# Contents

Table of Contents

- Purpose of This Plan ................................................................. 1-1
- Program Summary ...................................................................... 1-5

## 2. Emergency Assessment

- Levels of Emergency ................................................................. 2-1
- Notification .............................................................................. 2-9

## 3. Emergency Response Organization

- Emergency Response Team ....................................................... 3-1
- Calgary Emergency Management Team ..................................... 3-3
- On-Site Emergency Response Team ........................................... 3-25

## 4. Emergency Contacts

- MGM Energy Emergency Contacts ........................................... 4-1
- External Response Resource Contacts ...................................... 4-5
- Regulatory Contacts ................................................................. 4-9
- Media Relations ....................................................................... 4-11

## 5. Emergency Response Procedures

- Introduction ............................................................................. 5-1
- Fatality or Serious Injury ............................................................ 5-3
- Loss of Well Control ................................................................. 5-5
- Fire or Explosion ..................................................................... 5-7
- Shallow Gas Encounter During Drilling ..................................... 5-9
- Shallow Gas Encounter During Seismic ..................................... 5-11
- Ice Breakthrough .................................................................... 5-15
- Missing or Overdue Persons ....................................................... 5-17
- Wildlife Encounters ................................................................. 5-19
- Vehicle Accidents ................................................................... 5-21
- Aircraft Emergency Landing .................................................... 5-23
- Marine Vessel Incidents ............................................................ 5-25
- Work-Site Security Breaches or Crime ...................................... 5-27
- Severe Weather ....................................................................... 5-29
6. **Spill Prevention and Response**  
   1. Spill Prevention Principles  
   2. Spill Response and Notification  
   3. General Response to Winter Spills  
   4. Equipment Breaking Through Ice  
   5. Spills Under Ice  
   6. Diesel Leak from an Iced-In Barge  
   7. Spills On Ice  
   8. Leak During Fuel Transfer  
   9. Leak During Fuel Transfer From Barge  
  10. Summer Spills in Water  
  11. Summer Spills on Land  

7. **Emergency Response Follow-Up**  
   1. Stand Down – Demobilization  
   2. Post-Emergency Debriefing  
   3. Incident Investigations  

8. **Forms**  
   1. Introduction  

9. **ERP Administration and Implementation**  
   1. ERP Distribution  
   2. ERP Administration  
   3. Maintaining This Plan Bulletin  
   4. Emergency Response Training  

**Appendices**  
1. Mackenzie Delta Spill Response Corporation Equipment Inventory Tables
CONTENTS

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

LIST OF ILLUSTRATIONS

LIST OF FIGURES

Figure 1-1 MGM Energy’s Health and Safety Policy ................................................................. 1-3
Figure 1-2 MGM Energy’s Environmental Stewardship Policy .................................................. 1-4
Figure 1-3 Project Area Overview ............................................................................................ 1-7
Figure 1-4 Proposed Barge Access Routes ............................................................................... 1-8
Figure 1-5 Typical Drill Site Schematic .................................................................................... 1-10
Figure 1-6 Ogruknang 2-D Seismic Program Area ................................................................. 1-13
Figure 1-7 Ogruknang 2-D Seismic Land Ownership ............................................................... 1-14
Figure 1-8 Ogruknang 2-D Seismic Program Components ..................................................... 1-15
Figure 2-1 Emergency Decision Flowchart ............................................................................ 2-2
Figure 2-2 Incident Notification Flowchart ............................................................................ 2-10
Figure 3-1 Emergency Response Team ................................................................................... 3-2
Figure 6-1 Spill Response and Notification Protocol ............................................................... 6-6

LIST OF TABLES

Table 1-1 Summer Field Assessment and Advance Barge Project Activities ......................... 1-9
Table 2-1 Levels of Emergency ............................................................................................... 2-3
Table 4-1 MGM Energy’s Duty Officers ................................................................................. 4-1
Table 4-2 MGM Energy’s Emergency Response Team Contacts .................................... 4-2
Table 4-3 Public Emergency Services Contact List ............................................................. 4-5
Table 4-4 Response Resources and Contractor Contact List ........................................... 4-6
Table 4-5 Heavy Equipment Contractor Contact Lists .................................................... 4-6
Table 4-6 Regulatory Agency Emergency Contact List ..................................................... 4-9
Table 6-1 Schedule 1: Immediately Reportable Spill Quantities ........................................... 6-8
Table 6-2 Typical Drilling Product Usage ............................................................................. 6-9
Table 9-1 Emergency Response Plan – MGM Energy Distribution List ............................ 9-1
Table 9-2 Emergency Response Plan – External Distribution List ..................................... 9-2
INTRODUCTION

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

PURPOSE OF THIS PLAN

PURPOSE

This Emergency Response Plan (ERP) documents the procedures and processes for the initial and ongoing response to an emergency that might occur during drilling, seismic work, construction, and logistics activities associated with MGM Energy Corp.’s (MGM Energy) work in the Mackenzie Delta area.

OBJECTIVES

The objective of this plan is to prepare MGM Energy’s employees, consultants, and contractors, to respond promptly to emergencies that might arise during the course of their field work, particularly during the company’s drilling and seismic programs.

The objectives of the specific emergency response plans that have been developed for MGM Energy’s activities in the Mackenzie Delta are to:

• ensure the safety of personnel directly involved with the operation and the response

• assist personnel in assessing the level of threat posed by potential or actual emergencies, and to take prompt action to protect themselves, others, and the environment

• communicate with MGM Energy’s management, contractors, local communities, regulators, government agencies and the other interested parties in a timely manner

SCOPE OF THIS PLAN

The plan:

• outlines the planned work programs and activities expected to be undertaken by MGM Energy in the Mackenzie Delta Region

• identifies the types of emergencies that might arise in the course of the work
SCOPE OF THIS PLAN (cont’d)

- describes how emergencies are assessed and categorized according to their expected severity
- outlines the emergency response organization and the roles of key team members
- provides step-by-step procedures for responding to emergencies
- outlines the support services provided to those involved in an emergency
- identifies the requirements for notifying, reporting, and following up emergencies with corporate and external parties

For a summary of the programs supported by this plan, see Section 1.2, Program Summary.

MGM POLICIES

Safety and environmental stewardship are integral components of MGM Energy’s values and business strategies. Figure 1-1 shows MGM Energy’s Health and Safety Policy and Figure 1-2 shows their Environmental Stewardship Policy.
HEALTH & SAFETY POLICY

Safety is an integral part of the business of MGM Energy Corp. Prevention of all incidents that may cause death, bodily harm, illness, or property loss is of the highest importance to MGM Energy.

To fulfill this principle, the leadership of MGM Energy believes that:

- No job is so urgent that it may be undertaken without identifying and controlling hazards and taking the precautions reasonable and practical under the circumstances, to manage operational risk and prevent injury or occupational illness.

- All work activities undertaken at the direction of or on behalf of MGM Energy will comply with all applicable Federal, Territorial, local laws and regulations.

- All workers, contractors, consultants, and suppliers engaged in activities on behalf of MGM Energy will do everything reasonable and practical to protect the health and safety of all individuals present at the work-site.

- To ensure a safe, productive and respectful work environment at all work-sites and for those doing work for MGM Energy off-site, the use, sale, transfer or possession of alcohol, illegal drugs or other substances, including non-prescription and prescription medications for uses other than the intended use, is strictly prohibited.

- To ensure a respectful and productive work place environment, harassment of any form will not be tolerated.

- MGM Energy’s health, safety, and environmental management system provides a basis for the protection of all workers, visitors and members of the public at MGM Energy’s work-sites. MGM Energy’s HSE management system is aligned with the Petroleum Industry Guiding Principles for Worker Safety and flows through to MGM Energy's approved safe work procedures and codes of practice.

Figure 1-1: MGM Energy’s Health and Safety Policy
**ENVIRONMENTAL STEWARDSHIP POLICY**

Environmental stewardship is a key component of MGM Energy Corp’s. (“MGM”) values and business strategy. Environmental Stewardship means being responsible for the exploration and development of natural resources to ensure they are sustainably managed for current and future generations. MGM will strive to manage and minimize the impact of its operations on the environment and will:

- Make environmental stewardship a significant component of the corporate decision making process.

- Provide leadership and resources to allow employees and contractors to meet MGM’s commitment to environmental stewardship.

- Develop and implement HSE Management Systems with supporting programs and practices that are built on the concept of sustainable development.

- Work cooperatively and in consultation with all stakeholders to develop plans and operations that reflect our commitment to environmental stewardship.

- Apply economically viable, best proven technology and management practices to advance environmental stewardship in our work.

- Design, construct, operate, decommission and reclaim projects and facilities in compliance with applicable legislation and in a manner consistent with our commitment to environmental stewardship.

- Respond promptly and effectively to emergencies to minimize adverse impacts.

- Measure, audit and report annually to MGM senior management on the company’s environmental performance.

MGM believes that our interests, and those of the communities in which we operate, will best be served by effective stewardship of our shared environment.

______________________     ____________________
Henry W. Sykes           Gary L. Bunio
President               Vice-President, Chief Operating Officer

July 18, 2007

Figure 1-2: MGM Energy’s Environmental Stewardship Policy
INTRODUCTION

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

PROGRAM SUMMARY

PROPOSED PROGRAMS

Scope of Programs

Currently, four proposed MGM Energy programs in the Mackenzie Delta Region are supported by this ERP, as follows:

- a Field Assessment and Advance Barge Project, to be conducted in summer 2007, 2008, and 2009
- a 3-D Seismic Program at North Ellice and Olivier to be conducted in winter 2007–2008, 2008–2009 and 2009–2010

Figure 1-3 provides an overview of the locations of these programs.

Program Schedule

Regulatory agencies and communities will be informed of the extent of the work, the schedule and the logistics plans before any planned activity in any given year begins.

FIELD ASSESSMENT AND ADVANCE BARGE PROGRAM

Scope of Program

Field assessments and advance barge programs will be conducted in summer 2007, 2008 and 2009.

Each field program will involve five major activities:

- reconnaissance of barge landing sites, drilling target areas, access routes, and a follow-up assessment of the 2006–2007 winter drilling program areas, including well-site locations, barge staging site and access routes (see Figure 1-4)
Scope of Program (cont'd)

- a baseline biophysical and archaeological assessment for the selected well sites, overland access routes, and three barge landing sites
- a sump monitoring and revegetation assessment
- a bathymetric survey of selected barge landing sites and access routes
- staging of seismic and drilling equipment at selected advance barge staging or landing sites

Table 1-1 summarizes the location, timing and other requirements for these activities.

DRILLING, COMPLETIONS AND TESTING AT ELLICE, LANGLEY AND OLIVIER

Program Location

The project will occur on Crown land in three areas, i.e., Ellice, Langley and Olivier islands, on the outer western Mackenzie Delta. The final location of most project elements will be determined following summer assessment studies, which have been submitted for screening and approval separately, scheduled to occur in the summers of 2007, 2008 and 2009. Final well sites and staging sites planned for use in each of the three drilling seasons will be provided to regulators before project activities start.

Scope of Program


The project involves drilling up to nine exploratory wells, and using up to three existing on-land staging sites, four barge landing sites and several access routes on channels throughout the outer Mackenzie Delta. Equipment will either be staged on barges, available at staging sites or transported in by truck. Following freeze-up, ice road and well site construction will start in early December, and be demobilized in April.

Although nine wells will be drilled during the three-year program, the number of wells that will be drilled each year has not been confirmed because of the availability of drilling equipment, and other logistics and economic considerations. MGM Energy proposes to drill up to three wells in 2007–2008, up to six wells in 2008–2009 and up to six wells in 2009–2010, and intends to complete nine wells by the end of the 2009–2010 season. No sumps are planned as part of the project. All drilling waste will be transported by truck or barge out of the Mackenzie Delta.

Figure 1-5 shows a typical drill site schematic.
Figure 1-3: Project Area Overview
Figure 1-4: Proposed Barge Access Routes
## INTRODUCTION PROGRAM SUMMARY

### Table 1-1: Summer Field Assessment and Advance Barge Project Activities

<table>
<thead>
<tr>
<th>Location</th>
<th>Reconnaissance ¹</th>
<th>Biophysical and Archaeological Assessments</th>
<th>Sump Monitoring and Revegetation Assessment</th>
<th>Bathymetric Survey</th>
<th>Advance Barge Landing or Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Potential drilling target areas, access routes and barge landing sites.</td>
<td>Sump site located on Richards Island from 2006-2007 winter drilling.</td>
<td>Selected barge landing sites and access routes.</td>
<td>Barges mobilized to chosen barge landing or staging sites. Support flights along barge channels and tie-up areas to monitor channel conditions and for periodic inspections.</td>
</tr>
<tr>
<td>Personnel</td>
<td></td>
<td>• ecologist • archaeologist • MGM representative • wildlife monitor • pilot</td>
<td>• MGM representative • 1 to 2 ecologists • wildlife monitor • pilot • consultant (EM and thermistor measure)</td>
<td>• MGM representative • 1 surveyor • 3 boat crew members • wildlife monitor</td>
<td>• 1 to 3 MGM representatives • wildlife monitor • pilot • 2 to 6 tugboat crew • 2 to 4 bollards crew</td>
</tr>
<tr>
<td>Mobilization</td>
<td>Daily helicopter flights from Inuvik.</td>
<td>Daily helicopter flights from Inuvik.</td>
<td>Daily helicopter flights from Inuvik.</td>
<td>Survey boat will originate from Inuvik and will follow proposed access routes to barge landing sites.</td>
<td>Barges will originate from Inuvik, Tuktoyaktuk or a southern location, supported daily by helicopter flights from Inuvik.</td>
</tr>
<tr>
<td>Equipment</td>
<td>Helicopter, GPS, cameras, maps and depth gauge.</td>
<td>Helicopter, GPS, cameras, maps, and archaeological and vegetation field kits, including hand tools, such as a shovel and rake.</td>
<td>Helicopter, GPS, cameras, maps, hand-auger, plot frame, seed mix, hand tools, as required, EM equipment and data logger.</td>
<td>Small survey boat, GPS, single beam depth sounder and helicopter.</td>
<td>Helicopter, GPS, cameras, maps, tugboats, barges, drill for bollard installation and bollards, drilling equipment, including drill rig, remote camps, seismic equipment, including explosive, and fuel.</td>
</tr>
<tr>
<td>Time Frame ²</td>
<td>mid-July</td>
<td>July and August</td>
<td>July and August</td>
<td>August and September</td>
<td>September 15 to October 15</td>
</tr>
<tr>
<td>Duration ²</td>
<td>2 to 3 days</td>
<td>6 to 10 days</td>
<td>1 to 2 days</td>
<td>3 to 6 days</td>
<td>15 days, plus biweekly inspections</td>
</tr>
<tr>
<td>Special Conditions</td>
<td>Access to KIBS required for reconnaissance survey of 2006–2007 Kumak South well site.</td>
<td>Harvesters and congregations of wildlife and birds will be avoided.</td>
<td></td>
<td>Surveys will be limited to barge landing sites and Mackenzie River channels proposed for barge access routes.</td>
<td>Access to Kendall Island Bird Sanctuary (KIBS) required if Camp Farewell is used.</td>
</tr>
</tbody>
</table>

Note:
1. Reconnaissance of barge sites, well sites and access routes for the project and the 2006–2007 winter sites.
2. Estimated timing and duration; subject to equipment availability and weather conditions. Each activity might be conducted in 2007, 2008 and 2009.
Figure 1-5: Typical Drill Site Schematic
2-D SEISMIC PROGRAM AT OGRUKRANG

Program Location

The proposed Ogrukrang 2-D winter seismic program will be located about 70 km north of Inuvik, in the Northwest Territories. The winter 2-D seismic program and associated summer reconnaissance will be conducted within Inuvik Blocks 1 and 2 and adjacent Crown land in the Mackenzie Delta, about 50 km northwest of Inuvik (see Figure 1-6). The land ownership is shown in Figure 1-7.

Scope of Program

The proposed program will involve:

- reconnaissance work between late June and August in the summers of 2007, 2008 and 2009
- 2-D seismic work during the winters of 2007–2008, 2008–2009 and 2009–2010, between December and mid April of the following year

The program comprises five 2-D seismic lines with a total length of about 162 km. The program components are shown in Figure 1-8. The program area will be re-inspected and cleaned up in the summer following completion of the 2–D seismic activity.

An access road about 154 km long, branching off the Inuvik to Tuktoyaktuk ice road, will be required.

3-D SEISMIC PROGRAMS AT NORTH ELLICE AND OLIVIER

Scope of Program

The proposed North Ellice and Olivier 3-D seismic program consists of two 3-D seismic programs, each of which includes using the area for:

- seismic lines
- camps
- staging sites
- associated ice roads on channels of the Mackenzie Delta

The seismic data collected from these programs will be used to examine subsurface formations to delineate potential exploratory drilling targets for petroleum and natural gas.

The seismic programs will be conducted between November and mid-April of the following year over one or more of the 2007–2008, 20082009 and 2009–2010 winters.
TEMPORARY INFRASTRUCTURE

The project will be conducted on Crown land and over portions of the Inuvik blocks 1 and 2, and will be accessed from one of the several potential advanced barge staging areas or from Bar C, off the Inuvik to Tuktoyaktuk ice road.

Equipment and fuel might be brought to the sites in advance by barge or by road via the Inuvik to Tuktoyaktuk ice road once it is opened, and when offsetting winter roads over frozen channels of the Mackenzie Delta are built.

Up to two temporary work camps will be required to support the seismic programs. MGM Energy will attempt to coordinate the work to minimize the number of locations actually used. Site selection will be made based on professional judgment, permit conditions and in consultation with INAC. The selected site will also depend on whether the camps are staged at an advanced barging site and are brought in from Inuvik or elsewhere.
Figure 1-6: Ogruknang 2-D Seismic Program Area
Figure 1-7: Ogruknang 2-D Seismic Land Ownership
Figure 1-8: Ogruknang 2-D Seismic Program Components
EMERGENCY ASSESSMENT

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

LEVELS OF EMERGENCY

SCOPE

An emergency is a sudden unplanned physical situation or event with actual, or the potential for, human injury, damage to the environment, equipment or property, or a combination of these. An emergency requires immediate action to control and to mitigate the negative consequences of the event, to the extent possible.

CATEGORIES OF EMERGENCIES

Emergencies are categorized using Table 2-1. Each level defines the escalating severity and requirements of the response, including indicating the:

- severity of the situation and the potential hazard to workers, responders and others
- ability of the operator to respond and control the situation with on-site resources
- requirement for off-site supplemental response resources, both internal and external
- requirement for internal and external notifications and reporting
- requirement for public communications

EMERGENCY DECISION PROCESS

Figure 2-1 summarizes the major decisions made for each level of emergency, and the major steps taken to control the emergency. For further information on the response taken for specific emergencies, see Section 5, Emergency Response Procedures and Section 6, Spill Prevention and Response.
Figure 2-1: Emergency Decision Flowchart
## Table 2-1: Levels of Emergency

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Notification and Reporting</th>
</tr>
</thead>
</table>
| **Alert** | An incident where immediate control of the hazard is achieved by applying normal operating procedures, resulting in a progressive resolution of the situation. | Alerts include:  
- any controlled situation, outside of normal operating conditions, which has the potential to affect well, pipeline, or facility operations, and has the potential to escalate in severity  
- minor injuries to personnel requiring only first aid treatments  
- spills and releases <2 m³ confined to the site or lease  
- public concern, inquiry, complaint or observation of an incident, such as noise, dust, and odour  
- preliminary weather reports that might threaten operations | Notify:  
- on-site supervisor  
- Complete a Near Miss or incident report form (included in HSE Manual).  
- Include a description of the alert event on the daily report  
- No activation of emergency plans or response team. |
| **Level 1** | An incident where control of the hazard has been obtained, using on-site resources, but deteriorating conditions might result in imminent loss of control. | Level 1 emergencies include:  
- controlled hazard – any controlled situation, outside of normal operating conditions, where the ability to maintain control using on-site resources is in question, or off-site resources are required for control, such as for fire or explosion where imminent control of the fire is likely  
- spill or release:  
  - >2 m³ confined to the site or platform, with the potential to extend off site or off the lease  
  - non-government reportable spill. Control is immediate. Environmental impact is negligible.  
- well control – wellbore influx (kick) detected, but kept under control using existing equipment  
- shallow gas encounter – gas-cut mud controlled by drilling procedures  
- fire or explosion:  
  - minor fire involving non-critical equipment, such as a vehicle or non-camp building  
  - fire extinguished immediately, with no prolonged interruption of the operation | Notify:  
- on-site supervisor (immediately by phone or e-mail)  
- duty officer (immediately by phone or e-mail)  
- incident commander (same business day by phone or e-mail)  
- emergency manager (same business day by phone or e-mail)  
- Discretionary notification and activation by incident commander to emergency manager based on type and magnitude of incident |  
- Initiate the Emergency Response Plan  
- Complete an Initial Emergency Incident Fact Sheet and send to head office within 24 hours. |
### Table 2-1: Levels of Emergency (cont’d)

