EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

DRAKE / LADYFERN EMERGENCY RESPONSE PLAN

The Drake / Ladyfern Emergency Response Plan covers the following areas:

AREA NAME	LOCATION	SOUR/ SWEET
Drake		Sour
Ladyfern		Sweet
Mearen Redacted - N	EB Order MO-006-2016, s. 1.a.	i ^{Sweet} acility

information, disclosure of which would risk security

1	SITE SPECIFIC DISTRIBUTION LIST	3
	1.1 INTERNAL COPIES	
	1.2 EXTERNAL COPIES	
	1.3 AMENDMENT RECORD	5
2	GENERAL INFORMATION	6
	2.1 INTRODUCTION AND SUMMARY	6
	2.1.1 Facility General Information	6
	2.1.2 Off-Site Command Centre / Emergency Operations Centre	6
	2.1.3 General Land Use and Population Density	7
	2.1.4 Safe Locations	7
	2.1.5 Emergency Equipment	
	2.1.6 External Emergency Response Plans/ Mutual Aid	9
	2.1.7 Driving Directions and Map	
	2.1.8 Special Considerations For Emergency Response	13
	2.2 EMERGENCY DETECTION, NOTIFICATION AND CONFIRMATION SYSTEMS	14
	2.3 COMMUNICATIONS	15
	2.3.1 Communication Equipment	15
	2.3.2 Radio Frequencies	15
3	CONTACTS AND TELEPHONE LISTS	16
	3.1 COMPANY EMERGENCY NUMBERS	16
	3.2 PROVINCIAL GOVERNMENT CONTACTS	16
	3.3 EMERGENCY SERVICE NUMBERS	
	3.4 TDG / LPG EMERGENCY NUMBERS	
	3.5 MUNICIPAL GOVERNMENT CONTACTS (FOR NOTIFICATION PURPOSES ONLY)	18
	3.6 FEDERAL GOVERNMENT CONTACTS	
	3.7 CONTRACT SERVICES	19
4	PUBLIC NOTIFICATIONS	21
	4.1 COMMALERT ACTIVATION – NOT APPLICABLE	
	4.2 NOTIFICATION PROCEDURES	
	4.3 RECEPTION CENTRE(S)	
	4.4 RESIDENT INFORMATION	
	4.5 BUSINESS INFORMATION	22
	4.6 SCHOOL DIVISION(S) / SCHOOL(S)	22
	4.7 INDUSTRIAL OPERATORS	
	4.8 TRAPPER/ GUIDE OUTFITTER INFORMATION	
	4.9 GRAZING LEASE(S) / RESERVE(S) AND OTHER LAND USE DISPOSITIONS	23
	4.10 FOREST MANAGEMENT AREA(S)	
	4.11 FIRST NATIONS	23



Page 2 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

5	GATHERING SYSTEMS INFORMATION	24
	5.1 FACILITY INFORMATION	24
	5.1.1 Facility Summary	24
	5.1.2 Isolation Equipment	24
	5.1.3 Emergency Control Systems	25
	5.2 FACILITY, PIPELINE AND WELL INFORMATION	25
	5.2.1 Facility Release Rates and Emergency Planning Zones	
	5.2.2 Legend	
	5.2.3 Pipeline Release Volumes and Emergency Planning Zones - Sorted by From Location	27
	5.2.4 Well Release Rates and Emergency Planning Zones	
6	MAP AND PUBLIC INFORMATION PACKAGE	28



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 3 of 28

Rev. 0-0

May, 2016

1 SITE SPECIFIC DISTRIBUTION LIST

1.1 INTERNAL COPIES

COPY#	RECIPIENT	POSITION	LOCATION	CONFIDENTIAL INFORMATION INCLUDED (✓)
1	Marcel Johnson	Foreman	Fort St. John Office	✓
2	David Duke	Assistant Foreman	Truck	✓
3	Site – Drake	Facility		
4	Site – Ladyfern	Facility		
5	Site – Ladyfern	Facility		
6	Site – Mearon	Facility		
7	Site – Velma	Facility		
8		Operations Superintendent	Fort St. John Office	✓
9		Manager, Northern Field Operations	Calgary Office	
10		Area Safety & Compliance Coordinator	Fort St. John Office	
11	Surface Landman	Surface Landman	Fort St. John Office	✓
12	Emergency Response Mobile Cart	Emergency Response Mobile Cart	Calgary Office	
13	Calgary Office Command Center	Calgary Office Command Center Calgary Office BHE 26002		
CD* (x6)	Rig Coordinator	Rig Coordinator	Fort St. John Office	
*	Roadblock Kit	Site – Drake		
*	Roadblock Kit	Site – Ladyfern		
*	Roadblock Kit	Site – Ladyfern		
*	Roadblock Kit	Site – Mearon		
*	Roadblock Kit	Site – Velma		
*	Roadblock Role Checklist	and Information, Roadblock Control Log	and Map only	
CD*	Complete Emergency Response Plan on CD and a paper copy of the EPZ map			

