

**Mackenzie Delta Gas Hydrate
Research and Development Project**

Emergency Response Plan

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CPE EMERGENCY RESPONSE PLAN FOR
MALLIK 3L-38 OPERATIONS IN THE MACKENZIE DELTA

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1. Introduction

The 2001/2002 research wells at Mallik L-38 are offsets to the IOL Mallik L-38 well, which was drilled in 1972, and the Mallik 21-38 well drilled in 1998. The primary objective of this research program is to drill three wells in a straight line, approximately 50 metres apart. The central test well will be cored through the gas hydrate section. The other wells will be used as observation wells to monitor the response of gas hydrates to the planned testing activities. The drilling operation will not encounter conventional oil and gas bearing reservoirs.

Prior to beginning operations at Mallik, the Drilling Supervisor will establish an Emergency Response Team for the wellsite. The Team, consisting of on-site personnel, will be used to deal with any emergencies that could arise during the period of operations. The Team will meet to review the entire program prior to the commencement of operations. During operations, they will conduct regular safety meetings. In addition, prior to the commencement of any special operations or changes to the drilling program, they will review all emergency procedures specific to those operations.

All supervisory personnel at the wellsite will have received specialised training in well control, first aid, fire fighting and the workplace hazardous materials information system (WHMIS) as appropriate for this site.

An "emergency" is defined as any unforeseen happening or situation requiring prompt action which could result in a threat to safety, environmental damage or property destruction.

Emergency incidents are defined in terms of three Stages. The Stage of Emergency depends on the perceived hazard to personnel, to the environment and to property.

No two incidents are the same. The response and resources required need to be evaluated and assessed uniquely for every emergency. Examples of emergency incidents include fire, explosion, fuel spill, and gas release. Such incidents require immediate actions and notifications. The criteria utilised to classify an emergency incident include:

- Risk to life and/or public safety
- Environmental Damage
- Property damage

The site specific Emergency Response Plan described within this document will guide the actions of the Emergency Response Team and other key personnel who would be affected by any on-site emergencies. The procedures have been developed to maximise the protection of personnel, the environment and property under all operating conditions.

The senior company representative at any company work site is responsible for the declaration of the Stage of Emergency. At a wellsite, this will generally be the Drilling Supervisor, or his alternate.

2. Stage 1 Emergency (Minor)

During a Stage 1 Emergency, the well is under full control but a portion of normal operations may be temporarily disrupted.

During a Stage 1 Emergency, a portion of the operation may be temporarily suspended while on-site personnel are addressing a specific incident. A Stage 1 Emergency does not present any current danger to personnel, the public or the environment.

Drilling and completion situations can be associated with a Stage 1 Emergency if a mechanical or downhole problem occurs. Examples of these problems are:

- Gas odour complaint.
- Lost circulation.
- The well is shut in because an influx of formation fluids is detected.
- Any abnormal situation which has the potential to escalate.

Examples of non well-related incidents that may lead to a Stage 1 Emergency are:

- A small spill of oil or fuel which can be cleaned immediately.
- A minor injury.
- A controlled sweet gas release.
- A minor fire that is easily controlled.
- A minor vehicle accident.
- An overdue vehicle or aircraft.
- A limited rescue effort not associated with imminent danger to personnel.
- A bear sighting at or near the work site.

3: Stage 2 Emergency (Serious but Controllable)

During a Stage 2 Emergency, well control is possible through the use of surface well control equipment (BOP stack, manifold, choke and control lines). All critical well control equipment is functional and effective.

During a Stage 2 Emergency, normal drilling operations are temporarily suspended while the emergency is being addressed. Outside services may be required. Deterioration of control of operations is likely. There may be a potential for serious injuries or fatalities to personnel, or serious environmental or property damage.

Drilling and completion situations associated with a Stage 2 Emergency are a deterioration of wellsite conditions due to one or more of the following:

- Loss of well control.
- An uncontrolled sweet gas release.
- Mud losses exceed mixing rates.
- Insufficient degasser capacity.
- Insufficient mud volumes to fill the hole and which cannot be replenished within a reasonable time.
- Gas flows to flare, but slugs of mud or water continue to extinguish the flame.
- Mechanical failure that prevents circulating out a kick within a reasonable time.
- Malfunction of the kick control equipment.
- Any other failure that impedes the ability of the crew to shut in the well or safely circulate out a kick while maintaining control of the well.
- Security breaches.

Examples of non well-related incidents leading to a Stage 2 Emergency are:

- A large fire, an explosion, a spill or natural disaster.
- A situation that could result in serious and imminent danger to personnel or the environment until it can be controlled.
- Search required for an overdue vehicle or aircraft.
- A rescue operation associated with imminent danger to personnel.

4. Stage 3 Emergency (Major Loss of Control)

During a Stage 3 Emergency, loss of control of the well has either occurred, or is imminent. One or more fatalities, serious injuries or serious environmental damage may have occurred.

A Stage 3 Emergency is a major emergency during which normal operations are suspended and outside services are immediately required.

For drilling and completion operations, examples of conditions leading to a Stage 3 Emergency are:

- Control of the well has been lost.
- Any of the ignition criteria has been reached (see Section 9).
- Flow up through the drill pipe without the kelly being attached.
- Flow through the drill pipe while the stabbing valve is leaking.
- Pipe in the BOP stack with flow past the pipe rams and the annular.
- Pipe out of the hole with flow past the blind rams.
- Flow from the conductor or casing below the BOP's.
- Inability to shut in the well.
- Uncontrolled security breaches.
- An uncontrolled release of sour gas.
- An uncontrolled gas flow.

