EMERGENCY RESPONSE PLAN

ALL PEMBINA PERSONNEL HAVE THE RESPONSIBILITY AND AUTHORITY TO ACTIVATE THIS PLAN

Document	What does it contain?	Location
CORPORATE EMERGENCY RESPONSE PLAN (ERP)	General emergency response information relevant across the company. The plan contains details pertaining to: • Corporate Incident Classification Matrix • Regulatory reporting requirements • Public protection measures • Responder roles and responsibilities • Post incident actions	PART 1 BLUE TAB
DISTRICT/AREA OR SITE/SYSTEM SPECIFIC SUPPLEMENTS	District/Area or Site/System specific supplements are maintained separately from the Corporate ERP. Supplements contain information that may be common throughout a geographical operating area or the entirety of site or pipeline system, including: • Internal and external contact information • Support services and mutual aid • Pembina owned response equipment For plans containing a single site or system, the following details may also be common throughout a geographical operating area or the entirety of a site or pipeline system, eliminating the need for an asset specific addendum(s)(Part 3): • Site description and overview of operations • Technical data • Maps	PART 2 GREEN TAB
ASSET OR RESPONSE ZONE SPECIFIC ADDENDUMS	Asset or Response Zone specific addendums include details specific to an individual site or zone within a larger operating area, such as: • Site description and overview of operations • Technical data • Maps	PART 3 YELLOW TAB Where Required
SUPPORTING DOCUMENTS	Additional documents maintained independently from the ERP that provide additional supporting details, such as: • Spill control point data sheets • Site specific procedures • Fire safety and/or pre-plans • Office evacuation plans • Supplemental plan(s) or bridging documents for newly constructed or acquired assets Where large data sets exist, Supporting Documents may be housed in separate binders.	PART 4 ORANGE TAB

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CORPORATE EMERGENCY RESPONSE PLAN (CANADA)

PEMBINA EMERGENCY RESPONSE LINE
1-800-360-4706

Select details have been removed throughout this document to protect private and/or confidential information. This may include names, phone numbers, addresses, equipment details, locations of surface installments, and information collected during public consultation activities.

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This document is not intended for external distribution without approval from the Emergency & Continuity Management Program (ECMP).

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PREFACE

Purpose

The purpose of this Corporate Emergency Response Plan (Corporate ERP) is to provide guidance and direction to Pembina personnel to ensure effective response actions during emergencies, to aid in the prevention of injury to employees, emergency responders, and members of the public, and to minimize impacts to the environment, property, and infrastructure.

Application

The Pembina Corporate ERP applies to Pembina Pipeline Corporation and each of its subsidiaries and/or entities operating within Canada (excluding marine operations), including but not limited to: [redacted]. These entities are collectively referred to as Pembina in this plan.

Scope

The Corporate ERP serves as Pembina's foundational emergency response plan and includes emergency response information relevant to Canadian operations (excluding Marine Terminals) and is applicable to all sites and pipeline systems operated by Pembina, within Canada.

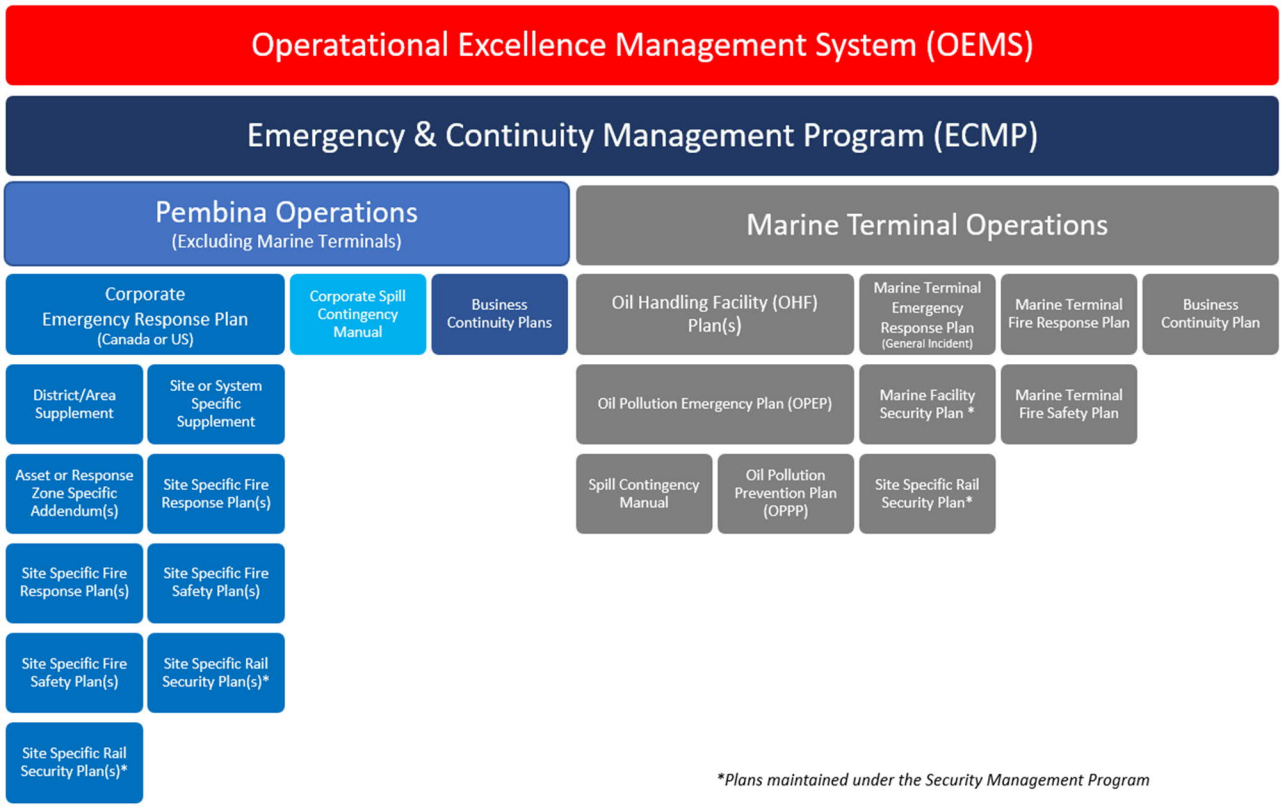
The Corporate ERP has been developed in partnership with Pembina stakeholders and response personnel to ensure the document contains helpful and relevant information. The Corporate ERP has been prepared to ensure compliance to applicable regulations and reporting requirements.

The Corporate ERP is supported by Pembina's Emergency & Continuity Management Program (ECMP), which is a component of Pembina's Operational Excellence Management System (OEMS) Framework and works in conjunction with other OEMS documentation, including the Canada Energy Regulator Operations and Maintenance Manual. The Corporate ERP also works in conjunction with District/Area or Site/System specific plans, and their applicable asset specific details. These plans are reviewed and maintained independently from the Corporate ERP.

Responders are responsible for reviewing and familiarizing themselves with the contents of the Corporate ERP, their related duties and responsibilities, as well as the associated District/Area or Site/System specific plan(s), applicable to their working area(s). All Pembina personnel have the responsibility and authority to activate this Plan.

Document Navigation

Pembina emergency response documentation is organized as follows:



Introduction

Pembina operations include liquid transportation pipelines, gas gathering and processing infrastructure, and midstream and marketing services within Canada and into the USA.

Pembina is committed to protecting the health and safety of workers, the public, and safeguarding the environment and property. Pembina places a strong focus on emergency management through its Emergency & Continuity Management Program (ECMP) which includes detailed standards and processes for continued emergency management activities including planning, prevention, preparedness, response, and recovery.

Emergency Management includes, among others:

- Hazard identification and risk assessment
- Emergency response planning
- Emergency response training and exercises
- Stakeholder liaison, public awareness, and engagement
- Incident response and public protection
- First Responder liaison, awareness, and engagement
- Participation in area Mutual Aid groups
- Business continuity planning

The Pembina emergency response framework is based on the Incident Command System (ICS) principles, implementation methodologies, roles and responsibilities, and associated tools and guides to facilitate incident response activities, are discussed throughout this document. Pembina utilizes a competency-based training and exercise framework to ensure Pembina's emergency response personnel have appropriate qualifications to perform their duties, as required.

Additional information on Pembina's ECMP, including governing standards, procedures, and tools, is available on the Pipeline.

Distribution Record

Internal Distribution

The Corporate ERP is readily available to employees in electronic format on the Pipeline. Personnel are encouraged to use the Pipeline to access the Corporate ERP.

Distribution will be maintained with the applicable District/Area or Site/System Specific Supplement(s).

External Distribution

The Corporate ERP is distributed as a stand-alone document to the following external agencies:

Destination	Location	Format
[redacted]		
[redacted]		

Other applicable government/regulatory agencies will receive a copy of the Corporate ERP in electronic format with applicable District/Area or Site/System specific supplement(s) enclosed, as required. Distribution lists for these agencies will be maintained within the applicable District/Area or Site/System specific supplement(s).

Revision Record

Those responsible for the implementation of the Emergency & Continuity Management Program (ECMP), in coordination with the appropriate Operations staff, shall be responsible for the maintenance of the Corporate ERP. The Corporate ERP will be reviewed as required, and on a regular basis to ensure compliance with applicable regulations.

Revised plans will be distributed to noted plan holders who are responsible for destroying the outdated plans and advising Emergency & Continuity Management staff once complete.

The below table details historical revisions to the Corporate ERP for a period of five years, in accordance with applicable regulations and Pembina's document retention policy.

Date	Version	Revision Details (reference type of revision, i.e., annual or regular)
Prior to 2020	1.0 – 1.2	Archived
February 15, 2020	2.0	Annual Review and Update completed, and re-development of the Corporate Emergency Management Plan completed.
May 1, 2020	2.1	Minor Revision and Update to include the Corporate Incident Classification Matrix and the regulatory Levels of Emergency.
August 25, 2020	2.2	Minor Revision and Update to include PKM entities.
January 31, 2021	3.0	Annual Review and Update completed. Removed all U.S. references.
April 15, 2021	3.1	Minor Revision to include Aux Sable Canada Ltd. and a revision to the Corporate Incident Classification Matrix.
November 1, 2021	3.2	Regular Update to entities in Application section
January 15, 2022	4.0	Annual Review and Update completed.
January 15, 2023	5.0	Annual Review and Update completed.
January 31, 2024	6.0	Annual Review and Update completed. Validated Federal/Provincial notification matrices. Updated where required to address changes to regulatory requirements.
January 31, 2025	7.0	Annual Review and update completed. Update to external document references where required.
January 30, 2026	8.0	Annual Review and update completed. Update to Roles and Responsibilities section to align with quick reference guides.

Revision Requests

If you find any errors in this Plan, or if you become aware of regulatory or industry procedural changes, please document the information and forward it to Pembina's ECMP at Emergency.Management@pembina.com

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1.0 INCIDENT ONSET & PLAN ACTIVATION

All incidents, accidents, events, or crises that occur during Pembina's operations have the potential to impact the safety and wellbeing of people, property, the environment, or Pembina's finances or reputation. This includes events occurring at, near, or with the potential to affect, Pembina owned and/or operated assets. It is critical for all potential or verified emergencies to be quickly assessed and addressed to ensure the appropriate emergency response actions are taken and resources are mobilized, as required.

All Pembina personnel have the responsibility and authority to activate this Plan.

Pembina requires all potential emergencies be reported to the Sherwood Park Control Centre (SPCC), and to the appropriate regulatory body, as required. Pembina has resources across its operational areas which can be dispatched to provide direction and support to local personnel during an emergency.

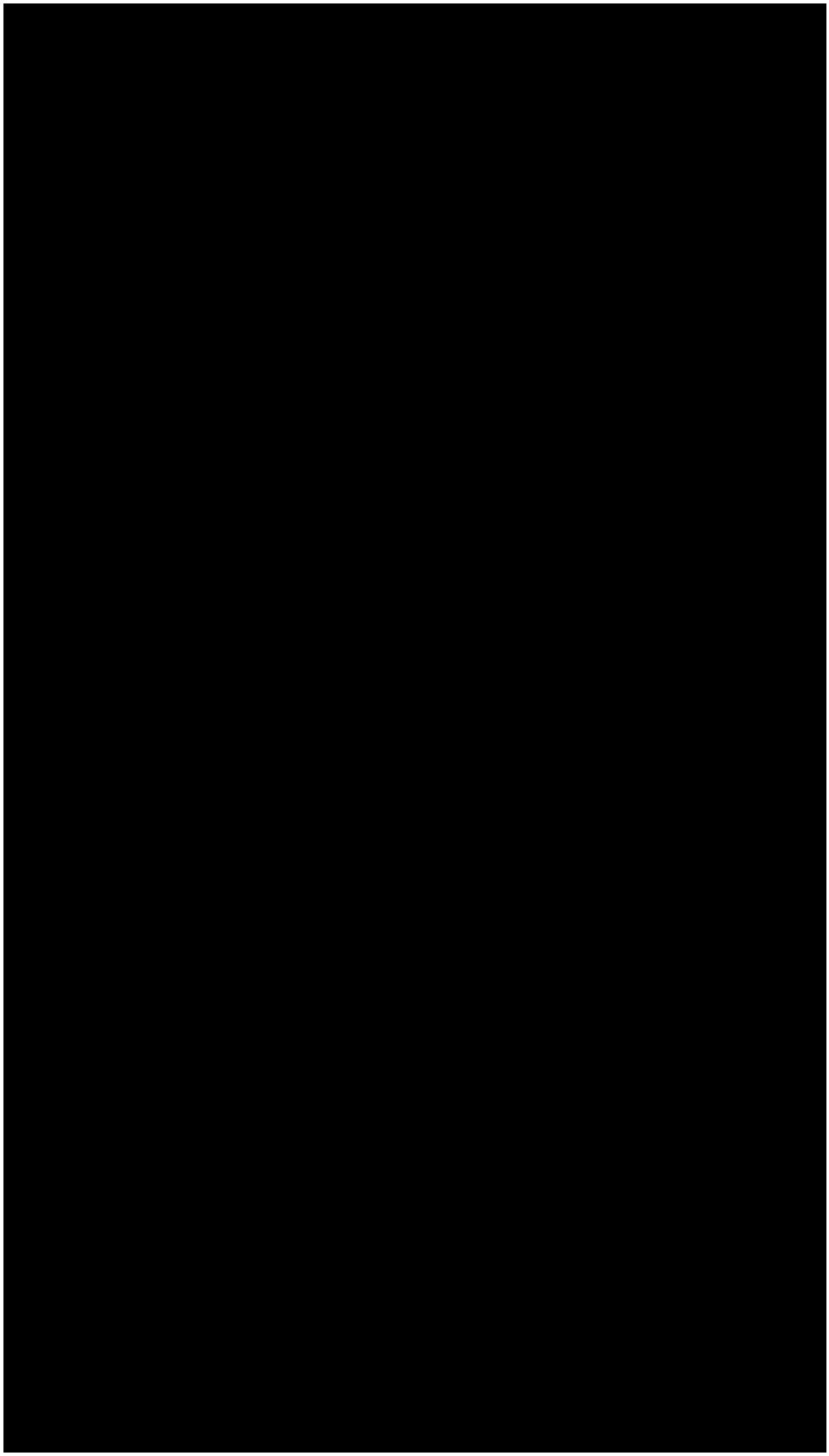
Refer to the applicable District/Area or Site/System specific supplement(s) for asset specific information, emergency contact details, local response/safety equipment, and resource listings.

