



Huntingdon Inc. Transmission Pipelines Emergency Response Plan

February 2023/2024

The information in this Emergency Response Plan is a guide for **site-specific response** to emergency situations that affect FortisBC Huntingdon Inc. transmission pipelines.

This Plan **does not apply** to

- other FortisBC distribution pressure assets, pipelines, compressor stations and all other types of stations.

This document is not intended to replace current reporting procedures for occurrences of a non-emergency nature.

This Emergency Response Plan has been approved for distribution and implementation.

Gianni Del Bianco

Printed Name

Operations Manager,
Pipeline

Title

A handwritten signature in black ink, appearing to read "Gianni Del Bianco".

Signature

02/6/2023

Date

Plan Distribution

Specific contact information in this section is available to persons associated with emergency response.

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16705 Fraser Highway, Surrey, BC V4N 0E8
Phone: 604-576-7000 • Toll free: 800-773-7001

www.fortisbc.com

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1 Immediate Actions

1.1 Immediate Actions

Operations personnel will evaluate all emergencies and investigate alarms (where applicable). Many incidents may not be emergencies upon investigation. Upon completion of the incident evaluation, operations personnel will determine the level of emergency and then implement the appropriate immediate actions.

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✓	IMMEDIATE ACTIONS CHECKLIST
	Ensure personal safety: <ul style="list-style-type: none"> ➤ Stop work in the area ➤ Assess the scene and evaluate the hazards ➤ Don any additional PPE ➤ Remove any sources of ignition
	Evacuate all non-essential personnel from the area.
	Assist injured persons within the capabilities of your training and if safe to do so.
	Call 9-1-1 if required, to request assistance from emergency services.
	Relocate to a safe area upwind of the incident site.
	Establish communications with FortisBC Emergency Operations Representative (EOR) by calling the FortisBC Gas Emergency Line.
	Establish an initial isolation area 100m (328 ft) in all directions from the incident site to protect others (see Section 5 Public Protection Measures).
	Contact Gas Control and verify alarm (if applicable).
	Initiate appropriate control measures needed to manage the situation.
	Determine initial Level of Emergency using the Incident Classification table (Section 1.9). <ul style="list-style-type: none"> ➤ If Level 1, request appropriate Operations Manager to initiate internal notification. ➤ If Level 2 or 3, request Dispatch or EOR to activate Emergency Operations Centre.
	Refer to appropriate subsection in Section 3 (Emergency Response for Specific Incidents) to determine any specific actions to be taken to address the current situation.

1.2 FortisBC Emergency Contacts

Specific contact information in this section is available to persons associated with emergency response.

1.3 Transmission Pipeline Emergency Equipment

Specific contact information in this section is available to persons associated with emergency response.

1.4 Incident Commander

Name: _____ Date: _____ Time in: _____ Time out: _____

Primary Responsibilities

- Coordinates and manages response actions at the Incident Site
- Ensures immediate public safety measures are taking place at the incident site
- Determines tactical response, based on incident objectives
- Reports to and received information from Operation Manager or Operations Section Chief, if assigned

✓	INCIDENT COMMANDER – INITIAL RESPONSE / SHIFT START CHECKLIST
	If first on site, follow Immediate Actions Checklist (Section 1.1).
	Report to Incident Site and sign in. Don green vest (if available) and obtain a copy of the appropriate Emergency Response Plan.
	Refer to appropriate subsection in Section 3 (Emergency Response for Specific Incidents) to determine if there are any specific actions to be taken to address the current situation.
	If other responders on site, receive briefing of current situation from person currently in charge.
	Assume control of the incident site.
	If an Incident Command Post has been established by emergency services (fire/police), establish Unified Command.
	If ICP has NOT been established, establish an ICP at a safe location either on site or off site. Designate a secondary ICP to be used in case the incident escalates.
	Assess and confirm the emergency situation. Determine impact to employees, customers, the public, the environment and FortisBC assets.
	Determine Level of Emergency using the Incident Classification table (Section 1.9).
	Ensure that initial response efforts are underway (worker and public protection, isolation of hazard area). <ul style="list-style-type: none"> ➤ Confirm Hazard Area (Section 5.1) - Have combustible gas indicator (CGI) readings taken to determine actual radius of hazards, including methane (CH₄), LEL and oxygen concentrations ➤ Evacuate non-essential personnel from Hazard Area ➤ If appropriate, recommend evacuation to be carried out by the fire department.
	Determine notification requirements to external agencies, stakeholders, neighbours, etc. and ensure they are initiated in a timely manner. Refer to Section 2 Regulatory Reporting and Appendix A: Contact Information.
	Establish contact with Operations Section Chief if EOC is activated.
	Establish tactical response to reach incident objectives based on the following priorities: <ul style="list-style-type: none"> ➤ People ➤ Environment ➤ Assets ➤ Restoration

✓	INCIDENT COMMANDER – ONGOING CHECKLIST
	As they arrive, brief other responders on the situation and ensure that regular updates are provided.
	Liaise with CER pipeline inspector when he or she arrives on site and ensure that regular updates are provided.
	Maintain a list of responders within the Emergency Response Zone.
	Communicate all actions taken to EOR (or Operations Section Chief, if assigned), and ensure that a log of all emergency response activities and decisions is maintained.
	Prepare Incident Site Incident Action Plan/Incident Objectives (ICS 202) in consultation with other responding agencies. Modify as required and update at the beginning of each operational period.
	If required, delegate functions to FortisBC personnel present, such as Scribe or Logistics, as required.
	Prepare Site Safe Work Plan and submit to Operations Section Chief for review.
	Manage response activities at the site. Report any current or potential issues to Operations Manager or Operations Section Chief, if assigned.
	Continually assess Hazard Area and adjust as necessary.
	Monitor resources and request any additional resources as required. As the number of resources increases, the number of leadership positions also must expand to ensure effective span of control. Request EOC Director activate CGA Mutual Assistance Agreement if required.
	Ensure external agencies, stakeholders, neighbours, etc. are updated as required.
	Advise Operations Manager Operations Section Chief, if assigned, of any changes at the incident site, including a downgrade or upgrade in Level of Emergency based on the Incident Classification table (Section 1.9).
✓	INCIDENT COMMANDER – SHIFT CHANGE CHECKLIST
	Communicate shift change to the appropriate personnel.
	Fully debrief your relief on the incident status and actions being taken.
	Give all completed forms and notes to your relief.
✓	INCIDENT COMMANDER - DEACTIVATION CHECKLIST
	In conjunction with appropriate agencies, downgrade Level of Emergency or call a STAND DOWN.
	Confirm with the CER pipeline inspector that permission is received to restart the pipeline.
	Ensure all contacts made during the incident are aware of the status change.
	Work with emergency services to ensure all evacuated areas are deemed safe for re-entry Give “All Clear” to all site personnel and any other evacuees when appropriate.
	Collect all incident-related documentation and submit to Manager, Emergency Management & Business Continuity Programs.
	Hold a debrief with all incident command team members.
	Sign out.
	Complete and submit reporting through the Utility Risk Management (URM) application.
	Assist with preparation of After Action Report.