Examples of non well-related incidents leading to a Stage 3 Emergency are:

- A major fire or explosion, a large spill, or a natural disaster.
- An incident resulting in one or more fatalities, serious injuries or serious environmental damage.

5. Emergency Reporting

First Person on the Scene

The first person on the scene of an emergency must immediately report it to his direct supervisor or the Drilling Supervisor. Reporting of all emergencies will be according the Emergency Reporting Flow Chart shown in Figure 1.

Drilling Supervisor

Under most circumstances, the Drilling Supervisor, or his designate is responsible for declaring the Stage of Emergency at the wellsite and reporting it to the Project Manager.

At the discretion of the Drilling Supervisor, the reporting of a temporary and minor Stage 1 Emergency may, in some circumstances, be left until the regular daily report.

More serious or lasting Stage 1 Emergencies, and all Stage 2 and Stage 3 Emergencies, will be reported to the Project Manager as soon as possible. Key contacts and alternates are listed in Section 22 of this Plan.

Types of Report Forms are found in Section 23 of this document.

Project Manager

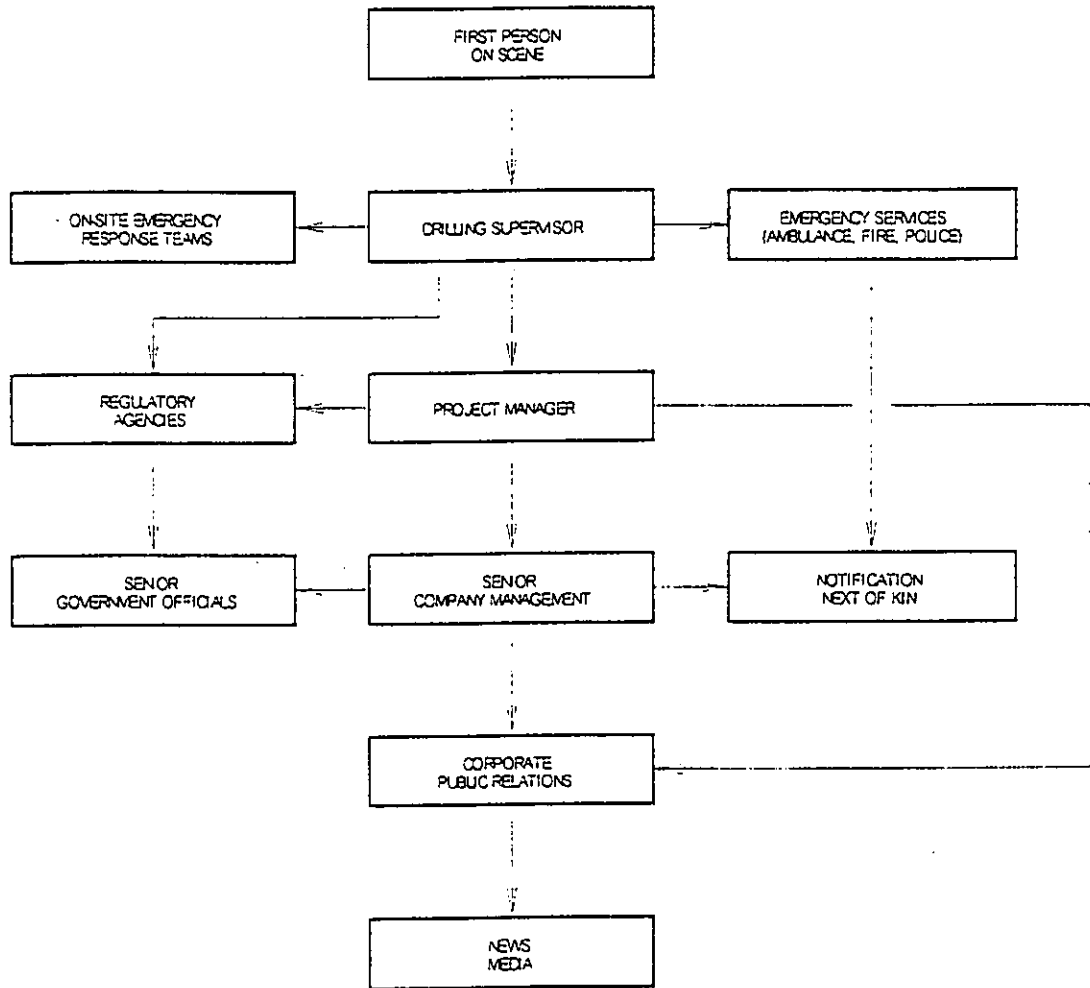
The Project Manager will maintain contact with the Drilling Supervisor as necessary in order to monitor events and verify that the appropriate steps to control situation are being taken.

The Project Manager will maintain contact with company management in order that they may remain informed about the situation as it develops.

The Project Manager will contact the National Energy Board (NEB) and any other regulatory agency that is affected, advise them of the situation, and solicit their assistance if needed.

