



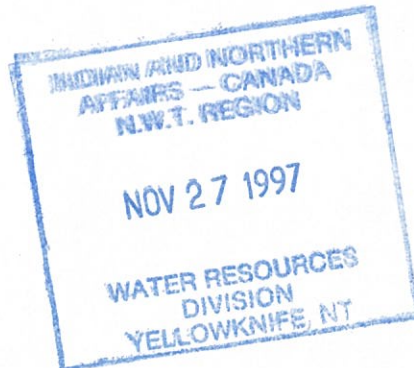
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# Emergency Response Plan for Ikhil Seismic and Development Drilling Program

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WATER REGISTER COPY  
DO NOT REMOVE FROM OFFICE

**Inuvialuit Petroleum Corporation**  
**1100, 300 - 5<sup>th</sup> Avenue S.W.**  
**Calgary, Alberta**  
**T2P 3C4**



**November, 1997**

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# Emergency Response Plan for Ikhil Seismic and Development Drilling Program

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## 1.0 Introduction

The Inuvialuit Petroleum Corporation (IPC) has developed this Emergency Response Plan as a guide for its management, employees and contractors during emergency situations. The purpose of the Plan is to protect the operating personnel, general public, property and the environment in the event of an emergency.

This Emergency Response Plan identifies personnel responsibilities, communication paths, and emergency procedures and support services available to implement emergency control measures. Having these pre-planned guidelines will lead to an effective response to all emergency situations and will make maximum use of the combined resources of IPC, Government Agencies and Outside services.

All IPC management, employees and contractors will become thoroughly familiar with the Plan. They must also recognize that no plan can completely cover all situations; common sense and sound judgment must also be exercised during emergency situations.

The Inuvialuit Petroleum Corp. Safety Program Manual and Environmental Policy Manual are additional references to this Emergency Response Plan.

This Emergency Response Plan is preliminary and subject to enhancement. The Inuvialuit Petroleum Corporation will develop a comprehensive, site specific, safety plan and emergency response plan by the end of January and submit it to regulatory agencies for their review and comment in early February, prior to commencement of the proposed program.

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## 2.0 Emergency Response Policy

IPC's Emergency Response Policy is designed to protect IPC personnel, subsidiaries, assets and contract employees. In addition, the Emergency Response Policy is intended to limit financial loss and industry standing in the event of an incident affecting field operations, district offices and /or head office. In support of this policy, the following guidelines are identified:

1. Personnel safety is the primary concern.
2. Notification of an event to key IPC personnel and/or relevant third parties is mandatory.
3. Containment of the event is critical to limit injury and damages.
4. Reactive responsibilities will be assigned prior to the event occurring, wherever possible.
5. External communications will be channeled through the appropriate IPC spokesperson in Calgary.
6. It is the responsibility of all employees to report any errors or omissions in the Plan to the Emergency Response Coordinator. Effective response is dependent upon all aspects of the Emergency Response Plan being current.
7. All personnel under contract operating in IPC's or subsidiary field locations are to be aware of the Emergency Response Plan and understand their responsibilities.

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## 3.0 Emergency Definition

An emergency is defined as any unplanned event that may result in serious injury, loss of life, property damage, or environmental damage, and which demands immediate attention. Emergencies are classified as follows:

### 3.1 Minor Emergency

A minor emergency may force a portion of the operation to be temporarily suspended but can be completely handled by work site personnel and equipment. A minor emergency does not present any potential danger to the public. Examples of minor emergencies are:

- A small fire or spill
- A minor injury
- A controlled sweet gas release

### **3.2 Major Emergency**

A major emergency is an escalated minor emergency for which the entire operation may be temporarily suspended, and for which outside services are immediately required. Safe control of operations has been lost, causing or having the potential to cause serious injuries or fatalities to work site personnel or the public, or serious property and environmental damage. Examples of major emergencies are:

- A major fire, explosion, spill or natural disaster
- A serious injury or fatality
- An uncontrolled sweet gas release
- Loss of well control
- Security breaches

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## **4.0 Emergency Reporting**

The urgency of reporting depends on the emergency level. The first person on the scene must report major emergencies immediately after they have occurred. All emergencies must be reported using the emergency Reporting Flow chart shown in Figure 1. Telephone numbers for IPC's office and key personnel are listed in Section 8 of the Plan.

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## **5.0 Personnel Duties and Responsibilities**

Reference the emergency reporting flow chart (Figure 1).

