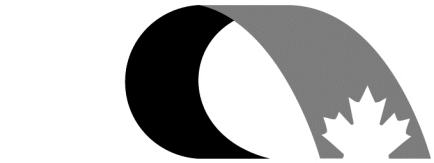


CORPORATE
EMERGENCY
RESPONSE PLAN

24-HOUR EMERGENCY
1-888-878-3700

TABLE OF CONTENTS

TABLE OF CONTENTS - Continued

TABLE OF CONTENTS - Continued

AMENDMENT RECORD

Date	Details	Amended By
Nov, 2000	- First Initiated	[redacted]
Sept, 2001	- Corporate and Site Specific ERPs finalized and distributed	[redacted]
Aug, 2002	- Corporate pages, all phone lists changed and confirmed, NEB information added	[redacted]
Dec, 2003	- Entire manual rewritten and made G71 compliant. Old manuals destroyed, new red binders were distributed to all areas.	[redacted]
June 2004	- Mobile Air Quality Monitoring Units must be dispatched at a level 1 Emergency for all sour releases. (throughout manual) - Ignition Criteria – wording changed at EUB request	[redacted]
August 2004	- Changes made at request of EUB: • Notification/Evacuation Criteria - for public outside EPZ requires immediate evacuation *approaching* 20 ppm; • Decision to downgrade – clarified decision is made in consultation with EUB & local/provincial disaster services • Clarified government authorities are contacted at Level 1	[redacted]
July 2005	- Changes made at request of EUB: • Page 5-15, Operations Coordinator role – clarification that the provincial authority or federal authority (NEB) must be notified if the public is contacted at any level, including the Alert Level • Page 5-23, Off-Site Supervisor role – added the Regional Emergency Operations Centre (REOC) to list of operations centres that this role is to assist in. • Page 5-41, Evacuation Coordinator role – clarification of task "When directed, commence notification or evacuation of all public (residents, industrial operators, school divisions, private schools, etc.) within the EPZ." • Page 5-41, Evacuation Coordinator role – clarification that notification of the sensitive residences within the EPZ is mandatory at a Level 1 emergency.	[redacted]
Feb., 2007	- Changes made to meet OGC requirements: • B.C.-specific information regarding Levels of Emergency (production facilities & drilling), Ignition Criteria and Notification of Public Outside the EPZ was added • Health Effects of a Hydrogen Sulphide Release information table changed to match table used in public information package • Downgrading emergency levels changed to read provincial authority or federal authority (NEB) will be consulted at all levels before downgrading an emergency. • Ministry of Water, Land & Air Protection changed to Ministry of Environment • 24 hour OGC number added and fax number updated	[redacted]
Apr. 27, 2007	- Change made at request of EUB: - The following information was added to Section 3.3, B) Air Quality Monitoring Procedures – "Monitored results must be made available to AB Environment, EUB & the public on a regular basis throughout the emergency".	[redacted]

AMENDMENT RECORD

Date	Details	Amended By
June, 2007	- Changes made to meet OGC requirements: • B.C. specific information added regarding sheltering procedures and scripts • H_2S and SO_2 characteristics and health effects were changed to meet B.C. standards • Emergency response duties of the Operations Coordinator and the on-scene commander changed to ensure that all responders receive adequate rest periods and support.	[redacted]
May, 2008	- Changed name of Alberta Energy and Utilities Board to Energy Resources Conservation Board - Changes made to meet NEB requirements: • Information added on classifying levels of emergency for NEB regulated pipeline incidents • Phone numbers for reporting of incidents for NEB/Canada Labour Code/Canada Oil and Gas Operations regulated operations was added - Changes made at request of OGC: • Revised government roles and responsibilities • Revised information on evacuation & sheltering, including notification methods • Revised emergency level classification to Public Information Package - Updated WCSS Chairman, Alternate Chairman and Co-op Map	[redacted]
August, 2009	- Clarified roles of the Operations Coordinator and On-Scene Commander, as per ERCB training assessment	[redacted]
November, 2009	- Updated CNRL key personnel phone numbers and annual review.	[redacted]
November, 2010	- Updated CNRL key personnel phone numbers. - Updated British Columbia Oil & Gas Commission phone numbers	[redacted]
January, 2011	- Updated CNRL key personnel phone numbers	[redacted]
December 2011	- Updated CNRL key personnel phone numbers	[redacted]
March, 2012	- Added the section *"Emergency Response Tool Box"* - Roles & Responsibilities (changed in the manual and flow chart) • Added designated roles for the Site Safety Coordinator, Logistics Coordinator, Government Liaison and Communications Coordinator • Changed the role name of Off-Site Coordinator to Operations Coordinator • Changed the role name of Senior Management to Corporate Support Team (CST) • Removed the role name of Off-Site Supervisor – role will remain as Incident Commander • Changed the names and acronyms for Canadian Natural's emergency operations centers and adjusted the definitions for the government operations centers - Added Emergency Management information section - Added a "First Responder's Guide" to the Emergency Response Toolbox and the First Responder's role section - Removed some contract service categories (e.g. heavy equipment, tank truck, vac truck, etc.)	[redacted]

AMENDMENT RECORD

Date	Details	Amended By
Jun, 2013	- Updated CNRL key personnel phone numbers	[redacted]
Dec, 2013	- Update phone contact and name change for the Saskatchewan Government from SER to ECON (Ministry of the Economy) as per the audit recommendation.	[redacted]
Feb, 2014	- Updated CNRL key personnel phone numbers - Changed name of Energy Resources Conservation Board to Alberta Energy Regulator	[redacted]
Sept, 2014	- Added the Corporate Statement on Asset Integrity Management	[redacted]
Mar to Dec, 2014	- Document reformat and update: • Moved Table of Contents and Amendment Record section to front of binder • Moved Forms and Guidelines (purple tab) section to follow Emergency Response Tool Box (red tab) section • Added secondary Table of Contents / separate page numbering for Tool Box and Forms and Guidelines sections. • Added CommAlert Standard Operating Procedures (SOP) form; to be used for reference only • Created and added new Staging Area Log and Demobilization Checkout Form • Replaced Canadian Natural's old "10 Steps" and Roles and Responsibilities diagram with new Incident Command Flowchart where required • Added Canadian Natural's All Hazards Incident Command Flowchart • Added Canadian Natural's ERP Activation Requirements • Added Emergency Management BC's (EMBC) new Incident Classification Matrix • Updated all acronyms where applicable • Updated / added Roles to correspond with new Incident Command Flowchart • Deleted redundant Guidelines and Forms in each Role section • Updated Government Roles section • Changed Canadian Natural minimum EPZ to 100 m • Updated Shelter-In-Place procedures as per CAPP Emergency Shelter-In-Place Instructions • Updated Telephone Caller Scripts • Included EMBC Ignition Criteria • Updated Emergency Contacts section • Created separate Oil Spill Services Contacts tab and incorporated oil spill contact information for Saskatchewan • Moved Exercise Tracking section to become last section of Corporate ERP; renamed "Manual Maintenance and Exercise Records"	[redacted]
Mar, 2015	- Minor typographic corrections - Inclusion of Canadian Natural 24 hour emergency number in various locations - Inclusion of AER Slave Lake Field Centre and contact information in Government Emergency Contacts section	[redacted]
Apr, 2015	- Added The Office of the Regulator of Oil and Gas Operations contact information for the Northwest Territories provincial government where applicable - Added Northwest Territories RCMP contact information	[redacted]

AMENDMENT RECORD

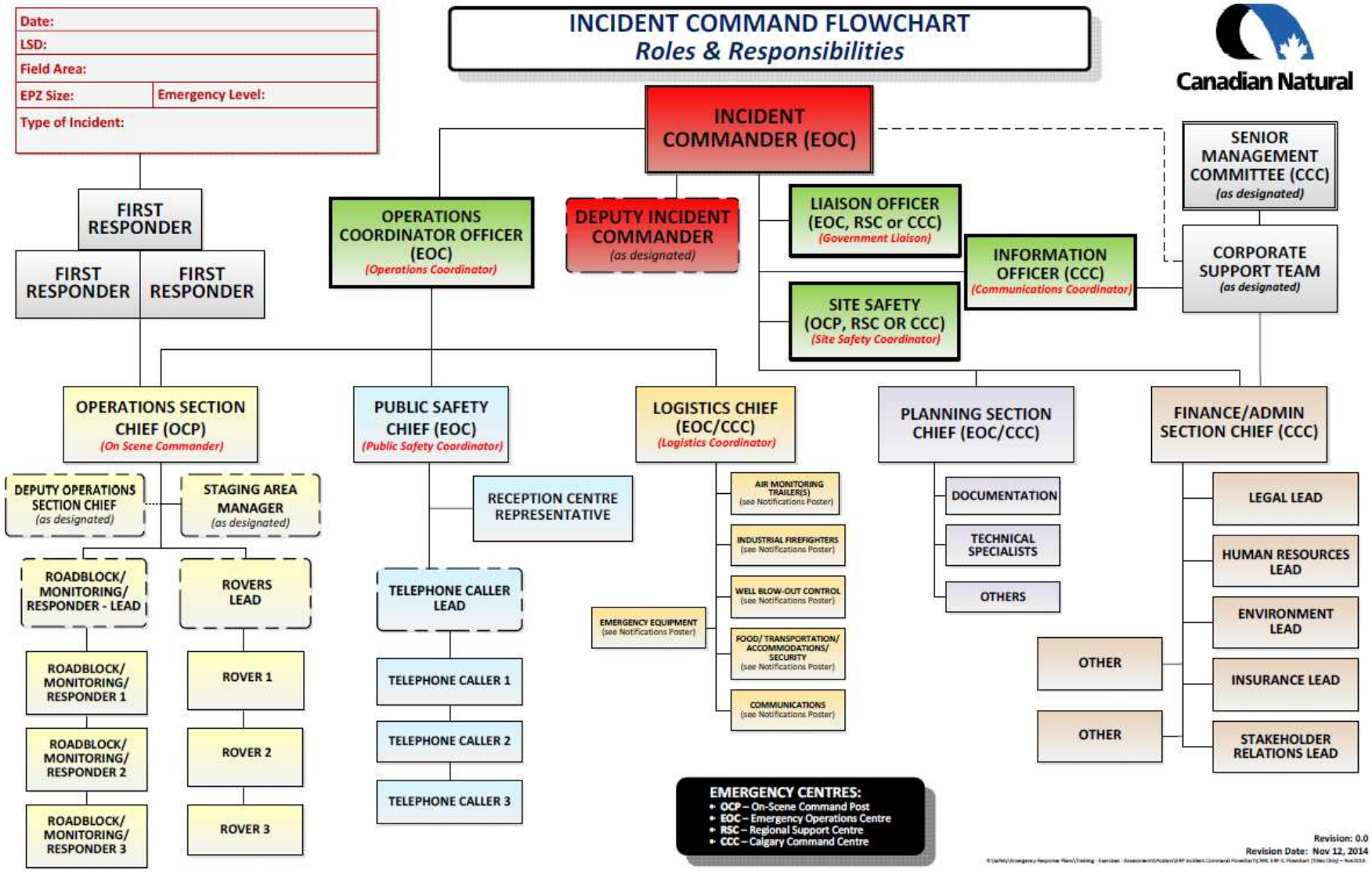
Date	Details	Amended By
Apr, 2015	- Updated National Energy Board (NEB) and Transportation Safety Board (TSB) information as per NEB regulatory update instructions dated March 25, 2015	[redacted]
Apr, 2016	Annual update including: - Minor revisions - Updated section Federal Agencies C) Indian and Northern Affairs Canada (page 5-42) - Updated Emergency Contacts – Calgary - Updated Emergency Contacts – Field - Updated various Government Emergency Contacts - Updated various Contract Services	[redacted]

[redacted]

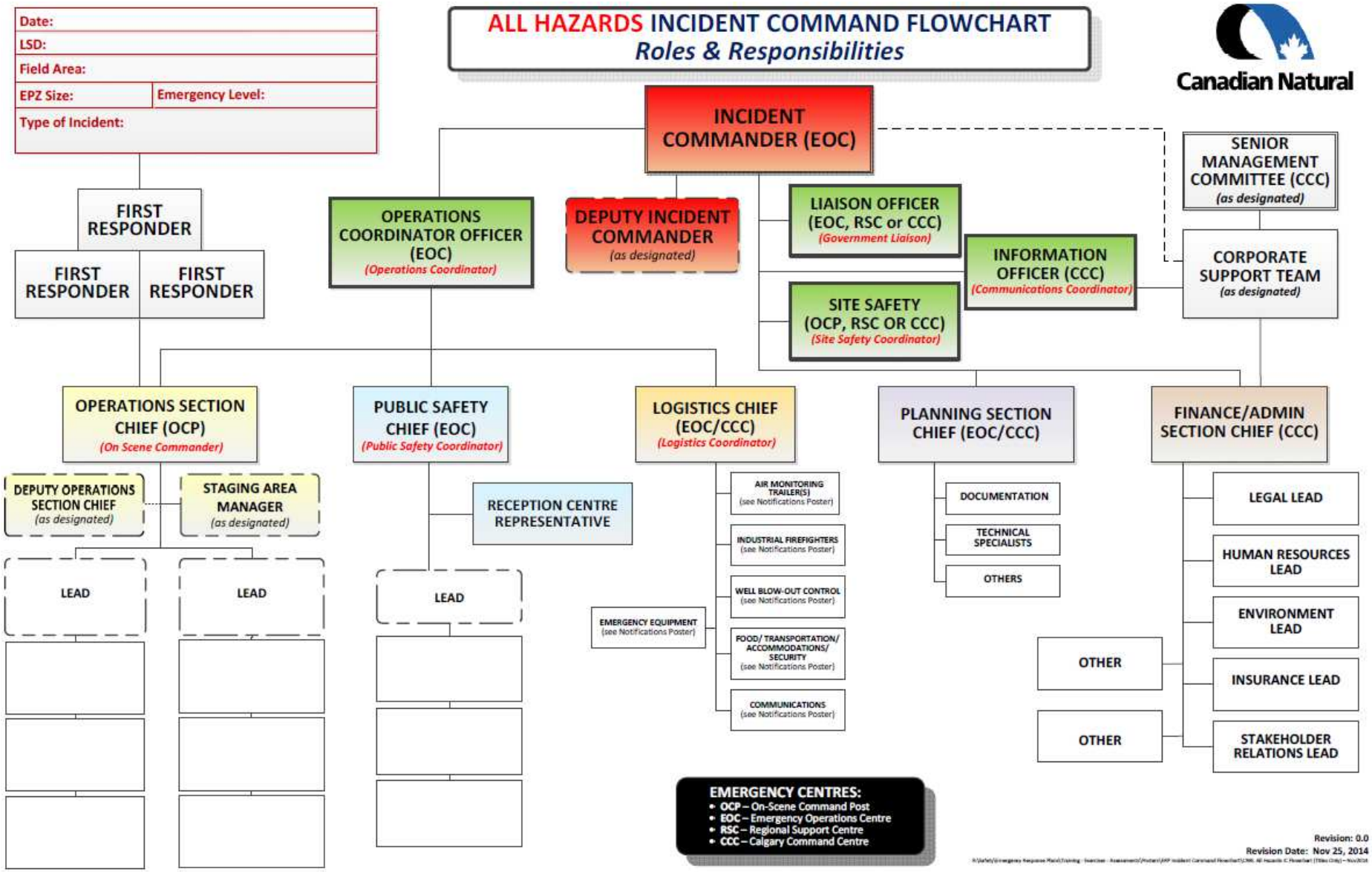
"10" STEPS FOR EMERGENCY RESPONSE & INCIDENT COMMAND FLOWCHART

"10 STEPS" FOR EMERGENCY RESPONSE

1. Initial Contact Regarding Problem
2. Assess the Situation
3. Classify the Emergency Level
4. Activate the Emergency Response Plan
5. Define the Emergency Planning Zone
6. Decide on Public Protection Measures
7. Make External (Government) Notifications
8. Activate Personnel & Equipment
9. Respond & Control the Emergency
10. Stand Down



ALL HAZARDS INCIDENT COMMAND FLOWCHART



FIRST RESPONDER'S GUIDE

GAS RELEASE

- ☐ Do not rush in – remain calm.
- ☐ Monitor for H_2S and LEL - H_2S gas is heavier than air and can collect in low lying areas.
- ☐ Be aware of changing weather conditions, i.e. wind direction.
- ☐ Wait for back-up.
- ☐ Protect yourself first - don any required personal protective equipment.
- ☐ Only attempt rescue of persons when safe to do so – don't become a second victim.

LPG/PROPANE RELEASE

- ☐ Evacuate everyone upwind and out of the path of the vapour.
- ☐ Request assistance from local emergency services if required.
- ☐ Call LPG ERC Corp for advice/assistance if required (for bullet or large vessel storage containers).
  LPG ERC Emergency Number: 1-800-265-0212
  ERAP No.: ERP2-0010-140
- ☐ Do not rush in – remain calm.
- ☐ Eliminate any ignition sources. Vapours may travel considerable distance to a source of ignition and flash back.
- ☐ Be aware of the smell of propane and that it can spread along the ground and collect in low or confined areas.
- ☐ Monitor for LEL.
- ☐ Assess for a **BLEVE** situation (Boiling Liquid Expanding Vapour Explosion). If the vapour space of a vessel becomes overheated, the tank may explode – **EXTREME DANGER**. Warning of increased pressure may be noted by the increase in volume of fire or noise level of the relief valve. **THIS IS A SIGNAL TO CLEAR THE IMMEDIATE AREA. EVACUATE IMMEDIATELY TO A MINIMUM OF 1600 METERS.**
- ☐ Discuss any action plan with your supervisor. If life safety is assured, take immediate action to gain control.
- ☐ Protect yourself first – don any required personal protective equipment.

- **Propane Leakage, Without Fire**

- If escaping propane is not on fire, close any valve available that can stop the flow of gas. Small lines, such as copper tubing, could be flattened or crimped with pliers to stop the flow **only** if the procedure can be done safely.
- Make sure leak area is well ventilated to prevent air concentrations from reaching a lower flammable limit.
- Water spray is effective in dispersing propane vapour. If available, it should be used as soon as possible directing the spray stream across the normal vapour path and dispersing the vapour. When handling the hose, avoid entering the propane vapour cloud and keep low behind the spray to be protected from radiant heat if the vapour should unexpectedly ignite.
- In some instances of leakage from a tank or truck without fire, it may be desirable to move the tank or truck to a more remote area such as an open field away from a source of ignition. Consult with LPG ERC Corp.

- **Propane Leakage, With Fire**

- Assess for **BLEVE** potential – **EXTREME DANGER.**
- Discuss any action plan with your supervisor. If life safety assured, take immediate action to gain control.
- Apply water to vapour space of the tank to keep the shell cool.
- Warning of increased pressure may be noted by the increase in volume of fire or noise level of the relief valve. **THIS SHOULD BE TAKEN AS A SIGNAL TO CLEAR THE IMMEDIATE AREA. EVACUATE TO A MINIMUM OF 1600 METERS.**
- For small tanks, when there is propane leakage with fire, the primary point to remember is **FIRST CONTROL THE LEAK, AND THEN PUT OUT THE FIRE. DO NOT EXTINGUISH UNLESS FUEL FEEDING THE FIRE CAN BE SHUT OFF.** Explosive re-ignition may occur. If it is necessary to approach the tank to shut off the fuel source, always approach the tank from the sides, never the ends.
- If the escaping gas is on fire, immediately apply water to all tank surfaces that are exposed to heat. Concentrate on piping and metal surfaces of the vessel or adjoining vessels or combustible surfaces exposed to flame or intense radiant heat.
- Dry chemical fire extinguishers are effective in fighting small propane fires – direct toward the point of vapour discharge.

FIRE / EXPLOSION

- ☐ Assume danger. Do not rush in – remain calm.
- ☐ Monitor for toxic gases and LEL.
- ☐ Attempt to identify fuel, heat and oxygen sources.
- ☐ **If fire has the potential to impinge on pressurized vessels, assess the potential for a BLEVE (Boiling Liquid Expanding Vapour Explosion).** Refer to the LPG/Propane Release info on this card.
- ☐ Look for any subsequent hazards of the fire/explosion – falling debris, structure failures, secondary fires, etc.
- ☐ Assess escape routes.
- ☐ Discuss any action plans with your supervisor. If life safety is assured, take immediate action to gain control.
- ☐ Protect yourself first – don any required personal protective equipment.
- ☐ If fire is unable to be brought under control **immediately**, ESD the facility and retreat to a safe area.

Remember the fire triangle:

Remove the fuel - shut off any fuel sources.
Remove the oxygen – if possible use chemicals, foam, dry powder.
Remove the heat – eliminate any ignition sources, cool equipment tanks, structures, shut off power, shut off heaters.

- ☐ Do not attempt to fight a fire unless you understand the hazards and are familiar with the available fire fighting equipment. Be aware that a typical hand-held fire extinguisher (30 lbs.) should only be used for very small fires – hand held extinguishers have a very limited time and range capacity.
- ☐ Do not attempt to extinguish an electrical fire with water.
- ☐ If a fire is approaching or impinging on a pressurized container (e.g. LPG bullet) assess for a **BLEVE** situation (Boiling Liquid Expanding Vapour Explosion). If the vapour space of a vessel becomes overheated, the tank may explode – **EXTREME DANGER**. Warning of increased pressure may be noted by the increase in volume of fire or noise level of the relief valve. **THIS IS A SIGNAL TO CLEAR THE IMMEDIATE AREA. EVACUATE IMMEDIATELY TO A MINIMUM OF 1600 METERS.**

CONFINED SPACE RESCUE

- ☐ Do not rush in – remain calm – do not become a second victim.
- ☐ Monitor for toxic gases (e.g. H_2S) and LEL.
- ☐ Attempt to communicate with the victim without entering the confined space.
- ☐ Confirm all sources of energy (i.e. electricity, steam, gas, process fluids) are isolated from the confined space.
- ☐ Protect yourself first - don any required personal protective equipment and only enter the area when safe to do so.
- ☐ Remove victim to a safe area and use first aid or revival as required.

ELECTRICAL CONTACT

- ☐ Alert others and evacuate the area.
- ☐ Do not rush in – remain calm.
- ☐ Treat all electrical equipment as live until you can confirm otherwise.
- ☐ Protect yourself first - don personal protective equipment
- ☐ Do not approach a victim of an electrical incident until the electrical source is isolated. Don't become a second victim. If the person is still in contact with the electrical source, touching the person may pass the current through to you. If the source cannot be turned off, move the source away from both you and the injured person using a dry, non-conducting object made of cardboard, plastic or wood.
- ☐ If safe to do so, remove the victim to a safe area and use first aid or revival as required.
- ☐ Apply first aid if required:
  - check for signs of circulation (breathing, coughing or movement). If absent, begin CPR immediately
  - prevent shock – lay the person down with the head slightly lower than the trunk if possible, and the legs elevated
  - look for both an entrance and exit wound
  - cover the affected areas with a clean cloth; don't use a blanket or towel if possible as loose fibres can stick.

COLLAPSE OF STRUCTURES OR EQUIPMENT

- ☐ Assume danger - do not rush in – remain calm.
- ☐ Inspect the scene from a safe distance.
- ☐ Be aware of physical hazards created by the situation such as falling debris, secondary structural failure, blocked access/egress, fire, explosion, etc.
- ☐ Protect yourself first - don any required personal protective equipment.
- ☐ Only enter the area if your life safety is assured.
- ☐ Remove any victims to a safe area and use first aid or revival as required.
- ☐ If operations response is required, do so in accordance with safe work practices and as directed by your supervisor.
- ☐ Request heavy rescue assistance if required.

SPILLS

- ☐ Monitor for toxic gases (e.g. H_2S) and LEL.
- ☐ Determine the potential hazards of the spilled product; refer to product MSDS sheets if necessary.
- ☐ Assess the area for sloping and banking.
- ☐ Assess if the spill will affect a watercourse; if so discuss calling Western Canada Spill Services with your supervisor.
- ☐ Protect yourself first - don any required personal protective equipment.
- ☐ Determine the source of the spill.
- ☐ Contain the spill as per safe work practices; if the spill is not contained, initiate containment measures such as dikes, bell holes and trenches to limit the impact.

Note: Spills must be reported according to jurisdictional requirements. Refer to Canadian Natural's Spill Reporting Requirements.

SUSPICIOUS PACKAGE

- ☐ Assume danger – do not handle any suspicious package.
- ☐ If you have already handled the package, wash your hands.
- ☐ Do not attempt to move, remove or defuse the package.
- ☐ Ventilate the area if possible.
- ☐ Wait for professional assistance.

THREATENING PHONE CALL

IF YOU RECEIVE AN EXPLOSIVES THREAT:

- ☐ Listen carefully, both to the message the caller is giving and to voice characteristics:
  - voice: loud, soft, familiar
  - speech: fast, slow, slurred, etc.
  - diction: good, nasal, lisp, stutter, etc.
  - manner: calm, rude, emotional, etc.
  - background noises: traffic, other voices, etc.
  - was caller familiar with company facilities or employees
- ☐ Be calm and courteous and do not interrupt – try to draw the caller into conversation or into talking as long as possible; if possible have someone call police while you are on the line.
- ☐ Get as much information as possible.
- ☐ Immediately relay information to your Supervisor or the Canadian Natural Emergency Number 1-888-878-3700.

Questions to Ask:

- What time will the explosion happen?
- What does the device look like?
- What kind of bomb is it?
- Where are you calling from?
- Why was the explosive planted?

HEART ATTACK

Signs and Symptoms:
- squeezing chest pain
- problems breathing
- abdominal or back pain (more common in women)
- cold, sweaty skin
- skin that is bluish or paler than normal
- nausea and vomiting
- denial
- jaw pain

First Aid Actions:
- Seek immediate medical attention – call emergency services or if not practical, transport.
- Place victim in position of comfort.
- Reassure the victim that help is on the way.
- Loosen constricting clothing.
- Keep victim quiet but avoid physical restraint.

UNRESPONSIVENESS

First Aid Actions:
- Tap or gently shake victim. Shout "ARE YOU OK?"
- If a head or neck injury is suspected, only move the victim if absolutely necessary.
- If no response – roll victim towards you on their back.
- Open the airway by tilting the head backward.
- Check for normal breathing
  - look for chest movement
  - listen for breathing
  - feel for breath on your cheek
- If victim is not breathing, use an Automated External Defibrillator if available, see section on AEDs on this card.
- If AED is not available begin CPR – see ABC's of CPR on this card.
- If victim is breathing but injuries are apparent – DO NOT MOVE THE VICTIM.
- If victim is unresponsive and breathing with no head or neck injuries, put victim in the recovery position.

The mouth is downward so that fluid can drain from the airway; the chin is well up to keep the epiglottis open. Arms and legs are locked so as to stabilize the position of the victim.

ABC'S OF CPR

A. AIRWAY
- Open the airway by tilting the head backward (head tilt-chin lift).

B. RESCUE BREATHING
- Check for normal breathing (no more than 10 seconds); look for chest movement – listen for breathing – feel for breath on your cheek.
- If not breathing, begin rescue breathing:
  - keep head back
  - pinch nose shut
  - place mouth over victim's
  - give two slow breaths – give each breath over one second; the correct amount of air for each breath is the amount that causes the chest to rise
  - begin chest compressions

C. CIRCULATION (CPR)
- Place victim face up on a hard, flat surface.
- Place both hands – one of top of the other – in the center of the chest, right between the nipples.
- Press straight down to compress chest 1-1/2" – 2" at a rate of 100 times per minute. After every 30 compressions give 2 slow breaths – each breath delivered over one second.
- Reassess victim after 2 minutes looking for signs of life. If no signs of life, continue until AED arrives, victim begins to move or emergency personnel take over care.