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Notification and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td>(cont’d)</td>
<td>• negligible threat to personnel, with no injuries&lt;br&gt;• health or injury – injuries to personnel requiring off-site medical attention or on-site medical treatment&lt;br&gt;• aircraft in-flight emergency – onboard alarms, resolved by the air crew&lt;br&gt;• missing or overdue person or vehicle – vehicle driver not reporting within 60 minutes of estimated arrival time at a control point or destination. Contact made by radio. Location known. Rescue possible, if required. Weather conditions good.&lt;br&gt;• vehicle incident – vehicle damage less than $10,000. No public impact. No injuries.&lt;br&gt;• transportation of dangerous goods – ticket issued or non-compliance occurs relative to documentation or personnel certification, with no fine&lt;br&gt;• marine vessel – on-board emergency brought under control immediately&lt;br&gt;• wildlife encounters – predatory animal not showing aggressive behaviour. Situation immediately controlled by scaring the animal away.&lt;br&gt;• work-site criminal behaviour:&lt;br&gt;  • physical threat, mitigated by on-site personnel&lt;br&gt;  • contraband discovered on-site, the owner of which is uncertain&lt;br&gt;  • security or public complaint:&lt;br&gt;    • verbal or written threat received via phone, mail or e-mail&lt;br&gt;    • minor vandalism occurs, but not safety related&lt;br&gt;  • severe weather – some interruptions to ongoing activities, but for less than 12 hours. Minor threat to personnel.</td>
<td>Notify:&lt;br&gt;• on-site supervisor (immediately by phone, anytime, weekends and holidays)&lt;br&gt;• duty officer (immediately by phone, anytime, weekends and holidays)</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>(see note 2)</td>
<td>An incident where control of the hazard has been lost, but imminent or intermittent control of the hazard is possible.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 2 emergencies include:&lt;br&gt;• uncontrolled hazard – an uncontrolled hazard where the ability to regain control using available resources is imminent or intermittent control is being achieved using available resources, such as pipeline integrity failure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notify:&lt;br&gt;• on-site supervisor (immediately by phone, anytime, weekends and holidays)&lt;br&gt;• duty officer (immediately by phone, anytime, weekends and holidays)</td>
<td></td>
</tr>
</tbody>
</table>
Table 2-1: Levels of Emergency (cont’d)

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Notification and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 2</strong>&lt;br&gt;(see note 2)&lt;br&gt;(cont’d)</td>
<td>Meets any of the following criteria:&lt;br&gt;• although control of the hazard has been lost, applying available resources would result in intermittent or imminent control&lt;br&gt;• injuries to on-site personnel are serious – offsite evacuation or offsite treatment required&lt;br&gt;• the public’s perception is that risk to human health or the environment is significant&lt;br&gt;• environmental effects extend off site with minor or short-term detrimental impacts&lt;br&gt;• some control and relief systems are not operational</td>
<td>• spill or release – government reportable spill occurs. Control of source is imminent. Environmental impact is minor. Involves a watercourse.&lt;br&gt;• well control:&lt;br&gt;  • surface equipment failing or in danger of failing&lt;br&gt;  • influx resulting in lost circulation&lt;br&gt;  • the maximum allowable casing pressure being reached, or expected to be reached imminently&lt;br&gt;• shallow gas encounter – shallow gas reaching the surface and being controlled by flaring (blowout preventers not installed)&lt;br&gt;• fire or explosion:&lt;br&gt;  • fire involving non-critical camp equipment, vehicles or facilities&lt;br&gt;  • fire being extinguished, or likely to be extinguished, in less than one hour. Some operational impacts occur.&lt;br&gt;  • moderate threat to life, or a significant potential for injuries&lt;br&gt;• health or injury:&lt;br&gt;  • injuries to personnel requiring medivac for off-site medical treatment&lt;br&gt;  • injuries to personnel that will result in a lost-time injury beyond the day of the incident or will have a short-term health impact&lt;br&gt;• aircraft in-flight emergency – emergency landing at an airport, no injuries requiring more than first aid&lt;br&gt;• missing or overdue person or vehicle – vehicle driver not reporting within 60 minutes of estimated arrival time at a control point or destination. No contact made. Location estimated. Search required and possible. Weather conditions moderate.&lt;br&gt;• vehicle incident – vehicle damage between $10,000 and $50,000. No public impact. Results in medical treatment, restricted work or lost-time injuries to workers.&lt;br&gt;• transportation of dangerous goods – minor spill or release occurs with localized and short-term public or environmental impacts. Ticket is issued, or non-compliance occurs, resulting in a fine.</td>
<td>• incident commander (immediately) <em>&lt;br&gt;• emergency manager (same business day by phone or e-mail)&lt;br&gt;Initiate the Emergency Response Plan and activate the emergency response team&lt;br&gt;Complete an Initial Emergency Incident Fact Sheet and send to head office within two hours and ERP forms as required – Immediate and ongoing during emergency event. External reporting to stakeholders and media may occur. Incident investigation required&lt;br&gt;</em> discretionary notification and activation by incident commander to emergency manager based on type and magnitude of incident</td>
</tr>
</tbody>
</table>
### Table 2-1: Levels of Emergency (cont’d)

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Notification and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 2</strong>&lt;br&gt;(see note 2)&lt;br&gt;(cont’d)</td>
<td>marine vessel – vessel master declaring the vessel is in distress. Control measures taken and expected to mitigate the situation. &lt;br&gt;wildlife encounters – predatory animal showing aggressive behaviour, or events are repeated. Wildlife monitor or equipment used to scare the animal away. &lt;br&gt;work-site criminal behaviour: &lt;br&gt;- physical altercation between two or more individuals, with injuries sustained. Combatants separated and controlled – authorities have responded. &lt;br&gt;- sale of contraband reported &lt;br&gt;security or public complaint: &lt;br&gt;- multiple or ongoing verbal and written complaints &lt;br&gt;- vandalism, with the potential for a safety or environmental incident &lt;br&gt;severe weather – interruptions to ongoing activities for more than 12 hours, but less than 48 hours. Some threat to personnel.</td>
<td><strong>Examples</strong>&lt;br&gt;- • Level 2 (see note 2) (cont’d)</td>
<td><strong>Notification and Reporting</strong>&lt;br&gt;- Notify: &lt;br&gt;- on-site supervisor (immediately by phone, anytime, weekends and holidays) &lt;br&gt;- duty officer (immediately by phone, anytime, weekends and holidays) &lt;br&gt;- incident commander (immediately by phone, anytime) * &lt;br&gt;- emergency manager (immediately by phone, anytime) &lt;br&gt;- public affairs and media spokesperson &lt;br&gt;- senior management and board of directors</td>
</tr>
<tr>
<td><strong>Level 3</strong>&lt;br&gt;(see note 2)</td>
<td>An incident where control of the hazard has been lost, imminent control is not possible and public safety is, or has the potential to be, threatened. Meets any of the following criteria: &lt;br&gt;- control of the hazard has been lost and regaining control is not imminently possible &lt;br&gt;- injuries to on-site personnel are major or catastrophic &lt;br&gt;- public safety is, or has the imminent potential to be, jeopardized &lt;br&gt;- environmental impacts are significant, extending off site with the potential for long-term environmental degradation &lt;br&gt;- key control and relief functions have failed and are not operating correctly</td>
<td><strong>Level 3 emergencies include:</strong> &lt;br&gt;- uncontrolled hazard – any situation where control of a hazard has been lost and regaining control is not imminently possible, such as loss of well control or failure of essential well control equipment &lt;br&gt;- spill or release – government reportable spill occurs. Control timing is uncertain. Environmental impact is significant. Outside assistance is required. &lt;br&gt;- well control: &lt;br&gt;- loss of control occurring or imminent &lt;br&gt;- off-site control resources required &lt;br&gt;- shallow gas encounter – washout, failure of containment equipment or breach outside the conductor barrel &lt;br&gt;- fire or explosion: &lt;br&gt;- fire involving critical equipment, such as camp generators, tank farms, camp buildings and wellbore areas</td>
<td><strong>Initiate the Emergency Response Plan and activate the emergency response team</strong></td>
</tr>
</tbody>
</table>
## Table 2-1: Levels of Emergency (cont’d)

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Notification and Reporting</th>
</tr>
</thead>
</table>
| Level 3 (see note 2) (cont’d) | • fire not extinguished, and expected to take more than one hour to extinguish  
• significant immediate and long-term operational impacts  
• significant potential for injuries (medical aid or greater) or fatalities  
• health or injury – injuries to personnel resulting in permanent disability, long-term health impacts, or death  
• aircraft in-flight emergency – emergency or crash landing, not at an airport, with injuries or fatalities  
• missing or overdue person or vehicle – vehicle driver not reporting within 60 minutes of estimated arrival time at a control point or destination. No contact made. Location cannot be determined. Search not possible or yields no results. Weather conditions severe.  
• vehicle incident – vehicle damage greater than $50,000 or vehicle written off. Personal injuries or fatalities to members of the public.  
• transportation of dangerous goods – major spill or release occurs with regional and long-term public or environmental impacts. Ticket is issued or non-compliance occurs, resulting in court action.  
• marine vessel – vessel master declaring a may day emergency. Crew and personnel abandon ship.  
• wildlife encounters – animal attacking a worker or piece of equipment. Wildlife monitor or other individual kills the animal.  
• work-site criminal behaviour:  
  • major physical altercation involving a weapon. Injuries incurred. Police required to control the situation.  
• security or public complaint:  
  • blockades or significant public action  
  • major vandalism, resulting in environmental damage or safety threat  
• severe weather – interruptions to ongoing activities for more than 48 hours. Personnel are at risk, with significant exposure to injury or loss of life. | Complete an Initial Emergency Incident Fact Sheet and send to head office within two hours and ERP forms as required – Immediate and ongoing during emergency event. External reporting to stakeholders and media may occur. Incident investigation required. |
EMERGENCY ASSESSMENT

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

NOTIFICATION

RESPONSIBILITY

In all emergencies, anyone noticing the emergency is required to notify their supervisor or on-site contact immediately. The supervisor, in collaboration with MGM Energy’s on-scene commander, will:

- assess the severity of the emergency
- initiate or escalate response actions
- implement required internal and external notifications

External notification and reporting requirements are listed in the specific emergency procedures, see Section 5, Emergency Response Procedures and Section 6, Spill Prevention and Response.

INTERNAL NOTIFICATION REQUIREMENTS

The first person observing the emergency must notify the supervisor promptly. If the person or alternate being contacted is not available at the time contact is attempted, the next person up the chain of contact should be contacted.

On-site supervisors may, at their discretion, escalate the contact process for Level 2 emergencies if they believe that the situation will probably worsen. Complete the necessary incident forms and logs listed in Section 8, Forms.

Figure 2-2 summarizes the notifications for levels 1, 2 and 3 emergencies.
On-Scene Supervisor receives report of incident and assumes role of On-Scene Commander. Notifies (Functional Manager) Incident Commander via Duty Officer

Incident Commander:
• Establishes Severity using Levels of Emergency Table
• Notifies Emergency Manager of all Level 2 and 3 events

Level 1 Minor
- Muster
- Minor Oil Spill
- Minor Injury

Potential to Escalate?
No
- Provide appropriate level of response and close-out
- Record and report

Level 2 Serious
- Well Control Incident
- Serious Injury
- Precautionary Down Manning
- Serious Gas Release
- Serious Oil Spill
- Security Threat

Potential to Escalate?
No
- Provide advice and support to Site Response and inform Emergency Management Team, as required
- Record and report

Level 3 Major
- Any major event: Multiple Injuries or Fatality
- Fire or Explosion
- Rig or Vessel Damage
- Major Oil Spill
- Security Incident

Potential to Escalate?
Yes
- Emergency Manager to Mobilize Emergency Management Team and support, as required
- If there is any doubt about the severity of an incident, the Emergency Management Plan should be activated

Figure 2-2: Incident Notification Flowchart
MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE TEAM

SCOPE

MGM Energy’s emergency response team (ERT) provides emergency response services from two locations:

- an off-site Calgary emergency management team (CEMT), operating from the Emergency Management Centre in the Calgary office, provides support services to the on-site team during an emergency

- an on-site emergency response team (OERT), operating from the Emergency Operations Centre, provides on-site response services

The Emergency Operations Centre (EOC) for construction and drilling operations will initially be at the construction base camp until drilling operations begin. Afterwards, the EOC will remain at the drilling lease offices for construction, drilling and testing operations.

The EOC for seismic operations will be at the seismic base camp or Aguila’s offices in Inuvik, depending on the nature of the emergency.

Figure 3-1 shows the organization of MGM Energy’s emergency response team. For the roles of the CEMT, see Section 3.2. For the roles of the OERT members, see Section 3.3.
Figure 3-1: Emergency Response Team
EXECUTIVE LEAD – ERT 01

Role

The executive lead is the senior management representative on the ERT.

Duties

The executive lead:

- decides the extent and method of senior management notification, as required
- notifies and provides briefings to the senior management team and board of directors
- addresses company policy issues, as needed
- approves major capital financial support, as required
- provides advice and support to the emergency manager
- participates in the initial risk assessment
- provides advice and support to the emergency manager
- provides overall policy direction and final decision authority, as required

Initial Action

As initial actions, the executive lead:

- goes to the Emergency Management Centre, as requested by the emergency manager
- participates in risk assessment and identification of potential consequences
- provides the emergency manager with immediate evaluation regarding:
  - risk and potential impacts to short and long-term exposures
Initial Action (cont'd)

- required corporate involvement and ERT functions, and resources needed
- recommended course of action

Support

To provide support in an emergency, the executive lead:

- provides briefings to the senior management and the board of directors, as required
- addresses the company policy issues, as needed
- approves major capital financial support, as required
- provides advice and support to the emergency manager
- ensures interfaces with external stakeholders are being managed effectively
- arranges for an executive lead backup, if required

Post Incident

The executive lead:

- gives the emergency manager approval to stand down the ERT once the status of corporate risks has been addressed and the go-forward issues, tasks and responsibilities have been clarified
- assists demobilization and post-incident activities, as determined by the ERT, as required

EMERGENCY MANAGER – ERT 02

Role

The emergency manager possesses ultimate decision-making authority of the ERT, and:

- manages the corporate response and leads the ERT
- reviews all tactical decisions of other operating members of the ERT
- works in liaison with the executive lead
- provides advice and support to the CEMT
- assesses current and potential risks to the company
- coordinates the corporate staff and resources
Initial Action

As initial actions, the emergency manager:

- verifies the event and clarifies information
- makes contact with the executive lead
- identifies and mobilizes the support required, commensurate with the level of emergency
- verifies the event
- identifies corporate risks and potential consequences, and the company’s position regarding liabilities. Consults with additional ERT members to assist in the assessment.
- goes to the Emergency Management Centre
- ensures switchboard personnel and appropriate building reception personnel are kept apprised of the situation, i.e., where to direct subsequent calls. This task might be undertaken by the communications lead.

Support

To provide support in an emergency, the emergency manager:

- holds an initial briefing with the ERT members
- solicits immediate evaluations from each of the ERT members regarding:
  - risk and potential impacts to the company’s short and long term exposures
  - required corporate involvement and additional ERT functions and resources needed
  - recommended course of action
- maintains ongoing communications with the ERT, and ensures support is provided
- establishes goals and objectives, and delegates responsibilities for task completions
- develops a 12-hour action plan, including provisions for relieving and rotating personnel. The period might be reduced, but not extended, depending on the scale of the incident.
Support (cont’d)

- meets regularly with ERT members to clarify the incident status and continually addresses strategic issues
- determines, in conjunction with the executive lead, the representatives who are required to travel to the site or travel to government agencies
- arranges for an emergency manager backup, if required

Post Incident

The emergency manager:

- stands down the ERT, as directed by the executive lead
- directs demobilization and post-incident activities of the ERT
- ensures critical post-incident services are provided for employees, first responders, families, members of the public and next of kin

HUMAN RESOURCES LEAD – ERT 03

Role

The human resources lead is responsible for personnel issues and their well-being. For incidents involving MGM Energy personnel or contractors, the human resources lead is responsible for:

- providing assistance in dealing with the family
- ensuring the family’s material well-being
- managing critical incident stress debriefing (CISD) assessment and resources for all affected parties

Duties

This position will generally be filled by an on-call delegate from human resources, who:

- liaises with health providers, such as hospitals and doctors
- supports or provides Worker’s Compensation Board (WCB) notification, as required
- coordinates human resources (HR) support, such as notifying the next of kin and arranging CISD sessions
- administers benefit programs, if serious injury or a fatality occurs
Initial Action

As initial actions, the human resources lead:

- receives a briefing from the emergency manager
- initiates any HR programs or support services required, i.e., travel services and benefits support

Support

To provide support in an emergency, the human resources lead:

- conducts ongoing liaison with medical personnel and hospitals, as required
- provides support and guidance to those responsible for next of kin notifications
- liaises with Calgary travel services regarding arrangements for support personnel travelling to the incident
- gives approval to mobilize trained CISD counsellors
- determines the nature of HR support requirements to respond to, including:
  - serious injury or fatality of company or contract personnel
  - employee benefits and compensation
  - next of kin notification and support
  - arrangements for travel and accommodations, ground transportation, expenses and counselling for families
  - provisions for involved but uninjured personnel (responders) and contacting their families
- arranges for a human resources lead backup, if required

Post Incident

The human resources lead assists with the demobilization and post-incident activities, as determined by the ERT and as required.

LEGAL ADVISOR – ERT 04

Role

The legal advisor is responsible for protecting the company’s interests by mitigating potential legal issues or defending the company in an action. The legal
Role (cont’d)

advisor is responsible for keeping a chronological record of the ERT’s actions, and:

- coordinates legal support and provides counsel concerning the incident
- supports the communications lead in addressing legal issues inherent in external communications

Initial Action

As initial actions, the legal advisor:

- goes to the Emergency Management Centre, as directed by the emergency manager or the incident commander
- receives a briefing from the emergency manager

Support

To provide support in an emergency, the legal advisor:

- evaluates the situation and, in consultation with the emergency manager, determines the legal concerns and general counsel support requirements
- determines the facts, status, risks and potential impacts, such as:
  - incident time and location – such as the company worksite, jurisdiction, land use and environmental sensitivities
  - incident details – prime contractor, who was directing work, substance released and details on the cause
  - incident response – who is in charge, who is directing work, regulatory notification, response strategy and controversy internally or from external sources
  - incident investigation – investigation process, determination if the process is privileged, government investigation, who had control of pollutant before discharge, who owns the pollutant, determination if charges have been laid or are contemplated, and liability determination
- determines legal reporting requirements
- determines what contractual arrangements are in place, i.e., lease of land, products and sales agreements, mutual aid agreements, and transportation and charter party agreements
- determines if additional contracts are required
• protects the company from unnecessary admissions, i.e., liability, and prepares disclosures against company interest by reviewing press releases and reports to employees, using solicitor-client privilege for investigations and legal advice

• attends press and media briefings

• arranges for a legal advisor backup, if required

Post Incident

The legal advisor assists with the demobilization and post-incident activities, as determined by the ERT and as required.

FINANCE LEAD – ERT 05

Role

The finance lead is responsible for finance and other administrative issues. In the case of security-related incidents, the finance lead is responsible for liaison with banking institutions.

Duties

This position will generally be filled by a delegate from corporate finance, who coordinates and supervises the representatives of business functions, such as insurance, accounting and treasury.

Initial Action

As an initial action, the finance lead identifies, with the emergency manager, the current and potential financial and business support requirements.

Support

To provide support in an emergency, the finance lead:

• mobilizes, briefs and supervises additional business support staff, as required

• ensures the involvement of the finance and business section is adequate to support the response

• tracks the resources required and ordered

• clarifies and assigns tasks to support staff and ensures they provide:
  • an estimated time to complete the required task
  • where they need to be to complete the task
Support (cont’d)

- how often, and the method they intend to use, to notify the finance lead of progress and or obstacles
- ensures funding for incident response activities is in place and that complete accounting records are prepared and collected
- provides support and advice on insurance and accounting issues
- participates in planning meetings to ensure an understanding of overall strategy and to provide input on financial and cost analysis matters
- arranges for a finance lead backup, if required

Post Incident

The finance lead assists with the demobilization and post-incident activities, as determined by the ERT and as required.

INCIDENT COMMANDER – ERT 06

Role

The incident commander is responsible for overall management of incident activities, including building a command structure that matches the organizational needs to achieve the determined tactical priorities to mitigate escalation of the incident and assist in recovery to normal operations. The incident commander has the responsibility to perform the duties associated with the command staff positions until the incident commander appoints someone to fill the positions.

Duties

The incident commander:

- obtains an initial situation briefing from the duty officer and appoints an operations section lead for ongoing communications with the on-scene commander, if not already acting in this capacity
- assesses the incident situation to define key issues and determines the appropriate level of response
- mobilizes the CEMT and develops the appropriate organizational structure based on the incident command system to effectively manage issues and resources, assign tasks and brief personnel
- activates the Calgary Emergency Management Centre
- implements the Emergency Response Plan
• notifies the Calgary emergency manager of an emergency

• serves as primary contact to the emergency manager and updates the status of the emergency on a regular basis throughout the incident

• determines strategic goals and tactical objectives for managing the incident

• develops and approves the Incident Action Plan with input from other personnel within the CEMT

• ensures that updates are provided to the CEMT

• sets a predetermined schedule to meet as a team for updates from all parties

• ensures that a time and event log (see Section 8, Forms) is completed for the duration of the event

• notifies relevant government agencies

• restricts the CEMT to five to seven individuals (maximum span of control). If the CEMT becomes too large, the incident commander reassigns officers to the planning section, such as to administrative support, HSE and security officers, and to the logistics section, such as security officer.

