopardized Reputation Actual or Potential severity consequence 4 to 5 on the RAM
Environmental	Onsite event only	Onsite, with possible impact off-site Environmental Actual severity consequence 2 on the RAM	Onsite, with possible impact off-site Environmental Actual severity consequence 3 on the RAM	Onsite, with significant off-site Environmental Actual severity consequence 4 to 5 on the RAM / Long term
TYPES OF INCIDENTS				
Fire / Explosion	Small gas leak or fuel spill that can be immediately contained.	Gas or fuel leak with some risk of fire.	Contained equipment fire (i.e., camp, trailers or rig equipment), no risk to life.	Major equipment / rig fire and or explosion.
Camp Fire	Potential of camp fire, false fire alarms, electrical problems in	Refuse, fuel, dry vegetation or other material out of control	Contained camp fire	Major camp fire or explosion

	the fire system	around the camp		
Hazardous Spill (chemicals, hydrocarbons or produced water)	Spill but within a containment system No hazard of fire	Onsite spill but outside containment system	Spill migrates off-site and or potential of fire and or explosion	Off-site sensitive environment (ie. wildlife wet lands, river or water body)
Transportation of Dangerous Goods (TDG)	TDG violation warning (no ticket issued)	TDG violation / accident, no damage to container and no product release	Accident with damage to container with potential of failure and/or fuel spill to sensitive area	Accident with fire and/or significant loss of product in sensitive area
Natural Event				
Severe Weather	Severe weather warning of area.	Travel becomes hazardous / potential for worker injury.	Restriction on travel / potential for worker injury.	No visibility, roads are impassable, significant build up of ice in equipment
External Events				
Sabotage	Targeting industry in the area.	Unconfirmed.	Onsite damage.	Sever damage that disrupts the safety of the operations.
Bomb Threat	Targeting industry in the area.	Unsubstantiated threat.	Credible threats.	Explosive located onsite and/or has detonated.

12.3 Action Plan Checklist

	LEVEL 1: LOW	LEVEL 2: MEDIUM	LEVEL 3: HIGH
Incident Commander (IC) Onsite Shell Representative	❑ Activate Site Specific ERP ❑ Alert the Office Based Superintendent/Supervisor or Operations Manager who will: • Consider proceeding to the worksite • Mobilize Sr. Construction Foreman (if not on site) and HSE Team Leader • Alert the Manager WA&SO and E&P Crisis Manager as needed. ❑ Establish an Incident Command Post ❑ Establish initial Staging Area ❑ Notify local regulators (INAC, WCB, etc) ❑ Alert / Stand by: • Aircraft Support • Fire Services • MDSRC if required • Emergency Medical Services	❑ Relocate Incident Command Post if req'd. ❑ Establish / relocate Staging Area ❑ Mobilize to rescue and or treat injured personnel • Dispatch medic • Establish triage area ❑ Order additional communication equipment if req'd ❑ Mobilize resources to the Staging Area: • Additional personnel from local contractors • Fire services (if required) • Spill equipment (if required) • Emergency Medical Services (EMS – if required) ❑ Dispatch manpower and equipment from Staging Area ❑ Up-date • Discuss if fan-out is required to other government / local agencies • INAC • ROC • WCB • INAC • DFO • RCMP • Environment Canada • E&P Crisis Manager	❑ Establish road blocks ❑ Notify public (as required) ❑ Activate Corporate EOC (if required) ❑ Up-date • INAC • ROC • WCB • INAC • DFO • RCMP • Environment Canada • E&P Crisis Manager

APPENDICES

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

Appendix I ***TRANSPORTATION & MEDIVAC PLAN***

EMERGENCY NUMBERS	Preferred hospital: **Inuvik Hospital** Number: (**867) 777- 8161 Emergency** **(867) 777-8000 Switchboard** Preferred Ambulance: **Inuvik Ambulance Emergency** Number: (**867) 777-4444** Preferred Police: **RCMP** Number: (**867) 777-1111** Preferred Air :Evacuation **Canadian Helicopters** Number **867 777-2424** **867 678-0091** Alternate Air: **Aklak Air** Number **867 777-3777 Office Hours** **867 777-3555 24hr**
GENERAL INFORMATION **Note-** If travel distance to Health care facility is: **CLOSE** (< 20 min.) or **DISTANT** (20 min to 40 min) You may rely on ambulance service from that Health care facility, HOWEVER, if the travel distance of the worksite is greater then 40 min, then it is deemed: **ISOLATED (>40 min)** Therefore, you shall have transportation that meets the following criteria: • Clean • Protects from weather • Equipped with communication • Accommodate a 200 cm stretcher **HELICOPTER RESPONSE TIME WILL QUALIFY**	Type of accident likely to occur: Lacerations, Slips/Trips/Falls Number of workers at site: 15 - 35 Distance from a Health Care Facility: greater than 40 min Availability of Ambulance Service: Air evacuation Ambulance emergency response time: Approximately 40min Time of day work is in progress: Day-time Type of transportation needed to get to the worksite: Helicopter or fixed wing Route to site: Flying 110km Northwest of Inuvik **Lat: 69 12 35.09 Long: 135 06 17.286** Does change in weather effect type of travel? Explain. Increase time by: Depends upon weather. Could be next day.
CONTACTS: ***LOCATION OF PHONES AND RADIOS***	• phones located in offices • hallway • radios on specific personnel • radios in office • specific personnel have cell phones
EMERGENCY CALL RESPONSIBILITY	Primary responsibility: Medic Secondary responsibility: Shell Site Supervisor Site phone number: **867 777-** **867 777-** Radio Frequency: **Receive:** _____ **Transmit:** _____ Air to Ground Frequency: **130.275 MHz**
INFORMATION YOU NEED TO	**CALL AIR EVACUATION CHARTER**

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

HAVE	**Tell them** • Medivac required • Your location –Camp Farewell **Lat: 69 12 35.09** **Long: 135 06 17.286** • Landing (airstrip) condition include lighting, wind speed, wind direction and local weather conditions • Any obstructions or hazards to be aware of in landing • Phone numbers of camp • Radio frequencies of camp • Upon contact to charter, medical contact is mandatory to ensure that proper facilities and attention is given to patient(s). • Number of injured: • Extent of injuries: • What is being done (patient talking, seated, no response, etc): • Obtain confidential medical file to accompany patient **CALL TO HOSPITAL AND AMBULANCE** If available and possible, medic shall call the local hospital and ambulance **Tell them** • Medivac in progress and that evacuation charter has been notified • Number of injured: • Extent of injuries: • What is being done (patient talking, seated, no response, etc) • Age, sex of patient • Brief description of accident • Description of injuries or illness • Medic position and qualifications • Type of medical aid already administered • Site phone number • Estimated time of arrival:
EXPECTATIONS	What the paramedic should expect when he arrives on site: _____ _____ OR What you can expect when the conveyance vehicle arrives: _____ _____
COMMUNICATION OF PLAN	**FIRST AIDERS ON SITE** _____ _____ _____ **All workers on site as part of orientation**

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

Appendix II PERSONAL MEDICAL INFORMATION SHEET

THE INFORMATION BELOW IS CONFIDENTIAL - TO BE VEIWED BY MEDICAL PERSONNEL ONLY

EMPLOYER:_____ POSITION:_____

NAME:_____ DATE:_____

ADDRESS:_____

PHONE NO.: ( ) _____ OR ( ) _____

BIRTHDATE:_____ AGE_____ HEIGHT:_____ WEIGHT:_____

HEALTH CARE NUMBER:_____ PROVINCE:_____

FAMILY DOCTOR:_____ CITY:_____

MEDICAL HISTORY

ARE YOU TAKING MEDICATION FOR THE FOLLOWING?