### **5.1 First Person on the Scene**

The first person on the scene of an emergency will:

- Assess the situation and if safe, provide first aid, and commence rescue operations.
- Notify supervisory personnel of emergency, so additional emergency services can be called in as required.
- Alert others in the vicinity of the emergency and evacuate anyone in immediate danger.
- If the emergency permits, attempt to control it until additional help arrives.
- Report to and receive instructions from the On-Scene Commander.

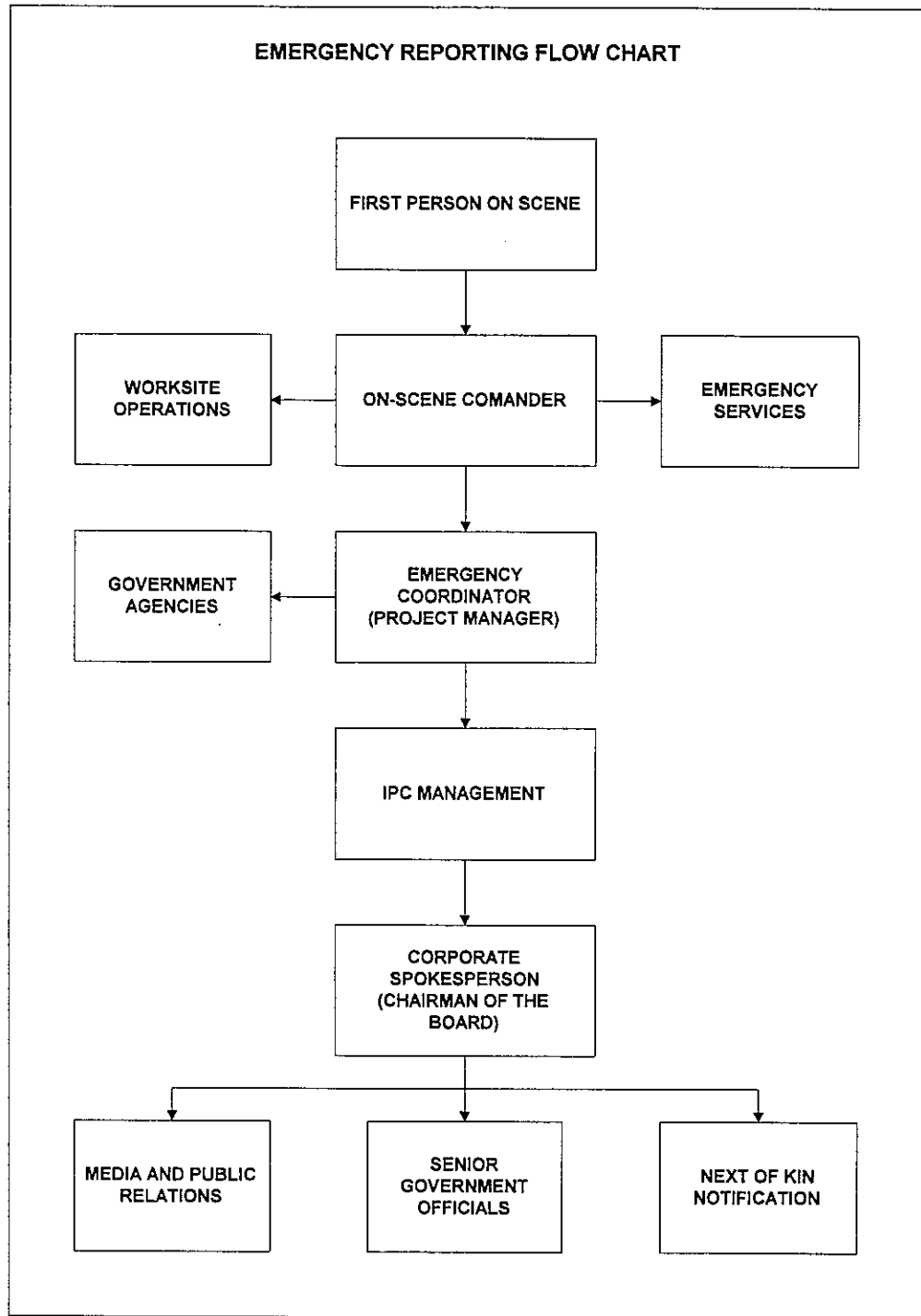


Figure 1 - Emergency Reporting Flow Chart

## 5.2 On-Scene Commander

The On-Scene Commander is the most senior IPC employee, Consultant or Contractor at the emergency site. He will direct the movement and actions of all personnel at the emergency site and is responsible for reporting to IPC's Emergency Coordinator. During an emergency the On-Scene Commander will:

- Assess the situation and direct work site operations.
- Immediately attend to protecting life and preventing injuries.
- Take corrective action to return the situation to the normal, safe operating condition and in the event an injury or fatality has occurred, attempt to not disturb the evidence to the greatest extent possible under the particular circumstances.
- Notify the Emergency Coordinator (and other personnel at his/her discretion).
- Isolate the area and deny access to non-essential personnel.
- Initiate and follow Emergency Procedures as required (Section 6).
- Order additional emergency services, personnel and equipment as required.
- Take corrective action to return the situation to normal. In the case of death or serious injury, ensure operations remain suspended, and wherever possible, evidence is left undisturbed until investigations are complete. Maintain accurate records of all operations and complete an Emergency Information Report form (Appendix 1).

## 5.3 Emergency Coordinator - Project Manager

The Project Manager or designated alternate becomes the Emergency Coordinator during a major emergency situation, and in conjunction with the On-Scene Commander, will make all critical operational decisions. During an emergency, the Emergency Coordinator will:

- Obtain all pertinent facts and record all information from the On-Scene Commander.
- Maintain communication with management as shown on the Emergency Reporting Flow Chart (Figure 1).
- Ensure proper Emergency Procedures are followed (Section 6).
- Immediately notify government agencies as required.
- Direct Post Emergency Procedures (Section 7).

## **5.4 Corporate Spokesperson Chairman**

The Chairman becomes IPC Corporate Spokesperson during a major emergency situation. In consultation with management, the Corporate Spokesperson will:

- Issue news releases to the media (Section 6.7).
- Direct notification of next of kin (Section 6.8).
- Respond to public inquiries regarding the emergency.
- Maintain communication with senior representatives of government agencies.
- If necessary, inform industry partners.
- Evaluate the need to and if necessary, consult with legal council and inform IPC's insurance agent.
- Address the need to compensate parties impacted by the emergency.

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## **6.0 Emergency Procedures**

### **6.1 Site Specific Pre-Emergency Procedures**

The most senior IPC employee, consultant or contractor at the re-entry site will prepare and maintain a current site-specific emergency telephone list. The list must be posted in an area known to all on-site personnel.

### **6.2 Rescue Operations**

No search and rescue will be attempted if it places the lives of workers in danger. In the event of a rescue operation, the following attempts will be taken:

- Notify the work site supervisor of the need to rescue workers.
- If the supervisor is unavailable and the situation is urgent, notify the closest person at hand of the need for rescue operations.
- Assess the area and determine if a rescue attempt is safe.
- Wear appropriate personal protective equipment (e.g. fire-retardant clothing and self-contained breathing apparatus).
- Upon finding an injured worker:



- initiate first aid even if the person does not appear to be alive.
- do not move the injured person unless to prevent further injuries.
- send for help.

### **6.3 Fire Control Procedures**

If a fire is detected, proceed with the following measures:

- Sound an alarm, if available.
- Evacuate the immediate area.
- Activate emergency shutdown systems to cut off fuel supply to the fire.
- Shut off any high-voltage power supplies (480 volts or greater) to all equipment in the immediate area of the emergency.
- Shut off fuel to heaters near to or downwind of the fire.
- If the fire is too big or threatens explosion, do not attempt to fight it. Call for emergency services.
- If the fire is small enough to be extinguished by work site personnel and equipment, use the appropriate fire-fighting method.
- Check the surrounding area for any sources of re-ignition and take steps to remove them. Prior to entering potentially explosive areas, instruct personnel to dissipate static charges on their bodies by grounding themselves (holding onto a bare metal structure with bare hands for ten seconds and then releasing).

### **6.4 Evacuation Procedures**

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

- Alert work site personnel and release all non-essential personnel.
- Contact local RCMP to provide evacuation assistance.
- Designate a nearby meeting place as an evacuation center and dispatch a representative to the evacuation center.
- Dispatch two person evacuation teams complete with mobile communications, to advise area residents and persons working or

traveling in the immediate vicinity of the incident of the need to evacuate.

- Dispatch work site or emergency service personnel to establish road blocks well back of the emergency area.

## **6.5 Dangerous Goods Response**

### **Incidents /Accident Procedures**

An Incident /Accident involving dangerous goods is anything that represents a danger to health and safety, property or the environment. In the event of an Incident /Accident involving dangerous goods, certain procedures must be followed. It is vital that personnel under your supervision are aware of these procedures and of their responsibilities for the Emergency Response Plan to work effectively.

