

SASKATCHEWAN CONVENTIONAL HEAVY OIL EMERGENCY RESPONSE PLAN

24-Hour Emergency Number

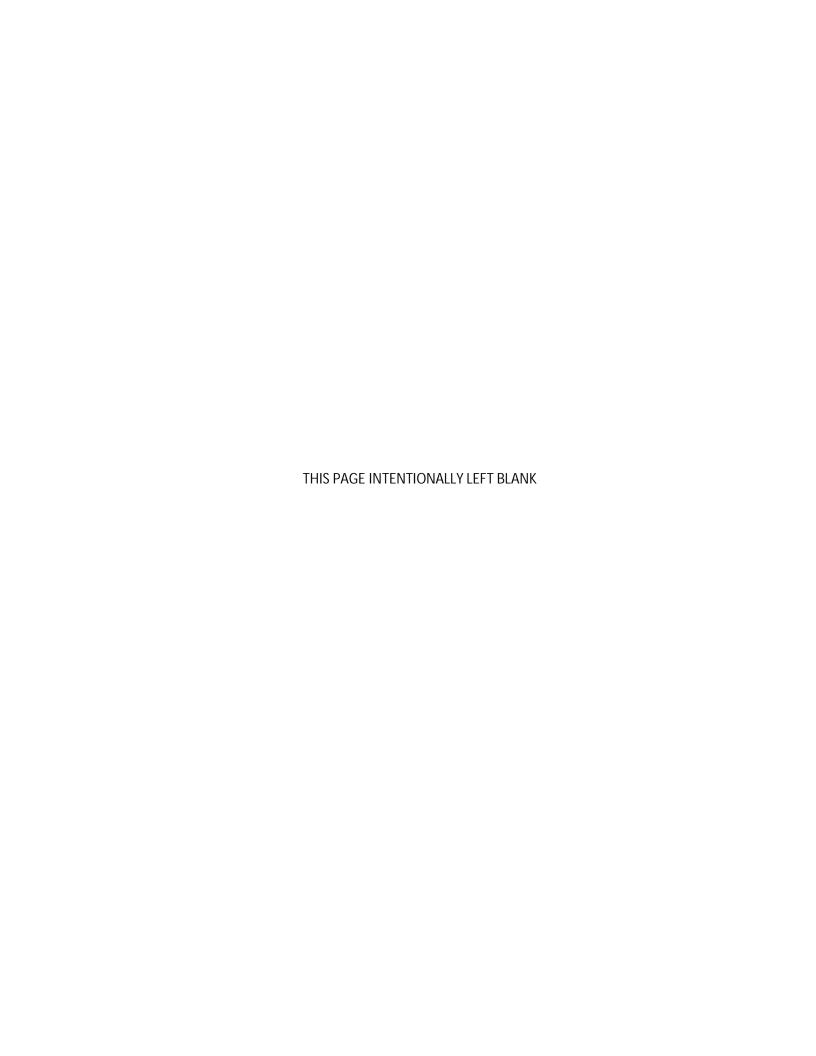
1-877-458-8080

Regulatory 24-Hour Emergency Numbers

Alberta Energy Regulator/Alberta Environment and Parks	1-800-222-6514
Energy & Environmental Response Line	780-422-4505 (outside of AB)
BC OGC Incident Reporting	1-800-663-3456
Canada Energy Regulator	1-403-299-2773
Transportation Safety Board	1-819-997-7887
Saskatchewan Ministry of Energy and Resources	1-844-764-3637
Saskatchewan Ministry of Environment	1-800-667-7525
Manitoba Sustainable Development	1-204-944-4888
Manitoba Emergency Measures Organization	1-204-945-5555

Cenovus Energy Inc. 225 6 Ave SW, P.O. Box 766 Calgary, Alberta T2P 0M5

Bus: 403-766-2000 Fax: 403-766-7600





REVISION HISTORY

This Emergency Response Plan is effective September 8, 2023.