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



Page 4 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

1.2 EXTERNAL COPIES

COPY#	RECIPIENT	ORGANIZATION	LOCATION
14	Emergency Response and Safety Inspector	British Columbia Oil and Gas Commission	6534 Airport Road Fort St. John, BC V1J 4M6
15	NEB – Hard Copy	National Energy Board	517 – 10 th Avenue SW, Calgary, AB T2R 0A8
CD	NEB – Electronic Copy	National Energy Board	517 – 10 th Avenue SW, Calgary, AB T2R 0A8
Electronic	Manager of Community Services	Peace River Regional District	P. O. Box 810 1981 Alaska Avenue Dawson Creek, BC V1G 4H8 prrd.dc@prrd.bc.ca
CD*	Director of Emergency Management	Clear Hills County	Mailing Address: Box 240, Worsley, AB T0H 3W0 Courier Address: 313 Alberta Ave, Worsley, AB T0H 3W0
Electronic	Chief Medical Health Officer	Northern Health Authority	600 – 299 Victoria Street Prince George, BC V2L 5B8 sandra.allison@northernhealth.ca
CD	Shane Hussey	Alberta Health Service – North Zone	11202- 100 Ave. High Level, AB, T0H 1Z0
CD	Wil White	RCMP – Grande Prairie Detachment	10202 99 th Street Grande Prairie, AB T8V 2H4
Electronic	Emergency Response Plan sent as PDF documents via email		
CD	Emergency Response Plan on CD		
CD *	Emergency Response Plan on CD & paper copy of EPZ map		

Any of the following that are affected by the EPZ have been sent an information package:

- Residents
- Registered Trappers
- Grazing Lease Owners
- Grazing Reserves



Page 5 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

1.3 AMENDMENT RECORD

DATE	DETAILS	CHANGED BY
May, 2016	Rev. 0-0 - ERP created - Reviewed gathering system and calculated EPZs - Map created and updated to reflect all changes (no residents in EPZs) - All emergency contact information verified and updated Incorporated NEB Ladyfern/ Mearon ERP	

Any comments, suggestions or revisions can be directed to:

Canadian Natural Resources Limited
Attention:

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



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 6 of 28

2 GENERAL INFORMATION

2.1 INTRODUCTION AND SUMMARY

2.1.1 FACILITY GENERAL INFORMATION

FACILITY LOCATIONS:			
FACILITIES	PHONE NUMBER DESCRIPTION		
	250-263-6308	Ladyfern West Office	
TELEBHONE NUMBERS	250-263-6319	Ladyfern West Camp	
TELEPHONE NUMBERS	250-263-6315	Ladyfern East Office	
		Emergency Cell – Ladyfern East	

DISTRICT OFFICE	Fort St. John	
MAILING ADDRESS	Bag 6450 Fort St. John BC V1J 4H9	
	250-785-3085	BUSINESS
TELEPHONE NUMBERS	250-785-3055	Fax
		On-Call Pager

2.1.2 OFF-SITE COMMAND CENTRE / EMERGENCY OPERATIONS CENTRE

DISTRICT OFFICE LOCATION	6744 Airport Road Fort St. John BC V1J 4H9	
	250-785-3085	Business
TELEPHONE NUMBERS	250-785-3055	Fax
		On-Call Pager

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



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 7 of 28

Rev. 0-0 May, 2016

2.1.3 GENERAL LAND USE AND POPULATION DENSITY

Name of Municipal District / County: Forest Region		Peace River Regional District (BC) Clear Hills County (AB)
Land use of area surrounding facility:		Forestry, Trapping, Mixed Farming, Oil & Gas
	POPULATION DEN	SITY (WITHIN EPZ):
NO.	ТҮРЕ	DESCRIPTION
0	Residences	
0	Businesses / Organizations	
0	Public Facilities / Recreational Areas	
1	Trappers/ Guide Outfitters	See Section 4.8.
0	Grazing Leases/Reserves	
0	Forest Management Areas	
0	First Nation Groups	
Several	Lakes / Rivers	Milligan Creek, Flick Creek, Adskwatim Creek, several other unnamed lakes and tributaries.
	Other	

2.1.4 SAFE LOCATIONS

On Site Muster Area	Upwind side of incident
Off-Site Staging Area	Depending on Emergency Location



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 8 of 28

2.1.5 EMERGENCY EQUIPMENT

ТҮРЕ	#	LOCATION / NOTES
Personal Gas Monitor	12	
Burn Kit	2	
Eye Wash Station (15 min flow)	4	
Eye Wash Station (1 litre bottle)	20	
First Aid Kit	10	
First Aid Room	1	
Fire Extinguisher	20	
Ignition Equipment	2	
Portable Gas Detector	6	
SABA	0	
SCBA	10	
Wheeled Fire Extinguisher	0	
Road Block Kit - Consists of: 3 triangular flare / reflector kits 1 traffic vest (mesh with reflective striping) 1 Stop / Slow paddle 3 traffic cones 1 30-minute flare with spike 1 flare gun with flares 1 6-volt flashlight with spare battery 1 12-volt spotlight 1 roll of Caution tape 1 windsock and stand - clipboard, pencils, paper - ERP map(s) - Roadblock Role Checklist & information - Roadblock Control Log form	5	Drake Ladyfern Ladyfern Mearon Velma



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 9 of 28

2.1.6 EXTERNAL EMERGENCY RESPONSE PLANS/ MUTUAL AID

BC - PEACE RIVER REGIONAL DISTRICT

Consulted Protective Services Manager/ Emergency Program Coordinator.

Any time an emergency occurs that involves the evacuation of any residents, the Peace River Regional District will be notified.

It is essential that Canadian Natural's Incident Commander maintain communication with Peace River Regional District Protective Services Manager to ensure that responses are coordinated.

The Peace River Regional District has a formal Emergency Management Plan, which outlines the measures and sources of assistance that can be obtained to support emergency response efforts within their jurisdiction. Upon request from the Oil and Gas Commission (OGC), the Regional District may address emergency response capabilities, expectations and preparedness. If required, the Regional District may activate their emergency plan in order to achieve any of the following:

- Dispatch representative(s) to the OGC Emergency Operations Centre (EOC), if established
- Provide support to ensure notification of endangered area residents
- Provide support to coordinate and deliver emergency social services to evacuated residents
- If necessary, declare a State of Local Emergency and issue an Alert, Order and Rescind
- Assist in a public information service (joint OGC, industry, local government)
- Provide building re-entry procedures

The Peace River Regional District provides enhanced 9-1-1 services to all municipalities and electoral areas of the Regional District. Personnel at the 9-1-1 Public Safety Answering Point (PSAP), located within the RCMP North District Operational Communications Centre (OCC) in Prince George, determine the nature of the emergency and transfer the caller to the appropriate response agency – police, fire or ambulance.