The Project Manager will report all Stage 1 Emergencies with the daily report to the National Energy Board (NEB) and to any other regulatory agencies that have been specified by the NEB. He will report all Stage 2 and Stage 3 Emergencies immediately to the NEB and to other regulatory agency specified by the NEB.

Figure 1:
Emergency Incident Reporting Flow Chart



6. Stage 1 Emergency: Duties and Responsibilities

First Person on the Scene

The first person on the scene of an emergency will:

- Make a brief assessment of the situation.
- Sound the fire alarm or any other alarm warranted by the situation.
- Alert others in the vicinity of the emergency and call for help.
- Keep all personnel away from any dangerous situation.
- Notify supervisory personnel of the emergency, so additional emergency services can be called in as required.
- If conditions permit, attempt to control the emergency until additional help arrives.
- Follow instructions from the Drilling Supervisor or his designate upon his arrival.

Drilling Supervisor

Safety of all personnel at the wellsite is of primary importance to guiding the Drilling Supervisor's actions. Safety of the environment and protection of property are the next priorities to be considered.

During a Stage 1 Emergency, the Drilling Supervisor, or his designate, may take any of the following steps that are required by the circumstances:

- Assess the situation and direct work site operations to minimize the risk of injuries or loss of life, and minimize environmental and property damage.
- Take corrective action to return the situation to normal, safe operating conditions.
- When necessary, isolate the area and deny access to all non-essential personnel.
- Notify the Project Manager, local authorities, and local authorities if warranted.
- Take steps to ensure that the incident does not recur.
- Maintain accurate records of all operations and complete a detailed incident report.
- Complete a NWT Spill Report in the event of an oil or fuel spill and fax it to the Project Manager.

7. Stage 2 Emergency: Duties and Responsibilities

First Person on the Scene

The first person on the scene of an emergency will:

- Make a brief assessment of the situation.
- Sound the fire alarm or any other alarm warranted by the situation.
- Alert others in the vicinity of the emergency and call for help.
- Keep all personnel away from any dangerous situation.
- Notify supervisory personnel of the emergency, so additional emergency services can be called in as required.
- Provide first aid and, if it is safe to do so, commence rescue operations.
- If conditions permit, attempt to control the emergency until additional help arrives.
- Follow instructions from the Drilling Supervisor or his designate upon his arrival.

Drilling Supervisor

Safety of all personnel at the wellsite is of primary importance to guiding the Drilling Supervisor's actions. Safety of the environment and protection of property are the next priorities to be considered.

During a Stage 2 Emergency, the Drilling Supervisor, or his designate, may take any of the following steps that are required by the circumstances:

- Assess the situation and direct work site operations to minimize the risk of injuries or loss of life, and minimize environmental and property damage.
- Take corrective action to return the situation to normal, safe operating conditions.
- Isolate the area and deny access to all non-essential personnel.
- As soon as possible, notify the Project Manager or his alternate, of the situation and agree with him on the appropriate steps to take next.
- Do not downgrade the Emergency Stage until after the incident has been thoroughly discussed with the Project Manager and his approval has been given.
- Notify the local authorities, and affected regulatory agencies as required by the circumstances.
- Take steps to ensure that the incident does not recur.
- Maintain accurate records of all operations and prepare a detailed incident report.
- Complete a Hazardous Occurrence Investigation Report (NEB Form #369) and fax it to the Project Manager.
- Complete a NWT Spill Report in the event of an oil or fuel spill and fax it to the Project Manager.

Project Manager

Upon receiving notification of a Stage 2 Emergency, the Project Manager will:

- Discuss the situation with the Drilling Supervisor and verify that the appropriate steps to control situation are being taken.
- Contact company management in order to keep them up to date on the situation.
- Make arrangements for any outside support services required to re-establish control and resume of normal operations.
- Contact the National Energy Board and any other regulatory agency that is affected. advise them of the situation, and solicit their assistance if needed.
- Forward the Hazardous Occurrence Investigation Report and, in the event of a spill, a NWT Spill Report to the NEB.
- Report any incident that results in a medivac to the NEB.
- Direct any Post-emergency Procedures.

8. Stage 3 Emergency: Duties and Responsibilities

First Person on the Scene

The first person on the scene of an emergency will:

- Make a brief assessment of the situation.
- Sound the fire alarm or any other alarm warranted by the situation.
- Alert others in the vicinity of the emergency and call for help.
- Keep all personnel away from any dangerous situation.
- Notify supervisory personnel of the emergency, so additional emergency services can be called in as required.
- Provide first aid and, if it is safe to do so, commence rescue operations.
- If conditions permit, attempt to control the emergency until additional help arrives.
- Follow instructions from the Drilling Supervisor or his designate upon his arrival.

Drilling Supervisor

Safety of all personnel at the wellsite is of primary importance to guiding the Drilling Supervisor's actions. Safety of the environment and protection of property are the next priorities to be considered.