Date of Update Inserted Into ERP:

Signature:

Plan Holder Name:

Date of Revision	Reason for Revision	Section	Affected Pages		
				Foreword	Title Page, Pg. 0-1, 0-3, 0-11, 0-14
		Section 1	Pg. 1-11 to 1-12		
	Annual update of the ERP. Apply any regulatory changes throughout the core, as well as client specific changes	Section 4	Pg. 4-11 to 4-14, 4-17 to 4-24, 4-27, 4-35 to 4-37		
September 8, 2023	to standards and processes. Annual area-specific update: verify all government/ support/ emergency services agencies, updated all area users and transients, map updates	Section 5	Pg. 5-3 to 5-10, 5-13, 5-14, 5-17 to 5-22, 5-25 to 5-28		
		Section 6	Pg. 6-65 (Form A8)		
		Section 7	TOC, Pg. 7-10, 7-43		
		Section 8: Area Specific	Various throughout the site sections		
July 25, 2022	Annual area-specific update: verify all government/ support/ emergency services agencies, map updates, convert the entire back-end area specific section to the new Cenovus template	Section 8: Area Specific	All		

FOREWORD PAGE 0-3



		Foreword	Title Page, Pg. 0-1, 0-3, 0-5, 0-15, 0-16
	Annual undata of the Company EDD. Annual	Section 1	Pg. 1-19, 1-37, 1-41, 1-52, 1-53
		Annual update of the Corporate ERP. Apply	Section 2
April 15, 2022	any regulatory changes throughout, as well as client specific changes to standards and	Section 3	Pg. 3-3
	processes.	Section 4	Pg. 4-14, 4-17, 4-27, 4-39, 4-51
		Section 5	Pg. 5-3
		Section 6	Pg. 6-1, 6-3, 6-13, 6-15
		Section 7	Pg. 7-10, 7-11, 7-13, 7-14, 7-23, 7-27, 7-28
June 17, 2021	Annual area-specific update for all sections: verify all government/ support/ emergency services agencies, map updates, revised EPZ calculations.	All Site Sections	AII
April 15, 2021	New ERP manual – based on amalgamation of Cenovus Energy (CVE) / Husky Energy (HSE) merger.	All Core Sections (Foreword, Sections 1 to 7)	AII