Forms:

- Check In/Check Out (ICS 211)
- Position Log (ICS 214)
- Incident Action Plan/Incident Objectives (ICS 202)

1.5 Emergency Operations Representative

Name: _____ Date: _____ Time in: _____ Time out: _____

Primary Responsibilities

Once manager of involved asset has determined that the Emergency Operations Centre will be activated:

- Sets up Emergency Operations Centre
- Ensures notification of appropriate personnel at the onset of an emergency
- Transitions to role of Scribe once the below actions have been completed

✓	EOR – INITIAL RESPONSE ACTIONS
	Act as the primary point of contact to assist field resources until the Emergency Operations Centre (EOC) is fully activated.
	Send General Emergency Message (GEM) to appropriate operation zone managers, based on incident type.
	Notify additional personnel of the situation, as requested by the manager of the involved asset.
	Prepare EOC for arrival of emergency management team members (sign in sheet, conference line, computer start-up, etc.).
	Start emergency incident diary using the SAP system. Record the notification time and dispatch times for all personnel responding to the emergency, as well as key events and decisions made.
	Assist with external stakeholder notifications. For example, utilize the CER's Online Event Reporting System (https://apps.cer-rec.gc.ca/ers) to report incidents, unauthorized activities and contamination. Refer to Section 2 Regulatory Reporting and Appendix A: Contact Information.

Forms:

- Check In/Check Out (ICS 211)
- Position Log (ICS 214)

1.6 Gas Control

Name: _____ Date: _____ Time in: _____ Time out: _____

Primary Responsibilities

- Continuously monitors and operates the transmission system
- Acts as hub for information and data on the transmission system and compressor stations, utilizing field personnel at key sites and the SCADA (Supervisory Control and Data Acquisition) system

✓	GAS CONTROL – INITIAL RESPONSE / SHIFT START CHECKLIST
	Determine the scope of the incident.
	Notify EOR of incident if not already aware.
	Provide updates and notifications made to the EOR, and request the EOR to diarize the response.
	Dispatch appropriate operations personnel, in conjunction with EOR. <ul style="list-style-type: none"> ➤ Operations Manager, Pipelines; Operations Manager, Pressure Control; or designate ➤ Gas Control & SCADA Manager
	Make notifications to interconnecting pipeline companies, if required. See Other Stakeholders for contact list.
✓	GAS CONTROL – ONGOING CHECKLIST
	Evaluate gas supply requirements and options in consultation with Gas Supply personnel.
	Adjust gas supply as necessary.
✓	GAS CONTROL – SHIFT CHANGE CHECKLIST
	Communicate shift change to the appropriate personnel.
	Fully debrief your relief on the incident status and actions being taken.
✓	GAS CONTROL - DEACTIVATION CHECKLIST
	Ensure all contacts made during the incident are aware of the status change.
	Attend debrief session if requested.
	Assist with preparation of After Action Report if requested.

1.7 Operations Manager, Pipelines/Pressure Control

Name: _____ Date: _____ Time in: _____ Time out: _____

Primary Responsibilities

- Acts as authority for initial emergency response actions for transmission pipeline-related incidents
- If necessary, activates Emergency Operations Centre/Area Command Centre

✓	OPERATIONS MANAGER, PIPELINES/PRESSURE CONTROL
	Verify the level of the emergency.
	Validate the requirement and authorize requests for valve closures from Gas Control or personnel on site.
	Activate the EOC if required. Transition to appropriate role in EOC emergency management team.
	Confirm notification made to the CER both by phone and the Online Event Reporting System. Prepare to liaise with the CER pipeline inspector at the site.

1.8 Additional Subject Matter Leads (SML)

Duties of additional subject matter leads will be determined by the appropriate Section Chief, based on the incident and nature of expertise. These may include, but are not limited to, representatives from:

- System Capacity Planning
- Engineering
- Human Resources
- Finance
- Insurance
- External companies

1.9 Incident Classification

The level of emergency defines the severity of the incident, the potential hazards to the public and the environment, and the appropriate response. A level is assigned when the emergency meets one or more conditions of the higher level. For example, if an incident meets several conditions under Level 1 (minor) and Level 2 (serious) in the table below, it is a Level 2 Emergency.

CONDITION	LEVEL 1 – MINOR	LEVEL 2 – SERIOUS	LEVEL 3 – CRITICAL
Threat or Injury to Workers or Public	No immediate threat.	Some injury or threat.	Serious injury or fatality and/or ongoing threat.
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 potential exists to extend beyond boundaries.	Ongoing or imminent threat to facility infrastructure. Effects extend beyond company boundaries.
Control of Product	Control completed or pending.	Control likely imminent.	Uncontrolled release of product continues and control is not imminent.
Potential Environmental Effects	Minimal.	Moderate.	Significant and ongoing.
Media Interest	Little or no interest.	Local or regional interest.	National or regional interest.
Response Capability	Incident is handled by FortisBC.	First responders and government agencies are likely to be directly involved.	Immediate and significant government agency involvement.
Potential to escalate	Low.	Moderate, based on potential for fire, explosion, increased release of product, or other hazard.	High, based on potential fire, explosion, increased release, or other hazard.
Examples	<ul style="list-style-type: none"> Vehicle accident involving facility with moderate to major damage to facility Damage to facility equipment and/or piping with gas release <LEL beyond 3m; control expected within 4 hours Gas release beyond site affecting public safety, area successfully evacuated Underground leak on pipeline and outside of facilities not entering structures or underground utilities 	<ul style="list-style-type: none"> Unable to control damage on site, requiring control off site Damage to facility equipment and/or piping with gas release >LEL beyond 3m Underground leak on pipeline entering structures or underground utilities; control expected within 4 hours Facility overpressure condition discovered and controlled Gas release beyond site affecting public safety; area evacuated within 1 hour Failure of facility to deliver downstream supply; <10,000 customers without service 	<ul style="list-style-type: none"> Underground leak on pipeline, entering structures or underground utilities; control not expected for more than 2 hours Facility overpressure condition discovered and not controlled Failure of facility to deliver downstream supply; >10,000 customers without service

2 Regulatory Reporting

2.1 Regulatory Reporting Requirements

Regulatory reporting is the responsibility of the Operations Manager, On-Call Manager or Operations Supervisor, Support but can be delegated as required.