AED – AUTOMATED EXTERNAL DEFIBRILLATOR
- Remove any body piercings, metal necklaces or bracelets and bras (metal underwire) to reduce interference or arcing and check for puddles or water near the person who is unconscious.
- Turn on the AED's power – most units will give instruction on the unit.
- Expose the chest. If the person's chest is wet, dry it.
- Apply the pads to the person's chest – place one pad on the right center of the person's chest above the nipple. Place the other pad slightly below the other nipple and to the left side of the ribcage.
- The unit will tell you when to deliver the shock.
- Start or resume CPR until emergency medical help arrives or until the person begins to move.

COLD INJURIES

Hypothermia

Signs and Symptoms:
- shivering
- slurred speech
- abnormally slow breathing
- cold, pale skin
- loss of coordination
- fatigue, lethargy or apathy
- confusion or memory loss

First Aid Actions:
- Move the person out of the cold – if not possible to move the person to warmth, protect the person from the wind, cover the head and insulate the body from the cold ground.
- Remove any wet clothing.
- Don't apply direct heat such as hot water, a heating pad or heating lamp.
- Apply warm compresses to the center of the body – head, neck, chest wall and groin.
- Don't attempt to warm arms and legs – heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain causing the core body temperature to drop.
- Don't massage or rub the person.
- Monitor breathing – if breathing stops apply CPR.

Frostbite

Signs and Symptoms:
- Most common areas to be affected are hands, feet, nose and ears.
- Skin may look white or grayish-yellow, is very cold and has a hard or waxy feel – may also itch, burn or feel numb.
- Severe or deep frostbite can cause blistering and hardening – as the area thaws, the flesh becomes red and painful.

First Aid Actions:
- Protect the skin from further exposure.
- Don't rub the affected areas.
- Gradually warm the frostbitten areas – don't use direct heat.
- Place hands and feet in warm (not hot) water.
- Don't walk on frostbitten feet or toes if possible.
- If numbness or sustained pain remains during warming or if blisters develop, immediately seek medical attention.

HEAT INJURIES

Burns

1st Degree: reddened skin and extremely painful
2nd Degree: reddened, swollen skin and blisters
3rd Degree: white/charred, dry/leathery skin with little or no pain
- Never open blisters.
- Never apply medications, ointments or greasy substances to burn area.

First Aid Actions:
- Cut away any clothing stuck to burn – do not tear away.
- Cool burned area with water until the burning or pain stops.
- If a large area of the body is burned, do not attempt to cool as it may lower body temperature.
- Loosely bandage or cover burn with sterile, dry, non-stick dressing.
- Cover victim with clean sheet or blanket to keep warm.
- Elevate burned area if possible.

Chemical Burns
- Brush off dry chemicals and remove contaminated clothing.
- Wash area with soap and water.
- Cover lightly with clean dressing.

Electrical Burns
- Look for both an entrance and exit wound.
- Cover lightly with clean cloth.

Heat Stroke

Signs and Symptoms:
- high body temperature
- hot/flushed/dry skin

First Aid Actions:
- Remove victim to cool area.
- Decrease body temperature by sponging with cool water and applying ice packs to the neck, armpits and groin.
- Seek medical attention.

Heat Exhaustion

Signs and Symptoms:
- normal body temperature
- wet clammy skin

First Aid Actions:
- Remove victim to cool area.
- Loosen constrictive clothing and apply cool cloths.
- If conscious, give fluids.

DIABETIC EMERGENCY

Caused by decreased insulin production or an inability of the body to use insulin properly and an imbalance in a person's sugar and insulin levels

Signs and Symptoms:
- Feeling or looking ill
- Fever
- Dizziness, confusion, drowsiness or unconsciousness
- Pale, sweaty appearance
- Rapid respirations and pulse
- Irritability
- Abdominal pain, nausea and vomiting

First Aid Actions:
- If victim is conscious, assist them in drinking something sweet, e.g. a drink sweetened with sugar.
- Never give anything by mouth to an unconscious victim.

BLEEDING

Internal Bleeding

Signs and Symptoms:
- Bruises or abrasions of the skin
- Edema or swelling
- Black-brown vomit
- Coughed up blood
- Anxiety or restlessness
- Rapid, weak pulse
- Nausea and vomiting
- Altered level of consciousness

First Aid Actions:
- Seek medical attention.
- Lay victim down and elevate legs 12" if leg is not broken.
- Cover the victim with a blanket.
- Do not give victim anything to eat or drink.

External Bleeding
- Use latex glove if available.
- Place dressing over the wound – apply direct pressure.
- If possible, elevate body part above the heart level.

Impaled Object
- Do not remove the object – stabilize as best as possible.
- Bandage around the object to control bleeding.

1.0 INTRODUCTION

1.1 FOREWORD

Canadian Natural operates and maintains facilities (wells, pipelines and processing facilities) with the utmost of safety in mind. As a result, the possibility of an emergency occurring is extremely remote. Nevertheless, Canadian Natural has an emergency management program in place to ensure the safe and coordinated response to incidents that may unexpectedly occur. This manual, the Corporate Emergency Response Plan (ERP), is one component of Canadian Natural's Emergency Management Program.

1.2 PURPOSE

The purpose of an ERP is to direct and coordinate the responses of Canadian Natural personnel in their actions to protect personnel, public, environment and / or property. Canadian Natural's Corporate ERP manual uses a version of the Incident Command System (ICS) that has been modified to fit Canadian Natural's requirements. Site-Specific ERPs have also been prepared for certain sites, to be used in conjunction with the Corporate ERP. These plans describe the safety precautions, emergency actions and procedures that will be implemented if an incident (or event) occurs, that causes or creates the potential for a hazardous situation.

1.3 SCOPE

This manual describes the procedures for Canadian Natural's response to emergency situations. Examples of emergencies that may require implementation of this plan are:

- uncontrolled hydrocarbon release from wells, pipelines or facilities
- H_2S release
- fire or explosion
- serious injury or fatality
- natural disaster / environmental emergency
- security breach / telephone threat
- other unplanned event that has the potential to cause harm or damage property

1.4 EMERGENCY MANAGEMENT PROGRAM

The Emergency Response Plan (ERP) is only one component of Canadian Natural's Emergency Management Program. The program encompasses the following:

1. **Risk Mitigation/Prevention:** Process safety is ensured through engineering design and integrity programs, along with adherence to regulations, codes of practice and industry best practices. Safe operations of all assets through the use of a comprehensive safety management system are applied by all employees and contractors of Canadian Natural.
2. **Preparedness:** Hazard and risk assessments are used to identify areas of concern. Emergency Planning Zones (EPZs) are calculated using methods governed by jurisdictional regulations. Surface developments in EPZs are determined and residents / businesses within these zones are contacted on an annual basis to address any changes to area operations and to gather current contact information. Resident information may also be submitted to the Calgary office on a real-time basis from field operations personnel as they become aware of changes. A 24-hour emergency call-in number is in place. Senior operations staff rotate through an on-call schedule to ensure immediate attention to calls that come into the emergency call-in

number. Emergency response training is conducted on an ongoing basis for new personnel and as a refresher for existing personnel. Table top exercises are held once per year and major exercises are conducted once every three years.

3. **Response** – The Emergency Response Plan (ERP) is a guide used to protect persons, the environment and Canadian Natural property. A "10 Step Process" has been developed by Canadian Natural and is used to ensure that all the necessary and appropriate actions are taken to swiftly resolve emergency situations, protect the public and workers and mitigate damage to the environment and property.

4. **Recovery** – Incidents are investigated and a report is prepared. Remediation, if necessary, is implemented as soon as possible. Learnings are shared within the company and significant learnings are shared with industry.

1.5 CORPORATE POLICIES

The Emergency Management Program is guided by and is under the umbrella of the following Canadian Natural corporate policies:

- Corporate Statement on Health and Safety
- Corporate Statement on Environmental Protection
- Corporate Statement on Asset Integrity Management
- Corporate Mission Statement

A copy of these statements follow.

CORPORATE STATEMENT ON HEALTH & SAFETY

Canadian Natural Resources Limited (Canadian Natural) is committed to conducting its operations in a manner that will protect the Health and Safety of their employees, contractors and the public. With the goal of "No Harm to People – No Safety Incidents" in the workplace, Canadian Natural will:

- Integrate Health and Safety into all aspects of Canadian Natural operations;
- Comply with government regulations, industry guidelines, best management practices and company policies and procedures in the planning, design and operation of Canadian Natural wells, facilities and equipment;
- Provide appropriate training and equipment to Canadian Natural employees, enhancing their ability to recognize hazards and minimize risk during company operations;
- Require contractors working for Canadian Natural to be adequately supervised, trained and competent in the duties they perform; and
- Provide prompt and effective response to any emergency situation.

Managers and supervisors are responsible for identifying safety needs, communicating safety hazards, investigating hazardous conditions and accidents, providing training, and ensuring equipment is properly maintained. They are responsible to respond to safety concerns raised by employees, contractors and the public.

Employees share the responsibility to work in a manner that will safeguard themselves with equal concern for co-workers, contractors and the public. They are responsible to identify and mitigate hazards, refuse and report work that is unsafe.

Canadian Natural's management is committed to achieving Safety Excellence through continuous improvement. Annual safety performance objectives and targets are tracked and corporate status reports will be presented regularly to the management and Board of Directors.

Steve Laut
President

Tim McKay
Chief Operating Officer

CORPORATE STATEMENT ON ENVIRONMENTAL PROTECTION

Environmental protection is a fundamental value of Canadian Natural Resources Limited (Canadian Natural). The Corporation recognizes that every employee and contractor has a vital role to play in achieving environmental protection. The company's management will lead in the implementation of this policy. Canadian Natural's management commitment will be incorporated into business activities through the following guiding principles:

- Ensure all employees and others engaged on Canadian Natural's behalf are aware of the need and informed of the requirements to protect the environment;
- Determine, evaluate and mitigate the environmental impacts of Canadian Natural's business during project planning, exploration, drilling, construction, operations and decommissioning;
- Communicate with members of the public regarding Canadian Natural activities;
- Ensure that Canadian Natural operations comply with government regulations, industry guidelines and company policies and procedures concerning the protection of the environment and public;
- Ensure appropriate waste and emission management programs are developed and implemented; and
- Use energy and other resources efficiently at Canadian Natural operations.

Canadian Natural's management will be responsible for developing specific operational procedures and standards that are consistent with this policy and are accountable for the maintenance, regular review, and interpretation of this policy. Canadian Natural expects its suppliers, partners and business associates to have compatible environmental procedures and values.

Corporate status reports will be presented regularly to the Board of Directors.

Steve Laut
President

Tim McKay
Chief Operating Officer

CORPORATE STATEMENT ON ASSET INTEGRITY MANAGEMENT

Canadian Natural Resources Limited (Canadian Natural) is committed to high levels of asset integrity to ensure safe, efficient and effective operations. We conduct our operations in a manner that will evaluate, prevent and mitigate impacts to the integrity of our assets.

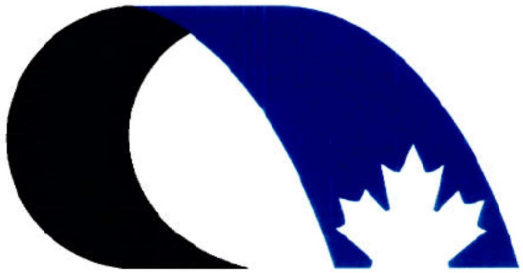
Canadian Natural's commitment to asset integrity management will be incorporated into business activities through the following guiding principles:

- Comply with all relevant legislation relating to asset integrity and regulatory requirements and, where laws and regulations are absent, apply all appropriate company standards;
- Ensure risk-based technical evaluations are completed and that appropriate procedures for mitigation are in place where potential impacts to asset integrity are identified;
- Ensure there is a program in place to monitor, audit and review our performance and seek continuous improvement by having clear objectives and targets;
- Provide ongoing training and development opportunities for employees and contractors where their work can impact asset integrity management programs;
- Ensure individuals performing critical tasks that impact asset integrity are competent to do so and that procedures are developed and followed;
- Ensure continuous improvement by effectively investigating near misses and incidents so that appropriate action can be taken to prevent them from recurring. Ensure that any learnings, including those from the experiences of others, are communicated to all parts of the organization;
- Ensure that our Asset Integrity Management System, including this policy, is maintained, followed and remains effective through regular review.

Canadian Natural's management is committed to achieving continual improvement in asset integrity performance through annual objectives and targets. Performance is tracked and corporate status reports will be presented regularly to management and the Board of Directors.

Steve Laut
President

Tim McKay
Chief Operating Officer



Canadian Natural

Corporate Mission Statement

"To develop people to work together to create value for the Company's shareholders by doing it right with fun and integrity."

2.0 EMERGENCIES – PREVENTION, ACTION AND FOLLOW-UP

An emergency can be defined as an unplanned occurrence that causes or creates the potential for situations such as fatalities, serious injuries, danger to the public, significant environmental impacts or major loss or damage to Canadian Natural property.

2.1 EMERGENCY PREVENTION AND DETECTION

PREVENTION

Process safety is achieved through engineering design and integrity programs, along with adherence to regulations, codes of practice and industry best practices. Canadian Natural maintains safe operations of their assets through the use of a comprehensive safety management system that applies to all employees and contractors of Canadian Natural.

DETECTION

Early detection can be crucial in minimizing the severity of an incident. Canadian Natural has a number of systems that can provide early warnings. These systems may include:

Emergency Shutdown Devices – Emergency Shutdown (ESD) valves isolate facilities or sections of pipeline to minimize releases. Inlet and sales ESD valves isolate the facilities from the field. In an emergency situation, plant ESD valves depressurize the facilities. Some producing wells are equipped with ESD valves that can be actuated by pressure and low flow, causing wells to shut in. ESD activation includes on-site and remote alarm activation.

Flare systems – Some facilities have flare systems that can incinerate toxic gases in an emergency situation.

24-Hour Emergency Phone Number – A 24-hour emergency number is posted at all facilities and pipeline crossings. Any operator, landowner or citizen can call to notify Canadian Natural of an emergency situation. On-call Canadian Natural personnel will take appropriate actions to manage the emergency.

Supervisory Control and Data Acquisition (SCADA) System – Electronic monitoring equipment on wells throughout the gathering system will transmit signals to a central control panel. SCADA systems trigger alarm and call-out systems.

Alarm and Call-Out Process – System monitoring equipment throughout facilities will trigger an alarm to an answering service that will use a call-out system to notify applicable operators.

Aerial Surveillance – Pipelines may be surveyed on a regular basis to detect leaks.

Landowner Complaint System – Landowners with concerns, or who have identified potential problems, can call the facility directly or the 24-hour emergency number.

Operator Inspections – Operators regularly inspect pipelines, wells and facilities and will report any abnormality they detect.

24-Hour Manned Stations – Some Canadian Natural facilities are monitored 24 hours a day.

Gas Detection Equipment – Continuous H_2S monitoring equipment is strategically located at all sour facilities. Monitors are calibrated at regular intervals and are designed to activate a call-out procedure to operational personnel if H_2S levels are detected at the facility. If H_2S levels reach a predetermined level, the system is designed to activate the Emergency Shutdown (ESD) and shut down the facility.

Continuous combustible gas (Lower Explosive Limit - LEL) detectors are located strategically throughout oil and gas facilities. Monitors are calibrated at regular intervals and are also tied into a call-out procedure. They will activate an ESD and shut down the facility.

Canadian Natural personnel are equipped with personal H_2S / LEL monitors for early detection.

Fire Detection Equipment – An ultraviolet fire detection system, "Fire Eyes," may be installed throughout facilities.

2.2 EMERGENCY CLASSIFICATIONS / LEVELS / POSSIBLE RESPONSES (ALBERTA / SASKATCHEWAN / MANITOBA)

All incidents are classified as either an Alert or an emergency Level (Level 1, 2 or 3). Incidents that can be handled on-site through normal operating procedures are typically defined as Alerts, while those with a more complex resolution are usually defined as emergencies with associated Levels.

The following tables consider the risk, control, containment and impact on public safety and the environment to determine a classification:

EMERGENCY LEVEL CLASSIFICATIONS (ALBERTA / SASKATCHEWAN / MANITOBA)

Emergency levels will be declared based on the criteria below. The Incident Commander, in consultation with the Operations Coordinator Officer and the Operations Section Chief is responsible for determining the level of emergency. The Incident Commander must consult with the provincial authority or federal (National Energy Board – NEB) authority, before declaring the emergency level. When a situation improves, a decision will be made by the Incident Commander, in consultation with the provincial or federal authority, and the provincial and local disaster service authorities to reduce or call down the level of emergency. The Incident Commander will ensure the level change or stand down is communicated to all responders.

TABLE 1: CONSEQUENCE OF INCIDENT

Rank	Category	Example of Consequence in Category
1	Minor	• No worker injuries. • Nil or low media interest. • Liquid release contained on lease • Gas release impact on lease only
2	Moderate	• First aid treatment required for on-lease worker(s). • Local and possible regional media interest. • Liquid release not contained on lease. • Gas release impact has potential to extend beyond lease.
3	Major	• Worker(s) requires hospitalization. • Regional and national media interest. • Liquid release extends beyond lease – not contained. • Gas release impact extends beyond lease – public health/safety could be jeopardized.
4	Catastrophic	• Fatality. • National and international media interest. • Liquid release off lease not contained – potential for, or is, impacting water or sensitive terrain. • Gas release impact extends beyond lease – public health/safety jeopardized.

TABLE 2: LIKELIHOOD OF INCIDENT ESCALATING

(What is the likelihood that the incident will escalate, resulting in increased exposure to public health, safety or the environment?)

Rank	Descriptor	Description
1	Unlikely	The incident is contained or controlled and it is unlikely that the incident will escalate. There is no chance of additional hazards. Ongoing monitoring required.
2	Moderate	Control of the incident may have deteriorated but imminent control of the hazard by the licensee is probable. It is unlikely that the incident will further escalate.
3	Likely	Imminent and/or intermittent control of the incident is possible. The licensee has the capability of using internal and/or external resources to manage and bring the hazard under control in the near term.
4	Almost certain or currently occurring	The incident is uncontrolled and there is little chance that the licensee will be able to bring the hazard under control in the near term. The licensee will require assistance from outside parties to remedy the situation.

Sum the Rank from both of these columns to obtain the Risk Level and incident classification

TABLE 3: INCIDENT CLASSIFICATION

Risk Level		Assessment Result
Very low	**2 – 3**	Alert
Low	**4 – 5**	**Level 1 Emergency**
Medium	**6**	**Level 2 Emergency**
High	**7 – 8**	**Level 3 Emergency**

POSSIBLE RESPONSES FOR SPECIFIC INCIDENTS

(Alberta Energy Regulator (AER) Directive 71)

RESPONSES	Incident Classification			
	Alert	**Level 1**	**Level 2**	**Level 3**
Communications				
Internal	Discretionary, depending on licensee policy	Notification of off-site management	Notification of off-site management	Notification of off-site management
External Public	Courtesy at licensee discretion	Mandatory for individuals who have requested notification within the EPZ	Planned and instructive in accordance with the specific ERP	Planned and instructive in accordance with the specific ERP
Media	Reactive, as required	Reactive, as required	Proactive-media management to local or regional interest	Proactive-media management to national interest
Government	Reactive, as required. Notify AER if public or Media is contacted	Call AER's 24-Hour Response Line. Call local authority and RHA if public or media is contacted	Call AER's 24-Hour Response Line, local authority and RHA.	Call AER's 24-Hour Response Line, local authority and RHA
Actions				
Internal	On-site, as required by licensee	On-site, as required by licensee. Initial response undertaken in accordance with the site-specific or corporate-level ERP.	Predetermined public safety actions are underway. Corporate management team alerted and may be appropriately engaged to support on-scene responders	Full implementation of emergency management system
External	On-site, as required by licensee	On-site, as required by licensee	Potential for multi-agency (operator, municipal, provincial, or federal) response	Immediate multi-agency (operator, municipal, provincial, or federal) response
Resources				
Internal	Immediate and local. No additional personnel required	Establish what resources would be required	Limited supplemental resources or personnel required	Significant incremental resources required
External	None	Begin to establish resources that may be required	Possible assistance from government agencies and external support services, as required	Assistance from government agencies and external support services, as required

INCIDENT CLASSIFICATION MATRIX

Instructions: Start at the top and continue down until you check off any one box in both consequence and probability to determine the incident classification. *This matrix is required as an attachment upon submission of an incident through the Online Minor Incident Reporting System.*

TABLE 1. CONSEQUENCE RANKING

RANK	CONSEQUENCE (any one of the following)
4	☐Major on site equipment or infrastructure loss ☐Major act of violence, sabotage, or terrorism which impacts permit holder assets ☐Reportable liquid spill beyond site, uncontained and affecting environment ☐Gas release beyond site affecting public safety
3	☐Threats of violence, sabotage, or terrorism ☐Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property ☐HAZMAT worker exposure exceeding allowable ☐Major on site equipment failure
2	☐Major on site equipment damage ☐A security breach that has potential to impact people, property or the environment ☐Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property
1	☐Moderate on site equipment damage ☐A security breach that impacts oil and gas assets ☐Reportable liquid spill or gas release on location ☐**Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations
0	☐No consequential impacts

**** For this consequence criteria, a probability score of 2 or higher must be used.**

TABLE 2. PROBABILITY RANKING

RANK	PROBABILITY (any one of the following)
4	☐Uncontrolled, with control unlikely in near term
3	☐Escalation possible; under or imminent control
2	☐Escalation unlikely; controlled or likely imminent control
1	☐Escalation highly unlikely; controlled or imminent control
0	☐Will not escalate; no hazard; no monitoring required

TABLE 3. INCIDENT RISK SCORE AND CLASSIFICATION

CONSEQUENCE _____+ PROBABILITY _____= RISK SCORE _____ (this must be completed)

Risk Score	Assessment Result
Minor (1-2)	**Notification Only;** permit holder must notify the Commission online within 24 hours using the **Form A: Minor Incident Notification Form**. In addition to Form A, spills must also be reported to EMBC.
Moderate (3-4)	**Level-1 Emergency;** immediate notification (call EMBC)
Major (5-6)	**Level-2 Emergency;** immediate notification (call EMBC)
Serious (7-8)	**Level-3 Emergency;** immediate notification (call EMBC)

CONTINUED ON NEXT PAGE

Updated: 31-July-2014
Effective: 31-July-2014

SPILL REPORTING CRITERIA

Where the permit holder holds or maintains rights, the permit holder must report to the BC Oil and Gas Commission, all spills of materials as identified below:

- A spill or release of any amount of materials which impacts water ways
- Hydrocarbons; 100 litres where the hydrocarbon contains no toxic materials and does not impact water ways
- Produced/salt water; 200 litres where the fluid contains no toxic materials
- Fresh water; 10,000 litres
- Drilling or invert mud; 100 litres
- Sour Natural gas; 10Kg or 15 m3 by volume where operating pressure is >100 PSI
- Condensate; 100 litres
- Any fluid including hydrocarbons, drilling fluids, invert mud, effluent, emulsions, etc. which contain toxic substances; 25 litres

Please refer to the BC Environmental Management Act; Spill Reporting Regulation, Schedule "Reporting Levels for Certain Substances" for determining reportable spillage amounts of other substances:

OTHER REPORTABLE INCIDENTS

The Commission's Incident Risk Classification Matrix is designed to assist permit holders in determining which incidents must be reported. However, some incidents, which do occur, may not meet the criteria outlined in the Incident Classification Matrix but still require notification to the Commission as a minor notification. These include the following:

- Spills or release of hazardous substances which are not provincially regulated, such as radioactive substances;
- Major damage to oil and gas roads or road structures;
- Drilling kicks when any one of the following occur:
  - pit gain of 3 m^3 or greater
  - casing pressure 85% of MA
  - 50% out of hole when kicked
  - well taking fluid (LC)
  - associated spill
  - general situation deterioration, i.e. leaks, equipment failure, unable to circulate, etc.
- Pipeline incidents, such as spills during construction phase, exposed pipe caused by flooding, pipeline over pressure, failure (without release) of any pressure control or ESD device during operations
- Security related issues which are relatively minor; such information may be required for tracking and monitoring purposes only

• Updated: 31-July-2014
Effective: 31-July-2014

OGC Incident Classification Matrix

Consequence			Probability				
			4	3	2	1	0
			Uncontrolled, with control unlikely in near term	Escalation possible; under or imminent control	Escalation unlikely; controlled or likely imminent control	Escalation highly unlikely; controlled or imminent control	Will not escalate; no hazard; no monitoring required
	4	Major on site equipment or infrastructure loss Major act of violence, sabotage, or terrorism which impacts permit holder assets Reportable liquid spill beyond site, uncontained and affecting environment Gas release beyond site affecting public safety	**Level 3**	**Level 3**	**Level 2**	**Level 2**	**Level 1**
	3	Threats of violence, sabotage, or terrorism Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property HAZMAT worker exposure exceeding allowable Major on site equipment failure	**Level 3**	**Level 2**	**Level 2**	**Level 1**	**Level 1**
	2	Major on site equipment damage A security breach that has potential to impact people, property or the environment Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property	**Level 2**	**Level 2**	**Level 1**	**Level 1**	**Minor Notification Form**
	1	Moderate on site equipment damage A security breach that impacts oil and gas assets Reportable liquid spill or gas release on location ** Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations	**Level 2**	**Level 1**	**Level 1**	**Minor Notification Form**	**Minor Notification Form**
	0	No consequential impacts	**Level 1**	**Level 1**	**Minor Notification Form**	**Minor Notification Form**	**No notification Required**

** For this consequence criteria, a probability score of 2 or higher must be used.

2.3 EMERGENCY CLASSIFICATION LEVELS / ACTION PLAN (BRITISH COLUMBIA)

Emergency levels will be declared based on Emergency Management BC's (EMBC's) Incident Classification Matrix. The Incident Commander, in consultation with the Operations Coordinator Officer and the Operations Section Chief is responsible for determining the level of emergency. The Incident Commander must consult with the provincial authority or federal (National Energy Board – NEB) authority, before declaring the emergency level. When a situation improves, a decision will be made by the Incident Commander, in consultation with the provincial or federal authority, and the provincial and local disaster service authorities to reduce or call down the level of emergency. The Incident Commander will ensure the level change or stand down is communicated to all responders.