During a Stage 3 Emergency, the Drilling Supervisor, or his designate, may take any of the following steps that are required by the circumstances:

- Evacuate all non-essential personnel to safety and ensure the safety of all personnel remaining at the wellsite.
- Assess the situation and direct work site operations to minimize the risk of injuries or loss of life, and minimize environmental and property damage.
- Notify the local emergency services as required by the circumstances.
- Be prepared to ignite the well if any of the ignition criteria in Section 9 of this Plan are exceeded. If the well is to be ignited, follow the procedure outlined.
- As soon as possible, notify the Project Manager or his alternate, of the situation and agree with him on the appropriate steps to take next.
- Do not downgrade the Emergency Stage until after the incident has been thoroughly discussed with the Project Manager and his approval has been given with the concurrence of the NEB.
- In the event of a fatality or serious injury having occurred, ensure that the operation remains safely suspended and, to the greatest extent possible under the particular circumstances, attempt to not disturb evidence.
- Take steps to ensure that the incident does not recur.
- Maintain accurate records of all operations and, prepare a detailed incident report.
- Complete a Hazardous Occurrence Investigation Report (NEB Form #369) and fax it to the Project Manager.

- Complete a NWT Spill Report in the event of an oil or fuel spill and fax it to the Project Manager.

Project Manager

Upon receiving notification of a Stage 3 Emergency, the Project Manager will:

- Discuss the situation with the Drilling Supervisor and verify that the appropriate steps to control situation are being taken.
- Contact company management in order to keep them up to date on the situation.
- Make arrangements for any outside support services required to re-establish normal control.
- Contact the National Energy Board and any other regulatory agency that is affected, advise them of the situation, and solicit their assistance if needed.
- In the event of a fatality or serious injury having occurred, cooperate with the local authorities in notifying the next of kin.
- Direct any Post-emergency Procedures.
- Obtain approval from the National Energy Board prior to resuming operations.

9. Well Ignition (Stage 3 Emergency)

The Drilling Supervisor has authority to ignite the well if any of the following criteria are exceeded during a gas release:

- The health and safety of the public or wellsite personnel cannot be maintained without ignition.
- Malfunction of the monitoring equipment or meteorological conditions make adequate monitoring of the plume impossible.

A flare gun is included in the safety equipment at the wellsite. If ignition is required, the following procedures will be followed:

- Evacuate the lease and move all personnel to a safe location upwind of the well.
- Mask up with appropriate breathing apparatus if required.
- Approach the well from an upwind direction.
- Make sure that an explosive mixture does not exist in the immediate vicinity of any personnel.
- Ignite the plume from the maximum upwind range of the flare.
- Aim the flare shells toward the gas release point such that ignition will occur at the outside edge of the explosive gas region.
- After igniting the gas release, update the Project Manager of the situation.
- Monitor the stability of the flare and re-ignite if required.

All personnel will follow the reporting procedures outlined in Sections 5 and 8 of this Plan.

10. Evacuation (Stage 3 Emergency)

During some emergencies such as a major fire, explosion, major spill or natural disaster, evacuation and hazard isolation may be required to ensure worker safety. Should evacuation be deemed necessary, the Drilling Supervisor will take the following steps:

- Alert all work site personnel and release all non-essential personnel.
- Designate a nearby meeting place as an evacuation center and dispatch a representative to the evacuation center.
- If required, contact local emergency services listed in Section 22 of this Plan to provide evacuation assistance.
- Dispatch work site or emergency service personnel to establish roadblocks well back of the emergency area.

All personnel will follow the reporting procedures outlined in Sections 5 and 8 of this Plan.

11. Fire (Stage 2 or 3 Emergency)

If a fire is detected, the first person(s) on the scene will proceed with the following measures:

- Activate emergency shutdown systems to cut off the fuel supply to the fire.
- Sound an alarm.
- Shut off power to all equipment in the immediate area of the emergency.
- Shut off fuel to any heaters near to or downwind of, the fire.

The Drilling Supervisor will dispatch an Emergency Response Team to deal with the situation. If the fire is too big, or might result in an explosion, personnel will not attempt to fight it but will evacuate the immediate area and call for emergency services.

For controllable fires, all personnel will:

- Use the appropriate fire fighting methods and equipment.
- Check the surrounding area for any sources of re-ignition and take steps to remove them.
- Prior to entering potentially explosive areas, personnel will dissipate static charges on their bodies by grounding themselves (holding onto a grounded bare metal structure with bare hands for ten seconds and then releasing).

Depending on the Stage of Emergency declared, all personnel will follow the reporting procedures outlined in Sections 5 and either Section 7 (Stage 2 Emergency) or Section 8 (Stage 3 Emergency) of this Plan.

12. Rescue Operations (Stage 1 or 2 Emergency)

In the event of a requirement for a rescue operation, the following steps will be taken:

- The first person(s) on the scene will notify the Drilling Supervisor or his alternate of the need to rescue workers.
- The Drilling Supervisor will notify the Emergency Response Team(s) and contact any required local emergency services listed in Section 22 of this Plan.
- The Drilling Supervisor will assess the area in order to verify that a rescue attempt is safe. No search and/or rescue will be attempted if it places the lives of workers in danger.
- Rescue personnel will wear appropriate personal protective equipment (e.g. fire-retardant clothing and self-contained breathing apparatus).

Upon finding an injured worker, the rescue personnel will:

- Alert the on-site medic.
- Initiate first aid even if the person does not appear to be alive.
- Will not move the injured person unless to prevent possible further injuries resulting from an imminent safety hazard.

At the completion of the rescue, the Drilling Supervisor will:

- Arrange for a medivac if required, and report to local authorities.
- Notify the Project Manager as soon as it is practical.

Depending on the Stage of Emergency declared, all personnel will follow the reporting procedures outlined in Sections 5 and either Section 6 (Stage 1 Emergency) or Section 7 (Stage 2 Emergency) of this Plan.