INCIDENT TYPE	IMMEDIATE	WITHIN 24 HOURS OR ASAP
Any potential danger to public safety, including hazardous product release	Police, TSBC, OGC ² , CER ³	BCUC ⁴
Release of any hazardous product (no danger to public safety)	Ministry of Environment, WorkSafe BC	
Pipeline rupture – Major ¹	OGC ³ or CER	
Pipeline rupture – Minor	OGC or CER	
Serious injury or fatality (worker)	Police, WSBC, OGC or CER	
Serious injury or fatality (customer)	Police, TSBC	BCUC
Fire or explosion	Police, TSBC, OGC or CER	BCUC
System outage (greater than 100 customers impacted)	TSBC	BCUC

1. Instantaneous release that immediately impairs the operation of a pipeline segment such that the pressure of the segment cannot be maintained
2. OGC notifications only if impacted pipeline pressure is greater than 100 psi (700 kPa) (transmission and Intermediate pressure pipelines)
3. CER requires notification only for incidents involving pipelines that cross provincial or international borders. For additional information see Appendix C: Reporting an Incident to the CER and TSB.
4. BCUC notifications will be completed by the FortisBC regulatory group

2.2 Regulatory Authorities

Specific contact information in this section is available to persons associated with emergency response.

3 Emergency Response for Specific Incidents

3.1 Transmission Pipeline Release

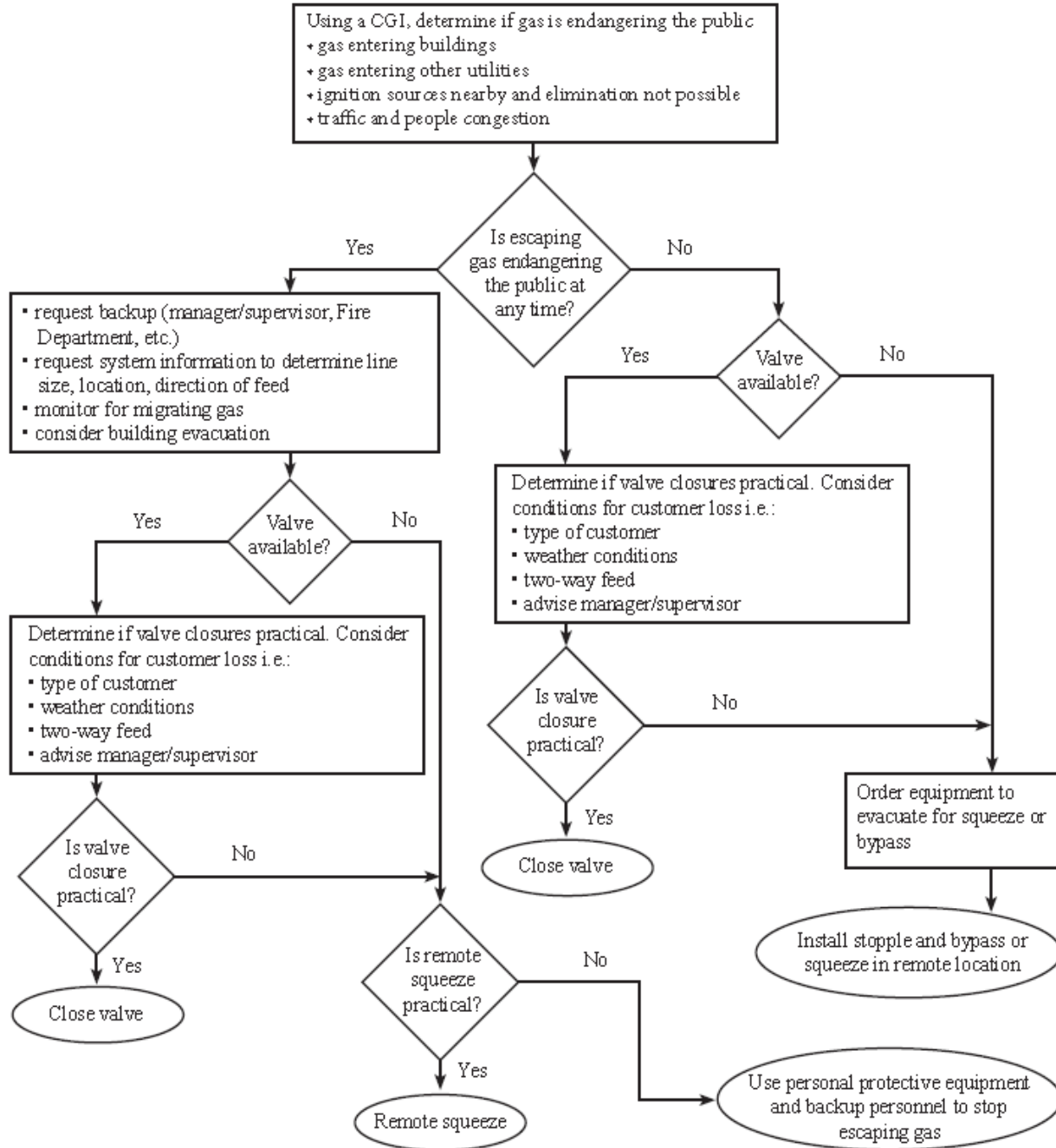
The procedures in this section are to be performed by trained personnel only.