❑ Diabetes ❑ Asthma ❑ Epilepsy ❑ High Blood Pressure
❑ Angina ❑ Thyroid ❑ Heart Disease

Allergies to Penicillin? ❑ Yes ❑ No ❑ Other Drugs _____

Do you suffer from allergies ❑ Yes ❑ No If so, explain _____

Do you have other medical problems not listed above?_____

_____

Have you had a tetanus shot in the past five years? ❑ Yes ❑ No

Do you wear Glasses? ❑ Yes ❑ No **Contact Lenses?** ❑ Yes ❑ No **Dentures?** ❑ Yes ❑ No

Do you have any medical problems, disabilities or previous injuries that may affect your ability to conduct your job in a safe efficient manner? ❑ Yes ❑ No

If Yes please explain:_____

_____

EMERGENCY CONTACT NUMBERS

Name:_____ Relationship:_____

Address:_____

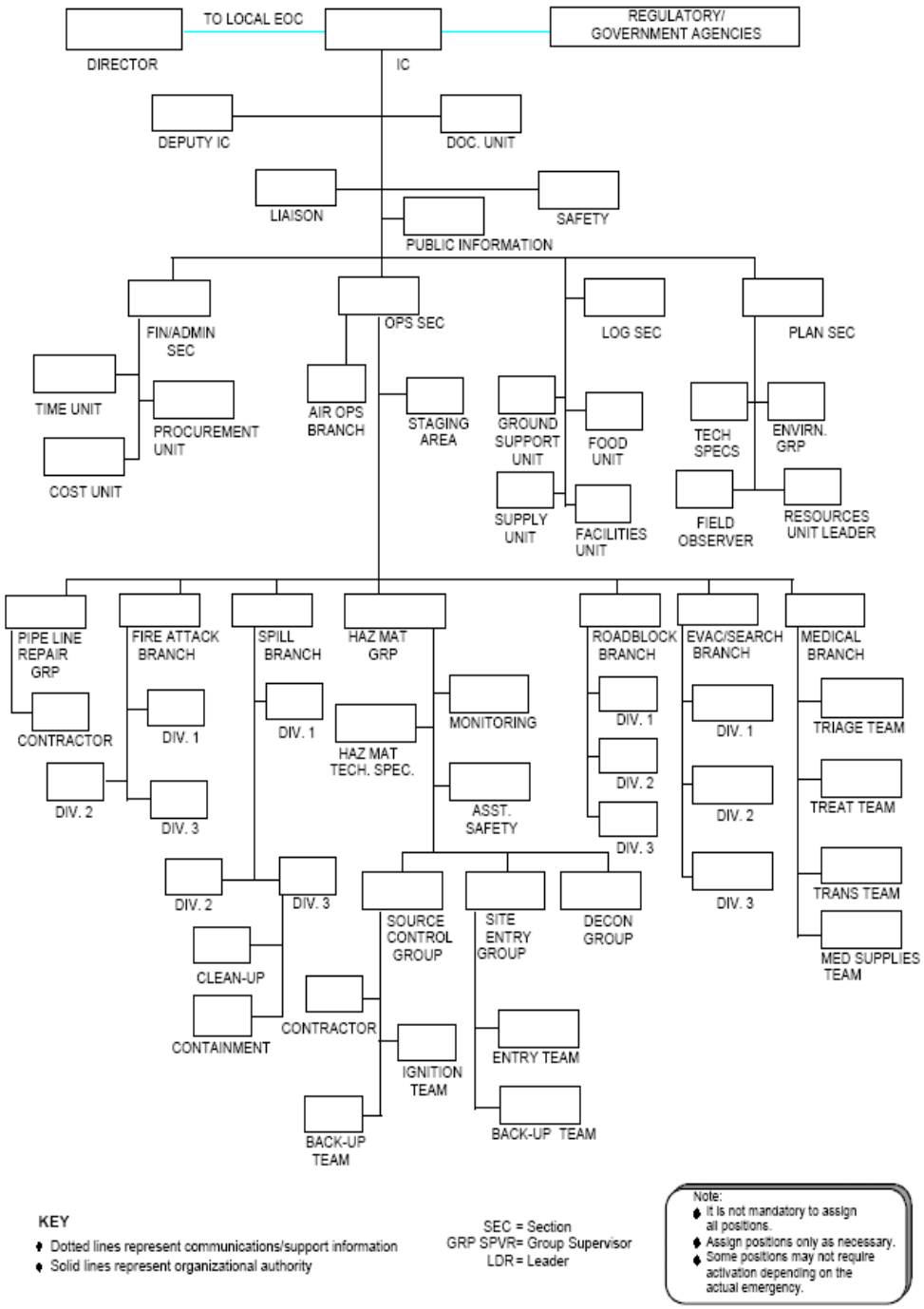
Phone Number: ( ) _____ Cell Number: ( ) _____

_____ Employee Signature	This form is to be used only in an emergency. By signing you are authorizing this information to be released to medical personnel.

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

Appendix III FIELD BASED INCIDENT COMMAND POST

COMPOSITE ORGANIZATION CHART - INCIDENT COMMAND POST (ICP)



Appendix IV NWT SPILL REPORT FORM & PROTOCOLS

See .pdf version for full size form

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 Party 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 sq. m if possible)
L Factors affecting spill or recovery (weather conditions, terrain, snow cover, etc.)		M Containment (natural depression, dyke, 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 persons, property, or environment; eg: fire, drinking water, fish or wildlife*		
Q Comments and/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 No:	
Reported to:	Position, Employer, Location	Telephone No:	

*Put additional comments on next page (Please type in the Box letter you are referring to in your comments)

Indian and Northern Affairs Canada
www.inac.gc.ca

Affaires indiennes et du Nord Canada
www.ainc.gc.ca

Your file - Votre référence

Our file - Notre référence

December 17, 2003

Oil and Gas Exploration and Production Companies
Operating in the Northwest Territories and Nunavut

INAC Spill Reporting Protocol for Upstream Oil and Gas Operations

The Northwest Territories/Nunavut Spills working Agreement (revised 2003) does not specify what quantity of a substance would trigger a requirement to report a spill, largely because there are seven signatories to the Agreement who have different spill reporting requirements.

Recently, the National Energy Board (NEB) developed a Spill Reporting Protocol for NEB lead spills in the NWT/Nunavut (see attached letter). The purpose of the revised upstream oil and gas spill reporting protocol is to:

- more closely align spill reporting requirements with reporting requirements of other jurisdictions such as the territorial governments;
- focus spill notification and follow-up on spills that have potential to be a threat to the environment; and
- minimize the number of spill reports of low volume and areal extent that can be immediately and adequately dealt with by the operator and have minimal or no potential to be a threat to the environment.

The NEB spill reporting protocol came into effect on 15 July 2003 for well drilling and production operations where the NEB is the lead agency for that spill. At that time, Indian and Northern Affairs Canada had adopted the NEB protocol for INAC lead spills for oil and gas operations including well drilling where the NEB is not the lead agency and seismic operations. The conditions outlined in Appendix A of the NEB protocol must be met prior to the operator being permitted to use this protocol.

Effective immediately, the following conditions are added to the Appendix A of the protocol for INAC lead spills:

- An on-site record shall be kept of all minor spills and immediately reportable spills and be readily available to INAC Inspectors or officials upon request;
- Monthly reporting of all minor spills shall be reported to the District INAC Inspector(s) in the condensed form attached;
- All spills requiring assistance by the operator (i.e. not cleaned up immediately and assistance is required for cleanup), continuing spills, or in situations where further spillage is possible are to be reported immediately;

- All spills, irregardless of size (areal extent), amount, and product, remain the liability of the proponent and must be cleaned up immediately. All INAC lead spills must be cleaned up to the satisfaction of the INAC Inspector.

Please review the attached and if you wish to take advantage of this protocol, please contact Robert Jenkins at (867) 669-2574.