13. Overdue Vehicles, Lost Personnel (Stage 1 or 2 Emergency)

Operators of all vehicles enroute to the wellsite will call in a travel plan to the wellsite radio operator prior to departure. The travel plan will include departure time, planned route and estimated time of arrival. The radio operator will record each travel plan.

Each vehicle in transit to the wellsite will be equipped with appropriate survival equipment and cold weather clothing for all passengers as well as a radio or cellular telephone that is appropriate for communications enroute. The vehicle operator will check in with the radio operator at least every two hours while enroute in order to provide an update of his progress. The radio operator at the wellsite will record the time and location of all updates received.

Any vehicle not reporting in within one hour of the scheduled time will be considered overdue. If the radio operator is unable to make contact with an overdue vehicle, he will advise the Drilling Supervisor of the situation. The Drilling Supervisor will advise the local emergency services of a possible requirement for search and rescue.

After consultation with local emergency services, the Drilling Supervisor may, at his discretion, also dispatch a suitably equipped search and rescue team from the worksite. In the event of a whiteout condition, no search and rescue team will be dispatched from the worksite until the weather has cleared sufficiently to conduct a search. The search and rescue team will follow the rescue plan outlined in Section 12.

14. Personnel or Equipment Through Ice (Stage 1 or 2 Emergency)

Vehicles and crew will be traversing ice covered waters enroute to worksites. All vehicles must follow established routes on which the ice has been checked to ensure adequate thickness.

In the event of personnel have fallen through the ice, drowning and hypothermia are immediate life threatening hazards. Any rescue plan must consider the following:

- Safety of the rescuers.
- Rapid rescue of the victim.
- Prevention of further trauma for the victim.
- Rapid transport to a treatment facility.

Whenever possible, a conscious victim should be reached with a reaching device such as a lumber, branches, ladder or rope with a float or rescue loop. If rescue is imminent, the victim should try to conserve heat by limiting movement and by keeping all limbs as close as possible to the body.

When a victim is either unconscious or too numbed by the cold to grasp a rescue device, a properly clothed and equipped rescuer may enter the water. Properly equipped means wearing an immersion suit and secured by a safety line attached to the suit and held by a minimum of two haulers.

Very cold water can often significantly increase the duration that an unconscious victim can remain submerged without breathing. It is critical that even victims with no apparent signs of life be rushed to a treatment facility.

14. Hazardous Materials (Stage 1 or 2 Emergency)

An incident involving hazardous materials may represents a danger to personnel, to the environment or to property.

First Person on the Scene

The first person on the scene of an emergency incident involving a hazardous material will:

- Evaluate the situation for present or anticipated danger. If required, evacuate to an area of safety.
- Notify his immediate supervisor or the Drilling Supervisor immediately.
- Barricade the hazardous area and await instructions from the Drilling Supervisor or his designate, and/or the Emergency Response Team(s).

Drilling Supervisor

The Drilling Supervisor, or his designate, at the scene of an emergency incident involving a hazardous material will:

- Evaluate the situation for present or anticipated danger.
- If required, oversee and enforce an evacuation to an area of safety.
- Outline the situation to appropriate Emergency Response Team(s) and direct the response to the particular emergency situation(s).
- Notify the appropriate dangerous goods emergency contact number for the as listed in Section 22 of this Plan.
- Notify the Project Manager as soon as possible.

Hazardous Materials Incident: Emergency Response Team(s)

The Emergency Response Team(s) dealing with an emergency incident involving hazardous materials must be familiar with potential hazards that may occur involving dangerous goods and the emergency action required for control of these hazards. These procedures are outlined on the Hazardous Materials Data Sheet (HMDS) that accompanies the hazardous materials. All personnel who might be expected to handle the hazardous materials must be aware of these procedures and must have undergone appropriate Workplace Hazardous Materials Information System (WHMIS) training for the products on site. Each member must have a valid First Aid ticket.

Project Manager

In the event of an incident involving hazardous materials, the Project Manager will:

- Assist the Drilling Supervisor as required by the situation.
- Immediately notify the National Energy Board and any other regulatory agencies affected by the incident.
- Immediately notify senior company management.

Depending on the Stage of Emergency declared, all personnel will follow the reporting procedures outlined in Sections 5 and either Section 6 (Stage 1 Emergency) or Section 7 (Stage 2 Emergency) of this Plan.

15. Fuel Spills (Stage 1 or 2 Emergency)

First Person on the Scene

If a fuel spill is initiated or detected, the following measures will be taken by the first person at the site:

- Take immediate steps to stop, or at least reduce, the flow.
- Activate the appropriate emergency systems.
- Eliminate all ignition sources.
- Isolate the area and establish a control perimeter if the spill is over 2m³ or is outside the containment area.
- Contain and control the spill as close to the source as is safe and practical.
- Notify the Drilling Supervisor.

Drilling Supervisor

The Drilling Supervisor, or his designate at the scene of an incident involving a fuel spill will:

- Evaluate the situation for present or anticipated danger.
- Keep all personnel away from any dangerous situation.
- Outline the situation to the appropriate Emergency Response Team(s) and direct the control and clean-up of the spill.
- Contact the Project Manager and forward a NWT Spill Report to him as soon as possible.