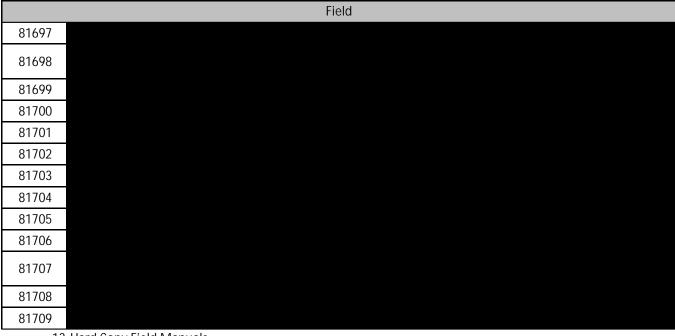
FOREWORD PAGE 0-4

SASKATCHEWAN CONVENTIONAL HEAVY OIL ERP

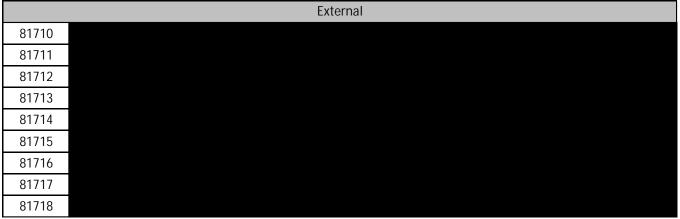
DISTRIBUTION LIST

Manual #	Туре	Res Info	Title/Agency	Name
			Corporate	
81695				
81696				

2 Hard Copy Corporate Manuals



13 Hard Copy Field Manuals



- 4 Hard Copy External Manuals
- 5 Digital (UBS) External Manuals

FOREWORD PAGE 0-5



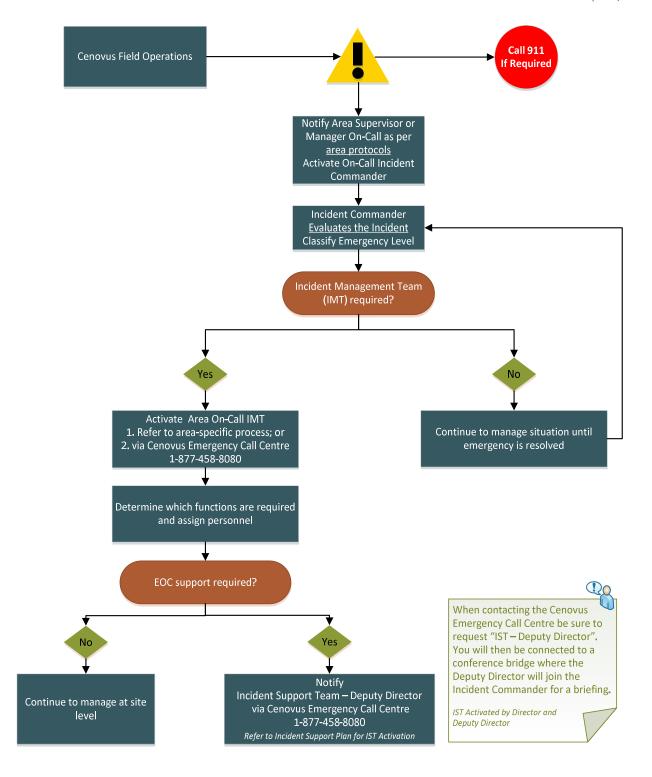
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INTERNAL NOTIFICATION FLOWCHART

Western Canada Operations Activation Flowchart

Version 1.0 - April 15, 2021

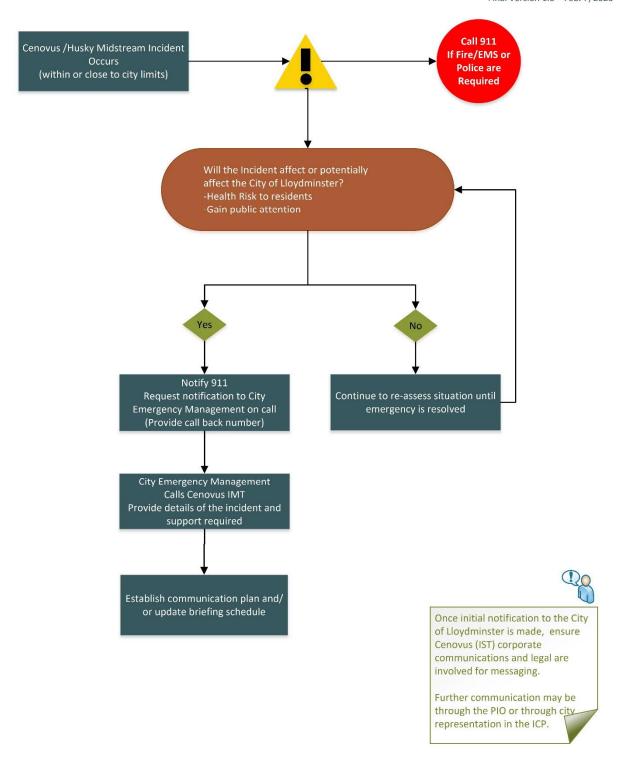




CITY OF LLOYDMINSTER NOTIFICATION FLOWCHART

City of Lloydminster Notification Flowchart

Final Version 1.0 - Feb. 7, 2023







SECTION 8: AREA SPECIFIC INFORMATION

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FDAM	

FURNESS / MARSHALL

LASHBURN / GULLY LAKE / DEE VALLEY

MARSDEN /BALDWINTON

MERVIN

NORTHEND / BORDER (SHUT-IN)