Sincerely,

David Milburn
Manager, Water Resources Division
Indian and Northern Affairs Canada

cc. Annette McRobert, Operations Directorate
Bob Wooley, Mackenzie Valley Land and Water Board
George Govier, Sahtu Land and Water Board
Gordon Wray, Northwest Territories Water Board
Robert Alexie, Gwich'in Land and Water Board
Rudy Cockney, North Mackenzie District
Ed Hornby, South Mackenzie District
Norman Wells Sub-District
Fort Simpson Sub-District
Fort Smith Sub-District
Hay River Sub-District
John Korec, National Energy Board
Harvey Gaukel, Government of the Northwest Territories
Terry Cook, DFO
Ed Collins, Environment Canada
James Thorbourne, Inuvialuit Land Admintistration
Gordon Mackay, Government of Nunavut

INAC Monthly Spill Reporting Form

Company Responsible:
Project Name and Water Licence #:
Month:

Date of Spill (d/m/y)	Product Spilled	Amount	Extent of Contaminated Area (m^2)	Location (latitude and longitude)

DIAND District Fax Numbers
North Mackenzie District (Inuvik): (867) 777-2090
Norman Wells Sub-District: (867) 587-2928
South Mackenzie District (Yellowknife) (867) 669-2720
Hay River Sub-District: (867) 874-2460
Fort Smith Sub-District: (867) 872-3472
Fort Simpson Sub-District: (867) 695-2615
Nunavut District: (867) 979-6445

National Energy Board

Office national de l'énergie

File 9720-A000-7-2
14 July 2003

Oil and Gas Exploration and Production Companies
Operating in Northwest Territories and Nunavut

Spill Reporting Protocol for Upstream Oil and Gas Operations in the Northwest Territories and Nunavut Regulated by the National Energy Board

Protocol Purpose and Effective Date

A revised upstream oil and gas spill reporting protocol (Protocol) is intended:

1) to more closely align spill reporting requirements with reporting requirements of other jurisdictions such as the territorial governments;
2) to focus spill notification and follow-up on spills that have potential to be an imminent threat to the environment; and
3) to minimize the number of spill reports of low volume and areal extent that can be immediately and adequately dealt with by the operator and have minimal or no potential to be a threat to the environment.

Effective 15 July 2003, the new Spill Reporting Protocol for Upstream Oil and Gas Operations in the Northwest Territories and Nunavut will apply to exploratory and development oil and gas drilling and production operations[2].

Protocol Highlights

The Upstream Oil and Gas Spill Reporting Protocol will:

- Apply to companies authorized to carry on drilling or production activities in the Northwest Territories and Nunavut and who meet the conditions set out in the Protocol;
- Apply to spills where either the NEB or Indian and Northern Affairs Canada (INAC) would be designated as lead agency as per the NWT Spills Working Agreement[3];

...2

[2] Existing reporting protocols, such as for Imperial Oil Resources Ltd.'s Norman Wells facility and operations, would not be affected by this new protocol.
[3] See attached Table 1A of the Northwest Territories/Nunavut Spills Working Agreement.

444 Seventh Avenue SW
Calgary, Alberta T2P 0X8

444, Septième Avenue S.-O.
Calgary (Alberta) T2P 0X8

Canada

Telephone/Téléphone : (403) 292-4800
Facsimile/Télécopieur : (403) 292-5503
http://www.neb.gc.ca

- Establish that the triggers for immediately reportable spills meet *the Canada Oil and Gas Operations Act* (COGOA) and *Regulations* and, be consistent with the reporting triggers in the Nunavut and Northwest Territories *Spill Contingency Planning and Reporting Regulations*[4]; and
- Require that each operator have, and implement, an approved spill contingency plan.

Immediately Reportable Spills

For the purpose of the Protocol, an "immediately reportable spill" is defined as a release of a substance that is likely to be an imminent environmental or human health hazard or meets or exceeds the volumes in Schedule 1.

Minor Spills

All other releases, for which there is no loss of control, are not considered immediately reportable spills and can be handled as part of ongoing operations and maintenance, i.e., immediately cleaned up. However, an on-site record shall be maintained for all releases, whether or not reported.

Please review the attached and if you wish to take advantage of this protocol, please contact me at (403) 292-6614.

John Korec

John Korec, P.Geol.
Environmental Assessment Officer

c.c. Terry Baker, NEB
Gregory Lever, NEB
Rick Turner, NEB
Rick Fisher, NEB
Mieke Vander Valk, NEB

[4] The Territories reference *Transportation of Dangerous Goods* (TDG) *Act* and Regulations for reportable quantities. The same quantities are intended for the Spill Reporting Protocol for those releases not addressed by the TDG or Regulations.

APPENDIX A

Terms and Conditions For Implementing the Spill Reporting Protocol For Upstream Oil and Gas Operations

1.	Applies only to upstream projects in a single geographic area, i.e., well drilling programs or production operations including flowlines and pipelines. The Protocol does not apply to upstream geological or geophysical operations.	UPSTREAM WELL DRILLING OR PRODUCTION OPERATIONS
2.	Applies to spills for which the National Energy Board (NEB) or Indian and Northern Affairs Canada (INAC) would be designated as the Lead Agency under the Northwest Territories/Nunavut Spills Working Agreement.	LEAD AGENCY
3.	This Spill Reporting Protocol **does not apply** to spills for which the Government of the Northwest Territories (GNWT), Government of Nunavut (GNU), Environment Canada Environmental Protection Branch (EPB), Canadian Coast Guard (CCG), or Inuvialuit Land Administration would be designated as the Lead Agency under the Northwest Territories/Nunavut Spills Working Agreement.	NON-APPLICABLE SPILLS
4.	Immediately reportable spills include releases as per **Schedule 1**, and releases of substances of lesser volumes that are likely to be an imminent environmental or human health hazard or where an operator is uncertain if a release is reportable.	IMMEDIATELY REPORTABLE SPILLS
5.	An on-site record shall be kept of all minor spills and immediately reportable spills and be available for inspectors upon request, including the INAC Inspector prior to Land Use Permit closure.	ON-SITE RECORD OF ALL SPILLS
6.	Operator, i.e., the company or individual who holds an authorization for the project, must have a spill contingency plan approved by the NEB or INAC, i.e., signatories to the Northwest Territories/Nunavut Spills Agreement.	SPILL CONTINGENCY PLAN
7.	Spill contingency plan must meet the appropriate regulatory requirements and/or spill contingency planning guidelines, including procedures to clean up minor spills and ensure environmental protection.	
8.	Appropriate field spill kits, as indicated in the spill contingency plan, must accompany each crew and/or mobile equipment and/or vehicle.	
9.	Contractors and sub contractors for the Operator must abide by the Protocol and the spill contingency plan. All spills or releases, whether by the Operator, contractors or sub-contractors, remain the liability of the Proponent or Operator.	LIABILITY

Schedule 1 – Immediately Reportable Quantities

TDG Class	Substance	Immediately Reportable Quantities for NWT/NU 24-Hour Spill Reports
1 2.3 2.4 6.2 7 None	Explosives Compressed gas (toxic) Compressed gas (corrosive) Infectious substances Radioactive Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.1 3.2 3.3	Flammable liquid	≥ 100 L
4.1 4.2 4.3	Flammable solid Spontaneously combustible solids Water reactant	≥ 25 kg
5.1 9.1	Oxidizing substances Miscellaneous products or substances excluding PCB mixtures	≥ 50 L or 50 kg
5.2 9.2	Organic peroxides Environmentally hazardous	≥ 1 L or 1 kg
6.1 8 9.3	Poisonous substances Corrosive substances Dangerous wastes	≥ 5 L or 5 kg
9.1	PCB mixtures of 5 or more parts per million	≥ 0.5 L or 0.5 kg
None	Other contaminants, e.g., crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater, etc.)	≥ 100 L or 100 kg
None	Sour natural gas (i.e., contains H_2S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more

As well, all releases of harmful substances, regardless of quantity, are immediately reportable where the release:

- is near or into a water body;
- is near or into a designated sensitive environment or sensitive wildlife habitat;
- poses an imminent threat to human health or safety; or
- poses an imminent threat to a listed species at risk or its critical habitat.