	Notification Only	Level 1	Level 2	Level 3
Action Plan	• Permit holder must notify the Commission online within 24 hours using the *Form A: Minor Incident Notification Form*. In addition to Form A, spills and leaks must also be reported to EMBC	• **Immediate notification (call EMBC)** • Alert all well site / facility personnel. Evaluate problem and initiate appropriate remedial action • Unnecessary personnel to leave the site • Notify company representative(s) • Alert mobile monitoring equipment and be ready for call-out or mobilize monitoring equipment if location is remote • In some cases, where there are large number of residents, notify or evacuate residents in accordance with site-specific plan • Prepare for evacuation in case of escalation of the situation.	• **Immediate notification (call EMBC)** • Ensure all level 1 actions are taking place • Initiate evacuation/sheltering of the Emergency Planning Zone (EPZ) • Set up roadblock to isolate the EPZ • Discuss issuance of a closure order with the EMBC's head office in Fort St. John • Send out monitoring crew; initiate mobile monitoring • Send company representative to reception Centre • Inform senior company personnel • Establish communications links to off-site control centre • Assemble ignition crew and ready ignition equipment in case of escalation of the situation	• **Immediate notification (call EMBC)** • Ensure all level 1 and level 2 actions are taking place • Mobile monitoring equipment in place • Ignite release if any of the ignition criteria are met • Expand EPZ as required

2.4 EMERGENCY CLASSIFICATION LEVELS / ACTION PLAN (NATIONAL ENERGY BOARD)

Emergency levels will be declared based on the criteria below. The Incident Commander, in consultation with the Operations Coordinator Officer and the Operations Section Chief is responsible for determining the level of emergency. The Incident Commander must consult with the provincial authority or federal (National Energy Board – NEB) authority, before declaring the emergency level. When a situation improves, a decision will be made by the Incident Commander, in consultation with the provincial or federal authority, and the provincial and local disaster service authorities to reduce or call down the level of emergency. The Incident Commander will ensure the level change or stand down is communicated to all responders

Condition	Level I	Level II	Level III
Threat or Injury to People	No immediate threat to the people	Some injury or threat to people	Serious injury or fatality and/or ongoing threat to the public
Containment within Company Property	No threat to company facility infrastructure. No effects outside company property	Potential threat to company facility infrastructure. No immediate threat outside company property but the potential exists to extend beyond boundaries	Ongoing or imminent threat to facility infrastructure. Effects extend beyond company boundaries
Control of Product	Control of released product is completed or pending	Imminent control of released product is likely but not yet established	Uncontrolled release of product continuing and control is not imminent
Environmental Effects	Little or no media interest	Local / regional media interest	National / regional media interest
Response	Incident is handled by company	First responders and government agencies are likely to be directly involved	Immediate and significant government agency involvement
Potential to Escalate	Low potential to escalate	Moderate potential to escalate based on potential for fire, explosion, increased release of product or other hazard	High potential to escalate based on potential fire, explosion, increased release or other hazard

2.5 CANADIAN NATURAL'S EMERGENCY RESPONSE PLAN (ERP) ACTIVATION REQUIREMENTS

Following the determination of the emergency level, Canadian Natural Senior Management has established these directives to clarify when the activation of the ERP and other tools need to take place:

- Level 1 events / incidents, as noted below, require full activation of Canadian Natural's ERP, as well as use of the Incident Command Flowchart and Emergency Notification Details chart:
    - Release into a body of water
    - Impact to the public
    - Media involvement
    - Regulators request to release a Media Statement
- All events / incidents that can be classified as a Level 2 or greater, as defined by both the AB and BC Incident Classification Matrixes, require a full activation of Canadian Natural's ERP, as well as use of the Incident Command Flowchart and Emergency Notification Details chart.

2.6 POST INCIDENT ASSESSMENT

A debriefing meeting will be held with personnel involved in responding to incidents. If applicable, stress management counseling will be provided by qualified personnel to assist responders.

All incidents will be investigated and a report of findings will be prepared. A formal report will be provided to government agencies, as required and in accordance with applicable jurisdictional requirements. Learnings will be shared throughout the company. Significant learnings will be shared with industry.

3.0 PUBLIC PROTECTION MEASURES

Canadian Natural will initiate public protection measures for any emergency that occurs that has the potential to endanger the public. Any or all of the following public protection measures may be implemented:

- roadblocks
- evacuation
- shelter-in-place
- air monitoring
- ignition

The type of public protection measure employed will depend on the circumstances and severity of the incident.

3.1 EMERGENCY PLANNING ZONE (EPZ)

An EPZ is a priority area surrounding a well, pipeline or facility where immediate response actions are required in the event of an emergency. An EPZ helps to identify those members of the public at risk in the event of an emergency.

During any emergency, it is important to identify an EPZ as it will show:

- where to set up roadblocks
- which residents to shelter-in-place or evacuate
- the safest evacuation route
- where to place air monitoring personnel (for sour gas releases)

The general public within or immediately adjacent to the EPZ will be notified and advised to evacuate or shelter-in-place if a harmful release of H_2S occurs, or if a dangerous situation develops that may affect their safety.

EPZs for sour areas are determined using calculation methods governed by regulation and are reviewed on an annual basis. An EPZ will encompass the entire facility and gathering system; however during an emergency, only the EPZ surrounding the site of the incident will be activated.

3.1.1 IDENTIFYING EMERGENCY PLANNING ZONES (EPZ) DURING AN EMERGENCY

During an emergency, the Incident Commander, in consultation with the Public Safety Chief, Operations Coordinator Officer and the Operations Section Chief, will determine the EPZ applicable to the emergency based on the following:

- sour operations - the calculated EPZ radius from the Site Specific Emergency Response Plan (ERP) will be used; if there is not a calculated EPZ, 100 m will be used and increased as required
- Liquified Petroleum Gas (LPG) emergencies – the calculated EPZ radius from the Site Specific ERP will be used; if there is not a calculated EPZ, 100 m will be used and increased as required
- sweet operations or for emergencies other than a gas release, a 100 m radius will be used and increased as necessary to ensure public and worker safety

The EPZ may need to be increased based on the following considerations:

- current weather conditions
- terrain features, such as elevation changes
- any other factors that pose a risk

3.2 ISOLATION OF THE EPZ (ROADBLOCKS)

A. EPZ ISOLATION CRITERIA

- The Incident Commander, in consultation with the Operations Coordinator Officer and the Operations Section Chief, will determine the severity of the situation, and may adjust the size and location of the EPZ using emergency-specific information, including air monitoring data.
- Isolation of the EPZ is mandatory at a Level 2 emergency. At an Alert or Level 1, emergency access to the incident site should be controlled and the appropriate Emergency Response Plan (ERP) should be activated, if applicable (refer to Canadian Natural's Emergency Response Plan Activation guideline).

B. EPZ ISOLATION PROCEDURES

- The Operations Section Chief will initially designate the necessary personnel to secure all entrances into the hazard area and only allow access to authorized personnel (roadblocks must be used). All personnel who are allowed entry will be briefed on the existing conditions and must be equipped with the appropriate Personal Protective Equipment (PPE).
- The Incident Commander will ensure notification and consultation with appropriate regulatory authorities and the RCMP or local police
- It may be necessary to obtain a Fire Hazard (FH) order (issued by the provincial authority) or to declare a state of local emergency to restrict access to a designated area. A state of local emergency may be declared by the local authority should the incident escalate beyond the defined EPZ. In British Columbia, the Ministry of Transportation and Infrastructure or Emergency Management BC (EMBC) may order a road closure.
- It also may be necessary for NAV Canada to issue a Notice to Airmen (NOTAM) to advise pilots of restrictions in the airspace above the EPZ, or to close the airspace for a certain radius from the release thereby establishing a no-fly zone. NOTAMs or closure of airspace may be requested by the provincial authority at a Level 2 or 3 emergency.

3.3 AIR QUALITY MONITORING (HAZARDOUS GAS RELEASE)

A. AIR QUALITY MONITORING CRITERIA

Air quality monitoring is required to track and record the levels of H_2S, SO_2 and Lower Explosive Limits (LEL) during a sour gas release and following ignition of a release. Air quality monitoring is used to:

- determine roadblock locations
- track plumes
- determine whether evacuation and / or shelter-in-place criteria have been met, including beyond the Emergency Planning Zone (EPZ)
- determine concentrations in areas being evacuated to ensure that evacuation is safe
- determine if ignition criteria are met
- assist in determining when the emergency can be downgraded

The type and number of air monitors required is determined by the Operations Coordinator Officer and Public Safety Chief, in consultation with the Incident Commander, and will be dispatched by the Operations Coordinator Officer. Air monitoring requirements are based on site-specific information, including:

- access and egress points
- population density and proximity to urban density developments
- local conditions

Air monitoring readings for emergency situations will initially be taken and recorded by Canadian Natural response personnel; however stationary air monitoring units will be required as per section "C" below for ongoing situations.

B. AIR QUALITY MONITORING PROCEDURES

Air quality monitoring will occur downwind, with priority being directed to the nearest unevacuated residence or areas where people may be present. H_2S and SO_2 information will be recorded on an Air Quality Monitoring Record form and will be reported to the Operations Coordinator Officer. Monitored results will be made available to regulators (and the public, if required) on a regular basis throughout the emergency. A stationary air quality monitoring trailer may be necessary at the nearest urban density development for the duration of an emergency.

C. DISPATCHING REQUIREMENTS FOR MOBILE AIR QUALITY MONITORING EQUIPMENT

A mobile air quality monitoring unit (AMU), by regulatory definition, is a trailer unit that can measure in parts per billion. For a Level 1 emergency, an AMU must be called and put on stand-by. For a Level 2 or 3 emergency that may include air quality concerns (i.e.: H_2S release), the unit must be dispatched to the incident area to commence air quality monitoring downwind of the incident site at the nearest unevacuated residence. Once in place, the AMU will monitor for gases and record wind speed and direction. Contact will be maintained with the Operations Coordinator Officer and information relayed to the Incident Commander.

3.4 PUBLIC NOTIFICATION / SHELTER-IN-PLACE / EVACUATION / IGNITION

3.4.1 PUBLIC NOTIFICATION

For sour facilities, Canadian Natural has identified individuals and groups within an Emergency Planning Zone (EPZ) requiring notification during an incident. This list is included in Site-Specific Emergency Response Plans (ERPs) and includes residences (permanent, occasional, seasonal), schools, public facilities, other industrial operators, trappers / guides, forestry management areas, grazing leases and First Nations. Residents or groups considered "sensitive" or having "special needs" are identified. These residents will be notified at a Level 1 emergency so they may decide whether to voluntarily evacuate or indicate if assistance is needed (i.e.: residents without transportation, large groups requiring transportation or those who may require special procedures).

Notification to all others within the EPZ will begin no later than a Level 2 emergency. The general public outside the EPZ will be notified by local authorities, if the situation warrants, based on air monitoring.

Method of Notification

In the event of an emergency situation requiring notification, shelter-in-place or evacuation, Canadian Natural representatives will attempt to contact, by phone, all occupants in the EPZ who have provided a telephone number. If telephone attempts are unsuccessful, Canadian Natural personnel will be dispatched to evacuate those areas. A Resident Evacuation Notice identifying the time and date of the evacuation attempt will be posted at each dwelling checked. Aerial surveillance (helicopters or fixed wing aircraft) will be considered to sweep recreational areas and / or to look for trappers, guides, hunters, transients, etc., who could not be reached by telephone. If available, broadcast Media could be used to notify residents outside the EPZ, in conjunction with assistance from provincial and municipal agencies.

3.2.1 SHELTER-IN-PLACE

Shelter-In-Place is the practice of going or remaining safely indoors during an outdoor release of a hazardous substance. Shelter-In-Place has been demonstrated to be the most effective response during the first few hours of a substance release where the public would be at higher risk outdoors. Shelter-In-Place creates an indoor buffer to protect from higher (more toxic) concentrations that may exist outdoors. It is based on using a building that is not too drafty for typical Canadian winter weather conditions.

The goal of Shelter-In-Place is to reduce the movement of air into and out of the building until either the hazard has passed or other appropriate emergency actions can be taken, such as evacuation.

SHELTER-IN-PLACE CRITERIA

Shelter-In-Place must be considered the primary protective measure in any of the following circumstances:

- there is insufficient time or warning to safely evacuate the public that may be at risk
- residents are waiting for evacuation assistance
- the release will be of limited size and / or duration
- the location of a release has not been identified
- the public would be at higher risk if evacuated

By staying indoors, residents will be protected from any contaminated air outside until the problem is resolved.

SHELTER-IN-PLACE PROCEDURES [1]

If Shelter-In-Place is used for protection in the event of an emergency, the following instructions should be given:

- Immediately gather everyone indoors and stay there
- Close and lock all windows and outside doors
- Extinguish indoor wood burning fires
- Turn off appliances or equipment such as:
    - Bathroom and kitchen exhaust fans, built-in vacuum systems, clothes dryers, gas fireplaces, gas stoves
    - Heating ventilation and air conditioning (HVAC) systems for apartments, commercial or public facilities
    - Fans for heat recovery ventilators or energy recovery ventilators (HRV / ERV)
- Turn down furnace thermostats to the minimum setting and turn off air conditioners
- Leave all inside doors open
- Avoid using the telephone, except for emergencies, so that you can be contacted by company emergency response personnel
- If you are unable to follow these instructions,
    - Stay tuned to local radio and / or television station for possible information updates
    - Even if you see people outside**, DO NOT** leave until told it is safe to do so

3.4.3 EVACUATION

Although Shelter-In-Place is the preferred way of protecting residents, evacuation is an alternate protection measure if the public can be safely removed from an area during an emergency. Canadian Natural will advise residents to evacuate if the need arises; however the local authority or health authority has to declare a state of local emergency before mandatory evacuation can occur. If possible, evacuation of the EPZ will take place before a release of sour gas has the potential to affect people off-site or as soon as possible to avoid any exposure to H_2S. Canadian Natural will establish a Reception Centre if evacuation of the general public is required or for voluntary evacuations if members of the public have been notified of an incident and wish to leave.

The evacuation of the public outside of the EPZ may be required if the incident cannot be controlled or if H_2S or SO_2 concentrations exceed the allowable limits. The local authority, in conjunction with the regulatory authority, may assist with evacuation outside of the EPZ.

[1] *Emergency Response Planning: Shelter-In-Place Instructions, May 24, 2006 (CAPP)*

CRITERIA FOR PUBLIC NOTIFICATION / SHELTER-IN-PLACE / EVACUATION (ALBERTA / SASKATCHEWAN / MANITOBA)

FOR THE PUBLIC INSIDE THE EMERGENCY PLANNING ZONE (EPZ)

Level 1	Those residents who are "sensitive" due to a special need must be contacted and given an opportunity to evacuate if they choose to do so.
Level 2	All residents within the EPZ must be sheltered-in-place or evacuated, beginning with those in the immediate area and those downwind of the incident.
Level 3	All residents within the EPZ must be sheltered-in-place or evacuated, beginning with those in the immediate area and those downwind of the incident.

FOR THE PUBLIC IN UNEVACUATED AREAS

H_2S CONCENTRATIONS IN UNEVACUATED AREAS	**REQUIREMENT**
1 ppm - 10 ppm (3-minute average)	Individuals who requested notification so that they can voluntarily evacuate before any exposure to H_2S must be notified.
Above 10 ppm (3-minute average)	Local conditions must be assessed and all persons must be advised to evacuate or shelter.

SO_2 CONCENTRATIONS IN UNEVACUATED AREAS	**REQUIREMENT**
5 ppm (15-minute average) 1 ppm (3-hour average) 0.3 ppm (24-hour average)	Immediate evacuation of the area must take place.

FOR THE PUBLIC IN UNEVACUATED AREAS (BRITISH COLUMBIA)

H_2S CONCENTRATIONS IN UNEVACUATED AREAS	REQUIREMENT
1 ppm - 9 ppm	Individuals must be informed of the concentrations and advised to leave the area. All other individuals should consider leaving the area and seek medical advice if health symptoms develop.
10 ppm	Immediate evacuation of the area must take place or the release must be ignited.

SO_2 CONCENTRATIONS IN UNEVACUATED AREAS	REQUIREMENT
1 ppm	Voluntary.
2 ppm	Evacuation of the area should begin.
5 ppm	Mandatory evacuation of the area.

EVACUATION PROCEDURES

Evacuation of the public within the Emergency Planning Zone (EPZ) will be initiated no later than a Level 2 emergency. If the situation warrants whereby public safety may be in jeopardy and it is safe to do so, the evacuation procedures will be initiated immediately.

For an emergency that involves only a few residents, Canadian Natural will designate Telephone Callers to relay messages of notification, shelter-in-place or evacuation. If an emergency occurs that involves too many residents for Canadian Natural personnel to phone in a timely manner, an automated calling system will be activated. Also, if evacuation of an urban density development or urban centre is required, the local municipal authority may manage the evacuation process.

EPZ occupants will be evacuated in the following order:

1. Individuals located immediately downwind or adjacent to the incident site.
2. Individuals who have indicated they are sensitive or require assistance.
3. Individuals who cannot be contacted by telephone.

The Operations Coordinator Officer and Public Safety Chief, in consultation with the Incident Commander, will determine the severity of the situation, and may adjust the size and location of the EPZ using emergency specific information.

All residents will be asked to check in with a Canadian Natural representative at the designated Reception Centre and will be provided with temporary accommodations at local hotels or motels if required. After they have registered at the Reception Centre, they may proceed to a location of their choice. A Canadian Natural representative will record contact information and where the resident will be staying so that further information regarding the emergency can be relayed in a timely manner.

RETURN OF EVACUEES

Once the emergency is over, the decision to permit the return of persons to the area will be made by the Incident Commander in consultation with the Operations Coordinator Officer, the Public Safety Chief, the regulatory authority, and local and municipal disaster services authorities.

All persons previously requested to evacuate will be notified that the emergency condition no longer exists and that they may return. Canadian Natural will provide transportation and assistance where required along with instructions on how to claim for expenses incurred due to the emergency.

3.4.4 IGNITION

IGNITION CRITERIA

Canadian Natural will take immediate steps to prepare for ignition at the earliest signs of a well control problem to ensure there will be no delay. Ignition does not negate the need for continuing with evacuation. The decision-making authority to ignite a well is assigned to the Canadian Natural Operations Section Chief in consultation with the Incident Commander, Senior Management and the provincial or federal regulatory authority if time permits.

During a release of H_2S, the following should be assessed:

- Risk of exposure / injury to the public or response workers
- Proximity to residences, public facilities, towns or urban centers
- Status of evacuations
- Fire hazard after ignition in relation to adjacent forested or cropland areas
- Safety of ignition team (hazard area identification, protective gear)

Ignition of a sour gas release to the atmosphere must take place when one of the following conditions has been met and as soon as all personnel working at the site can be cleared to a safe distance:

- Although required, evacuation of the Emergency Planning Zone (EPZ) has not yet taken place.
- Monitoring results indicate H_2S concentrations in excess of 10 ppm over a 3-minute average (AB, SK, MB) or 15 ppm over 15 minutes (BC) in unevacuated parts of the EPZ. If monitored levels are declining, then the situation needs to be continuously assessed for ignition.
- Monitored H_2S concentrations exceed 1 ppm (1-hour average) in urban density developments.
- Monitoring is not taking place due to weather or other unforeseen circumstances.
- The release cannot be brought under control in the short term (the ignition decision will be made in consultation with the provincial or federal regulator).

Once any of the above criteria has been met, ignition must occur within 15 minutes of the decision to ignite.

IGNITION PROCEDURES

The following procedure is to be used as a guide for igniting the release:

- ❑ Consider notifying the local fire department, professional services, or having fire-fighting equipment or personnel available to address the potential hazard of a fire resulting from ignition.
- ❑ Account for all on-site personnel and locate to a safe upwind area.
- ❑ Form two (2) ignition teams, if possible. The ignition team must be certified in sour well ignition.
  - #1 Team (Primary) - Operations Section Chief and Designate
  - #2 Team (Secondary) - Two Designates
- ❑ Assemble the following ignition equipment:
  - flare gun and shells
  - self-contained breathing apparatus (SCBA)
  - explosive / Lower Explosive Limit (LEL) meter
  - lanyards and harness
  - fire retardant clothing, including gloves
  - ear protection
- ❑ The Operations Section Chief will conduct a briefing with the team members. Each person will wear SCBA, fire retardant clothing and ear protection.
- ❑ Establish an escape route before approaching.
- ❑ Use a safety line and remain in visual contact with each other at all times. The backup team (#2) will man the safety lines.
- ❑ Approach the release from the upwind side and using an LEL monitor, check that an explosive mixture does not exist in the immediate area.
- ❑ Ignition will be implemented from the maximum upwind range of the flare gun. Shells should be shot towards the release so that ignition will occur a reasonable distance from the release point.
- ❑ Firing of the flare gun should be done from a prone position or from behind a protective object. Fire the flare gun and ignite the release when at the correct range.
- ❑ If possible, remain on stand-by at the ignition site to re-ignite the release, if required.
  - **NOTE:** Ignition (burning of H_2S) will produce sulphur dioxide (SO_2). Monitor the area thoroughly for these gases prior to and after removing breathing apparatus.
- ❑ Contact the Operations Coordinator Officer to confirm ignition. Confirm that air quality monitoring of the Emergency Planning Zone (EPZ) for SO_2 is taking place.

4.0 COMMUNICATIONS PLAN

4.1 GOVERNMENT COMMUNICATION

In the event of an emergency, Canadian Natural will immediately contact all of the following:

- provincial authority (Alberta Energy Regulator - AER (AB) / Emergency Management BC - EMBC (BC) / Saskatchewan Ministry of Economy - ECON (SK) / Manitoba Emergency Measures Organization - EMO (MB))
- federal authority, if applicable (National Energy Board - NEB / Transportation Safety Board - TSB / NWT SPILL LINE)
- local municipal authority
- local police or RCMP
- Health Authority, if needed

For an NEB related incident, Canadian Natural should still make the appropriate calls to the provincial regulator.

Canadian Natural will maintain communication throughout the duration of the emergency by providing updates at regular intervals to all stakeholders.

4.2 PUBLIC COMMUNICATION

Canadian Natural personnel will contact and maintain communications with directly impacted members of the public to keep them informed of the situation and of actions being taken to protect their safety. These actions will be determined by the severity of the emergency and will include public protection measures such as Shelter-In-Place and / or evacuating occupants within and beyond the Emergency Planning Zone (EPZ).

Canadian Natural will also contact the public at the end of an emergency when public protection measures are no longer necessary.

4.2.1 PUBLIC INFORMATION PACKAGES AND QUESTIONNAIRES

Information packages are distributed to all residents, businesses, and public facilities in the EPZ during public consultation and provided to other specific external agencies after annual updates or initial creation of the Emergency Response Plan (ERP). The package describes the facilities covered by the ERP, identifies local potential hazards, and explains appropriate public protection measures and the procedures that would be implemented if an emergency occurs. The package also includes a map of the local area and Canadian Natural emergency contact telephone numbers. A resident can call at any time if they identify or discover a potential hazard or have any concerns or questions that need to be addressed.

Resident information is essential for effective communication during an emergency. A questionnaire is completed during the consultation process to ensure that accurate, up-to-date resident information is available. All information obtained from residents is confidential and would only be used in case of an emergency. This information is collected annually and identifies those residents who may require early notification and / or evacuation. The public information package also includes information on the potential health effects of H_2S and SO_2 as follows:

HEALTH EFFECTS OF A HYDROGEN SULPHIDE (H_2S) RELEASE

Hydrogen sulphide (H_2S) is a colourless gas found naturally in oil and gas formations and decaying organic matter at temperatures above -60^o C and can also be found in places such as silos and sewers. It is flammable, forming sulphur dioxide (SO_2) when burned. It will tend to disperse more slowly in sheltered, calm or low-lying areas and is extremely toxic.

At lower concentrations (20 to 50 ppm), H_2S has a DISTINCT ROTTEN EGG SMELL. At low levels H_2S irritates mucous membranes, causes headaches, dizziness, nausea and pulmonary edema (fluid in the lungs) with prolonged exposure.

At higher concentrations (500 to 1,000 ppm), H_2S KILLS THE SENSE OF SMELL and causes paralysis of the respiratory centre in the brain. BREATHING STOPS resulting in suffocation.

This gas is dangerous because it kills the sense of smell very quickly and one is not aware of the level of concentration that is present.

Concentration (ppm)	Effects of H_2S
0.01 - 0.3	Odour threshold
1 - 5	Moderate to strong offensive odour may create nausea, tearing of the eyes, headaches or loss of sleep upon prolonged exposure – effects are moderate
10	Ceiling limit (BC Workers Compensation Board)
20	Ceiling limit (AB Occupational Health & Safety)
20 to 50	Slight eye and lung irritation; may cause eye damage after several days of exposure and may cause digestive upset and loss of appetite
100	Eye and lung irritation
150 to 200	Kills sense of smell; severe eye and lung irritation
500	Serious damage to eyes within 30 minutes; respiratory malfunction in 2 to 15 minutes; unconsciousness and death within 4 to 8 hours
1,000	Immediate loss of consciousness, BREATHING STOPS within 1 to 2 breaths

NOTE: *1 ppm = 1 part gas in one million parts air*

HEALTH EFFECTS OF A SULPHUR DIOXIDE (SO_2) RELEASE

This is a choking gas unlike hydrogen sulphide (H_2S) and one wants to move to an area where the discomfort is not experienced.

SO_2 is formed by the combustion of H_2S or sulphur and is non-flammable. It is found as a gas at temperatures above -10°C and the odour is similar to an extinguished wooden match. It is highly irritating and dissolves to form sulphuric acid.

At lower concentrations SO_2 irritates eyes, nose and throat and may cause DIFFICULTY IN BREATHING and shortness of breath.

At higher concentrations SO_2 causes pulmonary edema (fluid in the lungs) and MAY BE FATAL.

The effects of even low concentrations are more severe on heavy smokers and individuals with respiratory problems including asthma.

Concentration (ppm)	Effects of SO_2
0.3 / 24 hours 0.3 - 1.0 / 3 hours	**VOLUNTARY EVACUATION OF SENSITIVE INDIVIDUALS OR ANYONE EXPERIENCING DIFFICULTIES**
0.13	24-hour evacuation level (Level B criteria) - BC
0.34	One hour average evacuation level (Level B criteria) - BC
2	8-hour occupational exposure limit
3 to 5	Odour threshold
5	15-minute occupational exposure limit. **MANDATORY EVACUATION OF EMERGENCY PLANNING ZONE (EPZ) IF LEVEL PERSISTS FOR 15 MINUTES**
8 to 12	Throat irritation, coughing, constriction in the chest, tearing and smarting of the eyes
10 to 50	Exposure 5 to 15 minutes: increased irritation of the eyes, nose, throat, choking, coughing, and in some cases, wheezing as a sign of narrowing of the airways (which increases the resistance of the air flow)
150	Short-term endurance lost due to severe eye irritation and because of the effects on the membranes of the nose, throat and lungs
500	Highly dangerous after an exposure of 30 to 60 minutes
1,000 to 2,000	May be fatal with continued exposure

NOTE: *1 ppm = 1 part gas in one million parts air*

4.2.2 PUBLIC INVOLVEMENT PROGRAMS

Public and local government involvement in emergency preparedness and response takes place at various stages of resource development. All persons, residences, local authorities and publicly used facilities within and immediately adjacent to the Emergency Planning Zone (EPZ) are identified and provided with site-specific information. This information will include local Canadian Natural facilities and details of established emergency response procedures. Any concerns noted during the involvement process regarding potential impacts that an emergency situation may have on the surrounding community will be addressed at this time.

4.3 MEDIA COMMUNICATION

Media releases will be generated and released by Canadian Natural management in a timely manner as significant developments occur. It is the responsibility of the Incident Commander to field all Media inquiries at the site, with support from the Corporate Support Team and Senior Management. For significant events, a spokesperson will be designated and will coordinate Media releases with the appropriate government regulatory agency (Alberta Energy Regulator, Emergency Management BC, Saskatchewan Ministry of Economy, Manitoba Emergency Measures Organization or National Energy Board / Transportation Safety Board) prior to release to ensure consistency and accuracy of information.

The designated spokesperson will compile and release the following information if applicable, to the general public as soon as possible during an incident:

- type and status of incident
- location and proximity of the incident to people in the area
- areas impacted by the incident
- effects the incident may have on people in the area
- actions the general public should take if they experience adverse effects
- description of the products involved and their short-term and long-term effects
- public protection measures to follow, evacuation direction and any other emergency response measures to consider
- actions being taken to correct the situation and time period anticipated
- contacts for additional information

The following guidelines must be followed for any on-site Media contact.