✓	TRANSMISSION PIPELINE RELEASE
	Follow Immediate Actions Checklist (section 1.1).
	Follow the actions listed in the <i>Transmission Pipeline & Compression Emergency Response Guide</i> (Orange Card).
	Remove sources of ignition away from the gas envelope, if not done already.
	Do not extinguish burning gas from a pipeline break unless the fire poses a hazard.
	Direct the fire department to use water spray to protect surrounding property.
	Evaluate requirements and <i>if authorized</i> , request Gas Controller to remotely close the valve or manually close valve if permission is given to isolate the transmission pipeline segment. Operate valves only after authorization of the Operations Manager, Pipelines or Operations Manager, Pressure Control.
	Assess the damage to determine if a shutdown is required: <ul style="list-style-type: none"> ➤ Immediate shutdown if an immediate public hazard exists or gas system pressures are decaying significantly. ➤ Planned shutdown if there is no immediate public hazard and system pressures are stable. ➤ No shutdown if temporary or permanent repairs can be made with the transmission pipeline in service, possibly at a reduced pressure.
	Collaborate with Gas Control to determine if the transmission system configuration could be changed as a result of the incident or as a remedial measure.

When responding to a pipeline leak, always consider the possibility of multiple leaks.

3.2 Other Gas Emergency

Decision logic for determining what course of action to take during an EMERGENCY/UNPLANNED release of gas



The procedures in this section are to be performed by trained personnel only.

✓	TRANSMISSION PIPELINE RELEASE
	Follow Immediate Actions Checklist (section 1.1).
	Remove sources of ignition away from the gas envelope, if not done already.
	Do not extinguish burning gas from a pipeline break unless the fire poses a hazard.
	Direct the fire department to use water spray to protect surrounding property, as required.
	Monitor gas migration above and below ground using a CGI.
	Protect private property by repeatedly checking for gas indications in surrounding area.
	Check on an ongoing basis for gas accumulation in nearby buildings and fixtures. If a building is discovered to contain concentrations of gas, and the decision is made to shut off power to the building, it must be done remotely.
	Repeat until gas is controlled and accumulations are vented.

When responding to a pipeline leak, always consider the possibility of multiple leaks.

3.3 Entry into the Hazard Area

Under [Section 5.31 of the BC OHS Regulation](#), “If it is not practicable to maintain the airborne concentration of a flammable gas or vapour below the applicable exposure limit, for example, in a temporary situation or an emergency,

- (a) only the minimum number of workers necessary for the work may be exposed,
- (b) every worker exposed must be adequately trained and equipped to safely perform the required duties,
- (c) the concentration of the flammable gas or vapour must not exceed 20% of the lower explosive limit (LEL), and
- (d) in a life-threatening emergency only, exposure of emergency response workers is permitted above 20% of the LEL, provided that only those qualified and properly trained and equipped workers necessary to correct the unsafe condition are exposed to the hazard and every possible effort is made to control the hazard while this is being done.”

Entry into the hazard area should only be done with Manager approval and if:

- there are no ignition sources within the area,
- fire extinguishers and trained emergency response personnel are on-site,
- the worker and at least one backup are trained to perform emergency work,
- the worker and backup are fully equipped and, when entering the gas envelope, are wearing appropriate PPE,
- backup personnel are present outside the area of potential hazard and are ready to effect a rescue, and
- **if possible**, diesel operated equipment (backhoes, crew trucks, welding machines, compressors, etc.) must be shut off if left unattended in any area where there is a possibility of a sudden release of gas unless the equipment has an over speed protection device or another effective means of engine shut down.

3.4 Grass Fire

If an orange alert is issued by the EOC due to a grass fire within 10 km of the FortisBC Huntingdon site or pipeline right-of-way, the following actions may be considered.

✓	PLANT OPERATOR ACTIONS
	Follow Immediate Actions Checklist (section 1.1).
	Request activation of the EOC.
	Review and update consequence management strategies.
	Review and update isolation plans for the FortisBC Huntingdon Inc. Transmission Pipelines
	Through the EOC, notify PREEC (Provincial Regional Emergency Operation Centre) of the risk to the FortisBC Huntingdon assets.
	Monitor continuously for possible escalation.

3.5 Flood

The FortisBC Huntingdon site is located within a floodplain. If flooding of the FortisBC Huntingdon site or pipeline right-of-way is probable, the following actions may be considered.

✓	OPERATIONS MANAGER, PIPELINES
	Request activation of the EOC for advanced planning purposes.
	Consider diking critical processes and functions.
	Review and update consequence management strategies.
	Review and update Huntingdon Flood Emergency Plan for the FortisBC Huntingdon Inc. Transmission Pipelines
	Through the EOC, notify PREEC (Provincial Regional Emergency Operation Centre) of the risk to the FortisBC Huntingdon assets.

3.6 Earthquake

3.6.1 Felt by personnel

✓	PLANT PERSONNEL ACTIONS
	Drop, Cover and Hold On until the shaking has stopped.
	Ensure your personal safety.
	Look for visual or instrument indications of any gas leak detection.
	Isolate the impacted area, if possible.
	If appropriate and safe to do so, conduct an operational inspection and assessment as per the site operating guidelines – in particular, the LNG outer tank and its foundation.
	Check in with the EOR.
	Classify the emergency level as Critical (3), Serious (2), or Minor (1).
	Perform the necessary pre-start up safety review to validate integrity and operability.
	Download the data from the seismic monitors for analysis, share with Engineering.*
	Evaluate the data relative to an Operational Basis Earthquake (OBE) and a Safety Shutdown Earthquake (SSE) event in conjunction with Engineering.

*If only a small earthquake registers on the seismic instrumentation (but is not felt by plant personnel), the seismic monitor data should be downloaded, but no ESD is required.

3.6.2 Notified by ANHAS

When an earthquake, greater than a Richter scale magnitude of 3.5 and within 400km, or ≥ 4.0 and within 1,000 km occurs in the region, FortisBC System Control Centre will be notified by Geological Survey of Canada via the ANHAS, (Automated Earthquake Notification Service), with the time, location, magnitude of the quake and estimates of the strength of ground shaking that would have been experienced at the Tilbury LNG Plant. Notification to the EOR is usually within 5-10 minutes of the event.

Peak Ground Acceleration (PGA) values are used to evaluate risk of impact and required action. PGA is expressed in terms of the acceleration due to earth's gravity {g}, where $1g=9.8m/s^2$.