Example Scenarios:

1. NEB Lead Agency (assumes spills are under control)

Activity	Spill Location	Quantity & Product Spilled	Spill Reporting
Drilling operation	Drilling lease on Crown land	200 L gel-chem mud	Immediately reportable to the NWT 24-hour Spill Report Line
Drilling operation	Drilling lease on Crown land	2 m^3 sour gas	Immediately reportable to the NWT 24-hour Spill Report Line
Water injection line operation	Pipeline right-of-way on Crown land	150 L produced water from valve	Immediately reportable to the NWT 24-hour Spill Report Line
Drilling operation	Drilling lease on Crown land and into near-by creek	75 L of crude oil	Spill has entered a water body - immediately reportable to the NWT 24-hour Spill Report Line
Drilling operation	Drilling lease on Crown land	50 L oil-based mud	On-site record of spill & clean up.
Drilling operation	Drilling on Crown land	0.5 m^3 sweet gas	On-site record of spill & clean up.
Water injection line operation	Pipeline right-of-way on Crown land	80 L produced water from valve	On-site record of spill & clean up.
Drilling operation	Inside shed for the diesel-generator	100 L of diesel leaks into fully-contained generator shed	Not a spill – diesel did not get into or threaten the environment or human health – no report necessary. However, as an operational upset, the leak would be cleaned up and included on the daily tour sheet.

2. INAC Lead Agency (assumes spills are under control)

Activity	Spill Location	Quantity & Product Spilled	Spill Reporting
Fuel tank refilling	Bermed storage tank area on drilling lease on Crown Land	100 L gasoline	Immediately reportable to the NWT 24-hour Spill Report Line
Truck refuelling	Drilling lease on Crown land	2 L of diesel	On-site record of spill & clean up.
Camp operations	Camp on Crown land	75 L of grey water overflows camp sump	On-site record of spill & clean up.
Vibroseis operation	Seismic line on Crown land	50 ml of hydraulic fluid on snow, immediately scooped up and placed in disposal container	Protocol does not apply for a seismic operation – however, this is not a spill as the hydraulic fluid did not enter the environment.
Truck refuelling	Seismic line on Crown land	2 L of diesel	Protocol does not apply for a seismic operation – spill is immediately reportable to the NWT 24-hour Spill Report Line

3. Other Lead Agencies (assumes spills are under control unless otherwise stated)

Activity	Spill Location	Lead Agency	Quantity & Product Spilled	Spill Reporting
Drilling operation	Drilling lease on ILA land	ILA	50 L gel-chem mud	Protocol does not apply – spill is immediately reportable to the NWT 24-hour Spill Report Line
Refilling tanks from fuel barge	River next to drilling base camp	CCG	10 L diesel fuel	Protocol does not apply – spill is immediately reportable to the NWT 24-hour Spill Report Line
Fuel re-supply	Truck overturn on a territorial road (would also apply to spills within a community)	GNWT or GNU	50 L of diesel fuel	Refer to GNWT or GNU *Spill Contingency Planning and Reporting Regulations*

Table 1A
Designation of Lead Agency for spills in the NWT and NU
(From the Northwest Territories/Nunavut Spills Working Agreement)

	SPILL INCIDENT	LEAD AGENCY
1.	**Spills on Commissioner's Land in NWT**[1,2] (i.e., Territorial Highways[3], communities)	GNWT
	Except:	
	a) At facilities authorized under Federal Legislation.	INAC
	b) At Federal Facilities[4] not authorized under Federal or Territorial legislation	EPB
	c) At oil and gas exploration and production facilities[5]	NEB
	d) Those sections of Territorial Highways on ice surfaces.	INAC
2.	**Spills on Commissioner's Land in NU**[6,7] (i.e., Territorial Roads[8], communities)	GN
	Except:	
	a) At facilities authorized under Federal Legislation.	INAC
	b) At Federal Facilities[4] not authorized under Federal or Territorial legislation	EPB
	c) At oil and gas exploration and production facilities[5]	NEB

Table 1A cont'd

3.	**Spills on Territorial Land in NWT[9,2] and NU[9,7]**		INAC
	Except:		
	a)	At Federal Facilities[4] not authorized under Federal or Territorial legislation	EPB
	b)	At oil and gas exploration and production facilities[5]	NEB
	c)	In National Parks.	EPB
4.	**Spills on Water in NWT[10] and NU[10]**		INAC
	Except:		
	a)	From ships and barges (i.e., ship source pollution incidents, including refuelling shore-based tanks from ships)	CCG
	b)	At oil and gas exploration and production facilities[5]	NEB
5.	**Spills on Land in the NWT set aside under the Inuvialuit Land Claim.** (i.e., on private 7-1-a, b lands under the claim, excluding spills on water bodies)		ILA

FOOTNOTES:

1 **Commissioner's Land** means land in the NWT transferred by Order in Council to the GNWT and is, generally, land within a community, town or city.

2 See Table 1B for Jurisdiction Designation of **Airports** in the NWT.

3 **Territorial Highways** are described in the GNWT *Public Highways Act* Schedules A, B and C (attached as Table 1D).

4 **Federal Facilities** means any facility owned by the Government of Canada, such as DEW Line Stations, North Warning System Stations, High Arctic Weather Stations including airports, docks and wharves, and Research Centres, operated directly or indirectly by the following agents of the Crown:

- Department of Industry
- Department of Fisheries and Oceans
- Indian and Northern Affairs Canada
- Environment Canada
- Natural Resources Canada
- Health Canada
- Department of National Defence
- Transport Canada
- Department of Public Works and Government Services (PWGSC)
- Department of Justice
- Royal Canadian Mounted Police (RCMP)

Crown Corporations such as:

- Canadian National (Railway)
- Canadian Broadcasting Corporation (CBC)
- Canadian Mortgage and Housing Corporation (CMHC)
- Federal Business Development Bank (FBDB)
- Canada Post Corporation
- Freshwater Fish Marketing Corp.

This designation does not include private dwellings owned or leased by PWGSC; or office and other complexes leased by PWGSC; or Petro-Canada facilities located within communities or on Commissioner's Land.

5 This designation includes pipelines, gas plants and refineries.

6 **Commissioner's Land** means land in NU which is described in the *Commissioner's Land Act*, R.S.N.W.T. 1988,c-11 as amended for NU pursuant to the *Nunavut Act* and is, generally, land within a community or town.

7 See Table 1C for jurisdictional designation of Airports in NU.

8 **Territorial Roads** are described in the GNWT *Public Highways Act* Schedules A, B and C (attached as Table 1E), and in the *Public Highways Act*, R.S.N.W.T. 1988, c.P-13, as amended for NU pursuant to the *Nunavut Act*.

9 **Territorial Land** means lands in NWT and NU that are vested in the Crown or for which the Government of Canada has power to dispose.

10 **Water** means both inland and Arctic waters as defined in the *Northwest Territories Waters Act* and *Arctic Waters Pollution Prevention Act*. Where a spill on land enters surface or ground water, the lead agency is the agency responsible for the spill on land.