- Redacted - NEB Order MO-006-2016, s. 1.a.ii. - security risk
- Forward Media information (reporter's name and contact information, type of Media represented, type of information requested and deadline) to **INVESTOR RELATIONS at 403 514-7777**

- Advise Media that a statement will be released as soon as the facts have been determined. Direct questions or comments to the designated Canadian Natural Media spokesperson.
- No speculation will be made on the cause or damages resulting from the emergency
- Under no circumstances will the name of any accident victim be released before the next-of-kin are notified or permission has been received from Canadian Natural's Senior Management and the RCMP
- News Media will not be allowed on-site until clearance has been granted by Canadian Natural's Senior Management, government regulatory authority and / or the RCMP

- All reporters allowed on site must be accompanied at all times and for their own safety, denied access to dangerous areas

5.0 EMERGENCY RESPONSE - ROLES & RESPONSIBILITIES

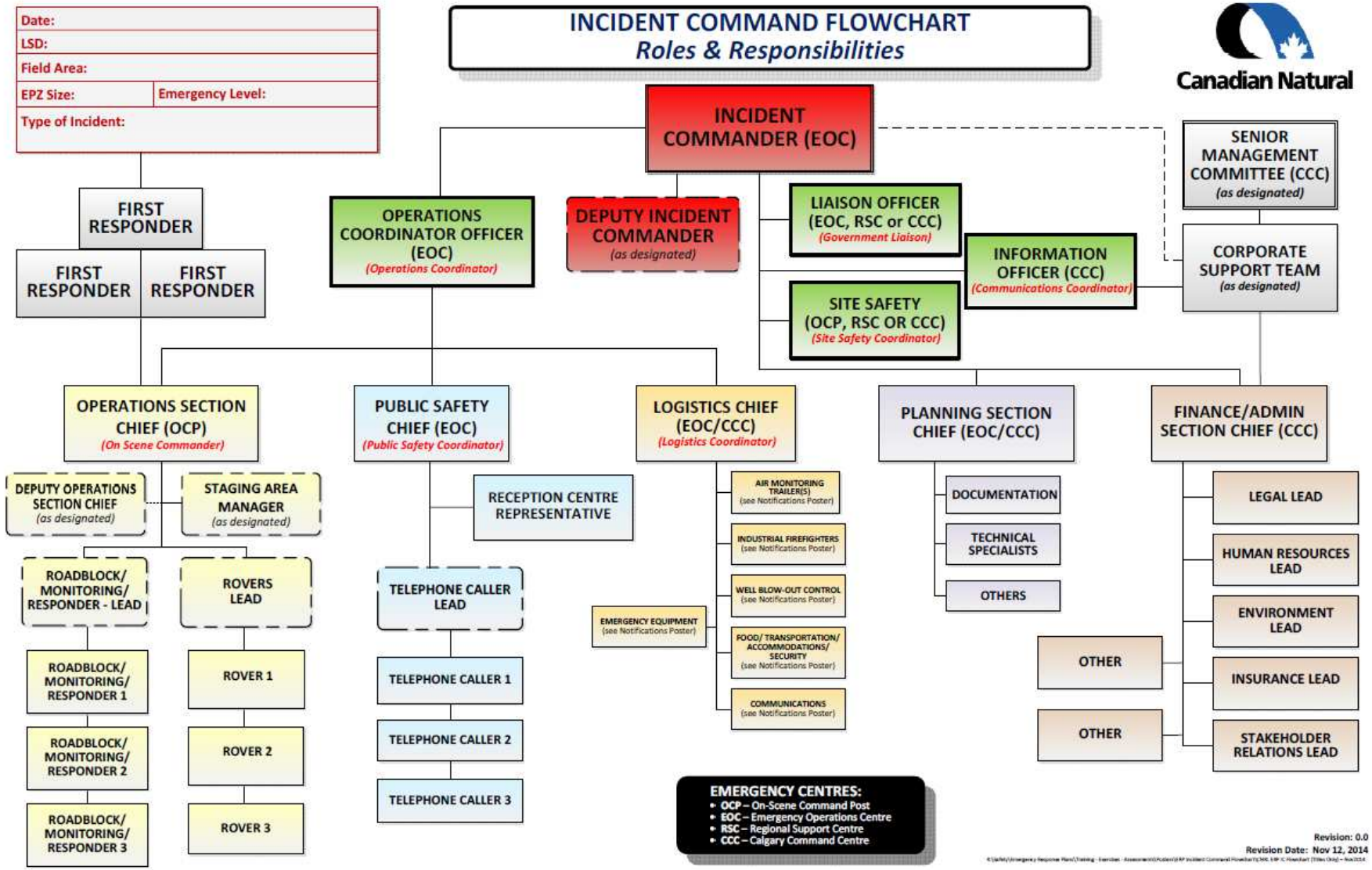
The Canadian Natural Corporate Emergency Response "10 Steps" provides a brief summary of actions to safely and effectively coordinate company responses to emergency situations. The Incident Command Flowchart indicates the reporting structure and communication flow of responder roles during an emergency. Canadian Natural employees and representatives are responsible for implementing the Flowchart when required and must be aware of their roles and duties as outlined in the following pages. Depending on the situation, not all roles will be filled and multiple roles may be assigned to one person.

5.1 CANADIAN NATURAL'S "10 STEPS" FOR EMERGENCY RESPONSE

1. Initial Contact Regarding Problem
2. Assess the Situation
3. Classify the Emergency Level
4. Activate the Emergency Response Plan
5. Define the Emergency Planning Zone
6. Decide on Public Protection Measures
7. Make External (Government) Notifications
8. Activate Personnel & Equipment
9. Respond & Control the Emergency
10. Stand Down

5.2 CANADIAN NATURAL'S INCIDENT COMMAND FLOWCHART

A copy of the Incident Command Flowchart follows.


Date:
LSD:
Field Area:
EPZ Size:
Emergency Level:
Type of Incident:
INCIDENT COMMAND FLOWCHART
Roles & Responsibilities
Canadian Natural
INCIDENT COMMANDER (EOC)
SENIOR MANAGEMENT COMMITTEE (CCC)
(as designated)
CORPORATE SUPPORT TEAM
(as designated)
FIRST RESPONDER
FIRST RESPONDER
FIRST RESPONDER
OPERATIONS COORDINATOR OFFICER (EOC)
(Operations Coordinator)
DEPUTY INCIDENT COMMANDER
(as designated)
LIAISON OFFICER (EOC, RSC or CCC)
(Government Liaison)
INFORMATION OFFICER (CCC)
(Communications Coordinator)
SITE SAFETY (OCP, RSC OR CCC)
(Site Safety Coordinator)
OPERATIONS SECTION CHIEF (OCP)
(On Scene Commander)
PUBLIC SAFETY CHIEF (EOC)
(Public Safety Coordinator)
LOGISTICS CHIEF (EOC/CCC)
(Logistics Coordinator)
PLANNING SECTION CHIEF (EOC/CCC)
FINANCE/ADMIN SECTION CHIEF (CCC)
DEPUTY OPERATIONS SECTION CHIEF
(as designated)
STAGING AREA MANAGER
(as designated)
RECEPTION CENTRE REPRESENTATIVE
AIR MONITORING TRAILER(S)
(see Notifications Poster)
INDUSTRIAL FIREFIGHTERS
(see Notifications Poster)
WELL BLOW-OUT CONTROL
(see Notifications Poster)
EMERGENCY EQUIPMENT
(see Notifications Poster)
FOOD/ TRANSPORTATION/ ACCOMMODATIONS/ SECURITY
(see Notifications Poster)
COMMUNICATIONS
(see Notifications Poster)
DOCUMENTATION
TECHNICAL SPECIALISTS
OTHERS
LEGAL LEAD
HUMAN RESOURCES LEAD
ENVIRONMENT LEAD
INSURANCE LEAD
STAKEHOLDER RELATIONS LEAD
OTHER
OTHER
ROADBLOCK/ MONITORING/ RESPONDER - LEAD
ROADBLOCK/ MONITORING/ RESPONDER 1
ROADBLOCK/ MONITORING/ RESPONDER 2
ROADBLOCK/ MONITORING/ RESPONDER 3
ROVERS LEAD
ROVER 1
ROVER 2
ROVER 3
TELEPHONE CALLER LEAD
TELEPHONE CALLER 1
TELEPHONE CALLER 2
TELEPHONE CALLER 3
EMERGENCY CENTRES:
OCP – On-Scene Command Post
EOC – Emergency Operations Centre
RSC – Regional Support Centre
CCC – Calgary Command Centre
Revision: 0.0
Revision Date: Nov 12, 2014

Each responder role has been provided with a checklist of duties. If an emergency situation occurs, the responder should go to the yellow tab for their specific role and complete the duties by utilizing the checklist. This will ensure that all necessary steps are considered and taken if required, and that all government emergency notifications are made and regulatory requirements are met.

The most senior on-site Canadian Natural representative will assume the role of Operations Section Chief and will activate the Emergency Response Plan (ERP).

5.3 RESPONSE MANAGEMENT CENTRES

CANADIAN NATURAL RESPONSE MANAGEMENT CENTRES:

Upon activation of the ERP the following Operations Centres may be established:

On-Scene Command Post (OCP): The OCP is an emergency operations centre to be located at or near the incident site to manage on-scene emergency activities.

Emergency Operations Centre (EOC): The EOC is an operations centre typically established at Canadian Natural's closest district or field office to provide a strategically located support centre to the OCP for managing activities at the incident site. The EOC provides a centre for logistical, technical and supervisory support for on-scene personnel. The EOC may also be used for the dissemination of information to the public, Media, government and other stakeholders in the area during the initial hours of the incident. If a response to an incident becomes prolonged, it may be used for on-going regular dissemination of information to government agencies with regard to logistics and incident status.

In situations where the appropriate supervisory and technical specialists are located in Calgary, typically for drilling, completions or servicing emergencies, the EOC may be established in the Calgary office. If the EOC is to be located in the Calgary office, a Regional Support Centre (RSC) may be established at the closest Canadian Natural district / field office to assist with support for logistics, communications and public protection in Emergency Planning Zones (EPZs).

Regional Support Centre (RSC): In situations where the Emergency Operations Centre (EOC) is established in the Calgary office, the RSC may be set up to assist with local logistical support, communication and public protection in EPZs. It may be used for regular dissemination of information to local government agencies in regard to response management activities and incident status**.**

Corporate Command Centre (CCC): A Corporate Command Centre (CCC) is a control centre established at Canadian Natural's corporate office in Calgary by the Corporate Support Team (CST), primarily for Level 2 or 3 emergencies. The CCC provides centralized managerial support and direction to EOC personnel.

Reception Centre: Canadian Natural will establish a Reception Centre in the event that evacuation of the public is required. A representative will be present at the Centre to receive residents, record appropriate contact information and address any concerns that arise. The representative will also assist with temporary accommodation arrangements if necessary.

GOVERNMENT EMERGENCY OPERATIONS CENTRES:

Several government operations centres may be established to manage the larger aspects of an emergency. In a high-impact emergency, there may be a number of government EOCs established to support the response. These may include local field centre incident command posts, regional EOCs (REOC), or municipal EOCs (MEOC) and / or provincial government EOCs (GEOC).

Municipal Emergency Operations Centre (MEOC): A municipal Emergency Operations Centre where municipal officials manage and support emergency operations within their jurisdiction.

Regional Emergency Operations Centre (REOC): A regional Operations Centre that may be established in a suitable location to manage the larger aspects of the emergency. It may be manned jointly by government and industry staff.

Government Emergency Operations Centre (GEOC): A government Operations Centre with the capacity to accommodate representatives from multiple government departments. It may consist of two centres, the Consequence Management Operations Centre (COMOC) and the Crisis Management Operations Centre.

5.4 FIRST RESPONDER

WHO:	First Canadian Natural representative on-scene of the incident. *(Suggested: Operators, well site personnel)*
RESPONSIBILITY:	To assess and control emergency incidents; will also assume the tasks of the Operations Section Chief until a more senior Canadian Natural representative arrives at the scene
REPORTS TO:	Direct Supervisor

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log and *First Responder's Guide* can be found in the Emergency Response Tool Box (red tab) section.
- ❑ **DO NOT RUSH IN, PROTECT YOURSELF FIRST**
- ❑ Assess the situation – move to a safe area and recognize potential hazards.
- ❑ Take appropriate protective measures to ensure your safety; don personal protective equipment (PPE).
- ❑ Take control of the site / situation – identify yourself as the Operations Section Chief (complete tasks of the Operations Section Chief until a more senior representative assumes the role).
- ❑ Alert all personnel in the immediate vicinity of the incident. Account for all persons and dispatch non-essential personnel from the site.
- ❑ Direct someone to secure the incident site, as soon as someone is available.
- ❑ Await the arrival of additional personnel and equipment for back up.
- ❑ Prevent further impacts – refer to the *First Responder's Guide* (in Emergency Response Tool Box section). Take action to prevent injuries, environmental damage and loss of equipment, without jeopardizing personal safety (i.e.: eliminate ignition sources, activate ESDs, etc.).
- ❑ Spills:
  - for spills of low vapour pressure (LVP) liquids - attempt to contain the spilled product by using trenches, bell holes, straw bales, booms, blocking culvert openings, or using any absorbent materials on-site.
  - for spills of high vapour pressure (HVP) liquids - attempt to dissipate the liquid and isolate the area. **DO NOT ATTEMPT TO CONTAIN HVP LIQUIDS**.
- ❑ Attend to injured persons.
- ❑ Call Emergency Services if required (i.e.: 9-1-1, police, fire department, ambulance, etc.).
- ❑ Monitor for H_2S and LEL readings on a handheld monitor.
- ❑ Contact immediate supervisor and inform them of the site conditions, including operational situation, monitor readings, wind direction, personnel on-site, injuries, what you see, smell, hear, etc.

FIRST RESPONDER DUTIES – Continued

- ❑ Once a more senior representative arrives and takes over the role of the Operations Section Chief, perform duties as directed by the Operations Section Chief.
- ❑ Do not disturb the incident scene except to recover injured persons or to protect the public, environment or property.
- ❑ Be aware of any changes to conditions (operational or weather); communicate any changes to the Operations Section Chief.
- ❑ Direct all Media inquiries to the Incident Commander.
- ❑ Turn in any completed Time / Action Logs to the Area Safety & Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.5 OPERATIONS SECTION CHIEF

WHO:	Most senior Canadian Natural representative on-site. *(Suggested: Assistant Foreman, Lead Operator, Rig Manager)*
RESPONSIBILITY:	To direct immediate on-site emergency activities and is responsible for establishing the On-Scene Command Post (OCP)
REPORTS TO:	Operations Coordinator Officer

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Emergency Classifications, Notification / Evacuation Criteria and Ignition Criteria and Procedures can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Discuss the current situation with the Operations Coordinator Officer and Incident Commander. Use the applicable Incident Classification Matrix for Classifying Incidents (located in the Emergency Response Tool Box section) in the discussion to determine the Emergency Level.
- ❑ Establish the OCP. Choose a location based on safety, proximity and accessibility to the site. Ensure everyone involved knows where the OCP has been set up.
- ❑ Ensure hazard assessments are in place for work to be conducted.
- ❑ Direct, confirm and record all applicable on-site activities, such as:
    - Have all injured persons been attended to? Was 9-1-1 called?
    - Have all persons been accounted for?
    - Have all ignition sources been eliminated?
    - Have immediate corrective mitigation actions been taken?
- ❑ Ensure the incident site been secured.
- ❑ Ensure air monitoring is occurring in the immediate vicinity of the incident for flammable and / or toxic gases using portable handheld gas monitors (Notification / Evacuation Criteria can be found in the Forms and Guidelines section).
- ❑ Mobile Air Monitoring Units (trailers):
    - Level 1 – trailer unit to be put on stand-by
    - Levels 2 and 3 – trailer unit to be dispatched
- ❑ Air Monitoring Units should be dispatched through the Logistics Chief.
- ❑ In coordination with the Operations Coordinator Officer and the Incident Commander, develop an action plan for controlling the situation.
- ❑ Determine if the potential for ignition criteria exists (Ignition Criteria and Procedures can be found in the Forms and Guidelines section). If any of the criteria are met, discuss the situation with the Operations Coordinator Officer and the Incident Commander. Direct ignition of a release according to the Ignition Procedure. In extreme situations, the Operations Section Chief may be required to make the decision to ignite. If ignition takes place, SO_2 monitoring must commence.

OPERATIONS SECTION CHIEF DUTIES – Continued

- ❑ Contact WCSS (Western Canadian Spill Services) and initiate area Oil Spill Co-op manual spill response procedures if a release has affected or potentially could affect a water course. Deploy emergency spill response equipment.
- ❑ Determine need for assistance from off-duty personnel for back up and to assist with ignition, roadblocks, air monitoring, roving, etc., as well as any additional resources / services that may be required. Contact the Operations Coordinator Officer to place personnel on standby or to dispatch. **NOTE: There should be no more than seven (7) people reporting directly to one position. Utilize Lead positions as per Incident Command Flowchart.**
- ❑ If additional equipment and / or services are required, activate the Staging Area Manager role if necessary and determine the most appropriate Staging Area location in consultation with the Operations Coordinator Officer.
- ❑ Dispatch Rovers as directed by the Operations Coordinator Officer to residences and businesses that require transportation assistance, who could not be contacted, or where transients, trappers, operators or recreational users may be in potential danger.
- ❑ Maintain contact with the Operations Coordinator Officer and immediately report any new information or change in the operational situation or the weather, particularly wind direction.
- ❑ If the situation is prolonged, ensure that responders receive adequate rest periods and support.
- ❑ Once the situation improves and the Level may be considered for downgrading, relay this information to the Operations Coordinator Officer. A determination will be made by the Incident Commander in discussion with the Operations Coordinator Officer as to whether the situation can be downgraded. A decision to downgrade the emergency will be made by the Incident Commander in consultation with the provincial regulatory authority or federal authority, the National Energy Board (NEB), and the local disaster services representative. When advised by the Operations Coordinator Officer that the Level has changed or the emergency is stood down, alert all site responders and Staging Area Manager if necessary.
- ❑ Direct all Media inquiries to the Incident Commander.
- ❑ Do not disturb the incident scene except to recover injured persons or to protect the public, environment or property.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety & Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.6 DEPUTY OPERATIONS SECTION CHIEF

WHO:	Designated Canadian Natural representative *(Suggested: Assistant Foreman, Lead Operator, Foreman)*
RESPONSIBILITY:	Back up to the Operations Section Chief
REPORTS TO:	Operations Section Chief

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Emergency Classifications, Notification / Evacuation Criteria and Ignition Criteria and Procedures can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Back fill duties / responsibilities that cannot be completed by the Operations Section Chief.
- ❑ Work directly with the Operations Section Chief.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety & Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.7 OPERATIONS COORDINATOR OFFICER

WHO:	Supervisor of the Operations Section Chief *(Suggested: Area Foreman, Drilling / Completions Superintendent)*
RESPONSIBILITY:	Coordinates response within the hazard area and provides support to the Operations Section Chief
REPORTS TO:	Incident Commander

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Emergency Classifications, Notification / Evacuation Criteria and Ignition Criteria and Procedures can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Discuss the current situation with the Operations Section Chief.
- ❑ Ensure that the Operations Section Chief has secured the emergency site.
- ❑ Notify the Incident Commander.
- ❑ Make initial "heads up" notification of the incident to the government regulatory authority. All further contact in regard to detailed information and action plans should be initiated by the Incident Commander through the Liaison Officer.
- ❑ Discuss the location of the Emergency Operations Center (EOC) with the Incident Commander and go to the Centre. Ensure the Operations Section Chief knows where the EOC has been set up.
- ❑ Together with the Incident Commander and the Operations Section Chief and in conjunction with the provincial regulatory authority or federal government authority, the National Energy Board (NEB), discuss and agree on the Level of Emergency using the applicable Incident Classification Matrix for Classifying Incidents (located in the Emergency Response Tool Box section).
- ❑ Develop an action plan for operational control with the Incident Commander and Operations Section Chief.
- ❑ Discuss the need for extra personnel, resources and equipment with the Operations Section Chief. **NOTE: There should be no more than seven (7) people reporting directly to one position. Utilize Lead positions as per Incident Command Flowchart.**
- ❑ Activate the Logistics Chief role if dispatching assistance is required.
- ❑ Activate the Public Safety Chief's role. Brief the Public Safety Chief on the situation details and together with the Incident Commander, develop an action plan for public protection, considering the EPZ and requirements for public notification / shelter-in-place / evacuation (Notification / Evacuation Criteria can be found in the Forms and Guidelines section).

OPERATIONS COORDINATOR OFFICER DUTIES – Continued

- ❑ Discuss the Emergency Planning Zone (EPZ) and location of potentially impacted residents. Use an area map or find the map in the Site-Specific section and draw an EPZ around the emergency site by following the guidelines below:
    - sour operations - use the calculated EPZ radius from the Site-Specific Emergency Response Plan (ERP); if there is not a calculated EPZ start with 100 m and adjust according to air monitoring readings
    - LPG emergencies – use calculated EPZ radius from the Site Specific ERP; if there is not a calculated EPZ start with 100 m and adjust according to air monitoring readings
    - sweet operations or for emergencies other than a sour gas release, start with a 100 m radius and adjust as necessary to ensure public and worker safety
- ❑ Assess the situation to determine if any ignition criteria have been met; review the Ignition Criteria found in the Forms and Guidelines (purple tab) section with the Incident Commander and Operations Section Chief. If a decision is made to ignite, in consultation with the provincial regulatory authority or federal authority, the National Energy Board (NEB), direct ignition. Initiate SO2 monitoring.
- ❑ Increase the EPZ as necessary based on environmental and site factors:
    - weather conditions, including wind speed and direction
    - terrain such as elevation changes (low-lying areas)
    - any other factors that would create a safety risk to the public
- ❑ Decide on roadblock locations and air monitoring locations (handheld monitors) and dispatch as soon as possible. Personnel to be identified by the Operations Section Chief. **NOTE: Only the RCMP has the authority to set up or direct the set-up of a roadblock on a major or secondary highway.**
- ❑ Mobile Air Quality Monitoring Units (trailers) are required for sour releases.
    - Level 1 : trailer unit put on standby
    - Levels 2 and 3: trailer unit to be dispatched
- ❑ Public Notification and Evacuation:
    - Level 1: mandatory notification of those individuals within the EPZ deemed “sensitive”; evacuation is at their discretion
    - Levels 2 and 3: mandatory shelter-in-place or evacuation of public inside the EPZ
- ❑ The Public Safety Chief will coordinate notifying members of the public and activate the Reception Centre and Reception Centre Representative role if necessary.
- ❑ Maintain communication with the Logistics Chief as to estimated arrival times for dispatched personnel and other resources; keep the Operations Section Chief informed of these times.
- ❑ If the situation is prolonged, ensure that the Operations Section Chief has enough people to provide back-up support so that all responders receive adequate rest periods.

OPERATIONS COORDINATOR OFFICER DUTIES – Continued

- ❑ Contact WCSS (Western Canadian Spill Services) and initiate area Oil Spill Co-op manual spill response procedures if a release has affected or potentially could affect a water course. Deploy emergency spill response equipment.
- ❑ When advised by the Operations Section Chief that the situation has improved and the Emergency Level may be considered for downgrading or stand down, advise the Incident Commander. Consult with the Incident Commander and the Public Safety Chief for a decision to downgrade the Level. The decision will be made by the Incident Commander, in consultation with the provincial regulatory authority or federal authority, the National Energy Board (NEB), and the provincial and local disaster service authorities.
- ❑ Notify the Operations Section Chief of any Emergency Level change or stand down.
- ❑ At stand down, advise the Logistics Chief to notify all external agencies.
- ❑ Direct all Media inquiries to the Incident Commander.
- ❑ After the emergency is over, turn in all completed Time / Action Logs to the Area Safety & Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.8 INCIDENT COMMANDER

WHO:	Overall Supervisor of Site Response *(Suggested: Operations Superintendent, Drilling Manager, Foreman)*
RESPONSIBILITY:	To provide overall support, direction and decision-making for all emergency response activities and ensure that they comply with Canadian Natural and government policies.
REPORTS TO:	Corporate Support Team

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Media Communications guidelines, Emergency Classifications, Notification / Evacuation Criteria and Ignition Criteria and Procedures can be found in either the Emergency Response Tool Box (red tab) or in the Forms and Guidelines (purple tab) section.
- ❑ Discuss the current situation with the Operations Coordinator Officer. Confirm that a "heads-up" notification was made to the provincial government regulatory authority or federal authority, the National Energy Board (NEB).
- ❑ Contact the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Establish the Emergency Operations Center (EOC). Go to the EOC and supervise all activities from this location if possible. If available, post a wall map of the area. Put up a notification chart and have flip charts available for recording the sequence of events. If required, designate an Event Recorder and gather a team of note-takers to be assigned to update wall charts and document Time / Action Logs for the key supervisory roles.
- ❑ Together with the Operations Coordinator Officer and the Operations Section Chief and in conjunction with the provincial regulatory authority or federal authority (NEB), discuss and agree on the Emergency Level using the applicable Incident Classification Matrix for Classifying Incidents (located in the Emergency Response Tool Box section).
- ❑ Develop an action plan for operational control with the Operations Coordinator Officer and Operations Section Chief.
- ❑ Discuss the Emergency Planning Zone (EPZ) and location of potentially impacted residents. Use an area map or find the map in the Site-Specific section and draw an EPZ around the emergency site by following the guidelines below:
    - sour operations - use the calculated EPZ radius from the Site Specific Emergency Response Plan (ERP); if there is not a calculated EPZ, start with 100 m and adjust according to air monitoring readings
    - LPG emergencies – use the calculated EPZ radius from the Site Specific ERP; if there is not a calculated EPZ start with 100 m and adjust according to air monitoring readings
    - sweet operations or for emergencies other than a sour gas release, start with a 100 m radius and adjust as necessary to ensure public and worker safety

INCIDENT COMMANDER DUTIES – Continued

- ❑ Assess the situation to determine if ignition criteria has been met (Ignition Criteria and Procedures can be found in the Forms and Guidelines section); review the ignition criteria with the Operations Coordinator Officer and Operations Section Chief. If a decision is made to ignite, in consultation with provincial regulatory authority or federal authority (National Energy Board – NEB), have the Operations Coordinator Officer direct the Operations Section Chief to ignite and initiate SO_2 monitoring.
- ❑ Increase the EPZ as necessary based on environmental and site factors:
  - weather conditions, including wind speed and direction
  - terrain, such as elevation changes (low-lying areas)
  - any other factors that would create a safety risk to the public
- ❑ Decide on roadblock locations and air monitoring locations (handhelds). Personnel will be identified by the Operations Section Chief. **NOTE: Only the RCMP has the authority to set up or direct the set-up of a roadblock on a major or secondary highway.**
- ❑ Mobile Air Quality Monitoring Units (trailers) are required for sour releases:
  - Level 1 : trailer unit to be put on standby
  - Levels 2 and 3: trailer unit to be dispatched
- ❑ Public Notification and Evacuation:
  - Level 1: mandatory notification of those individuals within the EPZ deemed as "sensitive," evacuation is at their discretion
  - Levels 2 and 3: mandatory shelter-in-place or evacuation of public inside the EPZ
- ❑ Ensure the Public Safety Chief is coordinating the notification of members of the public and has activated the Reception Centre and Reception Centre Representative role as required.
- ❑ Notify the regulatory authority immediately of the public protection plan and operations action plans or activate the Liaison Officer role to contact the following:
  - **provincial or federal authority** (AER, EMBC, ECON, EMO, NEB / TSB, NWT Spill Line) for Level 1, 2 and 3 emergencies. The provincial or federal authority (NEB) must also be notified if the public has been contacted at any Level. For Level 2 and 3 emergencies, the provincial or federal authority (NEB) may initiate fan-out calls to other authorities. The provincial authority or federal authority should be updated at regular intervals.
  - **local municipal authority disaster services** for Level 1 emergencies if assistance is required and all Level 2 and 3 emergencies.
  - **local police or RCMP** for Level 1 emergencies if assistance is required and all Level 2 and 3 emergencies.
  - **Health Authority** if the public is impacted.
- ❑ Consult the provincial regulatory or federal authority to confirm the emergency Level.