RUSH LAKE / GOLDEN LAKE

SAND CAVERN / SO2 CAPTURE FACILITY

SASKATCHEWAN GAS

TANGLEFLAGS / LANDROSE / ABERFELDY

WESTHAZEL / CELTIC

ENVIRONMENTAL EMERGENCIES (E2) PLAN



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AREA OVERVIEW

AREA OVERVIEW SUMMARY

This area overview section typically contains general operations information, telephone directory, ICP locations, and an area overview map, etc. It is intended to support the 1-pager site specific (white tabs) which contains all contacts and pertinent information to help carry out an initial response to an emergency.

FACILITY SUMMARY

This Saskatchewan Conventional Heavy Oil (CHO) Emergency Response Plan contains 9 site sections, all under the oversight of

Site Section	Facility	Location	License #
Edam			
Furness / Marshall			
Lashburn / Gully Lake / Dee Valley			



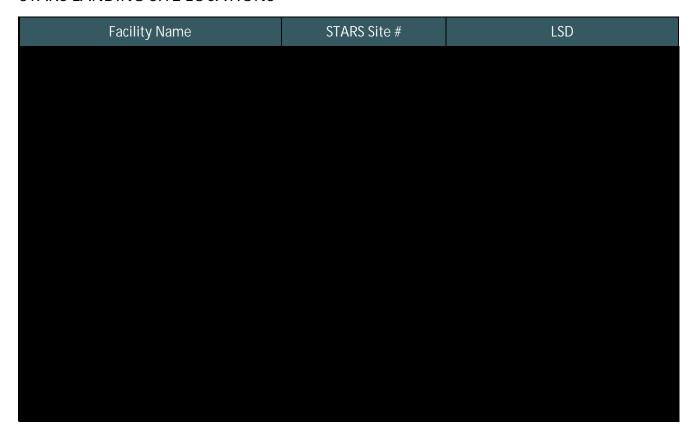
	-		
Marsden / Baldwinton			
Mervin			
Rush Lake / Golden Lake			
Sand Cavern / CO2 Capture Facility			
Saskatchewan Gas			



Saskatchewan Gas, continued		
Tangleflags / Landrose / Aberfeldy		
Westhazel / Celtic		



STARS LANDING SITE LOCATIONS





EMERGENCY RESPONSE EQUIPMENT

SAFETY EQUIPMENT

All safety equipment is documented and regularly inspected so that equipment is readily available with minimum chance of failure. On-site safety equipment is as follows:

Field Operator's carry the following equipment		
30 lbs fire extinguisher	Safety glasses	
First aid kit	Safety boots	
Cellular phone	Safety gloves	
Two-way radio	Personal 4-way monitor (H ₂ S, LEL, SO ₂ , CO)	
Flame-resistant clothing	Emergency Response Plan	
Hard hat	Blackline work alone device	
Roadblock Kits		

If any of the above-mentioned safety equipment is insufficient, Cenovus personnel will contact a local safety company who will be asked to provide additional equipment.

ROADBLOCK KITS

Roadblock kits are carried by some field operators and contain the following equipment:

Equipment			
Some Field Operator's carry the following roadblock equipment			
1x High visibility vest	1x Radio (where applicable)		
1x Stop sign with reflective tape	1x Flashlight, extra batteries		
1x Air monitoring device (H2S, CO, O2 & LEL)	1x Reflector		
1x Copy of roadblock roles and responsibilities	1x Yellow flashing light		
1x Copy of the map(s)	1x Caution tape		
3x Copies of roadblock forms	1x Decal for kit		
2x Pens and/or pencils			

If any of the above-mentioned roadblock equipment is insufficient, Cenovus personnel will contact a local safety company who will be asked to provide additional equipment.