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

Appendix V MDSRC SPILL EQUIPMENT LISTING

Revised: September 2005 Sept. 18 edition

		*	*	*	*	*	*	*	*	*	*	*	*	
ANCHORS, BRIDLES BUOYS & FLOATS														***Located @ IT&SC, Inuvik Airport (YEV) N 68° 18' 28.4" W 138° 28' 40.7"**
ANCHORS	Danforth 25 lb. c/w chain & caribiner at chain end and on crown plate						6							21 K. ea
	Danforth 40 lb c/w chain & caribiner at chain end.						4							
	Danforth 43 lb c/w chain & caribiner at chain end and on crown plate						2							31 K ea
	75 lb. Danforth, chain, 100' rope & shackle. Quick-link on crown plate										1	2		59 K ea
ANCHOR PINS	Drive- in , 4'						12							6 K ea
	Drive-in, Delta wing						12							14 K ea
	Screw- in 5'						2							
BRIDLES	Shoreline, c/w snaps						12							2 Kg.
	Tow, Double						4							3 K ea
	Tow, Single						8							2 Kg.
	Tow, Single, c/w 50' rope						1							5 kg
BUOYS	A-1 (small)						3							2 K
	C-M3, Ring Top & Bottom						10							6 K ea
	A-6 (Large) c/w Wire Loops						4							17 K ea. Not yet inflated
PARAVANES	Boom tow, c/w Dble Tow Bridle										1	1		11 K

M.D.S.R.C. BOAT		
20' Aqua-Dek Hull	1	Need Decals (MDSRC)
175hp Mercury Jet Outboards	2	Engine Hours Jul '05
c/w manual		P = 43.0hrs S = 43.5hrs
Trailer	1	
Air Horn	1	
Allen Key set	1	
Anchor, 10 lb. c/w line	1	
Bailer	1	
Bilge Pump, Manual	1	
Boat Cover	1	
Boat Pole, Telescopic	1	
Bungee - 8"	1	
Circuit Tester, Electrical	2	
Compass/Depth Sounder/GPS	1	Lowrance Model X15MT
c/w operation manual, CD & comp. interface equipment		
Davit, Removable c/w cable & manual	1	
Drain Plugs	2	
Engine Fuel System Spares	1	
Engine Oil 4L	1	
Exacto Knife c/w spare blades	1	
Fenders	4	
Fire Extinguisher	1	Serviced July '05
First Aid Kit (Marine)	1	
Flare Kit (Marine)	1	Flares expire June 05. Kit expires 2006 **replace** - Orion marine signal kit (Ian)

Flat File	1	
Funnel	1	
Fuses 20 Amp	4	
Fuses 30 Amp	4	
Gas, Jerry cans- 5 gall.	3	**Refilled July '05 Boat spare gasoline stored in #6 (outdoors) due to hangar insurance policy**
Gear Lube Pump	1	
Grease Gun	1	
Hacksaw c/w spare blades	1	
Hammer	1	
Heaving Line, c/w bag	2	
Impeller (Spare)	2	
In-Line Fuel Filter (Spare)	1	
Impeller Removal Socket	1	
Insect Repellent, Aerosol	6	
Jackknife c/w holster	1	
Knife, Utility	1	
Lantern c/w 6 v battery	1	
Life Vests	5	others in Container #6 & Floater Coats
Manual Package	1	
Oar	1	
Oil Filter Housing c/w filter (Spare)	1	
Paddle	1	
Pads, Sorbents	Y	
Penlight	1	Batteries Not Included
Pliers	2	
Pliers, Needlenose	1	
Quick Links	11	
VHF Marine Radio c/w manual	1	Model ICM502
Icom - Former Petrocan Radio c/w manual	1	Model ICF310

Ropes, various lengths		3
Screwdriver, Multi tip		1
Shackles, Assorted		Y
Socket Set 1/4" & 3/8"		1
Spare Tire (Trailer)	1	
Spare Tire Bracket		1
Spark Plugs		11
Spark Plug Gap Gauge		1
Spotlamp, Handheld		1
Stern Light Post, Removable		1
Stirrup Belt (Swimmer Rescue Tool)		1
Tire Gauge		1
Tool Box		1
Tow Hitch, Triple Ball		1
Tow Hitch, 2"		1
Tow Post, Removable, c/w 2 brackets		1
Water Separator/Filter (spare)		1
Wire, Copper (roll)		1
Wire Cutters		1
Worklight lamp, spare		1
Wrench, Adjustable 6"		1
Wrench, Adjustable 12"		1
Wrench Set, 1 x 10 Piece Combination		1
Wrench, Crescent - Various sizes		7
BOOMS, BOOMVANE CABLES & CHAINS		

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

BOOMS	6" x 6" River Boom in 50' sections			10	10	120 lb per 50' section
	Boom Connector Pin, Spares	Y				
	ShoreSaver Boom in 50' sections		2			38 K ea
	ShoreSaver Air/Water Loading Adapter c/w hose & camlock		1			
	ShoreSaver Inflation Blower (gas) c/w Shore Saver load unload boom valve		1			Ser. 256976111
	ShoreSaver Loading Hoses		2			
	ShoreSaver Water Loading Strainer		1			
BOOM BOX	c/w canvass cover			1	1	
BOOMVANE	Shallow Water Version c/w 150 m x 12 mm mooring line on reel	1				
BOOMVANE RUDDER LOCKS		1				Install to allow open water sweeping. Remove for river deployments.
CHAIN	Galv. 1/2" x 10' c/w caribiner	2				Chains are installed on each anchor
ELECTRICAL EQUIPMENT						

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

& GENERATORS										
EXTENSION CORDS	50'	2	2	3	3	2		2		
	100'	3	4	1	1	1		2		6 K ea
GENERATORS	Kodiak Gas Model SGB5500HX	1								C.1 Ser. C007858 90K
	c/w Operation M annual		1							C.2 Ser. C008127 90K
								1		C.8 Ser. C008175 90K
LIGHT STAND	Portable, c/w light	3	3					4		
LIGHTS, HAND	Portable, 500W Halogen							2		
	Spare 500W Halogen bulbs	5	5	5	5	5		5		
FUEL, GAS, OIL, LUBES & ADDITIVES										
ANTI - FREEZE	Gas Line 150 ml	2	2					2		
DIESEL	5 gall. Jerry Can	1	1				2			#9 filled Aug. '04, rest filling date unknown #9 diesel stored in #6 container, due hangar insurance policy
GASOLINE	5 gall. Jerry Can	1	1				6		Y	All Refilled July '05 Y = See boat
										#8 & #9 gasoline and diesel stored in #6 container (outdoors), due hangar insurance policy

OIL/GAS MIX	4L Jerry Can			1		
	2 gall Jerry Can	1	1			
OIL	2 cycle, 1L			12		12K Tot.
	2 cycle 4L				7	
	Chain, 4L			1		4 K ea. Plus a second container with 10% in it
	Engine, 4L Synthetic 0W-30			4	1	4 K ea.
	Gear (Boat) 1 Quart.				2	
	W5-30 1Qu.	1	1		10	1K ea
HELICOPTER EQUIPMENT						
						Under Consideration
HOSES & RELATED EQUIPMENT						
DISCHARGE HOSE	2" x 25' c/w Camlock				8	9 Kg.
	2" x 50' c/w Camlock				6	18 K.
	1 1/2" x 50' canvas c/w Camlock				1	
FIRE NOZZLE	c/w 1 1/2" to 2" Swedge c/w Camlock				2	

FOOT VALVES	2" c/w Camlock		3	
HOSE CAPS	2"			**Partial order of new caps and plugs in one box awaiting balance of order that includes plug/cap chains. Box in #9**
HOSE PLUGS	2"			
KAMLOCK LOCKING PINS (spare)			4	
KAMLOCKS & ADAPTERS				
	female adapter 2"		1	
	female external thread 2"		2	
	female / female adapter 2"		1	
	female internal thread 4"		1	
	hose cap 2"		1	
	male external thread 2"		4	
	male internal thread 2"		1	
	female internal thread 4"		1	
	male internal thread 4"		1	
	male / male adapter 2"		4	
SEALS, KAMLOCK	2" Rubber, Spares		6	
SUCTION HOSES	2" x 25' c/w Camlock		6	
	2" x 50' c/w Camlock		2	
SUCTION SCREEN	2" c/w Camlock		3	
SWEDGES	2" - 3" c/w Camlock		2	