INCIDENT COMMANDER DUTIES – Continued

- ❑ Ensure regular updates are provided to government. If requested, go to the Emergency Operations Centre that is jointly manned by government staff or delegate the Liaison Officer to go.
- ❑ Notify the Corporate Support Team of the action plans.
- ❑ In the event of a fatality, consult with the Corporate Support Team.
- ❑ If the incident is being managed from the Calgary office (i.e.: drilling or completions emergency), establish a Regional Support Centre (RSC) at the nearest district office or other suitable field office.
- ❑ Field all Media inquiries and coordinate Media responses with the Corporate Support Team until an Information Officer is designated (Media Communications guidelines are found in the Forms and Guidelines section).
- ❑ When advised by the Operations Coordinator Officer that the situation has improved, assess the situation for the possibility of downgrading the Emergency Level or stand down. A decision to downgrade an Emergency Level must be made in consultation with the provincial regulatory authority or federal authority (NEB) and provincial and local disaster services. If the Level is changed or the emergency is stood down, direct the Operations Coordinator Officer to inform the Operations Section Chief who should in turn advise all site personnel as well as the Logistics Chief. Also advise the Public Safety Chief.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Arrange and attend a debriefing meeting with all responders.

5.9 DEPUTY INCIDENT COMMANDER

WHO:	Designated Canadian Natural representative *(Suggested: Other Operations Superintendent, Operations Manager)*
RESPONSIBILITY:	Back up to the Incident Commander
REPORTS TO:	Incident Commander

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Media Communications guidelines, Emergency Classifications, Notification / Evacuation Criteria and Ignition Criteria and Procedures can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Back fill duties / responsibilities that cannot be completed by the Incident Commander or in the absence of the Incident Commander.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.10 PUBLIC SAFETY CHIEF

WHO:	Designated Canadian Natural representative *(Suggested: Land personnel)*
RESPONSIBILITY:	Coordinate all public safety protection activities, including the location of roadblocks, air monitoring and activities, notification of the public and designating a Reception Centre
REPORTS TO:	Operations Coordinator Officer

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Notification / Evacuation Criteria, Notification / Shelter-In-Place / Evacuation Scripts, Shelter-In-Place Procedures can be found in either Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Attend at the Emergency Operations Center (EOC) or the Regional Support Center (RSC).
- ❑ Together with the Incident Commander and Operations Coordinator Officer, discuss the situation and Emergency Level.
- ❑ In coordination with Incident Commander and Operations Coordinator Officer, develop an action plan for public protection, considering the Emergency Planning Zone (EPZ) and requirements for public notification, shelter-in-place and / or evacuation:
    - Level 1: mandatory notification of those individuals within the EPZ deemed as "sensitive," evacuation is at their discretion
    - Levels 2 and 3: mandatory shelter-in-place or evacuation of public inside the EPZ
- ❑ Discuss the EPZ and location of potentially impacted residents. Use an area map or find the map in the Site-Specific section and draw an EPZ around the emergency site by following the guidelines below:
    - sour operations - use the calculated EPZ radius from the Site Specific Emergency Response Plan (ERP); if there is not a calculated EPZ start with 100 m and adjust according to air monitoring readings.
    - LPG emergencies – use the calculated EPZ radius from the Site Specific ERP; if there is not a calculated EPZ, start with 100 m and adjust according to air monitoring readings.
    - sweet operations or for emergencies other than a sour gas release, start with a 100 m radius and adjust as necessary to ensure public and worker safety.
- ❑ Increase the EPZ as necessary based on environmental and site factors:
    - weather conditions, including wind speed and direction
    - terrain such as elevation changes (low-lying areas)
    - any other factors that would create a safety risk to the public

PUBLIC SAFETY CHIEF DUTIES – Continued

- ❑ Mobile Air Quality Monitoring Units (trailers) are required for sour releases:
  - Level 1 : trailer unit to be put on standby
  - Levels 2 and 3: trailer unit to be dispatched
- ❑ The action plan should identify which members of the public (including residents, businesses, industrial operators, school divisions, private schools, etc.) need to be notified and if they should shelter-in-place or evacuate. Provide the safest evacuation route, advise where the Reception Centre will be located and indicate who will be there to receive them.
- ❑ Shelter-in-place should be considered for the following situations:
  - there is insufficient time or warning to safely evacuate
  - the residents are waiting for evacuation assistance
  - the release will be of limited size and/or duration
  - the location of the release has not been identified
  - the public would be at higher risk if evacuated
- ❑ Activate a Reception Centre if required. Activate the Reception Center Representative role and dispatch to the Reception Center, ensuring they have multiple copies of the proper forms – Reception Centre Registration Forms and Daily Expense Claim Forms (found in the Forms and Guidelines section). Inform the Operations Coordinator Officer.
- ❑ If an automated call-out system has been set up for the area, activate the system to commence notification, shelter-in-place and / or evacuation of all public within the EPZ. Begin with those residents and businesses closest and downwind of the emergency and then the sensitive residents. A copy of the call-out system's (CommAlert) Standard Operating Procedure can be found in the Emergency Response Tool Box (red tab) section. It defines the information that will be required to initiate the automated notifications.
- ❑ If there is not an automated call-out system in-place, assemble a team of Telephone Callers. If there are more than six Telephone Callers utilized, consider assigning a Telephone Caller Lead. Complete the appropriate script(s) (all scripts found in the Forms and Guidelines – purple tab – section) and compile a list of residents from the Site-Specific Emergency Response Plan (ERP) section to be notified, prioritized by those downwind and those who are sensitive. **NOTE:** Telephone Callers will also be required to try to reach those not contacted by the call-out system.
- ❑ Brief the Telephone Callers on the situation and give them the completed script(s) and resident lists.
- ❑ Keep the Operations Coordinator Officer apprised of the following:
  - persons who will evacuate and those who refuse
  - persons who require assistance
  - persons who could not be contacted
  - areas where transients, trappers, operators or recreational users may be in potential danger

PUBLIC SAFETY CHIEF DUTIES – Continued

- ❑ If large numbers of people require evacuation, arrange for transportation (buses) or make changes in the normal notification procedures to accommodate such situations; contact the municipal authority for assistance.
- ❑ When the emergency is stood down, confirm with the Operations Coordinator Officer that residents are safe to return (i.e.: H_2S is not present in their homes). Confirmation from the local municipal authority may also be required. Direct Telephone Callers to contact all evacuees and advise them that the emergency is over and it is safe to return home or to their place of business. Advise the Reception Centre Representative to inform any persons at the Centre that the emergency is over and it is safe to return home or to their place of business.
- ❑ After the emergency is over, turn in completed Time / Action Logs and all other forms to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.11 LOGISTICS CHIEF

WHO:	Designated Canadian Natural representative *(Suggested: Environmental Field Coordinators, Asset Integrity personnel, Area Engineers, available operational personnel)*
RESPONSIBILITY:	To assist the Operations Coordinator Officer in contacting and dispatching resources required to assist in executing the action plan for managing an emergency situation.
REPORTS TO:	Operations Coordinator Officer

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log found in the Emergency Response Tool Box (red tab) section.
- ❑ Obtain a briefing from the Operations Coordinator Officer as to the following:
  - operational situation, the operations action plan and the public protection plan
  - Emergency Planning Zone (EPZ)
  - location of the On-Scene Command Post (OCP)
  - location of the Staging Area
- ❑ Assist the Operations Coordinator Officer in obtaining extra personnel.
- ❑ Assist the Operations Coordinator Officer in obtaining any required extra resources (i.e.: air monitoring units, heavy equipment, helicopters / aircraft for aerial surveillance, etc.). Obtain clear and detailed information from the Operations Coordinator Officer as to where the resources are to be sent (i.e.: OCP, Staging Area, etc.).
- ❑ Assist the Staging Area Manager in obtaining any resources required for food, transportation, sanitation, accommodations and security.
- ❑ Provide clear directions to the service provider or resources as to where they are to check in (i.e.: Staging Area or OCP) and who they should check in with (i.e.: Operations Section Chief, Staging Area Manager).
- ❑ Keep the Operations Coordinator Officer informed of estimated arrival times of resources.
- ❑ When the Operations Coordinator Officer has advised that the situation is at stand down, make calls to any service providers that have not arrived on-scene and advise to turn back.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.12 LIAISON OFFICER

WHO:	Designated Canadian Natural representative *(Suggested: Operations supervisory personnel)*
RESPONSIBILITY:	To communicate with government agencies
REPORTS TO:	Incident Commander

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log found in the Emergency Response Tool Box (red tab) section.
- ❑ Receive a briefing from the Incident Commander as to the following:
  - Operational situation and operations action plan
  - Public protection plan
  - Emergency Planning Zone (EPZ)
  - If initial calls have been made to any government agencies
- ❑ If notification has not been made, on request from the Incident Commander proceed with the following calls:
  - Provincial and / or federal regulatory authority (AER, EMBC, ECON, EMO, NWT Spill Line, NEB) of Level 1, 2 and 3 emergencies. The provincial or federal authority, the National Energy Board (NEB), must also be notified if the public has been contacted at any Level. For Level 2 and 3 emergencies, the provincial or federal authority may initiate fan-out calls to other authorities. The provincial or federal authority should be updated at regular intervals.
  - Local municipal authority disaster services for Level 1 emergencies if assistance is required and for all Level 2 and 3 emergencies
  - Local police or RCMP for Level 1 emergencies if assistance is required and for all Level 2 and 3 emergencies
  - Health Authority if the public is impacted
- ❑ If the Incident Commander advises of potential danger to the public outside of the EPZ, immediately contact the municipal authority for direction / assistance.
- ❑ Ensure regular status updates are made to government agencies as required.
- ❑ If requested to do so by the Incident Commander, go to the government agency operations centre that is established.
- ❑ Review any messaging with the Incident Commander or Information Officer.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.13 INFORMATION OFFICER

WHO:	Designated by Corporate Support Team *(Suggested: Stakeholder Relations personnel)*
RESPONSIBILITY:	To coordinate communications to all stakeholders and Media.
REPORTS TO:	Corporate Support Team

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED

- ❑ Document **everything you do** on a Time / Action Log found in the Emergency Response Tool Box (red tab) section.
- ❑ Obtain briefing from the Corporate Support Team.
- ❑ In consultation with the Corporate Support Team, develop communications for the following groups:
    - Updates to government agencies
    - Public
    - Media
    - Employees
- ❑ For larger emergencies, prepare a Media Statement; consult with the provincial regulatory authority or federal authority, National Energy Board (NEB), prior to release of any statements to provide consistency and accuracy of information.
- ❑ Develop communications for responses to public (i.e.: those who check in at the Reception Centre).
- ❑ Designate a Media spokesperson in consultation with the Corporate Support Team.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.14 SITE SAFETY

WHO:	Designated Canadian Natural representative *(Suggested: Area Safety and Compliance Coordinator or safety service provider)*
RESPONSIBILITY:	Provide support in ensuring site safety; if required assist the Operations Section Chief in monitoring activities at site to ensure adherence to safe work practices
REPORTS TO:	Incident Commander

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED

- ❑ Document **everything you do** on a Time / Action Log found in the Emergency Response Tool Box (red tab) section.
- ❑ If requested by the Incident Commander, go to the site and monitor activities for adherence to safe work practices and hazard assessment.
- ❑ If not directed to the site, go to the Emergency Operations Centre (EOC) or Regional Support Centre (RSC) if established and provide support to the Operations Coordinator Officer and Incident Commander for site safety issues.
- ❑ Collect all Time / Action Logs and all other completed forms from all emergency responders after the incident is over.
- ❑ Attend a debriefing meeting.
- ❑ Assist with a post-incident investigation.

5.15 STAGING AREA MANAGER

WHO:	Designated Canadian Natural representative *(Suggested: Assistant Foreman, Lead Operator, Senior Operator, Consultant)*
RESPONSIBILITY:	Oversee and control the movement of equipment, services and personnel to and from the Staging Area
REPORTS TO:	Operations Section Chief

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Staging Area Log and Demobilization Checkout Form can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Obtain multiple copies of the *Staging Area Log* and *Demobilization Checkout Form*. Proceed to Staging Area and establish a Staging Area layout, including areas for identification and traffic control.
- ❑ Determine any support needs for equipment, food, sanitation and security and notify Logistics Chief.
- ❑ Monitor and record any equipment / services information dispatched to and from the Staging Area using the Staging Area Log.
- ❑ Ensure that all individuals dispatched from the Staging Area have been orientated and have appropriate personal protective equipment (PPE) before being mobilized.
- ❑ Advise Operations Section Chief periodically of arrivals, dispatches and demobilizations.
- ❑ Monitor and record any equipment or supplies distributed and received at Staging Area.
- ❑ Monitor and record equipment / services demobilizations using the Demobilization Checkout Form.
- ❑ After the emergency is over, turn in completed Time / Action Logs, Staging Area Logs and Demobilization Checkout Form to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.16 ROADBLOCKS

WHO:	Designated Canadian Natural representative *(Suggested: Operators, well site personnel or service providers)*
RESPONSIBILITY:	To restrict access into the hazard area and to monitor for hazardous gases using handheld detectors.
REPORTS TO:	Operations Section Chief or Roadblock Lead (if applicable)

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document everything you do on a Time / Action Log. **NOTE:** The Time / Action Log, Roadblock Control Log, Air Quality Monitoring Record, Emergency Classifications and Notifications / Evacuation Criteria can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Obtain the following equipment:
  - Roadblock kit
  - Appropriate personal protective equipment (PPE)
  - Handheld monitor that detects LEL, H_2S CO_2, O_2 and SO_2
  - Communications equipment (radio or cell phone)
- ❑ When directed, mobilize with a roadblock kit to assigned locations and establish roadblock. Report to the Operations Section Chief.
- ❑ Be visible to traffic and protect yourself at all times.
- ❑ Consider detour routes; if possible, post detour direction signs to keep traffic moving.
- ❑ Only authorized vehicles should be permitted through roadblocks. Authorization will only be given by the Operations Section Chief. If a person is adamant about going past the roadblock, they must be permitted to go through; however, they must be made aware of the area hazard. Notify the Operations Section Chief of this type of situation.
- ❑ For all vehicles that are permitted through the roadblock, record applicable information on the *Roadblock Control Log* located in the roadblock kit or in the Forms & Guidelines (purple tab) section in this Corporate Emergency Response Plan (ERP). If the form is not available, record the following information:
  - Date and roadblock location
  - Vehicle type
  - License number and province
  - Company name
  - Driver's name
  - Number of passengers
  - Purpose for entering Emergency Planning Zone (EPZ)
  - Time entering EPZ and time exiting

ROADBLOCKS – Continued

- ❑ Monitor for H_2S and LEL at roadblocks. Record applicable information on an *Air Quality Monitoring Record* form found in the Roadblock Kit and also in the Forms and Guidelines (purple tab) section. If the form is not available, record the following information:
  - Date
  - Time
  - Reading
  - Where reading was taken
  - Weather conditions
  - Temperature
  - Wind direction
- ❑ Report any detection to the Operations Section Chief.
- ❑ Remove roadblock upon instruction from the Operations Section Chief.
- ❑ Return all roadblock equipment to its designated location. Ensure any used items are replaced and that the roadblock kit is ready for next use.
- ❑ Direct all Media inquiries to the Incident Commander.
- ❑ After the emergency is over, turn in completed Roadblock Control Logs, Air Quality Monitoring Records, and any Time/Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.17 AIR MONITORS

WHO:	Designated Canadian Natural representative *(Suggested: Operators, well site personnel or service providers)*
RESPONSIBILITY:	To monitor for hazardous gases using handheld detectors and track plumes.
REPORTS TO:	Operations Section Chief or Air Monitor Lead (if applicable)

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Air Quality Monitoring Record, Notification / Evacuation Criteria and Ignition Criteria and Procedures, and Emergency Classifications can be found in either the Emergency Response Tool Box (red tab) or the Forms and Guidelines (purple tab) section.
- ❑ Obtain the following equipment:
  - Breathing apparatus and appropriate personal protective equipment (PPE)
  - Handheld monitor that detects LEL, H_2S, CO_2, O_2 and SO_2
  - Communication equipment (radio or cell phone)
  - Emergency Response Plan (ERP) map showing Emergency Planning Zone (EPZ), if available
  - Multiple copies of the *Air Quality Monitoring Record* (found in the Forms and Guidelines section)
- ❑ When directed, mobilize to assigned locations (downwind of emergency site, at nearest un-evacuated residence).
- ❑ Establish intervals for reporting conditions to the Operations Section Chief (i.e.: every half-hour, only at changes in conditions, etc.).
- ❑ Monitor for H_2S and LEL and record readings on an Air Quality Monitoring Record at regular intervals (if not available, record the date, time, reading, where reading was taken, weather condition, temperature, wind direction). Track plumes.
- ❑ Immediately report any detection / changes to the Operations Section Chief if:
  - Notification / evacuation or ignition criteria are met (criteria for both found in Forms and Guidelines – purple tab – section)
  - H_2S is detected in unevacuated areas
  - Any new information develops
- ❑ Continue monitoring until instructed otherwise by the Operations Section Chief.
- ❑ Return all air quality monitoring equipment to its designated location when directed to. Ensure batteries are recharged and that the equipment is ready for the next use.
- ❑ After the emergency is over or when directed to, turn completed Time / Action Logs and Air Quality Monitoring Records in to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.18 ROVERS

WHO:	Designated Canadian Natural representatives *(Suggested: Operator, well site personnel)*
RESPONSIBILITY:	To locate, notify, give shelter-in-place instructions or evacuate all affected residents.
REPORTS TO:	Operations Section Chief or Rovers Lead (if applicable)

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Resident Evacuation Notice and Air Quality Monitoring Record can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Obtain the following equipment:
    - Breathing apparatus and appropriate personal protective equipment (PPE)
    - Handheld monitor that detects LEL and H_2S
    - Communications equipment (radio or cell phone)
    - Emergency Response Plan (ERP) map showing Emergency Planning Zone (EPZ) map, if available
    - Multiple copies of the *Resident Evacuation Notice* and *Air Quality Monitoring Record* (found in the Forms and Guidelines section)
    - Strong tape for posting Resident Evacuation Notices on residents' doors
    - Flashlight
- ❑ Get direction from the Operations Section Chief as to the area to be surveyed, if there are residents requiring assistance and where the Reception Center is.
- ❑ When directed, travel to the area specified, ensuring a safe route in and out of the EPZ.
- ❑ Notify any residents who are still in their homes to evacuate to the Reception Center, providing them with directions for a safe route. Check all barns, buildings, shops, sheds, etc. Keep a log of residents that spoken with and notify the Operations Section Chief.
- ❑ Survey EPZ for transients.
- ❑ Take air quality monitoring readings at each residence and document readings on an Air Quality Monitoring Record. Notify the Operations Section Chief of any high H_2S or LEL monitor readings. If the form is not available, record the following information:
    - Date, time, air monitoring reading
    - Where the reading was taken
    - Weather conditions

ROVERS' DUTIES - Continued

- ❑ Notify the Operations Section Chief of any high H_2S or LEL monitoring readings.
- ❑ Post a Resident Evacuation Notice (found in the Forms & Guidelines section) on doors at all residences you are dispatched to. If the notice is not available, leave a message taped to the door indicating that the area has been evacuated and to proceed to the Reception Centre. Make sure to provide the name of the Reception Centre and safe driving directions to exit the Emergency Planning Zone (EPZ) as well as the date and time.
- ❑ If directed by the Operations Section Chief, maintain a security watch over evacuated residences / businesses / property in the EPZ.
- ❑ When emergency is stood down, return all air quality monitoring equipment to its designated location. Ensure batteries are recharged and that the equipment is ready for the next use.
- ❑ After the emergency is over, turn in completed Time / Action Logs and all other forms in to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.19 TELEPHONE CALLERS

WHO:	Canadian Natural representatives designated by the Public Safety Chief *(Suggested: Operators, office personnel)*
RESPONSIBILITY:	To notify affected residents and give shelter-in-place or evacuation instructions
REPORTS TO:	Public Safety Chief or Telephone Caller Lead (if applicable)

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Notification / Evacuation / Shelter-In-Place Scripts and Procedures and Evacuation Contact Logs can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ The Public Safety Chief will provide the following:
  - A briefing of the incident
  - Completed script(s) to shelter-in-place or evacuate
  - List of persons to be called indicating which message to be given
  - The safest evacuation route and which Reception Center is to be used for each residence, if applicable
  - *Evacuation Contact Logs* (found in the Forms and Guidelines section)
- ❑ When directed commence notification for shelter-in-place or evacuation of all members of the public within the designated Emergency Planning Zone (EPZ). The Public Safety Chief will stipulate the correct script to use (i.e.: notification, shelter-in-place or evacuation script).
- ❑ Do not disclose any information about the emergency unless authorized by Public Safety Chief.
- ❑ Record information on an *Evacuation Contact Log* for each call made.
- ❑ Upon completion of the designated contacts, relay the following information to the Public Safety Chief:
  - People who will shelter-in-place or evacuate and if they evacuate, whether they will proceed to the Reception Center
  - People who require assistance
  - People who cannot be contacted
  - People who refuse to shelter-in-place / evacuate
- ❑ When directed by the Public Safety Chief, contact all people previously notified and inform them that the emergency condition no longer exists.
- ❑ After the emergency is over, turn in any completed Time / Action Logs and all other forms to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.20 RECEPTION CENTRE REPRESENTATIVE

WHO:	Designated Canadian Natural representative *(Suggested: Land personnel)*
RESPONSIBILITY:	To manage the Reception Centre and to address any public concerns or needs
REPORTS TO:	Public Safety Chief

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log, Reception Centre Registration Form and Daily Expense Claim forms can be found in either the Emergency Response Tool Box (red tab) or Forms and Guidelines (purple tab) section.
- ❑ Obtain multiple copies of the forms required for this role – *Reception Centre Registration Form* and *Daily Expense Claim Form* from the Public Safety Chief or from the Forms and Guidelines section.
- ❑ Open a Reception Centre as directed by the Public Safety Chief where the public can gather. **NOTE:** For emergencies involving towns / cities or more residents than Canadian Natural personnel can handle, the municipal authority will most likely take over the entire evacuation process and manage their own Reception Centre. The degree of control that the municipality will take will depend on the emergency. Be sure to clarify the municipal authority's involvement with the Public Safety Chief at the time of the emergency.
- ❑ Be aware of general information about the incident; how many people have been notified and what information may or may not have been given to the public. Do not disclose any information about the emergency unless authorized by the Public Safety Chief.
- ❑ Set up a receiving area at the Reception Centre to check in the public.
- ❑ Use the Reception Centre Registration Form to record appropriate information for each person entering or leaving the Reception Centre.
- ❑ If temporary accommodations are required, discuss the situation with the Public Safety Chief who will in turn, inform the Logistics Chief.
- ❑ Explain and distribute Daily Expense Claim Forms to residents if required.
- ❑ Maintain regular communications with the Public Safety Chief.
- ❑ Remain at the Reception Centre until notified by the Public Safety Chief that the emergency condition no longer exists. When directed by the Public Safety Chief, advise any residents at the Reception Centre that they may return to their homes or places of business.
- ❑ After the emergency is over, turn in all completed forms and Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.21 PLANNING SECTION CHIEF

WHO:	Designated Canadian Natural representative *(Suggested: Environmental Field Coordinators, Asset Integrity personnel, Area Engineers, available Operational personnel)*
RESPONSIBILITY:	To provide knowledge and expertise in order to control / mitigate the emergency
REPORTS TO:	Incident Commander / Corporate Support Team

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log found in the Emergency Response Tool Box (red tab) section.
- ❑ Assist with developing alternative strategies in coordination with Incident Commander and Operations Coordinator Officer.
- ❑ Provide additional documentation services as required.
- ❑ Prepare situation displays and summaries if required.
- ❑ Develop maps and projections if required.
- ❑ Provide other operational data if required.
- ❑ Assist in organizing the attendance of additional technical specialists.
- ❑ Assist in demobilization – releasing resources from an incident in an orderly, safe and cost effective manner.
- ❑ Turn in completed Time / Action Logs to the Area Safety & Compliance Coordinator (Site Safety) when emergency is over.
- ❑ Attend a debriefing meeting.

5.22 CORPORATE SUPPORT TEAM

WHO:	Canadian Natural Management-Level Support *(Suggested: Safety Manager, Conventional / Drilling Manager, Operations / Drilling VP / other support as required)*
RESPONSIBILITY:	To provide guidance and support to the Emergency Response Team.
REPORTS TO:	Senior Management Committee

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log and Media Communication procedures can be found in either the Emergency Response Tool Box (red tab) or the Forms and Guidelines section (purple tab) of this Corporate Emergency Response Plan (ERP).
- ❑ Provide input and advice on critical decisions regarding the emergency.
- ❑ Establish the Corporate Command Center (CCC) in the designated Bankers Hall East Emergency Response Room.
- ❑ If the designated Emergency Response Room is unavailable, utilize the mobile Canadian Natural Emergency Response Room (red cabinet).
- ❑ Activate the Information Officer role and assist in drafting statements to be issued to the Media and other stakeholders. Media statements must be coordinated with the provincial regulatory authority or federal authority, the National Energy Board (NEB), prior to release.
- ❑ If necessary, expand the Support Team by designating a Finance / Administration Section Chief who will supervise representatives / leads from other groups (i.e.: Communications, Environment, Legal, Insurance, Human Resources, Stakeholder Relations, etc.).
- ❑ Notify and assemble the Senior Management Committee if required.
- ❑ Notify district and Corporate Reception of the situation and have them refer all inquiries to the Information Officer.
- ❑ Notify Workplace Health & Safety / Workers Compensation Board / WorkSafeBC of any worker injuries / fatalities.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Ensure company incident / accident investigations are conducted.
- ❑ Attend a debriefing meeting.

5.23 SENIOR MANAGEMENT COMMITTEE

WHO:	Senior Management Committee
RESPONSIBILITY:	Provide support and direction to the Corporate Support Team
REPORTS TO:	Board of Directors

EMERGENCY RESPONSE DUTIES

NOTE: THE SEQUENCE OF TASKS MAY VARY DEPENDING ON THE SITUATION; SOME ROLES MAY BE HANDLED BY THE SAME PERSON OR NOT FILLED.

- ❑ Document **everything you do** on a Time / Action Log. **NOTE:** The Time / Action Log and Media Communication procedures can be found in either the Emergency Response Tool Box (red tab) or the Forms and Guidelines (purple tab) section of this Corporate Emergency Response Plan (ERP).
- ❑ Upon notification of an emergency, proceed to the Corporate Command Centre (CCC), if required, in the designated Bankers Hall East Emergency Response Room.
- ❑ Review and approve internal and external communications.
- ❑ Provide direction and support to the Corporate Support Team.
- ❑ Notify the Board of Directors of any critical situations.
- ❑ After the emergency is over, turn in completed Time / Action Logs to the Area Safety and Compliance Coordinator (Site Safety).
- ❑ Attend a debriefing meeting.

5.24 GOVERNMENT ROLES AND RESPONSIBILITIES

DUTIES

Provincial government regulatory agencies and local authorities provide support services and may become involved in the implementation of an Emergency Response Plan.

This section is for informational purposes only and is not intended to supersede or replace applicable provincial or federal legislation. Local regulatory agencies should be consulted for further information and / or clarification.

