



Huntingdon Inc. Transmission Pipelines Emergency Response Plan

February 2024/2025

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

Regional Manager,
Transmission

Title

Gianni Del Bianco

Signature

January 30, 2024

Date

Plan Distribution

All FortisBC Emergency Response Plans are made available on FortisBC’s intranet.

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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

NAME	PHONE	OTHER
Emergency Contacts		
Natural Gas Emergency Line (24 Hour)	1-800-663-9911	
Dispatch	604-576-7255 (local)	1-866-221-3322 (toll-free)
Emergency Operations Representative (EOR)	604-576-7172	604-576-7163
Emergency Operations Centre (EOC)	604-576-7172	Failsafe: 604-576-9843 Satellite: 1-866-436-9741
FortisBC Gas Control	604-592-7500	Cell: 604-230-1689 (Surrey Primary Site) Cell: 604-818-3044 (Burnaby Alternate Site) Satellite: 866-447-9335

1.3 Transmission Pipeline Emergency Equipment

LOCATION	PHONE	OTHER
Burnaby Ops, 3700 2nd Avenue, Burnaby ➤ Shops Manager	604-293-8673	After Hours: On Call Manager
Surrey Ops, 16705 Fraser Highway, Surrey ➤ Shops Manager	604-592-7795	After Hours: On Call Manager
Emergency Pipe Storage, 25252 48 th Avenue, Langley ➤ Operations Manager, Pipelines	604-690-3952	
Huntingdon Station, 100 Whatcom Road, Abbotsford ➤ Operations Manager, Pipelines	604-690-3952	

For a list of Emergency Response Equipment, refer to Section 6 (Emergency Response Equipment).

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 Management
	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
- Environment
- 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, BCER ² , CER ³	BCUC ⁴
Release of any hazardous product (no danger to public safety)	Ministry of Environment, WorkSafe BC	
Pipeline rupture – Major ¹	BCER ³ or CER	
Pipeline rupture – Minor	BCER or CER	
Serious injury or fatality (worker)	Police, WSBC, BCER or CER	
Serious injury or fatality (customer)	Police, TSBC	BCUC
Fire or explosion	Police, TSBC, BCER 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. BCER 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

AGENCY	PHONE	OTHER
Technical Safety BC (TSBC)	1-866-566-7233	
WorkSafe BC	1-888-621-7233	1-866-922-4357 (After hours)
Environment Canada Duty Officer (24/7)	604-666-6100	
Canada Energy Regulator (CER)	819-997-7887	403-299-2773 https://apps.cer-rec.gc.ca/ers ¹
Transportation Safety Board of Canada (TSB)	819-997-7887	819-953-7876 (fax) pipelinenotifications@tsb.gc.ca
Emergency Management BC (EMBC)	1-800-663-3456	
BC Ministry of Environment	Call to report to all three agencies.	604-582-5200
BC Energy Regulator (BCER)		
BC Utilities Commission (BCUC)	604-660-4700	

1. Online Event Report System (OERS) is used to report incidents, unauthorized activities and contamination.

3 Emergency Response for Specific Incidents

3.1 Transmission Pipeline Release

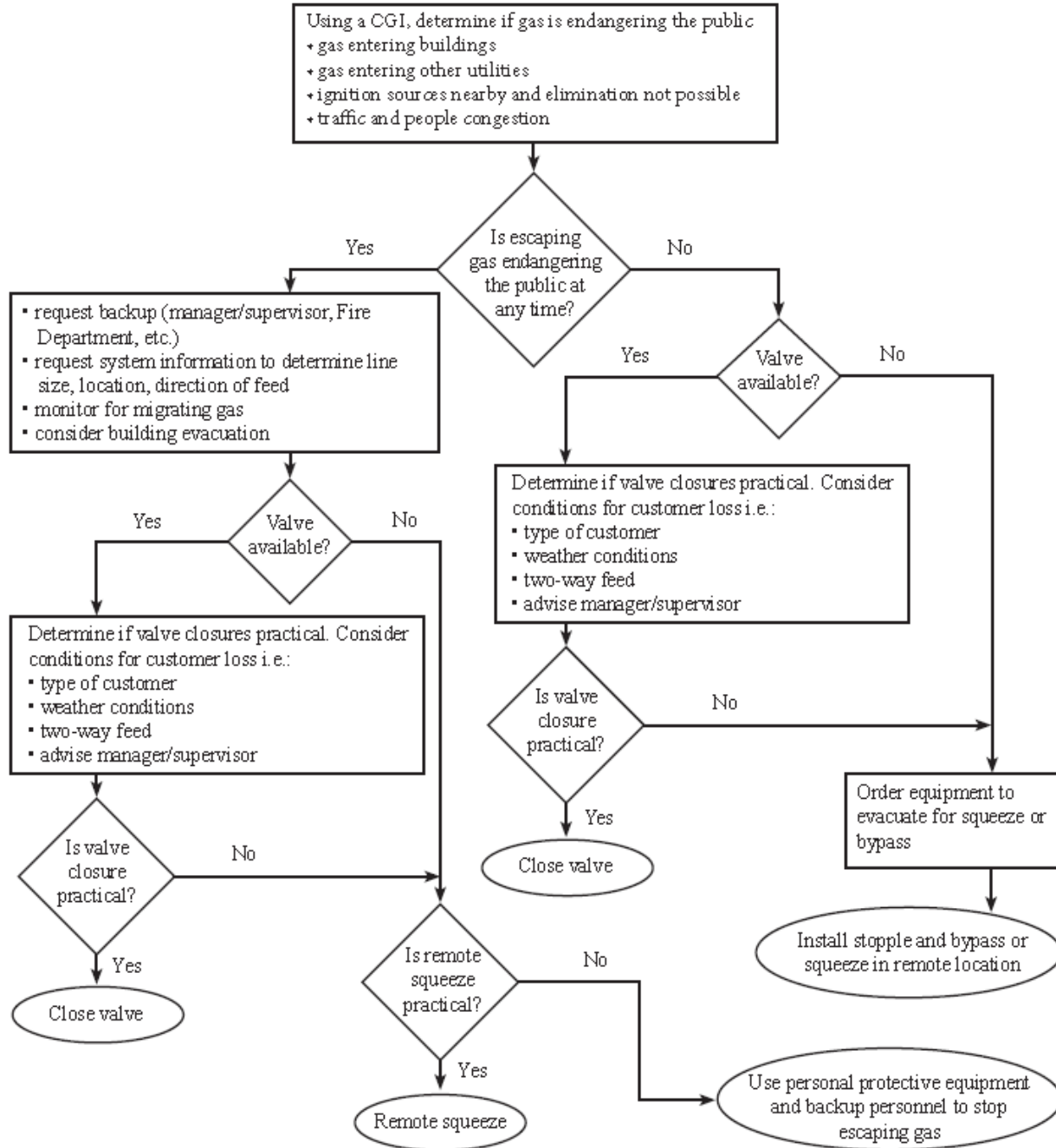
The procedures in this section are to be performed by trained personnel only.