✓	EOR ACTIONS
	Immediately upon receipt of an ANHAS Earthquake Notification, the EOR notifies: <ul style="list-style-type: none"> ➤ Operations Manager, Pipelines ➤ Operations Manager, Pressure Control ➤ Senior Engineer, Geotechnical ➤ Operations Supervisor, Support ➤ Regional Manager, Fraser Valley Operations ➤ Manager, System Integrity Programs
✓	PLANT OPERATOR ACTIONS
	Interpretation of the PGA and required actions will be instigated and internal notifications to Engineering and LNG Plant Operations will be made to determine the appropriate inspection requirements and timing based on the PGA of the quake.

3.7 Third-Party Emergencies Impacting FortisBC Assets

If a gas emergency arises in the area of a third-party shelter-in-place or HAZMAT incident, it may be dangerous for FortisBC crews to respond. At no time should crews enter the affected area without coordinating with the emergency services Incident Commander (IC). Any decisions about how to respond to an emergency in the affected area will be made in conjunction with the IC. The following procedure should be used in such cases:

✓	THIRD-PARTY EMERGENCIES ACTION CHECKLIST
	Responding crews stage to a safe location outside of the affected area, maintaining communications with EORs.
	EORs contact External Agency Liaison or Supervisor, Emergency Support and request the location of the Incident Command Post (ICP).
	External Agency Liaison or Supervisor, Emergency Support contacts the incident EOC, and: <ul style="list-style-type: none"> ➤ Determines the location of the ICP ➤ Informs the EOC that a FortisBC representative will report to the ICP to coordinate response to a gas emergency ➤ Requests that the EOC pass this information to the emergency services IC.
	External Agency Liaison or Supervisor, Emergency Support passes the location of the ICP through the EORs to the responding crew.
	Upon arrival at the ICP, the senior FortisBC representative will become the FortisBC Incident Commander, and identify him or herself as such to the First Responder IC.
	FortisBC and emergency services IC will together determine an appropriate plan for responding to the situation.

3.8 Security Threat

If any person is in immediate danger or could become in immediate danger as a result of a threat to FortisBC personnel or property, contact Police or RCMP immediately. When safe to do so, contact FortisBC Corporate Security. If no immediate danger is present, contact FortisBC Corporate Security.

3.9 Chemical/Odorant Spill or Release

For guidance on cleanup and regulatory reporting requirements, refer to:

- Safety Data Sheets (SDS) <http://ccinfoweb.ccohs.ca/msds/search.html>
- T- Butyl Mercaptan Safety Data Sheet [01685426.pdf \(cpchem.com\)](#)
- FortisBC [Spill Reporting Response and Cleanup](#)
- FortisBC [Odorant Spill Response \(fortisbc.com\)](#)

For any leak or spill, ensure that a FortisBC Environment representative is contacted.

3.10 Serious Injury or Fatality

In the event of a serious injury or fatality, it's extremely important that evidence not be disturbed other than to perform immediate actions to protect personnel or execute rescue operations.

4 Site Specific Information

4.1 Overview

Specific contact information in this section is available to persons associated with emergency response.

4.2 Site Layout

Specific contact information in this section is available to persons associated with emergency response.

4.3 Site Evacuation Routes

Specific contact information in this section is available to persons associated with emergency response.

4.4 Assembly Area

Specific contact information in this section is available to persons associated with emergency response.

5 Public Protection Measures

The safety of responders and the public is FortisBC’s first priority in any emergency. Public protection measures will start immediately surrounding the incident site and then move to those downwind of the incident before expanding to the rest of the defined Hazard Area.

The distance that public protection measures will be taken is dependent on the hazards that are present, but must be outside of any area that may present a safety concern.

5.1 Hazard Area

5.1.1 Determining Hazard Area

The table below should be used as a guideline until actual hazardous conditions are determined. Emergency services will respond based on the CANUTEC guidelines until advised by FortisBC personnel.

	DISTRIBUTION PRESSURE	INTERMEDIATE PRESSURE	TRANSMISSION PRESSURE	CANUTEC GUIDELINES
INITIAL ISOLATION AREA	100 meters	100 meters	100 meters	100 meters
EVACUATION AREA	200 metres	200 metres	300 metres	800 metres
EXPLOSION RISK	200 metres	200 metres	800 metres	1600 metres

Several factors must be considered when determining the actual hazard area.

- Combustible gas indicator measurements – methane (CH₄), LEL, oxygen, (document all readings)
- Sources of odour, if applicable
- Meteorological conditions (wind direction, wind speed)
- Possible ignition sources
- Opportunities to influence direction and speed of vapour cloud
- Potential exposure of the public (rural versus urban area)
- Possibility of migrating gas (surrounding buildings, sewers, underground ducts, enclosed areas)
- ETA of resources, as it influences time for incident under control
- Critical infrastructure at risk (ex. government buildings, transportation corridors (road, rail and water))

Re-evaluate regularly, or upon a change in the circumstances, to expand or contract the zone in consultation with emergency services and the EOC.

Helpful FortisBC resources include:

- Data from Gas Control, if monitored
- Emergency analysis conducted by the Dispatch or EOR on distribution pipelines and some intermediate pressure pipelines, including:
 - Asset type
 - Flow direction
 - Location of valves
 - Number of utility services downstream of the incident

- System Planning can provide assistance to establish the shut off plan¹; determination includes:
 - Capacity
 - Load requirements and projections
 - Strength of feed or capacity
 - Location of valves

Re-evaluate regularly, or upon a change in the circumstances, to expand or contract the zone in consultation with emergency services and the EOC.

5.1.2 Cordoning Off Hazard Area

To ensure the safety of the public and any attending responders, it may be necessary to cordon off an area surrounding the involved asset. This should be done immediately upon arrival at any incident site, and can be done using cones, flags, sawhorses, or any other equipment available to indicate restricted access.

5.1.3 Restricting Access – Land and Air

To ensure the safety of the public, roadblocks may need to be established. FortisBC response personnel will work with emergency services (fire, police) to determine when this is required, and where access should be restricted.

It may be necessary for the local rail lines to restrict train access to the area. Contact the rail lines identified in Appendix A: Contact Information as soon as possible in the event of a large gas release.