Spill Response Team

- Recover as much liquid as possible using tank and vacuum trucks.
- Remove and recover all contaminated snow and ice.
- Haul all recovered material to an approved disposal site.
- Use the spill recovery barrels that are on site for small spills.

Project Manager

In the event of fuel spill incident, the Project Manager will:

- Assist the Drilling Supervisor as required by the situation.
- Immediately notify the National Energy Board and any other regulatory agencies affected by the incident and forward the NWT Spill Report.
- Immediately notify senior company management.
- The Project Manager will report all spills of oil, fuel, and other deleterious materials immediately to the NWT 24 Hour Spill Line (867) 920-8130.

Depending on the Stage of Emergency declared, all personnel will follow the reporting procedures outlined in Sections 5 and either Section 6 (Stage 1 Emergency) or Section 7 (Stage 2 Emergency) of this Plan.

16. Bear Encounter (Stage 1 Emergency)

A Wildlife Monitor will be posted at each site that is subject to encounters with bears, or with any other wildlife which could pose a threat to personnel.

First Person on the Scene

If a bear is encountered at the site, the first person at the site will:

- Notify the Drilling Supervisor and the Wildlife Monitor.
- Make sure that everyone in the area is aware of the bear danger.

Drilling Supervisor

The Drilling Supervisor will:

- Evaluate the situation for present or anticipated danger.
- Ensure that everyone in the area is aware of the bear danger and that they are kept safely away.
- Outline the situation to the Wildlife Monitor and agree on the appropriate follow-up actions.
- Contact the GNWT Renewable Resources Officer at the number listed in Section 22 of this plan. Describe the situation and obtain guidance.

Wildlife Monitor

The wildlife monitor will:

- Attempt to drive the bear away from the site using appropriate deterrent methods.
- Give the bear a chance. It may leave after its curiosity is satisfied. Destroy the bear only as a last resort
- Notify GNWT Renewable Resources Officer as soon as possible.

All personnel will follow the reporting procedures outlined in Sections 5 and 6 of this Plan. In the event of any injuries incurred, the Drilling Supervisor will ensure that the victim receives the appropriate care and that the appropriate safety measures are taken as outlined in Section 7.

17. Information Gathering

On-site information gathering during and after an emergency incident is the responsibility of the Drilling Supervisor. All details from any emergency must be compiled as soon as possible to ensure proper documentation of events leading up to, during, and following the emergency. The accuracy of the information is critical to the planning of emergency services and accurate preparation of any government, insurance, police and company reports, which will be required after the emergency is corrected.

Information on the following will be gathered:

- Location of the emergency.
- Time and date when the emergency occurred.
- Extent of damage (serious injury, loss of equipment, shut-down of operations, evacuation, etc.).
- Sequence of events leading up to the emergency.
- Key personnel and witnesses.
- Environmental conditions at the time of the emergency.
- Corrective efforts such as notification of emergency services, and authorities.
- Recommendations and actions taken to prevent the recurrence of the incident.

An Emergency Report containing the above information will be prepared by the Drilling Supervisor and forwarded to the Project Manager.

A Hazardous Occurrence Investigation Report (NEB Form #369) will be forwarded to the National Energy Board.

18. Notification of Emergency

In an emergency, the Drilling Supervisor will contact any emergency service providers and local authorities that are required. As soon as possible, he will notify the Project Manager. First contact with the appropriate regulatory agencies is the responsibility of the Project Manager. The Drilling Supervisor will provide any required updates to regulatory agencies in as timely manner as is possible under the circumstances.

Telephone numbers for emergency services and government agencies are listed in Section 22 of this Plan.

Reports required by governmental regulations shall be promptly prepared and submitted by the Project Manager. Report formats are shown in Section 23 of this plan.

19. Notification of Next of Kin

In the event of a fatality or serious injury, the Project Manager must be notified immediately. Notification of next of kin will be arranged by the Project Manager and senior management and will be carried out by the RCMP or other authority.

Under no circumstances shall the name of any accident victim be released to the public before the next of kin are notified and permission is received from the RCMP and the Project Manager.

20. Post-Emergency Procedures

In every major emergency involving a fatality, serious injury, or loss or damage to company property, the Project Manager will designate a representative to proceed to the work site to complete an Emergency Investigation Report along with insurance and government reports.

Care must be taken to preserve evidence in its original state. Government agencies conducting investigations will be given full cooperation. After confirming the investigator's credentials, employees and contractors will provide statements and company reports as requested. Investigators will be permitted to move freely about the work site. Work site supervisors will warn inspectors of any hazardous conditions present.

Work at the scene of a fatality, serious injury, or significant damage to property, will remain suspended until permission has been obtained from the Project Manager, local officials, regulatory investigating teams, and the National Energy Board to recommence operations.

Once the Project Manager and regulatory agencies have determined that an emergency condition no longer exists, on-site personnel will proceed with the following systematic return to work under the direction of the Drilling Supervisor and Project Manager:

- Determine the extent of damage.
- Initiate the necessary steps to prevent further damage and control hazards in damaged areas.
- Recall non-essential personnel.
- Inform personnel and affected agencies that the situation has returned to normal.
- Commence work site clean up and repair operations as necessary.