1.1 Activation Procedure Overview

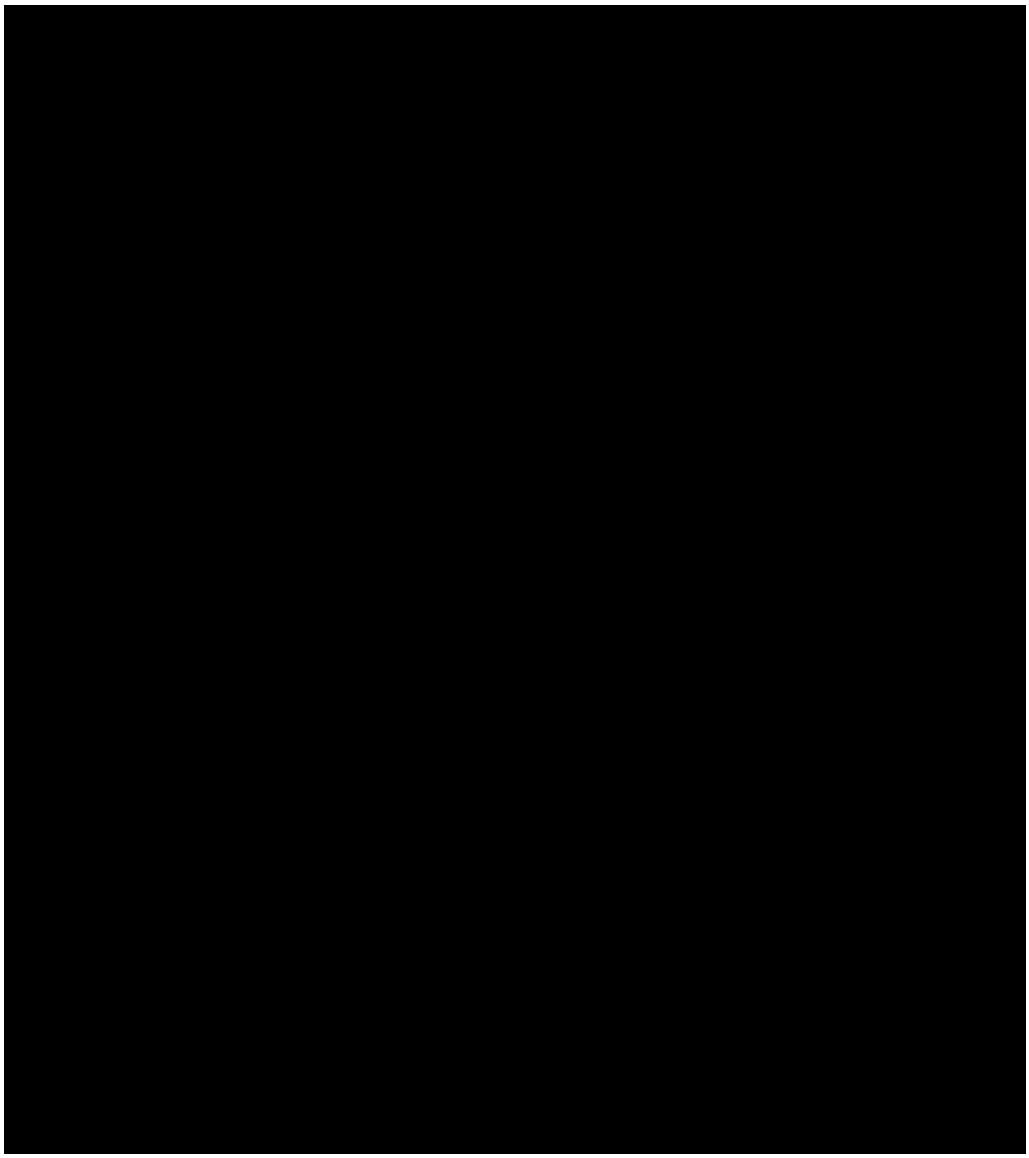
The following diagram has been adapted from the ECMP Activation Procedure and details how to activate Pembina's Incident Management Team (IMT). This process is applied to all Business Units (BUs) and Service Units (SUs) within Pembina, excluding the Alliance Pipeline System, which follows a slightly modified Alliance specific procedure.

Refer to the ECMP Activation and Response Standard and the Activation Procedure on the Pipeline for further details, including process maps, role specific actions and checklists. For area specific contacts and information, refer to the applicable District/Area or Site/System specific supplement(s).

Standard Activation Procedure



Alliance Specific Activation Procedure



1.2 Event Notification and Validation

The detection of an incident may occur through several mechanisms including notice by the SPCC, during routine operations and maintenance activities and/or monitoring by the operator, or by notification from a regulator, Third Party operator/contractor, or member of the public.

Once a potential incident is detected, efforts to validate the event begin immediately. Depending on the number and type of indicators, the SPCC may initiate shut down procedures remotely to prevent possible escalation or other compounding factors. Subsequent visual confirmation may be required, and resources are dispatched accordingly.

Additional details and processes related to event notification are available in ECMP Activation Procedure.

1.3 Activation and Establishment of the ICP

Once an incident has been verified, the Field On-Call must activate the Plan and establish the Incident Command Post (ICP), as appropriate. The established Incident Commander (IC) will be in charge and responsible for the overall coordination and direction of response activities until one of the following occurs:

- Transfer of Command, and the IC is relieved
- The IC is relieved by an external authority who will assume command (i.e., a regulator, local authority)
- Incident is stood down

Local Field Responders are most likely to be first on scene and are responsible for tactical response actions such as Pembina's Initial On-Site Actions.

Regional Response Team (RRT) members, trained to plan and execute response activities during an incident, may be deployed to fill additional ICS roles within the ICP.

If the IC determines the incident warrants additional support, they may request the activation of individuals assigned to the Incident Technical Response Team (ITRT). The ITRT is a collection of personnel that provide subject matter expertise during a response. They may be physically located at the ICP or provide support remotely from another location.

Additional details and processes related to initiating an ICS response, assessment of the site/scene, and activating the ICP are available in the ECMP Activation Procedure and the Command Post and Role Specific Guides.

Additional details pertaining to roles and responsibilities are available in Section 3.0 Emergency Response Roles and Responsibilities and supporting Command Post and Role Specific Guides.

1.4 Activation of the Emergency Coordination Centre

The Emergency Coordination Centre (ECC), led by the Emergency Coordination Manager (ECM), provides coordinated, corporate support and resources to assist the ICP in the planning and execution of response activities.

Additional details pertaining to roles and responsibilities are available in Section 3.0 Emergency Response Roles and Responsibilities and supporting Command Post and Role Specific Guides.

1.5 Crisis Management Team

The Crisis Management Team (CMT) is a cross-functional team of Senior Executives who are well positioned to act in accordance with Pembina's risk tolerance and stakeholder expectations and is responsible for assessing the need to declare a Crisis.

Additional details pertaining to the processes and procedures followed by the CMT are located in the Crisis Management Plan.

1.6 Security Threat Response Assessment

An incident may require security or criminal elements be assessed. The IC or ECM, in conjunction with Corporate Security Technical Specialists within the ITRT or the ECC, will initiate a Security Threat Assessment, as required.

1.7 Corporate Incident Classification

Pembina's OEMS Hazard Identification & Risk Assessment Standard outlines requirements, considerations, and processes to systematically identify and evaluate the hazards and risks associated with Pembina's operations.

The Corporate Incident Classification is determined using the Corporate Incident Classification Matrix, which is adapted from the OEMS Corporate Risk Matrix.

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1.7.1 Corporate Incident Classification Matrix

STEP 1 - Estimate the Severity Score:

Severity Score	Descriptor	Health & Safety	Environmental & Regulatory	Financial	Operational	Reputation
5	Extreme	Multiple loss of life and/or serious long-term health implications as a result of the company's actions.	Major long term (10+ years) widespread environmental incident. Significant long-term mitigation required. Loss of license to operate.	Earnings or capital impact greater than $1B.	Major break with lengthy response time and extensive damage.	Sustained negative campaign against the company. Investment withdrawal. Business critical stakeholders withdraw their support (lenders, insurers, institutional investors, governments). International coverage.
4	Major	Single loss of life and/or long-term occupational health implications as a result of the company's actions.	Long term (5-10 years) environmental damage. Offsite release with significant pollution/contamination. Regulator suspends asset.	Earnings or capital impact between $100M & $1B.	A critical event with a long recovery period which stretches plans to the limit and requires significant management effort to endure. Major failure, quickly controlled, major damage.	Long-term negative focus and/or sustained concerns raised by multiple key stakeholders. Prolonged area attention/difficult to resolve.
3	Moderate	Lost time injury and/or restricted duty injury, and/or short-term occupational illness.	Onsite release outside designed containment (1-5 years). Significant cleanup efforts required. Non-compliance resulting in enforcement.	Earnings or capital impact between $10M & $100M.	A significant event which can be managed through existing processes. Major failure, quickly controlled, minor damage.	Medium-term negative focus. Short term credibility concern/quickly resolved. Brief area attention.
2	Minor	Medical aid, and/or minor occupational illness.	Onsite release within designed containment (1 year). Minor cleanup efforts required. Reportable to regulator.	Earnings or capital impact between $1M and $10M.	Impact of event requires actions that can be managed through existing processes. Minor failure, quickly controlled, loss.	Short-term negative focus. Isolated incidents/resolvable.
1	Insignificant	First aid or report only (no injury).	Controlled or minor non-reportable release.	Earnings or capital impact less than $1M.	Impact of event can be absorbed through normal activity. Minor incident.	Minimal impact on public. No stakeholder attention.

STEP 2 - Assess the Likelihood of Escalation Score:

Likelihood Score	Descriptor	Description
E	Almost Certain	The incident is uncontrolled and there is little chance of bringing the hazard under control in the near term. External assistance is required to bring the event under control. The event is escalating, or it is highly likely the event will escalate.
D	Likely	Imminent and/or intermittent control is possible in the near term using internal and external resources. It is likely the incident will escalate further.
C	Possible	Incident is under control or control is probable in the near term. It is possible that the incident will escalate further.
B	Unlikely	The incident is controlled, or control is imminent. It is unlikely that the incident will escalate further.
A	Rare	The incident is controlled, or control is imminent. Escalation is highly unlikely. There is no chance of additional hazards.

STEP 3 - Determine the Corporate Incident Classification:

Severity Score	A	B	C	D	E
5	M	M	H	VH	VH
4	M	M	H	H	VH
3	L	M	M	H	H
2	L	L	M	M	M
1	L	L	L	L	M

Likelihood of Escalation Score

Low (L)

- Mitigations and/or management activities properly designed and operating.
- Routine procedures in place to address abnormal operations.
- No further mitigation required.
- Activation of the Regional Response Team (RRT) or the Incident Technical Response Team (ITRT) is not required.
- Activation of the Emergency Coordination Centre (ECC) is not required.
- Activation of the Crisis Management Team (CMT) is not required.

Medium (M)

- Mitigations and/or management activities in place but may not be routine.
- No further mitigation required where controls are verified to be working as intended.
- Incident shall be reported to the District Manager or the Director, Engineering or Operations if controls are not deemed to be working as intended.
- Activation of the RRT and the ITRT is required.
- Activation of the ECC may not be required.
- Activation of the CMT is not required.

High (H)

- Incident response continues even after controls and treatment strategies are in place.
- Further treatments and controls need to be evaluated considering the specifics of the incident.
- Activation of the RRT and the ITRT is required.
- Activation of the ECC is required.
- Notification to the CMT is required, although activation may not be required.

Very High (VH)

- Incident response continues even after controls and treatment strategies are in place.
- Further treatments and controls are required.
- Activation of the RRT and the ITRT is required.
- Activation of the ECC is required.
- Activation of the CMT is required.

Note: The Corporate Incident Classification Matrix is based on the OEMS Corporate Risk Matrix.

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1.8 Regulatory Notifications

Details on required immediate (verbal) and subsequent regulatory reporting are available in Section 5.0 Regulatory Support and Reporting.

Spill Reporting Release Charts, maintained under Pembina's Environment Management Program, guide reporting requirements in response to the release of solid, liquid, or gaseous substances or compounds that have environmental impacts. The most current version of these documents can be found on the Pipeline.

For interprovincial or cross-border incidents, ensure you review the reporting requirements for all involved jurisdictions, including applicable Federal notice/reporting requirements.

1.9 Incident Priorities

The priorities by which Pembina responds to an incident are constant regardless of the incident.

1. Life and safety
2. Incident stabilization
3. Conservation of property and the environment
4. Political and economic considerations
5. Conservation of Pembina's reputation

1.10 Incident Site Worker Protection

The IC (or Safety Officer, if activated) is responsible for ensuring appropriate safety measures are in place to protect site workers and Pembina response personnel. Responsibilities also include hazard assessment, anticipating, detecting, and correcting unsafe situations, and if required, assigning a Site Security Supervisor/Group to monitor security aspects of the response effort at the field level.