• coordinates CEMT activity

• prepares to act as initial information officer to release information to the media

• reviews the overall emergency operations on a continuous basis to identify further issues related to the emergency, and determines any additional resource or personnel required, approving requests for additional resources or release of resources

• approves the plan for demobilization

• ensures a post-incident meeting is conducted after the emergency is over to review emergency activities and identify any corrective action or follow-up that might be required

DUTY OFFICER – ERT 07

Role

The duty officer, as the primary contact for the on-site personnel, contacts the incident commander to initiate the Emergency Response Plan.
Duties

The duty officer:

- records the details and the nature of the emergency, and completes an Initial Emergency Incident Fact Sheet, and if a spill or dangerous or hazardous release occurs, completes a Spill and Dangerous/Hazardous Goods Incident Report form (see Section 8, Forms)

- notes the phone number where the on-scene responders can be reached and arranges a specified time for the incident commander to communicate situation updates

- contacts the incident commander immediately to apprise the situation, and relays the details collected on the Initial Emergency Incident Fact Sheet, and, if required, The Spill and Dangerous/Hazardous Goods Incident Report

HSE AND SECURITY OFFICERS – ERT 08A, ERT 08B AND ERT 08C

Role

The HSE and security officers, appointed by and reporting to the incident commander, are responsible for ensuring environmental issues resulting from the incident are identified and mitigated. Also, the HSE and security officers are responsible for ensuring emergency response activities are conducted in a manner that minimizes additional environmental impacts.

Personnel filling these positions should be environmental specialists familiar with emergency operations and environmental issues and impacts related to emergencies. Also, personnel should be familiar with company environmental procedures and appropriate environmental legislation.

Duties

HSE and security officers:

- obtain a briefing from incident commander about the incident and potential environmental concerns

- establish contact with government or other agencies with environmental jurisdiction, to identify concerns or issues related to the incident, where appropriate

- conduct an environmental incident assessment to identify potential environmental issues or concerns, through a review of site environmental sensitivity information, site reconnaissance and liaison with government officials, where appropriate
• identify short and long-term environmental issues, and recommend appropriate environmental procedures to the incident commander for minimizing or mitigating environmental impacts at the site

• coordinate environmental sampling, protection and clean up efforts, as required at the site

• advise personnel and contractors on environmental concerns or constraints related to site activities

• maintain a chronological log of incident activities and issues related to the environment

• coordinate post-emergency site assessment and development of a site-specific remediation plan

Tips

Tips for the HSE and security officers include:

• identify the lead environmental regulatory agency and department with which to communicate

• secure the services of an environmental laboratory for water, soil and air monitoring and analysis

• ensure that before and after photos are taken of any land for which issues might arise

• ensure that all claims for environmental damages are routed through the appropriate channels

• document all actions taken

COMMUNICATIONS LEAD – ERT 09

Role

The communications lead provides advice on dealings with all internal or external communications, including media, investor, public and community, and employee communications. The communications lead might designate an alternate to be present at, or perform, any internal or external briefings. The communications lead will also be responsible for establishing and leading a public media inquiry room, as required.
Duties

This position will generally be filled by the VP legal and regulatory, who:

- reports to the incident commander and participates in the initial corporate risk assessment
- coordinates the strategic response actions to effectively manage media issues, general public inquiries and employee communications
- prepares to act as media spokesperson, until that position is assigned
- mobilizes and coordinates the activities of additional communications support staff, as required

Initial Action

As initial actions, the communications lead:

- identifies and provides support, as required by the emergency manager
- goes to the Emergency Operations Center, as directed by the incident commander
- participates in the corporate risk assessment and identifies potential consequences
- provides immediate evaluation regarding:
  - risk and potential impacts on MGM Energy, including short and long-term exposures
  - required corporate involvement and additional ERT resources needed
  - recommended course of action
- determines and clarifies the details of any media or public contact made to this point, and develops a communications plan for all stakeholders, including employees
- fulfills the role as initial media spokesperson and determines the role assignment, as required

Support

To provide support in an emergency, the communications lead:

- mobilizes additional communication functions, based on the incident and potential implications and as required, leading the media spokesperson, and liaises with the in-country incident commander on media and government relations matters
ensures that Calgary staff and building reception personnel know where to direct subsequent calls regarding the incident

decides whether a public media inquiry room is needed to process inbound calls. If, needed, the communications lead regularly confers with the public media inquiry room supervisor and clarifies the basic information that can be released, and where to transfer which type of calls

continues to lead the communications section and supports the spokesperson role and the government and community relations role

ensures that linkages between the Calgary-based media spokesperson and the field government and community liaison are maintained

ensures clear lines of communications between groups, such as the media, public, community, government, employee and investor relations

ensures that all releases are reviewed and approved by the legal advisor, incident commander and emergency manager

participates in the status update briefings regarding completed tasks and issues, priorities, resource and staff requirements

arranges for a communications lead backup, if required

Post Incident

The communications lead:

• prepares and sends out a closing briefing note regarding the incident

• assists with the demobilization and post-incident activities, as determined by the ERT and as required

PLANNING CHIEF – ERT 10

Role

The planning chief, appointed by, and reporting to, the incident commander, is responsible for collecting, displaying and distributing information in support of emergency operations. The planning chief is also responsible for analyzing and evaluating information related to the incident, including the status of resources and planning for future events (the Incident Action Plan). The planning chief is also responsible for managing technical specialists.

Duties

The planning chief:

• obtains a situation briefing from the incident commander
• assesses the situation

• identifies the planning requirements and need for any specialty (on site) technical support

• analyzes the situation as it progresses by recording and evaluating information

• obtains specialized information, i.e., weather reports, in support of emergency operations

• establishes information requirements and reporting schedules for all ICS organizational elements for use in preparing the Incident Action Plan

• ensures that important information related to the incident is provided to the appropriate personnel within the emergency organization

• appoints appropriate staff, as necessary

• supervises planning sections and technical specialists, as required

• consults and collaborates with the operations section lead and logistics chief

• gathers and stores information related to the incident, such as photos, video and documentation, and ensures a log of emergency activities is kept

• maintains an inventory of on-site resources, as required, at the request of the incident commander

• meets with the incident commander and other key staff to update the incident status, and sets objectives and plans for future activities

• ensures that status updates from the incident site are put on display in the Calgary EMC

• supervises the preparation of the Incident Action Plan

• identifies the need for using specialized resources

• provides periodic predictions on incident potential

• ensures that normal agency information collection and reporting requirements are met

• maintains records of resources committed to the incident

• maintains and records activities
Tips

Tips for the planning chief include:

• obtain briefings from the incident commander
• use a white board, flip chart, overhead projector or LCD projector to communicate the action plan to the CEMT
• acquire maps, alignment sheets, photographic and video information, as needed
• look at the probable course of events based on the situation at hand and suggest alternative strategies, as required
• ensure that all forms are available and filled out, as required
• develop a required environmental assessment and obtain necessary permits
• profile and plan waste disposal with assistance from the HSE and security officers
• evaluate the status of the facility or equipment involved in the incident
• maintain a time and event log
• document all actions

FINANCE AND ADMINISTRATION CHIEF – ERT 11

Role

The finance and administration chief, appointed by and reporting to the incident commander, is responsible for monitoring and tracking all costs and financial aspects of the incident, including:

• time records of personnel involved in the response
• equipment and rental supply contracts
• compensation claims and records
• cost information and cost estimates
Duties

The finance and administration chief:

- obtains a situation briefing from incident commander
- attends planning meetings to gather information
- identifies and orders supply and support needs for the finance section
- develops an operating plan for the finance function
- provides input in all planning sessions on financial and cost analysis matters
- participates in demobilization planning
- ensures that all obligation documents initiated are properly prepared and completed
- briefs personnel of all incident-related business management issues needing attention and follows up before the incident is de-classified
- maintains documentation

LOGISTICS AND PROCUREMENT CHIEF – ERT 12

Role

The logistics and procurement chief, appointed by, and reporting to, the incident commander, is responsible for acquiring personnel, equipment, facilities, supplies and services to support emergency operations, and as requested by the incident commander.

Duties

The logistics and procurement chief:

- obtains a situation briefing from the incident commander, including any operational or logistical issues
- assesses the situation
- plans the organization of the logistics section, and appoints additional personnel, as required, to adequately manage logistical concerns or issues
- works closely with the incident commander to assess resources required, ordering and maintaining supplies or services in support of emergency operations
• coordinates activities with the staging officer on site, if a staging area is in place on site
• assigns work locations and preliminary tasks to personnel in the section
• participates in preparing the Incident Action Plan
• monitors site operations and meets with the incident commander or operations section lead to anticipate logistical needs to support present and planned incident operations
• ensures, at the request of the incident commander, the following:
  • to arrange accommodations and food for CEMT members and for site work crews
  • to arrange fuelling and equipment repair, and contract additional personnel or special resources
  • to maintain on-site communications systems and arrange for additional communications support
• reviews the Incident Action Plan and estimates the section needs for the operational period
• advises on current service and support capabilities
• maintains a record of resources received and controls the resource inventory, as appropriate
• prepares service and support elements of the Incident Action Plan
• reviews and releases unit resources to conform with the demobilization plan, when the planning section releases the demobilization plan
• ensures the general welfare of personnel involved in logistical activities

Tips

Tips for the logistics and procurement chief include:
• request additional support, depending on the size of the incident
• document all actions taken
• track the status of ordered resources and the estimated time of arrival on a Resource Summary form (see Section 8, Forms)
• keep the incident commander informed of any major logistical hurdles encountered
• ensure that accurate cost control measures are in place to avoid overruns
GOVERNMENT AND COMMUNITY RELATIONS – ERT 13

Role

The government relations officer is appointed by, and reports to, the incident commander, and is responsible for notifying and communicating with government and regulatory agencies, as appropriate. This person might also act as a point of contact for assisting and cooperating agencies.

Personnel filling this position should be familiar with governmental departments and structure.

Duties

The government and community relations officer:

- obtains a status briefing from the incident commander
- identifies government and other agencies with jurisdiction related to the incident
- notifies and communicates the situation status to local government organizations
- liaises with local organizations, at an operational and technical level
- coordinates meetings between government agencies and company personnel, as required
- meets with the incident commander and other key staff to update the incident status, and sets objectives and plans for future activities

MEDIA SPOKESPERSON – ERT 14

Role

The media spokesperson provides advice, through the communications lead, on dealings with the media. The media spokesperson might designate an alternate to brief the press in some instances, to prevent the accidental release of sensitive information to which the media spokesperson is privy.

This position will generally be filled by an investor relations person or a trained member of management team, who:

- manages media issues effectively
- liaises with the field-based government and community liaison spokesperson

Initial Action

As initial actions, the media spokesperson:
obtains a status briefing from the communications lead

determines and clarifies details of any media or public contact and assists the communications lead in implementing the communications plan

Support

To provide support in an emergency, the media spokesperson:

- confers with the communications lead regarding the need for additional communications staff, based on the incident and potential implications and as required

- maintains liaison with, and supports the field-based government and community liaison spokesperson

- determines what the media concerns are and what reports have been released to date

- ensures that all media releases are reviewed and approved through proper channels. (The communications lead will ensure that media releases are approved by the legal advisor, executive lead and the emergency manager, as appropriate.)

- ensures that the public media inquiry room supervisor understands how the media spokesperson wants media calls to be processed, documented or transferred, if the communications lead has activated the public media inquiry room

- communicates regularly with the communications lead to update basic incident information that can be released for:
  - general public enquiries received, corporately or at the field level
  - media enquiries, in person or via telephone, corporately and at the field level
  - investor relations
  - employee relations

- determines, with the communications lead, if a senior company spokesperson is warranted, and if so, prepares the executive lead or other senior management staff to speak to the media or public

- arranges for a media spokesperson backup, if required
Post Incident

The media spokesperson:

- assists with the demobilization and post-incident activities, as determined by the ERT and as required
- refers to the post incident procedures, see Section 5, Response Procedures

TECHNICAL SPECIALISTS – ERT 15

Role

Technical specialists are appointed by, and report to, the planning chief, as required to provide relevant support during the response to an incident. Depending on the needs of the response, the technical specialists might also be assigned to other sections in the CEMT.

Technical specialists are generally subject matter experts and might be resourced internally, or from external agencies or organizations.

ADMINISTRATIVE SUPPORT – ERT 16

Role

The administrative support person, appointed by, and reporting to, the emergency manager, is responsible for keeping detailed logs of information in support of emergency operations.

Initial Action

As initial actions, the administrative support:

- ensures the availability of a note pad, flip charts and writing instruments
- ensures that phones are available and working in the Emergency Management Centre

Support

To provide support in an emergency, the administrative support:

- keeps a running list of high-level details on a flip chart or white board in the Emergency Management Centre
- locates critical phone numbers and places any calls required on behalf of, and at the request of, the emergency manager
- answers the phones for the ERT, if they are in critical meetings
• asks for clarification of such things as phone numbers and persons called
• ensures that all names are spelled correctly
• records only the information pertinent to the administrative support position
• ensures that all critical information from the EMT is documented for the ERT
• submits all forms and records to the emergency manager

Post Incident

The administrative support participates in the post-incident debriefing.

IT SPECIALIST – ERT 17

The information technology (IT) specialist:

• advises on technical support requirements, such as for the telecommunications networks (voice, data and fax)
• liaises with suppliers to implement network expansions, as required
• sources and supports procurement’s efforts to locate and acquire special or incremental IT equipment, such as satellite phones and proprietary radio network equipment
• liaises with federal telecommunications regulators, if required
Section 3.3

EMERGENCY RESPONSE ORGANIZATION

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

ON-SITE EMERGENCY RESPONSE TEAM

ON-SCENE COMMANDER – ERT 18

Role

The on-scene commander is usually the highest-ranking MGM Energy responder until relieved by more senior personnel on site. The individual in this position ensures that the Incident Action Plan is carried out and works with MGM Energy and contractor personnel on site to manage emergency response activities.

Duties

The on-scene commander:

- ensures that command is established on site
- protects life and property
- ensures that initial notification is made to the incident commander via the duty officer and declares an initial emergency level of 1, 2 or 3
- ensures that all on-site personnel are accounted for
- ensures that a command post is established in a safe area
- works closely with the contractor, where applicable, to monitor the contractor response and to provide support and resources to control the incident
- maintains close communication with the operations section lead, provides updates on the status of emergency operational activities, and works together with the operations section lead to define future operational objectives and activities
- conducts meetings with key on-site staff, including any other on-site MGM Energy senior personnel and key on-site contractor personnel, reviews the action plan and assesses on-site communications and safety
- determines the need for immediate and expected resources, and works with the operations section lead to request and mobilize necessary internal and external personnel and resources to undertake operational activities
Duties (cont’d)

- reviews operational activities on a continuous basis to determine that all equipment, supplies and materials are available to allow operational activities to be undertaken in a safe, efficient and effective manner, and determines the need for additional operational personnel or resources, as required

- communicates changes in operational conditions to the operations section lead

- maintains control of all on-site operations

- implements the Incident Action Plan

- maintains accountability for responder and public safety

- acts as the on-site MGM Energy liaison to outside agencies, where required

ADMINISTRATIVE SUPPORT – ERT 19

Role

The administrative support, appointed by, and reporting to, the incident commander, is responsible for keeping detailed logs of information in support of emergency operations. The administrative support will normally be assigned to support the incident commander and the operations section lead.

Duties

The administrative support:

- ensures that all critical information is documented from both the incident commander and the operations section lead

- locates critical phone numbers and places any calls required on behalf of, and at the request of, the incident commander or operations section lead

- answers the phones for the incident commander or operations section lead, if they are in critical meetings

- submits all forms and records to the incident commander

- participates in the post-incident debriefing

Tips

Tips for the administrative support include:

- ensure the availability of a note pad, flip charts and writing instruments
• ensure that phones are available and working in the ICC
• ask for clarification of such things as phone numbers and persons called
• ensure that all names are spelled correctly
• record only the information pertinent to the administrative support position
• keep a running list of high-level details on a flip chart or white board in the ICC

FIELD HSE AND SECURITY ADVISORS – ERT 20

Role

The field HSE and security advisors are responsible for supporting the on-scene commander and the OERT on all HSE issues and providing accurate analyses of environmental, health and safety issues.

These positions are filled by the on-site HSE field advisors, who:

• report to the emergency manager
• coordinate and supervise representatives of HSE

Initial Action

As initial actions, the field HSE and security advisors:

• identify, along with the on-scene commander, a course of action and develop an HSE plan for addressing the incident
• assist in displaying and tracking incident information and support the risk and priority-setting process
• implement the Spill Response Plan, if applicable to the emergency

Support

To provide support in an emergency, the field and HSE security advisors:

• mobilize additional HSE support personnel, based on the incident and potential implications, and as required
• provide information regarding safety and environmental conditions related to the incident, as requested by the on-scene commander
• participate in the status update meetings regarding:
  • current status
Support (cont’d)

- completed tasks and issues
- go forward priorities and additional staff requirements

- assist, participate and, as required, facilitate ongoing regular risk assessments
- arrange for HSE and security advisor backups, if required

Post Incident

The field and HSE security advisors assist with the demobilization and post-incident activities, as determined by the ERT and as required.

OPERATIONS SECTION LEAD – ERT 21

Role

The operations section lead appointed by, and reporting to, the on-scene commander, is responsible for direct management of all incident tactical activities and priorities, and the safety and welfare of personnel in the operations section. The operations section lead directs all resources to accomplish the goals and objectives developed by the ERT, and ensures that resources at the scene perform the tactical priorities to mitigate escalation and recovery from the incident.

The operations section lead is responsible for ensuring all operational activities are carried out consistent with company policy and government regulations, taking into account the concerns of all affected agencies or individuals.

Personnel filling this position must be familiar with company operational and safety procedures.

Duties

The operations section lead:

- obtains an initial situation briefing from the on-scene commander
- consults and collaborates with the on-scene commander to assess the situation
- works in conjunction with the on-scene commander to provide updates and information to the incident commander
- assists the on-scene commander in developing strategic goals and tactical objectives for the incident response
- consults with the incident commander about the overall Incident Action Plan
EMERGENCY RESPONSE ORGANIZATION

ON-SITE EMERGENCY RESPONSE TEAM

- develops the tactical operations portion of the Incident Action Plan
- consults and collaborates with the logistics and planning chiefs
- keeps the incident commander informed of any special conditions, activities and resource status within response operations
- assembles and disassembles tactical response teams, as necessary
- requests periodic progress reports from the on-scene commander
- recommends demobilization of resources
- maintains record of activities

Tips

Tips for the operations section lead include appointing administrative support for the operations section, if required, to document all calls and meeting notes.

EXPEDITER – ERT 22

Role

The expediter is a key position for MGM Energy’s remote operations. The expediter works with the field-based OERT and is responsible for arranging procurement and transportation services to facilitate mitigating any emergency incident.

Duties

The expediter:

- obtains an initial situation briefing from the on-scene commander or incident commander, depending on the location of the expediter
- consults and collaborates with the on-scene commander to assess the situation
- works in conjunction with the on-scene commander and the operations section lead to ensure that goods, materials, equipment and personnel are available and in the right place to support the incident response
- assists the on-scene commander to coordinate flights and logistics for response support
- works in cooperation with the logistics and procurement chief to ensure delivery of required resources, supplies and services in support of emergency operations
Duties (cont’d)

- ensures, at the request of the on-scene commander, the following:
  - to arrange accommodations and food for OERT members and for site
    work crews
  - to arrange fuelling and equipment repairs
  - to maintain on-site communications systems and arrange for additional
    communications support

GOVERNMENT AND COMMUNITY LIAISON – ERT 23

Role

The government and community liaison officer reports to the on-scene
commander and is responsible for notifying and communicating with government
and local communities and stakeholders, as appropriate, and at the direction of
the communications lead and their command staff in the Emergency
Management Centre.

Personnel filling this position should be familiar with governmental departments
and local communities.

Duties

The government and community relations officer:

- obtains an initial situation briefing from the on-scene commander, or
  communications lead, depending on the location of the government and
  community liaison person
- identifies local communities and organizations that might be affected by the
  incident
- communicates the situation status to local government organizations and
  communities, under the direction of the communications lead
- liaises with local organizations, at an operational and technical level
- coordinates meetings between local communities, government agencies and
  company personnel, as required
- meets with the on-scene commander and other key staff to update the
  incident status, and sets objectives and plans for future activities
- completes and presents a preliminary media statement, if required (see
  Section 8, Forms)
- selects community representatives to participate in local media briefings
EMERGENCY CONTACTS

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

MGM ENERGY EMERGENCY CONTACTS

EMERGENCY RESPONSE TEAM

General Contact Information

General contact information for MGM Energy Corp. is:

MGM Energy Corp.
4100, 350 – 7th Avenue S.W.
Calgary, Alberta
T2P 3N9
main phone (403) 781-7800
main fax (403) 781-7801
www.mgmenergy.com

Emergency Contact Information

Table 4-1 lists MGM Energy’s duty officers who are the first point of contact on the CEMT.