21. Media Relations

Media attention is expected for any emergencies, especially for major ones. It is imperative that pertinent facts important to the public be released in a timely and accurate manner. The following procedures will be observed for all news media contacts:

- Initially, the Project Manager will have the responsibility to handle accredited news media personnel and will advise the public and media that statements concerning the accident will be issued from the head office.
- Although news media personnel have no more rights than private citizens to enter company property, they should be tactfully handled, always accompanied while on company property, and, for their safety, denied access to danger areas.
- As facts become known, and before an official company news release is approved, the Project Manager shall prepare a summary for company management.
- Company management will issue official news releases to both the news media and within the company; and provide assistance and advice in the handling of the press.
- Under no circumstances shall the name of any accident victim be released to the public before the next of kin are notified and permission is received from the RCMP and the Project Manager.

22. Contacts, Telephone Numbers

The Drilling Supervisor, or his designate, will prepare and maintain a current site-specific emergency telephone list. The list will be posted in an area known to all on-site personnel.

Japex Canada / Canadian Petroleum Engineering

Contact	Name	Office	Home
Project Manager	Ed Fercho	(403) 263-0752	(403) 938-5580
Project Engineer	Doug Bradley	(403) 263-0752	(403) 271-4306
Project Engineer	Lorne Hammer	(403) 263-0752	(403) 242-3487
Japex Manager	Akihisa Takahashi	(403) 264-9046	

Emergency Services

Organization	Phone
Ambulance – Inuvik	(867) 777-4444
Hospital – Inuvik	(867) 777-2955
Fire – Tuktoyaktuk	(867) 977-2222
Fire – Inuvik	(867) 777-5555
RCMP – Inuvik	(867) 777-2935
RCMP – Tuktoyaktuk	(867) 977-2351
Canadian Helicopters – Inuvik	(867) 777-2424
NWT Emergency Spill Line – Yellowknife	(867) 920-8130
Emergency Measures Organization – GNWT	(867) 873-7554

Regulatory Agencies

Agency	Title	Name	Office	Home
NEB	Pet. Eng. Spec.	Chris Knoechel	(403) 299-3866	(403) 241-0047
NEB	Env. Asses. (Spills)	John Korec	(403) 299-6614	(403) 275-6256
NEB	Chief Cons. Officer	Terry Baker	(403) 299-2792	(403) 239-5032
INAC	District Manager	Rudy Cockney	(867) 777-3361	
Wildlife	District Officer- Bear	Paul Voudrach	(867) 977-2350	
Wildlife	Habitat-Birds	Paul Latour	(867) 669-4769	
Fisheries	Cons. Officer	Tyson Pertchy	(867) 777-3314	

Other Stakeholders

Organization	Contact	Office
Tuktoyaktuk HTC	Frank Pokiak	(867) 977-2457
Inuvik HTC	Richard Binder	(867) 777-3671
Inuvialuit Land Administration	Calvin Pokiak	(867) 977-2202
Inuvialuit Game Council	Katherine Thiesenhausen	(867) 777-2828
Env. Impact Screening Committee	Bill Classen	(867) 777-2828

23. Report Forms

SCHEDULE I / ANNEXE I
 (SUBSECTION 16.4(3) / PARAGRAPHE 16.4(3))

HAZARDOUS OCCURRENCE
 INVESTIGATION REPORT

RAPPORT D'ENQUÊTE DE
 SITUATION HASARDEUSE

TYPE OCCURRENCE / GENRE DE SITUATION		Department File No. / No de dossier du ministere
? Fire / Explosion	? Death / Décès	Regional Office / Bureau regional
? Disabling Injury Blessure entraînant une invalidité	? Emergency Procedure Procédures d'urgence	
? Other Autre	Specify / Préciser	Employer ID No. / Numéro d'identification de l'employeur

Employer Name and Mailing Address / Nom et adresse postal de l'employeur	Telephone Number / Numéro de téléphone	Operator / Exploitant
	Supervisor's Name / Nom du surveillant	
	Witnesses / Témoins	
	Weather / Conditions météorologiques	

ID of Drilling Rig, Drilling Unit, Production Facility, or Support Craft / Identification de l'appareil de forage, installation de forage, installation de production ou du véhicule de service	Date and Time of Hazardous Occurrence / Date et heure de la situation hasardeuse
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Description of what happened / Description des circonstances

Description and estimated cost of property damage / Description et coût estimatif des dommages matériels	Operation in progress / Operation en cours
--	--

Injured Employee's Name (if applicable) / Nom de l'employé blessé (s'il y a lieu)	Age / Âge	Occupation / Profession
		Years of experience in occupation / Nombre d'années d'expérience dans la profession

Description of Injury / Description de la blessure	Sex / Sexe	Nationality / Nationalité
	Evacuation / Evacuation	Direct cause of injury / Cause directe de la blessure

Was training in accident prevention given to injured employee in relation to duties performed at the time of the hazardous occurrence?
 L'employé blessé a-t-il reçu un entraînement en prévention des accidents relativement aux fonctions qu'il exerçait au moment de la situation hasardeuse?