- An Incident Commander (ie: Field Supervisory Staff) must be designated to administer and initiate the Emergency Response Plan.
- Emergency Response Team(s) must be designated by the Incident commander to respond to and assist in emergency situation(s).
- Incidents /Accidents involving dangerous goods are to be reported to the Incident Commander immediately.
- The Incident Commander must put the Emergency Response Plan in effect (refer to attachments for Emergency Response Plans for these products).
- Incidents /Accidents involving explosives or injuries due to a release of dangerous goods must be reported to the Director, General of Dangerous Goods in Ottawa within 30 days of the Incident /Accident. Information must be present on Schedule IX, Form 2 (refer to page 37).

Director General  
344 Slater Street  
Ottawa, ON K1A 0N5  
The CAGC explosives Emergency  
Response Number is  
ERP2-1050  
403/ 245-5883 (24 hours)

### **Incident /Accident Responsibilities**

#### **Employee**

- Notify the Incident Commander immediately.

- Barricade the hazardous area and await the Incident Commander and /or Emergency Response Team(s).
- Evacuate to pre-determined area of safety as defined by the Emergency Response Plan.

#### **Incident Commander**

- Evacuate to pre-determined area of safety as defined by the Emergency Response Plan.
- Notify the appropriate Emergency Response Team(s) to respond to the particular emergency situation(s).
- In accordance with Table 1, page 40, notify the appropriate dangerous goods emergency contact number for the province or territory you are in. Numbers are listed in this module under Other Emergency Contact Numbers.
- Notify the RCMP.
- Notify your supervisor and /or a IPC Supervisor.
- When a railway vehicle is involved, notify the Canadian Transport Commission.
- In accordance with Table 1, page 40, notify the owner, lessee or charterer of a road vehicle when a road vehicle is involved.
- In accordance with Table 1, page 40, notify the owner or the consignor of the consignment of dangerous goods.

#### **Emergency Response Team(s)**

- Must be familiar with potential hazards that may occur involving dangerous goods and the emergency action required for these hazards.
- Each member must have a valid First Aid ticket.
- Respond to and assist in emergency situations at the request of the Incident Commander.

### **6.6 Spill Response**

If a spill is initiated or detected, proceed with the following measures

- Sound the alert and notify the work site supervisor.
- Activate the emergency shutdown systems.
- Eliminate all ignition sources.

- Isolate the area and establish control perimeter if the spill is over 2m<sup>3</sup> or is outside the containment area.
- Contain and control the spill. Contain the spill as close to the source as safe and practical. If the spill cannot be contained with the equipment on site, activate the spill response equipment from Tuk.
- Report all spills of oil, fuel, and other deleterious materials immediately to the:
  - 24 Hour Spill Line (403) 920-9130
- Once the spill has been contained, recover as much liquid as possible using tank and vacuum trucks. Remove and recover all contaminated snow and ice. Haul all recovered material to Inuvik for approved disposal. For small spills, use the spill recovery barrels that are on site.

## **6.7 Notification of Emergency Services and Government Agencies**

In an emergency, contacting appropriate government agencies is the responsibility of the Emergency Coordinator. Telephone numbers for emergency services and government agencies are listed in Section 8 of the Plan, beginning on Page 13.

## **6.8 Information Gathering**

Information gathering is the responsibility of the On-Scene Commander. All details from any emergency must be compiled as soon as possible to ensure proper documentation of events leading up to, during and after the emergency. The accuracy of the information is critical to the planning of emergency services and accurate preparation of government, insurance, police and company reports, which are required after the emergency, is corrected. During the emergency, this information can be used to prepare reports for the media.

Information on the following will be gathered:

- Location of the emergency.
- Time and date when the emergency occurred.
- Extent of damages (serious injury, loss of equipment, plant shut-down, 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.

An Emergency Information Report form (Appendix 1) is to be filled out by the On-Scene Commander. Once the On-Scene Commander has finalized his copy, he must provide copies to the Emergency Coordinator. These reports will be used to provide information to more senior levels of management and outside agencies.