PROVINCIAL AGENCIES

A) Provincial Oil and Gas Regulators

British Columbia: Emergency Management BC (EMBC)
Alberta: Alberta Energy Regulator (AER)
Saskatchewan: Ministry of Economy (ECON)
Manitoba: Government of Manitoba, Emergency Measures Organization (EMO)
Northwest Territories: The Office of the Regulator of Oil and Gas Operations (for non-Federal lands)

- Oversees operator's response and establishes communication with the operator during emergencies
- In consultation with Canadian Natural, confirms the emergency Level; also confirms decision to downgrade an emergency and to stand down
- As required, alerts the provincial emergency management organization that may initiate fan-out calling
- Issues road closure order upon request of operator (BC). **NOTE:** in Alberta, this is the responsibility of the local authority (municipality or urban centre)
- As required, may issue a Fire Hazard (FH) Order to restrict access to a designated area (AB)
- May request a closure of airspace (NOTAM) from NAV Canada upon request of operator
- As required, dispatches area office staff to the On-Scene Command Post (OCP) and / or Emergency Operations Center (EOC) and / or Reception Centre
- May establish a Government EOC (GEOC) at the regional office (AB)
- May establish a Provincial Emergency Coordination Centre (PECC) and / or a Provincial Regional Emergency Operations Centre (PREOC) (BC)
- Confirms ignition decision with licensee if time permits
- Confirms and may assist with Media communications

B) Emergency Management Organizations

British Columbia: Emergency Management BC (EMBC)
Alberta: Alberta Emergency Management Agency (AEMA)
Saskatchewan: Saskatchewan Emergency Management and Fire Safety
Manitoba: Manitoba Emergency Measures Organization (EMO)
Northwest Territories: Northwest Territories Emergency Measures Organization (EMO)

- Implements the government telephone fan-out to alert all affected departments and agencies that may include:
  - local authorities whose geographic area is or may be affected
  - RCMP detachment nearest the scene or the local police
  - environmental agencies
  - land and forest agencies
  - fish and wildlife agencies
  - health authorities
- Activates the Provincial Emergency Coordination Centre (PECC) if required (BC)
- Activates the Provincial Government Emergency Operations Centre (GEOC) (AB)
- May provide liaison to the government's emergency centre
- Can provide advice and assistance to Municipal / Regional District or County
- May advise or assist the licensee and local first responders with:
  - Emergency response management, including the declaration of a provincial state of emergency
  - Coordination of an evacuation
  - Notification of NAV Canada for the arrangement of closure of airspace and the issuance of a Notice-To-Airmen (NOTAM) to restrict air traffic within the immediate area surrounding the incident site

C) Environmental Agencies

British Columbia: Ministry of Environment
Alberta: Alberta Environment and Sustainable Resource Development (AESRD)
Saskatchewan: Ministry of Environment
Manitoba: Manitoba Conservation and Water Stewardship, Environmental Compliance and Enforcement
Northwest Territories: Environment and Natural Resources

- Provides representation to the licensee's On-Scene Command Post and government emergency centre to provide advice regarding environmental impacts
- Determines areas at risk and ensures adequate equipment is available and appropriate data is collected

D) Lands and Forests

British Columbia: Ministry of Forests, Lands and Natural Resource Operations, Wildfire Management Branch
Alberta: Alberta Environment and Sustainable Resources Development (AESRD), Wildfire
Saskatchewan: Ministry of Environment, Wildfire Management
Manitoba: Conservation and Water Stewardship, Fire Program
Northwest Territories: Environment and Natural Resources

- Provides forest fire suppression response within provincial forests, provincial parks, recreation sites and vacant Crown lands
- Provides advice on forest fire conditions and behaviour and recommends appropriate course of action
- May provide specialized firefighting and safety equipment
- Assists in location of transients and search and rescue operations
- Provides advice and input into the impacts of an ignition decision

E) Fish and Wildlife

British Columbia: Ministry of Environment, Fish and Wildlife and Habitat Management Branch
Alberta: Alberta Environment and Sustainable Resource Development (AESRD), Fish and Wildlife
Saskatchewan: Ministry of Environment
Manitoba: Conservation and Water Stewardship, Fisheries Branch, Wildlife Branch
Northwest Territories: Environment and Natural Resources

- Assists in evacuation and location of transients in rural areas

F) Transportation

British Columbia: Ministry of Transportation and Infrastructure
Alberta: Ministry of Transportation, Roads and Highways
Saskatchewan: Highways and Infrastructure
Manitoba: Manitoba Infrastructure and Transportation (MIT)
Northwest Territories: Transportation Department

- May assist in highway closures by providing equipment and operators

G) Workplace Health and Safety / Compensation Boards

British Columbia: WorkSafeBC, Occupational Health and Safety
Alberta: Occupational Health and Safety, Workers' Compensation Board
Saskatchewan: Occupational Health and Safety, Workers' Compensation Board
Manitoba: Workplace Safety and Health, Workers' Compensation Board
Northwest Territories: Workers' Compensation Board

- Monitors the health and safety aspects of applicable occupations within the hazard area to ensure that necessary precautions are taken to protect the worker's safety

MUNICIPAL AGENCIES

A) Local Authority (Municipality / Urban Centre) – Emergency Management or Disaster Services

- Implements the County / Municipal Emergency Plan to protect the health, safety and welfare of residents using any or all of the resources available to the local authority
- May assist in the opening and operation of the Reception Centre
- May assist with roadblocks, fire protection and medical services (ambulance)
- May declare a state of local emergency to restrict access to a designated area
- If necessary, access provincial Emergency Alert public notification system (where available)

B) Alberta Health Services (by Zone), BC Regional Health Authority – Northern Health

- Provides information on toxic chemicals to the Emergency Operations Centre (EOC) and / or Provincial Regional Emergency Operation Centre (PREOC) as required
- Establishes health safety levels for the escaping product
- Monitors the health effects of the incident to ensure appropriate data is collected
- Investigates such health effects
- Provides advice to the government on the existing or potential health effects of the incident
- Provides health advice and safety levels for any health care or special care facility and for the more vulnerable residents

C) RCMP

- May assist with initial area isolation, evacuation and / or assistance with closure of roads
- Provides security, traffic and crowd control
- May assist in search and rescue activities
- Maintains law and order

FEDERAL AGENCIES

A) NATIONAL ENERGY BOARD

The National Energy Board's (NEB) top priority in any emergency is to make sure that people are safe and secure, and that property and the environment are protected. Any time there is a serious incident at an NEB regulated energy facility, NEB staff may attend the site to oversee the company's immediate response. The NEB will require that all reasonable actions are taken to protect employees, the public and the environment. Further, the NEB will verify that the regulated company conducts an adequate and appropriate clean-up and remediation of any environmental effects caused by the incident.

The NEB is the lead regulatory agency in emergency situations that occur on NEB-regulated facilities or operations and the Transportation Safety Board of Canada (TSB – see information below) has the option to choose to be the lead investigator for determining the cause and contributing factors leading to an incident / emergency. The NEB, in cooperation with the TSB, investigates reported incidents to determine factors leading to an incident, whether any trends are evident and what action is necessary to prevent similar occurrences in the future.

As lead regulatory agency, the NEB:

- Monitors, observes and assesses the overall effectiveness of the company's emergency response in terms of :
  - emergency management
  - safety
  - security
  - environment
  - integrity of operations and facilities; and
  - energy supply
- Investigates the event, either in cooperation with the TSB, under the *Canada Labour Code*, or as per the *National Energy Board Act* or *Canada Oil and Gas Operations Act* (COGOA) whichever is applicable
- Inspects the pipeline or facility
- Examines the integrity of the pipeline or facility
- Requires appropriate repair methods are being used
- Requires appropriate environmental remediation of contaminated areas is conducted
- Coordinates stakeholder and Aboriginal community feedback regarding environmental clean-up and remediation
- Confirms that a company is following its Emergency Procedures Manual(s) commitments, plans procedures, and NEB regulations and identifies non-compliances
- Initiates enforcement actions as required
- Approves the restart of the pipeline

B) TRANSPORTATION SAFETY BOARD OF CANADA (TSB)

The TSB's mandate is to advance transportation safety in the marine, pipeline, rail and air modes of transportation by:

- Conducting independent investigations, including public inquiries when necessary, into selected transportation occurrences in order to make findings as to their causes and contributing factors
- Identifying safety deficiencies, as evidenced by transportation occurrences
- Making recommendations designed to eliminate or reduce any such safety deficiencies and
- Reporting publicly on investigations and on the findings in relation thereto

The TSB's mandate is distinct from those of other organizations such as Transport Canada (TC), the National Energy Board (NEB), the Royal Canadian Mounted Police (RCMP), the Canadian Coast Guard (CCG), and the Department of National Defense (DND), all of whom play a role in the transportation field. As an independent federal agency, the TSB is not associated with any of these organizations, although it works in cooperation with them when conducting investigations and making safety recommendations.

When the TSB investigates an accident, no other federal department (except the DND and RCMP) may investigate for the purpose of making findings as to the causes and contributing factors of the accident. Transport Canada and the NEB may investigate for any other purpose, such as regulatory infractions. In these instances, the TSB is the lead investigator for determining the cause and contributing factors leading to an incident / emergency.

NOTIFICATION OF AN EMERGENCY SITUATION (FEDERAL)

The TSB and NEB have agreed to a single-window reporting approach; however the severity of the incident / event determines how and when it is reported.

Incident Reporting Instructions [1]

Significant incidents occurring to NEB regulated pipelines and facilities must be reported on the TSB Incident Line (see Section 6.36 Federal Gov't Contacts) and all events must be reported on the NEB's Online Event Reporting System (OERS) found at: https://apps.neb-one.gc.ca/ers

A significant incident is an acute event that results in:

- death;
- missing person (as reportable pursuant to the *Canada Oil and Gas Drilling and Production Regulations* (DPR) under the *Canada Oil and Gas Operations Act* (COGOA) or the *Oil and Gas Operations Act* (OGOA));
- a serious injury (as defined in the OPR or TSB regulations);
- a fire or explosion that causes a pipeline or facility to be inoperative; a LVP hydrocarbon release in excess of 1.5 m^3 that leaves company property or the right of way;
- a rupture; or a toxic plume as defined in CSA Z662.

Note: A "rupture" is an instantaneous release that immediately impairs the operation of a pipeline segment such that the pressure of the segment cannot be maintained.

Where an event qualifies as a significant incident and must be reported immediately, companies are required to notify the TSB Reporting Hotline at 819-997-7887. Subsequently, the company is required to input the details required by both the TSB (see TSB regulations) and the NEB for each significant incident into the NEB's OERS.

For all other events that must be reported immediately, companies must report within twenty-four hours of occurrence or discovery to the online reporting system.

The events that are reportable using OERS are:

- incidents under the *National Energy Board Onshore Pipeline Regulations* (OPR), *National Energy Board Processing Plant Regulations* (PPR) and DPR / OGOA;
- unauthorized activities under the *National Energy Board Pipeline Crossing Regulations Part II*;
- emergency burning or flaring under the PPR
- hazard identification under the PPR;
- near-misses under the DRP;
- serious accidents or incidents under the *Canada Oil and Gas Geophysical Operations Regulations / Oil and Gas Geophysical Operations Regulations*;
- emergencies or accidents under the *Canada Oil and Gas Installation Regulations / Oil and Gas Installation Regulations*; and
- accidents, illnesses, and incidents under the *Canada Oil and Gas Diving Regulations / Oil and Gas Diving Regulations.*

In the event that OERS is unavailable, companies are directed to report events to the TSB Reporting Hotline at 819-997-7887.

The NEB and TSB have adopted a single window reporting approach. However, in some areas, the TSB reporting requirements are somewhat different than the NEB requirements. **For specific details on the TSB reporting requirements, companies should refer to the TSB website: www.tsb.gc.ca/eng/incidents-occurrence/pipeline/index.asp**

Transportation Safety Board of Canada
Place du centre, 4th Floor
200 Promenade du Portage
Hull, Quebec K1A 1K8
Facsimile 819-953-7876

[1] *National Energy Board Letter* dated 26 March 2015 *Appendix A*

C) INDIGENOUS AND NORTHERN AFFAIRS CANADA (INAC)

The federal government's Ministry of Indigenous and Northern Affairs Canada's mission is to work together to make Canada a better place for Aboriginal and northern people and communities.

Aboriginal Affairs and Northern Development Canada (AANDC), one of the many departments responsible for meeting the Government of Canada's obligations and commitments to First Nations, Inuit and Métis, supports Aboriginal people (First Nations, Inuit and Métis) and Northerners in their efforts to:

- improve social well-being and economic prosperity;
- develop healthier, more sustainable communities; and
- participate more fully in Canada's political, social and economic development — to the benefit of all Canadians.

AANDC works with other departments to ensure the safety and wellbeing of First Nations on reserves through the promotion of the four pillars of emergency management: mitigation, preparedness, response and recovery.

AANDC encourages First Nation Communities to create and implement emergency management plans. When there is an actual or impending emergency that could threaten life, property or the environment, the Chief and Council are responsible for using all available local resources to respond. They are also responsible for notifying AANDC and provincial or territorial emergency management officials if a threat is beyond their community's response capacity. During an emergency, AANDC provides advice and support within its mandate and authority as requested by the affected province or territory.[1]

Indian Oil and Gas Canada (IOGC), a special operating agency within AANDC, is an organization committed to managing and regulating oil and gas resources on First Nation reserve lands. All aspects of oil and gas production are monitored by IOGC throughout the life cycle of a well; from drilling to abandonment. IOGC ensures that sound environmental standards are maintained.[2]

D) ENVIRONMENT CANADA

- Creates and administers Canada's environmental laws
- Assesses and controls dangerous chemicals
- Provides scientific advice and environmental impact assessments for spill incidents
- Helps Canadians adapt to their environment by providing scientific information affecting their health, safety and business
- Helps to protect different species of plants and animals and their habitats

[1] Excerpts (reproduced April 13, 2016) from the *Government of Canada Indigenous and Northern Affairs Canada – Roles and Responsibilities during Emergencies website*:
https://www.aadnc-aandc.gc.ca/eng/1309372584767/1309372634626

[2] Excerpts (reproduced April 13, 2016) from the *Government of Canada Indian Oil and Gas Canada website*:
http://www.pgic-iogc.gc.ca/eng/1100110010458/1100110010464#transcript

6.0 EMERGENCY RESPONSE - PHONE LISTS

6.1 CALGARY CONTACTS

24 - HOUR EMERGENCY
1-888-878-3700

SOURCE: Canadian Natural Emergency Phone List - updated April, 2016

CALGARY CONTACTS – Continued

	CELL	OFFICE		CELL	OFFICE
[redacted]			[redacted]		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]		
			[redacted]	[redacted]	[redacted]

Redacted - NEB Order MO-006-2016 s. 1.a.i. - personal information

6.2 FIELD CONTACTS

	CELL	OFFICE		CELL	OFFICE

[redacted]

Redacted - NEB Order MO-006-2016 s. 1.a.i. - personal information

24-HOUR EMERGENCY:
1-888-878-3700

[redacted]

FIELD CONTACTS – Continued

	CELL	OFFICE
[redacted]	[redacted]	[redacted]

	CELL	OFFICE
[redacted]	[redacted]	[redacted]

Redacted - NEB Order MO-006-2016 s. 1.a.i. - personal information

[redacted]

[redacted]

[redacted]

Redacted - NEB Order MO-006-2016 s. 1.a.i. - personal information

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

6.3 GOVERNMENT CONTACTS

6.3.1 ALBERTA

A. ALBERTA ENERGY REGULATOR (AER)	PHONE	FAX
Energy and Environmental 24-Hour Response Line	**1 800 222 6514**	
Field Centres:		
Calgary	403 297-8311	N/A
Bonnyville	780 826-5352	780 826-2366
Drayton Valley	780 542-5182	780 542-2540
Edmonton (formerly St. Albert)	780 642-9310	780 642-9385
Grande Prairie	780 538-5138	780 538-5582
High Level	780 926-5399	780 926-4721
Midnapore	403 297-8303	403 297-5283
Medicine Hat	403 527-3385	403 529-3103
Red Deer	403 340-5454	403 340-5136
Slave Lake	780 843-2050	780 843-2060
Wainwright	780 842-7570	780 842-7536

B. ALBERTA EMERGENCY MANAGEMENT AGENCY (AEMA)		
	PHONE	**FAX**
Response Readiness Centre (ARRC) 24-Hour	1 866 618-2362	
Toll-free in Alberta	310-0000	
Office	780 422-9000	780 644-1044

C. ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCE DEVELOPMENT WILDFIRE		
	PHONE	**FAX**
Wildfire Reporting 24-Hour	**1 866 394-3473**	
Toll-free in Alberta	403 310-3473	780 427-0292

ALBERTA GOVERNMENT CONTACTS - Continued

D. ALBERTA ENVIRONMENT AND PARKS - FISH & WILDLIFE AREA OFFICES

Report a Poacher 24-Hour **1 800 642-3800**

Call toll free in Alberta – dial 310-0000 and then area code and number below

Office	Phone	Office	Phone	Office	Phone
Athabasca	780 675-2419	Fort Vermillion	780 927-4488	Provost	780 753-2433
Barrhead	780 674-8236	Fox Creek	780 622-3421	Red Deer	403 340-5142
Blairmore	403 562-3289	Grande Cache	780 827-3356	Red Earth	780 649-3853
Bonnyville	780 826-3142	Grande Prairie	780 538-5265	Rocky Mtn House	403 845-8230
Brooks	403 362-1232	Hanna	403 854-5540	Slave Lake	780 849-7123
Calgary	403 297-6423	High Level	780 926-2238	Smoky Lake	780 656-3556
Camrose	780 679-1225	High Prairie	780 523-6521	Spirit River	780 864-4101
Canmore	403 678-2373	High River	403 652-8330	Stettler	403 742-7510
Cardston	403 653-5158	Hinton	780 865-8264	St. Paul	780 645-6313
Claresholm	403 625-1450	Lac La Biche	780 623-5247	Stony Plain / Spruce Grove	780 960-8190
Cochrane	403 932-2388	Lethbridge	403 381-5266	Strathmore	403 934-3422
Cold Lake	780 594-7876	Lloydminster	780 871-6495	Sundre	403 638-3805
Drayton Valley	780 542-6616	Manning	780 836-3065	Swan Hills	780 333-2229
Drumheller	403 823-1670	Medicine Hat	403 529-3680	Valleyview	780 524-3605
Edmonton	780 427-3574	Nordegg	403 721-3965	Vegreville	780 632-5410
Edson	780 723-8244	Oyen	403 664-3614	Vermilion	780 853-8137
Evansburg	780 727-3635	Olds	403 556-4215	Vulcan	403 485-6971
Fairview	780 835-2737	Peace River	780 624-6405	Wetaskiwin	780 361-1250
Foremost	403 867-3826	Pincher Creek	403 627-1116	Whitecourt	780 778-7112
Fort McMurray	780 743-7200	Ponoka	403 783-7093		

E. ALBERTA TRANSPORTATION	PHONE	FAX
24-Hour Emergency Line (TDG Spills)	**1 800 272-9600**	**780 427-1044**

F. ALBERTA LABOUR	PHONE	FAX
Occupational Health and Safety	**1 866 415-8690**	**N/A**

G. WORKERS' COMPENSATION BOARD	PHONE	FAX
Toll-free in Alberta	**1 866 922-9221**	**1 800 661-1993**

ALBERTA GOVERNMENT CONTACTS - Continued

H. MUNICIPALITIES – DISASTER SERVICES

Refer to the Site-Specific section of this Manual or call Alberta Emergency Management Agency for assistance.

I. ALBERTA HEALTH SERVICES

Geographic Zone	LOCATION		PHONE
Northern Zone	Grande Prairie	After Hours Public Health On-Call, **ask for Public Health On Call**	1 800 732-8981
Northern Zone	Grande Prairie		780 538-7100
Central Zone	Red Deer	24-Hour Emergency	1 866 654-7890
Central Zone	Red Deer	Central Zone Manager, Office	403 356-6393
South Zone	Lethbridge & Area	24-Hour Emergency	403 388-6111
South Zone	Medicine Hat & Area	Public Health On-Call	403 502-8300

J. RCMP – ALL AREAS **9-1-1**

6.3.2 BRITISH COLUMBIA

A. BRITISH COLUMBIA – OIL AND GAS COMMISSION		PHONE
Province-Wide	**24-Hours**	**1 800 663-3456**
Fort St. John, BC	Office	250 794-5200

B. EMERGENCY MANAGEMENT BC		PHONE
Emergency Reporting	**24-Hours**	**1 800 663-3456**
Headquarters (Victoria)	Office	250 952-4913
North East Region (Prince George)	Office	250 612-4172

C. BRITISH COLUMBIA MINISTRY OF ENVIRONMENT		PHONE
Environmental Emergencies	**24-Hours**	**1 800 663-3456**
Environmental Protection, Victoria	Office	250 387-1288

D. MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS		
WILDFIRE MANAGEMENT BRANCH	**PHONE**	**FAX**
Wildfire Reporting	**1 800 663-5555**	
Prince George Fire Centre	**250 565-6124**	**250 565-6672**
Prince George Zone	N/A	250 565-6672
Fort St. John Zone	N/A	250 787-9513
Dawson Creek Fire Zone	250 784-1262	250 784-0138
Fort Nelson Fire Zone	N/A	250 774-3448
Mackenzie Fire Zone	250 988-4250	250 997-5413

E. MINISTRY OF ENVIRONMENT	PHONE
Report All Poachers and Polluters (RAPP)	**1 877 952-7277**
Ministry of Forests, Lands & Natural Resources, Fish and Wildlife Branch	
Victoria Office Toll-free	1 866 387-9771
Victoria Office Phone	250 387-9711
Victoria Office Fax	250 387-0239

BRITISH COLUMBIA GOVERNMENT CONTACTS - Continued

F. MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE	PHONE
REPORT A PROBLEM (Highway Maintenance Contractor):	
Northern Region, Area 22 - North Peace, Fort St. John *Yellowhead Road & Bridge (North Peace) Ltd.*	1 888 883-6688
Northern Region, Area 21 – South Peace (Dawson Creek – Pouce Coupe) *Caribou Road Services (South) Ltd.*	1 800 667-2322

G. WORKSAFE BC		PHONE	FAX
Emergency and Accident Reporting	Business Hours	1 888 621-7233	N/A
	After Hours	1 866 922-4357	N/A
Fort St. John Office, Toll-free		1 800 663-4630	N/A
Fort St. John Office		250 785-1283	250 785-8976

H. MUNCIPALITIES – DISASTER SERVICES
Refer to the Site-Specific Section of this manual, or call Emergency Management BC (EMBC) for assistance.

I. REGIONAL HEALTH AUTHORITIES	PHONE	FAX
Northern Health, Northeast Area *(Chetwynd, Dawson Creek and Pouce Coupe, Hudson's Hope, Fort Nelson, Fort St. John, Tumbler Ridge)*		
Northern Health – Corporate Office	250 565-2649	250 565-2640

J. RCMP (except as noted below)	9-1-1
Northern Rockies Regional Municipality, 24-Hour Emergency	**250 774-2777**
Northern Rockies Regional Municipality, Non-emergency	**250 774-2700**

6.3.3 SASKATCHEWAN

A. MINISTRY OF THE ECONOMY (ECON)		
PETROLEUM AND NATURAL GAS EMERGENCY SUPPORT LINE		**1-844-764-3637**
PETROLEUM DEVELOPMENT BRANCH FIELD OFFICES	**PHONE**	**FAX**
Regina (Head Office)	306 787-2502	306 787-2478
Area 1: Lloydminster (24-Hour)	306 825-6434	306 825-6433
Area 2: Kindersley (24-Hour)	306 463-5400	306 463-5405
Area 3: Swift Current (24-Hour)	306 778-8252	306 778-8256
Area 4: Estevan (24-Hour)	306 637-4541	306 637-4547

B. MINISTRY OF GOVERNMENT RELATIONS	
EMERGENCY MANAGEMENT & FIRE SAFETY (formerly Emergency Measures Organization SASKEMO)	**PHONE**
Emergency Management and Fire Safety - Saskatoon Office	306 787-3774
Emergency Management and Fire Safety - Prince Albert Office	306 953-3763

C. MINISTRY OF ENVIRONMENT – ENVIRONMENTAL PROTECTION / WILDFIRE MANAGEMENT / FISH & WILDLIFE / FOREST SERVICE		
	PHONE	**FAX**
Report a Chemical Spill (Spill Control Centre)	**1 800 667-7525**	**N/A**
FireWatch Line	**1 800 667-9660**	**N/A**
Turn-In-Poachers (TIPS)	**1 800 667-7561**	**N/A**
ParkWatch	**1 800 667-1788**	**N/A**
ENVIRONMENT FIELD OFFICES:		
Cypress Hills	306 662-5435	306 662-5482
Estevan	306 637-4600	306 637-4603
La Ronge	306 425-4234	306 425-2580
Lloydminster	306 825-6430	306 825-6432
Meadow Lake	306 236-7557	306 236-7677
Prince Albert	306 953-2322	306 953-2321
Saskatoon	306 933-6240	306 933-5773
Weyburn	306 848-2344	306 848-2456

D. MINISTRY OF HIGHWAYS AND INFRASTRUCTURE	PHONE
Road Restriction Information – Saskatoon Area	306 933-5228
Road Restriction Information – Regina Area	306 787-7623
Road Restriction Information – All Other Saskatchewan Areas	1 888 335-7623

SASKATCHEWAN GOVERNMENT CONTACTS - Continued

E. MINISTRY OF LABOUR RELATIONS AND WORKPLACE SAFETY	PHONE	FAX
Occupational Health and Safety Division	306 787-4496	306 787-2208

F. WORKERS' COMPENSATION BOARD	PHONE	FAX
Toll-free	1 800 667-7590	1 888 844-7773
Main Phone	306 787-4370	306 787-4311

G. REGIONAL HEALTH AUTHORITIES – HEALTH REGIONS	PHONE
Cypress Health Region	306 778-5100
Five Hills Health Region – Toll-free	1 888 425-1111
Five Hills Health Region – Main Office	306 694-0296
Heartland Health Region	306 882-4111
Kelsey Trail Health Region	306 873-6600
Prairie North Health Region	306 446-6622
Prince Albert Parkland Health Region – Toll-free	1 800 922-1834
Prince Albert Parkland Health Region – Main Office	306 765-6400
Regina Qu'Appelle Health Region	306 766-5100
Saskatoon Health Region	306 655-3999
Sun Country Health Region – Weyburn Office	306 842-8399
Sun Country Health Region – Estevan Office	306 637-3600
Sunrise Health Region	306 786-0100

H. RCMP – ALL AREAS	9-1-1

6.3.4 MANITOBA

A. MINERAL RESOURCES DEPARTMENT – PETROLEUM BRANCH		
For info regarding Field Operations / Complaint Investigation / Workplace Safety and Health	**PHONE**	**FAX**
Toll-free	1 800 223-5215	N/A
Winnipeg Headquarters	204 945-6577	204 945-0586
Waskada – For Townships 1 to 6	204 673-2472	204 673-2767
Virden – For Townships north of Township 6	204 748-4260	204 748-2208

B. EMERGENCY MEASURES ORGANIZATION (EMO)		
	PHONE	**FAX**
Winnipeg – Toll-free	1 888 267-8298	N/A
Winnipeg – Main Office	204 945-4772	204 945-4929

C. CONSERVATION AND WATER STEWARDSHIP		
	PHONE	**FAX**
Environmental Accident Reporting Line – 24-Hour	**204 945-4888**	**N/A**
Forest Fire Report Line – 24-Hour, Toll-free	**1 800 782-0076**	**N/A**
Turn-In-Poachers (TIP) – 24-Hour, Toll-free	**1 800 782-0076**	**N/A**
REGIONAL OFFICES:		
Central Region – Winnipeg	204 945-7100	204 948-2338
Central Region – Gimli	204 642-6070	204 642-6108
Eastern Region – Lac Du Bonnet	204 345-1431	204 345-1440
Northwest Region – The Pas	204 627-8215	204 623-5733
Western Region – Brandon	204 726-6441	204 726-6301
Northeast Region – Thompson	204 677-6648	204 677-6359

D. INFRASTRUCTURE AND TRANSPORTATION	PHONE	FAX
Brandon Regional Office	204 726-6800	204 726-6836

E. LABOUR AND IMMIGRATION	PHONE	FAX
Workplace Safety and Health Incident Reporting	1 855 957-7233	N/A
Workers Compensation Board of Manitoba	1 800 362-3340	1 877 872-3804

MANITOBA GOVERNMENT CONTACTS - Continued

F. MUNICIPALITIES – DISASTER SERVICES
Refer to the Site-Specific section of this manual, or call the EMO (Emergency Management Organization) for assistance.