The 9-1-1 Emergency Service also includes fire/rescue radio dispatch for eleven fire departments throughout our region. The fire dispatch centers are located at the Dawson Creek and Fort St John Fire Departments.

The Charlie Lake Fire Department (CLFD), operated by the Peace River Regional District, is staffed by a full time Fire Chief, a full time Deputy Chief and 30+ enthusiastic volunteer firefighters out of one fire hall. The department currently responds to 80 to 100 calls for service a year and protects 125 square km's with a population of 3,700. Full time staff are at the hall 8:30 a.m. – 4:30 p.m. Monday to Friday.

When requested, volunteer Search and Rescue teams are available to support Ground Search and Rescue activities throughout the Peace Region. All members receive search training with some trained in specialized disciplines including Rope Rescue, Tracking and Swiftwater and Ice Rescue and HETS.

AB - CLEAR HILLS COUNTY

Consulted , CAO/ Director of Disaster Services.

Clear Hills County:

- Initiates and manages the local disaster services response in accordance with County Policy.
- May dispatch representative(s) to the Government's Off-Site Emergency Operations Centre.
- Ensures all local emergency and public information services are available in accordance with County Policy (Public Information Releases will be coordinated with the company's Public Information Officer).
- If required, activates Municipal Emergency Operations Centre (MEOC) and coordinates activities at this centre. The MEOC is available to the company for use as a Regional Emergency Operations Centre (REOC) subject to limitations as may be imposed by Clear Hills County due to current operations requirements at the time.



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 10 of 28

Rev. 0-0 May, 2016

AB - CLEAR HILLS COUNTY continued

- Upon request, may assist with set-up and administration of Reception Centre. May assist with arrangement of temporary accommodations for residents who have been evacuated in accordance with County Policy.
- May assist with set up and maintenance or roadblocks in accordance with County Policy.
- May assist with fire protection in accordance with County Policy in areas where accessible.
- If necessary, may declare a local state of emergency to provide local authorities with special powers.
- Supports the company in dealing with the emergency in accordance with County Policy.

There is one County Fire Department, located at Worsley and three Fire Departments on contract from Hines Creek, Fairview and Berwyn for the Hines Creek and east areas, each with approximately 20 volunteer firefighters.

NOTE: The Fire Departments are not equipped for Industrial Fire Protection and would be responsible for anything off-site or outside of the Emergency Planning Zone. Some Fire Department resources may be useful for on-site actions such as water tank trucks, potable tanks, etc. and may be made available if requested. Certain areas of Clear Hills County have limited access or are extremely remote from any Fire Department.

The Alberta Energy Regulator – Peace Wildfire Management Area is responsible for wildland fire protection in these areas. The County has no Special Constables. All policing duties are covered by the RCMP – Fairview Detachment. The Public Works Department employs about six personnel, which expands to 20 employees during the summer.

Emergency Medical Services are under Alberta Health Services; dial 9-1-1.

BC - NORTHERN HEALTH AUTHORITY

Consulted

Chief Medical Health Officer.

The Northern Health Authority's Medical Health Officer is the primary contact in the event of an emergency but works with Environmental Health to investigate the incident and / or liaise with the licensee. Health Emergency Management BC (HEM BC North) will serve as an additional contact, however, the primary contact should always be the Medical Health Officer.

For consultation purposes, HEMBC North can be used as the confirming agency for contact information and roles and responsibilities however, any revised consultation forms will be forwarded to the Chief Medical Health Officer for confirmation signing.

Roles:

Northern Health is the regional health authority responsible for providing health services to 300,000 people over an area of 600,000 square kilometers in the province of British Columbia. Services include:

- Acute (hospital) Care
- Public Health (Protections, Preventive and Population Health services)
- Mental Health and Addictions
- Home and Community Care

In the event of a major emergency/disaster, Northern Health will provide health care services within its capacity, and will activate its emergency response management plan(s).

Responsibilities:

- Provide acute care and emergency services at existing Northern Health hospitals/health centre;
- Work with BC Ambulance Service and the BC Patient Transfer Network to transport patients to the appropriate levels of care:
- Activate internal emergency response management plans related to ongoing provision of its services (listed above);
- Apply and enforce the Public Health Act, and associated regulations;
- Provide advice/information to the stakeholders on the existing or potential public health effects of an incident (including drinking water safety, air quality);
- Provide advice/information on the best methods for monitoring health effects from an incident.



Page 11 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

AB - ALBERTA HEALTH SERVICES - NORTH ZONE

Consulted

Environmental Public Health Director

The North Zone has developed an e-mail address <u>NZERP@albertahealthservices.ca</u> that will be used to receive all electronic information relating to oil and gas Emergency Response Planning for the North Zone. If it can be sent electronically please use the e-mail provided.

This e-mail will be checked by designated personnel and all information handled appropriately. There is no longer a need to send information to local offices in the North Zone as it will be distributed internally by our own staff.