✓	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 PREOC (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 (Appendix G) for the FortisBC Huntingdon Inc. Transmission Pipelines
	Through the EOC, notify PREOC (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, the closet FortisBC site with the relevant detection system installed. 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/ACC, and: <ul style="list-style-type: none"> ➤ Determines the location of the ICP ➤ Informs the EOC/ACC that a FortisBC representative will report to the ICP to coordinate response to a gas emergency ➤ Requests that the EOC/ACC 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.

For guidance on security incidents management and information on related standards, refer to the FortisBC [Corporate Security](#) internal site.

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

FBC Huntingdon Control Station location: 176A Whatcom Road, Abbotsford, BC, V2S 1B7

FortisBC Huntingdon Inc. is owned by FortisBC Holdings Inc. It has two short Transmission Pipelines located within the fenced grounds of the FortisBC Huntingdon Control Station:

- **Export transmission pipeline:** Delivers gas south across the Canada/U.S. border.
- **Import transmission pipeline:** Receives gas flowing north across the Canada/U.S. border.

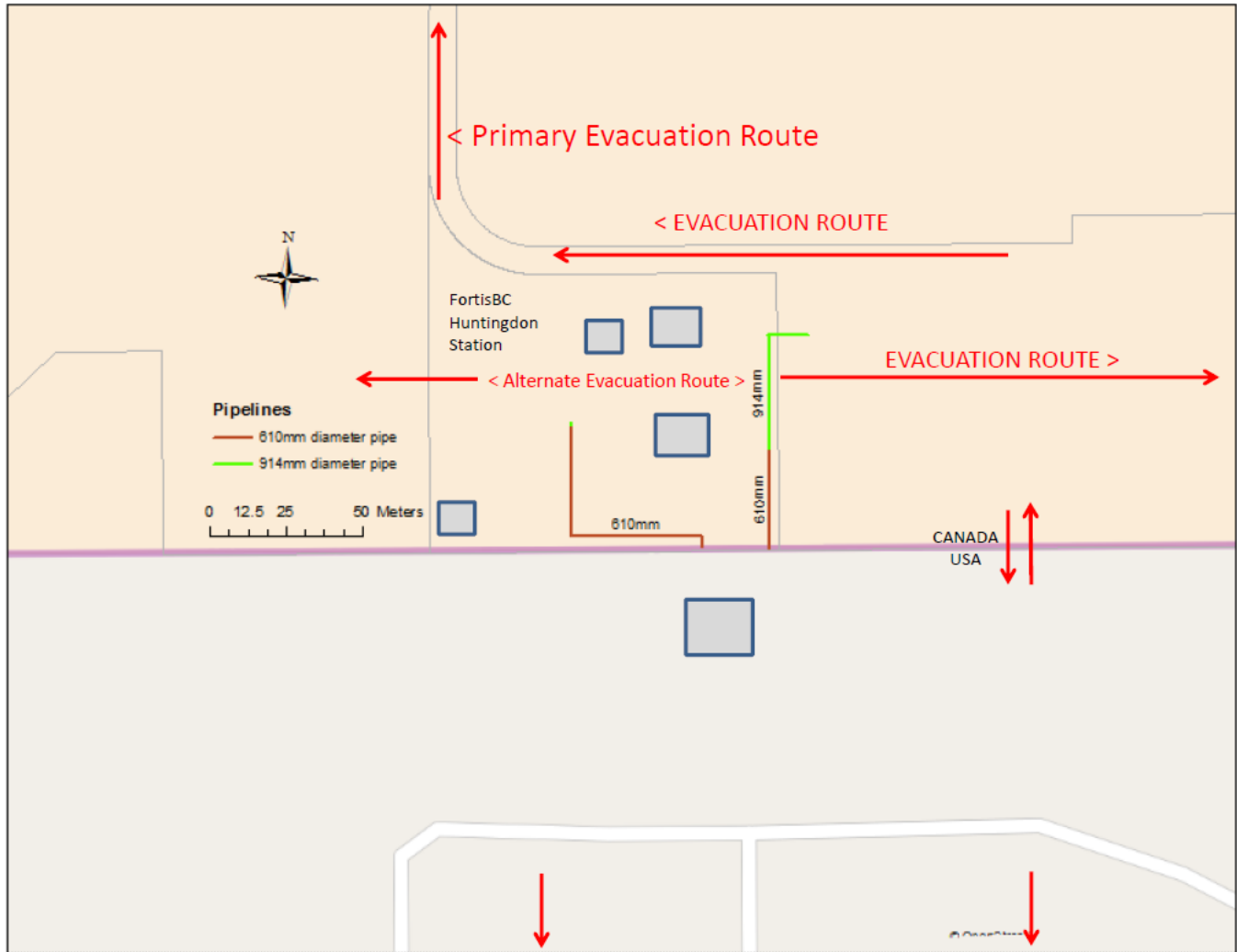
EXPORT TRANSMISSION PIPELINE	
Pipe specifications	38 m – 610 mm x 12.7 mm W.T. API 5LX42 Cat. I
Maximum operating pressure	5380 kPa
Product	Natural gas (unodorized)
ROW width	6.0 m
Normal depth of cover	1.2 m