G. REGIONAL HEALTH AUTHORITIES	PHONE	FAX
Prairie Mountain Health, Souris, Toll-free	1 888 682-2253	N/A
Main Office	204 483-5000	204 483-5005

H. RCMP – ALL AREAS	9-1-1

6.3.5 NORTHWEST TERRITORIES

A. THE OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS (NON-FEDERAL LANDS)	PHONE
	867 669-2519

B. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES		
	PHONE	**FAX**
Yellowknife Office, General Inquiries	867 873-7379	
Dehcho Regional Office, Fort Simpson	867 695-7450	867 695-2381
Fort Liard	867 770-4300	
Inuvik Regional Office, Shell Lake	867 678-6650	867 678-6659
Aklavik	867 978-2248	
Fort McPherson	867 952-2200	
Paulatuk	867 580-3021	
Tsiigehtchic	867 953-3605	
Tuktoyaktuk	867 977-2350	
Ulukhaktok	867 396-4505	
North Slave Regional Office, Yellowknife	867 873-7184	867 837-6230,
Tlicho	867 392-6511	
Sahtu Regional Office, Norman Wells	867 587-3500	867 587-3516
Deline	867 589-3421	
Fort Good Hope	867 598-2271	
Tulita	867 588-3441	
South Slave Regional Office, Fort Smith	867 872-6400	867 872-4250
Fort Providence	867 699-3002	
Fort Resolution	867 394-4596	
Hay River	867 875-5550	
Lutsel K'e	867 370-3141	

C. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES	
ENVIRONMENTAL AND WILDLIFE EMERGENCY NUMBERS	**PHONE**
24-Hour Spill Report Line; Call Collect	**867 920-8130**
Report a Wildland Fire, Toll-free	**1 877 698-3473**
Report a Poacher, Toll-free	**1 866 762-2437**
Report Bison in the Control Zone, Toll-free	**1 866-629-6438**

D. ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA (AANDC)	
NWT REGION, MINERAL AND PETROLEUM RESOURCES	**PHONE**
Director, Fort Liard Office	867 669-2519

NORTHWEST TERRITORIES GOVERNMENT CONTACTS - Continued

E. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

WILDLIFE EMERGENCIES	PHONE
Fort Simpson	867 695-7433
Fort Smith	867 872-0400
Hay River	867 875-7640
Inuvik	867 678-0289
Norman Wells	867 587-2422
Yellowknife	867 873-7181

F. DEPARTMENT OF MUNICIPAL AND COMMUNITY AFFAIRS (MACA)

EMERGENCY MEASURES ORGANIZATION (EMO)	PHONE
24-Hour Emergency Call Line	867 920-2303

G. DEPARTMENT OF TRANSPORTATION

	PHONE	FAX
South Slave Regional Office, Hay River	867 874-5000	867 874-2272
North Slave Regional Office, Yellowknife	867 920-3096	867 873-0606
Fort Simpson Regional Office, Fort Simpson	867 695-7651	867 695-3029
Inuvik Regional Office, Inuvik	867 777-7343	867 777-4290

H. WORKERS' SAFETY & COMPENSATION COMMISSION AGENCY

WORKERS' COMPENSATION BOARD	PHONE	FAX
Incident & Injury Reporting	**1 800 661-0792**	**867 873-0262**
Yellowknife, General Inquiries	867 920-3888	867 873-4596
Yellowknife, General Inquiries, Toll-free	1 800 661-0792	1 866 277-3677
Iqaluit, General Inquiries	867 979-8500	867 979-8501
Iqaluit, General Inquiries, Toll-free	1 877 404-4407	1 866 979-8501
Inuvik, Industrial Safety	867 678-2301	867 678-2302

I. MUNICIPALITIES – DISASTER SERVICES

Refer to the Site-Specific section of this manual, or call the EMO (Emergency Management Organization) for assistance.

NORTHWEST TERRITORIES GOVERNMENT CONTACTS - Continued

J. REGIONAL HEALTH AUTHORITIES

HEALTH AND SOCIAL SERVICES AUTHORITIES	PHONE	FAX
Beaufort-Delta HSS Authority, Inuvik	867 777-8000	
Dehcho HSS Authority, Fort Liard	867 770-4301	867 695-7920
Fort Smith HSS Authority, Fort Smith	867 872-6200	
Hay River HSS Authority, Hay River	867 874-7100	867 874-7109
Sahtu HSS Authority, Norman Wells	867 587-3333	
Stanton Territorial Health Authority, Yellowknife	867 669-4111	
Yellowknife HSS Authority, Yellowknife	867 873-7094	867 873-0289

K. RCMP

	PHONE
Northwest Territories	867 669-5100
Fort Liard	867 770-1111
Fort Smith	867 872-1111
Hay River	867 874-1111
Inuvik	867 777-1111
Norman Wells	867 587-1111
Yellowknife - General Inquiries	867 669-5200

6.3.6 FEDERAL

A. NATIONAL ENERGY BOARD (NEB) / TRANSPORTATION SAFETY BOARD (TSB)	PHONE:	FAX:
Online Event Reporting System (OERS)	**https://apps.neb-one.gc.ca/ers**	
TSB Reporting Hotline (significant incidents)	**819 997-7887**	819 953-7876
NEB Incident Line (all other incidents)	**403 807-9473**	N/A
TSB Email Address	**PipelineNotifications@tsb.gc.ca**	
Calgary NEB Office	403 292-4800	403 292-5503
Calgary NEB Office, Toll-free	1 800 899-1265	1 877 288-8803

B. TRANSPORT CANADA	PHONE	FAX
Ottawa – General Inquiries	613 990-2309	613 954-4731
Ottawa – General Inquiries, Toll-free	1 866 995-9737	N/A

C. TDG / LPG (PROPANE & BUTANE) EMERGENCIES:	
Emergency Response Assistance Canada (ERAC) For Propane & Butane Emergencies Only **Canadian Natural ERAP Number: ERP 2-0010-140**	1 800 265-0212
For TDG emergencies other than LPG: CANUTEC	613 996-6666

D. ENVIRONMENT CANADA	PHONE	FAX
Notification of Environment Canada will be through respective provincial or territorial government:		
Emergency Management BC	1 800 663-3456	
Alberta Environment and Parks	1 800 222-6514	
Saskatchewan Ministry of Environment	1 800 667-7525	
Manitoba Department of Conservation	204 944-4888	

E. INDIAN OIL AND GAS CANADA	PHONE	FAX
Calgary Office	403 292-5625	403 292-5618

F. HEALTH CANADA	PHONE	FAX
First Nations, Health Authority - Prince George	250 561-5370	N/A

6.4 CONTRACT SERVICES

Below is a list of companies that provide services in Canadian Natural operations areas. Note that this list is neither an all-inclusive nor a "preferred vendors" list. Responders are free to use the most appropriate service provider they know of in their area.

A. AIRCRAFT FIXED-WING AND CHARTER *(approved by Corporate Travel, last updated 01/14/2016)*

Location	Company	Phone
Athabasca	Alberta Central Airways	780 675-5225
Calgary	Air Georgian (Air Canada Express)	Book via Air Canada website
Calgary	Airco Aircraft Charters	1 800 724-7261
Calgary	Air Partners Corp.	1 800 233-9350
Calgary	Canadian North	1 800 661-1505
Calgary	Central Mountain Air Ltd.	1 888 865-8585
Calgary	Enerjet	1 877 363-7538
Calgary	North Cariboo Air	1 866 359-6222
Calgary	R1 Airlines	1 888 802-1010
Calgary	Skyservice Business Aviation	1 866 759-4132
Calgary	Sunwest Aviation	1 888 291-4566
Edmonton	North Cariboo Air	1 866 359-6222
Fort St. John	North Cariboo Air	1 866 359-6222
Kelowna	Flair Airlines	250 491-5513
Lac La Biche	Alberta Central Airways	780 623-4122
Peace River	Northern Air	1 800 661-1911
Saskatoon	West Wind Aviation	1 866 636-9121
Smithers	Central Mountain Air Ltd.	1 888 865-8585
Terrace	Hawkair Aviation Services	1 800 487-1216
Toronto	Air Georgian (Air Canada Express)	Book via Air Canada website

B. HELICOPTER CHARTERS

(approved by Corporate Travel, last updated 01/14/2016)

Location	Company	Phone
Abbotsford	Sequoia Helicopters	604 852-1704
Athabasca	Yellowhead Helicopters	1 888 566-4401
Calgary	Bailey Helicopters	1-877-822-2245
Calgary / Springbank	OpsMobil	1 877 926-5558
Chetwynd	Highland Helicopters	250 788-9340
Cold Lake	Star Helicopters	780 639-2770
Edmonton	Bailey Helicopters	1-877-822-2245
Edmonton	Canadian Helicopters	780 429-6900
Edmonton	Delta Helicopters	1 800 665-3564
Edson	Highland Helicopters	780 723-6422
Fort Liard	Deh Cho / Great Slave Helicopters	867 770-3116
Fort McMurray	Canadian Helicopters	780 743-4888
Fort McMurray	Delta Helicopters	780 713-3582
Fort McMurray	Highland Helicopters	780 791-0039
Fort McMurray	Phoenix Heli-Flight	780 799-0141
Fort McMurray	Wood Buffalo Helicopters	1 866 743-5588
Fort Nelson	Bailey Helicopters	1-877-822-2245
Fort Nelson	Canadian Helicopters	250 774-6171
Fort Nelson	Highland Helicopters	250 774-6106
Fort Nelson	Qwest Helicopters	250 774-5302
Fort St. John	Bailey Helicopters	1-877-822-2245
Fort St. John	Canadian Helicopters	250 787-0431
Fort St. John	Highland Helicopters	250 787-7912
Fort St. John	Yellowhead Helicopters	1 888 566-4401
Grande Prairie	Canadian Helicopters	780 532-2047
Grande Prairie	Highland Helicopters	780 539-3112
Grande Prairie	OpsMobil	1 877 926-5558
High Level	Delta Helicopters	780 926-3848
High Level	OpsMobil	1 877 926-5558
Hinton	Highland Helicopters	780 865-7081
Lac La Biche	Delta Helicopters	780 623-3490
Lac La Biche	Highland Helicopters	780 623-7638
Lac La Biche	Sequoia Helicopters	780 404-1820
Manning	Valley B Aviation	780 836-4309
Norman Wells	Canadian Helicopters	867 587-2136
Norman Wells	Sahtu / Great Slave Helicopters	867 587-2827
Prince George	Yellowhead Helicopters	1 888 566-4401
Edmonton	Bailey Helicopters	1-877-822-2245

B. HELICOPTER CHARTERS

(approved by Corporate Travel, last updated 01/14/2016)

Location	Company	Phone
Rainbow Lake	Delta Helicopters	780 956-3988
Slave Lake	Delta Helicopters	780 805-8800
Slave Lake	Highland Helicopters	780 849-5199
Slave Lake	Sequoia Helicopters	780 805-6846
Slave Lake	Slave Lake Helicopters	780 849-6666
Slave Lake	Sloan Helicopters	780 849-4456
Wabasca	Yellowhead Helicopters	1 888 566-4401
Westlock	Synergy Aviation	780 479-2477
Whitecourt	Highland Helicopters	780 778-4246
Whitecourt	OpsMobil	1 877 926-5558
Whitehorse	Canadian Helicopters	867 633-4354

C. SAFETY SERVICES / COMMUNICATION EQUIPMENT

Location	Company	Phone
BC, AB	Fire Power Oilfield Firefighting Ltd.	1 800 463-3187
BC, AB	Safety Boss Services	1 800 882-4967
BC, AB	United Safety Ltd.	1 800 432-1809
BC, AB, SK	Firemaster Oilfield Services Inc.	403 342-7500
BC, AB, SK	HSE Integrated Ltd.	1 888 346-8260
BC, AB, SK	Trojan Safety Services	1 888 785-9557
Bonnyville	Astec Safety Inc.	780 812-3080
Edmonton	Carson Integrated	1 855 869-4701
Lloydminster	Astec Safety Inc.	780 875-0331
Provost	Astec Safety Inc.	780 753-2905
Weyburn	Safety Vic Inc.	306 842-3333

NOTE: This is only a suggested list of safety services / communication equipment vendors. Please refer to the site specific ERP (if available) or local field operations for other options.

D. AIR QUALITY MONITORING TRAILERS

Location	Name	Phone
Province-Wide, AB	Alberta Energy Regulator *(not a contract service)*	1 800 222-6514
BC, AB, SK	Firemaster Oilfield Services Inc.	403 342-7500
BC, AB, SK	HSE Integrated Ltd.	1 888 346-8260
BC, AB, SK	Promet Environmental	1 877 577-6638
BC, AB, SK	Trojan Safety Services	1 888 785-9557

E. WELL BLOW OUT CONTROL

Location	Company	Phone
BC, AB, SK	Firemaster Oilfield Services Inc.	403 342-7500
BC, AB, SK	HSE Integrated Ltd.	1 888 346-8260
BC, AB	Safety Boss Services	1 800 882-4967

F. HOTELS / MOTELS

Location	Company	Phone
Athabasca	Days Inn Athabasca	780 675-7020
Bonnyville	Holiday Inn Express	1 877 660 8550
Claresholm	Motel 6 Claresholm	403 625-4646
Drumheller	Ramada Drumheller	403 823-2028
Edson	Holiday Inn Express	1 877 660 8550
Estevan	Days Inn Estevan	306 634-6456
Fairview	Dunvegan Motor Inn	780 835-5100
Fort Liard	Liard Valley Motel	867 770-4441
Fort McMurray	Radisson Hotel & Suites	1 800 333-3333
Fort St. John	Pomeroy Hotel & Conference Centre	1 866 618-3233
Fox Creek	Best Western Plus Fox Creek	1 800 780-7234
Grande Prairie	Pomeroy Inn & Suites	1 877 977-4678
Lloydminster	Best Western Plus Meridian Hotel	1 800 780-7234
Oxbow	Bow Manor Motor Inn	306 483-2991
Peace River	Best Western Plus Peace River	780 617-7600
Red Deer	Best Western Plus Red Deer Inn & Suites	1 866 366-3555
Slave Lake	Holiday Inn Express Slave Lake	1 877 859-5095
Taber	Heritage Inn Hotel & Convention Centre	1 888 888-4374
Wabasca	Riverside Inn	780 891-2020
Westlock	Ramada Westlock	780 349-2245

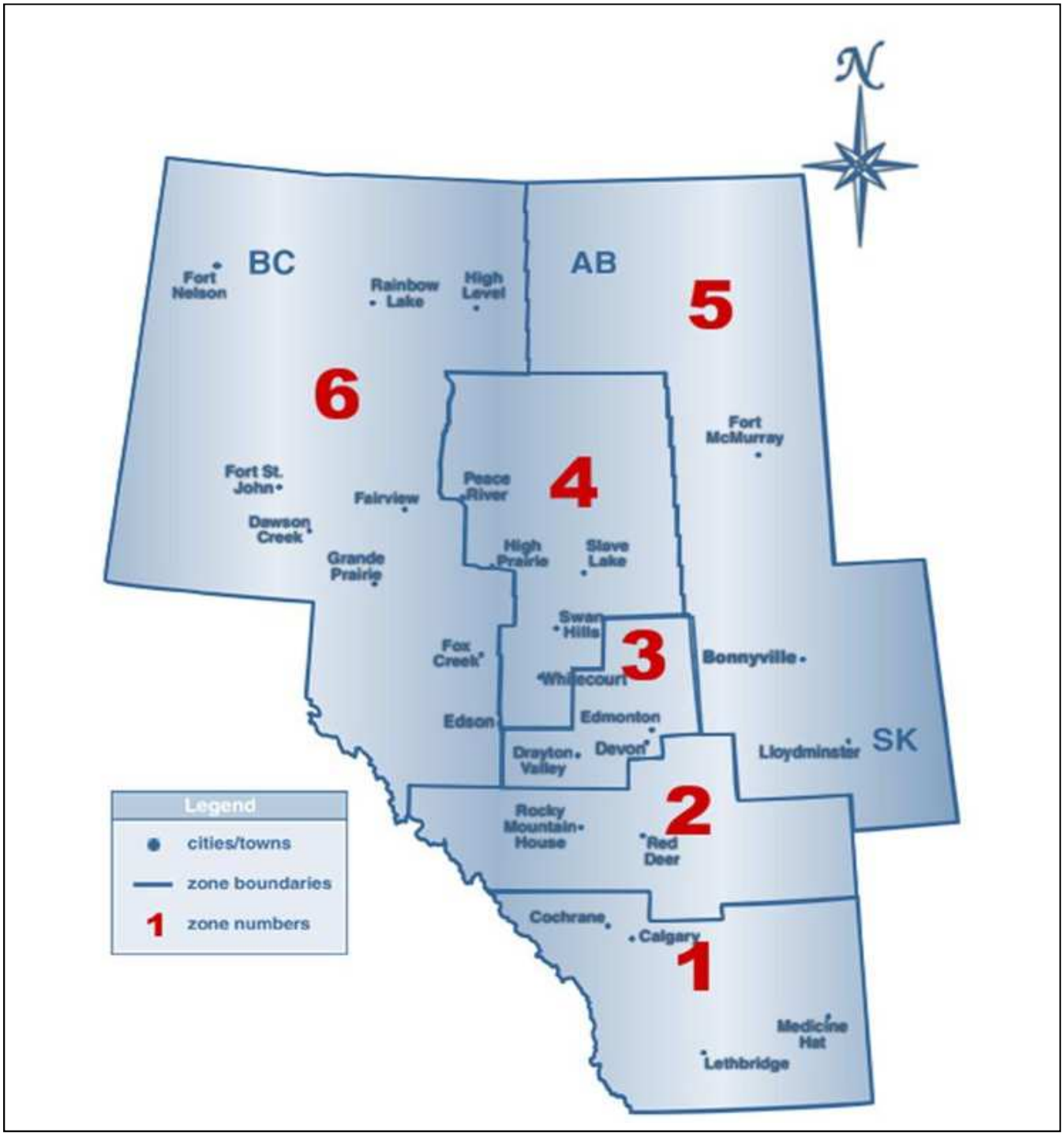
NOTE: This is only a suggested list of accommodations. Please refer to the site specific ERP (if available) or local field operations for other options.

6.5 OIL SPILL SERVICES CONTACTS

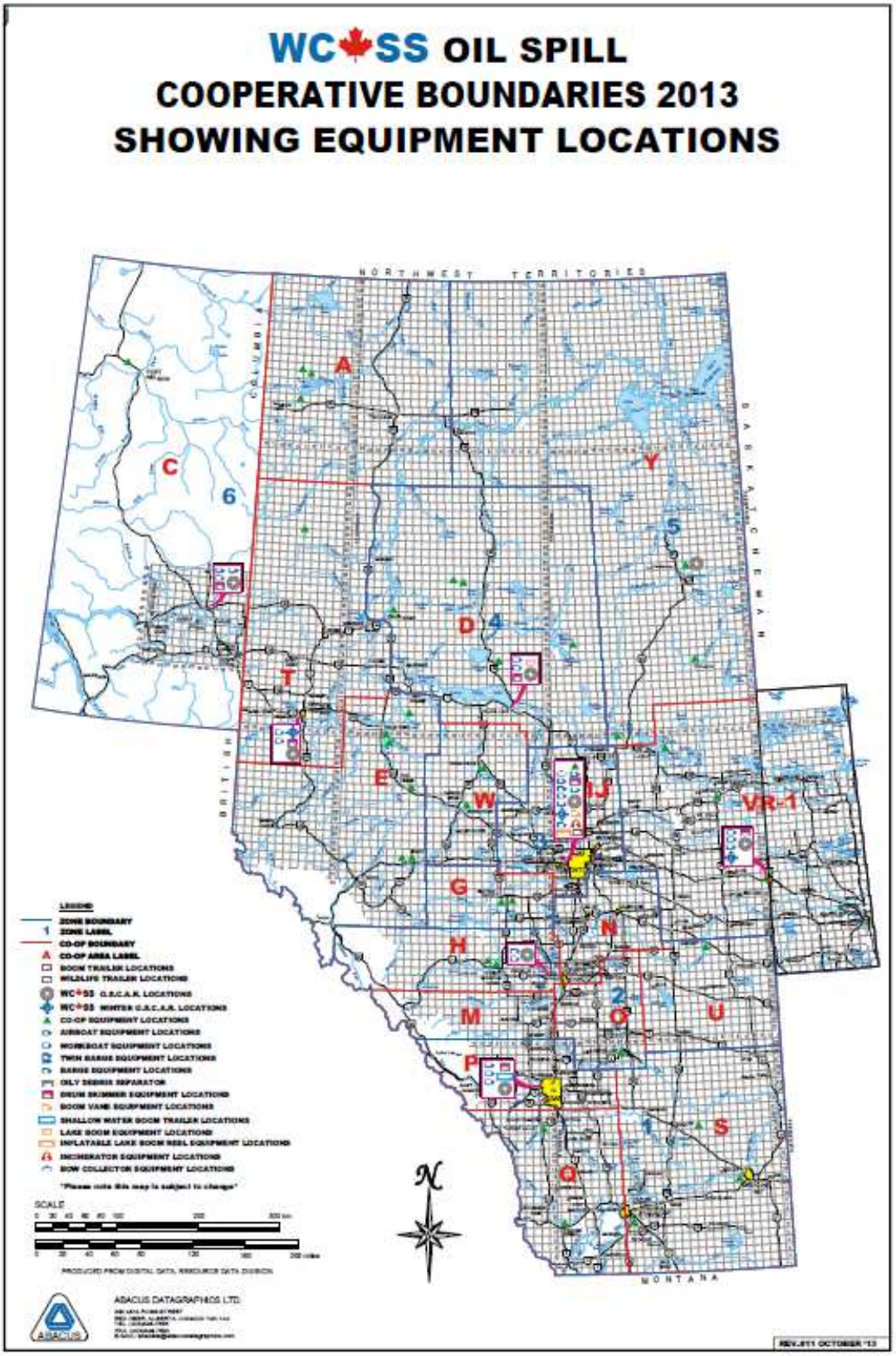
A. WESTERN CANADIAN SPILL SERVICES (WCSS)	PHONE
24-Hour Emergency Contact	**1 866 541-8888**

In the event of a spill emergency, refer to the proper Area WCSS Oil Spill Contingency Manual:

WCSS ZONE BOUNDARIES



WCSS ZONE & COOP BOUNDARIES



B. SASKATCHEWAN EMERGENCY SPILL RESPONSE

Area	Location	Contact	Trailer Location	Equipment Summary
1	WCSS Area VR-1	***24-Hour Emergency:*** 1 866 541-8888 *Website:* http://www.wcss.ab.ca/maps/area-vr-1.asp	[redacted]	a) 2 – OSCAR trailers (tractor truck required) b) 3 – Workboats (1/2 ton truck w/ 2" ball hitch required) c) Winter OSCAR trailer (3/4 ton truck with 2-5/16" ball hitch required) d) Hydraulic Drum Skimmer with Power Pak and Pump (3/4 ton truck required)
2	Area II Environmental Spill Response Unit	***24-Hour On Call:*** 306 846-2088 Website: http://areatwospill.com/	[redacted]	a) Emergency Storage Trail Unit ***Other Equipment available to Area 2:*** b) OSCAR trailer – Lloydminster/Regina/Moose Jaw – review equipment usage and costs with OSCAR rep prior to use; highway transport required. c) Canadian Petroleum Products Institution Trailer – Swift Current Fire Hall – CONTACT Swift Current & District Emergency Services • Hatchcone c/w Kamlock (male fitting) • 130 ft Sorbent Boom (10 ft sections, 8 inch diameter) • 36 x 150 ft Sorbent material, rolled • 1 portable 1000 gallon tank/stand and liner • Dangerous goods suits, etc. • Other environmental protection equipment

Redacted - NEB Order MO-006-2016, s. 1.a.ii. - Facility, disclosure of which would risk security

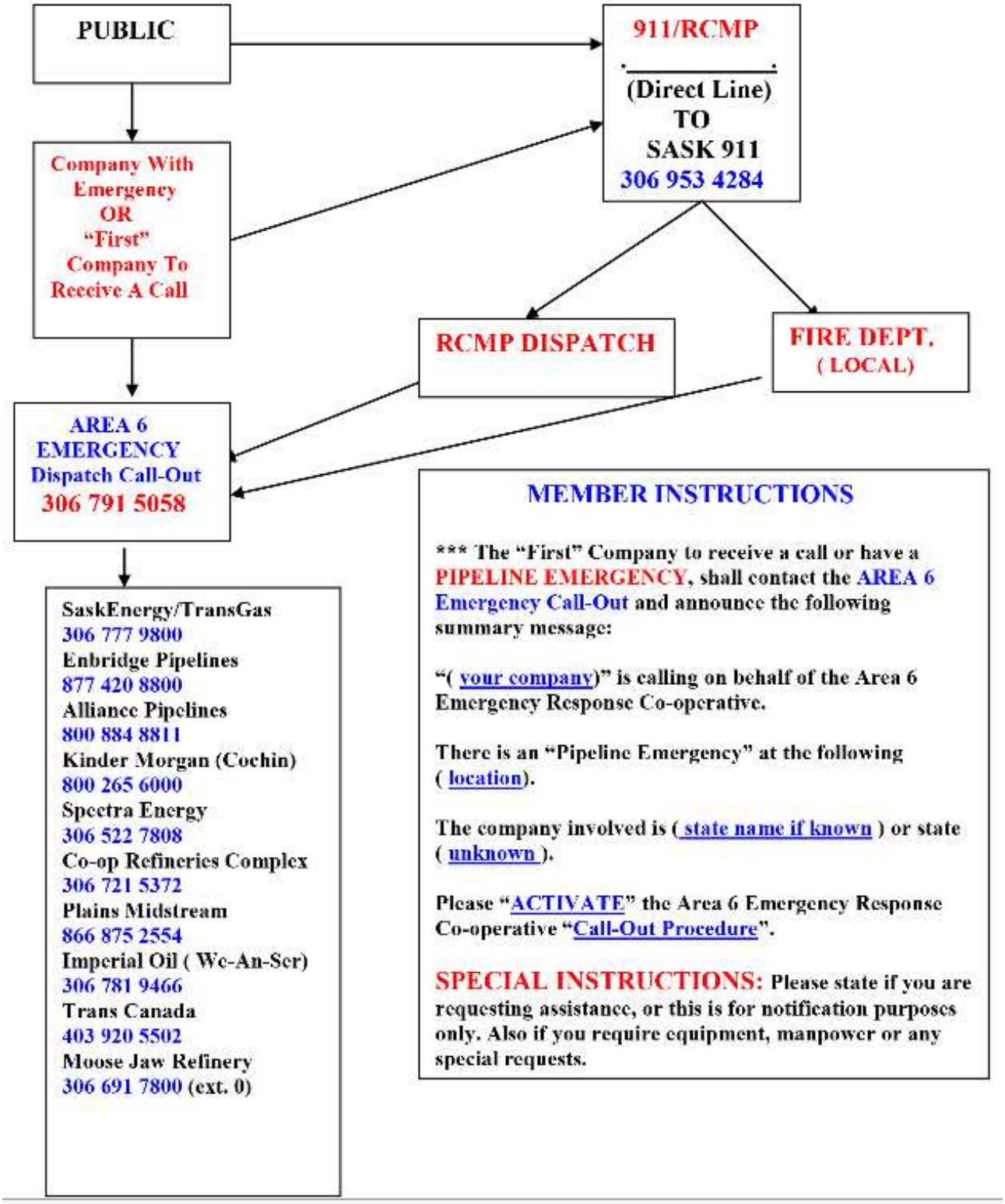
Redacted - NEB Order MO-006-2016, s. 1.a.ii. - Facility, disclosure of which would risk security

B. SASKATCHEWAN EMERGENCY SPILL RESPONSE

Area	Location	Contact	Trailer Location	Equipment Summary
3	Southwest Saskatchewan Area 3 Environmental Response Unit	***24-Hour Emergency:*** 306 778-7857 *Website:* http://www.area3eru.com/home.html	[redacted]	a) Environmental Response Trailer Unit (8' x 28' tandem axle trailer c/w pintle hitch) ***Other Equipment available to Area 3:*** b) OSCAR trailer – Regina/Moose Jaw – review equipment usage and costs with OSCAR rep prior to use; highway transport required. c) Canadian Petroleum Products Institution Trailer – Swift Current Fire Hall – CONTACT Swift Current & District Emergency Services • Hatchcone c/w Kamlock (male fitting) • 130 ft Sorbent Boom (10 ft sections, 8 inch diameter) • 36 x 150 ft Sorbent material, rolled • 1 portable 1000 gallon tank/stand and liner • Dangerous goods suits, etc. • Other environmental protection equipment
4 & 5	Oil Contingency Group – Weyburn (4) Estevan (5)	***Phone:*** 306 634-6277 *Website:* http://saskoilspill.com/	[redacted]	a) Trailer 1 – First Response equipment in 32 ft trailer b) Trailer 2 – Spare Equipment and extra booms in 24 ft trailer (both trailers equipped with pintle hitches; receivers for hitches stored inside) *NOTE: trailers are greater than 10,000 lb (actual weight approx. 13,000 lb); drivers must possess minimum of Class 1G license, as per SGI requirements and vehicles must be rated accordingly. Website has a list of contractors with qualified drivers/ vehicles. Any other contractors with qualified drivers/vehicles may be used to mobilize and de-mobilize the trailer.* ***Other Equipment Available to Area 4:*** a) OSCAR trailer – Regina/Moose Jaw – review equipment usage and costs with OSCAR rep prior to use; highway transport required.
6	Area 6 Emergency Response Cooperative Moose Jaw – Regina	***Emergency Dispatch:*** 306 791-5058 *Website:* http://area6sask.ca/call-out-chart/	N/A	Not available – See Call-Out Chart on following page

Redacted - NEB Order MO-006-2016, s. 1.a.ii. - Facility, disclosure of which would risk security

SASKATCHEWAN AREA 6 EMERGENCY RESPONSE COOPERATIVE CALL-OUT CHART



7.0 DRILLING, COMPLETIONS AND SERVICING OPERATIONS

This section describes the emergency response procedures for drilling, completion and well servicing programs. It also outlines the safety preparations, emergency actions and procedures that will be implemented if an incident occurs during these operations. All information in the previous sections of the Corporate Emergency Response Plan (ERP) is applicable to well site incidents. For sour drilling, completions and servicing operations where the public may be affected, a Site-Specific ERP will be used in conjunction with the Corporate ERP.