Environmental Public Health (EPH) will endeavor to:

- Participate with the Licensee in the development of their Emergency Response Plans as it relates to the EPH Program's role and responsibility.
- Provide the AHS Zone Single-Point-of-Contact (SPOC) emergency phone number to enable the Licensee to notify and alert the Zone of an emergency. From the initial notification or alert, AHS emergency response will fan out to and coordinate with other AHS programs and facilities as necessary. 9-1-1 EMS services remain independent of the Zone SPOC notification / alert process.
- Participate with stakeholders in preparedness training and exercises associated with a Licensee's simulated activation of an Emergency Response Plan in which EPH has a role and responsibility.
- Participate in public information sessions during the Licensee's Emergency Response Plan development process when appropriate and resources permit.
- Provide guidance to stakeholders and local municipal authorities in identifying sites suitable for establishing and operating an evacuation centre and / or reception centre, including operational requirements.
- In consultation with the Zone Medical Officer of Health (MOH) provide guidance to stakeholders on substances that may affect public health, including Alberta Health and Wellness acute exposure health effects for hydrogen sulphide and sulphur dioxide.
- Conduct assessments, inspections and give regulatory direction, when appropriate, to ensure the requirements of
 provincial legislation and EPH program areas of responsibilities for public health protection and disease prevention
 are maintained.
- Notify the Zone Medical Officer of Health of any incident affecting or potentially affecting other AHS programs or facilities. The Zone MOH will notify and coordinate emergency response in other program areas and facilities as necessary.
- Establish EPH emergency management operations, when appropriate, to support regional response efforts and liaise with the Government Emergency Operations Centre, Municipal Emergency Operations Centre and / or industry Emergency Operations Centre, if needed.
- Assist the Zone Medical Officer of Health, local municipal authority and Public Information / Communication
 Officers in the development, issuance and rescinding of public health, public evacuation and shelter-in-place
 advisories.
- Provide guidance to stakeholders on matters relating to evacuation of the public and / or public facilities and the reoccupancy of those evacuated areas or facilities.
- Record and respond to health complaints or concerns from the public during and following an incident.
- Participate in stakeholder debriefings as necessary.

BC - RCMP - FORT ST. JOHN DETACHMENT

Consulted November 26, 2015 via phone/email with Staff Sergeant Steve Perret.

The 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



Page 12 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

AB - RCMP - GRANDE PRAIRIE DETACHMENT

Consulted

via phone/email with Wil White.

The 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

MUTUAL AID

It is generally understood that in the event of an emergency if another industrial operator is the first to identify the situation their initial response will be to notify Canadian Natural immediately. In the same vein, if Canadian Natural personnel are the first ones to identify the emergency, they will immediately notify all other industrial operators that may be affected.

Canadian Natural would provide first responder actions for an emergency involving other operated assets, with immediate notification to the well or the pipeline licensee.

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



Page 13 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

2.1.7 DRIVING DIRECTIONS AND MAP

DRIVING ROUTE					
Redacted -	NEB Order M	10-006-201	6, s. 1.a.iiFac	ility	
information	, disclosure of	f which wou	ld risk security		
PROXIMITY TO NEAREST UR	BAN CENTRE				
LATITUDE AND LONGITUDE	COORDINATES				
LATITUDE: LONGITUDE:					
	LATITUDE:		LONGITUDE:		
	LATITUDE:		LONGITUDE:		

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

2.1.8 SPECIAL CONSIDERATIONS FOR EMERGENCY RESPONSE

Locating Transients and Recreational Users

In an emergency situation, aerial surveillance must be contacted and brought in to sweep the area to look for snowmobilers, hunters, backpackers, skiers or any other recreational transients. Helicopters and fixed wing contractors are listed in the Contract Services section of this manual. **NOTE:** helicopters only fly daylight hours; an emergency situation that happens at night will require the services of the fixed wing company.



Page 14 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

2.2 EMERGENCY DETECTION, NOTIFICATION AND CONFIRMATION SYSTEMS

PRESENT AT FACILITY	ТҮРЕ	DESCRIPTION
Y	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.
Y	SCADA System (on sales line)	Supervisory Control and Data Acquisition – 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.
Y	Alarm & 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.
N	Aerial Surveillance	Pipelines may be surveyed on a regular basis to detect leaks.
Y	Landowner Complaint System	Landowners with concerns, or who have identified potential problems, can call the facility directly or the 24-hour emergency number.
Y	Operator Inspections	Operators do regular inspections of pipelines, wells and facilities and will report any abnormality they detect.
N	24-Hour Manned Stations	Some Canadian Natural facilities are monitored 24 hours a day.
Y	H2S Monitors – Continuous	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.
Y	H2S Monitors – Handheld	Canadian Natural personnel are equipped with personal H_2S / LEL monitors for early detection.
Y	Gas Detection Equipment	Continuous Combustible Gas Detectors are located throughout the facility. The detectors alarm at 20% lower explosion limit (LEL). At 40% LEL, the detectors engage a facility shut down.
Y	Fire Detection Equipment	An ultraviolet fire detection system, "Fire Eyes," may be installed throughout facilities.



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 15 of 28

Rev. 0-0 May, 2016

2.3 COMMUNICATIONS

The primary means of communication between the Emergency Response Team personnel and the various Operations Centres / Command Posts will be by cellular telephone. Portable radios will be utilized if practical. Applicable radio frequencies are listed below. In the event that more portable radios are required than are available, contact should be made with service providers as listed below or in the Contract Services section: "Safety Services / Communication Equipment."