IMPORT TRANSMISSION PIPELINE	
Pipe specifications	83 m – 610 mm x 12.7 mm W.T. API 5LX42 Cat. I
Maximum operating pressure	4020 kPa
Product	Natural gas (odorized)
ROW width	6.0 m
Normal depth of cover	1.2 m

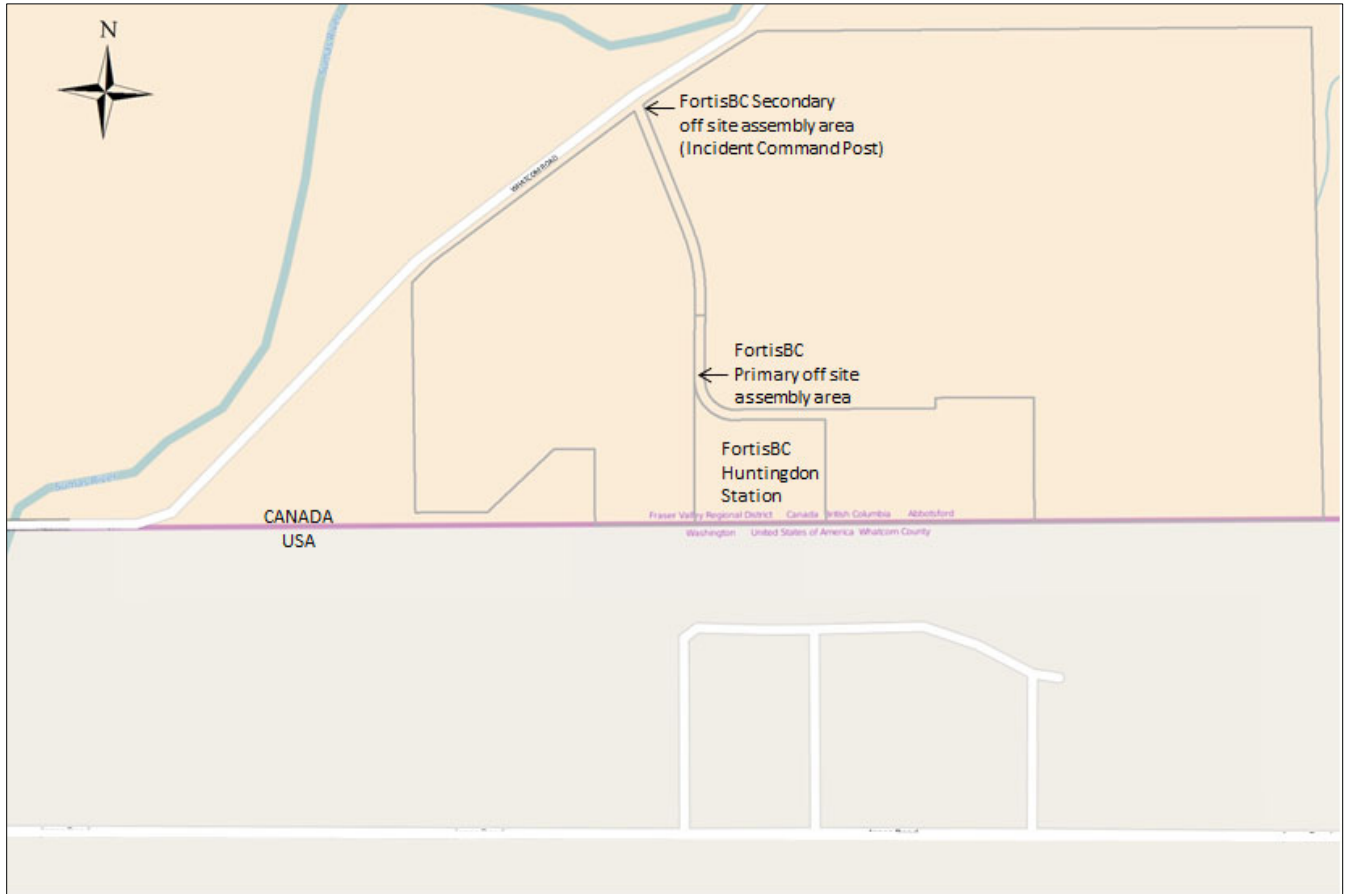
4.2 Pipeline Layout



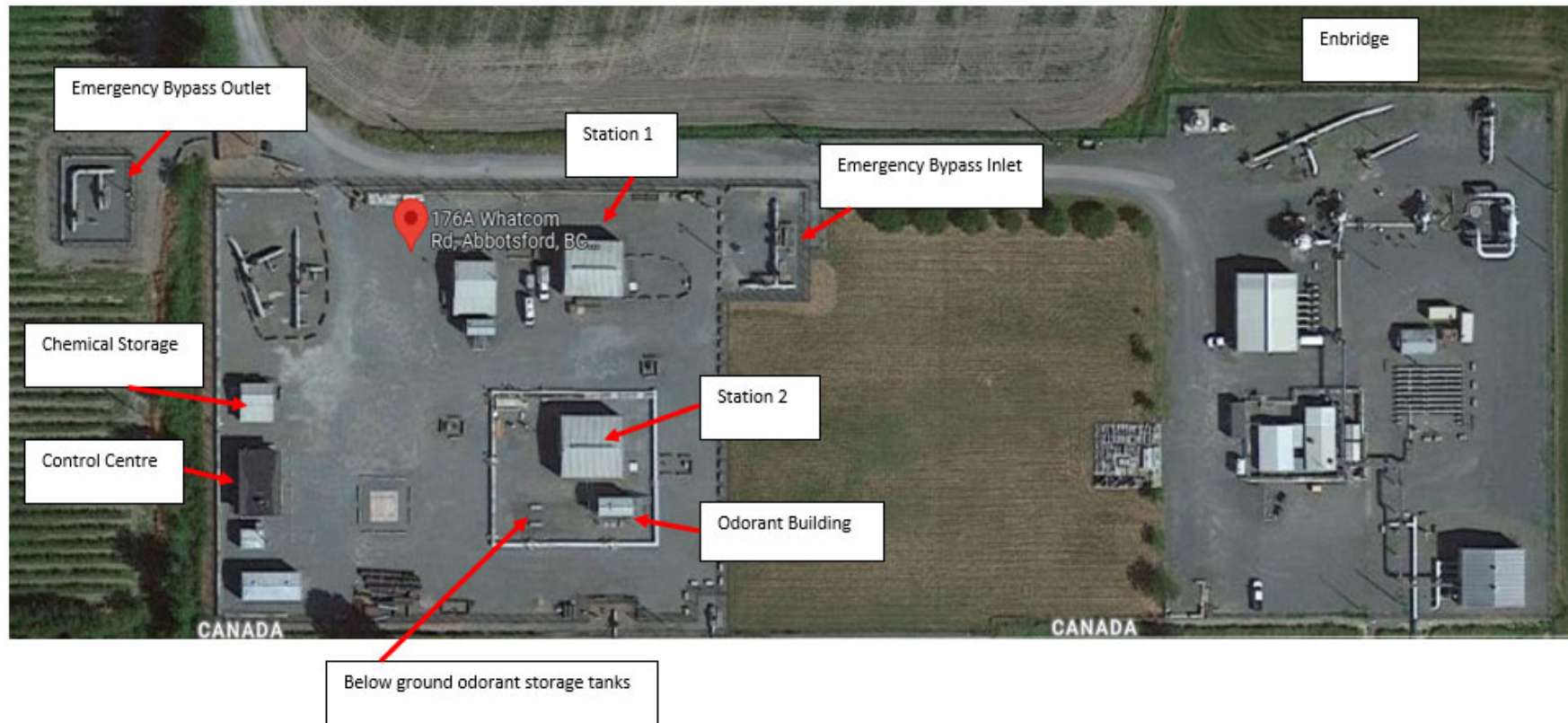
4.3 Site Evacuation Routes



4.4 Assembly Area



4.5 Site Layout



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 response 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/ACC.

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 Dispatch, or the EOC to 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.