Table 4-1: MGM Energy’s Duty Officers

<table>
<thead>
<tr>
<th>Position and position number</th>
<th>Name</th>
<th>Phone Number</th>
<th>E-Mail Address*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty officer (day)</td>
<td>Dick Heenan</td>
<td>(403) 781-7819 (o) (403) 818-4408 (c)</td>
<td><a href="mailto:Dick.Heenan@mgmenergy.com">Dick.Heenan@mgmenergy.com</a></td>
</tr>
<tr>
<td>(ERT 07)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty officer (night)</td>
<td>Marshall Melnechuk</td>
<td>(403) 781-7823 (o) (780) 554-4270 (c)</td>
<td><a href="mailto:Marshall.Melnechuk@mgmenergy.com">Marshall.Melnechuk@mgmenergy.com</a></td>
</tr>
<tr>
<td>(ERT 07)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-2 lists MGM Energy’s emergency response team (ERT) contacts.
Table 4-2: MGM Energy’s Emergency Response Team Contacts

<table>
<thead>
<tr>
<th>Position and position number</th>
<th>Name</th>
<th>Phone Number</th>
<th>E-mail Address*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>office (o)</td>
<td>cell (c)</td>
</tr>
<tr>
<td>Calgary Emergency Management Team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive lead (ERT 01)</td>
<td>Henry Sykes</td>
<td>(403) 781-7808 (o)</td>
<td><a href="mailto:Henry.Sykes@mgmenergy.com">Henry.Sykes@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 860-5015 (c)</td>
<td></td>
</tr>
<tr>
<td>Emergency manager (ERT 02)</td>
<td>Gary Bunio</td>
<td>(403) 781-7806 (o)</td>
<td><a href="mailto:Gary.Bunio@mgmenergy.com">Gary.Bunio@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 703-4602 (c)</td>
<td></td>
</tr>
<tr>
<td>Alternate emergency manager (ERT 02)</td>
<td>John Hogg</td>
<td>(403) 781-7820 (o)</td>
<td><a href="mailto:John.Hogg@mgmenergy.com">John.Hogg@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 819-6096 (c)</td>
<td></td>
</tr>
<tr>
<td>Human resources lead (ERT 03)</td>
<td>Henry Sykes</td>
<td>(403) 781-7808 (o)</td>
<td><a href="mailto:Henry.Sykes@mgmenergy.com">Henry.Sykes@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 860-5015 (c)</td>
<td></td>
</tr>
<tr>
<td>Legal advisor (ERT 04)</td>
<td>Nancy Dilts</td>
<td>(403) 781-7807 (o)</td>
<td><a href="mailto:Nancy.Dilts@mgmenergy.com">Nancy.Dilts@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 519-2856 (c)</td>
<td></td>
</tr>
<tr>
<td>Finance lead (ERT 05)</td>
<td>Rick Miller</td>
<td>(403) 781-7809 (o)</td>
<td><a href="mailto:Rick.Miller@mgmenergy.com">Rick.Miller@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 519-7217 (c)</td>
<td></td>
</tr>
<tr>
<td>Incident commander (ERT 06)</td>
<td>Dick Heenan</td>
<td>(403) 781-7819 (o)</td>
<td><a href="mailto:Dick.Heenan@mgmenergy.com">Dick.Heenan@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 818-4408 (c)</td>
<td></td>
</tr>
<tr>
<td>Alternate incident commander (ERT 06)</td>
<td>Rob Carss</td>
<td>(403) 781-7813 (o)</td>
<td><a href="mailto:Robert.Carss@mgmenergy.com">Robert.Carss@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 617-2195 (c)</td>
<td></td>
</tr>
<tr>
<td>Alternate incident commander (ERT 06)</td>
<td>Ron Feschuk</td>
<td>(403) 781-7812 (o)</td>
<td><a href="mailto:Ron.Feschuk@mgmenergy.com">Ron.Feschuk@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 815-4112 (c)</td>
<td></td>
</tr>
<tr>
<td>Duty officer (day) (ERT 07)</td>
<td>Dick Heenan</td>
<td>(403) 781-7819 (o)</td>
<td><a href="mailto:Dick.Heenan@mgmenergy.com">Dick.Heenan@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 818-4408 (c)</td>
<td></td>
</tr>
<tr>
<td>Duty officer (night) (ERT 07)</td>
<td>Marshall Melnechuk</td>
<td>(403) 781-7823 (o)</td>
<td><a href="mailto:Marshall.Melnechuk@mgmenergy.com">Marshall.Melnechuk@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(780) 554-4270 (c)</td>
<td></td>
</tr>
<tr>
<td>HSE and security officer (ERT 08A,B,C)</td>
<td>Rob Carss</td>
<td>(403) 781-7813 (o)</td>
<td><a href="mailto:Robert.Carss@mgmenergy.com">Robert.Carss@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 617-2195 (c)</td>
<td></td>
</tr>
<tr>
<td>Alternate HSE &amp; security officer (ERT 08A,B,C)</td>
<td>Ed Kustan</td>
<td>(403) 781-7822 (o)</td>
<td><a href="mailto:Ed.Kustan@mgmenergy.com">Ed.Kustan@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 616-7207 (c)</td>
<td></td>
</tr>
<tr>
<td>Alternate HSE &amp; security officer (ERT 08A,B,C)</td>
<td>Don Casey</td>
<td>(403) 781-7810 (o)</td>
<td><a href="mailto:Don.Casey@mgmenergy.com">Don.Casey@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 470-1129 (c)</td>
<td></td>
</tr>
<tr>
<td>Communications lead (ERT 09)</td>
<td>Nancy Dilts</td>
<td>(403) 781-7807 (o)</td>
<td><a href="mailto:Nancy.Dilts@mgmenergy.com">Nancy.Dilts@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 519-2856 (c)</td>
<td></td>
</tr>
<tr>
<td>Planning chief (ERT 10)</td>
<td>John Ferris</td>
<td>(403) 781-7816 (o)</td>
<td><a href="mailto:John.Ferris@mgmenergy.com">John.Ferris@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 620-5014 (c)</td>
<td></td>
</tr>
<tr>
<td>Finance and administration chief (ERT 11)</td>
<td>John Ferris</td>
<td>(403) 781-7816 (o)</td>
<td><a href="mailto:John.Ferris@mgmenergy.com">John.Ferris@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 620-5014 (c)</td>
<td></td>
</tr>
<tr>
<td>Logistics and procurement chief (ERT 12)</td>
<td>Alistair Sim</td>
<td>(403) 281-7855 (o)</td>
<td><a href="mailto:frontierlogistics@shaw.ca">frontierlogistics@shaw.ca</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 650-9266 (c)</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-2: MGM Energy’s Emergency Response Team Contacts (cont’d)

<table>
<thead>
<tr>
<th>Position and position number</th>
<th>Name</th>
<th>Phone Number</th>
<th>E-mail Address*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calgary Emergency Management Team (cont’d)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternate logistics and procurement chief (ERT 12)</td>
<td>Dan Fensky</td>
<td>(403) 781-7815 (o)</td>
<td><a href="mailto:Dan.Fensky@mgmenergy.com">Dan.Fensky@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 613-3641 (c)</td>
<td></td>
</tr>
<tr>
<td>Government and community relations (ERT 13)</td>
<td>Shirley Maaskant</td>
<td>(403) 290-3618 (o)</td>
<td><a href="mailto:Shirley.Maaskant@paramountres.com">Shirley.Maaskant@paramountres.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 860-5014 (c)</td>
<td></td>
</tr>
<tr>
<td>Media spokesperson (ERT 14)</td>
<td>Nancy Dilts</td>
<td>(403) 781-7807 (o)</td>
<td><a href="mailto:Nancy.Dilts@mgmenergy.com">Nancy.Dilts@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 519-2856 (c)</td>
<td></td>
</tr>
<tr>
<td>Technical specialist – drilling (ERT 15)</td>
<td>Brad Scott</td>
<td>(403) 781-7826 (o)</td>
<td><a href="mailto:Brad.Scott@mgmenergy.com">Brad.Scott@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 519-2856 (c)</td>
<td></td>
</tr>
<tr>
<td>Technical Specialist – seismic (ERT 15)</td>
<td>Stewart Gall</td>
<td>(403) 366-2156 (o)</td>
<td><a href="mailto:sgall@aguila.ca">sgall@aguila.ca</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 540-4549 (c)</td>
<td></td>
</tr>
<tr>
<td>Technical specialist – construction (ERT 15)</td>
<td>Jerry Buiman</td>
<td>(403) 269-3501 (o)</td>
<td><a href="mailto:jerry@parkvalley.net">jerry@parkvalley.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 831-7287 (c)</td>
<td></td>
</tr>
<tr>
<td>Administrative support (ERT 16)</td>
<td>Kristen Verberne</td>
<td>(403) 781-7826 (o)</td>
<td><a href="mailto:Kristen.Verberne@mgmenergy.com">Kristen.Verberne@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) 923-2310 (c)</td>
<td></td>
</tr>
<tr>
<td>IT specialist (ERT 17)</td>
<td>Brian Cameron</td>
<td>(403) 513-xxxx (o)</td>
<td><a href="mailto:Brian.Cameron@mgmenergy.com">Brian.Cameron@mgmenergy.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
<tr>
<td><strong>On-site Emergency Response Team</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-scene commander – construction (ERT 18)</td>
<td>Ron Krinke</td>
<td>(780) 985-2262 (c)</td>
<td><a href="mailto:ron@parkvalley.net">ron@parkvalley.net</a></td>
</tr>
<tr>
<td>On-scene commander – drilling (ERT 18)</td>
<td>John Williams</td>
<td>(403) xxx-xxxx (o)</td>
<td><a href="mailto:john.williams@telus.net">john.williams@telus.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fred Svenko</td>
<td>(403) xxx-xxxx (o)</td>
<td><a href="mailto:Fredse@shaw.ca">Fredse@shaw.ca</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
<tr>
<td>On-scene commander – seismic (ERT 18)</td>
<td>Blaine Gervais</td>
<td>(403) 807-1935 (c)</td>
<td></td>
</tr>
<tr>
<td>On-scene commander – completions and testing (ERT 18)</td>
<td>TBD</td>
<td>(403) xxx-xxxx (o)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
<tr>
<td>Administrative support (ERT 19)</td>
<td>TBD</td>
<td>(403) xxx-xxxx (o)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
<tr>
<td>Field HSE &amp; security advisors – construction, drilling and testing (ERT 20)</td>
<td>TBD</td>
<td>(403) xxx-xxxx (o)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(403) xxx-xxxx (c)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4-2: MGM Energy’s Emergency Response Team Contacts (cont’d)

<table>
<thead>
<tr>
<th>Position and position number</th>
<th>Name</th>
<th>Phone Number</th>
<th>E-mail Address*</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site Emergency Response Team (cont’d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field HSE &amp; security advisor – seismic (ERT 20)</td>
<td>TBD</td>
<td>(403) xxx-xxxx (o)</td>
<td></td>
</tr>
<tr>
<td>Operations section lead – drilling (ERT 21)</td>
<td>Akita Tool Push - TBD</td>
<td>(403) xxx-xxxx (o)</td>
<td></td>
</tr>
<tr>
<td>Operations section lead – seismic (ERT 21)</td>
<td>Blaine Gervais</td>
<td>(403) 807-1935 (c)</td>
<td></td>
</tr>
<tr>
<td>Operations section lead – construction (ERT 21)</td>
<td>Ron Krinke</td>
<td>(780) 985-2262 (c)</td>
<td></td>
</tr>
<tr>
<td>Expediter (ERT 22)</td>
<td>Wayne Ross</td>
<td>(867) 777-3493 (o)</td>
<td></td>
</tr>
<tr>
<td>Government and Community Liaison (ERT 23)</td>
<td>Wayne Ross</td>
<td>(867) 777-3493 (o)</td>
<td></td>
</tr>
</tbody>
</table>

Note *: Primary means of emergency notification and contact is by phone. Use e-mail for follow-up reporting or where allowed by the emergency response procedures.

TBD = to be determined when project staff are identified
EMERGENCY CONTACTS

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

EXTERNAL RESPONSE RESOURCE CONTACTS

PUBLIC EMERGENCY SERVICES CONTACTS

Table 4-3 lists the contacts for public emergency services.

Table 4-3: Public Emergency Services Contact List

<table>
<thead>
<tr>
<th>Position</th>
<th>Phone Number (Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance, Inuvik</td>
<td>(867) 777-4444</td>
</tr>
<tr>
<td>• Emergency</td>
<td>(867) 777-8161</td>
</tr>
<tr>
<td>• Main</td>
<td>(867) 777-2955</td>
</tr>
<tr>
<td>• Switchboard</td>
<td>(867) 777-8000</td>
</tr>
<tr>
<td>• Fax</td>
<td>(867) 777-8062</td>
</tr>
<tr>
<td>Fire, Inuvik</td>
<td>(867) 777-2222</td>
</tr>
<tr>
<td>Fire, Tuktoyaktuk</td>
<td>(867) 977-2222</td>
</tr>
<tr>
<td>NWT Forest Fire</td>
<td>(867) 777-3333</td>
</tr>
<tr>
<td>NWT Spill Response</td>
<td>(867) 920-8130</td>
</tr>
<tr>
<td>RCMP, Inuvik</td>
<td>(867) 777-1111</td>
</tr>
<tr>
<td>RCMP, Tuktoyaktuk</td>
<td>(867) 777-1111</td>
</tr>
</tbody>
</table>

EMERGENCY CONTRACTOR AND SUPPLIER SERVICES

Table 4-4 lists the emergency contacts for contractors’ and suppliers’ services. For heavy equipment contractor services, see Table 4-5.

Contact information for contractors identified from the Inuvialuit Business List, February 2007 may be subject to change. Contact the Inuvialuit Regional Corporation at (867) 777-2737 for updates.
### Table 4-4: Response Resources and Contractor Contact List

<table>
<thead>
<tr>
<th>Resource or Contractor</th>
<th>Phone Number (Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Services (AOGS – Cliff MacDonald)</td>
<td>(867) 678-8007</td>
</tr>
<tr>
<td>Fuel Supply</td>
<td></td>
</tr>
<tr>
<td>Rig contractors</td>
<td></td>
</tr>
<tr>
<td>Akita Drilling Ltd. (Dave Millar)</td>
<td>(867) 777-4903</td>
</tr>
<tr>
<td></td>
<td>(780) 717-0925</td>
</tr>
<tr>
<td>Seismic contractor</td>
<td></td>
</tr>
<tr>
<td>Aguila (Stewart Gall)</td>
<td>(403) 366-2156</td>
</tr>
<tr>
<td>Spill Response Co-op</td>
<td>(867) 920-8130</td>
</tr>
<tr>
<td><strong>Aviation Contractors</strong></td>
<td></td>
</tr>
<tr>
<td>Aklak Air (Fixed-wing medivac)</td>
<td>(867) 777-3555</td>
</tr>
<tr>
<td>Bar XH Air</td>
<td>(403) 291-3227</td>
</tr>
<tr>
<td>Canadian Helicopters</td>
<td>(867) 777-2424</td>
</tr>
<tr>
<td>Highland North Helicopters</td>
<td>(867) 777-5115</td>
</tr>
<tr>
<td>North Caribou Air</td>
<td>(867) 777-4700</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>(403) 717-1800</td>
</tr>
<tr>
<td>Sunwest Home Aviation</td>
<td>(403) 275-8121</td>
</tr>
</tbody>
</table>

### Table 4-5: Heavy Equipment Contractor Contact Lists

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Phone Number (Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Services</td>
<td>Brian McCarthy</td>
<td>(867) 777-4000</td>
</tr>
<tr>
<td>Arctic Star Contracting Ltd.</td>
<td>Frank Carmichael</td>
<td>(867) 777-2404</td>
</tr>
<tr>
<td>Beaufort Logistics</td>
<td>Kurt Wainmand</td>
<td>(867) 777-2426</td>
</tr>
<tr>
<td>Bob’s Welding</td>
<td>Bob Guly</td>
<td>(867) 777-4174</td>
</tr>
<tr>
<td>David Storr &amp; Sons Contracting Ltd.</td>
<td>Glenna Hansen</td>
<td>(867) 777-2611</td>
</tr>
<tr>
<td>Dowland Contracting Ltd.</td>
<td>Guy Pemberton</td>
<td>(867) 777-8500</td>
</tr>
<tr>
<td>Integrated Transportation Services Co-operation</td>
<td>Rob Adams</td>
<td>(780) 930-1453</td>
</tr>
<tr>
<td>Kila Enterprises</td>
<td>Johnny Lennie</td>
<td>(867) 678-2611</td>
</tr>
<tr>
<td>Lakes &amp; Rivers Consulting</td>
<td>Moe Hansen</td>
<td>(867) 777-4037</td>
</tr>
<tr>
<td>Northern Oilfield Services</td>
<td>Rob Adams</td>
<td>(780) 232-6962</td>
</tr>
<tr>
<td>Northwind Industries Ltd.</td>
<td>Kurt Wainmand</td>
<td>(867) 777-2426</td>
</tr>
</tbody>
</table>
Table 4-5: Heavy Equipment Contractor Contact Lists (cont’d)

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Phone Number (Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inuvik Contractors (cont’d)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Okeevik Energy Solutions LP</td>
<td>Bill Stamps</td>
<td>(867) 777-2673</td>
</tr>
<tr>
<td>Price Contracting Limited</td>
<td>Douglas Price</td>
<td>(867) 777-3015</td>
</tr>
<tr>
<td>Wolverine Rentals &amp; Services Ltd.</td>
<td>Olaf Falsnes</td>
<td>(867) 777-3535</td>
</tr>
<tr>
<td><strong>Tuktoyaktuk Contractors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Equipment Contractors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Gruben’s Transport</td>
<td>Russell Newmark</td>
<td>(867) 977-7000</td>
</tr>
<tr>
<td>J &amp; L Transport</td>
<td>Peter Louie</td>
<td>(867) 977-2304</td>
</tr>
<tr>
<td>Mackenzie Delta Integrated Oilfield Services</td>
<td>Russell Newmark</td>
<td>(867) 977-7000</td>
</tr>
<tr>
<td><strong>Aklavik Contractors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K &amp; D Contracting</td>
<td>Dave McLeod</td>
<td>(867) 978-2792</td>
</tr>
</tbody>
</table>
# EMERGENCY CONTACTS

## MACKENZIE DELTA

EMERGENCY RESPONSE PLAN

## REGULATORY CONTACTS

### REGULATORY AGENCIES

Table 4-6 lists the regulatory agencies to be contacted in an emergency.

**Table 4-6: Regulatory Agency Emergency Contact List**

<table>
<thead>
<tr>
<th>Agency and Person</th>
<th>Phone Number (Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Aviation Contingency Operations Division of Transport Canada</td>
<td>(613) 947-5140 *</td>
</tr>
<tr>
<td>E&amp;P Team Leader, Chief Conservation Officer – Bharat Dixit</td>
<td>(403) 299-2792</td>
</tr>
<tr>
<td>Environmental Specialist Conservation Officer – Ann-Marie Buchwald</td>
<td>(403) 292-4931</td>
</tr>
<tr>
<td>Environmental Specialist Conservation Officer – John Korec</td>
<td>(403) 292-6614</td>
</tr>
<tr>
<td>Environmental Specialist Conservation Officer – Pam Romanchuk</td>
<td>(403) 299-3906</td>
</tr>
<tr>
<td>GNWT, Energy and Natural Resources</td>
<td></td>
</tr>
<tr>
<td>Indian &amp; Northern Affairs Canada</td>
<td>(403) 292-4800</td>
</tr>
<tr>
<td>National Energy Board</td>
<td>(403) 807-9473</td>
</tr>
<tr>
<td>NEB 24-hour emergency cellular</td>
<td>(403) 299-3866</td>
</tr>
<tr>
<td>NWT EMO, 24 hours</td>
<td>(867) 873-7554</td>
</tr>
<tr>
<td>NWT Workers’ Compensation Board (24 hours)</td>
<td>(800) 661-0792</td>
</tr>
<tr>
<td>Operations Specialist, Safety and Conservation Officer – Rick Turner</td>
<td>(867) 299-3868</td>
</tr>
<tr>
<td>Petroleum Engineering Specialist, Safety and Conservation Officer – Chris Knoechel</td>
<td>(403) 299-3866</td>
</tr>
<tr>
<td>Professional Leader, Engineering Chief Safety Officer – Allan Murray</td>
<td>(403) 299-3903</td>
</tr>
<tr>
<td>Transport Canada – Aviation, Mike Gurbeau, John Burndett</td>
<td>(780) 495-2505</td>
</tr>
</tbody>
</table>

Note: * Monday to Friday 0700-1600 hours
EMERGENCY CONTACTS

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

MEDIA RELATIONS

PRIMARY SPOKESPERSON

MGM Energy believes it is important to communicate with the media and the public in an emergency. All communications with the media and public must be timely, accurate, and consistent.

The on-scene commander will be the primary MGM Energy spokesperson in the field, unless otherwise designated.

MAJOR COMMUNICATION ACTIVITIES

The on-scene commander will be assisted by personnel in MGM Energy’s Calgary office. In some cases, additional media relations personnel will be added to the field emergency response team.

These personnel will assist with:

- responding to the media and questions from the public
- monitoring media coverage
- coordinating responses with government agencies

Communications could involve:

- an explanation of the emergency and the extent of its actual or potential impacts
- an announcement of public safety or environmental protection measures being taken
- an explanation of the status of the response, and planned actions
- a response to public concerns that may be voiced
- statements of what is being done, or will be done to prevent similar emergencies in the future
- contact details for sources of additional information
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

INTRODUCTION

OBJECTIVES

This section identifies the emergency-specific first response procedures that have been developed for MGM Energy’s field programs in the Mackenzie Delta. The objectives of these emergency response procedures are to:

• ensure the safety of workers, injured parties, responders and the public
• control hazards
• take initial measures to protect people, the environment, equipment and facilities
• notify and mobilize emergency response personnel and resources reporting to external agencies
• formulate preliminary communications with others who may be potentially affected

SITUATION APPRAISAL AND STRATEGY DEVELOPMENT

Following these initial steps, emergency response team members will fully assess the situation, identify issues, prioritize the issues, set objectives and develop resource situation-specific response strategies. These strategies will be implemented and their effectiveness evaluated and modified, as necessary.