Yes / Oui No / Non Specify / Préciser

Direct causes of Hazardous Occurrence / Causes directes de la situation hasardeuse

Corrective action and date employer will implement / Mesures correctives qui seront appliquées par l'employeur et date d'entrée en vigueur

Supplementary preventative measures / Mesures supplémentaires de prévention

Name of person investigating / Nom de la personne menant l'enquête	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	
Safety & Health Committee Member or Representative's Name / Nom du membre du comité d'hygiène et de sécurité ou du représentant à l'hygiène et à la sécurité	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	
Name of person representing the Operator / Nom de la personne représentant l'exploitant	Signature / Signature	Date / Date
Title / Titre	Telephone Number / Numéro de téléphone	

Lab/Trav 369 (Revised 7/87)

(Continue on reverse side if needed / Continuer au verso si nécessaire)

COPIES 1 & 2 to R.S.O., COPY 3 to the Safety and Health Committee or Representative, COPY 4 to the Employer /
 COPIES 1 ET 2 à A.R.S., COPIE 3 au Comité d'hygiène et de sécurité ou au représentant, COPIE 4 à l'employeur

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

National Energy Board
 Phone (403) 292-6614 Home (403) 275-6256
 Fax (403) 292-5876 or 292-5875

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 Report	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 (m2)
L Factors affecting spill recovery (weathering conditions, terrain, snow cover, etc.)		M Containment (natural depression, dykes, 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	
Q Comments and/or recommendations		FOR SPILL LINE USE ONLY _____ Lead Agency _____ Spill significance _____ Lead Agency contact and time _____ _____ _____ _____ _____ _____ _____ Is this file now closed?	
Reported by	Position, Employer, Location	Telephone	
Reported to	Position, Employer, Location	Telephone	

CANADA LABOUR CODE

Oil and Gas Occupational Safety and Health Regulations

PART XVI

HAZARDOUS OCCURRENCE INVESTIGATION, RECORDING AND REPORTING

[SOR/94-165, s. 59(F)]

Interpretation

16.1 In this Part,

"disabling injury" means an employment injury or an occupational disease that

(a) prevents an employee from reporting for work or from effectively performing all the duties connected with the employee's regular work on any day subsequent to the day on which the disabling injury occurred, whether or not that subsequent day is a working day for that employee,

(b) results in the loss by an employee of a body member or part thereof or in the complete loss of the usefulness of a body member or part thereof, or

(c) results in the permanent impairment of a body function of an employee;

"minor injury" means an employment injury or an occupational disease for which medical treatment is provided and excludes a disabling injury. (blessure légère) SOR/94-165, s. 60.

Report by Employee

16.2 Where an employee becomes aware of an accident or other occurrence arising in the course of or in connection with his work that has caused injury to him or to any other person, he shall without delay report the accident or other occurrence to his employer, orally or in writing.

Investigation

16.3 (1) Where an employer is aware of an accident, occupational disease or other hazardous occurrence affecting any of his employees in the course of employment, the employer shall, without delay,

(a) take necessary measures to prevent a recurrence of the hazardous occurrence;

(b) appoint a qualified person to carry out an investigation of the hazardous occurrence; and

(c) notify the safety and health committee or the safety and health representative, if either exists, of the hazardous occurrence and of the name of the person appointed to investigate it.

(2) In addition to the investigation referred to in paragraph (1)(b), where the hazardous occurrence referred to in subsection (1) is an accident involving a ship or aircraft or a motor vehicle on a public road, the employer shall investigate the accident by obtaining from the appropriate police or other investigating authority a copy of the report made by that authority in respect of the accident.

(3) As soon as possible after receipt of the report referred to in subsection (2), the employer shall provide a copy thereof to the safety and health committee or the safety and health representative, if either exists. SOR/94-165, s. 61.

Hazardous Occurrence Report

[SOR/94-165, s. 62(F)]

16.4 (1) The employer shall report, by the most rapid means of communication available to the employer, the date, time, location and nature of any accident, occupational disease or other hazardous occurrence referred to in section 16.3 to a safety officer and to the safety and health committee or the safety and health representative, if either exists, as soon as possible but not later than 24 hours after becoming aware of the occurrence, where the occurrence resulted in one of the following circumstances:

- (a) the death of an employee;
- (b) a missing person;
- (c) a disabling injury to an employee;
- (d) the implementation of emergency rescue, revival or evacuation procedures;
- (e) a fire or explosion that threatened the safety or health of an employee;
- (f) the free fall of an elevating device that rendered the elevating device unsafe for use by an employee;
- (g) an accidental accumulation, spill or leak of a hazardous substance; or
- (h) the loss of or damage to support craft.

(2) A written report of the accident, occupational disease or other hazardous occurrence referred to in subsection (1) shall be submitted by the employer within 14 days after the occurrence to

- (a) the regional safety officer at the regional office; and
- (b) the safety and health committee or the safety and health representative, if either exists.

(3) The report referred to in subsection (2) shall be in the form set out in Schedule I to this Part and contain the information required by the form. SOR/88-199, s. 19; SOR/94-165, s. 63.

16.5 Where an investigation referred to in subsection 16.3(2) discloses that the accident resulted in a circumstance referred to in subsection 16.4(1), the employer shall, within 14 days after the receipt of the report of the accident made by the police or other investigating authority, submit a copy of the report to the regional safety officer at the regional office.

Minor Injury Record

16.6 (1) Every employer shall keep a record of each minor injury of which he is aware that affected any of his employees in the course of employment.

(2) A record made pursuant to subsection (1) shall contain

(a) the date, time and location of the occurrence that resulted in the minor injury;

(b) the name of the injured or ill employee;

(c) a brief description of the minor injury; and

(d) the causes of the minor injury.