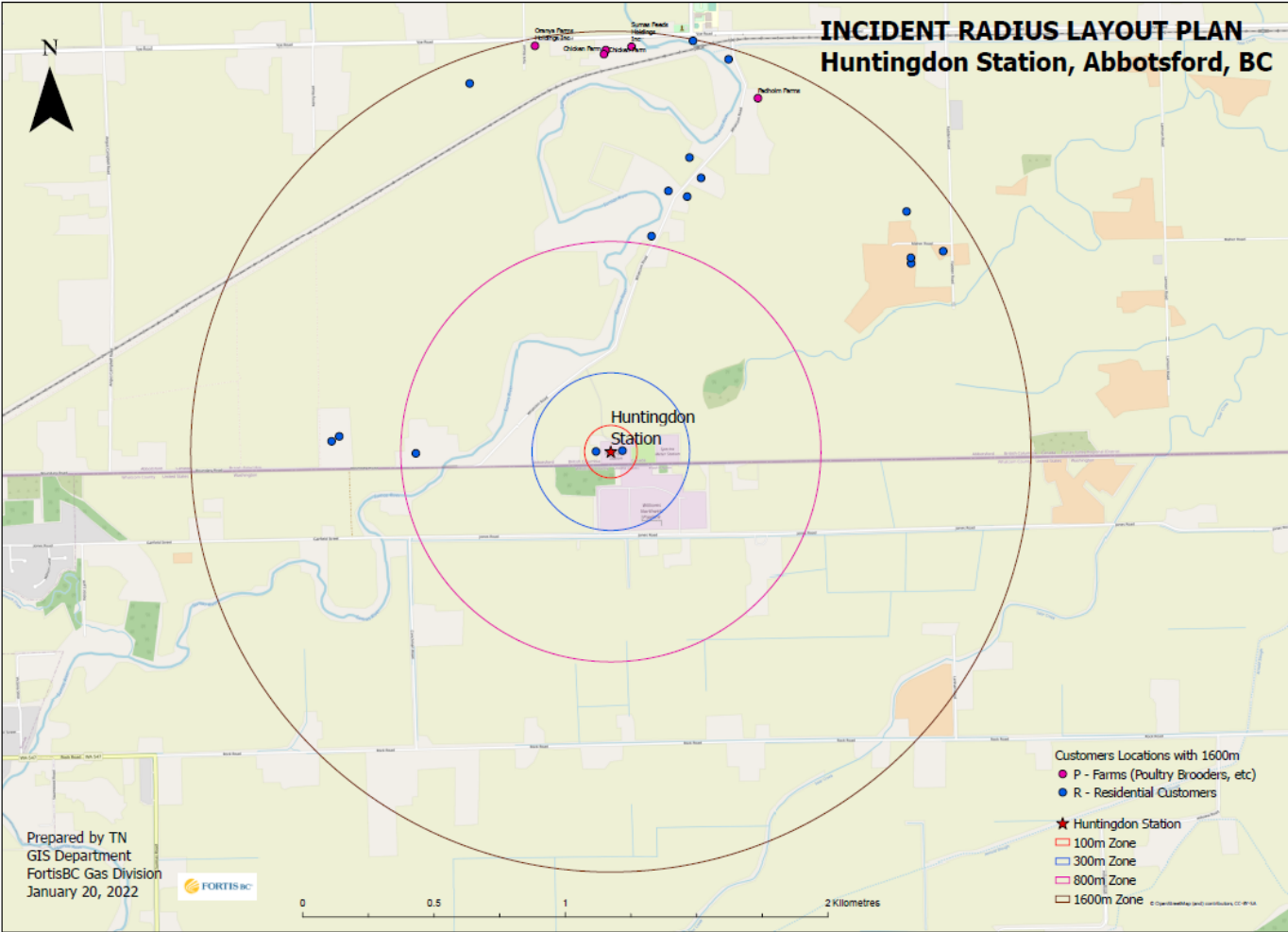
Any buildings within the evacuation zone (especially downwind) should be monitored for gas levels. If gas is detected, the buildings must be evacuated.

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	Yes	No
Pre-Tested Pipe	No	No	Yes	No
Bypass Equipment	Yes	No	Yes*	No
Stop Off Equipment	Yes	Yes	Yes*	No
Pipeline Repair Fittings	Yes	Yes	Yes	Yes

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

*STATS BICEP NPS 18 and NPS 20 Equipment at Langley Emergency Pipe Storage

7 Appendices

Appendix A: Contact Information

Emergency Support Contacts

NAME	PHONE	OTHER
Emergency Services		
Fire, Police/RCMP, Ambulance	9-1-1	
Nearby Hospitals		
Abbotsford Regional Hospital, 32900 Marshall Rd, Abbotsford ➤ Approx. 11 km from site	604-851-4700	
Response Support		
CANUTEC ➤ For response and product advice	1-888-CANUTEC (1-888-226-8832) or 613-996-6666	From cell: *666
Ministry of Transportation and Infrastructure Emil Anderson Maintenance Company ➤ For road closures	1-800-667-5122	
NAV Canada ➤ For airspace closures - "NOTAM"	604-586-4500	1-866-992-7433