Roadblock kits can be found at the following locations:

Facility	Quantity	Location
Gully Lake		
Landrose		
Lashburn		
Marshall		
Mervin		
Rush Lake		
Tangleflags		
Westhazel		
Gully Lake		

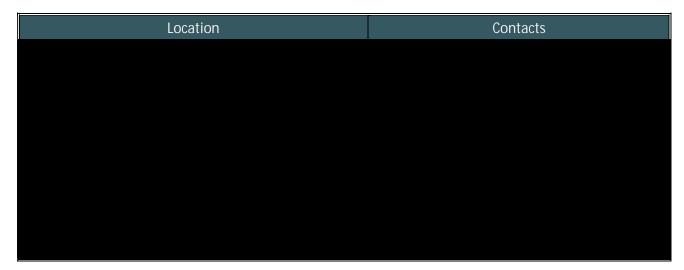
IGNITION KITS

Ignition equipment will be sourced from Safety Companies. Refer to the applicable site section information (11x17 one-pager) for a listing of Safety Companies.



RESPONSE FACILITY LOCATIONS

FIELD INCIDENT COMMAND POST (ICP)



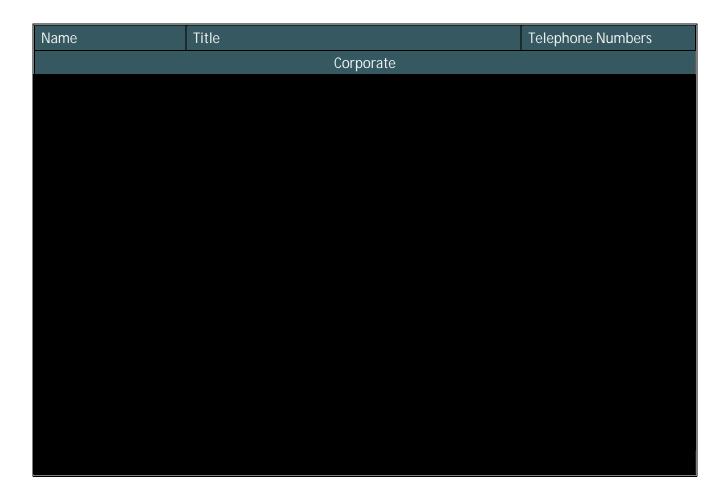
CORPORATE EMERGENCY OPERATIONS CENTRE

Location	Contacts



TELEPHONE DIRECTORY

CORPORATE PERSONNEL



FIELD PHONE LIST CENOVUS SASKATCHEWAN CONVENTIONAL HEAVY OIL



On-Call Manager 24 HOUR CENOVUS 24 HOUR 1-877-458-8080

FIELD AND CORPORATE CONTACTS

CORPORATE

Note: For a detailed contact list, refer to the Response Team Phone List found behind the *Section 8: Area Specific Information (blue) tab.*

OPERATIONS SUMMARY, continued

Closest Urban Centre

The Town of Macklin is located approximately 4.9 km from the gathering system and has a population of +/- 1,415.

Hydrology

There are various waterbodies impacted by the gathering system, including: Drake Lake and other unnamed waterbodies.

Highways and Rail

Highway 17 runs north/south through the gathering system.

There are no rail systems that run through the gathering system.

Surface Developments

No resident information has been gathered for this section of the Emergency Response Plan, due to this site section not being required/regulated by the MER.

OPERATIONS SUMMARY

Cenovus' Northend/Border area consists of operating wells and pipelines.

Emergency Planning Zone (EPZ) Information

The maximum H2S concentration for the wells is 0.001% with a maximum EPZ of 50m. The maximum H2S concentration for the pipelines is 5.0% with a maximum EPZ of 50m.

On-Site Storage

There is no on-site storage that impacts an Environmental Emergencies (E2) regulatory requirement.

SAFETY EQUIPMENT

Safety Equipment (On-**Site, Operator, Truck, Roadblock/Ignition Kits)**Refer to the Area Overview section for a list of standard safety equipment.

Notification

Communications

There are two forms of communication: Land Telephone and Cellular Telephone.