If required, contact NAV CANADA to issue a Notice to Airmen (NOTAM) to advise pilots of restrictions in the airspace above the incident site or to close the airspace for a certain radius from the release (a no-fly zone). See Corporate ERP Appendix B: *Procedures for Requesting Notice to Airmen (NOTAM)* for more information.

5.2 Notification to Neighbours

In the event of an incident at the Huntingdon site, it may be necessary to perform courtesy notification to neighbours. Refer to Appendix A: Contact Information. Notification will be carried out as follows:

- Notification of Minor (Level 1) emergencies is at the discretion of the FortisBC Incident Commander.
- Notifications must be made for Serious (Level 2) and Critical (Level 3) incidents, with the exception of injury or death.

The FortisBC EOC will ensure that timely updates of information are provided to notified parties in a coordinated fashion at regular intervals. The first update from FortisBC should be delivered within 30 to 60 minutes after the initial notification and regular updates, as established by the EOC thereafter.

¹ Pre-determined shutoff zones for events such as flood zones, tsunami inundation areas and earthquakes, have been established to enable rapid isolation. For events with advanced notice (forest fires), or when communities are on evacuation alert, detailed site specific shutoff plans will be generated.

5.3 Evacuation

In the event that the public is at risk as a result of a FortisBC incident and must be evacuated from the area, FortisBC response personnel will advise emergency services (fire, police) of the areas that should be evacuated. Note that special consideration must be given to those who have been identified as Critical Customers.

When the Gas Controller is made aware of the need for an evacuation, they will notify parties in the identified evacuation zone. Emergency Services will go door-to-door to communicate and confirm that the public evacuates. FortisBC employees may participate in the door-to-door evacuations if imminent danger exists to the public or when requested by Emergency Services.

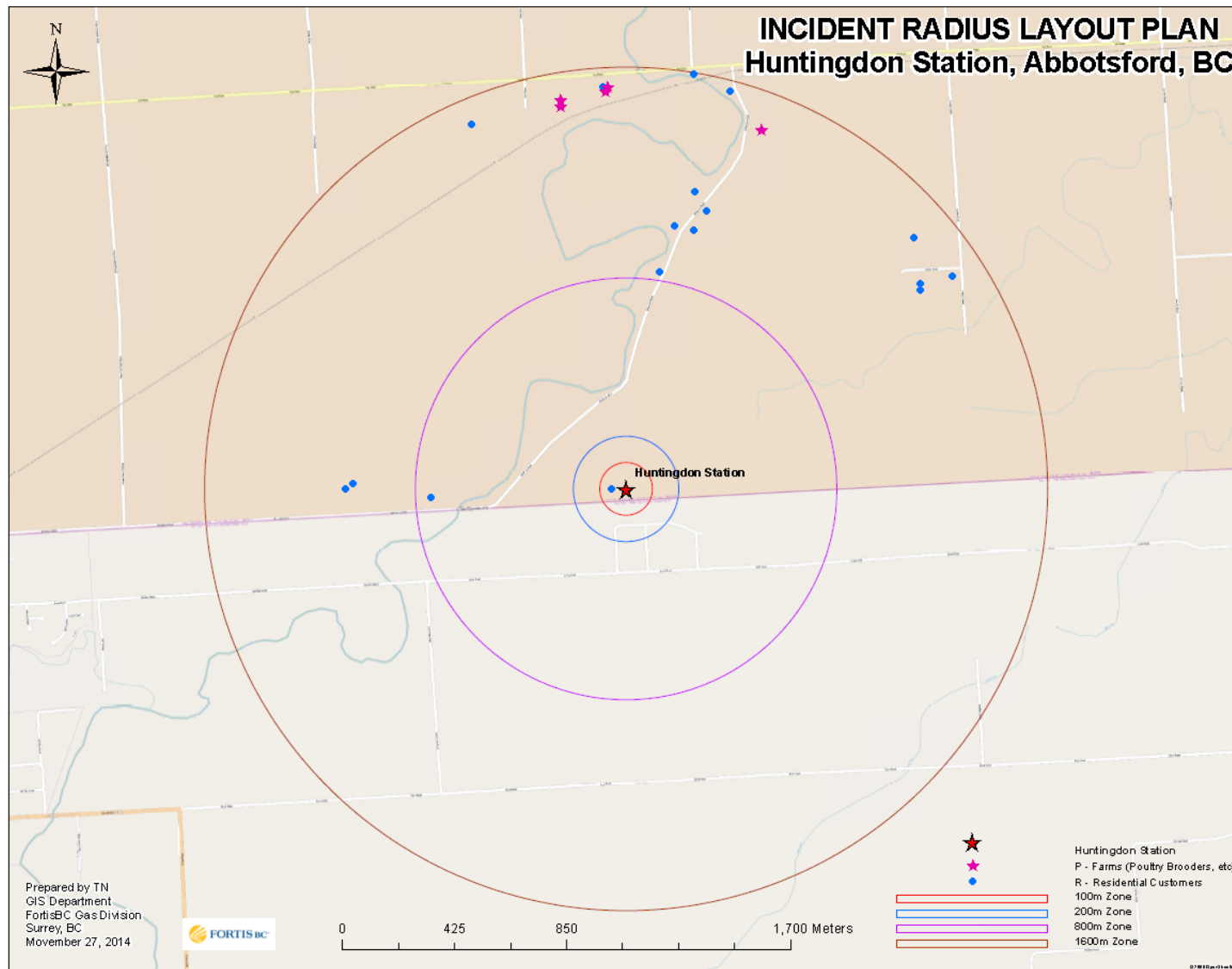
Any buildings within the evacuation zone (especially downwind) should be monitored for gas levels. If gas is detected, the buildings must be evacuated.

Reception Centres are designated by the Emergency Services Incident Commander in conjunction with the City of Abbotsford.

Permission to return to the evacuated area will be decided jointly by the FortisBC Incident Commander and the emergency services Incident Commander(s).

“All Clear” messaging will be coordinated and delivered by emergency services and distributed using the appropriate communication channels.