FortisBC Contacts

Other Resources		
FortisBC Media Line	1-855-322-6397 1-855-FBC-NEWS	
Gas Control		
➤ Manpreet Sidhu	604-220-1506	
➤ Darrell Sommer	604-592-7604	604-220-3817
Director, Transmission		
➤ Ferenc Pataki	604-592-7731	604-219-1879
Regional Operations Manager, Fraser Valley (Zone 3)		
➤ Neil Bolger	604-576-7083	604-916-4225
Regional Manager, Transmission		
➤ Gianni Del Bianco	604-576-7033	604-690-3952
Operations Manager, Pipelines		
➤ Duane Mrak	604-592-7531 x57531	604-690-4892
Operations Manager, Pipelines		
➤ Michael Orth	604-952-4876 x54876	604-690-3943
Operations Supervisor, Pipelines		
➤ Holly Motherwell	604-592-7986	604-315-5855
Operations Manager, Pressure Control		
➤ Guido Borrelli	604-592-7660	604-690-3908
Operations Supervisor, Support		
➤ Maxine Hickli	778-578-8056	604-842-1448
Occupational Health and Safety		
➤ Mark Kredba	604-576-7017	604-928-4188
Environment		
➤ Leslie Kristoff	604-592-7680	604-842-7188
Corporate Security		
➤ Gary Schoenhaar	778-578-8062	778-984-5292
Emergency Management		
➤ T.M. Sandulak	604-576-7013	604-813-9009
➤ Matthew Schneider	778-547-0153	604-209-5302
Regulatory		
➤ Ilva Bevacqua	604-592-7664	gas.regulatory.affairs@fortisbc.com

Personal contact information for Operations, Transmission Incident Response Team is available from the Emergency Operations Representative.

Other Stakeholders

NAME	PHONE	OTHER
Pipeline Companies		
Enbridge/ Westcoast Energy Gas Control	403-699-1700	
Kinder Morgan Canada, Control Centre	1-888-876-6711	780-449-5734
Williams Northwest Pipeline System Gas Control	1-800-972-7733	1-800-235-8966
Rail Lines		
CP Rail Emergency Line (CP Police)	1-800-716-9132	
Southern Railway of British Columbia	604-521-4821	
BNSF Railway	1-800-832-5452	
Local Authorities		
Fraser Valley Regional District	1-800-528-0061	
City of Abbotsford Emergency Advisor	604-864-5694	604-853-3566
Whatcom County Emergency Management (USA)	360-676-6681	
Border Authorities		
Canada Border Services Shift Supervisor	604-557-7120	604-557-7119
US Customs and Border Protection (Sumas, USA)	360-988-2971	Blaine Command Center 360-332-7611
Other Stakeholders	Phone	Other
Puget Sound Energy	425-882-4495	425-882-4622
Cascade Natural Gas	208-377-6139	1-888-522-1130
BP Pipelines	1-800-548-6482	918-660-4458

Appendix B: Role of Regulators in an Emergency

Canada 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, Canada 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 Canada 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 Canada 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 Canada 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 Canada 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

For all other emergencies related to a CER-regulated company's operations, facility or activity, call the CER at 403-299-2773.

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

FortisBC has a single distribution natural gas utility pipeline serving Pt. Roberts, Washington. This short line delivers natural gas at distribution pressure from Delta, BC to the US Customs and Border Protection station at Pt. Roberts, Washington.

PIPELINE SPECS	26 mm Polyethylene Pipe
MAXIMUM OPERATING PRESSURE	420 kPa
PRODUCT	Odourized Natural Gas
LOCATION	Road way adjacent to 56 Street, Delta
NORMAL DEPTH OF COVER	0.6 metres

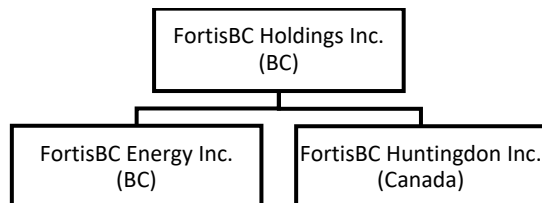
Osoyoos Distribution Natural Gas Utility Line

FortisBC has a single distribution natural gas utility pipeline serving Oroville, Washington. This short line delivers natural gas at distribution pressure from Osoyoos, BC to the US Customs and Border Protection station at Oroville, Washington.

PIPELINE SPECS	88 mm Polyethylene Pipe
MAXIMUM OPERATING PRESSURE	420 kPa
PRODUCT	Odourized Natural Gas
LOCATION	Road way of BC Hwy 97
NORMAL DEPTH OF COVER	0.6 metres

Appendix F: Corporate Ownership

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



Appendix G: Huntingdon Flood Response

Overview

In the event of a flood emergency at Huntingdon Station, the site will be abandoned and enter Flood Response Mode. There are 3 modes of operation that occur during Flood Response Mode. Remote monitoring of level indicator for the purpose of mode response is completed through Bosh Camera System identified as "STN 1 E ch12". Please note the following:

- Changes were made to the site to greater facilitate mode assurance.
- Bypass Junction boxes and metering points were raised to same elevation as Control floor. (Sea level reference to be noted)
- Station 2 surrounded by flood resilient wall and incorporates 2 sumps for transmissions to utilize with portable pumps.
- Selection of mode should take into consideration anticipated water level

Mode 1 (Potential: 0" (7.84m) – 36" (8.75m))

- Default Huntingdon output through Station 2 using standard operation while monitoring water levels.
- If levels reach 20"(8.35m) internal or 36"(8.75m) of Flood Protective Wall, or visibility of water level is lost, revert to Mode 2. Please refer to the Huntingdon Water Level Indicator in Figures 1,2 and 3.
 - Transmissions will supply water removal pumps, generator, and fuel cell internally of Flood Protective wall. If the water level reaches 20" it will become difficult to access. There is an elevated base for the purpose of installation

Mode 2- (36" (8.75m) – 63" (9.44m))

- Site is to be left running on the Bypass station. Odorization shall be set to Time-based Injection. • Time-based Injection should be delayed until the last possible moment as varying flow may cause Odorization levels to fluctuate.