Additional details are available in Section 3.0 Emergency Response Roles and Responsibilities. Responders are also encouraged to seek further information from relevant Pembina personnel/Subject Matter Experts (SME).

1.11 Emergency Management Tools

1.11.1 Pipeline

The Pipeline is Pembina's intranet site. It hosts a variety of information including corporate contacts and directories, regional and asset information, site drawings and diagrams, equipment inventories, functional/service area information, digital copies of the ERPs, and associated tools and resources.

1.11.2 Geocortex

Geocortex is Pembina's internal GIS Application for viewing and searching Pembina's assets and locations, as well as viewing spatial information including roads, water bodies, spill control points and data sheets, equipment caches, foreign pipelines and facilities, First Nations boundaries, environmental layers, and other datasets. Geocortex is available through the Pipeline.

Responders are encouraged to use Geocortex during response activities.

1.11.3 Live Asset/Technical Data

Live operational asset and technical data is available on Geocortex and readily available to responders during incidents. Basic asset and technical data are also available in the applicable ERP supplement(s) or addendum(s).

1.11.4 Emergency Response Equipment Inventories by Location

Responders are encouraged to use the Pipeline or Geocortex to review Pembina's Emergency Response Equipment inventories by location.

1.11.5 Additional Supporting Response Documents

The following guides are available in electronic format on the Pipeline.

Document Name	Description
Initial On-Site Actions	Provides initial on-site actions for first responders.
ECMP Activation Procedure	Provides information about Pembina's activation process.
Command Post & Role Specific Guides	Provides guidance on the actions to be undertaken by the initial responders and guidance on the activities undertaken at the command post upon the arrival of a RRT.
Initial Technical Response Team Role Guide	Provides specific guidance for members of an ITRT during a response.
Initial Response Guide	Designed to assist initial responders in conducting the initial actions expected at an incident site.
Spill Control Point Data Sheets	Provides response strategies and tactics specific to a pre-identified spill control point.
SPCC Emergency Response Operating Guide	Provides guidance to Sherwood Park Control Centre (SPCC) personnel on their roles and responsibilities during an emergency.

1.12 Downgrading the Incident

Pembina will make the decision to downgrade the Regulatory Level of Emergency as appropriate, in consultation with the applicable regulator(s).

The Corporate Incident Classification may be reviewed and amended throughout the incident by the Incident Commander.

Refer to Section 8.0 Post Incident and Recovery Actions for further information on downgrading and/or standing down the incident.

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2.0 PREPAREDNESS ACTIVITIES

2.1 Training Requirements

The objective of staff training is to ensure incident response personnel have the knowledge, skills, and abilities to initiate and sustain the appropriate response actions. Personnel assigned duties within the ICS organization receive training to ensure they are competent and/or appropriately qualified for those duties. At a minimum, it is Pembina's expectation these individuals are familiar with the Corporate ERP, applicable supplemental plan(s) for their area(s) of operations, as well as the authority and accountabilities of their potential response role(s). Pembina Emergency Management training consists of the following:

- Awareness of the Corporate ERP and supplemental plan(s)
- Incident Command System (ICS) training, including roles and responsibilities
- Identification of public protection measures during an emergency
- Review of communication methods and processes (internal/external)

Pembina has established emergency management specific training pathways for Pembina responders. These pathways are additional to the training individuals may require as part of their substantive position in the company. For example, an Operations Supervisor or Foreman will need operations training appropriate to their day-to-day job. However, as Supervisors will likely assume a role during emergencies, they will also require emergency management training for their assigned emergency role.

Local first responders are considered out of scope of Pembina's training framework, however, they are provided emergency response information and/or plans, as required or requested. In addition, liaison/engagement activities are conducted to ensure they are familiar with Pembina's operations and have a general awareness of response requirements.

Further information on training and exercise requirements is available in the appropriate Emergency & Continuity Management Program (ECMP) documents. Training records are available in Pembina's Learning Management System (LMS).

2.2 Exercise Requirements

Pembina conducts a broad range of emergency response exercises to test and validate plans, evaluate responder competency and/or qualification, and assess response capability, capacity, and resource allotment.

Exercises are designed to test objectives and identify gaps in plans, processes, procedures and training; ensuring ongoing continuous improvement to the ECMP. Scenarios are developed based on potential hazards that could impact the operations of a specific area, site or system, and may include, but are not limited to, a product release, fire, explosion, medical event, and/or a security threat. Exercises are scheduled on an annual basis; type and frequency are established according to applicable regulatory requirements and best practices. Exercise reports are produced following each session and are maintained by the ECMP. Further information is available in the appropriate ECMP documents.

2.3 Stakeholder Liaison and Public Awareness

Pembina conducts liaison and public awareness/engagement activities to educate stakeholders on Pembina's assets and operations including applicable hazards; planning zones; public protection measures; preparedness and emergency response actions; as appropriate to the area, as required.

The scope of liaison/public awareness activities varies – frequency and type of activity is dependent on jurisdictional requirements, asset characteristics (e.g., Province, or sour operations, respectively), and stakeholder type. Stakeholders may include local first responders, government or regulatory agencies, public officials and/or other agencies, and public or affected parties within identified planning zones. Stakeholders may also include excavators/contractors. For more information refer to Pembina's Damage Prevention and Public Awareness (DPPA) Program on the Pipeline.

Information may be communicated through consultations (in person or telephone), project-specific newsletters, public information packages, and open house(s), as appropriate.

2.4 Emergency Management Program Administration

Pembina's ECMP establishes the requirements for development, implementation, maintenance, and evaluation of emergency management activities. The ECMP establishes the framework for emergency preparedness, planning, response, and recovery activities. The Corporate ERP and supplemental plans are supported and administered as per defined program standards.

2.4.1 Program Documentation and Records

Pembina's OEMS sets out minimum requirements for ECMP documentation and records management. This includes processes for ECMP document and record identification, preparation, maintenance, storage, security, preservation, retrieval and disposition.

2.4.2 Management of Change (MOC)

Administrative changes (changes to a policy, standard, process, or procedure) within the ECMP will follow the guidance outlined in the OEMS Document Control Management Standard.

2.4.3 Mutual Aid Agreements

Pembina participates in mutual aid and/or other emergency services agreements. Where developed, copies of specific mutual aid agreements will be referenced in the applicable supplements and/or addendums, as required.

3.0 EMERGENCY RESPONSE ROLES & RESPONSIBILITIES

This section outlines the roles and responsibilities for personnel who will be assigned specific emergency response tasks in the event of an emergency. Although these emergency response tasks are written specifically for certain response positions, they are not intended to be a closed list of duties that might be required. Tasks are the responsibility of the Incident Commander (IC) and/or Section Chief(s) until tasks are assumed or delegated to additional roles as an incident becomes larger, expanding the structure.

All response personnel must clearly understand their assigned duties. Response personnel who are assigned duties must communicate with their designated alternate to coordinate the transfer of duties.

3.1 Incident Command System

Pembina's emergency response management approach is based on the Incident Command System (ICS) to ensure a coordinated and organized response to emergencies. ICS is a standardized emergency management system specifically designed to allow users to adopt and integrate an organizational structure equal to the complexities and demands of single or multiple/concurrent incidents without being hindered by jurisdictional boundaries.

The ICS structure is an effective means of coordinating emergency response, resources, and personnel from multiple responding organizations and agencies. Pembina emergency response personnel are trained in ICS principles and practices.

A list of ICS Forms and other documentation tools can be found in Appendix - Forms.

3.1.1 Unified Command Organization

Pembina will enter Unified Command (UC), as required. If it is determined that UC is needed, Incident Commanders representing agencies or jurisdictions that share responsibility for the incident manage the response from a single ICP. UC allows agencies with different legal, geographic, and functional authorities and responsibilities to work together effectively, without affecting individual agency authority, responsibility, or accountability.

3.2 ICS Organization Charts

The ICS structure can expand or contract to meet the needs of the incident. Emergency response teams are activated depending on the scope and complexity of the incident, Corporate Incident Classification, Regulatory Level of Emergency, and anticipated resource needs. The scale and complexity of the emergency can vary from requiring one person (the IC) to the entire Incident Management Team (IMT). Regardless of the size, the IC is responsible for the overall management and response of the emergency.

See the following page for an example of an ICS organization at Pembina.

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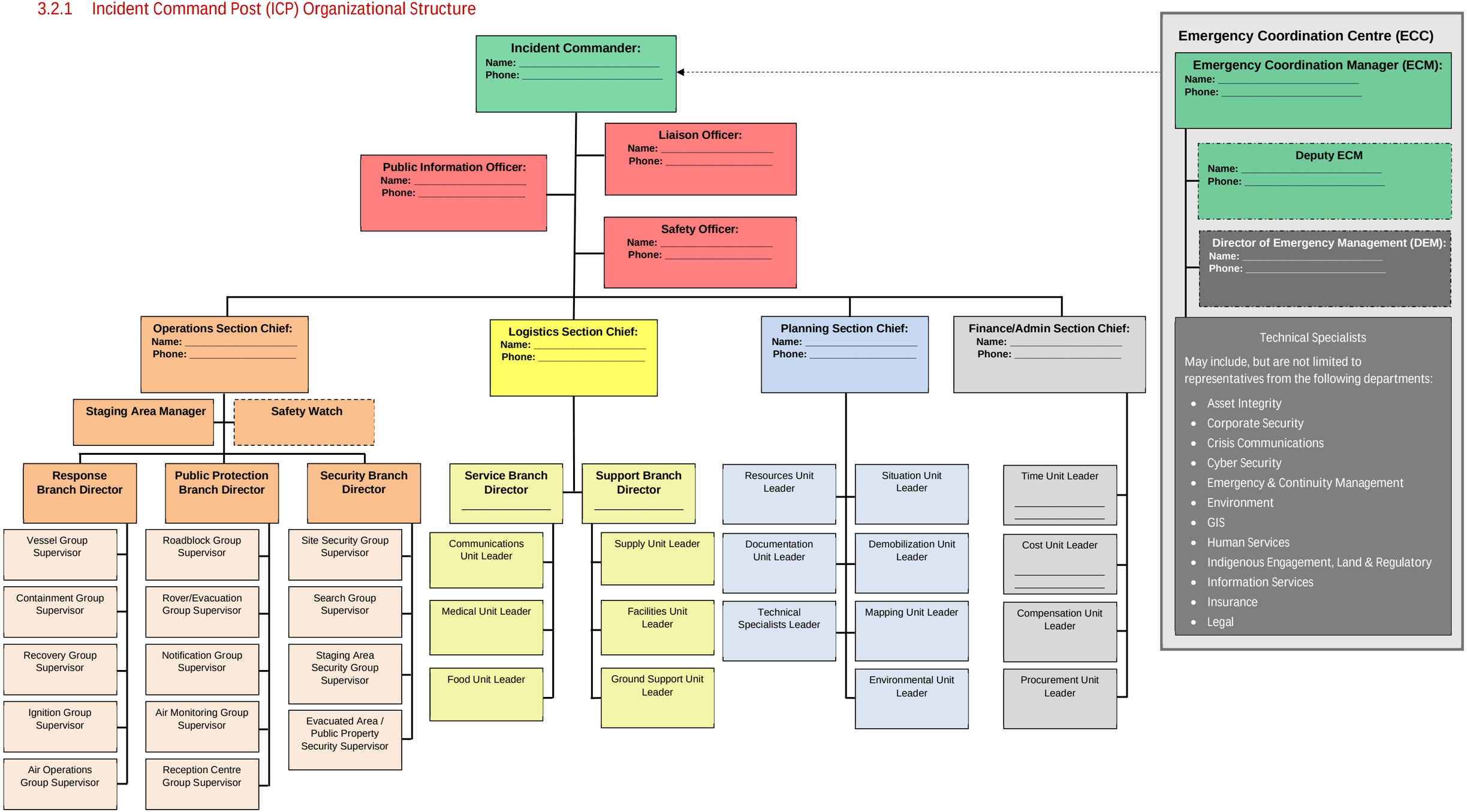
3.2.1 Incident Command Post (ICP) Organizational Structure



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3.3 ICS Roles and Responsibilities

Members of the IMT will be activated as required, depending on the nature and severity of the situation. Where appropriate, third parties may fill or supplement these roles, as required.

The following roles and responsibilities are taken from the following ECMP response tools:

- Command Post and Role Specific Guides
- Incident Technical Response Team Role Guides
- Initial Response Guide

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3.3.1 Incident Commander

<table>
<tr><th colspan="3">Incident Commander (IC)</th></tr>
<tr><td>Potential Designates</td><td colspan="2">District Manager, Senior Area/Plant Manager, Area Supervisor, Area/Plant Foreman or designated member of the RRT</td></tr>
<tr><td>Forms/Tools</td><td colspan="2">201 Incident Briefing, 202 Incident Objectives, 209 Incident Status Summary, 214 Activity Log</td></tr>
<tr><th>Role</th><th colspan="2">Responsibilities</th></tr>
<tr><td rowspan="9">The Incident Commander (IC) is responsible for providing leadership, direction, and guidance to personnel at the Incident Command Post (ICP).

The IC analyzes the overall requirements of the incident and determines the most appropriate direction to follow during the response.

This is accomplished by identifying the necessary functions required to deliver a response, setting priorities, identifying limitations and constraints, developing response objectives, identifying critical information requirements, making key decisions, determining operating procedures, assigning work (tasks), and assessing progress.
If necessary, an IC may request the activation and deployment of a Regional Response Team (RRT) which may be reinforced with an Incident Technical Response Team (ITRT).