5.4 Emergency Planning Zone Map



6 Emergency Response Equipment

6.1 Personal Kit

FortisBC operations personnel who could be dispatched as a first responder to a gas incident should have the following as standard personal equipment:

- Combustible gas indicator
- Fire-resistant coveralls
- Hard hat
- Safety Eyewear
- Safety Footwear
- High Visibility Apparel
- Gloves
- Hearing protection
- First aid kit – FortisBC (Gas) Level 1
- Cell phone
- Flashlight (with extra batteries)
- Notepad, pen, pencil
- *Huntingdon Transmission Pipelines Emergency Response Plan*
- *Transmission Pipeline & Compression Emergency Response Guide (Orange Card)*
- *Standard Field Guidelines for Gas Emergencies (Pink Card)*
- *LNG Road Tanker Emergency Guidelines (Blue Card)*
- *Responding to Spills (Green Card)*

6.2 Fire Protection

Fire suppression equipment is kept on site by FortisBC as part of their requirements for the Huntingdon Station, which is located at the same site as the FortisBC Huntingdon Inc. Transmission Pipelines. The equipment normally consists of the following:

- One 20 lb. dry chemical fire extinguisher
- Two 10 lb. dry chemical fire extinguisher
- Eleven 30 lb. dry chemical fire extinguisher
- One 15 lb. CO₂ fire extinguisher
- One 30 lb. CO₂ fire extinguisher
- One 50 lb. CO₂ fire extinguisher

6.3 Safety and First Aid Equipment

On-site safety and first-aid equipment is kept on site by FortisBC as part of their requirements for the Huntingdon Station located at the same site as the FortisBC Huntingdon Inc. Transmission Pipelines. Safety and first aid equipment located on site normally consists of the following:

- First aid kit in the Control Building
- Eyewash station in the Control Building
- Two large spill kits in the Work Shed

6.4 Transmission Pipeline Emergency Equipment

DESCRIPTION	BURNABY OPERATIONS	SURREY OPERATIONS	LANGLEY EMERGENCY PIPE STORAGE	HUNTINGDON
Welding Equipment	Yes	Yes	No	No
Purging Equipment	Yes	Yes	No	Yes
Pre-Tested Pipe	No	No	Yes	No
Bypass Equipment	Yes	No	No	No
Stop Off Equipment	Yes	Yes	No	No
Pipeline Repair Fittings	Yes	Yes	Yes	Yes

See Section 1.3 Transmission Pipeline Emergency Equipment for contact information for above locations.

7 Appendices

Appendix A: Contact Information

Emergency Support Contacts

Specific contact information in this section is available to persons associated with emergency response.

FortisBC Contacts

Specific contact information in this section is available to persons associated with emergency response.

Other Stakeholders

Specific contact information in this section is available to persons associated with emergency response.

Appendix B: Role of Regulators in an Emergency

Canadian Energy Regulator (CER)

The CER's top priority in any emergency is to make sure that people are safe and secure, and that property and the environment are protected. The CER will require that all reasonable actions are taken to protect employees, the public, and the environment.

When a serious incident occurs, Canadian Energy Regulator (CER) inspectors will attend the site to oversee FortisBC Huntingdon Inc.'s immediate response. These inspectors reside in the local area and are available to respond quickly to emergencies; they will be dispatched by the CER Emergency Operations Centre as soon as it is notified of an emergency at the Huntingdon Station by FortisBC. The Canadian Energy Regulator will be the lead regulatory agency on site, and is required to approve the restart of the pipeline when repairs are complete. The CER may also verify that FortisBC Huntingdon Inc. conducts adequate and appropriate cleanup and remediation of any environmental effects caused by the incident.

In addition, the Transportation Safety Board of Canada (TSB) may investigate the pipeline transportation accident to identify safety deficiencies and make safety recommendations.

As the lead regulatory agency, the CER:

- Monitors, observes, and assesses the overall effectiveness of the company's emergency response in terms of:
 - Emergency management
 - Safety
 - Security
 - Environment
 - Integrity of operation and facilities
 - Energy supply
- Approves the restart of the pipeline.
- Investigates the event, either in cooperation with the Transportation Safety Board of Canada (TSB) under the Canada Labour Code, or as per the Canadian Energy Regulator Act or Canada Oil and Gas Operations Act (whichever is applicable).
- Inspects the Pipeline.
- Examines the integrity of the Pipeline.
- Inspects the pipeline and examines its integrity.
- Requires appropriate repair methods to be used.
- Requires appropriate environmental remediation of contaminated area to be conducted.
- Coordinates stakeholder and Aboriginal community feedback regarding environmental cleanup and remediation.
- Confirms that the company is following its Emergency Response Plan(s) commitments, plans, procedures and CER regulations and identifies non-compliance.

Transportation Safety Board of Canada

The Transportation Safety Board of Canada (TSB) is an independent agency created to advance transportation safety to advance transportation safety through the investigation of occurrences in the pipeline mode of transportation. The [Canadian Transportation Accident Investigation and Safety Board Act](#) provide the legal framework governing TSB activities. The TSB's mandate is to advance transportation safety related to pipelines 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 that may have contributed to the transportation occurrence
- Making recommendations designed to eliminate or reduce any such safety deficiencies
- Reporting publicly on the investigations and their findings

To instill confidence in the public regarding the transportation accident investigation process, it is essential that an investigating agency be independent and free from any conflicts of interest when investigating accidents, identifying safety deficiencies, and making safety recommendations. As such, the TSB is an independent agency, separate from other government agencies and departments that reports to Parliament through the President of the Queen's Privy Council for Canada.

There are three main phases of a TSB investigation: the Field Phase, the Post-Field Phase and the Report Production Phase.

Field Phase

Once the decision has been made to investigate an occurrence, an Investigator-in-Charge (IIC) is appointed and an investigation team assembled. The field phase can last from one day to several months. During the field phase, team members generally:

- Secure and examine the occurrence site
- Examine the equipment, vehicle, or wreckage
- Interview witnesses and company and government personnel
- Collect pertinent information
- Select and remove specific wreckage items for further examination
- Review documentation
- Identify potential unsafe acts and unsafe conditions

Post-Field Phase

The field phase can last from one day to several months. During the field phase, team members generally:

- Examine all pertinent company, vehicle, government, and other records
- Examine selected wreckage in the laboratory and test selected components and systems
- Read and analyze recorders and other data
- Create simulations and reconstruct events
- Review autopsy and toxicology reports
- Conduct further interviews
- Determine the sequence of events
- Identify safety deficiencies

Report Production Phase

The Transport Safety Board of Canada (TSB) reviews the initial draft investigation report, which may be approved, amended, or returned for further staff work. Once the draft report is approved, a confidential draft report is sent to persons and companies whose interests may be affected by the report and who are most qualified to comment on its accuracy. They then have the opportunity to dispute, correct, or contradict information that they believe is incorrect or unfairly prejudicial to their interests.