For prolonged and complex emergency responses, such as marine spills and well-control situations, a unified command may be established with government agencies.
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

FATALITY OR SERIOUS INJURY

APPROACH TO RESPONSE

Workers and visitors will be advised through work-site orientations, and pre-job and tailgate meetings that, regardless of the severity, all injuries must be reported promptly to their supervisor or, in the absence of their supervisor and for visitors, the MGM Energy’s on-site representative. Injuries will be treated by the on-site medical staff. If more comprehensive medical treatment is required, arrangements will be made for a medivac.

Anyone who is involved in, discovers, or witnesses an incident that results in an injury, must report it to their supervisor, the MGM Energy on-site representative or the on-site medic.

In a Level 2 or 3 emergency, MGM Energy’s on-site representative will assume the role of on-scene commander.

FIRST RESPONSE PROCEDURE

If an injury or fatality occurs:

1. All other workers on the site stop work immediately.

2. Call for help, from co-workers, others nearby, your supervisor and medical staff.

If it is safe to do so:

3. Remove the injured person to a safe location for treatment.

If it is unsafe to approach or move the injured person:

4. Develop a safety plan in order to proceed with the rescue.

5. Secure the site, including any sources of stored energy, to prevent anyone else from being injured and to preserve any evidence.

6. Notify your supervisor, if you have not already done so.

7. Assist the on-site emergency medical staff, as directed by them or your supervisor.
FIRST RESPONSE PROCEDURE (cont'd)

If the on-site medical staff decide that a medivac is required and when MGM Energy’s air operations staff arrange for the appropriate aircraft:

8. Make the landing area at the evacuation site, and the route to the evacuation site, safe for use.

If the incident involves a disabling injury or a fatality:

9. Maintain the security of the site to allow for an investigation and site inspection.

As soon as possible:

10. Notify MGM Energy’s internal emergency contacts.

If the person injured or killed is a contractor:

11. Notify the relevant contractor’s management as soon as possible.

If the incident involves a fatality:

12. Request management representatives from the worker’s company to manage the expeditious and sensitive contact of the next of kin.

If the next of kin of the deceased cannot be reached:

13. Contact the RCMP and request assistance in notifying the next of kin.

If the deceased is a contractor’s employee:

14. Request MGM Energy’s management’s assistance in providing support to the contractor.

EXTERNAL NOTIFICATION AND REPORTS

For medical treatment, restricted work, lost time injuries or fatalities, MGM Energy’s on-site representative will ensure that the following external notifications and reports are made to the:

- RCMP
- NEB
- GNWT Workers’ Compensation Board
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

LOSS OF WELL CONTROL

APPROACH TO RESPONSE

If well control is lost, the safety of the rig crew and site personnel is the highest priority. Mitigating environmental damage and preserving the equipment to the extent possible is of secondary importance.

The drilling supervisor will act as the on-scene commander during a loss of well control and is authorized to direct the ignition of the well, if that is considered to be the appropriate course of action.

Well-specific control procedures are included in the well design and drilling program. Rig operations personnel are trained and certified in the appropriate well control techniques. Routine and planned well-control exercises and equipment checks are executed and logged.

Sour gas is not expected to be encountered in the Mackenzie Delta wells. However, if sour gas is expected during the well design process, this ERP will be revised to include appropriate sour gas emergency response procedures.

FIRST RESPONSE PROCEDURE

As soon as a loss of well control is identified:

1. Stop work immediately.
2. Sound the alarm.
3. Evacuate all non-essential personnel to the predetermined muster station.
4. Secure the site to prevent anyone from entering it.
5. Initiate well control procedures.
6. Initiate internal and external notifications, based on the severity, or potential severity, of the situation.
EXTERNAL NOTIFICATION AND REPORTS

For loss of well control, MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- National Energy Board
- Inuvialuit Regional Corporation
- GNWT Department of the Environment and Natural Resources
Section 5.4

EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

FIRE OR EXPLOSION

APPROACH TO RESPONSE

During the response to a fire or explosion, the safety of personnel and responders is of primary importance. Personnel should immediately sound the alarm and initiate an evacuation. A fire response might be attempted by personnel trained in the use of fire extinguishers if they are confident that they can safely contain or extinguish the fire with the available equipment. No one must ever try to begin fire-fighting alone.

For level 2 and 3 fires or explosions, MGM Energy’s on-site representative will assume the role of on-scene commander. A competent and trained person, such as a contractor’s senior on-site representative who has had fire-fighting and fire-rescue training, or a trained professional or volunteer fire-fighter, may be delegated as the fire response leader.

FIRST RESPONSE PROCEDURE

As soon as fire breaks out or an explosion occurs:

1. Stop work immediately.
2. Sound the alarm.
3. Evacuate all non-essential personnel from the area involved, or from the potentially affected area, to the predetermined muster stations.
4. Provide emergency medical attention to anyone injured.
5. Secure the site to prevent anyone from entering it.
6. Ensure that evacuees are safe and secure.
7. Take a head count of the evacuees.
8. Reconcile the evacuees’ head count with the site roster to identify potential missing individuals.

If anyone is missing:

9. Develop a safe search plan to locate the missing individuals.
FIRST RESPONSE PROCEDURE (cont’d)

If required:

10. Mobilize transportation for evacuees to alternative sites.

11. Remove or control sources of fuel to the fire.

12. Assess the severity and potential severity of the fire or explosion.

13. Call for assistance, as required.

14. Develop a fire response strategy and safety plan.

If appropriate:

15. Mobilize heavy construction equipment to drag or push burning structures away from the fire.

16. Initiate a fire response with fire extinguishers and water trucks.

17. Initiate internal and external notifications.

18. Notify the owner of the camp, rig or equipment involved in the fire or explosion.

EXTERNAL NOTIFICATION AND REPORTS

For fires and explosions, MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- National Energy Board
- RCMP
- GNWT Environment and Natural Resources
Section 5.5
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SHALLOW GAS ENCOUNTER DURING DRILLING

APPROACH TO RESPONSE

In responding to a shallow gas encounter during drilling, the safety of the rig crew and site personnel is the highest priority. The main concern regarding a shallow gas encounter during drilling is the potential for the gas to ignite, resulting in injuries to personnel or damaged or lost equipment. MGM Energy’s on-site representative, or designated alternate, will assume the role of on-scene commander for level 2 and 3 shallow gas encounters.

FIRST RESPONSE PROCEDURE

As soon as shallow gas is encountered:

1. Close the diverter immediately.
2. Activate the igniter at the flare tanks.
3. Activate the emergency shutdown of the drilling equipment.
4. Sound the alarm.
5. Evacuate all non-essential personnel from the area, moving upwind of the leak or to the designated muster position.
6. Provide emergency medical attention to anyone injured.
7. Secure the site to prevent anyone from entering it.
8. Ensure that evacuees are safe and secure.
9. Take a head count of the evacuees.
10. Reconcile the evacuees’ head count with the site roster to identify potential missing individuals.

If anyone is missing:

11. Develop a safe search plan for the missing individuals.
FIRST RESPONSE PROCEDURE (cont'd)

If required:

12. Call the MGM Energy base to assist the evacuees or to provide fire-fighting resources.

13. Initiate internal and external notifications, as required.


15. Monitor the gas flow from a safe distance.

When all audible and visible signs indicate that the gas flow has subsided:

16. Assess the area using a portable lower explosive limit (LEL) detector to determine if the work environment is safe.

If the work environment is unsafe:

17. Withdraw to a safe location.

18. Allow more time for venting.

When it is safe to return to the rig:

19. Check the rig thoroughly to identify any damage.

If the rig is not damaged:

20. Restart the rig.

21. Monitor the rig closely during start-up to identify any damage or malfunction.

EXTERNAL NOTIFICATION AND REPORTS

For shallow gas encounters, MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- National Energy Board
- GNWT Environment and Natural Resources

If methane gas was involved in the release, a Spill Report will be submitted to the GNWT.
MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SHALLOW GAS ENCOUNTER DURING SEISMIC

APPROACH TO RESPONSE

In responding to a shallow gas encounter during a seismic program, the safety of the seismic crew and site personnel is the highest priority.

SYMPTOMS OF GAS POCKET ENCOUNTER

A gas pocket has been hit when:

- the Myno pump operation becomes laboured as a result of back pressure from gas
- gas blows and vents around the rotating drill pipe
- bubbles rise out of the water surrounding the drill casing or within the drill casing
- the engine on the drill unit suddenly accelerates
- gas monitors and alarms are activated
- gas vents out of the top of the drill stem when pulling the stem out of the slot hole
- an unusual odour is smelled when drilling or pulling out of the shot hole

FIRST RESPONSE PROCEDURE

_hitting a gas pocket_

_If a gas pocket is hit:_

1. Shut down immediately, using the positive air shutdown safety feature, or by using the electrical master switch.

2. Evacuate the area by moving at least 100 m upwind of the rig, taking a handheld radio with you._
FIRST RESPONSE PROCEDURE (cont'd)

When you are in a safe location:

3. Radio the drill push and report the incident.

4. Keep away from the incident area until the gas has vented to atmosphere. Possible scenarios that might be encountered include:

   • a whooshing or whistling sound
   • burbling or bubbling water
   • water spraying up the drill rig mast or control bank if a lot of pressure is causing the gas to vent
   • ice rising up and buckling or heaving

Recovery Operation

After releasing a gas pocket:

1. Wait until everyone involved has discussed and agreed on how to go about the recovery process.

2. Ensure that no one tries to remove the drill from the venting shot hole location.

When ready to implement the recovery procedure:

3. Obtain a multi-gas detector or monitor.

4. Check the multi-gas detector to make sure that it has been calibrated properly and is serviceable.

5. Ensure that the operator is:

   • trained in the use of the detector
   • wearing a flotation vest
   • tethered to a safety line

6. Assign the operator to start sweeping the area with the multi-gas detector or monitor from a crosswind direction.

When the area has been swept for gas, and before re-entering the work area:

7. Verify that the environment around the work area is safe to approach.

8. Check the surrounding and immediate area of the incident for ice thickness and quality.
9. Ensure that there are no areas on the rig in which gas might be trapped, such as the water tank

10. Ensure that all moving parts, such as tracks, are able to move freely.

11. Restart the drill.

12. Remove any remaining drill stem or casing from the ground.

13. Move the drilling rig to a safe location, well away from the incident site.

14. Abandon the shot hole.

15. Ensure that:
   - the shot hole is logged
   - the hazard area is marked properly
   - the information is placed on the hazard list or map
   - the information is communicated to all affected personnel in a timely manner
APPROACH TO RESPONSE

The safety of personnel while working on, or travelling over, ice roads and ice platforms is a priority. Detailed ice management procedures are in place and will be followed throughout construction, drilling, seismic and logistic activities. Ice crossings must not be performed before the ice has been checked for thickness and evaluated for safe load-carrying capacity.

If a vehicle breaks through the ice, MGM Energy’s on-site representative will assume the on-scene commander’s role and will designate someone who is skilled and trained in safe ice management techniques to lead the rescue and recovery operations.

FIRST RESPONSE PROCEDURE

As soon as someone observes that a vehicle has broken through the ice:

1. Report the ice breakthrough and location to the MGM Energy base of operations.
2. Broadcast a traffic or work-site advisory, stopping all potential traffic or work in the immediate area, on the communication system.
3. Secure the area to prevent further traffic from entering the area.
4. Notify the RCMP and the GNWT Department of Transportation.

If it is safe to do so:

5. Rescue the operator.
6. Have the operator cared for by those on site.

If specialized resources are required to attempt a rescue:

7. Mobilize rescue resources, including emergency medical staff, ice profiling personnel and equipment.
8. Develop a safety plan for the rescue.
9. Rescue the operator as quickly as possible.
EXTERNAL NOTIFICATION AND REPORTS

For ice breakthroughs, MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- RCMP
- GNWT Department of Transportation
- Indian and Northern Affairs Canada
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

MISSING OR OVERDUE PERSONS

APPROACH TO RESPONSE

The safety of people travelling to and from MGM Energy’s work sites in the Mackenzie Delta is a priority. If the journey management protocol in the safety plan identifies that a vehicle or aircraft is overdue, the MGM Energy’s on-site representative will assume leadership for implementing the response procedure.

FIRST RESPONSE PROCEDURE

As soon as a vehicle or aircraft is identified as being overdue:

1. Try to make radio or cellular telephone contact with the vehicle or aircraft.

2. Determine the last known location and time of the vehicle or aircraft, by estimating its last known location, direction of travel and estimated speed, and considering potential turnoff points.

3. Put search vehicles or aircraft on standby.

If a vehicle is missing:

4. Broadcast a message to all project-related vehicles and equipment and request all units to report any sightings or potential sightings immediately.

5. Advise the RCMP of the situation and actions being taken.

6. Request information from anyone who might have seen the vehicle.

7. Dispatch search teams when and where deemed appropriate.

If an aircraft is missing:

8. Contact flight operations at the local airports.

9. Enlist the help of the air service operator or owner of the aircraft.

10. Support the civil air authorities as they execute their search and rescue procedures.
EXTERNAL NOTIFICATION AND REPORTS

For missing or overdue persons, MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- RCMP
- Civil Aviation Contingency Operations Division of Transport Canada
- National Energy Board
- Indian and Northern Affairs Canada
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

WILDLIFE ENCOUNTERS

APPROACH TO RESPONSE

Workers should not expose themselves to potential confrontations with naturally predatory animals. However, if such a situation occurs, the worker should try to withdraw to a safe place.

FIRST RESPONSE PROCEDURE

*If the presence of wildlife, such as bears, wolves, or foxes, is identified near MGM Energy work sites or camps:*

1. Report the presence or encounter to your supervisor immediately.
2. Mobilize on-site wildlife monitoring resources.
3. Alert other workers to the hazard and order them to stay in a safe location until the wildlife situation is resolved.
4. Assess the ongoing or potential risk to workers.
5. Notify the MGM Energy’s on-site representative as soon as practical.
6. Report all encounters with wildlife internally and externally, as required.

EXTERNAL NOTIFICATION AND REPORTS

MGM Energy’s on-site representative will ensure that all wildlife encounters are reported to the GNWT Environment and Natural Resources.
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

VEHICLE ACCIDENTS

APPROACH TO RESPONSE

The safety of everyone using the roads is a priority for MGM Energy, its contractors and subcontractors. If a vehicle accident occurs, providing emergency care for any injured parties is of paramount importance. MGM Energy’s on-site representative will take the lead role in responding to, or organizing the response to, a vehicle accident.

FIRST RESPONSE PROCEDURE

If you are involved in, or observe, a vehicle accident:

1. Report the accident to MGM Energy’s on-site representative, or your supervisor, immediately.

2. Determine if anyone has been injured.

If so:

3. Render emergency care to the injured until emergency medical staff arrive.

4. Secure the area to prevent any further accidents.

5. Mobilize rescue resources.

6. Initiate internal and external notifications.

If requested by your supervisor, other company representative or the RCMP:

7. Preserve the scene of the accident for investigation, as required.

EXTERNAL NOTIFICATION AND REPORTS

For vehicle accidents, MGM Energy’s on-site representative or designate will ensure that the following external notification and reports are made to the:

- RCMP
- Department of Transportation
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA EMERGENCY RESPONSE PLAN

AIRCRAFT EMERGENCY LANDING

APPROACH TO RESPONSE

Response to in-flight emergencies is the responsibility of the air crew. If an in-flight emergency results in an emergency landing at an airstrip or at some other location, MGM Energy will actively support regulatory agencies, the aircraft operator, and public responders in executing the appropriate response to the extent possible. MGM Energy’s on-site representative will be the key liaison with the response teams unless an alternate is assigned.

FIRST RESPONSE PROCEDURE

If the emergency landing of an aircraft is identified:

1. Confirm that the civil air operations and aircraft operator have been notified.
2. Determine what response, if any, has been initiated.
3. Determine what support MGM Energy’s on-site staff and contractors can provide.
4. Initiate internal notifications.
5. Monitor the progress of the situation.
6. Notify on-site workers to stand by.
7. Provide assistance, as required.
8. Monitor ongoing work-site activities and determine if a work stand-down is necessary for the safety of ongoing operations.

EXTERNAL NOTIFICATION AND REPORTS

MGM Energy’s on-site representative will confirm with the aircraft operator that the required external notifications and reports have been made to the:

- RCMP
- Department of Transportation
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

MARINE VESSEL INCIDENTS

APPROACH TO RESPONSE

The crew and operator of a chartered marine vessel are responsible for responding to marine emergencies. If a marine emergency results in a vessel capsizing or sinking, MGM Energy will actively support regulatory agencies, the vessel operator, and public responders in executing the appropriate response, to the extent possible. MGM Energy’s on-site representative will be the key liaison with the response teams unless an alternate is assigned.

FIRST RESPONSE PROCEDURE

If you observe, or are notified of, a marine vessel capsizing or sinking:

1. Confirm that the Canadian Coast Guard and vessel operator have been notified.
2. Determine what response, if any, has been initiated.
3. Determine what support on-site MGM Energy staff and contractors can provide.
4. Initiate internal notifications.
5. Monitor the progress of the situation.
6. Notify on-site workers to stand by.
7. Provide assistance, as required.
8. Monitor ongoing work-site activities and determine if a work stand-down is necessary for the safety of ongoing operations.

EXTERNAL NOTIFICATION AND REPORTS

For marine vessel incidents, MGM Energy’s on-site representative, with the marine vessel operator, will ensure that the following external notification and reports are made to the:

- RCMP
- Department of Transportation
Section 5.13
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

WORK-SITE SECURITY BREACHES OR CRIME

APPROACH TO RESPONSE

Security issues or worksite criminal behaviour includes:

- vandalism
- theft of equipment, tools or materials
- possession or sale of contraband
- verbal or physical threats
- fights and other physical confrontations
- acts of harassment

The safety of project workers, equipment and facilities is of primary importance to MGM Energy. Depending on the severity of the issue, the situation might be handled by the on-site project manager. The situation and response will be logged for trend analysis and reported to MGM Energy management, according to reporting guidelines. If the issue is severe enough, the RCMP’s assistance will be requested. MGM Energy’s on-site representative will liaise with the RCMP in implementing the response.

FIRST RESPONSE PROCEDURE

When a security breach or crime is detected:

1. Ensure the safety of those directly or indirectly involved.
2. Determine the severity or potential severity of the issue.
3. Initiate appropriate external and internal notifications.
4. Secure the site or equipment for investigative purposes, if required.
5. Support any police intervention or response.

EXTERNAL NOTIFICATION AND REPORTS

For security violations and criminal behaviour incidents, MGM Energy’s on-site representative will ensure that the RCMP is notified and that the required reports are made.
EMERGENCY RESPONSE PROCEDURES

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SEVERE WEATHER

APPROACH TO RESPONSE

Operations in the Mackenzie Delta and Northwest Territories are subject to occasional extreme weather conditions. In these conditions, the safety of the project workforce and the integrity of the operations and equipment are the primary concerns.

FIRST RESPONSE PROCEDURE

*If extreme weather is forecast:*

1. Assessing the situation, considering the weather forecast.
2. Conduct a head count of all personnel.
3. Determine the safety status of all personnel.
4. Taking safe mitigative action, depending on the situation.
5. Develop and implement plans, ensuring the safety of responders.
6. Monitor the weather forecasts continually, and adjust plans accordingly.
7. Initiate internal notifications and communications, as required.
8. Determine and implement external notifications or advisories, if appropriate.

EXTERNAL NOTIFICATION AND REPORTS

MGM Energy’s on-site representative will ensure that the appropriate internal reports are completed for severe weather incidents.
SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SPILL PREVENTION PRINCIPLES

OBJECTIVE

MGM Energy will manage its operations to the extent possible to prevent any oil, liquid hydrocarbons or other potentially hazardous materials from being spilled. To meet this objective, MGM Energy will assess the risk of spills and will implement appropriate measures to reduce the risk of spills in every aspect of its operations.

RISK ASSESSMENT

The risk assessment for spills will focus primarily on:

- pre-job planning
- primary containment
- secondary containment

Pre-Job Planning

The first step in spill prevention is to assess the work site and the jobs to be performed at the site. Items to be considered when planning the work site include:

- ensuring that the lease and fuel storage pad is surrounded by a berm, or that tanks are double walled. Lease construction standards include providing an ice or snow berm on the perimeter of the lease to:
  - provide temporary containment
  - make cleanup more efficient
- locating fuel storage areas at least 100 m from the high-water line or any waterbodies
- ensuring that an ice pad is in place. Drilling leases require an underlying ice pad to:
  - provide temporary containment
  - prevent spilled material from penetrating underlying soil and vegetation
  - facilitate cleanup and removal of contaminants
Pre-Job Planning (cont’d)

- minimizing the volume of liquid hydrocarbons and other waste materials that need to be stored and used
- assessing the transportation and handling logistics of materials enroute to the work site
- ensuring that personnel handling materials have the appropriate personal protective equipment (PPE) and handling equipment to minimize the risk of spillage and to handle these materials safely. Vehicles or personnel handling hydrocarbons or hazardous material will be equipped with:
  - absorbent material
  - portable drip trays
  - plastic bags for isolating and transporting contaminated snow, ice or dirt
- ensuring that dedicated and trained refuelling personnel are in place, and that they understand refuelling procedures
- communicating the expectation of zero discharge and leak tight to personnel and contract employees as part of the work site and job orientation process

Improving worker awareness is a key component of any continuous improvement, improved reporting and prevention program. Expectations and key findings will be communicated to all operations personnel through orientation, safety meetings and pre-job meetings, to help MGM Energy reach and maintain a zero spills record.