The IC may have one or more Deputy IC who report directly to the IC. The Deputy IC must have the same qualifications as the IC and can assume some, or all, of the responsibilities of the IC.</td><td>Developing and prioritizing incident objectives.</td><td>☐</td></tr>
<tr><td>Determining the Corporate Incident Classification and/or validate Regulatory Level of Emergency.</td><td>☐</td></tr>
<tr><td>Ensuring the ICP organizational structure and staffing is sufficient to meet the needs of the incident.</td><td>☐</td></tr>
<tr><td>Ensuring plans are developed to respond and recover from the incident.</td><td>☐</td></tr>
<tr><td>Monitoring progress of the action plan against the objectives.</td><td>☐</td></tr>
<tr><td>Monitoring progress of the action plan against the objectives.</td><td>☐</td></tr>
<tr><td>Ensuring regular information updates are provided to the Emergency Coordination Centre (ECC).</td><td>☐</td></tr>
<tr><td>Ensuring internal and external communications are accurate.</td><td>☐</td></tr>
<tr><td>If necessary, acting within the Unified Command structure for the incident.</td><td>☐</td></tr>
<tr><td colspan="3">See complete Role Guide for further details.
Digital version is available on the Pipeline. Hard copies are available in the ICP.</td></tr>
</table>

3.3.2 Liaison Officer

Liaison Officer			
Potential Designates	Field/Plant Personnel or designated member of the RRT or ITRT		
Reports to	Incident Commander		
Forms/Tools	201 Incident Briefing, 202 Incident Objectives, 214 Activity Log		
Role		**Responsibilities**	
The Liaison Officer serves as the primary contact for stakeholders and representatives of other agencies to provide input on incident related matters. External stakeholders and/or representatives from other agencies and organizations coordinate through the Liaison Officer. These stakeholders will vary according to the type of incident, but may include regulators, indigenous nations, emergency services, municipal, provincial and federal jurisdictions, and private entities. The Liaison Officer will represent their objectives and concerns to the Incident Management Team (IMT) throughout the planning process. There is only one Liaison Officer for an incident. In more complex incidents, the Liaison Officer may be supplemented by members of an Incident Technical Response Team (ITRT) who will provide subject matter expertise in areas such as regulatory, land, and Indigenous Engagement.		Conduct regulatory notifications as required by the incident. Report Regulatory Level of Emergency, using appropriate matrix, where required (AB/BC).	☐
		Coordination of activities of all external stakeholders, agencies and organizations present in the ICP.	☐
		Representation of the concerns and objectives of all external stakeholders, agencies and organizations to the IMT throughout the planning process.	☐
		Recording of all correspondence with external stakeholders, agencies and organizations.	☐
		Providing regular updates to all external stakeholders, agencies and organizations.	☐
		Maintaining a list of assisting and cooperating agencies and agency representatives.	☐
See complete Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ICP.			

3.3.3 Public Information Officer (PIO)

Public Information Officer (PIO)		
Potential Designates	Field/Plant Personnel or designated member of the RRT or ITRT	
Reports to	Incident Commander	
Forms/Tools	201 Incident Briefing, 214 Activity Log	
Role	**Responsibilities**	
Note: The deployment of an ITRT may take several hours and therefore this guide is intended to support untrained communications personnel in filling the role of Public Information Officer (PIO) during the initial response phase only until the arrival of an ITRT. The role of PIO will normally be filled by experienced communications personnel deploying as part of an Incident Technical Response Team (ITRT). The PIO is responsible for developing and releasing information about the incident to the media, to the general public, to incident personnel, Pembina employees and to other appropriate agencies and organizations.	Advising the IC on all public information matters relating to the incident.	☐
	Acting as a point of contact within the ICP for the Crisis Communications On-Call and maintaining regular communication with them.	☐
	Identification of key information that needs to be communicated externally and internally.	☐
	Acting as the point of contact for all public information issues raised by external agencies and organizations involved in the response and relay their concerns to the Crisi Communications On-Call.	☐
	Ensuring the IC verifies the accuracy of information produced by the Crisis Communications On-Call.	☐
	Dissemination of authorized messages across the response using the most effective means available.	☐
See complete Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ICP.		

3.3.4 Safety Officer

<table>
<tr><th colspan="3">Safety Officer</th></tr>
<tr><td>Potential Designates</td><td colspan="2">Area Safety Advisor or designated member of the RRT or ITRT</td></tr>
<tr><td>Reports to</td><td colspan="2">Incident Commander</td></tr>
<tr><td>Forms/Tools</td><td colspan="2">201 Incident Briefing, 202 Incident Objectives, 206 Medical Plan, 208 Safety Message/Plan, 214 Activity Log, 215a Incident Action Plan Safety Analysis, internal hazard assessment protocols/documents</td></tr>
<tr><th>Role</th><th colspan="2">Responsibilities</th></tr>
<tr><td rowspan="7">The Safety Officer develops and recommends measures to ensure personnel safety and occupational health of not only response workers, but also the public.

The Safety Officer should anticipate, recognize, assess, and control hazardous and unsafe conditions or situations.

If the incident requires response personnel to conduct activities outside routine Pembina activities, the Safety Officer will develop mitigation strategies to ensure the continued safety of response personnel and the public.

The Safety Officer may be supplemented with Assistant Safety Officers. Assistants may be required to take on some of the responsibilities of the Safety Officer or to provide specific subject matter expertise e.g., Public Health.</td><td>Continuous monitoring of the health and safety of personnel impacted by a response and to advise the Incident Commander (IC) on issues regarding safety.</td><td>☐</td></tr>
<tr><td>Identification and mitigation of hazardous situations.</td><td>☐</td></tr>
<tr><td>Development and recommendation of measures to ensure the safety of response personnel and the public.</td><td>☐</td></tr>
<tr><td>If necessary, development of an incident specific Safety Plan.</td><td>☐</td></tr>
<tr><td>Exercise emergency authority to stop and prevent unsafe acts.</td><td>☐</td></tr>
<tr><td>Investigation of accidents that have occurred within the incident area.</td><td>☐</td></tr>
<tr><td>Staffing and organization of the safety function.</td><td>☐</td></tr>
<tr><td colspan="3">See complete Role Guide for further details.
Digital version is available on the Pipeline. Hard copies are available in the ICP.</td></tr>
</table>

3.3.5 Logistics Section Chief

Logistics Section Chief		
Potential Designates	Field or Plant Personnel or designated member of the RRT	
Reports to	Incident Commander	
Forms/Tools	General: 201 Incident Briefing, 214 Activity Log, 215 Operational Planning Worksheet	As required/large scale incident: 205 Communications Plan, 206 Medical Plan, 208 Safety Message/Plan

Role	Responsibilities	
The Logistics Section Chief is responsible for providing facilities, services, people, and materials in support of the incident. They participate in the development and implementation of the Incident Action Plan (IAP). The Logistics Section has two key purposes: • Servicing the needs of the responders. • Supporting the needs of the response. In larger responses, the Logistics Section may be broken down into Branches to ease span of control. Branches are normally established to assist with span of control. When Branches are established, the Branch Director reports directly to the Logistics Section Chief.	Identify all resources currently ordered and take over the maintenance of the Resources Ordered section of the ICS 201 form.	☐
	Coordinate with the Operations Section Chief to determine if the immediate resource needs are adequate.	☐
	Coordinate with the Operations Section Chief and determine the communications requirements for the response.	☐
	Assess the suitability of the current incident facilities and identify any new facilities required such as camps, hotels or logistics bases.	☐
	Determine if security is required at the ICP, hotels, camps or bases.	☐
	Coordinate with the Operations Section Chief and determine ground support needs for responders e.g., fuel and transportation.	☐
	Assess the feeding requirements for the responders.	☐
	Coordinate with the Safety Officer and determine if dedicated medial support is required for the responders.	☐
	Determine the limit of spending authority.	☐

Logistics Section	
Service Branch	Support Branch
Communications Unit: • Enables communications across the entire response organization. • If necessary, develops a Communications Plan (ICS 205) for the IAP. Medical Unit: • Provides first aid and transportation to injured responders. • If necessary, develops a Medical Plan (ICS 206) for the IAP. Food Unit: • Provides food and water to all responders (field and in ICP).	Supply Unit: • Orders resources required to keep the response going. • Stores supplies for the incident. • Maintains an inventory of supplies. Facilities Unit: • Locates and lays out the ICP and camps. • Maintains the ICP and camps. • Provides security at the ICP and camps. Ground Support Unit: • Maintains resource equipment. • Provides fuel for responders. • Provides transportation services for responders.
See complete Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ICP.	

3.3.6 Planning Section Chief

<table>
<tr><th colspan="4">Planning Section Chief</th></tr>
<tr><td>Potential Designates</td><td colspan="3">Field or Plant Personnel or designated member of the RRT</td></tr>
<tr><td>Reports to</td><td colspan="3">Incident Commander</td></tr>
<tr><td>Forms/Tools</td><td>General:
201 Incident Briefing,
207 Incident Organization Chart,
214 Activity Log,
215 Operational Planning Worksheet</td><td colspan="2">Later in the Incident:
202 Incident Objectives,
203 Organization Assignment List,
204 Assignments List,
205 Incident Radio Communications Plan,
206 Medical Plan, 208 Safety Message/Plan</td></tr>
<tr><th colspan="2">Role</th><th colspan="2">Responsibilities</th></tr>
<tr><td colspan="2" rowspan="4">The Planning Section Chief coordinates and facilitates all planning activity within the Incident Command Post (ICP). This includes the collection, evaluation, dissemination, use of incident information and maintaining the status of assigned and demobilized resources.

The initial response may last for several hours. During this period, several situation updates are likely to occur, and additional objectives set by the IC. The Planning Section Chief will need to facilitate these updates and ensure the ICS 201 form is maintained.

The activation of additional units to assist in the delivery of the Planning function is strongly recommended.</td><td>Ensuring the Planning Cycle is adhered to.</td><td>☐</td></tr>
<tr><td>Facilitate all situation updates.</td><td>☐</td></tr>
<tr><td>Coordinate with the Operations Section Chief and assist in the development of any new strategies and tactics</td><td>☐</td></tr>
<tr><td>Maintain situational displays within the ICP.</td><td>☐</td></tr>
<tr><td colspan="2">The Planning Section Chief may activate the following if required:
• Situation Unit: Maintaining and displaying situation status and collecting and disseminating all incident related data and intelligence.
• Documentation Unit: Documenting meetings, production of the Incident Action Plan (IAP) and ensuring incident documentation is stored correctly.
• Demobilization Unit: Developing an Incident Demobilization Plan for resources no longer required.
• Environment Unit: Identification of resources at risk, advising on environmental impacts and development of environmental plans.
• Resources Unit: Preparing the Org. Chart (ICS 207) and Assignment lists (ICS 204) for the next operational period and tracking resources, identifying resource shortfalls and ordering resources for the next operational period.</td><td colspan="2">Ensure any resources mobilized are recorded. ☐</td></tr>
<tr><td colspan="4">See complete Role Guide for further details.
Digital version is available on the Pipeline. Hard copies are available in the ICP.</td></tr>
</table>

3.3.7 Finance/Administration Section Chief

Finance and Administration Section Chief		
Potential Designates	Field Administration or designated member of the RRT/ITRT	
Reports to	Incident Commander	
Forms/Tools	201 Incident Briefing, 214 Activity Log; 215 Operational Planning Worksheet	
Role	**Responsibilities**	
The Finance and Administration Section Chief is responsible for managing all financial and cost analysis aspects of an incident. The Finance and Administration Section Chief will need to work closely with members of the Incident Technical Response Team (ITRT) over issues relating to procurement, compensation, insurance, payroll and safety. Personnel deploying to the Finance and Administration Section are expected to have specialist knowledge of Pembina's financial/accounting procedures and procurement systems. Note: If Unified Command (UC) is established, obtain a copy of the initial UC meeting minutes and identify the cost sharing (or absence of) made during the meeting and coordinate with the Legal and enterprise Risk Officers to determine impacts to cost tracking and insurance.	Ensure an AFE has been established for the incident.	☐
	Coordinate with the Logistics Section Chief and identify any costs that have already been incurred.	☐
	If appropriate increase the AFE level to cover future expenditure.	☐
	Coordinate with Enterprise Risk (Insurance) and determine if there are any requirements to segregate expenditure to accommodate insurance claims.	☐
	Coordinate with Human Services to determine any policies and limitations relating to employees.	☐
	Coordinate with the Operations Section Chief and establish procedures for: • Receiving resources at the staging area. • Tracking time for employees. • Tracking time and usage for third party vendors and equipment.	☐
There are four functions that are fulfilled by the Finance and Administration Section. Unless these are activated, the Finance and Administration Section Chief will need to perform all these functions: • Time Unit: responsible for ensuring the accurate recording of daily personnel time, compliance with agency time recording policies and managing commissary operations if established at the incident. • Procurement Unit: responsible for all financial matters pertaining to vendor contracts, leases, and fiscal agreements. • Compensation/Claims Unit: responsible for all injury related compensation and claims made against Pembina during the response. • Cost Unit: ensures the proper identification of all equipment and personnel requiring payment, records all cost data, analyzes and prepares estimates of incident costs, and maintains accurate records of incident costs.		
See complete Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ICP.		

3.3.8 Operations Section Chief

Operations Section Chief	
Potential Designates	Operations/Plant Foreman or Supervisor or designated member of the RRT
Reports to	Incident Commander
Forms/Tools	201 Incident Briefing, 204 Assignment List, 214 Activity Log, 215 Operational Planning Worksheet

Role	Responsibilities	
The Operations Section Chief is responsible for managing all tactical operations at an incident. They will identify, assign and supervise all the resources needed to accomplish the incident objectives. During the planning process, the Operations Section Chief also directs the preparation of strategies and tactics required for the Incident Action Plan (IAP) for the next operational period, requests or releases resources, and monitors and reports progress against the incident objectives. The Operations Section Chief will need assistance conducting their role, and the appointment of a Deputy Operations Section Chief is recommended. The exact structure of the Operations Section will vary according to the needs of the incident. The Operations Section Chief must maintain an effective span of control throughout.	Supervising the execution of all tactical operations during the response.	☐
	Ensuring the safety of tactical operations during the response.	☐
	Developing and organizing the Operations Section to deliver the objectives considering operational efficiency, personnel safety, and adequate span of control.	☐
	Developing strategies and tactics for the IAP for the next operational period.	☐
	Requesting additional resources to support tactical operations.	☐
	Approving the release of resources from active operational assignments.	☐
	Maintaining close contact with the IC, Command Staff, Operations personnel and other agencies involved in the incident.	☐
	During the execution of the IAP, the Operations Section Chief may make or approve changes to the plan but must inform the IC immediately of these changes.	☐

If required, the Operations Section Chief may activate the following sub-units to assist in the execution of objectives:

- Staging Area(s): These are established for the temporary location of available resources prior to deployment to support tactical operations.
- Public Protection Branch: Established to ensure the safety of the public and stakeholders.
- Response Branch: Established to conduct all containment and clean-up activities in the event of a fire, spill, or release.