## **6.9 Media Relations**

Contact with the media is expected, especially for major emergencies. It is imperative that pertinent facts important to the public be released in a timely and accurate manner. In order to achieve this, only the Corporate Spokesperson will be authorized to issue news releases to the media. Under no circumstances will news releases be issued from the emergency site, unless authorized by the Corporate Spokesperson. All requests for interviews must be referred to the Corporate Spokesperson. Information of a speculative nature should not be discussed. No statements regarding IPC's responsibility or liability for an accident will be made. For the safety of the media (and any other private citizens), access to the site will not be given, unless both the Emergency Coordinator and the Corporate Spokesperson have given special clearance. No opinion as to the cause of the incident shall be given. The Corporate Spokesperson should be prepared to release the following information:

- What happened?
- Where?
- When?
- What personnel, equipment or property was injured or damaged?
- What action was taken to control the emergency?
- What is the current status of the situation?
- Name and number of personnel directly involved (the names of injured or deceased personnel must be withheld until next of kin has been notified).

## **6.10 Notification of Next of Kin**

The next of kin of a deceased or seriously injured worker must be notified as soon as possible after an accident has occurred. However,

in the case of death, the next of kin must not be notified until a doctor or coroner has officially pronounced the victim dead. Under no circumstances are the names of workers to be released before the next of kin have been notified.

Notification of next of kin should be made in person, where possible, by the victim's immediate supervisor or manager. A fellow employee or the victim's clergyman, if known to the victim's family, should also be present. The RCMP will assist to notify the family where company employees are not available. In all cases, the next of kin must be offered transportation, as they may go into shock after receiving the call and must not operate a vehicle in this condition.

If a contractor's employee has been injured, the contractor is to notify the next of kin and keep advised, so the victim's name can be released after notification.

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## **7.0 Post Emergency Procedures**

### **7.1 Investigation and Reports**

In every major emergency involving a fatality, serious injury or loss or damage to company property, IPC will designate a representative to proceed to the work site to complete an Emergency Investigation Report (Appendix 1) along with insurance and government reports.

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 are 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 will remain suspended until permission has been obtained from the Corporate Spokesperson and the NEB to recommence operations. The spokesperson must have authority from the chief safety officer. Care must be taken to preserve evidence in its original state.

### **7.2 Return to Work**

Once management and regulatory agencies have determined that an emergency condition no longer exists, emergency personnel should proceed with the following systematic return to work:

- Determine the extent of damage.

- Isolate necessary steps to prevent further damage and control hazards in damaged areas.
- Recall non-essential personnel.
- Inform personnel and agencies that were informed of the emergency or evacuated that the situation has returned to normal.
- Commence work site clean-up and repair operations as necessary.

## 8.0 Emergency Telephone Numbers

The following are telephone numbers for IPC, Government and Emergency Services.

### 8.1 Inuvialuit Petroleum Corporation Office

Position	Name	Phone Number
Project Manager	OD Hansen	(403)262-6955
V.P. Exp. & Production	James Burns	(403)262-6955
President	Al Taylor	(403)262-6955
Chairman	Russel Newmark	(867) 977-2300

### 8.2 Government Agencies

Agency	Contact	Phone Number
Inuvik Hunters and Trappers	Loretta Elias	(867) 777-3671
Inuvialuit Land Administration	Paul Voudrach	(403) 977-2202
Indian & Northern Affairs Canada	Rudy Cockney	(867) 777-3361
National Energy Board	Andrew Graw	(403) 299-2790
EMPR, GNWT	Doug Matthews	(403) 920-3214
Occupational Health and Safety	NEB Ed Reyven	(403) 299-2798
Workers Compensation Board	Yellowknife	(403) 920-3888

### 8.3 Emergency Services

#### 8.3.1 Local

Organization	Telephone Number
Inuvik Fire Department	(867) 777-5555
Ambulance Emergency Line	(867) 777-4357
Medical Emergency	(867) 777-2955
RCMP	(867) 777-2935
Esso / Imperial Oil	(867) 777-2311
Continental Helicopters	(867) 777-2323
Canadian Helicopters	(867) 777-2424

#### 8.3.2 Well Control

Fire Fighting and Well Control Specialists		
Canadian Firemaster	Red Deer	(403) 342-7500
Safety Boss	Red Deer	(403) 342-1310
SOS Oilfield Safety	Ft. St. John	(604) 787-0969
Firemaster	Kindersley	(306) 463-6244
Mobile Air Monitoring		
Dore Oilfield Safety	Red Deer	(403) 347-9100
Monitex Engineering	Calgary	(403) 291-3590
Pro West H2S Safety	Red Deer	(403) 340-3000
Safety Companies		
Standard Safety	Red Deer	(403) 347-2722
United Resource Safety	Red Deer	(403) 346-5661
United Resource Safety	Calgary	(403) 273-7774