AREA USERS & TRANSIENTS

(Note: all numbers are 24 hours, unless otherwise indicated)

Oil and Gas

Bow River Energy Ltd.
Priaire Thunder Resources Ltd.

403-475-4100 844-772-1147

Trappers

There are no trappers intersecting or within the gathering system.

Guides & Outfitters

Wildlife Management Zone (WMZ) 26, 27 and 46 could be impacted in an emergency. Recreational users use the area on an intermittent basis primarily during hunting season (August - May). In the event of an incident, assign rovers to patrol the area. Please refer to www.soa.ca for up to date for up-to-date maps and hunting timetables .

Grazing Areas

There are no grazing areas intersecting or within the gathering system.

Other Stakeholders

There are no other stakeholders impacted by the gathering system



GOVERNMENT AGENCIES

(Note: all numbers are 24 hours, unless otherwise indicated)

Saskatchewan Ministry of Energy and Resources (ER)

Saskatchewan Health Authority (SHA)

Saskatchewan Ministry of Health Health Emergency Management Unit

Saskatchewan Public Safety Agency (SPSA)

Saskatchewan Ministry of Environment Spill Report Centre

SaskPower - Electrical Safety

Technical Safety Authority of Saskatchewan

Admin:

Saskatchewan Ministry of Highways

Workers' Compensation Board (WCB) - Saskatchewan

Saskatchewan Labour Relations & Workplace Safety (OHS

Saskatchewan Water Security Agency (WSA)

Emergency Response Assistance Canada (ERAC)

Canadian Nuclear Safety Commission (CNSC) Duty Officer - Nuclear Incident Reporting

CANUTEC

Toll-Free

From Cell Phone

Inquiries

Admin:

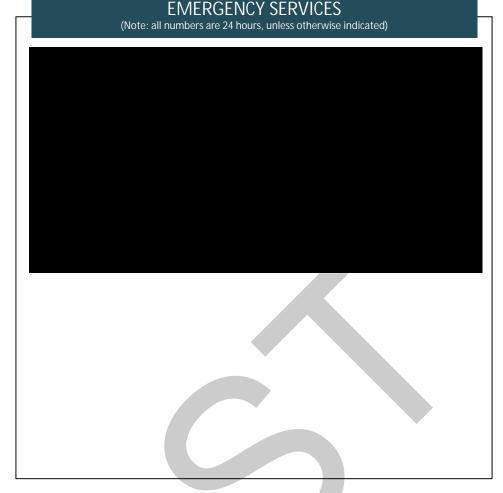
Environment and Climate Change Canada (ECCC)

Meteorological Services

Air Traffic Control

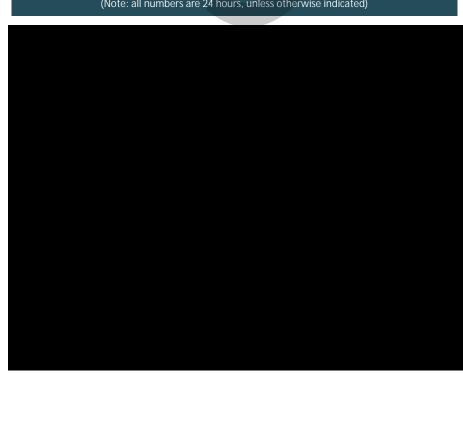
NAV Canada*

Transport Canada**



SUPPORT SERVICES

(Note: all numbers are 24 hours, unless otherwise indicated)



SUPPORT S (Note: all numbers are	SERVICES, co e 24 hours, unless oth	



^{*} If flight information or a NOTAM advisory is required, contact NAV Canada

^{**} if a NOTAM is required for airspace closure, contact the Transport Canada Aviation **Operations Centre**



CER SECTION

NORTHEND / BORDER CER PIPELINES



For Emergencies involving inter-provincial pipelines, Canadian Energy Regulator is the primary management agency – they will be contacted by the Transportation Safety Board.