2.3.1 COMMUNICATION EQUIPMENT

EQUIPMENT	COMMENT
Mobile Radios	See below
All operators carry cell phones	Reception is good

2.3.2 RADIO FREQUENCIES

NAME	RECEIVE NUMBER	TRANSMIT NUMBER
Ladyfern		
Drake		
LAD 1		

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



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 16 of 28

Rev. 0-0 May, 2016

3 CONTACTS AND TELEPHONE LISTS

3.1 COMPANY EMERGENCY NUMBERS

POSITION	NAME	CELL	OFFICE
Area Foreman Redacted - NEB Order I	MO-006-2016 s.	1.a.i Person	al information
Assistant Foreman			
Operations Superintendent			
Safety & Compliance Coordinator			
Surface Landman			
Health & Safety Manager			
Emergency Management Lead			
Manager, Northern Field Operations			
Vice President, West Field Conventional Operations			
Calgary Command Centre			

3.2 PROVINCIAL GOVERNMENT CONTACTS

BRITISH COLUMBIA

NAME	LOCATION	TELEPHONE NUMBER	
Emanage Management DC	Drings Coorse BC	24-Hour Incident Reporting	1-800-663-3456
Emergency Management BC	Prince George BC	Office	250-612-4172
BC Oil and Gas Commission	Province-Wide	24-Hour Incident Reporting	1-800-663-3456
BC On and Gas Commission	Fort St. John BC	Office	250-794-5200
Northern Health Authority	Prince George BC	24-Hour (On-call – MHO)	250-565-2000
Ministry of Environment: Fish and Wildlife	Fort St. John BC	Office	250-787-3411
Ministry of Forests and Range: Forests and Range	Dawson Creek BC	Office	250-784-1200
Forest Fire Reporting	Province-Wide	24-Hour	1-800-663-5555
Ministry of Transportation: Provincial Roads, Highways and Bridges	Fort St. John BC	Office	250-787-3237
Yellowhead Road & Bridge (North Peace) Ltd.	Fort St. John BC	Emergency	1-888-883-6688
Caribou Road Services (South) Ltd.	Dawson Creek / Pouce Coupe BC	Emergency	1-800-667-2322
WorkSafeBC	Province-Wide	Emergency - Office hours Emergency - After hours	1-888-621-7233 1-866-922-4357



Page 17 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

ALBERTA

NAME	LOCATION	TELEPHONE	
Allegate Engage Deputation (AED)	Province-Wide	24- Hour	1-800-222-6514
Alberta Energy Regulator (AER)	Grande Prairie Field Centre	24-Hour	780-538-5138
Alberta Emergency Management Agency	Edmonton AB	24-Hour	1-866-618-2362
Alberta Environment and Sustainable Resource	Whitecourt Office	Main Office	780-778-7112
Development (AESRD) – Fish & Wildlife	Report a Poacher	24-Hour	1-800-642-3800
AESDD Wildfine Demonting	Toll Free	24-Hour	1-866-394-3473
AESRD – Wildfire Reporting	Province-Wide	24-Hour	403-310-3473
Alberta Transportation	Edmonton AB	24-Hour	1-800-272-9600
Alberta Health Services	Grande Prairie AB	24-Hour	1-866-654-7890
Alberta Health Services	Grande France Ab	Main Office	780-513-7517
Workplace Health & Safety	Province-Wide	24-Hour	1-866-415-8690
Workers' Compensation Board	Edmonton AB	24-Hour	1-866-922-9221

3.3 EMERGENCY SERVICE NUMBERS

BRITISH COLUMBIA

SERVICE	LOCATION	TELEPHONE NUMBER	
RCMP – Fort St. John Detachment	Fort St. John BC	24-Hour Office	9-1-1 250-787-8100
Hospital	Fort St. John BC	24-Hour	250-262-5200
British Columbia Ambulance Service	Province-Wide	24-Hour Office	1-800-461-9911 250-651-7700
Fire Department	Fort St. John BC	24-Hour Office	9-1-1 250-785-4333

ALBERTA All Emergency Services: 9-1-1

SERVICE	LOCATION	TELEPHONE NUMBER	
RCMP	Grande Prairie	Office	780-830-5700
Hospital	Grande Prairie	Office	780-538-7100
Ambulance	Grande Prairie	Office	780-513-5290
Fire Department	Grande Prairie	Office	780-538-0393



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 18 of 28

3.4 TDG / LPG EMERGENCY NUMBERS

NAME	CONTACT	TELEP	HONE NUMBER
Transport Canada (CANUTEC) – TDG Emergencies	Call Centre	24-Hour	613-996-6666
Emergency Response Assistance Canada (ERAC) Canadian Natural ERAP Number:	Call Centre (Propane and butane emergencies only)	24-Hour	1-800-265-0212

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

3.5 MUNICIPAL GOVERNMENT CONTACTS (FOR NOTIFICATION PURPOSES ONLY)

NAME	LOCATION	TELEPHONE NUMBER	
	Dawson Creek, BC	Toll free	1-800-670-7773
Peace River Regional District		Office	250-784-3200
		Fax	250-784-3201
Clearbills County	Worsley, AB	Office	780-685-3925
Clearhills County		After Hours	780-835-0156

3.6 FEDERAL GOVERNMENT CONTACTS

NAME	LOCATION	CONTACT INFORMATIO	
National Energy Board (NEB)	Online Event Reporting System (OERS)	https://apps.neb-one.gc.ca/ers	
See Corporate ERP: Notification of an Emergency Situation (Federal), Page 5-40 for Incident Reporting Instructions	Incident Line (all other incidents)	24-Hour	403-807-9473
Joi meden Reporting Tissi decions	Calgary Office	Main	403-292-4800
Transportation Safety Board (TSB)	Reporting Hotline	24-Hour	1-819-997-7887
See Corporate ERP: Notification of an Emergency Situation (Federal), Page 5-40		Fax	1-819-953-7876
for Incident Reporting Instructions	Email Address	PipelineNotifications@tsb.gc.ca	
Indian Oil & Gas Canada	Calgary AB	Office Fax	403-292-5625 403-292-5618
First Nations, Health Authority	Prince George BC	Office Fax	250-561-5370 250-561-5369
Environment Canada	Emergency Management BC	24-Hour	1-800-663-3456
(will be notified through the respective provincial or territorial government)	Alberta Environment and Parks	24-Hour	1-800-222-6514