Each of the Branches may activate additional groups to meet the needs of the incident if required.

See complete Role Guide for further details.
Digital version is available on the Pipeline. Hard copies are available in the ICP.

3.3.9 Staging Area Manager

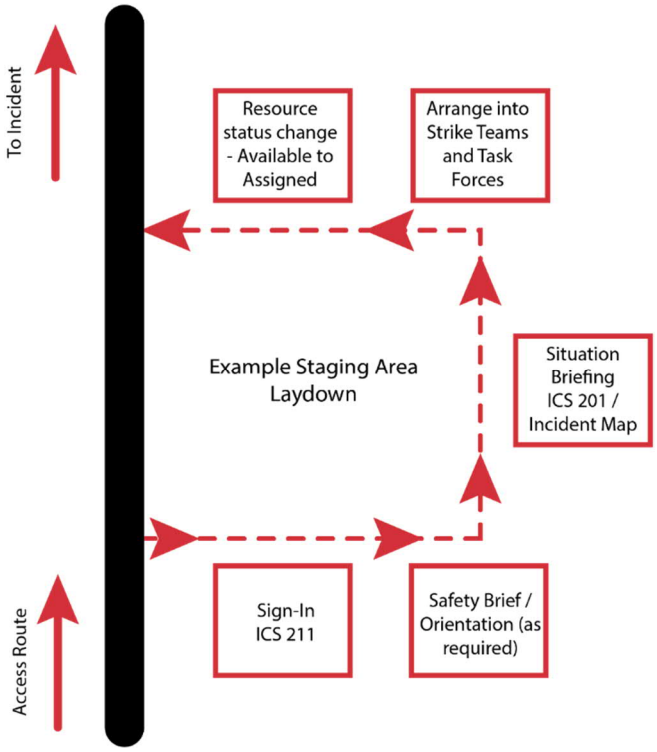
<table>
<tr><th colspan="3">Staging Area Manager</th></tr>
<tr><td>Reports to</td><td colspan="2">Operations Section Chief</td></tr>
<tr><th>Role</th><th colspan="2">Responsibilities</th></tr>
<tr><td rowspan="8">The Staging Area Manager is responsible for:
• Establishing the staging area.
• Coordinating and managing resources in the staging area.
• Providing briefings to the resources at the staging area covering:
o The current situation.
o Likely tasks to be executed.
o Safety procedures to be used.
• Organizing resources into Strike Teams and Task Forces.
• Ensuring resources are checked into the incident.
• Ensuring resources arriving at the staging area match those that have been ordered.
• Ensuring the security at the site is maintained.
• Providing regular updates to the Operations Section Chief on the status and availability of resources in the staging area.</td><td colspan="2">When potential staging area locations have been identified:</td></tr>
<tr><td>Confirm with the Operations Section Chief the suitability of the site.</td><td>☐</td></tr>
<tr><td>The availability of the site (private land may require an agreement to use).</td><td>☐</td></tr>
<tr><td>Take photos of the site prior to occupation (the site will have to be returned to its prior condition before handing back to the landowner).</td><td>☐</td></tr>
<tr><td>Identify entry and exit routes into the staging area</td><td>☐</td></tr>
<tr><td>If necessary, post signage to guide resources to the staging area.</td><td>☐</td></tr>
<tr><td>Inform the Operations Section Chief once the staging area is established.</td><td>☐</td></tr>
<tr><td colspan="3">EQUIPMENT
The Staging Area Manager will require the following equipment to conduct their role:
• Map of the incident area marked with the hazard areas, incident sites and incident facilities.
• Copy of the Incident Action Plan or ICS201 Form.
• ICS214 Individual Event Log.
• ICS211 Sign-in Sheet.
• Copy of resources ordered and their estimated time of arrival. During the initial response, this may simply be the back of the ICS201 form.
• Direct communication capability (radio, cell phone, etc.).
• Vehicle.
• Pens and notebook.
• Additional equipment such as signage, shelter and lighting may be required dependent on the incident. Additional equipment should be requested through the Operations Section Chief.

ESTABLISHING A STAGING AREA
Staging areas should be:
• Close enough to the incident to allow the rapid deployment of resources to the incident site.
• Far enough away to ensure the safety of the resources within it.
• Have good entry and exit routes.
• Have good communications with both the ICP and the incident site.</td></tr>
</table>

Staging Area Manager

LAYOUT OF A STAGING AREA

A staging area needs to be large enough to accommodate all the equipment that may arrive, but also to conduct all the administration functions that may occur. The following diagram shows an example laydown for a staging area.



CONDUCT OF A STAGING AREA

When resources arrive at the staging area:

- Ensure all resources and personnel check into the incident on the ICS211 sign-in sheet.
  - At the end of the shift, the sign-in sheet must be passed to the Planning Section Chief.
- When resources arrive, confirm from the list of resources that the number and type of resources are as ordered.
  - Resources may have a bill of laden/purchase order number, and this should be recorded on the sign-in sheet.
- Coordinate with the Safety Officer and ensure the resources have the necessary qualification and orientations.
- Provide a briefing to the resources on the current situation, and what they are expected to do. Use the generic briefing format and the ICS201 form (or Incident Action Plan if it is available).
- Organize resources into Strike Teams or Task Forces as directed by the Operations Section Chief.
  - Strike Team: Teams consisting of the same kind and type of resources, with common communications and a leader (e.g. 5 x work boats).
  - Task Force: A combination of single resources assembled for a particular tactical need, with common communications and a leader (e.g. 2 x excavators and 5 x gravel trucks).
- Inform the Operations Section Chief when resources arrive, are briefed and ready for deployment.
- If resources arrive that were not ordered, inform the Operations Section Chief immediately.

SECURITY IN THE STAGING AREA

A staging area provides an opportunity for members of the public or media to gain easy access to incident personnel and equipment.

If security at the staging area is an issue:

- Inform the Operations Section Chief and request security resources.
- Deploy Security Units to the staging area and report to the Staging Area Manager.
- If dealing with members of the public remember to:
- Be courteous.
- Remain calm.
- Record and report any interactions to the Operations Section Chief.

3.3.10 Safety Watch

Safety Watch	
Potential Designates	Field or Plant Personnel, Contract Safety or Security Company
Reports to	Operations Section Chief
Forms/Tools	201 Incident Briefing, Incident Action Plan, 214 Activity Log

Role	Responsibilities	
The Safety Watch Leader ensures the tactical operations carried out during the response are conducted in accordance with normal Pembina safety procedures. This may require: • Providing safety orientations to third parties involved in the response. • Reviewing certifications. • Ensuring mutual aid partners and contractors procedures meet or exceed Pembina procedures. • The support and observation of tactical actions being conducted to ensure they are being completed safely. • Identification and mitigation of hazards present at an incident site or facility. More than one person may be required to fulfill all the responsibilities of Safety Watch during a response. The Safety Watch Leader will assign individuals to specific Groups within the response to ensure activities are conducted as safely as possible. The Safety Watch Leader or any person assigned to them has the authority to stop any unsafe acts.	Ensuring the safe conduct of tactical operations.	☐
	Ensuring tactical operations are conducted in accordance with normal Pembina safety procedures and/or the Incident Safety Plan.	☐
	Ensuring enough safety personnel are available to support and observe tactical operations.	☐
	Providing orientations to response personnel.	☐
	Reviewing certifications.	☐
	Ensuring mutual aid partners and contractors conduct activities in a manner that meets or exceeds Pembina's safety procedures.	☐
	Identification and mitigation of hazards during the response.	☐
	Providing regular updates to the Operations Section Chief on the safe conduct of operations during the response.	☐
	Stopping unsafe acts.	☐
See complete Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ICP.		

3.3.11 Response Branch Director

Response Branch Director
A Response Branch Director may be appointed to oversee the execution of response activities at the incident site. They may in turn appoint personnel to act as Group Supervisors for the various sub-units within the Response Protection Branch. Depending on the situation, the following response groups may need to be established: • Vessel Group • Containment Group • Recovery Group • Ignition Group

3.3.12 Vessel Group

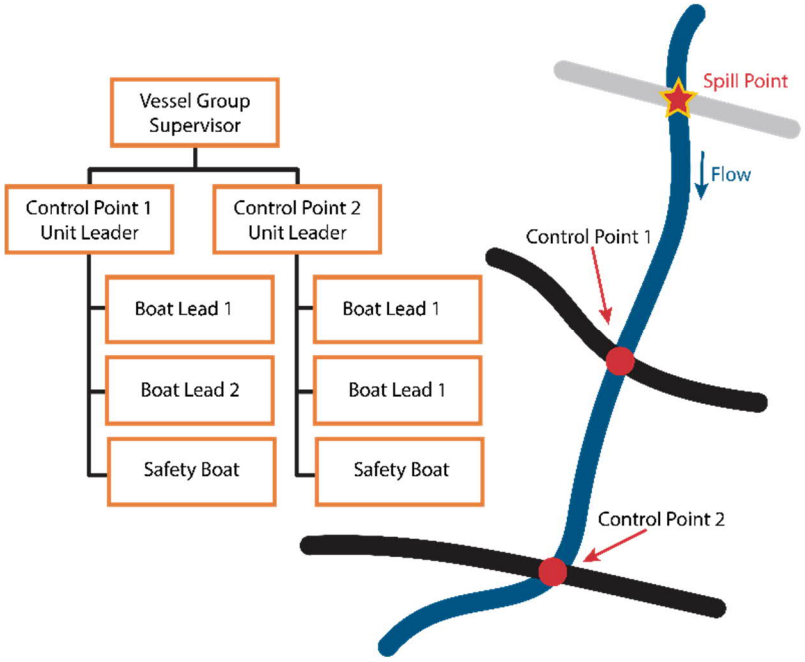
Vessel Group
If containment activities are required on a water body, then a Vessel Group should be activated. If a Vessel Group is required: • Appoint a Vessel Group Supervisor if sufficient personnel are available. • Using the Geocortex, identify downstream control points. Note: this task could be delegated to the Vessel Group Supervisor. However, the Response Branch Director remains accountable for delivering this action and must confirm the locations selected before deployment. • Confirm downstream control point locations with the Operations Section Chief. • Using the control point data sheet, determine the resources required at each selected control point. • Determine the staffing required to deliver the tactical actions. • Order resources through the Operations Section Chief/Logistics Section. • Establish staging area(s) to accommodate the spill response equipment and appoint a Staging Area Manager. • Provide a schedule for the Vessel Group Supervisor to provide updates on the status of operations. • Deploy the Vessel Group to the selected control points. • Provide consolidated updates to the Operations Section Chief on the status of Vessel Group activities. • Monitor and adjust the Vessel Group structure to maintain effective span of control. The Vessel Group Supervisor is responsible for: • Ensuring the safe conduct of all on water activity. • Implementing strategies and tactics for the defined control points. • Providing regular updates to the Response Branch Director on the progress of Vessel Group activities. • Managing the Vessel Group structure and ensuring an effective span of control is maintained throughout the response. • Ensuring proper decontamination procedures are followed. EQUIPMENT The Vessel Group members will require the following equipment to conduct their role: • Map of the incident area marked with hazard areas and relevant incident locations. • Copies of the relevant spill control point data sheets. • A direct communication capability (radio, cell phone, etc.). • Vehicle with passenger carrying capacity. • Pens and/or pencils. • ICS214 Individual Event Log. • Personal air monitoring device (H_2S, CO, SO_2, LEL). • Spill response equipment. Details of the equipment required at each control point can be found in the spill control point data sheets.

Vessel Group

CONDUCT OF THE VESSEL GROUP

On arrival at control point:

- Confirm communication capability with the Response Branch Director and provide an update on the current conditions at the control point including:
  - Condition of points of entry.
  - River conditions.
  - Any wildlife present in the area.
  - Issues that may prevent the deployment of spill response equipment.
- Brief the Vessel Group on the conduct of Vessel Group activities including any site-specific safety concerns.
  - Ensure waterproof coveralls are worn over clothing if possible and all boat passengers are wearing personnel flotation devices.
- In winter, complete an ice evaluation and report results to Response Branch Director.
- Ensure the safety boat is launched prior to the boom boat.
- Ensure booms are set up parallel to the shore.
- Provide regular updates to the Response Branch Director on the status of Vessel Group activities including:
  - Product release values.
  - Abnormal activities.
  - Any observations or issues that would adversely change response tactics.
- Maintain an effective span of control within the Vessel Group. To maintain this ratio, additional units within the Group could be activated, each with their own leader.



3.3.13 Containment Group

Containment Group

If containment activities are required, then a Containment Group should be activated. During an on-water response, the Containment Group will act as the shoreline team for the vessel branch and will maintain and adjust containment throughout the response.

If a Containment Group is required:

- Appoint a Containment Group Supervisor if sufficient personnel are available.
- Determine the strategies required to isolate and contain the spill or release.
  Note: this task could be delegated to the Containment Group Supervisor. However, the Response Branch Director must confirm the strategies before deployment.
- Confirm the strategies with the Operations Section Chief.
- Determine the staffing required to deliver the tactical actions.
- Order resources through the Operations Section Chief/Logistics Section.
- Establish staging area(s) to accommodate the spill response equipment and appoint a Staging Area Manager.
- Provide a schedule for the Containment Group Supervisor to provide updates on the status of containment activities.
- Deploy the Containment Group to the required locations.
- Provide consolidated updates to the Operations Section Chief on the status of Containment Group activities.
- Monitor and adjust the Containment Group structure to maintain effective span of control.