Primary Containment

The integrity of all primary containment, i.e. tanks and associated equipment, will be maintained, by:

- inspecting tanks and associated equipment daily as part of the formal equipment check
- including the inspection results in the daily report

Ensuring that adequate lighting and access is available around this equipment will enhance spill detection and cleanup, thereby reducing the effects of any spills. Equipment, hoses and tanks will be inspected before any fluids are transferred to and from a storage facility. Planned inspections include:

- checking the general condition of the fuel and liquid storage tank, including:
  - inspecting the paint for blisters and the tank surface for corrosion. A thorough inspection of the inside, underside and outside of the tank provides a good assessment of the tank’s condition. If the condition is poor, the tank will be flagged, then replaced.
looking for large dents or other deformation

determining whether the tank is well supported. For winter operations on frozen ground, the tank should be stable.

determining whether the secondary containment, overfill protection and leak detection systems are in place and in good condition. Where required, the secondary containment system should be effective during spring and summer.

ensuring that tank valves are installed and are in good working condition. The seals (stem and gate) must be leak tight. A drip tray must be installed under the valves to contain any minor leakage from the valve seals.

checking that bull plugs or blind flanges are in place. When tanks are not being actively used, such as when a filling or discharge hose is not connected to the tank valves, but the tank is being used for storage, the outlets from the tank will be fitted with dual barriers. These barriers usually consist of a valve and a bull plug or blind flange.

checking that transfer hoses connected to tanks are securely attached, tight and not leaking. Below any hose connections, a drip tray or barrel must be installed to collect minor leaks. If a tank is not to be used for an extended period, the hose should be removed and the bull plug installed. Hoses used to transfer hydrocarbons will be properly drained, then stored in a container that has primary containment.

checking that vents and hatches are working properly. Ensuring that open venting exists is critical, especially for tanks containing volatile hydrocarbons.

ensuring that tank gauges are working correctly. The tanks should have some method of overfill protection, to prevent them from being overfilled.

Secondary Containment

Secondary containment will be provided for all fluids contained on MGM Energy locations. The secondary containment system will consist of one of the following:

- integrated containment tanks, such as Enviro Tanks
- bermed ice-liner systems underneath single containment tanks

The bermed liner system will be expected to contain 110% of the volume of the largest single tank installed in the bermed area. This expectation is based on the premise that only one tank failure should occur before detection and cleanup has occurred.

The secondary containment area will be contoured to contain the spill and to allow access for spill cleanup.
Section 6.2

SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SPILL RESPONSE AND NOTIFICATION

APPROACH TO RESPONSE

In all spill responses, the protection of workers, responders and the environment are the key priorities.

MGM Energy is a member of the Mackenzie Delta Spill Response Corporation (MDSRC), and will use the MDSRC equipment to respond to MGM Energy spills, where the volume or location of the spill requires specialized equipment. For a list of the MDSRC equipment available for use, see Appendix 1.

A Workplace Hazardous Materials Information System (WHMIS) binder, which provides information on the types of materials used at the work site, their hazards and safe handling methods, will be provided at each work site.

Figure 6-1 illustrates the major steps taken for Level 1, 2 and 3 spills. MGM Energy’s on-site representative will assume the role of on-scene commander for Level 2 and 3 spills.

SAFETY HAZARDS

Pre-Response Precautions

Personnel who are responding to a spill can be exposed to various safety hazards. As with any emergency, workers should never expose themselves or their co-workers to increased danger. Before responding to a spill, workers should always protect human life first. The health and safety of workers and the public are the primary concern.

Safety hazards associated with a spill response depend on the components of the spilled material and the environment where the spill occurred. MSDS sheets will be available at the work site for all chemical products being used there. All workers will be trained in the MSDS system through WHMIS training. Where appropriate, before a response is initiated, MSDS sheets will be reviewed, so that responders fully understand the:

- potential hazards
- requirements for personal protective equipment
- treatment related to the spilled material
Figure 6-1: Spill Response and Notification Protocol

- Spills of more than 20 L of flammable liquids or vehicular fluids on a frozen waterbody used as a working surface are immediately reportable. Include spills of less than 20 L in the spill log and make it available to the INAC district inspector. Report immediately to the 24-hour Spill Reporting Line, all spills into open water, regardless of amount.

NWT 24-hour Spill Reporting Line: 867-920-8130
Common Safety Issues

Common safety issues that supervisors must be aware of when managing a spill response include:

- weather conditions – exposure to the elements, such as cold and wind
- flammability – the potential for gas vapours to ignite from a spill or other flammables on site
- toxicity – vapours, aromatics, skin irritation
- confined space issues – work plans will be designed to ensure that any confined spaces are identified and safety standby personnel are in place
- simultaneous work with heavy equipment – ensure good communication and good visibility, such as fluorescent striping on workers’ clothing and adequate lighting

Appropriate personal protective equipment is required for all spill response personnel.

GENERAL SPILL RESPONSE PROCEDURE

As soon as a spill is identified:

1. Stop work immediately.
2. Sound the alarm.
3. Determine the type and quantity of material spilled (see Table 6-1, Immediately Reportable Spill Quantities and Table 6-2, Typical Drilling Products Usage).
4. Call for assistance. For hydrocarbon spills, this might include the Mackenzie Delta Spill Response Corp.
5. Evacuate all non-essential personnel from the immediate area.
6. Secure the site to prevent anyone from entering it.
7. Provide emergency medical attention to anyone injured.
8. Ensure that evacuees are safe and secure.
9. Take a head count of the evacuees.
10. Reconcile the evacuees’ head count with the site roster to identify potential missing individuals.

If anyone is missing:

11. Develop a safe search plan for the missing individuals.
GENERAL SPILL RESPONSE PROCEDURE (cont'd)

*If it is safe to do so:*

12. Shut off the source of the spill.

13. Initiate internal and external notifications, including reporting the type and amount of material spilled to the on-scene commander.

14. Assess the situation, to determine:
   - potential containment and recovery plans
   - potential protection plans for adjacent and downstream areas

Table 6-1: Schedule 1: Immediately Reportable Spill Quantities

<table>
<thead>
<tr>
<th>TDG Class</th>
<th>Substance</th>
<th>Immediately Reportable Quantities for NWT or Nunavut 24-Hour Spill Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explosives</td>
<td>Any amount</td>
</tr>
<tr>
<td>2.3</td>
<td>Compressed gas (toxic)</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Compressed gas (corrosive)</td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Infectious substances</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Radioactive substances</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>Unknown substance</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Compressed gas (flammable)</td>
<td>Any amount of gas from containers with a capacity greater than 100 L</td>
</tr>
<tr>
<td>2.2</td>
<td>Compressed gas (non-corrosive, non-flammable)</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Flammable liquids</td>
<td>≥ 100 L</td>
</tr>
<tr>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Flammable solids</td>
<td>≥ 25 kg</td>
</tr>
<tr>
<td>4.2</td>
<td>Spontaneously combustible solids</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Water reactant</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Oxidizing substances</td>
<td>≥ 50 L or 50 kg</td>
</tr>
<tr>
<td>9.1</td>
<td>Miscellaneous products or substances, excluding PCB mixtures</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Organic peroxides</td>
<td>≥ 1 L or 1 kg</td>
</tr>
<tr>
<td>9.2</td>
<td>Environmentally hazardous</td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Poisonous substances</td>
<td>≥ 5 L or 5 kg</td>
</tr>
<tr>
<td>8</td>
<td>Corrosive substances</td>
<td></td>
</tr>
<tr>
<td>9.3</td>
<td>Dangerous wastes</td>
<td></td>
</tr>
<tr>
<td>9.1</td>
<td>PCB mixtures of 5 or more parts per million</td>
<td>≥ 0.5 L or 0.5 kg</td>
</tr>
<tr>
<td>None</td>
<td>Other contaminants, such as crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, sewage effluent and waste water</td>
<td>≥ 100 L or 100 kg</td>
</tr>
<tr>
<td>None</td>
<td>Sour natural gas, i.e., gas containing H₂S</td>
<td>Uncontrolled release or sustained flow of 10 minutes or more</td>
</tr>
<tr>
<td>None</td>
<td>Sweet natural gas</td>
<td></td>
</tr>
</tbody>
</table>
### Table 6-2: Typical Drilling Product Usage

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit Size</th>
<th>Units Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barite (bulk)</td>
<td>1 MT</td>
<td>100</td>
</tr>
<tr>
<td>Barite (M-I)</td>
<td>40 kg</td>
<td>7,200</td>
</tr>
<tr>
<td>Calcium carbonate 325</td>
<td>25 kg</td>
<td>150</td>
</tr>
<tr>
<td>Calcium carbonate 0</td>
<td>25 kg</td>
<td>150</td>
</tr>
<tr>
<td>Calcium carbonate (poultry)</td>
<td>25 kg</td>
<td>150</td>
</tr>
<tr>
<td>Calcium carbonate (supercal)</td>
<td>25 kg</td>
<td>150</td>
</tr>
<tr>
<td>Caustic soda</td>
<td>22.68 kg</td>
<td>76</td>
</tr>
<tr>
<td>Chemicide</td>
<td>20 L</td>
<td>24</td>
</tr>
<tr>
<td>Desco Cf</td>
<td>11.34 kg</td>
<td>24</td>
</tr>
<tr>
<td>Drilling detergent</td>
<td>18.93 L</td>
<td>10</td>
</tr>
<tr>
<td>Fed Pac (Reg)</td>
<td>22.68 kg</td>
<td>65</td>
</tr>
<tr>
<td>Fed Pac (UL)</td>
<td>22.68 kg</td>
<td>289</td>
</tr>
<tr>
<td>Fed Zan D</td>
<td>11.34 kg</td>
<td>360</td>
</tr>
<tr>
<td>Lime</td>
<td>20 kg</td>
<td>60</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>25 kg</td>
<td>6,005</td>
</tr>
<tr>
<td>Sapp</td>
<td>22.68 kg</td>
<td>34</td>
</tr>
<tr>
<td>Sida ash</td>
<td>22.68 kg</td>
<td>10</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>22.68 kg</td>
<td>80</td>
</tr>
<tr>
<td>Sulfamic acid</td>
<td>25 kg</td>
<td>80</td>
</tr>
<tr>
<td>Ultracap</td>
<td>22.68 kg</td>
<td>197</td>
</tr>
<tr>
<td>Ultrafree</td>
<td>208 L</td>
<td>84</td>
</tr>
<tr>
<td>Ultrahib</td>
<td>208 L</td>
<td>134</td>
</tr>
</tbody>
</table>

### NOTIFICATION AND REPORTS

#### Internal Reports

If a high-traffic work area starts to show signs of contamination as a result of frequent minor spills from equipment operating at a site, timely cleanup will be performed regularly to the satisfaction of MGM Energy’s on-site representative. Preventive measures will include:

- removing leaky equipment from the site
- using drip trays
- using belly tarps
- maintaining an internal log of spills from each piece of equipment
- using the internal log to identify equipment needing repair

If MGM Energy’s on-site representative determines that an area has become contaminated enough to potentially cause damage to the environment, the spill will be reported immediately to the 24-hour spill reporting line. The affected area will also be cleaned up immediately.
External Reports

For immediately reportable spills MGM Energy’s on-site representative will ensure that the following external notification and reports are made to the:

- National Energy Board, environment specialist (403) 818-2403
- GNWT Environment and Natural Resources (ENR) 24-hour spill reporting line (867) 920-8130

Immediately Reportable Spills

An immediately reportable spill is any release of a substance that:

- is likely to be an imminent hazard to human health or to the environment
- exceeds the volumes listed in Table 6-1

These spills must be reported, immediately after being discovered, to the NWT 24-hour spill reporting line.

In addition, all releases of harmful substances, regardless of quantity, are immediately reportable to the NWT spill line and National Energy Board, where the release:

- is near or in a waterbody
- is near or in a designated sensitive environment or sensitive wildlife habitat
- poses an imminent threat to human health or safety
- poses an imminent threat to a listed species at risk or its critical habitat
- is uncontrollable
Section 6.3

SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

GENERAL RESPONSE TO WINTER SPILLS

WINTER SPILL CHARACTERISTICS

Winter spills present a lower risk of environmental damage than spills during other seasons. Snow is an excellent absorbent and the frozen ground or ice acts to prevent the contaminants migrating into the soil or water. Ice and frozen ground also provide an effective surface on which heavy equipment can operate.

For spills that are not witnessed, staining on snow and ice is typically pronounced and a useful indicator of the extent of the spill. Odour can be used as another indicator of impact and extent.

APPROACH TO RESPONSE

MGM Energy will position MDSRC spill response containers at key locations in activity areas, such as camp sites, staging areas, drill sites and testing areas, to ensure that appropriate response equipment is available immediately, in case of a release.

RESPONSE PROCEDURE

1. Follow the first response procedure (see Section 6.2).

When the source of the spill has been controlled:

2. Build a berm to contain the flow of liquids, using shovels or front-end loaders, taking care not to damage the tundra.

3. Use absorbent materials to assist with containment.

4. Avoid having vehicle tires track contaminants away from the area.

For large spills:

5. Line the face of the berm with tarps to increase its effectiveness.

6. Recover liquids, using vacuum trucks, to the extent possible.

7. Use a dump truck and front-end loader to clean up the contaminated snow, taking care not to damage the tundra.
RESPONSE PROCEDURE (cont'd)

8. Use empty tanks for storing recovered materials.

*For work close to the base of the snow:*

9. Use hand shovels.

*Using the totes, barrels, shovels and absorbent materials that will be available at all MGM Energy work sites:*

10. Excavate contaminated snow to open 1 m³ lined totes or empty barrels.

11. Move contaminated snow in containers to the on-site evaporator.

12. Seal the residual material from the evaporator into drums for transportation to an approved industrial disposal site.

*Before transporting affected material by truck:*

13. Conduct a flash point test on the isolated material.

14. Review the test with GNWT Department of Transportation to determine if hazardous waste manifests are required.

*If a manifest is required:*

15. Obtain a manifest from the operator of record:
   - on free liquids
   - in locations that are hard to access
   - for materials that cannot be readily cleaned up with heavier equipment

16. Collect contaminated absorbent material at the site in appropriate containers.

17. Move the contaminated absorbent material under manifest to an approved industrial landfill that will accept the waste.
RESPONSE PROCEDURE

If a vehicle or other equipment breaks through the ice:

1. Ensure that any personnel nearby are safe.

2. Organize the rescue of anyone involved in the vehicle or equipment that broke through the ice.

When anyone involved in the incident has been rescued, and as soon as it is safe to do so:

3. Conduct a risk assessment for removing as much fuel from the vehicle as possible, to limit the amount of fuel spilled during the recovery.

4. Recover the vehicle or equipment.

As soon as possible after the vehicle has been recovered:

5. Report any fuel spilled during vehicle recovery to the NWT 24-hour spill reporting line.

6. Use a vacuum truck to clean up the spill.

7. Mobilize spill response equipment, as necessary.

8. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

9. Report any releases to the NWT 24-hour spill reporting line.
SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SPILLS UNDER ICE

APPROACH TO RESPONSE

Spills under ice procedures are also described in the seismic contractor’s and barging contractor’s ERPs.

RESPONSE PROCEDURE

If a spill occurs under the ice:

1. Ensure that any personnel in the spill area are safe.
2. Organize the rescue of anyone involved in the vehicle or equipment that broke through the ice.

As soon as possible:

3. Mobilize spill response equipment, as necessary.
4. Position ice safety package and rescue crew.

Before deploying work crews:

5. Perform an ice safety assessment.
6. Ensure that the crew is safely belted with manned ropes.
7. Clear snow on an approved location.
8. Establish a controlled access point to the site.
9. Use a check-in and out procedure.
10. Locate a decontamination station, if required.
11. Perform a pre-deployment survey, including:
   • developing an action plan, including an auger survey grid and flag holes
   • determining if hydrocarbons are present and documenting the findings
   • determining slot and deflector wall locations
   • reviewing recommendations with the response team
RESPONSE PROCEDURE (cont'd)

12. Brief crews on the action plan, safety plan, communication plan and waste management plan.

Once work begins:

13. Outline slot and deflector wall locations with spray paint:
   - Determine the size of slot blocks and mark the dimensions.
   - Auger holes in the centre of the slot blocks.
   - Saw the slot sides, starting at the downstream end of the slot.
   - Crosscut the slot sides to form blocks.
   - Remove the blocks, and transport and store them nearby for later reinsertion.
   - Saw deflector wall slots in two parallel cuts.
   - Install plywood in the slots.
   - Use wedges to secure the plywood in the slots.

14. Install a skimmer at the downstream end of the slot.

15. Ensure that the slot surface is kept free of ice.

16. Ensure that the skimmer access is kept free of ice.

17. Use a vacuum truck to remove the product for disposal.

18. Use tanks to store recovered product and water.

19. Dispose of waste according to the Waste Management Plan.

As soon as possible:

20. Initiate an event report, including details of spilled product, spill size, location, status, injuries, downstream control points (if there is any open water) and weather forecast.

21. Report any releases to the NWT 24-hour spill reporting line.
Mackenzie Delta  
Emergency Response Plan  

Diesel Leak from an Iced-In Barge  

Section 6.6  

Spill Prevention and Response  

General  

Barges will be used to transport fuel to support construction, drilling, seismic, and testing operations. Barges will be staged with fuel stored in the centre cells. No fuel will be placed in the outer storage cells. Each spill will require a varied response, depending on the specific situation. The response might range from no action to attempting to recover whatever amount of spilled diesel can be found.

Response Procedure  

Assess the extent of diesel contamination:  

1. Drill auger holes in the ice at intervals downstream of the source of the leak to determine the areal extent and quantity of diesel spilled.  

2. Look for a hydrocarbon sheen on the water.  

To locate the source of the leak:  

3. Cut the ice on the river side of the barge, using an ice saw sleigh, starting at the downstream end of the barge.  

4. Cut the ice 0.3 m from the barge hull along the entire length of the barge.  

When the source of the leak has been found:  

5. Transfer the remaining diesel in the leaking tank to a secure tank.  

6. Initiate an event report, including details of spilled product, spill size, location, status, and injuries.  

7. Report any releases to the NWT 24-hour spill reporting line.  

To recover spilled diesel trapped under the ice:  

8. Follow the response steps outlined in the Spills Under Ice procedure.
RESPONSE PROCEDURE

*If a spill occurs on ice:*

1. Ensure that any personnel in the spill area are safe.

*As soon as possible:*

2. Mobilize spill response equipment, as necessary.

3. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

4. Report any releases to the NWT 24-hour spill reporting line.

*Before deploying work crews:*

5. Perform an ice safety assessment.

6. Ensure that the crew is safely belted with manned ropes.

7. Clear snow on an approved location.

8. Establish a controlled access point to the site.

9. Use a check-in and out procedure.

10. Locate a decontamination station, if required.

*Once cleanup begins:*

11. Contain the spill by constructing snow dikes or ice trenches around the perimeter of the spill.

12. Prevent product escaping into ice cracks by using dikes or sealing cracks with a snow and water mixture.

13. Pick up contaminated snow and remove to a designated storage area for evaporation and temporary storage of residue.
RESPONSE PROCEDURE (cont’d)

If the spill is moving towards open water:

14. Obtain regulatory approval to burn the product.

If the spill is large:

15. Recover pumpable product with a vacuum truck and store it in secure tanks.

16. Dispose of waste according to the Waste Management Plan.
Section 6.8
SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

LEAK DURING FUEL TRANSFER

APPROACH TO RESPONSE

A fuel spill while transferring liquids or fuel from a storage tank to a vehicle or from a tanker truck to tanks and other fuel containers is the most likely type of spill to occur. Prevention and awareness are critical.

RESPONSE PROCEDURE

To minimize the likelihood of a fuel release:

- Use dedicated fuel and fluid transfer personnel, and follow the barge contractor’s written procedures.
- Ensure that tank trucks have absorbents, drip trays and a scoop shovel.
- Ensure that drip trays and secondary containment are always used under connections.
- Use absorbent pads under fuel transfer operations.
- Ensure that tank gauging is accurate before transfer and monitor frequently during the transfer.
- Maintain constant dedicated attention during fuel transfer operations.
- Avoid the tendency to top up a tank when refuelling.

When fuel is being transferred from barges to tankage, such as at Camp Farewell, use the barge contractor’s fuel transfer procedures. This includes having personnel positioned along the load-out or transfer line during pumping operations.

If a release occurs, follow the general spill response procedures outlined in this Spill Response Plan.
SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

LEAK DURING FUEL TRANSFER FROM BARGE

GENERAL

Barges will be used to transport fuel to support construction, drilling, seismic and testing operations. Barges might be overwintered or fuel transferred to depots for later use.

RESPONSE PROCEDURE

Pipeline or Hose Leakage

*When a leak in a pipeline or hose is discovered during a fuel transfer from a barge:*

1. Stop all transfer operations immediately.
2. Close all manifold valves.
3. Sound the general emergency alarm.
4. Initiate emergency response procedures.
5. Inform the loading master about the incident.
6. Consider whether to stop air intake into accommodation and non-essential air intake to the engine room.
7. Locate the source of the leakage.
8. Begin cleanup procedures.
9. Initiate an event report, including details of spilled product, spill size, location, status and injuries.
10. Report any releases to the NWT 24-hour spill reporting line.