Page 19 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

3.7 CONTRACT SERVICES

BRITISH COLUMBIA

COMPANY	LOCATION	TELEP	PHONE NUMBER		
AIR QUALITY MONITORING					
Firemaster Oilfield Services	Fort St John, BC	24-Hour	403-342-7500		
HSE Integrated Ltd.	Fort St John, BC	24-Hour	1-888-346-8260		
Promet Environmental Group Ltd.	Calgary, AB	24-Hour	1-877-577-6638		
Trojan Safety Services	Fort St. John, BC	24-Hour	1-888-785-9557		
AIRCRAFT / HELICOPTERS	·		·		
Canadian Helicopters Ltd.	Fort St John, BC	24-Hour	250-787-0431		
North Cariboo Air	Fort St John, BC	24-Hour	1-888-735-9464 250-787-0311		
Yellowhead Helicopters Ltd.	Fort St John, BC	24-Hour	250-785-2331		
SAFETY SERVICES / COMMUNI	CATION EQUIPMENT				
HSE Integrated Ltd.	Fort St John, BC	24-Hour	1-888-346-8260		
Trojan Safety Services	Fort St. John, BC	24-Hour	1-888-785-9557		
United Safety Ltd.	Fort St. John / Fort Nelson, BC	24-Hour	1-800-432-1809		
WELL BLOWOUT CONTROL					
Firemaster Oilfield Services	Fort St John, BC	24-Hour	403-342-7500		
HSE Integrated Ltd.	Fort St John, BC	24-Hour	1-888-346-8260		
Safety BOSS	Fort St John, BC	24-Hour	1-800-882-4967		

WESTERN CANADIAN SPILL SERVICES (WCSS) AREA "C"		UR EMERGEN	NCY 1-866-541-8888
Dwayne Stone, Clean Harbors Regional Custodian	Fort St. John, BC	Office	250-785-8500
Eric Pike, Clean Harbors Co-op Equipment Custodian	Fort Nelson, BC	24-Hour	250-233-8811



Page 20 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

ALBERTA

COMPANY	LOCATION	TELEPHONE NUMBER				
AIR QUALITY MONITORING	AIR QUALITY MONITORING					
Alberta Energy Regulator (not contract service)	Province-Wide	24-Hour	1-800-222-6514			
Firemaster Oilfield Services Inc.	Province-Wide	24-Hour	403-342-7500			
HSE Integrated Ltd.	Province-Wide	24-Hour	1-888-346-8260			
Promet Environmental	Province-Wide	24-Hour	1-877-577-6638			
Trojan Safety Services	Province-Wide	24-Hour	1-888-785-9557			
AIRCRAFT / HELICOPTERS			·			
Airco Aircraft Charters	Edmonton AB	24-Hour	780-471-4771			
Canadian Helicopters Ltd.	Edmonton AB	24-Hour	780-429-6900			
Central Mountain Air	Province-Wide	24-Hour	1-866-731-7992			
North Cariboo Air	Edmonton AB	24-Hour	1-866-359-6222			
WELL BLOWOUT CONTROL						
Firemaster Oilfield Services Inc.	Province-Wide	24-Hour	403-342-7500			
HSE Integrated Ltd.	Province-Wide	24-Hour	1-888-346-8260			
Safety BOSS	Province-Wide	24-Hour	1-800-882-4967			
SAFETY SERVICES/ COMMUNICATION EQUIPMENT						
HSE Integrated Ltd.	Province-Wide	24-Hour	1-888-346-8260			
United Safety Ltd.	Province-Wide	24 Hour	1-800-432-1809			
Trojan Safety Services	Province-Wide	24-Hour	1-888-785-9557			

WESTERN CANADIAN SPILL SERVICES (WCSS) AREA "T"		JR EMERGEN	ICY 1-866-541-8888
Regional Custodian, Clean Harbors	Grande Prairie AB	24-Hour Cell	780-532-4331
Co-op Custodian CNRL Chinchaga Gas Plant	Grande Prairie AB	24-Hour	780-836-3364 ext. 25

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



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 21 of 28

4 PUBLIC NOTIFICATIONS

4.1 COMMALERT ACTIVATION – NOT APPLICABLE

IMPORTANT - See Section 4.2 Notification Procedures below for procedures to activate Comm-Alert system

780-669-0325

4.2 NOTIFICATION PROCEDURES

*NOTE: COMMALERT IS NOT AVAILABLE FOR THIS PLAN

If an emergency occurs that will involve only a few residents, the Public Safety Chief will designate Telephone Callers to relay a message of notification, evacuation or shelter. Refer to the Public Safety Chief Tab in the Corporate ERP Manual for procedures and scripts. If an emergency occurs that involves too many residents for Canadian Natural to notify in a timely manner, the CommAlert automated call-out system may be activated. The procedure for initiating a CommAlert call-out follows:

- 1. Prepare the following information prior to calling CommAlert (the number is shown in Step 2):
 - a. Identify the name of the Emergency Response Plan
 - b. Identify which map quadrants and house letters / numbers are affected by the emergency
 - c. Identify which message is to be relayed (either evacuation or shelter)
 - d. Identify which Reception Centre should be activated
- 2. Call CommAlert at 780-669-0325 and indicate that there is an emergency situation and that a call-out is required. CommAlert will follow their Standard Operating Procedures (as found in the Corporate ERP Manual Emergency Response Toolbox) and ask for the information outlined therein.
- 3. After the call-out, CommAlert will send a report of the results within 15 minutes by either email (preferred) or fax.