**A pipeline is CER-regulated due to the fact that it crosses a Provincial Border. **

THIS MUST BE YOUR FIRST CALL				
Transportation Safety Board of Canada (TSB) (For pipeline emergencies)	24 Hour Line		819-997-7887	
Canada Energy Regulator (CER) (For all other emergencies related to a CER- regulated company's operations, facility or activity)	24 Hour Line		403-299-2773	

Call the TSB 24 Hr Incident Line when an incident meets the Immediately Reportable Events (see page 2 for criteria) for all Canadian Energy Regulator (CER) regulated pipelines and facilities.

Both the phone notification and the input of information into the CER's Online Event Reporting System (OERS): https://apps.cer-rec.gc.ca/ers/home/index are required to occur as soon as possible and no later than three hours of the incident being discovered.

For all other events (non-immediate) companies are only required to input the information via the OERS.

SECONDARY CALLS

Contact as needed AFTER contacting the TSB and CER.

Alberta Energy Regulator (AER)	24 Hour Line	800-222-6514
Saskatchewan Ministry of Energy and Resources (MER)	24 Hour Line	844-764-3637

Hazardous occurrences (under Part XVI of the Canada Oil and Gas Occupational Safety and Health Regulations) and incidents requiring medical evacuations are to be reported to the CER immediately.



National Energy



Office national



CER SECTION

CER DEFINITION OF AN EMERGENCY

CAN /CSA Z246.2-14 defines an emergency as "an event or imminent event, outside of the scope of normal operations that requires prompt coordination of resources to protect people, the environment, and property".

Emergencies can result from numerous causes including pipeline and equipment failure, human error and natural perils such as tornadoes, hurricanes, floods, or earthquakes and terrorism or other criminal activities. Multi-hazard emergencies such as an earthquake causing pipeline breaks, fires and explosions, which result in injury and further property damage, can also occur.

Companies must consider all probable emergencies and have applicable procedures in place to deal with potential effects and threats to people, property and the environment, as determined through a formal hazard assessment.

CER DEFINITION OF AN INCIDENT

Section 52 of the Onshore Pipeline Regulations (OPR) requires companies to notify the Board of all incidents relating to the construction, operation, or abandonment of their pipelines. An "incident" is defined in section 1 of the OPR as an occurrence that results in:

- 1) The death of or serious injury to a person;
- A significant adverse effect on the environment;
- 3) An unintended fire or explosion;
- 4) An unintended or uncontained release of low-vapour pressure (LVP) hydrocarbons in excess of 1.5 m³;
- 5) An unintended or uncontrolled release of gas or high-vapour pressure (HVP) hydrocarbons;
- 6) The operation of a pipeline beyond its design limits as determined under CSA Z662 or CSA Z276 or any operating limits imposed by the Board.

Companies are required to report a death or serious injury to a person only where the death or injury is a result of an occurrence that relates to the construction, operation, or abandonment of a "pipeline". Whether a death or injury is related to the construction, operation, or abandonment of a pipeline will depend on whether the person who was killed or injured was working at the time of the incident and/or whether the work was a cause or contributing factor to the incident. It is important to note that, unlike the Canada Labour Code (CLC), the OPR does not differentiate between different types of "persons". Therefore, companies must report all deaths or serious injuries to any person that occur relating to pipeline construction, operation, or abandonment regardless of whether or not that person was directly employed by the company.

The definition of "serious injury" in the OPR is not exhaustive and contains multiple injuries that qualify as serious, including "the fracture of a major bone". The CER uses the following definition of "major bone": skull, mandible, spine, scapula, pelvis, femur, humerus, fibula, tibia, radius, and ulna.



CER SECTION

IMMEDIATELY REPORTABLE EVENTS

Where regulations require an event to be reported "immediately", companies must also consider whether the event meets any of the following definitions:

An Incident that Harms People or the Environment:

- A death;
- A serious injury (as defined in the OPR or TSB regulations);
- An unintended or uncontrolled LVP hydrocarbon release in excess of 1.5 m³ that leaves company property or occurs on or off the right of way;
- An unintended or uncontrolled sweet natural gas or hvp release >30,000 m³;
- Any unintended or uncontrolled release of sour natural gas or hydrogen sulfide; and/or
- A significant adverse effect on the environment.