7.1 EMERGENCY PLANNING ZONES (EPZS)

An EPZ is a priority area surrounding a well site where immediate response actions are required in the event of an emergency.

During an emergency, the Incident Commander will determine the EPZ applicable to the emergency, based on the following:

- sour operations - the calculated EPZ radius from the Site-Specific ERP will be used;
- sweet operations, a 100 m radius will be used and adjusted as necessary to ensure public and worker safety

7.2 PUBLIC AWARENESS

Before operations begin, area residents, landowners, occupants and business owners in or immediately adjacent to the EPZ will be made aware of the operations.

7.3 PUBLIC NOTIFICATION / SHELTER-IN-PLACE / EVACUATION

Refer to “Public Protection Measures” section or information in the Site-Specific ERP.

7.4 COMMUNICATION SYSTEMS

Cellular or mobile telephones, portable radios or other communication equipment may be available in the well site office and in the vehicles of key emergency response personnel (i.e.: Drilling & Completions Supervisor, Rig Manager and contract Safety Supervisors). These systems will ensure effective communications between the On-Scene Command Post (OCP) and the Air Monitoring, Roadblock and Rover personnel.

7.5 RESPONSE TEAM DUTIES AND ACTIONS

Two Emergency Response teams, comprised of company consultants, contractors and / or company personnel, will be formed to respond to an emergency situation as outlined below:

1) **Well site Emergency Response Team**
   - Drilling / Completions Supervisor
   - Rig Manager / Testing Supervisor
   - On-duty Safety Supervisor
   - Off-duty Safety Supervisor
   - Off-duty personnel (for Roadblocks, Air Monitoring and Rovers)

2) **Calgary Office or Regional Support Center Team**
   - Drilling / Completions Superintendent
   - Drilling / Completions Manager
   - Telephone Caller Personnel
   - Corporate Support Team
   - Senior Management

In the unlikely event that an emergency occurs, the most senior Canadian Natural representative on-site will assume the role of the Operations Section Chief. The Drilling / Completions Manager (or his designate) will assume the role of Incident Commander and will designate personnel to assume all other roles and responsibilities. Tasks should be completed as per the checklists found in the Roles and Responsibilities section (yellow tabs), including completion of Time / Action Logs to document all actions taken.

NOTE: The Drilling / Completions Manager (or his designate) will inform the applicable provincial regulatory authority and federal authority (if applicable / required) of all Level 1 incidents; including "abnormal problems or situations" that could lead to a well control problem, as well as discuss the level of response and actions, particularly the potential for the situation to pose a safety risk to the Emergency Planning Zone (EPZ) occupants and / or area residents.

7.6 DRILLING / COMPLETIONS / SERVICING EMERGENCY CRITERIA, EXAMPLES AND ACTIONS / RESPONSES (AB, SK, MB)

TABLE 1: CONSEQUENCE OF INCIDENT

Rank	Category	Example of Consequence in Category
1	Minor	• No worker injuries. • Nil or low media interest. • Liquid release contained on lease • Gas release impact on lease only
2	Moderate	• First aid treatment required for on-lease worker(s). • Local and possible regional media interest. • Liquid release not contained on lease. • Gas release impact has potential to extend beyond lease.
3	Major	• Worker(s) requires hospitalization. • Regional and national media interest. • Liquid release extends beyond lease – not contained. • Gas release impact extends beyond lease – public health/safety could be jeopardized.
4	Catastrophic	• Fatality. • National and international media interest. • Liquid release off lease not contained – potential for, or is, impacting water or sensitive terrain. • Gas release impact extends beyond lease – public health/safety jeopardized.

TABLE 2: LIKELIHOOD OF INCIDENT ESCALATING

(What is the likelihood that the incident will escalate, resulting in increased exposure to public health, safety or the environment?)

Rank	Descriptor	Description
1	Unlikely	The incident is contained or controlled and it is unlikely that the incident will escalate. There is no chance of additional hazards. Ongoing monitoring required.
2	Moderate	Control of the incident may have deteriorated but imminent control of the hazard by the licensee is probable. It is unlikely that the incident will further escalate.
3	Likely	Imminent and/or intermittent control of the incident is possible. The licensee has the capability of using internal and/or external resources to manage and bring the hazard under control in the near term.
4	Almost certain or currently occurring	The incident is uncontrolled and there is little chance that the licensee will be able to bring the hazard under control in the near term. The licensee will require assistance from outside parties to remedy the situation.

Sum the Rank from both of these columns to obtain the Risk Level and incident classification

TABLE 3: INCIDENT CLASSIFICATION

Risk Level		Assessment Result
Very low	**2 – 3**	Alert
Low	**4 – 5**	**Level 1 Emergency**
Medium	**6**	**Level 2 Emergency**
High	**7 – 8**	**Level 3 Emergency**

ALERT	
Example	**Action Plan**
• Loss of circulation • "Kick" / well control warning sign (i.e.: gas cut mud, significant change in mud / circulating fluid properties and / or others)	• Assess the situation. Implement control measures to prevent injuries, environmental damage and equipment loss. • Account for all on-site personnel and isolate the incident site. • Notification of the Emergency Planning Zone (EPZ) occupants (residents, transients, trappers and other area operators) and other members of the public is not required; however; this is ultimately at the discretion of the Drilling / Completions Supervisor (senior on-site company representative) and / or the Drilling / Completions Superintendent. **NOTE:** *If the public is contacted with a courtesy notification, the provincial regulatory authority or federal authority (if applicable / required) must also be informed. Additionally, a Reception Centre must be prepared in case of voluntary evacuation.*

LEVEL 1	
Examples	**Action Plan**
• Significant loss of circulation • Continuous gas cut mud • Controlled well kick • Any other event that is likely to lead to a well control problem	• Complete Alert Level actions. • Classify emergency using the able located on the previous page and alert the Drilling / Completions Superintendent. • **NOTE:** The Drilling / Completions Superintendent will inform the provincial authority or federal authority (if applicable / required) of all Level 1 incidents, including "abnormal problem or situations" that could lead to a well control problem, as well as discuss the Level of response and actions, particularly the potential for the situation to pose a safety risk to the EPZ occupants and / or area residents. • Alert the Response Team Members (company representatives, contract and government agency personnel) required to implement the plan. • Open a Reception Centre prior to contacting EPZ occupants. • Notify sensitive EPZ occupants (residents, transients, trappers and other area operators) by telephone or visitation and inform them of the potential emergency situation. If required, personnel will provide transportation assistance to any individuals who wish to leave the area. • **NOTE:** At this Level, evacuation of the EPZ is voluntary. The EPZ occupants will be informed that evacuation is not required, but is an available option. • Alert and mobilize mobile air monitoring unit(s) to the well site. • Place Rover and Roadblock personnel on standby.

LEVEL 2	
Examples	**Action Plan**
• Inability to maintain required volumes of circulation material while circulating a well kick • Control equipment failure while circulating a well kick • Incomplete combustion of the sour gas flow at the flare pit / stack	• Complete Level 1 actions. • If upgrading from Level 1, inform the Response Team Members previously contacted of the change to Level 2 emergency conditions. • Discuss with the provincial authority or federal authority (if applicable / required), the issuance of a Fire Hazard (FH) Order and / or Notice-To-Airmen (NOTAM) to restrict access to the immediate area surrounding the incident site. • Notify all occupants and request evacuation of the area. Priority shall be given to persons located directly downwind of the well site and those who cannot be contacted by telephone. If required, personnel will provide transportation assistance. • ***NOTE:*** At this Level, evacuation of the Emergency Planning Zone (EPZ) is mandatory. • Position mobile air-monitoring unit downwind of the well site at the nearest unevacuated area. • Mobilize Roadblock personnel to establish Roadblocks at the perimeter of EPZ. • Contact and mobilize helicopter to conduct EPZ searches, if required. • Contact and mobilize additional personnel and equipment to the area. • Review ignition criteria and assemble ignition equipment.

LEVEL 3	
Examples	**Action Plan**
• A partially controlled or uncontrolled flow of sour gas is occurring at surface that cannot be controlled immediately by on-site personnel or equipment and the situation presents an immediate hazard to well site personnel and the public	• Complete Level 1 and Level 2 actions. • If upgrading from Level 2, inform the Response Team Members previously contacted of the change to Level 3 emergency conditions. • Continue with surveys / searches of the EPZ to verify evacuations have been completed. • Maintain Roadblocks. • Continue air monitoring downwind of the well site. • Consider expanding the EPZ / hazard area based on air monitoring results. • If ignition criteria is met, ignition must take place within 15 minutes of decision to ignite. If time permits consult with Senior Management to verify the decision.

INCIDENT CLASSIFICATION MATRIX

Instructions: Start at the top and continue down until you check off any one box in both consequence and probability to determine the incident classification. *This matrix is required as an attachment upon submission of an incident through the Online Minor Incident Reporting System.*

TABLE 1. CONSEQUENCE RANKING

RANK	CONSEQUENCE (any one of the following)
4	☐Major on site equipment or infrastructure loss ☐Major act of violence, sabotage, or terrorism which impacts permit holder assets ☐Reportable liquid spill beyond site, uncontained and affecting environment ☐Gas release beyond site affecting public safety
3	☐Threats of violence, sabotage, or terrorism ☐Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property ☐HAZMAT worker exposure exceeding allowable ☐Major on site equipment failure
2	☐Major on site equipment damage ☐A security breach that has potential to impact people, property or the environment ☐Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property
1	☐Moderate on site equipment damage ☐A security breach that impacts oil and gas assets ☐Reportable liquid spill or gas release on location ☐**Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations
0	☐No consequential impacts

**** For this consequence criteria, a probability score of 2 or higher must be used.**

TABLE 2. PROBABILITY RANKING

RANK	PROBABILITY (any one of the following)
4	☐Uncontrolled, with control unlikely in near term
3	☐Escalation possible; under or imminent control
2	☐Escalation unlikely; controlled or likely imminent control
1	☐Escalation highly unlikely; controlled or imminent control
0	☐Will not escalate; no hazard; no monitoring required

TABLE 3. INCIDENT RISK SCORE AND CLASSIFICATION

CONSEQUENCE _____+ PROBABILITY _____= RISK SCORE _____ (this must be completed)

Risk Score	Assessment Result
Minor (1-2)	**Notification Only;** permit holder must notify the Commission online within 24 hours using the **Form A: Minor Incident Notification Form**. In addition to Form A, spills must also be reported to EMBC.
Moderate (3-4)	**Level-1 Emergency;** immediate notification (call EMBC)
Major (5-6)	**Level-2 Emergency;** immediate notification (call EMBC)
Serious (7-8)	**Level-3 Emergency;** immediate notification (call EMBC)

CONTINUED ON NEXT PAGE

Updated: 31-July-2014
Effective: 31-July-2014

SPILL REPORTING CRITERIA

Where the permit holder holds or maintains rights, the permit holder must report to the BC Oil and Gas Commission, all spills of materials as identified below:

- A spill or release of any amount of materials which impacts water ways
- Hydrocarbons; 100 litres where the hydrocarbon contains no toxic materials and does not impact water ways
- Produced/salt water; 200 litres where the fluid contains no toxic materials
- Fresh water; 10,000 litres
- Drilling or invert mud; 100 litres
- Sour Natural gas; 10Kg or 15 m3 by volume where operating pressure is >100 PSI
- Condensate; 100 litres
- Any fluid including hydrocarbons, drilling fluids, invert mud, effluent, emulsions, etc. which contain toxic substances; 25 litres

Please refer to the BC Environmental Management Act; Spill Reporting Regulation, Schedule "Reporting Levels for Certain Substances" for determining reportable spillage amounts of other substances:

OTHER REPORTABLE INCIDENTS

The Commission's Incident Risk Classification Matrix is designed to assist permit holders in determining which incidents must be reported. However, some incidents, which do occur, may not meet the criteria outlined in the Incident Classification Matrix but still require notification to the Commission as a minor notification. These include the following:

- Spills or release of hazardous substances which are not provincially regulated, such as radioactive substances;
- Major damage to oil and gas roads or road structures;
- Drilling kicks when any one of the following occur:
  - pit gain of 3 m^3 or greater
  - casing pressure 85% of MA
  - 50% out of hole when kicked
  - well taking fluid (LC)
  - associated spill
  - general situation deterioration, i.e. leaks, equipment failure, unable to circulate, etc.
- Pipeline incidents, such as spills during construction phase, exposed pipe caused by flooding, pipeline over pressure, failure (without release) of any pressure control or ESD device during operations
- Security related issues which are relatively minor; such information may be required for tracking and monitoring purposes only

• Updated: 31-July-2014
Effective: 31-July-2014

OGC Incident Classification Matrix

Consequence			Probability				
			4	3	2	1	0
			Uncontrolled, with control unlikely in near term	Escalation possible; under or imminent control	Escalation unlikely; controlled or likely imminent control	Escalation highly unlikely; controlled or imminent control	Will not escalate; no hazard; no monitoring required
	4	Major on site equipment or infrastructure loss Major act of violence, sabotage, or terrorism which impacts permit holder assets Reportable liquid spill beyond site, uncontained and affecting environment Gas release beyond site affecting public safety	**Level 3**	**Level 3**	**Level 2**	**Level 2**	**Level 1**
	3	Threats of violence, sabotage, or terrorism Reportable liquid spill or gas release beyond site, potentially affecting public safety, environment, or property HAZMAT worker exposure exceeding allowable Major on site equipment failure	**Level 3**	**Level 2**	**Level 2**	**Level 1**	**Level 1**
	2	Major on site equipment damage A security breach that has potential to impact people, property or the environment Reportable liquid spill or gas release potentially or beyond site, not affecting public safety, environment, or property	**Level 2**	**Level 2**	**Level 1**	**Level 1**	**Minor Notification Form**
	1	Moderate on site equipment damage A security breach that impacts oil and gas assets Reportable liquid spill or gas release on location ** Occurrence of magnitude 4.0 or greater induced earthquake within 3 km of oil and gas operations or any earthquake which is felt on surface within a 3 km radius of oil and gas operations	**Level 2**	**Level 1**	**Level 1**	**Minor Notification Form**	**Minor Notification Form**
	0	No consequential impacts	**Level 1**	**Level 1**	**Minor Notification Form**	**Minor Notification Form**	**No notification Required**

** For this consequence criteria, a probability score of 2 or higher must be used.

7.7 EMERGENCY CLASSIFICATIONS, EXAMPLES AND ACTION PLAN (BC)

Emergency levels will be declared based on the criteria in Emergency Management BC's (EMBC's) Incident Classification Matrix. The Incident Commander, in consultation with the Operations Coordinator Officer and the Operations Section Chief is responsible for determining the level of emergency. The Incident Commander must consult with the provincial or federal authority, the National Energy Board (NEB), before declaring the emergency level. When a situation improves, a decision will be made by the Incident Commander, in consultation with provincial or the federal authority and the provincial and local disaster service authorities to reduce or call down the level of emergency. The Incident Commander will ensure level changes or stand down is communicated to all responders.

	Notification Only	Level-1	Level-2	Level-3
Action Plan	• Permit holder must notify the Commission online within 24 hours using the *Form A: Minor Incident Notification Form*. In addition to Form A, spills and leaks must also be reported to EMBC	• Immediate notification (call EMBC) • Alert all well site / facility personnel. Evaluate problem and initiate appropriate remedial action • Unnecessary personnel to leave the site • Notify company representative(s) • Alert mobile monitoring equipment and be ready for call-out or mobilize monitoring equipment if location is remote • In some cases, where there are large number of residents, notify or evacuate residents in accordance with site-specific plan • Prepare for evacuation in case of escalation of the situation.	• Immediate notification (call EMBC) • Ensure all level 1 actions are taking place • Initiate evacuation / sheltering of the Emergency Planning Zone (EPZ) • Set up roadblock to isolate the EPZ • Discuss issuance of a closure order with the EMBC's head office in Fort St. John • Send out monitoring crew; initiate mobile monitoring • Send company representative to reception centre • Inform senior company personnel • Establish communications links to off-site control centre • Assemble ignition crew and ready ignition equipment in case of escalation of the situation	• Immediate notification (call EMBC) • Ensure all level 1 and level 2 actions are taking place • Mobile monitoring equipment in place • Ignite release if any of the ignition criteria are met • Expand EPZ as required

7.8 EMERGENCY CLASSIFICATIONS, EXAMPLES AND ACTION PLAN (NEB)

Emergency levels will be determined using the tables below. The Operations Coordinator Officer and Incident Commander, in consultation with the Operations Section Chief, are responsible to determine the level of emergency. All emergency level classification will be based on the criteria below. The emergency level will be declared after consultation with, and, the provincial or federal authority (National Energy Board - NEB). The Operations Coordinator Officer and Incident Commander, in consultation with the Operations Section Chief, are also responsible to determine if the situation has improved to where downgrading the emergency level, or stand-down can be considered. Downgrading the emergency level or stand down will be declared after consultation and agreement from the provincial or federal authority (NEB).

Condition	Level I	Level II	Level III
Threat or Injury to People	No immediate threat to the people	Some injury or threat to people	Serious injury or fatality and/or ongoing threat to the public
Containment within Company Property	No threat to company facility infrastructure. No effects outside company property	Potential threat to company facility infrastructure. No immediate threat outside company property but the potential exists to extend beyond boundaries	Ongoing or imminent threat to facility infrastructure. Effects extend beyond company boundaries
Control of Product	Control of released product is completed or pending	Imminent control of released product is likely but not yet established	Uncontrolled release of product continuing and control is not imminent
Environmental Effects	Little or no Media interest	Local / regional media interest	National / regional media interest
Response	Incident is handled by company	First responders and government agencies are likely to be directly involved	Immediate and significant government agency involvement
Potential to Escalate	Low potential to escalate	Moderate potential to escalate based on potential for fire, explosion, increased release of product or other hazard	High potential to escalate based on potential fire, explosion, increased release or other hazard

7.9 IGNITION

A. IGNITION CRITERIA

Canadian Natural will take immediate steps to prepare for ignition at the earliest signs of a well control problem to ensure there will be no delay. Ignition does not negate the need for continuing with evacuation. The decision-making authority to ignite a well is assigned to the Canadian Natural Incident Commander, but should be done in consultation with Senior Management and the provincial regulatory authority if time permits.

During a release of H_2S, the following should be assessed:

- Risk of exposure / injury to the public or response workers
- Proximity to residences, public facilities, towns or urban centers
- Status of evacuations
- Fire hazard after ignition in relation to adjacent forested or cropland areas
- Safety of ignition team (hazard area identification, protective gear)

Ignition of a sour gas release to the atmosphere must take place when any one of the following conditions has been met and as soon as all personnel working at the site can be cleared to a safe distance:

- Although required, evacuation of the Emergency Planning Zone (EPZ) has not yet taken place.
- Monitoring results indicate H_2S concentrations in excess of 10 ppm over a 3-minute average (AB, SK, MB) or 15 ppm over 15 minutes (BC) in unevacuated parts of the EPZ. If monitored levels are declining, then the situation needs to be continuously assessed for ignition.
- Monitored H_2S concentrations exceed 1 ppm (1-hour average) in urban density developments.
- Monitoring is not taking place due to weather or other unforeseen circumstances.
- The release cannot be brought under control in the short term (the ignition decision will be made in consultation with the provincial or federal regulator).

Once any of the above criteria has been met, ignition must occur within 15 minutes of the decision to ignite.

B. IGNITION PROCEDURES

The following procedure is to be used as a guide for igniting the release:

- ❑ Consider notifying the local fire department, professional services, or having fire-fighting equipment or personnel available to address the potential hazard of a fire resulting from ignition.
- ❑ Account for all on-site personnel and locate to a safe upwind area.
- ❑ Form two (2) ignition teams, if possible. The ignition team must be certified in sour well ignition.
  - #1 Team (Primary) - Operations Section Chief and Designate
  - #2 Team (Secondary) - Two Designates
- ❑ Assemble the following ignition equipment:
  - flare gun and shells
  - self-contained breathing apparatus (SCBA)
  - explosive / Lower Explosive Limit (LEL) meter
  - lanyards and harness
  - fire retardant clothing, including gloves
  - ear protection
- ❑ The Operations Section Chief will conduct a briefing with #1 Team members. Each person will be wearing SCBA, fire retardant clothing and ear protection.
- ❑ Establish an escape route before approaching.
- ❑ Use a safety line and remain in visual contact with each other at all times. The backup team (#2 Team) will man the safety lines.
- ❑ Approach the release from the upwind side and using an LEL monitor, check that an explosive mixture does not exist in the immediate area.
- ❑ Ignition will be implemented from the maximum upwind range of the flare gun. Shells should be shot towards the release so that ignition will occur a reasonable distance from the release point.
- ❑ Firing of the flare gun should be done from a prone position or from behind a protective object. Fire the flare gun and ignite the release when at the correct range.
- ❑ If possible, remain on stand-by at the ignition site to re-ignite the release, if required.
  - ***NOTE:*** Ignition (burning of H_2S) will produce sulphur dioxide (SO_2). Monitor the area thoroughly for these gases prior to and after removing breathing apparatus.
- ❑ Contact the Operations Coordinator Officer to confirm ignition. Confirm that air quality monitoring of the Emergency Planning Zone (EPZ) for SO_2 is taking place.

7.10 MEDIA COMMUNICATION

Media releases will be generated and released by Canadian Natural management in a timely manner as significant developments occur. It is the responsibility of the Incident Commander to field all Media inquiries at the site, with support from the Corporate Support Team and Senior Management. For significant events, a spokesperson will be designated and will coordinate Media releases with the appropriate government regulatory agency (Alberta Energy Regulator, Emergency Management BC, Saskatchewan Ministry of Economy, Manitoba Emergency Measures Organization or National Energy Board / Transportation Safety Board) prior to release to ensure consistency and accuracy of information.

The designated spokesperson will compile and release the following information if applicable, to the general public as soon as possible during an incident:

- type and status of incident
- location and proximity of the incident to people in the area
- areas impacted by the incident
- effects the incident may have on people in the area
- actions the general public should take if they experience adverse effects
- description of the products involved and their short-term and long-term effects
- public protection measures to follow, evacuation direction and any other emergency response measures to consider
- actions being taken to correct the situation and time period anticipated
- contacts for additional information

The following guidelines must be followed for any on-site Media contact.

- Redacted - NEB Order MO-006-2016, s. 1.a.ii. - security risk
- Forward Media information (reporter's name and contact information, type of Media represented, type of information requested and deadline) to **INVESTOR RELATIONS at 403 514-7777**
- Advise Media that a statement will be released as soon as the facts have been determined. Direct questions or comments to the designated Canadian Natural Media spokesperson.
- No speculation will be made on the cause or damages resulting from the emergency
- Under no circumstances will the name of any accident victim be released before the next-of-kin are notified or permission has been received from Canadian Natural's Senior Management and the RCMP
- News Media will not be allowed on-site until clearance has been granted by Canadian Natural's Senior Management, government regulatory authority and / or the RCMP
- All reporters allowed on-site must be accompanied at all times and for their own safety, denied access to dangerous areas

8.0 MANUAL MAINTENANCE AND EXERCISE RECORDS

8.1 MANUAL MAINTENANCE

Canadian Natural's Corporate Emergency Response Plan (ERP) is reviewed and validated annually and updated as required. All amendments shall be distributed to each manual holder who will then be responsible for incorporating the revision when it is received. A record of all amendments will be maintained utilizing the Amendment Record form found at the beginning of this manual. Recommendations for changes to ERPs should be forwarded to the Emergency Management Lead in the Calgary office.

8.2 TRAINING AND EXERCISES

It is expected that all operations personnel working for Canadian Natural know and understand the contents of the Corporate ERP, as well as the Site-Specific plans applicable to their areas. All Canadian Natural personnel are responsible for actively contributing to the development and maintenance of effective plans.

Canadian Natural ERPs are tested through the use of table top and major exercises. A table top exercise is an informal meeting of field personnel who review roles, procedures and support services. These exercises provide procedural orientation, test the effectiveness and accuracy of the plan and help to identify any changes that may be required. Table top exercises are conducted annually and documented using the Exercise Evaluation Reports. Copies of these reports will be included in this section for audit and / or assessment purposes.

For sour facilities with Site-Specific ERPs, major exercises will be held once every three years in addition to the annual table top exercises. A major exercise is intended to provide a realistic simulation of an emergency and involves all internal and external resources required to test the plan.

Canadian Natural will notify the appropriate provincial and / or federal authorities of any scheduled major exercise and invite representatives to participate or observe:

- Alberta Energy Regulator (AER)
- Emergency Management BC (EMBC)
- Saskatchewan Ministry of Economy (ECON)
- Emergency Measures Organization – Government of Manitoba (EMO)

An Exercise Evaluation Report will be utilized to document major exercises and will contain the following information:

- type of exercise held (table top or major)
- scope and objectives
- persons involved
- outcome (objectives achieved)
- lessons learned
- action plan, including timelines

Completed reports will be included in this section and may be reviewed on a random basis by the provincial or federal authority for audit and / or assessment purposes.

EMERGENCY RESPONSE
EXERCISE ATTENDANCE RECORD

DATE:						
LOCATION:						
FACILITATOR:						
TYPE OF EXERCISE	☐	TRAINING	☐	TABLETOP	☐	MAJOR

ATTENDEES:			
NAME	**POSITION**	**FACILITY/FIELD AREA**	**PHONE**