 The report will include which residents responded that they would evacuate immediately or stay (shelter) in their home, which require evacuation assistance and which residents did not respond to the message.
- 4. Canadian Natural will then dispatch Rovers to assist those residents who require evacuation assistance. Residents who did not respond to the message will need to be contacted by a Telephone Caller or a Rover.
- 5. Once the emergency situation has been resolved, CommAlert, if requested, can relay an All Clear message. Following are the three (3) message choices that can be sent automatically by the CommAlert system:

Sheltering Message

This is the Canadian Natural emergency communication system. We are calling to advise you that we are experiencing operational difficulties near your residence. You are in no immediate danger; however we advise that you take shelter and remain indoors until we have called you with an All Clear message. Until then, stay inside and close and lock all windows and outside doors. Turn off all appliances and equipment with exterior vents and turn down your furnace to the minimum setting. We ask that you limit the use of your phone so that we can call you with further information. Please listen to the following menu:

- o If you will remain in your home until you receive an All Clear message please press 1.
 - * System response: Thank you we have received your response.
- o If you do not wish to remain in your home, please press 2 to have a Canadian Natural representative call you with further instructions.
 - *System response: Thank you we have received your response.
- o To replay this message, please press 3.



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN Page 22 of 28

Rev. 0-0 May, 2016

Evacuation	n Message
------------	-----------

This is the Canadian Natural emergency con	mmunication system.	We are calling to a	advise you that we	have encountered
operational difficulties near your residence.	For your safety, we	are requesting that y	ou leave the area a	and proceed to the
Reception Centre at		. It is very importan	nt that you check in	at this Reception
Centre so that we can provide you with more	e information. Please	listen to the followi	ng menu:	

- If you will proceed to the Reception Centre, press 1. Your concerns will be addressed at that time.
 - * System response: Thank you we have received your response.
- If you require assistance to evacuate, press 2. Keep all your windows and outside doors closed and locked and other outside vents shut. Please remain indoors and limit the use of your phone until we can contact you to see what help you need or that help has arrived.
 - * System response: Thank you we have received your response.
- To replay this message, press 3

All Clear Message

This is the Canadian Natural emergency communication system. We are calling to advise you that we have resolved the operational difficulties we experienced in your area. There is no longer any cause for concern. We apologize for any inconvenience this situation may have caused. Please listen to the following menu:

- To let Canadian Natural know that you have received this message, please press 1.
 - * System response: Thank you we have received your response.
- To replay this message, please press 2.

4.3 RECEPTION CENTRE(S)

Reception Centre(s) has / have been pre-arranged as noted below. The Reception Centre chosen to send residents to will be dependent on the site of the emergency and which route is the safest for evacuating residents out of the Emergency Planning Zone.

RECEPTION CENTRE	LOCATION	TELEPHONE NUMBER	
Northern Grand Hotel	9830 – 100 Avenue Fort St. John BC V1J 1Y5	24-Hour	250-787-0521

4.4 RESIDENT INFORMATION

There are no residents impacted by this Emergency Response Plan. .

4.5 BUSINESS INFORMATION

There are no businesses or organizations impacted by this Emergency Response Plan.

4.6 SCHOOL DIVISION(S) / SCHOOL(S)

In the event of an emergency, the school division(s) listed below must be contacted. General school division policy defines that in an emergency situation, each division is responsible for children attending their schools until their parents / guardian are located. Private schools must be contacted directly. School children living within the EPZ attend the following schools:

SCHOOL DIVISION	SCHOOL NAME	TELEPHONE NUMBER
There are no school divisions affected by this Emergency Response Plan		



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 23 of 28

4.7 INDUSTRIAL OPERATORS

If an industrial operator is the first person to identify a problem or emergency involving Canadian Natural Facilities, their response will be to notify Canadian Natural immediately. If Canadian Natural personnel are the first people to identify a problem or an emergency, they will immediately notify all industrial operators within the determined Emergency Planning Zone (EPZ). Whether or not assistance will be given by neighbouring industrial operators will depend on the resources of the company at the time.

The following companies operate in the Emergency Planning Zone(s):

INDUSTRIAL OPERATOR NAME	OPERATIONS DESCRIPTION	TELEPHONE NUMBER	
Dejour Energy	Wells/ Pipelines/ Facilities in area		24 Hour Emergency Office
Nova Gas Transmission / TransCanada Energy Ltd.	Pipelines in area		24 Hour Emergency Office
Pembina Pipeline Corporation	Pipelines in area	1-800-360-4706 403-231-7500	24 Hour Emergency Office

4.8 TRAPPER/ GUIDE OUTFITTER INFORMATION

REGISTERED AREA	NAME	ADDRESS	TELEPHONE NUMBER	DESCRIPTION
Redact	ed - NEB Orde	MO-006-2016 s. 1.a.i	Personal inforn	nation

4.9 GRAZING LEASE(S) / RESERVE(S) AND OTHER LAND USE DISPOSITIONS

Land Use Disposition Types:

	1 21		
FDL	Farm Development Lease	GRP	Grazing Permit
FGL	Forestry Grazing License	GRR	Provincial Grazing Reserve
GRL	Grazing Lease		