The Containment Group Supervisor is responsible for:

- Ensuring the safe conduct of all Containment Group activity.
- Implementing strategies and tactics for the site(s).
- Providing regular updates to the Response Branch Director on the progress of Containment Group activities.
- Managing the Containment Group structure and ensuring an effective span of control is maintained throughout the response.
- Ensuring proper decontamination procedures are followed and contaminated equipment is delivered to decontamination crews before leaving the site.

EQUIPMENT

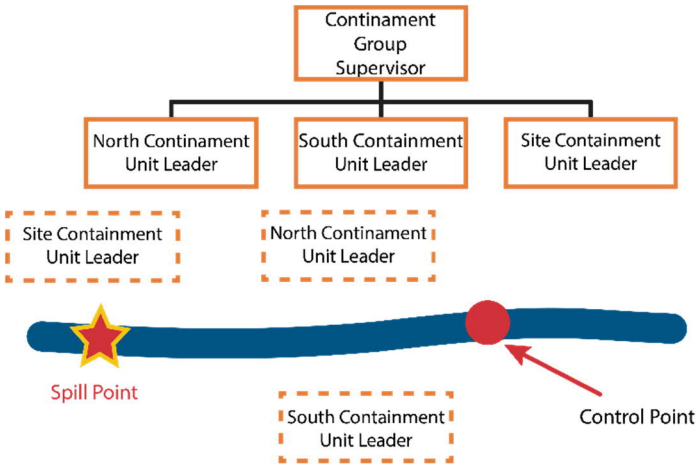
- Map of the incident area marked with hazard areas and relevant incident locations.
- Copies of the relevant spill control point data sheets.
- A direct communication capability (radio, cell phone, etc.).
- Vehicle with passenger carrying capacity.
- Pens and/or pencils.
- ICS214 Individual Event Log.
- Personal air monitoring device (H_2S, CO, SO_2, LEL).
- Spill response equipment will be specified by the Response Branch Director and available in the appropriate spill response units.

Containment Group

CONDUCT OF THE CONTAINMENT GROUP

On arrival at site:

- Provide an update to the Response Branch Director on the current conditions at the site including:
  - Any wildlife present in the area.
  - Issues that may prevent the conduct of containment activities.
  - Any abnormal hazards.
- Measure current velocity to determine the appropriate boom angle and required anchor set for effective containment.
- Brief the Containment Group on the conduct of Containment Group activities including any site-specific safety concerns.
- Supervise equipment installation.
  - Oversee anchor installation.
  - Supervise primary boom deployment.
  - Coordinate secondary boom deployment.
- Coordinate boat support through Vessel Group Supervisor.
- Coordinate with the Decontamination Lead.
  - Ensure personnel with contaminated PPE (boots, Tyvek suits) follow the proper de-contamination procedures as per the Decontamination Plan.
  - Ensure contaminated equipment (hard containment boom) are decontaminated or delivered to decontamination crews before leaving site.
- Provide regular updates to the Response Branch Director on the status of Containment Group activities.
- Maintain an effective span of control within the Containment Group. To maintain this ratio, additional units within the Group could be activated, each with their own leader.



3.3.14 Recovery Group

Recovery Group

Clean-up and recovery activities are normally conducted after the immediate risks to life, safety and the incident stabilization have been achieved.

If a Recovery Group is required:

- Appoint a Recovery Group Supervisor if sufficient personnel are available.
- If a Recovery Plan has not been developed:
  - Determine the strategies and tactics required to conduct the required recovery activities.
  - Confirm the strategies with the Operations Section Chief.
  - Confirm the staffing required to deliver the tactical actions with the Operations Section Chief.
  - Order the resources required to conduct recovery activities through the Operations Section Chief/Logistics Section.
- If a Recovery Plan has been developed:
  - Obtain a copy of the Plan.
- Brief to the Recovery Branch on the tactical actions required to be completed.
- Provide a schedule for the Recovery Group Supervisor to provide updates on the status of containment activities.
- Deploy the Recovery Group to the required locations.
- Provide consolidated updates to the Operations Section Chief on the status of Containment Group activities.
- Monitor and adjust the Recovery Group structure to maintain effective span of control.

The Recovery Group Supervisor is responsible for:

- Ensuring the safe conduct of all clean-up and recovery activities.
- Implementing strategies and tactics defined by the Response Branch Director.
- Providing regular updates to the Response Branch Director on the progress of Recovery Group activities.
- Managing the Recovery Group structure and ensuring an effective span of control is maintained throughout the response. This may include establishing:
  - Waste Unit
  - Shoreline Units
  - Decontamination Unit
  - Site Access Control Unit
- Ensuring all necessary decontamination procedures are implemented at relevant incident locations.

EQUIPMENT

- Map of the incident area marked with hazard areas and relevant incident locations.
- A direct communication capability (radio, cell phone, etc.).
- Vehicle with passenger carrying capacity.
- Pens and/or pencils.
- ICS214 Individual Event Log.
- Personal air monitoring device (H_2S, CO, SO_2, LEL).
- Equipment required to conduct recovery activities will be specified by the Response Branch Director.

Recovery Group

CONDUCT OF THE RECOVERY GROUP

On arrival at site:

- Provide an update to the Response Branch Director on the current conditions at the site(s) including:
  - Any wildlife present in the area.
  - Issues that may prevent the execution of Recovery Group activities.
- Conduct a hazard assessment of the site.
  - Report any abnormal hazards to the Response Branch Director.
  - If necessary, monitor air quality.
- Brief the Recovery Group personnel on the conduct of Recovery Group activities including any site-specific safety concerns.
- Direct and coordinate Recovery Group activities.
- Provide regular updates to the Response Branch Director on the status of Recovery Group activities.
- Maintain an effective span of control within the Recovery Group. To maintain this ratio, additional units within the Group could be activated, each with their own leader.

3.3.15 Ignition Group

Ignition Group

An Ignition Group may be required to ignite a plume at very short notice. Therefore, planning for, and having an Ignition Group prepared and ready to deploy is recommended, especially if ignition is a possibility during a response.

Note:

- If an immediate threat to human life exists and there is not enough time to evacuate the hazard area, qualified onsite personnel are authorized to ignite the release.
- The decision to ignite will be fully supported by Pembina, if the decision-making process has been followed and documented.
- However, if time permits, consultation with the Operations Section Chief, Incident Commander, and Regulator should be conducted.

If an Ignition Group is required:

- Appoint a qualified Ignition Group Supervisor.
- Provide the appropriate resources for the Ignition Group.
- Provide a briefing on the location and hazards present at the release site.
- Using the planning factors and criteria, decide if ignition should occur.
- Deploy the Ignition Group to the required location.
- On the instruction of the Operations Section Chief or the Incident Commander, instruct the Ignition Group to ignite the plume.
- Record all communication and decisions relating to plume ignition in the ICS214 Individual Event Log.

The Ignition Group Supervisor is responsible for:

- Ensuring the safe conduct ignition.
- Ensuring only qualified personnel ignite the release.
- Documenting all activities and decisions made by the Ignition Group.
- Providing regular updates to the Public Protection Branch Director on the progress of Ignition Group activities.

EQUIPMENT

The Ignition Group Supervisor will require the following equipment to conduct their role:

- Map of the incident area marked with hazard areas and relevant incident locations.
- A direct communication capability (radio, cell phone, etc.).
- Pens and/or pencils.
- ICS214 Individual Event Log.
- Personal air monitoring device (H_2S, CO, SO2, LEL).
- SCBA.
- Flare gun equipped with flare rounds.
- Heat protective clothing.
- Heat protective gloves.
- Hearing protection.
- Firefighting capability.
- Medical aid capability.

Ignition Group

CONDUCT OF THE IGNITION GROUP

On arrival at site:

- Confirm with the Public Protection Branch Director of the potential for air shock and heat flash.
- Brief all Ignition Group personnel of the potential for air shock and heat flash.
- Evacuate all people not directly involved in the actual ignition.
- Confirm evacuation with Public Protection Branch Director.
- Identify a protected ignition position to protect from large forces and heat.
- Confirm an equipped back-up team, ambulance, and first aid are available.
- Ensure two-person ignition team is wearing appropriate PPE.
- If specified by the Public Protection Branch Director, attach safety lines to Ignition Group.
- Approach the ignition area to approximately 100 metres from plume from the upwind side.
- Monitor the lower explosive limit. If safe to do so, proceed with ignition.
- Ignite plume using a flare shotgun or pistol.
  - Aim the flare to a point above the main plume where air and gas have mixed to form a combustible mixture.
  - Assume a physical position that is the most protective – turn away from the flash area and lie flat on the ground or behind a solid barrier.
  - Ignite the plume.
- Inform the Public Protection Branch Director of ignition and any visible impacts.
- Record the time of ignition on the ICS214 Individual Event Log.
- Continue to monitor the area for impacts and provide regular updates to the Public Protection Branch Director.

Note: Approximately five flare shells must be available in case some do not work, and for relighting if the fire goes out.

IGNITION CRITERIA

Criteria for ignition are different between H_2S and HVP releases. If ignition is to be conducted, the following planning charts should be completed and signed prior to ignition.

Planning for a HVP Ignition

The following factors must be considered when planning for ignition of an HVP Plume:

- ☐ Has the area been isolated?
- ☐ Has the public and response personnel been evacuated from the hazard area?
- ☐ Has the wind direction been established and is it being continually monitored? Indicators should be clearly visible. Examine weather conditions and analyze potential changing circumstances.
- ☐ Will ignition worsen the situation by endangering the environment, public, private property, or equipment?
- ☐ Is there a possibility of an explosion due to obstructions or regions of congestion within the perimeter of the dispersing vapour cloud?
- ☐ Is the appropriate personal protective equipment available?
- ☐ Has the local fire department and medical support been mobilized? Is firefighting equipment readily accessible?

Ignition Group

Situations where planned ignition of an HVP plume would not be considered:

- ☐ Injury and death to the public located inside and outside residences.
- ☐ Inability to control resulting fire (e.g. crops, structures, timber).
- ☐ Potential for employees or the public to inadvertently enter the cloud prior to or during ignition (isolation boundaries not sufficiently established).
- ☐ Unfavorable wind conditions impacting the size of the flammable cloud.

Whatever decision is made, the factors considered and the decision on whether to ignite or not to ignite must be recorded on the ICS214 Individual Event Log or signed off below.

The Incident Commander must be informed of the decision to ignite or not to ignite, and the reasons behind the decision, as soon as reasonably possible.

Planning for H_2S Ignition

The following factors must be considered for ignition of a H_2S plume:

- ☐ Injury and death to the public located inside and outside residences.
- ☐ Inability to control resulting fire (e.g. crops, structures, timber).
- ☐ Potential for employees or the public to inadvertently enter the cloud prior to or during ignition (isolation boundaries not sufficiently established).
- ☐ Unfavorable wind conditions impacting the size of the flammable cloud.

Ignition must not take place if one or more of the following factors is met:

- ☐ Evacuation of the response zones has not taken place.
- ☐ Monitoring results indicate H_2S concentrations more than 10 ppm over a 3-minute average in un-evacuated parts of the EPZ.
  If monitored levels are declining, the situation needs to be continuously assessed for ignition.
- ☐ Monitored H2S concentrations exceed 1 ppm (1-hour average) in urban density developments.
- ☐ Monitoring is not taking place due to weather or other unforeseen circumstances.
- ☐ The release cannot be brought under control in the short term (in these cases, the ignition decision will be made in consultation with the Regulatory authority).

Ignition must occur within 15 minutes of the decision to ignite.

Whatever decision is made, the factors considered and the decision on whether to ignite or not to ignite must be recorded on the 214 Individual Event Log or signed off below.

The Incident Commander must be informed of the decision to ignite or not to ignite, and the reasons behind the decision, as soon as reasonably possible.

3.3.16 Air Operations Group

Air Operations Group			
Potential Designates	Field or Plant Personnel, Contract SME		
Reports to	Response Branch Director		
Forms / Tools	201 Incident Briefing, Incident Action Plan, 214 Activity Log, 220 Air Operations Summary		
Role		**Responsibilities**	
The Air Operations Group Supervisor coordinates the deployment of all air assets (fixed wing, helicopter, drone) in support of the response. The Air Operations Group Supervisor establishes and maintains locations from which air assets can operate. The specialist nature of the Air Operations Group means vendors providing air assets provide their own fuel and maintenance. The Air Operations Supervisor will oversee these logistical elements of the Group. The Air Operations Supervisor schedules flights and advises the Response Branch Director on the utilization of air assets. The Air Operations Supervisor does NOT conduct air traffic control. Only suitably qualified third-party personnel can conduct this task.		Coordinating all Air Operations Group activity.	☐
		Scheduling of air asset use.	☐
		Monitoring of air asset utilization.	☐
		Establishment and maintenance of locations from which air assets can operate.	☐
		Providing regular updates to the Response Branch Director on the progress of Air Operations Group activities.	☐

3.3.17 Public Protection Branch Director

Public Protection Branch Director
If public protection measures are required, a Public Protection Branch Director may be appointed to oversee the planning and execution of public protection measures. They may in turn appoint personnel to act as Group Supervisors for the various sub-units within the Public Protection Branch. Depending on the situation, the following public protection groups may need to be established: • Roadblock Group • Rover/Evacuation Group • Notification Group • Air Monitoring Group

3.3.18 Roadblock Group

Roadblock Group

Roadblocks are utilized to control access into and out of the hazard area. Multiple roadblocks may be required to successfully isolate an area. Roadblock kits should be deployed to assist in the establishment of roadblocks. Local agencies such as fire or police may be able to assist with this task.

PLANNING ROADBLOCKS

The Public Protection Branch Director is accountable for identifying roadblock locations, but they may delegate this responsibility to the Roadblock Group Supervisor.