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## Appendix 1 - Emergency Reporting Forms

**EMERGENCY INVESTIGATION REPORT**  
**REPORTING DETAILS**

Location of emergency: \_\_\_\_\_

**CAUSE ANALYSIS**

Description of Immediate Causes:  
(including details of unsafe  
work practices or unsafe  
conditions)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RISK ANALYSIS**

Loss of Severity Potential:      \_\_\_\_\_ Major      \_\_\_\_\_ Serious      \_\_\_\_\_ Minor

Probability of Reoccurrence:      \_\_\_\_\_ Frequent      \_\_\_\_\_ Occasional      \_\_\_\_\_ Rare

Reasons for rating:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REMEDIAL ACTION**

Initial corrective action taken:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Work site action required to  
prevent recurrence:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Management action required  
to prevent events of this type:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Investigated by:

Signature:

Date:

\_\_\_\_\_  
\_\_\_\_\_

Reviewed by:

Signature:

Date:

\_\_\_\_\_  
\_\_\_\_\_

**EMERGENCY INFORMATION REPORT  
REPORTING DETAILS**

Location of emergency: \_\_\_\_\_

Date and time reported: \_\_\_\_\_

Name of person reporting emergency: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

How was emergency detected: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Brief description of emergency: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cause of emergency: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Events leading up to the emergency: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Extent of the damage: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Remaining environmental or public hazards: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witnesses: \_\_\_\_\_

Casualties and injuries: \_\_\_\_\_

(This information should be made public by the Corporate Spokesperson only after notification of Next-of-Kin).

**RESPONSE DETAILS**

Corrective action taken: \_\_\_\_\_

Government agencies contacted: \_\_\_\_\_

Emergency services contacted: \_\_\_\_\_

Report prepared by: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

A copy of this report must be submitted to the Calgary office.

**TABLE 1**  
**QUANTITIES OR LEVELS FOR IMMEDIATE REPORTING**

ITEM	COLUMN I CLASS AND DIVISION	COLUMN II QUANTITIES OR LEVELS		
1.	1	All	Explosives	
2.	2.1	At least 100 L*	Acetylene Propane	100 L = 22 gal
3.	2.2	At least 100 L*	Nitrogen	100 L = 22 gal
4.	2.3	All		
5.	2.4	All		
6.	3	At least 200 L	Gasoline Diesel	200 L = 44 gal
7.	4	At least 25 kg		25 kg = 55.11 lb
8.	5.1	At least 50 kg or 50L		50 kg = 110.23 lb 50 L = 11 gal
9.	5.2	At least 1 kg or 1L		1 kg - 2.20 lb 1 L = 22 gal
10.	6.1	At least 5 kg or 5L		5 kg - 11 lb 5 L = 1.1 gal
11.	6.2	All		
12.	7	Any discharge or radiation level exceeding 10 mSv/h at the package surface and 200 mSv/h at 1m from the package surface.		1 m = 39.37 in
13.	8	At least 5 kg or 5L		5 kg - 11 lb 5 L = 1.1 gal
14.	9.1	At least 50 kg		50 kg = 110.23 lb
15.	9.2	At least 50 kg		1 kg = 2.20 lb
16.	9.3	At least 5 kg or 5L		5 kg = 11 lb 5 L = 1.10 gal

\* Container Capacity

# SCHEDULE IX

## FORM 2

### FORM II - DANGEROUS OCCURRENCE REPORT

**1. TYPE OF DANGEROUS OCCURRENCE (Check All Applicable Boxes).**

Spill

Leak

Contamination



Explosion

Fire

Property

Human

Environment

Other (please specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2. DATE OF DANGEROUS OCCURRENCE**

Year

Month

Day

**3. TIMES OF DANGEROUS OCCURRENCE**

\_\_\_\_\_  
(24 Hr System)

**4. LOCATION OF DANGEROUS OCCURRENCE**

\_\_\_\_\_  
(City / Town / Municipality / Province)  
\_\_\_\_\_

**5. Residential**

**Urban**

**Rural Area**

**Commercial and Residential Area**

**Industrial Area**

**6. DANGEROUS OCCURRENCE HAPPENED**

During Transport

During Temporary Storage

During Handling

(specify): \_\_\_\_\_  
\_\_\_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_