	2" - 4" c/w Camlock		2	
THREE WAY MANIFOLD	2"		2	
VALVES	2" Ball, c/w camlocks		2	
ICE EQUIPMENT				
For Clothing (Chain Saw Chaps, Winter Boots etc see "Safety Equipment, Personnel." or "Miscellaneous"				
AUGER - ICE	Gasoline Powered, Stihl 31cc Mod. BT120 c/w 10" bit and 2' extension		1	17 K 2Stroke Engine, needs premix
AUGER - ICE	6" Bit		1	
AUGER/CHAIN SAW TOOL KIT	Includes chain file etc.		1	11 K
CHAIN SAW	Gasoline Powered Stihl 92cc Model 066 c/w 36" bar & chain. Mounted on Sleigh.		1	Marked 8815 . 106 K with sleigh #2
CHAIN SAW	Gasoline Powered Stihl 92cc Model 066 c/w 52" bar & chain. Mounted on Sleigh.		1	Marked 8816 . 136 K with sleigh #1
CHAIN SAW BAR	48" Spare		1	2 K
CHAIN SAW CHAIN	48" Spare		1	1 K
ICE BLOCK LIFTER CHAINS	c/w "T" Bar		2	15 K Tot

LADLES									2		
SAW SLEIGH									2		Saw sleigh ski-doo skis (4) are in #8 awaiting replacing present sleigh runners.
SHOVELS, SCOOP											See Also Miscellaneous Equipment
WATER VELOCITY METER	(Stream Speed Meter) c/w plastic pelican case								1		Requires 357 Ever-Ready Battery, 4 Purchased March '05 New battery & spare purchased July '05
MISCELLANEOUS											
ALLEN KEY	Set	1	1	1	1	1				1	
AWL						1					
AXES	Fire, Long Handled	2	2	2	2	2	2				
BATTERIES											
BRUSH	Floor, Long Handled	1	1	1	1	2	1	1	1	1	3 K. ea
BUNGY CORDS											TBA
CAMERA	Disposable	1	1	1		1					
CARIBINERS							6				All others attached to anchor chains

CHAINSAW	See also Ice Equipment	1								C.1 DCS400 Ser. 9875294 6K
			1							C.2 DCS400 Ser. 9875469 6K
						1				C.6 DCS400 Ser.9875409 6K
CHAIN SAW CHAPS		1	1			1		1		
CHALKLINE								2		
CHALKLINE REFILLS								6		
CLIPBOARD		2	2	2	2	2			2	
CONES, TRAFFIC		12	5	9	6	5		12		
CONTAINER, RUBBERMAID									2	
CORD	Sash on reel 1/8" x 250'					1				2 K
	Sash on Reel 1/4" x 250'					1				
DECON	Brushes						6			Tote 19
	Detergent - 20L Pail						2			Tote 19
	Trays c/w lids						4			Tote 19
DOCUMENT SUPPLY & LOGS	See Field Desk									
DRILL BITS	1/8TH "						4			Used when replacing boom connector pins
DRUM, 45 gall, steel	45 Gall. c/w removable lid	5		5	11					
DRUM, 45 gall, plastic	45 Gall. c/w removable lid	2	12	6		12				

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE GUIDE 2004								1			
FENCE	Snow, Orange								4		28 K. Tot
FIELD DESK	Rubbermaid, c/w log book, pencils & document supply						1		1	1	
FILES	Chainsaw	1	1	1	1					1	
	Flat	1	1	1	1	1				1	
FUNNELS	Large	1	1	1	1	1				1	
	Small								1	1	
GARBAGE BAGS	Box	1					1	1	1		8 K
HACKSAW	c/w spare blades	1	1	1	1	1				1	
HAMMER	Ball Peen 24 oz.	1	1	1	1	1				1	
	Claw	1	1	1	1	1				1	
	Sledge 8 lb.			1	1	1	1	1	1	1	
	Sledge 10 lb.	1	1								
	Sledge 14 lb	1	1	1	1	1					
HEATER	"Reddy", Diesel	1									C1. Ser. 95377757 46 K
			1								C2. Ser. 5986877 46K
									1		C.8 Ser. 5986876 46 K
HOSE CLAMPS										3	
KNIFE	Utility, c/w spare blades	1	1	1	1	1			1	1	
LADDER	Step 6'							1			

LANTERNS	Hand		6	6	6	6	6			9		
LANTERN 6V BATTS.			8	10	6	10	9			12		Stock date unknown
LIFTING CABLES	c/w shackles										4	
MEGAPHONE	c/w Siren							1		1		1 K. Needs 6 "C" cell Batteries
NAILS	Assorted, In One Gallon Paint can		1	1	1	1	1					
NWT SPILL REPORT FORM									1			
PADLOCKS	Combination type, Programmable		2	2	2	2	2	1	2	1	2	C.6 & C.8 have no man door
	Combination type, Programmable, Spare								5			
PAILS	Galv. 2.5 gall, aluminium				1	1	1	1			1	1 K.
	Plastic, 20L c/w lid		3	3								
PAINT	Aerosol	Orange	1	1	1	3	1			6		5 K. Tot.
PAINT STICKS	For marking tools								3			
PICK			1	1								
PITCH FORKS			1	2	2	2	2					
PLASTIC, SHEETING	20ft x 100ft 6mm	Roll						1				
PLIERS	Regular		1	1	1	1	1				1	
	Needlenose		1	1	1	1					1	

PLYWOOD	3/4" x 4'x 6'					3			1		
	3/4 x 4' x 8'					3					
POP RIVETER	c/w Rivets										For boom connector pin replacement
PROPANE BOTTLES	20lb					4					**Filled July '05 # 8 Propane Bottles (2) Stored in # 6 Container (outside) due Hangar Insurance Policy**
PROPANE TORCH KIT	c/w storage case, spark lighter, spare flints, flame spreader, utility flame tip, propane cylinder						1				
PRY BAR	5'	2	2	2	2	2					
QUICK LINKS, spares	See Caribiners										
RAGS (BOX)									1		
RAKES	LONG HANDLE	2	2	2	2	2	3				9 K Tot
RANGEFINDER	Laser, in Black Pelican Case						1				Includes spare 9V battery. New July '05
SCRAPER	Ice	2	2	2	1	1			2		
SCREWDRIVER	Flat Blade, Large	1	1	1	1					1	
	Multi tip	1	1	1	1	1				1	
SHACKLES	1/4"										

	3/8"									
	1/2"									
	Miscellaneous, in sack						1			
SHOVELS	Long Handled	2	2	2	2	2				
	Scoop, Aluminium	4	4	4	4	4	4		4	2 K ea
	Snow	1	2	2	1	2			2	5 K ea
SIGNS	Caution								1	
	Restricted Area								2	24 K. ea
"SMART ASH" BURNER	c/w 45 gall drum & oil injector pump c/w manual	1		1						65 kg ea. Awaiting new unit for #8
"SMART ASH" BURNER BASE		1								122 Kg ea. 2 new bases to be constructed
"SMART ASH" OPERATING MANUALS (spare)								2		
"SMART ASH" Filters		5							5	1 K
SMART ASH HEAD	Spare (used)							1		
SOCKET SET	20 piece 3/8" c/w plastic case	1	1	1	1					
	10 piece combination	1								
	57 piece combination - 3/8" c/w plastic case					1				
STRAPS, TIEDOWN	1" x 15'									TBA
	2" x 15'									TBA
SQUEEGEE	Long Handled	2	2	2	2	2			2	

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

TAPE	CAUTION	1	1	1	1	1	1					
	DANGER	1	1	1	1	1	1					
	DUCT	1	1	1	1	2	4	1	3		1	
	ELECTRICAL (ROLLS)	1	1	1	1	1			1	1		
	FLAGGING (ROLLS)											
	TEFLON (ROLLS) - pipe tape									5		in wooden Camlock box
TAPE MEASURE	25'					1						
	50 meter					1						
	50'	1										
	100'		1						1			
TARPAULINS		1	1	1	1	1	2	1	2			54 K Tot.
TIES, CABLE, NYLON	23"							12				
TIN SNIPS		3	3	2	3	1	3			1		
TOOL BOX	"Greenlees", fixed in container. Contents listed separately in this inventory	2	1	1	1	1						
TOOL BOX	Portable	1	1	1	1	1				1		
TIGER TORCH	c/w regulator and hoses - Propane						1		1			
WD - 40	lubricant, aerosol									1		
WIRE	Mechanics (roll)	1	1	1	1	1				1		
WIRE CUTTERS			1	1	1	1				1		
WIRE FLAGS	Bundles								2			