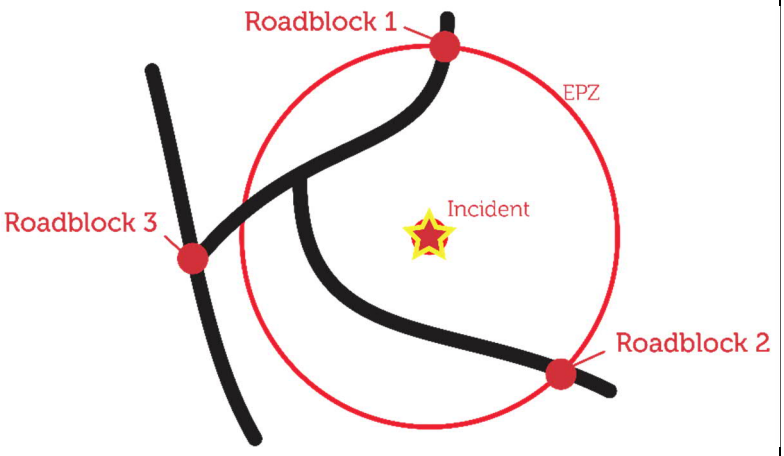
Equipment required for planning:

- Map of area. The map in the ERP may already have predetermined roadblock locations on it.
- Knowledge of the hazardous area.

Roadblock locations must be outside of any hazardous area to ensure the safety of responders and members of the public. Before determining locations of roadblocks, consider:

- Could the hazard extend beyond the current area? If so, plan for the worst case and place roadblocks at these worst-case locations.
- Try and utilize road junctions as roadblocks. This could reduce the total number of roadblocks required.
- Turning circles for vehicles. A semi having to reverse down a highway may cause further issues.
- Locating roadblocks at intersections can permit easier onward movement for diverted vehicles.

MAPPING ROADBLOCK LOCATIONS



- Roadblocks should be plotted on a map and provided a call sign. Do not use people's names as this will cause confusion later when shift changes occur.
- Starting at noon and moving clockwise, number each roadblock location, starting at one.
- Assign a call sign to each location – RB1, RB2 etc.
- Ensure the Public Protection Branch Director and Operations Section Chief approves the roadblock locations.
- Pass the locations of the roadblocks to the Roadblock Group Supervisor.
- Staff the Roadblock Group appropriately. Plan on having two people and a vehicle for every roadblock.
- Request resources required to maintain the roadblocks through the Public Protection Branch Director/Operations Section Chief.
- Provide consolidated updates on the status of roadblocks and personnel entering or leaving the hazardous area.
- Establish means of communications for each roadblock and standard check in times.

Roadblock Group

Roadblock Planning Outcomes
☐ Number and location of roadblocks identified.
☐ Roadblock locations approved.
☐ Roadblock kits ordered.
☐ Roadblocks staffed appropriately.
☐ Roadblock group briefed.

EQUIPMENT

Roadblock personnel will require the following equipment to conduct their role:

- ICS214 Individual Event Log.
- Map showing the EPZ and roadblock locations.
- Direct communication capability (radio, cell phone etc.).
- Flashlight and batteries.
- High visibility/reflective vests.
- Orange traffic cones/reflectors.
- Pens and pencils.
- Personal Air Monitoring Device (H_2S, CO, SO_2, LEL).
- Portable rotating emergency light.
- Hand-held STOP sign with reflective tape.
- Public and media scripts (see the Public and Media Statement Section)

Before deploying ensure all equipment is functional and you have enough spare batteries.

CONDUCT OF ROADBLOCKS

On arrival at the roadblock location:

- Take a reading with your hand-held monitor for H_2S and/or LEL.
- Record the levels on your 214 Individual Event Log.
  - If the readings are approaching 10% LEL and/or 10 ppm H_2S, move further away.
  - Report the levels and new location to the Roadblock Group Supervisor or Public Protection Branch Director.
- Establish the roadblock (see diagram).
- Report the location to the Roadblock Group Supervisor or Public Protection Branch Director.
- Provide GPS coordinates if available.
- Control access into the hazard area
  - Only authorized personnel such as emergency responders and response personnel should enter the hazard area.
  - Record information on who is entering and leaving the hazard area.
- Report immediately, any unauthorized access into the hazard area.
- Provide regular updates to the Public Protection Branch Director on:
  - Personnel entering or leaving the hazard area.
  - Air quality.

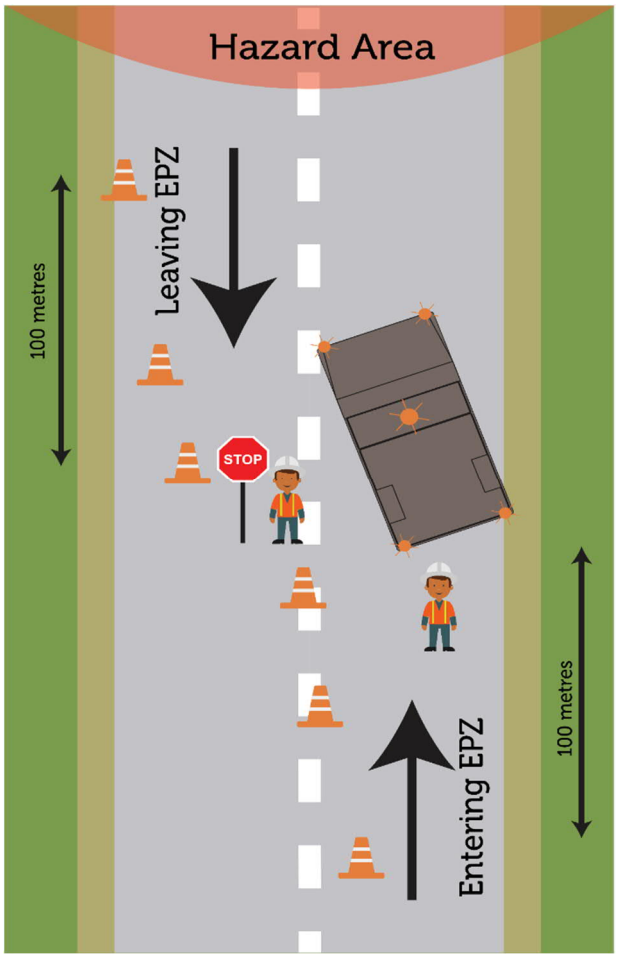
Roadblock Group

CONTROLLING ACCESS

The purpose of the roadblock is to control access into the hazard area rather than halt any movement. Emergency services and response personnel may have legitimate reasons to enter the hazard area.

Pembina personnel have no legal authority to stop anyone entering the hazard area. Roadblocks therefore only warn people of the hazards they may face. If someone insists on entering the hazard area:

- Inform them of the hazards present.
- Record as much information as you can.
- Notify the Public Protection Branch Director immediately.



When talking to people, use the scripts provided to you by the Public Protection Branch Director. Information must be recorded about who enters and who leaves the hazard area.

RECORDING INFORMATION

All information needs to be recorded on the ICS214 Individual Event Log.

Vehicle approaching the hazard area:

- Time.
- Names of personnel.
- License Plate.

Authorized personnel entering or leaving the hazard area:

- Time.
- Names of personnel.
- Role e.g. Evacuee/Emergency Services/Response personnel.
- Reason for entry/exit into hazard area.
- License Plate.

Non-Authorized personnel entering the hazard area:
You have no legal position to restrict access into the EPZ. If a person insists on access, you should:

- Explain to them the current danger and the risk to their own safety.
- Record as much information about them (e.g. name, where they are going, vehicle etc.).
- Inform the Public Protection Branch Director immediately.

3.3.19 Rover/Evacuation Group

Rover/Evacuation Group

The Rover and Evacuation Group may be required to assist members of the public who could be frightened, panicked or angry about being evacuated.

Remember to:

- Remain calm.
- Try not to scare them. They are aware you might be coming but don't know what to expect.
- Be courteous.
- Record and report any interactions to your supervisor.
- Maintain the status of all known impacted personnel.

STAFFING THE ROVER AND EVACUATION GROUP

As the Rover and Evacuation Group may operate inside a potentially hazardous area, personnel should always operate in pairs to provide mutual support. Additional personnel may be required to act as a rescue party for any personnel entering the hazard zone.

PLANNING ROVER AND EVACUATION AREAS

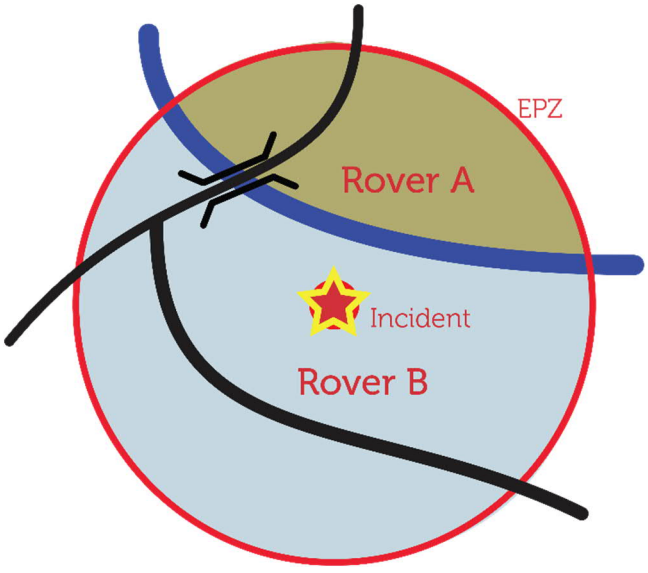
The Public Protection Branch Director is accountable for establishing the areas in which the Rover and Evacuation Group personnel will operate. However, they may delegate the task to the Rover and Evacuation Group Supervisor. If asked to develop the plan for the Rover and Evacuation Group, consider the size of the area impacted:

- Are multiple Rover and Evacuation Group Units required?
- Is the area large or have complex terrain?

If the answer is yes, then break the area up into easily identifiable sections and assign Rover and Evacuation Units to each area.

If multiple Rover and Evacuation Units are required in the Rover and Evacuation Group:

- Divide the area up into manageable areas for Rover and Evacuation personnel to operate in. Mark these areas on a map.
- Provide a call sign for each unit in the Rover and Evacuation Group. Do not use people's names as this will cause confusion later when shift changes occur.
- Staff the Rover and Evacuation Group appropriately. Plan on at least two personnel with a vehicle in each unit.
- Request resources through the Public Protection Branch Director.
- Provide a schedule for the Rover and Evacuation Unit Leaders to provide updates.
- Record decision to deploy a Rover and Evacuation Group on the ICS214 Individual Event Log.



- Provide consolidated updates to the Public Protection Branch Director on the progress of Rover and Evacuation Group activities.

Rover/Evacuation Group

EQUIPMENT

To conduct the Rover and Evacuation tasks, personnel should have:

- A map showing:
  - The area impacted and any potential hazard area.
  - Wind direction.
  - Surface development locations within the impacted area, including:
    - Names and number of occupants.
    - Location of surface development (legal land description and rural address).
    - Description of the building.
    - Contact details for the occupants of the surface development.
    - Any other pertinent information about the surface development from the ERP.
- Public information or media scripts specific to the response.
- Personal air monitoring device (H_2S, CO, SO_2, LEL).
- SCBA.
- Vehicles suitable for the terrain and evacuating/moving personnel.

CONDUCT OF THE ROVER AND EVACUATION GROUP

On entry into the isolated/controlled area:

- Inform your supervisor you are entering the isolated/controlled area.
- Ensure the roadblock records details of your entry into the isolated/controlled area.
- Search for residents and transients in the isolated/controlled area, as tasked.
  - The priority for areas to search should have been provided to you. Normally the priority will be those downwind of the incident.
  - Check all buildings including barns, shops, sheds etc.
- Record details of personnel you encounter within the isolated/controlled area and use the scripts provided to inform them of the situation.
  - Ensure they gather any supplies they will need for the next 24 hours (medicines, baby food, diapers etc.).
  - Ask them if they have any questions.
  - Record their information on the ICS214 Individual Event Log.
- Once you are satisfied that all personnel from the residence are accounted for either:
  - Direct them to the closest point of safety and provide details of the reception centre location, or
  - Deliver them to the reception centre.
  - Inform the Public Protection Branch Director of the number of evacuees and their expected time of arrival.
- Report any unauthorized access into the hazard area to your supervisor.
- Monitor the air quality levels and record on your ICS214 Individual Event Log.
- If the readings are approaching 10% LEL and/or 10 ppm H_2S, inform the Public Protection Branch Director of the readings and the location immediately.
- Determine a schedule with the Public Protection Branch Director to provide regular updates on:
  - Your Location.
  - Air Quality.
  - Status of evacuees.
- Report all suspicious activity to the Public Protection Branch Director immediately.

3.3.20 Notification Group

Notification Group

If members of the public may be impacted by the incident, they must be notified. There are two potential methods of notifying members of the public and will depend on the number of surface developments involved.

Individual Notification:
As a planning figure, notification of seven or less surface developments, are best performed manually.

- Allocate a person to fill the role of Notification Group Supervisor if personnel are available to fill the position.
- Using a copy of the ERP that contains Occupant Data, identify surface developments inside the impacted area and contact them manually.

Mass Notification:
Mass notification is best suited when seven or more surface developments require notification. To initiate mass notification:

- Contact EM On-Call ([redacted]) and provide them with the following information:
  - Location of the release and size of the EPZ.
  - The message to be sent (shelter-in-place or evacuate). In the early stages of an incident, this is most likely to be shelter-in-place.
  - Contact details for either the Operations Section Chief or Public Protection Branch Director.
- EM On-Call will then initiate mass notification and appoint a Notification Group Supervisor.

For the US Only: In the US, contact 911 and advise local fire or police of the immediate threat to life and recommend they notify residents to shelter in place or evacuate.

GUIDANCE ON MESSAGING

The Incident Commander is accountable for determining the type of message to be sent but may request the Operations Section Chief or the Public Protection Branch Director to make a recommendation.

To determine the requirements to evacuate or shelter-in-place, consider:

- Any air monitoring results.
- Volume, size, and duration. A small cloud that passes overhead quickly versus a continuous release.
- Meteorological conditions. Strong winds disperse small releases quickly.
- Methods available to evacuate and routes. Do people have a mechanism to safely evacuate themselves or do they require assistance?
- If the release will be of limited size and/or duration.
- The location of a release.
- Is there insufficient time or warning to safely evacuate the public that may be at risk?

The default action for initial notification is to shelter-in-place. However, if possible, evacuation should take place before a release has the potential to affect people near the incident. There may also be an opportunity to issue an early notification message. This type of message could be used when an incident has the potential to impact residents but is not yet doing so.