# SCHEDULE IX (CONT'D)

FORM 2

## FORM II - DANGEROUS OCCURRENCE REPORT

**7. COMPLETE A or B**

<p><b>A. Dangerous Occurrence During Transport</b></p> <p><b>1. Mode of Transport</b></p> <p>Road <input type="checkbox"/>      Air <input type="checkbox"/></p> <p>Rail <input type="checkbox"/>      Marine <input type="checkbox"/></p> <p><b>2. Type of Vehicle</b></p> <p>_____</p> <p><b>3. Carrier (name and address)</b></p> <p>_____</p> <p>_____</p>	OR	<p><b>B. Dangerous Occurrence During Handling or Temporary Storage</b></p> <p><b>1. Facility</b></p> <p><b>Terminal:</b></p> <p>Air <input type="checkbox"/>      Rail <input type="checkbox"/>      Road <input type="checkbox"/></p> <p><b>Port:</b></p> <p>On Shore <input type="checkbox"/>      On Ship <input type="checkbox"/></p> <p><b>Warehouse:</b></p> <p>Bulk Storage Plant <input type="checkbox"/>      Other <input type="checkbox"/></p> <p>Other _____</p> <p><b>2. Name and Address of the Facility</b></p> <p>_____</p> <p>_____</p>
--	----	--

8. **CONSIGNOR (Name)** \_\_\_\_\_

(Address) \_\_\_\_\_

9. **ORIGIN OF CONSIGNMENT** \_\_\_\_\_

10. **DESTINATION OF CONSIGNMENT** \_\_\_\_\_

11. **DANGEROUS GOODS INVOLVED IN THE OCCURRENCE WHERE:**

In bulk       Packaged       In Containers

PIN	Classification	Shipping Name	Type of Package	Total Mass or Volume of Shipment	Mass or Volume of Estimated Loss

# SCHEDULE IX (CONT'D)

FORM 2

## FORM II - DANGEROUS OCCURRENCE REPORT

12. DESCRIBE THE EVENTS LEADING TO, DURING, AND RESULTING FROM THE DANGEROUS OCCURRENCE.

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13. NUMBER OF DEATHS \_\_\_\_\_

14. NUMBER OF INJURED PERSONS REQUIRING HOSPITALIZATION: \_\_\_\_\_

15. EXCAVATION OF SURROUNDING AREA    Yes       No  

16. EMERGENCY RESPONSE PERSONNEL AT SITE OF DANGEROUS OCCURRENCE:

Police         Fire Department         Other  

17. COMMENTS AND ADDITIONAL INFORMATION

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18. INFORMATION ON THE PERSON COMPLETING THIS REPORT

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number (include area code): \_\_\_\_\_

I certify that this information is accurate to the best of my knowledge.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Please Print Name)

\_\_\_\_\_  
(Date)

**Potential Hazards**

**Fire or  
Explosion**

May be ignited by heat, sparks or flames.  
Many vapours are heavier than air. Many liquids are lighter than water.  
Vapours may form explosive mixtures with air.  
Vapours may travel to a source of ignition and flash back.  
Containing vessels may explode when heated.

**Health**

Some vapours are irritating or poisonous.  
Fire may produce irritating, poisonous and/or corrosive gases.  
Runoff may pollute waterways.

**Emergency Action**

**General:** Isolate hazard area. Keep upwind.  
Keep unnecessary people away. Keep out of low areas.

**Protective Clothing:** Wear SCBA and full protective clothing.

**Evacuation:** If rail or road tanker is involved in a spill or fire, consider initial evacuation for 800 m in all directions.

**Fire**

**Small Fire:** Use dry chemical, CO<sub>2</sub>, water spray or foam.  
**Large Fire:** Use water spray, fog or foam.  
Do not use water jet.  
**DO NOT GET WATER INSIDE CONTAINING VESSELS.**  
Move containing vessels from fire area if without risk.  
Cool containing vessels with flooding quantities of water until well after fire is out.

**Fire Involving Tanks:**  
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.  
Withdraw immediately in case of rising sound from venting safety devices or discolouration of tank.  
**ALWAYS** stay away from tank ends.

**Spill or Leak**

**ELIMINATE** all ignition sources.  
Do not touch spilled material.  
Stop leak if without risk.  
**DO NOT GET WATER INSIDE CONTAINING VESSELS.**  
Use water spray curtain to divert vapour cloud drift.  
Dike to prevent entry into waterways, sewers, basements or confined areas.  
Absorb with earth, sand or other non-combustible material.  
Call for assistance on disposal.