WRENCH	Crescent 8"		1	1	1			1	
	10"	1	1	1	1			1	
	12"	1							
	PIPE - 12"		1	1	1			1	
	18"	1	1	1	1		1	1	
	24"	1	1	1	1		1	1	
	36"						1	1	
	Combination Open End Box End Set 11, imperial					1			
	Combination Open End Box End Set 11, metric					1			
	Sparkplug							1	
ZIPLOC PLASTIC BAGS	Box							1	
PUMPS									
See also under "Skimmers"									
DIESEL									
GASOLINE	2" Honda Trash Model WT20X							1	Ser GCO2-8480904 50K
	2" Honda Trash Model WT20X							1	Ser. GCO2-8480921 50K
	2" Honda Centrif. Mod. WN 20							1	Ser. GCAJ-1246059 22K
	2" Honda Peristalt. Mod. GX200							1	Ser.GCAE-1848726 60K
	2" Honda Peristalt. Mod. GX200							1	Ser. GCACT-1105034 69K B ig cage
ROPES & ROPE REELS									

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

ROPE	1/2" x 25', floating, loop & hook					6					15K Tot. On Metal Reel
	1/2" x 25', floating, loop & hook Yellow					7					15K Tot. On Metal Reel
	1/2" x 50' ,floating, loop & hook					6					20K Tot. On Metal Reel
	1/2" x 100' ,floating, loop & hook					4					22 K Tot. on Metal Reel
	5/8" yellow x 175'					1					11 K Tot. On Wood Reel (red)
	1/2" x 50' thimble one end					1					4 K
	1/2" x 25' thimble both ends					1					2K
REEL	Rope, Metal					4					
REEL	Rope, Wood					1					
SAFETY EQUIPMENT GENERAL											
Air HORN		1	1	1	1	1					
AIR HORN REFILL		1	1	1	1	1					
EMERGENCY KIT	Roadside	1	1	1	1	1			2		9 K ea
EYE WASH STATION	c/w irrigating liquid, pads, cold packs etc							1			Tote 20
FIRST AID KIT	10 man #3	1	1	1	1	1					
	BC Level 3						1	1	1	1	Added July '05

	NWT #1 (loaner required by journey management)							1			
FIRE EXTINGUISHER	20 lb ABC	2	2	2	2	2					Serviced/Replenished June '04
	20lb ABC N2 Refillable						2	2	2	2	New July '05
	2 1/2 lb ABC (loaner required by journey management)							1			New Apr. '05
	20 lb ABC (loaner required by journey management rules)							1			
NITROGEN CARTRIDGES	Fire Extinguishers Spares						2	2	2	2	
POWDER, FIRE EXTINGUISHER	Purple K - 50lb Pails						1	1	1	1	
HOSE SEAL KIT, FIRE EXTINGUISHER SPARES								8			
WINDSOCK	Sock						1		1		2 K ea
	Extension Pole, c/w drill bit						1		1		14 K ea
SAFETY EQUIPMENT PERSONNEL											
BLANKETS		4	3	3	3	3					
BOOTS	Rubber, c/w steel toe & shank Size 10						3				
	Rubber, c/w steel toe & shank Size 11						3				

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

BOOTS, WINTER	Baffin -Size 9	1	1	1	1	1	1					
	Baffin -Size 10	1	1	1	1	1	2					
	Baffin -Size 11	1	1	1	1	1	2					
CHIN STRAPS	For Hardhats							10				T20
COVERALLS, DISPOSABLE, TYVEK	Size XL						50	38				5 K Tot. in 2 boxes
COVERALLS, INSULATED	Size XL	4	5	4	4	5						
EARPLUGS	Box									1		
FACESHIELDS												
FLOATER COATS	Size XL						7					In Small Black Tote
GOGGLES	Chemical											
GLOVES	Chemical resistant "Barrier", pr.						12	17				
	Latex 12"	4	4	4	4	4						
	Monkey Grip	12	12	12	12	12	12	12	12			
	Neoprene							20	12			
HARDHATS								4				T20
INSECT REPELLANT	"Deep Woods Off", Aerosol							2				
LIFEVESTS	Large											
	Extra Large						6		5			In Small Black Tote
RAINWEAR	Jacket & Pants set											
	Medium							1				

	Large							5		
	Extra Large							8		
	Extra Large							4		
RESPIRATORS	Half Mask c/w 2 org.vap. carts.							4		
	Full Face c/w 2 org.vap.carts.							2		
RESPIRATOR CARTRIDGES	Organic Vapour. Fits both of above type respirators							16		Each respirator includes 2 cartridges - comes in respirator box
SAFETY HARNESS	Parachute Type c/w 6' shock absorber safety lines							4		
SUNSCREEN	Tubes							4		
VESTS	Road, c/w reflective tape	5	5	5	5	4	5	2	5	
	Incident Commander							1		Tote 20
	Safety Representative							1		Tote 20
WADERS	Chest, c/w steel toes and shanks									
	Size 10						1			4 K.
	Size 11						1			4 K.
SAMPLING EQUIPMENT										
Cooler, 102 quart, white								1		
Cooler, 60 quart, red/white								1		
Packing tape, roll								1		
Ice Packs								6		
Pen								2		
Pencil								2		

Rite in Rain Notebook, small	1
Rite in Rain Notebook, large	1
Permanent marker pens	2
Trowel, Aluminium	1
Spoon, Stainless steel	1
Scrub Brush	1
Distilled Water	4L
Bucket, steel 9L	1
Liquid detergent, bottle	1
Paper towels, roll	1
Amber Glass Bottles 1L	12
Amber Bottles 250 ml	12
Plastic Bottles 250 ml	12
Purge and Trap Vials	36
Soil Sample Jars 250 ml	12
Mason Jars 1L	12
Ziploc Storage Bags, in box	1
Bottle & Jar Labels	90
Sample Preservatives, nitric acid vials	12
Chain of Custody Forms	10
Tape Measure	1
Latex Gloves	30
Summary of Typical Parameters, Hold Times & Bottle Requirements	2
Sampling Kit Inventory	2

SKIMMERS

Disc	MI-30 disk skimmer head	1	Requires addition of Landlocked discharge hose
	MI-30 skimmer, Yanmar diesel powerpack	1	No battery on unit. Use hand crank to start
Multi - Head	Canadyne Model 1230D	1	Powerpack & Hoses 275K
	Yanmar 10 hp diesel powerpack	1	
	S2T2 Hydratech discharge pump	1	
	Disc Insert for Multi-Head	1	Skimmer head, drum & pump 80K. In wooden box
	Drum Insert for Multi-Head	1	Discs in crate 68K
	Skimmer disc. hose 25'	2	5K
	Skimmer suction hose 25' (green)	1	8K
Rope Mop	Aquaguard Model 40D c/w Yanmar diesel Powerpack	1	
	Air Filters	2	Ser. 2443 100Kg
	Fuel Filters	2	
	Mop return, float & rope	1	15 K
	Oil Strainers	2	
	Recoil Spring	1	
	Starter Ropes	2	
	Spare mop for 40D	1	8K

Skim Pak									1	9K
	Extension suction tubes c/w Camlock								3	12K
SORBENTS										
BOOMS (Socks)	Sorbents, Bags of 4	4	5	4	3	4	1	2		
FLOOR DRY	Granular	2	13	15	14	16				
GRANULAR	Other than Floor Dry	3	2	2	2	1				
PADS		7	20	11	26	20	8	4	1	7 K. ea bale
RAGS	Box								1	
ROLLS	Sorbents	1	2	2	2	2	1	2		
SAWDUST	Bags	9	12	9	11	10				
TANKS AND RELATED EQUIPMENT										
TERRA-TANK	Pillow type 1500 Imp. Gall						2			36 K ea
TERRA TANK FITTINGS	In Sacks						2			6 K ea
TERRA REPAIR KIT							2			5 K ea
TOTE TANKS c/w Lids										
#11										
#12			1							

SITE-SPECIFIC GENERAL EMERGENCY RESPONSE PLAN

#13				1									
#14					1								
#15						1							
#16							1						
#17								1					Empty
#18													
#19								1					Decon. Equip.
#20								1					Additional PPE
Revised Dates		9'05	9'05	9,05	9'05	9'05	9'05	9,05	9,05	7'05	7'05	7'05	7'05	

Container Purposes

#1- #5 Inclusive	Small "nuisance" type spills
#6	River boom support equipment
#7	General - Extra PPE, Decon. equip.
#8	Winter spill, ice response equip.
#9	Pumps, skimmers, hoses etc.