*If it is possible to transfer spilled oil into an empty tank, such as the slop tank or another oil tank:*

11. Prepare the transfer pump.
12. Drain the affected section of the pipeline into an empty tank.
Pipeline or Hose Leakage (cont'd)

If the source of the leakage is located in the engine room at the suction manifold:

13. Take the necessary measures to relieve the pressure from the relevant section of the pipeline.

If the spilled oil is contained onboard and can be handled by the vessel crew:

14. Use absorbents and permissible solvents to clean up the spill.

15. Ensure that any residue collected in the cleanup operation is stored carefully.

16. Dispose of the residue properly.

When the spill has been cleaned up:

17. Obtain permission from local authorities to continue normal operations, if necessary.

Tank Overflow During Cargo Transfer

When a tank overflow is discovered during a cargo transfer:

1. Stop all transfer operations immediately.

2. Close all manifold valves.

3. Sound the general emergency alarm.

4. Initiate emergency response procedures.

5. Inform the loading master personnel about the incident.

6. Consider whether to stop air intake into accommodation and non-essential air intake to the engine room.

7. Reduce the tank level by discharging tanks to tanks on shore or another barge, if necessary.

8. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

9. Report any releases to the NWT 24-hour spill reporting line.

If it is possible to transfer spilled oil into an empty tank:

10. Prepare portable pumps and transfer the oil.
If the spilled oil is contained onboard and can be handled by the vessel crew:

11. Use absorbents and permissible solvents to clean up the spill.

12. Ensure that any residue collected in the cleanup operation is stored carefully.

13. Dispose of the residue.

When the spill has been cleaned up:

14. Obtain permission from local authorities to continue normal operations, if necessary.

Hull Leakage During Cargo Transfer

If oil is noticed on the water near the barge during cargo transfer operations and cannot be accounted for, the possibility of hull leakage should be investigated immediately:

1. Stop all transfer operations immediately.

2. Close all manifold valves.

3. Sound the general emergency alarm.

4. Initiate emergency response procedures.

5. Inform the loading master about the incident.

6. Use the vessel crew in an attempt to locate the source of the leakage.

7. Consider whether to stop air intake into accommodation and non-essential air intake to the engine room.

When the source of the leak has been identified:

8. Reduce the head of cargo oil by transferring it into an empty or slack tank.

9. Consider pumping water into the leaking tank to create a water cushion to prevent further oil loss (loading a water cushion will displace the fuel above the hull breach).

10. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

11. Report any releases to the NWT 24-hour spill reporting line.

If the leak is located below the waterline:

12. Use divers to investigate the leak further.
Hull Leakage During Cargo Transfer (cont'd)

*If it is not possible to identify the specific tank that is leaking:*

13. Reduce the level of oil in all of the tanks.
Section 6.10

SPILL PREVENTION AND RESPONSE

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

SUMMER SPILLS IN WATER

RESPONSE PROCEDURE

If a spill occurs in water:

1. Ensure that any personnel in the spill area are safe.

2. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

3. Report any releases to the NWT 24-hour spill reporting line.

4. Mobilize spill response equipment, as necessary.

5. Contain the spill, using booms or absorbents to prevent the spill from becoming larger.

6. Use a skimmer to recover spilled product and store it in drums or approved tanks.

If the spill is large:

7. Recover pumpable product with a vacuum truck and store it in secure tanks.

8. Dispose of waste according to the Waste Management Plan.
RESPONSE PROCEDURE

If a spill occurs on land in summer:

1. Ensure that any personnel in the spill area are safe.

2. Initiate an event report, including details of spilled product, spill size, location, status and injuries.

3. Report any releases to the NWT 24-hour spill reporting line.

4. Mobilize spill response equipment, as necessary.

5. Contain the spill, using dikes or containment booms or drainage trenches to prevent liquids from migrating.

If the spill is large:

6. Recover pumpable product with a vacuum truck and store it in secure tanks.

If a vacuum truck is not available:

7. Use absorbent pads and booms to recover the product.

8. Dispose of waste according to the Waste Management Plan.
Section 7.1

EMERGENCY RESPONSE FOLLOW-UP

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

STAND DOWN – DEMOBILIZATION

POST INCIDENT ACTIVITIES

CEMT Stand-Down Notification – Emergency Manager

The emergency manager is responsible for coordinating post-incident activities. These activities include:

- notifying the CEMT to stand down
- preparing and releasing a statement to the media, as required
- providing updates to employees and contractors about the incident
- notifying and holding debriefing meetings with stakeholders, as required
- providing support to the CEMT and OERT, as required

CEMT and OERT Stand-Down Notification – Incident Commander

The incident commander:

- ensures that all OERT members are notified about the incident stand-down
- ensures that all external contacts, such as government officials and community contacts, are notified about the stand-down
- advises all CEMT and OERT members to document their participation and call-down notifications
- manages emergency response records

CEMT and OERT Support

The incident commander supports the CEMT by:

- ensuring that ongoing support is provided to the affected public
- supporting MGM Energy on-scene personnel, where necessary, by contacting and, if necessary, visiting members of the public who have been directly affected by the incident, and helping to address any outstanding concerns or problems they might have
CEMT and OERT Support (cont’d)

- providing, where required, affected members of the public with post-incident MGM Energy contacts and telephone numbers. If an incident has affected many members of the public, a public relations office should be set up in the affected community for as long as deemed necessary.

- scheduling follow-up meetings with the public to ensure that concerns are fully addressed

- dealing with all public damage claims promptly

COMMUNICATIONS

The incident commander ensures that all communication issues are addressed following the incident. This includes communications with the public, communities, media, governments and investor relations, in conjunction with the emergency manager.

INCIDENT RECORDS MANAGEMENT

The incident commander:

- collects and compiles all incident records, time and event logs, forms and other documentation that might be relevant to the incident

- obtains copies of the original documents and works only from the copies

- stores all incident documentation securely

- ensures that all reports are provided to senior management, as required
Within a few days of the incident, debriefing sessions should be held with the CEMT and OERT leaders. These sessions should focus on the effectiveness of the response and opportunities for improvement.

The sessions should be recorded and any agreed-upon changes incorporated into the response plans, where applicable.

DEBRIEFING EVALUATION

As a minimum, the debriefing should include an evaluation of:

- the overall effectiveness of the emergency response – by those on the scene (OERT) and the CEMT
- the systems used for internal and external communications
- the effectiveness of communication efforts with the community, media and government
- public safety actions
- assessments of legal or environmental issues raised because of the incident or as a result of MGM Energy’s response actions
- plans to reduce the risk of a similar incident occurring, including recommendations for future actions and improvements to the emergency preparedness program
Section 7.3

EMERGENCY RESPONSE FOLLOW-UP

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

INCIDENT INVESTIGATIONS

INVESTIGATIONS AND REPORTING

An incident investigation and associated reports must be completed, following the requirements identified in MGM Energy’s incident reporting and follow-up requirements, as detailed in the MGM Energy HSE Manual.

Ensure that the on-site MGM Energy supervisor receives the support required to assist in the incident investigation process.

Obtain a copy of the incident investigation report and follow-up documentation to assist in the debriefing meetings.

Sometimes it might become necessary for MGM Energy investigators to obtain permission from regulatory agencies to conduct an investigation following an incident. In certain incidents, the regulating body has jurisdiction over an incident investigation because the regulator is directly responsible for identifying the cause of the incident. In such cases, the regulator becomes the prime investigator.

THIRD-PARTY INVESTIGATIONS

When third-party investigations by regulators, insurance companies and others are required, given the complexity and severity of the incident, it is important to cooperate fully with them. The following guidelines should be adhered to:

• give third-party investigators only the information they request
• speak truthfully and do not speculate
• ensure that legal counsel is present if the investigator is from a body with the authority to prosecute or file civil claims
MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

INTRODUCTION

SCOPE

This section contains examples of the following forms:

- Environmental Emergency Incident Fact Sheet
- Hazardous Occurrence Investigation Report
- Incident Action Plan
- Incident Status Update
- Initial Emergency Incident Fact Sheet
- Media Inquiry Form
- NWT Spill Report
- Operational Period Handover Report
- Preliminary Media Statement and News Release Template
- Resources Summary
- Site Safety/Evacuation Plan
- Time and Event Log
Environmental Emergency Incident Fact Sheet  
(Also Information for Media Spokesperson)

Date: _______________________
Time: ____________ (Hrs. 0-2400)

Initial Incident Notification

<table>
<thead>
<tr>
<th>Caller’s Name:</th>
<th>______________________________________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller’s Address:</td>
<td>______________________________________________________________________</td>
</tr>
<tr>
<td>Caller’s Phone Nos. Home</td>
<td>Work</td>
</tr>
</tbody>
</table>

Type of Emergency/Release

<table>
<thead>
<tr>
<th>Stage/ level of alert</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Other</th>
<th>(Specify)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Gas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sour (H₂S) Gas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVP Liquid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emulsion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous Chemical/Dangerous Good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Specify – include manufacturer &amp; U.N. No.)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Specify)</td>
<td></td>
</tr>
</tbody>
</table>

Released onto/into: Air | Land | Water | Water Conditions: | Open | Ice | |
Injuries | Operator/Contractor (Explain) | |
Fatalities | Operator/Contractor (Explain) | |

Location/Source and Time of Incident

| Operator of Record for the Operation: | ____________________________________________ |
| Type of Operation: | Seismic | Drilling | Construction | Marine | Aviation | Motor Vehicle | |
| Field/Area | Location (Lsd.) | | | | | | |
| Proximity to and name of nearest village/town/city | | | | | | | |
| Plant | Well | Pipeline | Surface facility (Specify) | Truck | | Tank car | |
| Marine vessel | Helicopter | Fixed Wing aircraft | |
| Name of consignor & carrier (Dangerous Good) or contractor | | | | | | | |
| Time of incident or discovery | (Hrs. 0-2400) | | | | | | |
| What was damaged/destroyed (i.e., facility, property)? | | | | | | | |
| Estimated volume lost/rate | Size of spill area | | | | | | |

Emergency Area Description

| Forest | Field | Muskeg | Hills | Flat | Near waterways | Tundra | |
| Marine | Ice road | Permanent road | | | | | |
| Marine vessel | Near public facility | | | | | | |
| Near residents | Near campground | | | | | | |
| Distance to nearest residence/campground/public facility: | | | | | | | |
| Are any people in immediate danger? | Yes | No | Have residents been notified? | Yes | No | |
| Has anyone evacuated the area? | | | | | | | |
| Where have evacuees been sent? | | | | | | | |
Environmental Emergency Incident Fact Sheet (continued)

Road access/conditions: _______________________________________________________________

Other access/conditions: (marine, air)

If a gas release, what equipment is near it? _______________________________________________

Can you smell gas?  Yes □  No □  If yes, from how far? _________________________________

Can you hear it?  Yes □  No □  If yes, from how far? _________________________________

Can you see it?  Yes □  No □  If yes, from how far? _________________________________

Has H2S/HVP gas release been ignited? Yes □  No □

Have possible sources of ignition been extinguished? Facilities Yes □  No □

Resident Yes □  No □

Actions Taken To Control Release

Has source of emission been shut off? Yes □  No □

If No, can source be easily shut off? Yes □  No □

What is the spill migration potential? _________________________________________________

Action taken to control release/prevent spread of spill: ___________________________________

Weather Conditions

Wind Direction: __________________ Wind Speed: _____ km/hr  Wind Gusts  Yes □  No □

Visibility ____________________________________

Other Weather Conditions (Specify): ______________________________________________________

Other Contacts Caller Has Already Made

RCMP: ___________________________________  GOVERNING AGENCY_______________________

DISASTER SERVICES: _______________________  ENVIRONMENT: _____________________________

AMBULANCE: ____________________________________  Others: _____________________________

Inuvialuit Regional Corporation
National Energy Board (NEB)
Department of Indian and Northern Affairs (DIAND)
Department of Fisheries and Oceans (DFO)

Update with others as appropriate

Information Taken By

Name: __________________________________________ Phone No. ____________________________

Position: ____________________________________ Location: ____________________________
Describe the area of the incident:

Site Drawing:

Containment and Recovery: Describe the spill containment and recovery procedures being implemented.
## Hazardous Occurrence Investigation Report

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schedule I / Annex I</strong>&lt;br&gt;(Subsection 16.4(3) / Paragraphe 16.4(3))</td>
<td>Type Occurrence / Genre de situation</td>
</tr>
<tr>
<td></td>
<td>Fire / Explosion</td>
</tr>
<tr>
<td>Hazardous Occurrence Investigation Report</td>
<td>Other / Autre</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional Office / Bureau régional</td>
</tr>
<tr>
<td></td>
<td>Employer ID No. / Numéro d'identification de l'employeur</td>
</tr>
<tr>
<td></td>
<td>Department File No. / No de dossier du ministère</td>
</tr>
<tr>
<td>RAPPORT D'ENQUÊTE DE SITUATION HASARDEUSE</td>
<td></td>
</tr>
<tr>
<td>Employer Name and Mailing Address / Nom et adresse postal de l'employeur</td>
<td>Telephone Number / Numéro de téléphone</td>
</tr>
<tr>
<td>Supervisor's Name / Nom du surveillant</td>
<td></td>
</tr>
<tr>
<td>Witnesses / Témoins</td>
<td></td>
</tr>
<tr>
<td>Weather / Conditions météorologiques</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td>Date and Time of Hazardous Occurrence / Date et heure de la situation hasardeuse</td>
</tr>
<tr>
<td>Description of what happened / Description des circonstances</td>
<td></td>
</tr>
<tr>
<td>Description and estimated cost of property damage / Description et coût estimatif des dommages matériels</td>
<td>Operation in progress / Opération en cours</td>
</tr>
<tr>
<td>Injured Employee's Name (if applicable) / Nom de l'employé blessé (s'il y a lieu)</td>
<td>Age / Âge</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of Injury / Description de la blessure</td>
<td>Sex / Sexe</td>
</tr>
<tr>
<td></td>
<td>Evacuation / Évacuation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td>Yes / oui</td>
</tr>
</tbody>
</table>
Hazardous Occurrence Investigation Report (continued)

| Direct causes of Hazardous Occurrence / Causes directes de la situation hasardenuse |
| 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 of 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 |

(Continue on reverse side if needed / Continue 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
<table>
<thead>
<tr>
<th>Incident Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report #: ____  Operational Period: from ____________ to _______________</td>
</tr>
<tr>
<td>Prepared By: ____________________________________ ERT Position: ______________</td>
</tr>
<tr>
<td>Date Prepared: ____________________________  Time Prepared: _______ (hours 00:00 – 24:00)</td>
</tr>
</tbody>
</table>

**Issues Identified During the Last Incident Assessment: Owner? Status?**

| Objectives for the Next Operational Period: Owner? Completed by? |

<p>| Response Actions to be Taken in the Next Operational Period (containment, recovery, clean-up, etc.): Owner? Completed by? |</p>
<table>
<thead>
<tr>
<th>Safety Issues/Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INCIDENT BRIEFING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of Current Actions</td>
</tr>
</tbody>
</table>
Incident Status Update

Incident Name: ______________________________ Status Report #: 1 2 3 4 5 6 ___
Report #: ________ Operational Period: from ____________________ to ______________________
Prepared By: _______________________________ ERT Position: ___________________________
Date Prepared: _______________________________ Time Prepared: _________ (hours 00:00 – 24:00)

Where lengthy notes are required use additional pages: Page ______ of ______

CURRENT CLASSIFICATION / EMERGENCY LEVEL: Level 1  Level 2  Level 3
Incident Location:

Nature of Incident (type, behaviour, current information)
Situation is: Stable □ Unstable (could get worse) □
Describe:

Modifying Conditions (location, time, weather)
Describe:

Potential Risk (See Levels of Emergency)
People (workers, responders, public): Minor □ □ □ □ Catastrophic □ □ □ □ □ □ Assets / Revenue Minor □ □ □ □ □ □ Catastrophic Loss:
Environment: Minor □ □ □ □ Catastrophic □ □ □ □ □ □ Reputation Exposure: Minor □ □ □ □ □ □ Catastrophic

Control Measures

Internal Resources: Incident Commander
Name Contact #

External Resources: On-Site Supervisor or On-Scene Commander
Name Contact #

Government Agency Notified / Involved: Emergency Manager
Name Contact #

Critical Issues
Priority Issue Assigned To Completed?


## Initial Emergency Incident Fact Sheet

<table>
<thead>
<tr>
<th>INCIDENT</th>
<th>Date &amp; Time Occurred:</th>
<th>Reported By:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT HAPPENED? (KNOWN FACTS ONLY)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCIDENT LOCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Construction</td>
<td>☐ Access Road</td>
<td>☐ Aircraft</td>
</tr>
<tr>
<td>☐ Drilling</td>
<td>☐ Lease</td>
<td>☐ Motor Vehicle</td>
</tr>
<tr>
<td>☐ Seismic</td>
<td>☐ Camp</td>
<td>☐ Other:</td>
</tr>
<tr>
<td><strong>EMERGENCY TYPE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Injury</td>
<td>Brief Description: Actual or Probable Spill?</td>
<td>Classification</td>
</tr>
<tr>
<td>☐ Environmental</td>
<td></td>
<td>☐ Level I</td>
</tr>
<tr>
<td>☐ Equipment Damage</td>
<td></td>
<td>☐ Level II</td>
</tr>
<tr>
<td>☐ Other:</td>
<td></td>
<td>☐ Level III</td>
</tr>
<tr>
<td><strong>INJURIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td>Estimate Number:</td>
<td>Nature of Injuries:</td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
<td>Has Medical Assistance been called?</td>
</tr>
<tr>
<td><strong>POTENTIAL IMPACT</strong></td>
<td></td>
<td>Immediate Danger to Others?</td>
</tr>
<tr>
<td>How large is the problem? Size of Spill (Note scope of fire, area of damage, release rate etc.)</td>
<td></td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>Incident Status:</td>
<td>Of What Nature?</td>
<td></td>
</tr>
<tr>
<td>☐ Terminated</td>
<td>☐ Escalating</td>
<td></td>
</tr>
<tr>
<td>☐ Continuing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL CONDITIONS (SS)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind Speed:</td>
<td>Wind Direction:</td>
<td></td>
</tr>
<tr>
<td>☐ Light</td>
<td>☐ Gusting</td>
<td></td>
</tr>
<tr>
<td>☐ Moderate</td>
<td>☐ Strong</td>
<td></td>
</tr>
<tr>
<td>☐ Strong</td>
<td>☐ Gusting</td>
<td></td>
</tr>
<tr>
<td>☐ Gusting</td>
<td>☐ Wind Direction:</td>
<td></td>
</tr>
<tr>
<td>☐ Visibility:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Poor</td>
<td>☐ Good</td>
<td></td>
</tr>
<tr>
<td>☐ Fair</td>
<td>☐ Air Temperature: °C</td>
<td></td>
</tr>
<tr>
<td><strong>INITIAL CONTROL MEASURES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the Incident under control? What steps have been taken to secure the Incident and to reduce its impact?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXTERNAL ASSISTANCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have other departments or agencies been contacted? Is government assistance required? (Specify what is required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POTENTIAL HAZARDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there hazards to persons/property/wildlife (birds, fish, Mammals)? (Specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RECOMMENDATIONS AND/OR REMARKS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NOTIFICATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List contacts made (NEB, WCB, IRC, NWT Spill Line, Police, Fire, Hospital, etc.):</td>
<td>Who has information been passed to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Date: _____________ Time:</td>
<td></td>
</tr>
<tr>
<td><strong>UPDATES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of Next Report/Update Call?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Media Inquiry Form

Use this form to document media calls, whenever you cannot transfer the reporter directly through to the Media spokesperson. Use the following prompts as a guide to gather key information.

1. “We have a **spokesperson** to answer your questions. 
   *His/Her* name is ____________________________________________________”

2. If I could get a bit of information from you, I will make sure that 
   ____________________ (Media Spokesperson’s Name) gets this message **immediately**, 
   so that you can be called as soon as information is available.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>INFORMATION RECORDED BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPORTER’S NAME</th>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA AFFILIATION</th>
<th>Area Code</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAX NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEADLINE?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INFORMATION REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

3. “I don’t have any information but I’ll **expedite** your inquiry to our **spokesperson** who 
   will get back to you as soon as possible.”