**First Aid**

Remove to fresh air. Apply artificial respiration if victim is not breathing.  
Administer oxygen if breathing is difficult.  
Remove contaminated clothing and shoes.  
In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes.  
Keep victim warm and quiet.  
Obtain immediate medical care.  
Ensure that attending medical staff are aware of identity of product(s) involved.



**GUIDE  
05****GASES: — Compressed, Liquefied or Deeply Refrigerated  
(Cryogenic)****Potential Hazards****Fire or  
Explosion**

Some may burn but do not ignite readily.  
Vapours from liquefied gas are initially heavier than air.  
Containing vessels may explode when heated. Ruptured cylinders may rocket.

**Health**

High concentrations of gas may cause asphyxiation without warning.  
Some are irritating. Fire may produce irritating, poisonous and/or corrosive gases.  
Contact with liquefied gas may cause severe frostbite.

**Emergency Action**

**General:** Isolate hazard area. Keep upwind.  
Keep unnecessary people away. Keep out of low areas.

**Protective Clothing:** Wear SCBA when handling gas.  
Wear SCBA and SPECIAL protective clothing when handling cryogenic gas.

**Evacuation:** If rail or road tanker is involved in a spill or fire, consider initial evacuation for 800 m in all directions.

**Fire**

Use extinguishing agent suitable for type of surrounding fire.  
Move containing vessels from fire area if without risk.  
Cool containing vessels with flooding quantities of water until well after fire is out.  
Handle damaged cylinders with extreme care.

**Fire Involving Tanks:**

Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.  
Do not direct water at source of leak or venting safety devices as icing may occur.  
Withdraw immediately in case of rising sound from venting safety devices or discolouration of tank.  
ALWAYS stay away from tank ends.

**Spill or Leak**

ELIMINATE all ignition sources.  
Do not touch spilled material.  
Stop leak if without risk.  
Use water spray curtain to divert vapour cloud drift.  
Do not direct water at spill or source of leak.  
If possible, turn leaking containing vessel so that gas escapes rather than liquid.  
Dike to prevent entry into sewers, basements or confined areas.  
Allow to evaporate.

**First Aid**

Remove to fresh air. Apply artificial respiration if victim is not breathing.  
Administer oxygen if breathing is difficult.  
Remove contaminated clothing and shoes.  
In case of contact with liquefied gas, thaw frosted parts with lukewarm water.  
Keep victim warm and quiet.  
Obtain immediate medical care.  
Ensure that attending medical staff are aware of identity of product(s) involved.

**Potential Hazards**

**Fire or  
Explosion**

If subjected to heat, shock or friction:  
Explosives of division 1.1 or 1.5 will burn and may detonate EN MASSE at any time  
Explosives of division 1.2 may burn or detonate with PROJECTION of fragments; ar  
Explosives of division 1.3 may burn VIOLENTLY.

**Health**

Fire may produce irritating, poisonous and/or corrosive gases.

**Emergency Action**

**General:** Isolate hazard area.

Keep upwind and use terrain and buildings for shielding.  
Keep unnecessary people away. Keep away from windows.

**Evacuation:** If fire or heat threatens cargo area, consider initially the following minimum evacuation distances in all directions.

Quantity	Division 1.1, 1.2 or 1.5	Division 1.3
1 000 kg	150 m	70 m
5 000 kg	400 m	150 m
20 000 kg	700 m	200 m
50 000 kg	900 m	300 m
100 000 kg	1 100 m	400 m

**Fire**

**Cargo:**

DO NOT FIGHT FIRE involving explosives if cargo is subjected to heat.  
EVACUATE surrounding area.  
If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.  
DO NOT MOVE CARGO that was exposed to heat except under supervision of a specialist.

**Vehicle and Equipment:**

Use dry chemical, sand or flooding quantities of water.  
If possible, remove tractor from cargo trailer.  
Pay special attention to tire fire as re-ignition may occur.

**Spill or Leak**

ELIMINATE ALL IGNITION SOURCES.  
DO NOT TOUCH DAMAGED CONTAINING VESSELS, PACKAGES OR SPILLED MATERIAL.  
DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 m OF ELECTRIC DETONATORS.  
DO NOT CLEAN-UP OR DISPOSE EXCEPT UNDER SUPERVISION OF A SPECIALIST

**First Aid**

Obtain immediate medical care.  
Ensure that attending medical staff are aware of identity of product(s) involved.

**\* Compatibility Groups**

- A,B Substances which are expected to explode or detonate en masse very soon after fire reaches them.
- C,W Substances which are readily ignited and burn violently without necessarily exploding.

(cont'd on opposite pag