APPENDIX IV

Bear Safety

If You Encounter a Bear...

- Remember the 3 S's... Stop, Stand still, Stay calm.
- Ensure others know that a bear is in the vicinity.
- Do not run.
- Leave the bear an open avenue of escape.

...at a DISTANCE

- Alert the bear to your presence – speak in low tones, slowly wave your arms.
- Quietly walk back the way you came or make a wide detour.
- Keep an eye on the bear.
- Stay downwind.
- Consider using warning shots, noisemakers.

...that is NEARBY

- Do not shout or make sudden movements.
- Avoid direct eye contact.
- Back away slowly.
- Climb at least four metres up a tree to escape a grizzly. (Ineffective against black bears).

Deterrents...

- Include... 12 gauge cracker shells, air horns, flares, and chemical repellents such as pepper spray.
- Are not completely effective against every bear in every situation.
- Should not make you less careful to avoid bear conflicts.
- Are potentially dangerous – use with extreme caution.

If a Bear Charges...

- Many charge are bluffs – the bear will often veer to the side at the last minute.
- Use a chemical repellent only at close range.
- If you have a firearm and contact appears unavoidable, shoot to kill.
- Play dead only during a grizzly bear attack (lie on your side, curl into a ball with your legs tight to your chest, hands clasped behind your neck).

If you must shoot a bear in self-defense, report the kill to a Renewable Resource Officer as soon as possible. If an Officer is not immediately available, skin the bear and preserve the hide. The hide must be turned in to an Officer. You may not keep any part of a bear killed in self-defense.

For Further Information...

For further information, contact any Environment and Natural Resources Office:

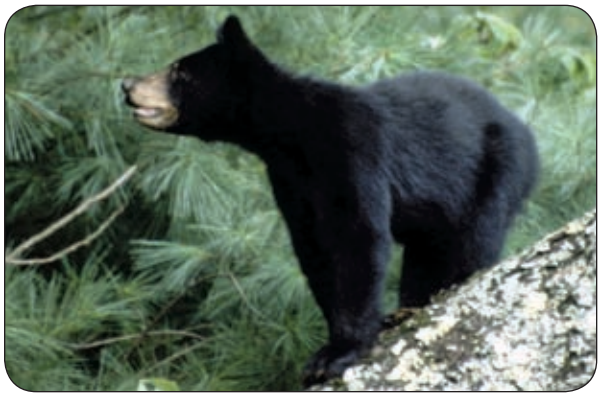
Area Code (867)

Aklavik	978-2248
Deline	589-3421
Fort Good Hope	598-2271
Fort Liard	770-4311
Fort McPherson	952-2200
Fort Providence	669-3002
Fort Resolution	394-4596
Fort Simpson	695-7433
Fort Smith	872-6400
Hay River	875-5554
Inuvik	678-6670
Lutsel K'e	370-3141
Norman Wells	587-3500
Behchokǫ̀	392-6511
Tsiigehtchic	953-3605
Tulita	588-3441
Tuktoyaktuk	977-2350
Ulukhaktok	396-4505
Yellowknife	873-7181

Northwest Territories Environment and Natural Resources

May 2009

Safety in Grizzly and Black Bear Country



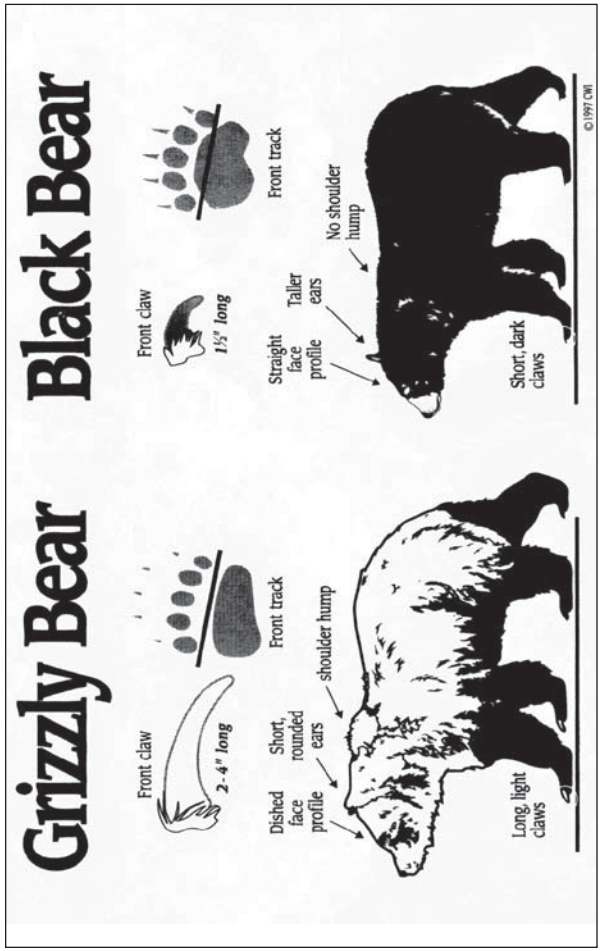
Black Bear

Welcome to Bear Country

Grizzly and black bears can be found throughout the Northwest Territories. They are an important part of the northern ecosystem.

Northerners are committed to maintaining healthy populations of all wildlife, including grizzly and black bears. Treat them with respect. Remember that you are in a bear's territory.

What's the Difference Between...?



While You are Travelling...

- Always be alert.
- Travel in groups.
- Travel only during daylight.
- Avoid carrying strong smelling foods.
- Make noise where visibility is limited.
- Avoid bear feeding areas such as flood plains, berry patches and areas rich in horsetails and other grasses.
- Avoid bear travel areas like shorelines, trails along the water or near berry patches.
- Watch for fresh bear droppings and tracks.
- Carry bear deterrents.

If You are Camping...

- Avoid camping in areas frequented by bears.
- Always sleep inside a shelter (tent, cabin, etc.).
- Don't keep food in tents or areas of camp other than the cook tent.
- Keep a clean camp - wash all dishes and utensils after every meal.
- Avoid cooking greasy foods.
- Burn all garbage every day or take it to a bearproof disposal site. Burying garbage does not eliminate odors.
- If you're going to leave the campsite:
  - bearproof your camp – store food and other attractants (dish detergent, toothpaste, etc.) in an inaccessible place.
  - let someone know where you are going.
  - take a partner and bear deterrents with you.

Grizzly Bears

If You are Fishing...

- Be cautious near streams or lakes - bears frequent these areas.
- Clean fish away from camp and store them underwater.
- Burn fish guts away from camp.
- Store fish-cleaning knifes away from camp.
- Don't wear clothes that smell like fish to bed.

If You are Hunting...

- Avoid hunting late in the day and returning to camp in the dark.
- Stay alert when dressing game or handling meat and only do so away from camp.
- Avoid shooting more than your party can pack out in a single load.
- If you must leave meat in the field, leave it near a visible landmark with a clear approach route and cover it with a tarp to discourage scavengers.
- Don't keep bloodied clothes in your tent.

APPENDIX V

NT-NU Spill Report Form

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-_____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME		

C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS

F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION	
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION	
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS		

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			