Mode 3 (63 " (9.44m) – 106" (10.53m))

- Selection of mode 3 may only be achieved upon anticipated water level being met (access challenge).
- Control Valve failure mode uncertain when water ingresses on controls
- Considerations are as follows:
 - Continuity of supply from Enbridge
 - Access to manually override control valve
 - failed in last position
 - failed to open
 - Ability of Enbridge to participate in over pressure protection via upstream compressor
 - Run on monitor (monitor to ensure MOP)

When using Odorant Time Based Injection Gas Control, Engineering and Gas Lab to determine rate.

Rates are to be adjusted for Peak Loads as close as practical to 7am and revert to remainder of Gas Day after anticipated Peak Load is realized. Peak load is the maximum expected amount of gas in any one day or hour required by customers on the FEI system.

At the risk of water damage, the Station 1 PLC should remain active and set Station to Local Manual for odorant injection visibility. If visual is lost on the Odorizers, consistent odorant testing is required either by Sniff Test (Odorator)/Lab Run Sample. In the event of any odorant changes required through sample results, Gas Control, Gas Lab and Stations Engineering are to determine the value and implement the change remotely. Consideration given to SIPI north flow when determining injection rate. Gas Lab will continue to monitor daily during differing flow situations. Please refer to table 1 for the Huntingdon Control Station Odorizer System Proportional-to-Time Operation Pump Stroke Intervals.

Along with the Station 1 PLC, the Bypass and SIPI PLCs are to also stay energized. The Station 2 PLC should be shut down and all other equipment should be elevated where possible to prevent unnecessary water damage. As a precaution to possible water damage, all up to date PLC data should be downloaded prior to activating Flood Response Mode.

Activation of Flood Response Mode 2

The following section outlines the procedure to activate Flood Response Mode 2 at Huntingdon Station.

Note: *While Huntingdon Station is in Flood Response Mode, Gas Control is required to get flow data from Enbridge at hourly intervals.*

Activation Procedure:

1. Elevate Equipment where possible to allow for operation in higher water levels
2. Download all up to date PLC data
3. Disengage Odorant Switching MOVs
4. Perform Instrument Gas Operational for Odorizers
5. Isolate Instrument Air to Odorizers allowing for Gas to actuate, Lock Open all necessary valves
6. Move YZ Station 1 Odorizers to Time based Injection
7. Verify at injection point Odorization drip
8. Move Station 1 to Local Manual
9. Set Station 1 to close
10. Isolate Station 1 Outlet Valve and perform LOTO SCAN
11. Move Station 2 to Local Manual
12. Set Station 2 to close
13. Isolate Station 2
 - a. Close Transmission Valve 22 and perform LOTO SCAN
 - b. Subsection Closing of Stations can be completed remotely through Valves 31 and 41,
 - i. SIPI north supply will be eliminated
14. Isolate Import to Open (SIPI north) and Export to Closed LOTO (SIPI south)

15. Power Down of the Station 2 - Panel 'E' Breaker 3.
 - a. Bypass, Station 1 and SIPI PLC to Stay Energized
16. Confirmation of Odorant Levels to be completed through sampling. Sampling rate determined on visibility for Pump Action
17. Disengage Odorant Tank MOVs or Power the electrical panel down
18. Close Monitor Sense Lines on Stations 1 & 2
19. Station 2 and SIPI Odorizers placed on Standby (tanks and switching systems)

Deactivation of Flood Response Mode:

The following section outlines the procedure to properly deactivate Flood Response Mode 2 at Huntingdon Station and return Normal Operating Procedures.

Deactivation Procedure:

1. Contact Gas Control informing of return to normal and Station 2 PLC energization (Station 1, SIPI, and Bypass PLC should have remained energized during the event)
2. Engage Odorant Tank MOVs
3. Engage Odorant Switching MOVs
4. Re-establish Instrument Air supply for Odorizer Power Gas (compressed air)
5. Set YZ Station 1 to flow-based injection
6. Set Station 2 Odorizers from Standby
7. Open Monitor Sense Lines on Station 1
8. Power up Fan and Modem in cabinet - Panel 'L' Breaker 11
9. Return Station 1 to Auto Remote and confirm set points with Gas Control for control valve closure
10. Enable Import and Export Valve for control (unlock them)
11. Open Station 1 outlet valves and perform LOTO SCAN
12. Ask Gas Control to run on Station 1 to confirm operation
13. Open Monitor Sense Lines on Station 2
14. Power up Station 2 - Panel 'E' Breaker 3
15. Power up Station 2 Batteries
16. Return Station 2 to Auto Remote and confirm set points with Gas Control for control valve closure
17. Open Station 2 outlet valves and perform LOTO SCAN
18. Ask Gas Control to run on Station 2 to confirm operation
19. Return Control Room Equipment to original physical position

References

- Reference the link below to the high level seismic and flood assessment study for Huntingdon station

<S:\GasInc\Assets\43000 L Mainland TP Stns & Misc\43030 Huntingdon\ Emerg Support\FEED & Info>