REGISTERED NUMBER	NAME	ADDRESS	TELEPHONE NUMBER	DESCRIPTION
N/A				

4.10 FOREST MANAGEMENT AREA(S)

REGISTERED NUMBER	NAME	ADDRESS	TELEPHONE NUMBER	DESCRIPTION
N/A				

4.11 FIRST NATIONS

NAME	CONTACT	TELEPHONE NUMBER	COMMENTS
N/A			



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 24 of 28

5 GATHERING SYSTEMS INFORMATION

5.1 FACILITY INFORMATION

5.1.1 FACILITY SUMMARY

Facility Name						
Facility Type						
Facility Code						
Legal Description						
Facility Description						
Facility Name						
Facility Type						
Facility Code						
Legal Description						
Facility Description						
-	T T					1
Facility Name						
Facility Type						
Facility Code						
Legal Description						
Facility Description	Redacted	- NEB Or	ler MO-0	06-2016 s	1.a.ii Facil	ity / Pineline
				<u> </u>		<u> </u>
Facility Name	technical	information	n, disclosi	ure of which	n would risk s	security
Facility Type						-
Facility Code						
Legal Description						
Facility Description						

5.1.2 ISOLATION EQUIPMENT

ROADBLOCK KIT CONTENTS	NUMBER	LOCATION
3 triangular flare / reflector kits 1 traffic vest (mesh with reflective striping) 1 Stop / Slow paddle 3 traffic cones 1 30-minute flare with spike 1 flare gun with flares 1 6-volt flashlight with spare battery 1 12-volt spotlight 1 roll of caution tape 1 windsock and stand - clipboard, pencils, paper - ERP map(s) - Roadblock Role Checklist & information - Roadblock Control Log form	5	Drake Ladyfern Ladyfern Mearon Velma



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

Page 25 of 28

5.1.3 EMERGENCY CONTROL SYSTEMS

ТҮРЕ	LOCATION	NOTES
Emergency Shut Down		Additional ESDs on TransCanada Pipeline's side. Also High Pressure Shut Downs (HPSD) and PSVs
Emergency Shut Down		on the compressor feeding the line.
High Pressure Shut Down		Compressor at 4-26 has HPSDs and PSV protection. ESDs also located at the Slavepoint wells that tie in downstream of the facility.

5.2 FACILITY, PIPELINE AND WELL INFORMATION

5.2.1 FACILITY RELEASE RATES AND EMERGENCY PLANNING ZONES

LOCATION	FACILITY TYPE	FACILITY CODE	SUB	STATUS	H2S RELEASE VOL (m³)	EPZ (m)
	Compressor Station		SG	О		1328

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



EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Page 26 of 28

Rev. 0-0 May, 2016

5.2.2 LEGEND

	LEGEND	SI	UBSTANCE / SUB	S	STATUS / STAT	FROM FACILITY (FAC) / TO FACILITY (FAC)		
LICENSE	License Number	OE	Oil Effluent	o	Operational	PL	Pipeline	
LINE	Line Number	FG	Fuel Gas	P	To Be Constructed	WE	Well	
OD	Outer Diameter (mm)	NG	Natural Gas	D	Discontinued	GP	Gas Processing Plant	
WT	Wall Thickness (mm)	sw	Salt Water	S	Suspended	IP	Injection / Disposal Facility	
МОР	Max Operating Pressure (kPa)	LV Low Vapour Pressure Products				RI	River	
LENGTH	Length of Segment (km)	CO	Crude Oil			LA	Lake	
H ₂ S	Licensed Hydrogen Sulphide (mol / kmol)	FW	Fresh Water			S	Satellite	
REL VOL	Total H ₂ S Volume Between ESDs (m ³)	SG	Sour Gas			CK	Creek	
IIZ	Initial Isolation Zone (km) – applicable only for Alberta					BE	Blind End	
SET EPZ	Emergency Planning Zone (m)					В	Battery	
ESD	Emergency Shut Down Valve					CS	Compressor Station	
CV	Check Valve					MS	Meter Station	

NOTE: Discontinued sour pipelines have been given an EPZ of N/A and will be calculated if their status changes.

No sweet natural gas, fuel gas, water or abandoned pipelines have been included with the exception of any Canadian Natural NEB lines in operation.



Page 27 of 28

EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN

Rev. 0-0 May, 2016

5.2.3 PIPELINE RELEASE VOLUMES AND EMERGENCY PLANNING ZONES- SORTED BY FROM LOCATION

License	Line	Licensee	Substance	Status	From Location	From Facility	To Location	To Facility	OD (mm)	WT (mm)	Max Operating Pressure (kPag)	H2S (mol/ kmol)	Length (km)	H2S Release Volume (m3)	Set EPZ (m)
**NEB: AO-02-XG-M023-3-2002 BC:280141 AB:280052	N/A	CNRL	NG	0		CS		PL				-		N/A	980
**NEB: XG-C298-022-2013 BC:280309 AB:280141	N/A	CNRL	NG	О		PL		WE						N/a	980
**NEB: A0-1-XG-C298-38-2001 BC:280309 AB:280141	N/A	CNRL	FG	0										NA	980

NOTE: NEB Order A0-1-XG-C298-38-2001 Substance, MOP and H2S have been amended as per NEB approval of Application for Change of Service dated September 7, 2016.

** NEB REGULATED PIPELINE. For any emergency involving NEB regulated pipelines, contact NEB first then the applicable provincial authorities (courtesy call only). Refer to reporting requirements and contact information in Section 3.6 "Federal Government Contacts"

5.2.4 WELL RELEASE RATES AND EMERGENCY PLANNING ZONES

NOTES: •

- Wells sorted by Surface Location
- Sweet wells have not been included

License	Licensee	Surface Location	Downhole Location (UWI)	Producing Zone	Substance	Status	1	Set EPZ (m)
005799	CNRL				Gas	Producing		10
003141	CNRL				Gas	Producing		17
001892	CNRL				Gas	Producing		60
008600	CNRL				Gas	Producing		14



Canadian Natural 24-HOUR EMERGENCY 1-888-878-3700 Page 28 of 28 EMERGENCY RESPONSE PLAN DRAKE/ LADYFERN May, 2016

6 MAP AND PUBLIC INFORMATION PACKAGE

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