This process is intended to ensure procedural fairness and the accuracy of the Board's final report. The Board considers all representations (comments) and will amend the report if required. Once the final report is approved, it is prepared for release to the public.

In making its findings on the causes and contributing factors of a transportation occurrence, the TSB does not assign fault or determine civil or criminal liability, and no finding should be construed as doing so. However, the TSB will fully report on the causes and contributing factors, even if fault or liability might be inferred from the findings. The findings are not binding on the parties to any legal, disciplinary, or other proceedings.

Appendix C: Reporting an Incident to the CER and TSB

The Canadian Energy Regulator (CER) and Transportation Safety Board of Canada (TSB) have implemented a single-window reporting process through the TSB.

In accordance with the Transportation Safety Board of Canada (TSB), all reportable accidents or incidents as defined under the [Onshore Pipeline Regulations](#) 1999 and [Canada Labour Code](#) shall be reported as soon as possible by the quickest means available.

After the initial call to the TSB Rail/Pipeline Occurrence Hot Line (1-819-997-7887), the following information shall be faxed (1-819-953-7876) as soon as possible as per TSB Regulations Sections 7.1:

- Type and number of the certificate issued under Section 52 of the Canadian Energy Regulator Act in respect of the pipeline
- Name of the operator
- Date and time of the accident or incident
- Location of the accident or incident
- Number of persons that were killed or sustained a serious injury
- Description of the accident or incident and the extent of any damage to the pipeline, the environment, and other property
- Description of any dangerous goods contained in or released from the pipeline and a description of any action taken by the operator to protect the public
- Anticipated arrival time of repair equipment (required for reportable accident only)
- Name, address, and title of the person making the report

In addition to these reporting requirements, the person making the report must submit to the Transportation Safety Board of Canada all of the above information, within 30 days after the accident or incident and using the approved form, unless otherwise exempted by the Board.

Submit preliminary reports to the TSB at the address below. The TSB will forward all applicable reports to the CER.

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

Appendix D: Natural Gas MSDS

The Safety Data Sheet for Natural Gas can be found at the Huntingdon site and at <http://ccinfoweb.ccohs.ca/msds/search.html>.

Appendix E: Other CER-regulated Assets

Pt. Roberts Distribution Natural Gas Utility Line

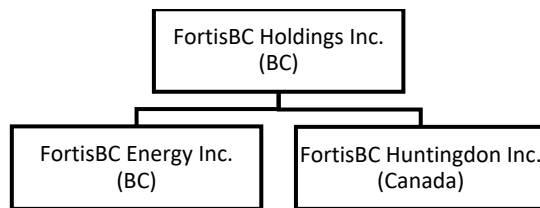
Specific contact information in this section is available to persons associated with emergency response.

Osoyoos Distribution Natural Gas Utility Line

Specific contact information in this section is available to persons associated with emergency response.

Appendix F: Corporate Ownership


FortisBC Huntingdon Inc. is owned by FortisBC Holdings Inc. as outlined in the organization chart below:



Appendix G: Forms

These forms are for reference only. Digital forms can be found on the FortisBC intranet.

Position Log (ICS 214)

Position Log (ICS 214) 				
Incident/Event Name		Section/Function		Position
Date	Time	To/From	Action/Decision/Enquiry	Follow-up Required


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Working Notes

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Incident Action Plan/Incident Objectives (ICS 202)

Incident Action Plan/Incident Objectives (ICS 202)		
Incident Name _____		Date/Time Prepared _____
		Date: _____ Time: _____
Operational Period		
From Date (Yr/Mo/Day): _____		To Date (Yr/Mo/Day): _____
From Time (24 hrs., Incl. time zone): _____		To Time (24 hrs., Incl. time zone): _____
General Control Objectives for the Incident (Include Alternatives)		
Weather Forecast		
General Safety Message		
Attachments (Check if attached)		
<input type="checkbox"/> Organization List (ICS 203)	<input type="checkbox"/> Incident Map	<input type="checkbox"/>
<input type="checkbox"/> Assignment List (ICS 204)	<input type="checkbox"/> Traffic Plan	<input type="checkbox"/>
<input type="checkbox"/> Communications Plan (ICS 205)	<input type="checkbox"/> Site Safe Work Plan (ICP)	<input type="checkbox"/>
<input type="checkbox"/> Medical Plan (ICS 208)	<input type="checkbox"/> Incident Action Safety Plan Analysis (ICS 215a)	<input type="checkbox"/>
Prepared By _____	Signature _____	
Approved By _____	Signature _____	
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Appendix H: ERP Administration

Authority

Under [Onshore Pipeline Regulations](#) 1999, CSA Z662-11, and the Canadian Energy Regulator's letter dated 26 March 2015 titled [Emergency Procedures Manuals](#), FortisBC Huntingdon Inc. must file an emergency procedures manual that meets the Board's critical information requirements.

FortisBC will activate the Emergency Response Plan (ERP) and carry out the reporting requirements as per the Regulatory Reporting Requirements in Section 2.1.

Plan Review and Updates

This plan must be reviewed and updated annually, as a minimum. The Operations Manager, Pipeline will be responsible for ensuring that any changes identified during the review process, after a training session or exercise, or when found by any FortisBC personnel are communicated to the Emergency Program Lead to be included in the upcoming revision.

Manual holders are invited to advise the FortisBC Emergency Program Lead if they notice pertinent information is incorrect, incomplete, or missing.

References

The documents referenced below provide additional detailed information on managing emergencies and may be used together with this plan:

- All Environmental Standards
- All FortisBC Occupational Health and Safety Standards
- [Spill Reporting Response and Cleanup](#)
- [Public Affairs Emergency Plan](#)
- [Corporate Emergency Response Plan](#)
- [Gas Operations Emergency Response Plan](#)
- [Responding to Spills](#)
- [Security Management System](#)