Huntingdon Control Station Odorizer System Proportional-to-Time Operation				
Pump Stroke Interval (seconds)				
Flow Rate km ³ /hr	Number of Pumps Operating			
	1	2	3	4
0-25	117.4	235	352	469
25-50	39.1	78.2	117	156
50-100	19.6	39.1	58.7	78.2
100-150	11.7	23.5	35.2	46.9
150-200	8.4	16.8	25.1	33.5
200-250	6.5	13.0	19.6	26.1
250-300	5.3	10.7	16.0	21.3
300-350	4.5	9.0	13.5	18.1
350-400	3.9	7.8	11.7	15.6
400-450	3.5	6.9	10.4	13.8
450-500	3.1	6.2	9.3	12.4
500-550	n/a	5.6	8.4	11.2
550-600	n/a	5.1	7.7	10.2
600-650	n/a	4.7	7.0	9.4
650-700	n/a	4.3	6.5	8.7
700-750	n/a	4.0	6.1	8.1
750-800	n/a	3.8	5.7	7.6
800-850	n/a	3.6	5.3	7.1
850-900	n/a	3.4	5.0	6.7
900-950	n/a	3.2	4.8	6.3
950-1000	n/a	3.0	4.5	6.0
1000-1050	n/a	n/a	4.3	5.7
1050-1100	n/a	n/a	4.1	5.5
1100-1150	n/a	n/a	3.9	5.2
1150-1200	n/a	n/a	3.7	5.0

n/a = stroke interval should not be less than 3 seconds
Stroke intervals are calculated for a target odorization rate of 12 mg/m³

Table 1: Huntingdon Control Station Odorizer System Proportional-to-time Operation

<u>Local Elevation (inch)</u>	<u>Sea Level Elevation (m)</u>	<u>Description</u>	<u>Mode</u>
20" (Internal interior containment) 36" (External Containment)	8.35 8.75	Mode 1 Operation Limits	1
36" 63"	8.75 9.44	Mode 2 Operation Limits	2
63"	9.44	Switch from Mode 2 to Mode 3	3
72"	9.67	PLC Failure	3
106"	10.53	200 Year Flood Level	3
53"	9.19	Floor Control Building x (Reference point)	2

Table 2: Huntingdon Control Station Water Level Indicator Measurements

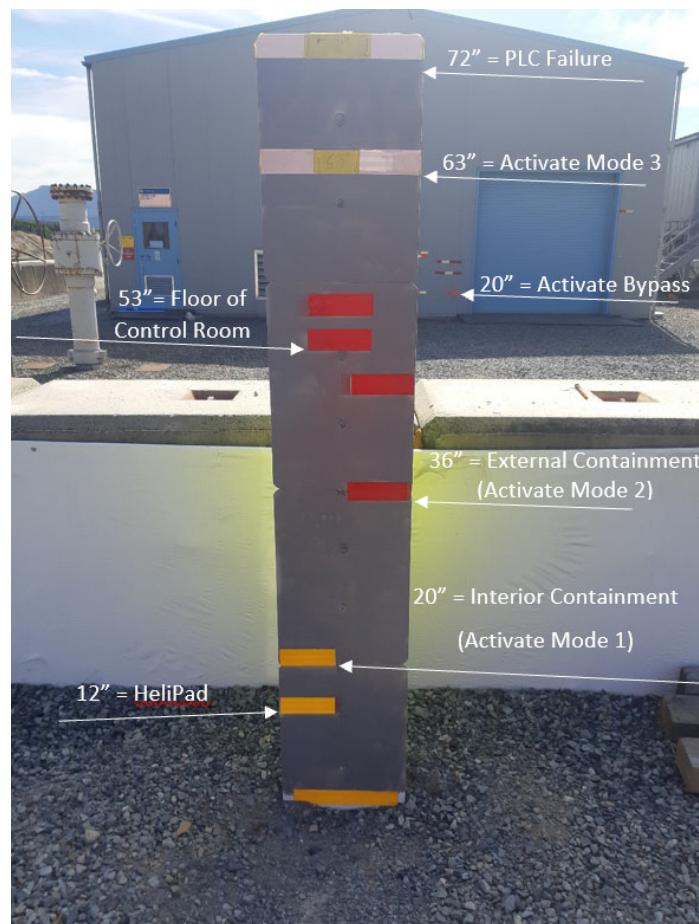


Figure 1: Huntingdon Water Level Indicator Measurement 1



Figure 2: Huntingdon Water Level Indicator Measurement 3




Figure 3: Huntingdon Water Level Indicator Measurement 4

Appendix H: 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 Objective (ICS 202)		
Incident Name	Date/Time Prepared	
	Date:	Time:
Operational Period		
From Date (Yr/Mth/Day): _____	To Date (Yr/Mth/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 206)	<input type="checkbox"/> Incident Action Safety Plan Analysis (ICS 215a)	<input type="checkbox"/>
Prepared By _____	Signature _____	
Approved By _____	Signature _____	
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Appendix I: ERP Administration

Authority

Under [Onshore Pipeline Regulations](#) 1999, CSA Z662-11, and the Canada 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 Program Manager, Emergency Management to be included in the upcoming revision.

Manual holders are invited to advise the FortisBC Program Manager, Emergency Management 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](#)