Deliver this information to the Media Spokesperson – **IMMEDIATELY**.
# NWT Spill Report

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| Report date and time | Date and time of spill (if known) | Original Report Update Report | Location and map coordinates (if known) and direction (if moving) | Party Responsible for Spill | Product(s) spilled and estimated quantities (provide metric volumes/weights if possible) | Cause of Spill | Is spill terminated? | If spill is continuing, give estimated rate | Is further spillage possible | Extent of contaminated area (m²) | Factors affecting spill recovery (weather conditions, terrain, snow cover, etc) | Containment (natural depression, dykes, etc.) | Action, If any, taken or proposed to contain, recover, cleanup or dispose of product(s) and contaminated materials | Do you require assistance? | Possible hazard to persons, property, or environment | Comments and recommendations | For Spill Line Use Only | Lead Agency | Spill Significance | Lead Agency Contact and Time | Is the file now closed? |

**For Spill Line Use Only**

**Lead Agency**

**Spill Significance**

**Lead Agency Contact and Time**

**Is the file now closed?**

**Reported By:**

**Position, Employer, Location:**

**Telephone**

**Reported To:**

**Position, Employer, Location**

**Telephone**
**Operational Period Handover Report**

**Incident Name:**

**Report #: _____**

**Operational Period:** from ____________________ to ____________________

**Prepared By:** __________________________________  **ERT Position:** _____________________________

**Date Prepared:** __________________________________  **Time Prepared:** _________ (hours 00:00 – 24:00)

**CURRENT CLASSIFICATION/EMERGENCY LEVEL:**   Level 1 □   Level 2 □   Level 3 □

**Incident Location:**

**What has Occurred:**

- [ ] Personal Injury
- [ ] Explosion
- [ ] Fire
- [ ] Gas Release
- [ ] Spill
- [ ] Vehicle Collision
- [ ] Well Blow-out
- [ ] Terrorism

**Incident Description/Current Status:**

**OFFSHORE**

- [ ] Marine Vessel
- [ ] Offshore Platform
- [ ] Other ________________

**ONSHORE**

- [ ] Gas Plant
- [ ] Production Field/Facility
- [ ] Surface Trucking
- [ ] Other ________________

**VESSEL/EQUIPMENT:**

- Vessel Name: ________________________________
- Call Sign: _______________ Flag: ________________
- Vessel Size/Type/Cargo: ________________________
- Vessel Destination and ETA: _____________________
- Equipment Description/Type: _____________________
- Name of Owner or Rep: _________________________
- Location: _____________________________________
- Phone: ______________________________________

**VEHICLE/EQUIPMENT:**

- Vehicle Name/Number: __________________________
- Vessel/Type/Cargo: ____________________________
- Vessel Destination and ETA: _____________________
- Equipment Description/Type: _____________________
- Name of Owner or Rep: _________________________
- Location: _____________________________________
- Phone: ______________________________________

**WEATHER/SEA CONDITIONS:**

- Air Temp:  °F/°C
- Wind Speed: (mph - knots - m/s)
- Direction from: _______________ to: _______________
- Precipitation/Humidity: _________ Visibility: __________
- Water Temperature: _____________________________
- Forecast Air Temp: _________ Wind: _________
- Forecast Precipitation: _______________________
- Sea State: 1 - 2 - 3 - 4 - 5 - 6 Ave Wave Height __ ft - m
- Tide State: _____________________________
- Currents: _________ Speed: _________ (mph - knots - m/s)
- Direction From: ______________ To: ______________
- Forecast and Remarks: ____________________________

**WEATHER CONDITIONS:**

- Air Temp:  °F/°C
- Wind Speed: (mph - knots - m/s)
- Direction from: _______________ to: _______________
- Precipitation/Humidity: _________ Visibility: __________
- Water Temperature: _____________________________
- Forecast Air Temp: _________ Wind: _________
- Forecast Precipitation: _______________________

---

**Incident Location:**

**What has Occurred:**

- [ ] Personal Injury
- [ ] Explosion
- [ ] Fire
- [ ] Gas Release
- [ ] Spill
- [ ] Vehicle Collision
- [ ] Well Blow-out
- [ ] Terrorism

**Incident Description/Current Status:**

**OFFSHORE**

- [ ] Marine Vessel
- [ ] Offshore Platform
- [ ] Other ________________

**ONSHORE**

- [ ] Gas Plant
- [ ] Production Field/Facility
- [ ] Surface Trucking
- [ ] Other ________________

**VESSEL/EQUIPMENT:**

- Vessel Name: ________________________________
- Call Sign: _______________ Flag: ________________
- Vessel Size/Type/Cargo: ________________________
- Vessel Destination and ETA: _____________________
- Equipment Description/Type: _____________________
- Name of Owner or Rep: _________________________
- Location: _____________________________________
- Phone: ______________________________________

**VEHICLE/EQUIPMENT:**

- Vehicle Name/Number: __________________________
- Vessel/Type/Cargo: ____________________________
- Vessel Destination and ETA: _____________________
- Equipment Description/Type: _____________________
- Name of Owner or Rep: _________________________
- Location: _____________________________________
- Phone: ______________________________________

**WEATHER/SEA CONDITIONS:**

- Air Temp:  °F/°C
- Wind Speed: (mph - knots - m/s)
- Direction from: _______________ to: _______________
- Precipitation/Humidity: _________ Visibility: __________
- Water Temperature: _____________________________
- Forecast Air Temp: _________ Wind: _________
- Forecast Precipitation: _______________________
- Sea State: 1 - 2 - 3 - 4 - 5 - 6 Ave Wave Height __ ft - m
- Tide State: _____________________________
- Currents: _________ Speed: _________ (mph - knots - m/s)
- Direction From: ______________ To: ______________
- Forecast and Remarks: ____________________________

**WEATHER CONDITIONS:**

- Air Temp:  °F/°C
- Wind Speed: (mph - knots - m/s)
- Direction from: _______________ to: _______________
- Precipitation/Humidity: _________ Visibility: __________
- Water Temperature: _____________________________
- Forecast Air Temp: _________ Wind: _________
- Forecast Precipitation: _______________________

---
## Operational Period Handover Report (continued)

### Casualties:

<table>
<thead>
<tr>
<th></th>
<th>Employees</th>
<th>Contractors</th>
<th>General Public</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fatalities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hospitalizations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medical Treatments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Evacuation in Progress?

- [ ] YES
- [ ] NO

By Whom/Details:

### Gas Release:

Type(s) of Gas: __________________________

Size of Release: __________________________

Duration: __________________________

Direction: __________________________ Population Impact: __________________________

### Media:

- [ ] Local __________________________
- [ ] Regional __________________________
- [ ] National __________________________
- [ ] International __________________________

**Media Type/Name**

- [ ] Local __________________________
- [ ] Regional __________________________
- [ ] National __________________________
- [ ] International __________________________

**Apparent Source:** __________________________

**Spill Occurred:**

- Date: ________
- Time: ______________

**Direction:** _______

**Population Impact:** _______

### Spill:

Spill Observed: Date: _____ Time: ______________

By Whom: __________________________ Company: __________________________

Spill Occurred: Date: ________ Time: ______________

Apparent Source: __________________________

**Is Spill Continuing?**

- [ ] YES
- [ ] NO

If YES, estimate release rate: ___ gal/day-bbl/day-m³/day

**Spill Type:**

- [ ] Crude
- [ ] Diesel
- [ ] Condensate
- [ ] Other: __________________________

**API Gravity:** _______ °

**Viscosity:** _______ cSt

**Volume of Spill:** _______ bbl – gal – litre – m³

Estimated: __________________________ Known? _________

**Ground Reference:**

- Movement ______ Direction: ______

**Current Spill Location:**

- Lat: ________
- Long: ________

**Habitat at Site:** __________________________

**Public Statement Available?**

- [ ] YES
- [ ] NO

**Statement Issued?**

- [ ] YES
- [ ] NO
Operational Period Handover Report (continued)

<table>
<thead>
<tr>
<th>Public Statement Available? ☐ YES ☐ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement Issued? ☐ YES* ☐ NO *If yes, please fill in the following information for each statement issued</td>
</tr>
<tr>
<td><strong>Statement Number</strong></td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interviews Planned? ☐ YES ☐ NO *If yes, please fill in the following information for each interview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Number</strong></td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Risk (See Levels of Emergency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People (workers, responders, public):</td>
</tr>
<tr>
<td>Assets/Revenue Loss:</td>
</tr>
<tr>
<td>Environment:</td>
</tr>
<tr>
<td>Reputation:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Resources:</td>
</tr>
<tr>
<td>External Resources:</td>
</tr>
<tr>
<td>Government Agency Notified/Involved:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Preliminary Media Statement and News Release Template

Used by: Information Lead/Media Spokesperson
Field-based Information Officer (For First Hours Response)

Date: _______________________________  Time: ______________________________

My name is _______________________________

At _____________ (time) on _________________ (date) a _____________________________ (nature of accident) occurred at __________________________________ (plant, wellsite, pipeline) located approximately _____________ kilometres (east, west, south, north) of ________________________ (nearest town or city).

The _________________________ (plant, wellsite, pipeline) has been shut down and isolated.

MGM Energy has activated its emergency response plan to protect the public, our employees and the environment.

Presently, ________ (number of) people are being treated for injuries. The names and condition of the injured are not being released at this time.

The cause of the _________________________ (nature of accident) is not yet known and we don’t have an estimate of damage at this time. A subsequent investigation will determine those facts.

I will release further information as it becomes available or for updates you can contact me at ____________________________ (phone number).
## Resources Summary

Incident Name: 

Page: _____ of _____  Operational Period: from _____________ to _________________

Prepared By: ____________________________  ERT Position: __________________________

Date Prepared: ____________________________  Time Prepared: ____________ (hours 00:00 – 24:00)

<table>
<thead>
<tr>
<th>Resources Required</th>
<th>Resources Ordered</th>
<th>ETA (hours)</th>
<th>On Scene</th>
<th>Location/Assignment</th>
</tr>
</thead>
</table>


Site Safety/Evacuation Plan

Incident Name: ________________________________________________________________________________
Report #: _________ Operational Period: from _________________________ to __________________________
Prepared By: _______________________________ ERT Position: ____________________________________
Date Prepared: _____________________________ Time Prepared: ________________ (hours 00:00 – 24:00)

Facility/Site

Name:

Site Location (Address, Legal Description, GPS or LSD coordinates):

Directions to Site:

<table>
<thead>
<tr>
<th>Emergency Response Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
</tr>
<tr>
<td>Police</td>
</tr>
<tr>
<td>Fire</td>
</tr>
<tr>
<td>Ambulance</td>
</tr>
<tr>
<td>Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

MGM 24 hour Emergency Number: Calgary
Site Safety/Evacuation Plan (continued)

Indicate locations of designated On-Site Command Post, fire extinguishers, designated mustering points, (ESD switch, main power switch), first aid kits, monitoring equipment, and other appropriate information on the diagram.

<table>
<thead>
<tr>
<th>Designated Mustering Points (worker assembly areas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
</tr>
<tr>
<td>Secondary</td>
</tr>
<tr>
<td>Alarm Procedures</td>
</tr>
</tbody>
</table>
## Time and Event Log

<table>
<thead>
<tr>
<th>Time (24h clock)</th>
<th>Call To</th>
<th>Call From</th>
<th>Telephone Number</th>
<th>Topic/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 9-1 lists the current MGM Energy holders of the Emergency Response Plan, and Table 9-2 is the current external distribution list for the plan.

<table>
<thead>
<tr>
<th>Copy No.</th>
<th>Holder’s Name</th>
<th>Organization</th>
<th>ERT Role or Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Henry Sykes</td>
<td>MGM Energy Corp</td>
<td>Executive lead/ Human resources lead</td>
</tr>
<tr>
<td>2</td>
<td>Gary Bunio</td>
<td>MGM Energy Corp</td>
<td>Emergency manager</td>
</tr>
<tr>
<td>3</td>
<td>John Hogg</td>
<td>MGM Energy Corp</td>
<td>Emergency manager</td>
</tr>
<tr>
<td>4</td>
<td>Nancy Dilts</td>
<td>MGM Energy Corp</td>
<td>Legal advisor/ Communications lead/ Media spokesperson</td>
</tr>
<tr>
<td>5</td>
<td>Rick Miller</td>
<td>MGM Energy Corp</td>
<td>Finance lead</td>
</tr>
<tr>
<td>6</td>
<td>Dick Heenan</td>
<td>MGM Energy Corp</td>
<td>Incident commander</td>
</tr>
<tr>
<td>7</td>
<td>Ron Feschuk</td>
<td>MGM Energy Corp</td>
<td>Incident commander</td>
</tr>
<tr>
<td>8</td>
<td>Rob Carss</td>
<td>MGM Energy Corp</td>
<td>Incident commander/ HSE and security officer</td>
</tr>
<tr>
<td>9</td>
<td>Ed Kustan</td>
<td>MGM Energy Corp</td>
<td>HSE and security officer</td>
</tr>
<tr>
<td>10</td>
<td>Don Casey</td>
<td>MGM Energy Corp</td>
<td>HSE and security officer</td>
</tr>
<tr>
<td>11</td>
<td>John Ferris</td>
<td>MGM Energy Corp</td>
<td>Planning chief/ Finance and administration chief</td>
</tr>
<tr>
<td>14</td>
<td>Shirley Maaskant</td>
<td>MGM Energy Corp</td>
<td>Government and community relations</td>
</tr>
<tr>
<td>15</td>
<td>Alistair Sim</td>
<td>Frontier Logistics</td>
<td>Logistics and procurement chief</td>
</tr>
<tr>
<td>16</td>
<td>Dan Fensky</td>
<td>MGM Energy Corp</td>
<td>Logistics and procurement chief</td>
</tr>
<tr>
<td>17</td>
<td>Brian Cameron</td>
<td>MGM Energy Corp</td>
<td>IT specialist</td>
</tr>
<tr>
<td>18</td>
<td>Brad Scott</td>
<td>MGM Energy Corp</td>
<td>Technical specialist – drilling</td>
</tr>
<tr>
<td>19</td>
<td>Stewart Gall</td>
<td>Aguila Exploration</td>
<td>Technical specialist – seismic</td>
</tr>
<tr>
<td>20</td>
<td>Jerry Bulman</td>
<td>Park Valley</td>
<td>Technical specialist – construction</td>
</tr>
<tr>
<td>21</td>
<td>Kristen Verberne</td>
<td>MGM Energy Corp</td>
<td>Administrative support</td>
</tr>
<tr>
<td>22</td>
<td>John Williams</td>
<td>MGM Energy Corp</td>
<td>On-Scene commander – drilling</td>
</tr>
<tr>
<td>23</td>
<td>Fred Svenke</td>
<td>MGM Energy Corp</td>
<td>On-Scene commander – drilling</td>
</tr>
</tbody>
</table>
### Table 9-1: Emergency Response Plan – MGM Energy Distribution List (cont’d)

<table>
<thead>
<tr>
<th>Copy No.</th>
<th>Holder’s Name</th>
<th>Organization</th>
<th>ERT Role or Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Ron Krinke</td>
<td>Park Valley</td>
<td>On-Scene commander – construction/Construction section chief</td>
</tr>
<tr>
<td>25</td>
<td>Blaine Gervais</td>
<td>Aguila</td>
<td>On-Scene commander – seismic</td>
</tr>
<tr>
<td>26</td>
<td>TBD</td>
<td>TBD</td>
<td>On-Scene commander – testing/Operations section chief – testing</td>
</tr>
<tr>
<td>27</td>
<td>Wayne Ross</td>
<td>MGM Energy Corp</td>
<td>Expeditor/Operations section chief – testing</td>
</tr>
<tr>
<td>28</td>
<td>TBD</td>
<td>Akita</td>
<td>Operations section chief – drilling</td>
</tr>
<tr>
<td>29</td>
<td>TBD</td>
<td>Veri-Illuq</td>
<td>Operations section chief – seismic</td>
</tr>
<tr>
<td>30-35</td>
<td>EOC – Calgary</td>
<td>MGM Energy Corp</td>
<td>Spare copies</td>
</tr>
<tr>
<td>36-37</td>
<td>MGM Office</td>
<td>MGM Energy Corp</td>
<td>Inuvik office copies</td>
</tr>
</tbody>
</table>

Note: TBD = to be decided

### Table 9-2: Emergency Response Plan – External Distribution List

<table>
<thead>
<tr>
<th>Copy No.</th>
<th>Holder’s Name</th>
<th>Organization</th>
<th>ERT Role or Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Kirk VanderPloeg</td>
<td>NTCL</td>
<td>Barging contractor</td>
</tr>
<tr>
<td>39</td>
<td>Rob Hunt</td>
<td>MDIOS (Horizon) – Inuvik</td>
<td>Wurmlinger vessel</td>
</tr>
<tr>
<td>40</td>
<td>Dave Millar</td>
<td>Akita – Inuvik Office</td>
<td>Akita EOC – Inuvik</td>
</tr>
<tr>
<td>41</td>
<td>HSE Manager</td>
<td>Akita – Nisku Office</td>
<td>Drilling contractor head office</td>
</tr>
<tr>
<td>42</td>
<td>Lawrence Verlaan</td>
<td>Aguila Exploration</td>
<td>Seismic contractor head office</td>
</tr>
<tr>
<td>43</td>
<td>TBD</td>
<td>TBD</td>
<td>Completion and testing contractor head office</td>
</tr>
<tr>
<td>44</td>
<td>Chief Conservation Officer</td>
<td>National Energy Board</td>
<td>Regulatory agency</td>
</tr>
<tr>
<td>45</td>
<td>Operations Specialist</td>
<td>National Energy Board</td>
<td>Regulatory agency</td>
</tr>
<tr>
<td>46-47</td>
<td>NEB</td>
<td>National Energy Board</td>
<td>Office spares</td>
</tr>
<tr>
<td>48</td>
<td>Chair</td>
<td>Inuvialuit Land Administration</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Chair</td>
<td>Inuvialuit Regional Corporation</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Regional Manager</td>
<td>Indian and Northern Affairs Canada – Inuvik</td>
<td>Government agency</td>
</tr>
<tr>
<td>51</td>
<td>Chairperson</td>
<td>Northwest Territories Water Board</td>
<td>Government agency</td>
</tr>
<tr>
<td>52</td>
<td>Regional Office</td>
<td>Canadian Wildlife Service – Inuvik</td>
<td>Government agency</td>
</tr>
<tr>
<td>53</td>
<td>Regional Manager</td>
<td>Environment Canada – Yellowknife</td>
<td>Government agency</td>
</tr>
<tr>
<td>54</td>
<td>Regional Manager</td>
<td>Department of Fisheries and Oceans – Inuvik</td>
<td>Government agency</td>
</tr>
</tbody>
</table>
Table 9-2: Emergency Response Plan – External Distribution List (cont’d)

<table>
<thead>
<tr>
<th>Copy No.</th>
<th>Holder’s Name</th>
<th>Organization</th>
<th>ERT Role or Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>Regional Manager</td>
<td>Government of the NWT – Department of Transportation – Inuvik</td>
<td>Government agency</td>
</tr>
<tr>
<td>56</td>
<td>Chair</td>
<td>Environmental Impact Screening Committee</td>
<td>Regulatory advisory body</td>
</tr>
<tr>
<td>57</td>
<td>Director</td>
<td>MDSRC</td>
<td>Regional spill cooperative</td>
</tr>
<tr>
<td>58</td>
<td>Doug Connon</td>
<td>Chevron</td>
<td>Joint venture partner</td>
</tr>
<tr>
<td>59</td>
<td>Bob Ball</td>
<td>BP Canada</td>
<td>Joint venture partner</td>
</tr>
</tbody>
</table>

Note: TBD = to be decided
ERP ADMINISTRATION AND IMPLEMENTATION

MACKENZIE DELTA
EMERGENCY RESPONSE PLAN

ERP ADMINISTRATION

MAJOR ACTIVITIES

Staff in the HSE department are responsible for implementing and administering the Emergency Response Plan.

The administrative activities include:

• helping to develop individual and group training plans
• identifying and arranging for emergency equipment, including personal protective equipment (PPE) for responders
• helping to develop and, in some cases, executing team emergency response exercises and drills
• distributing and maintaining the ERP
• updating the ERP, including revising team roster and contact information and procedures
• implementing upgrades resulting from exercises and real emergency responses
• submitting ERP revisions to management for approval
• auditing the ERP on a routine basis

REVISING THIS PLAN

The HSE manager is responsible for managing this ERP to ensure that the contents are kept current and its distribution is controlled. The plan will be revised at least once a year, normally in May, to reflect the specific work programs planned for the following 12 months.

Required corrections, and suggested additions or deletions, should be submitted to the HSE manager via e-mail at hse@mgmenergy.com.

Requested revisions will be reviewed by HSE and project management staff. Anyone requesting a revision will be informed of the disposition of the request.
Contact lists for emergency response team members, corporate contacts, government agencies and land administration authorities will be updated and a revised list distributed to holders of the plan within 15 days of the change being reported to the HSE and security officer.

Approved revisions will be issued to holders of the plan as replacement pages. Urgent revisions that cannot wait for the normal annual revision cycle will be issued as bulletins. Each set of revisions and each bulletin will include a brief explanation of the changes.

The distribution of the plan will be strictly controlled to ensure that those who need the plan receive all revisions as soon as they are issued, and that out-of-date information is removed and replaced with current material.
Mackenzie Delta
Emergency Response Plan

Document Information

Section Title

Subject Title

Section Number

Date

Page

Reason for Revision

Revised Text

Approval (signature): Date:

Controlled Copy Holder (signature): Date:

NOTE TO CONTROLLED COPY HOLDERS: Sign off the bulletin page that’s issued to you and forward a photocopy to the document owner for the project’s quality records.
ERM TEAM ORIENTATION

All emergency response team members will receive an orientation to the emergency response plan, their role and the roles of the team members when they join the emergency response team.

The orientation will include:

- a discussion of fitness-for-duty requirements
- the role of the team
- their individual roles and responsibilities
- the location of the field EOC and Calgary EMC
- an overview of key response management processes
- their personal emergency response training plan

DRILLS AND EXERCISES

Emergency response exercises are organized activities that are designed to simulate a real emergency. These exercises give the team members an opportunity to practice their emergency response roles and the processes and relationships, both internal and external, associated with a response.

Three main types of exercises are held:

- communication exercises, where the procedures to contact emergency response team members and, in some cases, key response resources and regulators, are practiced
- tabletop exercises, where a simulated scenario is played out in a room, or within a series of adjacent rooms, to enable the response team members to practice response management skills and processes
- major, full-scale exercises, similar to a tabletop exercise, but which involves a simulated scenario with the added feature of deploying some emergency response equipment

MGM Energy’s program of exercises will use one of more of these exercise types each season to enable the emergency response team to practice and develop its emergency response management capabilities.
POST INCIDENT RESPONDER SUPPORT

In critical emergency response situations, emergency responders and others can be placed under enormous stress. The effects of this stress may manifest itself immediately or take some time to surface. When distress is manifested, the emotional and physical well-being of the responders and those around them is jeopardized.

The emergency manager and direct reports will consider the potential need for a critical incident stress debriefing intervention after each emergency response. If a critical incident stress management program is necessary, it will be offered to responders. All stress management programs arranged for emergency responders will be conducted by qualified personnel.