A Rupture:

• an instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained.

A Toxic Plume:

• a band of service fluid or other contaminant (e.g. hydrogen sulfide or smoke) resulting from an incident that causes people, including employees, to take protective measures (e.g. muster, shelter-in-place or evacuation).

Where an event meets any of the above definitions, 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 NCER into the OERS. The phone notification and the input of information into OERS are required to occur as soon as possible and no later than three hours of the incident being discovered. The goal of the initial phone notification is to allow the relevant agencies to mobilize a response to an incident, if required. Note that OERS will automatically determine whether the event meets the definition of an "Incident that Harms People or the Environment", however the company will be responsible for specifically indicating whether the incident meets the definitions of "Rupture" and "Toxic Plume".

For all other events that do not meet any of the definitions in this section, companies are not required to phone the TSB Reporting Hotline but must report the event as soon as possible and no later than twenty-four hours after the event was discovered.

MULTIPLE INCIDENT TYPES

It is possible that a single occurrence may result in multiple incident types. If multiple incident types occur as a result of a single occurrence, companies are expected to report those incident types under a single incident report.

Examples of situations where this might be the case include but are not limited to:

- A pipeline rupture (occurrence) where there is a release of gas (incident type) and an explosion (incident type);
- An industrial accident (occurrence) that causes a death (incident type), a serious injury (incident type) and a fire (incident type);
- An operational malfunction (occurrence) that causes an overpressure (incident type) and a release of product (incident type); or
- An operational malfunction (occurrence) that causes several concurrent or immediately consecutive overpressures (incident types).



CER SECTION

In cases where an incident has occurred, and a second incident occurs during the response to the initial incident (e.g. a fire occurs during the clean-up of a spill), the second incident is considered distinct and should be reported separately.

The events that are reportable using the online reporting system are:

- Incidents under the National Energy Board Onshore Pipeline Regulations (OPR), National Energy Board Processing Plant Regulations (PPR), and Canada Oil and Gas Drilling and Production Regulations (DPR)/Oil and Gas Drilling Regulations;
- Unauthorized activities under the CER Act and Pipeline Damage Prevention Regulations Authorizations (DPR-A);
- Pipeline damage and consent suspensions under the Pipeline Damage Prevention Regulations Obligations of Pipeline Companies (DPR-O);
- Emergency burning or flaring under the PPR;
- Hazard identification under the PPR;
- Suspension of operations under the PPR;
- Near-misses under the DPR;
- 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.

REPORTING TIMELINES

Section 52 of the OPR requires companies to immediately notify the Board of any incident. Section 52 of the OPR also requires the submission of a Preliminary Incident Report (PIR) and a Detailed Incident Report (DIR) "as soon as is practicable". Generally, companies' initial notification of an incident will satisfy the PIR requirements. The information required for a DIR must be submitted within 12 weeks of reporting an incident. For complex incidents, companies may request an extension for submission of a DIR.

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

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



CER SECTION

SUPPORTING INFORMATION

The table below indicates the location of CER supporting documentation in this emergency response plan.

SUPPORTING INFORMATION	FOUND IN		
CER Distribution	Foreword Section: Distribution List		
Company 24/7 Emergency Number	Area Specific Information: Binder Cover.		
Area Map of CER Regulated Facilities	Area Specific Information: Last page of this section.		
TSB Roles & Responsibilities	Section 5: External Agencies Federal Roles Chart.		
CER Roles & Responsibilities	Section 5: External Agencies Federal Roles Chart.		
Safety data sheets (SDS)	Area Specific Information		
Health and Safety Plan	Please refer to the company's Health & Safety Plan located at the corporate head office.		



EMERGENCY RESPONSE PLAN CER SECTION







CER Pipelines