Note: The criteria used to decide on the type of message must be recorded on the ICS214 Individual Event Log.

Notification Group

EQUIPMENT

To conduct public notifications you must have:

- A map showing the incident location, the hazard area, and any surface developments (residences, business etc.).
- An ERP marked as containing Occupant Data. Note: these are not available in the US.
- A means of recording on a status board who you have notified and their response. Whiteboards and/or spreadsheets can be used to do this.
- Knowledge of the type of messaging you will be required to send. This must be provided to you by the supervisor.

CONDUCT OF PUBLIC NOTIFICATION

- Develop a list of residents to contact and prioritize them. (Those closest to the incident and downwind residents should be contacted first).
- Contact each resident on the list and provide them with the necessary message (shelter-in-place or evacuate).
- Update the status board with information from the call.
- Provide regular, consolidated updates to the Public Protection Branch Director.
- For residents that require assistance or cannot be contacted, the Public Protection Branch Director will require you to provide a list with:
  - Names and number of occupants.
  - Locations of surface development (legal land description and rural address).
  - Description of the building.
  - Contact details for the surface development.
  - Any other pertinent information about the surface development, or its occupants, from the ERP.

3.3.21 Air Monitoring Group

Air Monitoring Group

Air monitoring helps identify the extent of a plume and verifies if the EPZ is keeping the public and responders outside of the hazard area. Pembina may be expected to provide air monitoring results on a regular basis throughout the emergency to the relevant government regulator, environmental agency, health authority, local authorities, and on request to the public.

The Air Monitoring Group is responsible for acquiring and providing air quality readings. This may be done directly using Pembina personnel or through third parties contracted to provide the service.

It is crucial that Air Monitors continuously update the Public Protection Branch Director with monitored results. If air monitoring readings show high levels of H_2S, SO_2, or LEL the Public Protection Branch Director may need to initiate evacuation/shelter of additional residences, change the location of the roadblocks, or ignite the release.

Air Monitoring may be used to:

- Track the plume.
- Determine if ignition concentration criteria are met.
- Determine whether evacuation and/or sheltering concentration criteria have been met.
- Determine concentration levels in areas considered for evacuation or being evacuated to ensure that evacuation is safe.
- Confirm roadblock locations.
- Assist in determining when the emergency can be downgraded.

Air Monitoring may be mandated by agencies in the event of a release.

Urban Centres:
When an EPZ includes a portion of urban density or an urban centre there should be a minimum of two mobile air monitors, one to monitor the boundary of the urban density development or urban centre and the other to track the plume. Specific requirements pertaining to the type and number of air monitoring units may vary across jurisdictions.

Unmanned Operations:
If notified of a release by an alarm or by a reported odor, Pembina must investigate the source of the release and should send out air monitors upon confirmation of the release location. Specific requirements pertaining to air monitoring may vary across jurisdictions.

If Air Monitoring is required:

- ☐ Appoint an Air Monitoring Group Supervisor if personnel are available to fill the position.
- ☐ Order qualified third parties to conduct air monitoring. Refer to the applicable District/Area or Site/System specific ERP.
- ☐ Confirm the nature and type of hazards present and ensure the correct type of Air Monitoring is deployed.
- ☐ Provide a schedule for the Air Monitoring Group Supervisor to provide you with updated air monitoring results.
- ☐ Record decision to use air monitoring on the ICS214 Individual Event Log.
- ☐ Provide consolidated updates to the Operations Section Chief on air monitoring results.
- ☐ Provide action levels that must be reported immediately if met or exceeded.

Air Monitoring Group

EQUIPMENT

To conduct the Air Monitoring task, personnel must have:

- A map showing:
  - The area impacted and any potential hazard area.
  - A list of hazardous substances that may be present.
  - Wind direction.
  - Resident locations within the impacted area.
- Public information or media scripts specific to the response.
- Personal Air Monitoring Device (H_2S, CO, SO_2, LEL).
- SCBA.
- Any air monitoring equipment specific to the incident.

CONDUCT OF AIR MONITORING

Once tasked to conduct air monitoring:

- Deploy to locations specified by the Public Protection Branch Director. Normally this is the closest downwind, occupied public location or residence.
- Establish continuous monitoring.
- If necessary, track the location of any vapor plumes.
- Monitor environment, particularly wind direction, for adverse effects.
- Record all readings on the ICS214 Individual Event Log. If necessary, create an Air Monitoring Log.
- Report all readings at established intervals to the Public Protection Branch Director.
- For your own safety, ensure the Public Protection Branch Director is notified immediately if readings are approaching the following levels: 10% LEL or 10 ppm H_2S.
- Prepare Mobile Monitoring Plan.
  - This plan provides guidance to Air Monitors on safe routes and transportation means around the impacted areas.
  - The intent is to ensure Air Monitoring Teams can move safely around without placing themselves or others in danger. If necessary, personnel may need to be allocated to rescue any personnel conducting Air Monitoring.
- Record all other activities on the ICS214 Individual Event Log.

Be prepared to:

- Don SCBA apparatus quickly.
- Speed and direction of wind may vary, therefore, be prepared to become mobile to track gas plume.

3.3.22 Reception Centre Group

Reception Centre Group	
Potential Designates	Field or Plant Personnel/Contract SME/ First Responder or Local Authority
Reports to	Public Protection Branch Director
Forms / Tools	201 Incident Briefing Form, Incident Action Plan, 214 Activity Log

Role	Responsibilities	
The role of the Reception Centre Group Supervisor will vary depending on if the Local Authority or Pembina establish the Reception Centre. Local Authority Reception Centre In most cases, the Reception Centre will be established by the Local Authority. In these cases, the Reception Centre Group will coordinate with the Local Authority Reception Centre Manager and exchange incident information. This includes the incident status and number of evacuees expected. Pembina Reception Centre Where Pembina establishes their own Reception Centre, the Reception Centre Group will coordinate all activity, including establishing accommodation, feeding, communication and documentation for compensation purposes. No matter who establishes a Reception Centre the following apply: • In order to account for evacuees, close coordination within the Public Protection Branch will be required. • Community relations support should be requested as part of the ITRT.	Liaison with the Local Authority Reception Centre Manager.	☐
	Coordinate and direct the activities of Pembina personnel within the Reception Centre Group.	☐
	Log all personnel who arrive at the Reception Centre.	☐
	Provide regular updates to the Public Protection Branch Director on: • The status of activities at the Reception Centre. • Residents who have arrived at the Reception Centre.	☐

3.3.23 Security Branch Director

Security Branch Director
If security measures are required, a Security Branch Director may be appointed to oversee the planning and execution of security measures. They may in turn appoint personnel to act as Group Supervisors for the various sub-units within the Security Branch. Depending on the situation, the following security groups may need to be established: • Site Security Group • Search Group • Staging Area Security Group • Evacuated Area/Public Property Security Group If necessary, Security Branch Units may be allocated to other elements of the response to aid in efficient command and control of the incident. For example, a Staging Area Security Unit Leader may report to the Staging Area Manager directly rather than the Security Branch Director. In these cases, the title Security Unit Leader rather than Security Group Supervisor is used. The Security Unit Leaders report to the relevant Group Supervisor rather than the Security Branch Director.

3.3.24 Search Group

Search Group		
Potential Designates	Field or Plant Personnel/Contract SME/First Responder or Local Authority	
Reports to	Security Branch Director	
Forms / Tools	201 Incident Briefing, Incident Action Plan, 214 Activity Log	
Role	**Responsibilities**	
The Search Group coordinates and implements all search activities required during a response. This may include searching for missing personnel and / or confirming the existence of threats to personnel, equipment or facilities. If searching for people, the Search Group may be required to conduct evacuation of injured personnel identified during the search. The Search Group plans the conduct of the search and coordinates personnel conducting the search.	Planning how a search will be conducted.	☐
	Ensuring the safety of Search Group personnel.	☐
	Coordinating Search Group activities.	☐
	Providing regular updates to the Security Branch Director on the progress of Search Group activities.	☐

3.3.25 Evacuated Area and Public Property Group

Evacuated Area and Public Property Group		
Potential Designates	Field or Plant Personnel/Contract SME/First Responder or Local Authority	
Reports to	Security Branch Director	
Forms / Tools	201 Incident Briefing, Incident Action Plan, 214 Activity Log	
Role	**Responsibilities**	
The Public Property and Evacuated Area Group maintains security of controlled areas and all public property within the evacuated area. A key role is to record and report who is entering and leaving the controlled area. Other personnel will require access into the controlled area such as emergency services or response personnel. The recording of entry into, and out of, controlled areas is vital in ensuring the both the safety and security of the public and responders.	Coordinating and directing the activities of personnel within the Public Property and Evacuated Area Group.	☐
	Controlling access into and out of controlled areas.	☐
	Maintaining security of all public property within the controlled area.	☐
	Ensuring the logging of details for all personnel entering and leaving the controlled area.	☐
	Providing regular updates to the Security Branch Director on personnel who have entered or left the controlled area.	☐

3.3.26 Emergency Coordination Manager

Emergency Coordination Manager (ECM) or Deputy ECM		
Potential Designates	Business Unit VP, General Manager, Director, Operations Manager, or designated member of the ITRT.	
Forms/Tools	201 Incident Briefing, 214 Activity Log, 215 Operational Planning Worksheet	
Role	**Responsibilities**	
The ECM coordinates all response activities within Pembina during an incident.	Ensuring the necessary support is available to an IC. This may include the activation and deployment of an RRT or the ITRT.	☐
	Adjusting the organizational structures to meet the requirements of the incident.	☐
	Activating the ECC to support the response.	☐
	Depending on the corporate incident classification, ensuring notification to the impacted Business Unit (BU), Executive and/or Crisis Management Team (CMT).	☐
	Providing information updates to the Executive or CMT.	☐
	If appropriate, coordinating with the Executive or CMT to establish response priorities and objectives.	☐
	Ensuring response priorities and objectives provided by the Executive or CMT are actioned.	☐
See Role Guide for further details. Digital version is available on the Pipeline. Hard copies are available in the ECC.		

3.3.27 Director of Emergency Management

Director of Emergency Management (DEM)	
Potential Designates	Emergency & Continuity Management SME, as required
Reports to	Emergency Coordination Manager
Forms/Tools	201 Incident Briefing Form, 214 Activity Log, 215 Operational Planning Worksheet

Role

The function of the DEM is to provide support and advice to the Emergency Coordination Manager (ECM) on the processes and procedures in place to support the response.

The DEM may be activated when an Emergency & Continuity Management SME is not filling the ECM or Deputy ECM role.

Where unassigned, the DEM may act as the Deputy ECM.

3.3.28 Technical Specialist(s)

<table>
<tr><th colspan="3">Technical Specialist(s)</th></tr>
<tr><td>Potential Designates</td><td colspan="2">SME</td></tr>
<tr><td>Reports to</td><td colspan="2">Emergency Coordination Manager</td></tr>
<tr><td>Forms/Tools</td><td colspan="2">ICS and/or regulatory forms applicable to assigned responsibilities</td></tr>
<tr><th>Role</th><th colspan="2">Responsibilities</th></tr>
<tr><td rowspan="4">A Technical Specialist is a SME within Pembina's organization who is able to provide expert guidance on different elements, processes, procedures, or tools available to support the response.

Technical Specialists may include, but are not limited to representatives from the following departments:
• Asset Integrity
• Corporate Security
• Crisis Communications
• Cyber Security
• Environment
• Emergency & Continuity Management
• GIS
• Human Services
• Indigenous Engagement, Land & Regulatory
• Information Services
• Insurance
• Legal</td><td>Support and advise the ECM during the incident.</td><td>☐</td></tr>
<tr><td>Attend the appropriate meetings/briefings throughout the response.</td><td>☐</td></tr>
<tr><td>Maintain a 214 Activity Log to record key events, decisions and timings.</td><td>☐</td></tr>
<tr><td>Participate in post incident activities, as required.</td><td>☐</td></tr>
<tr><td colspan="3">See the applicable Role Guide for further details.
Digital version is available on the Pipeline. Hard copies are available in the ECC.</td></tr>
</table>

3.4 Pembina Command Centres

To coordinate response efforts Pembina and will establish various command centres to manage required emergency response actions. These centres represent the location of specific response team members and may be set up temporarily, or on a long-term basis depending on the nature of the emergency. Pembina utilizes the following command centres:

Type	Description	Location
On-scene site management Field Level Response	The focal point for control and containment activities as well as communications to the ICP, at or as close to the actual incident site as possible given safety concerns. In many cases, activities may be coordinated from a temporary and/or mobile location, such as the Initial IC's truck. As the event becomes more serious or complex, it may become necessary to activate the ICP.	As required by incident. Refer to applicable supplemental plan(s).
Incident Command Post (ICP) Field Level Response	The ICP will be activated during an emergency, as appropriate, usually at the area field office or plant site. The established ICP should be near the site of the emergency, but outside the hazard area. The ICP plans and coordinates tactical operations. The ICP must have the appropriate equipment, personnel, and materials resources to manage the emergency.	As required by incident. Refer to applicable supplemental plan(s).
Emergency Coordination Centre (ECC) Corporate Level Response	The ICP may be supported by the ECC which provides coordinated corporate support, guidance, and strategic planning. The ECC will be activated during an emergency, as appropriate, at the Calgary head office where Technical Specialists are available to provide support to the ICP, as requested.	As required by incident. [redacted]

Additional Pembina response locations, such as a Reception Centre or staging area, may be stood up to serve a specific function, as required by the incident.

3.5 Other Response Locations

Depending on the size or nature of the emergency, other stakeholders such as governments or regulators, may establish their own centres to coordinate response efforts. In such events, regulators generally encourage the formation of a single Regional Emergency Operations Centre (REOC) or Emergency Operations Centre (ECC) for industry and municipal response personnel to form Unified Command (UC).

The following table provides information about other possible response locations and their activities:

Name/Type	Purpose	Activities	Potential Location
Reception Centre	• A registration centre for members of the public that have been evacuated. May provide temporary lodging. • Alternative checkpoint for workers to report to on a designated schedule.	• Registers evacuees. • Addresses immediate needs for food, housing and information. • Records destination details of evacuees leaving the area. • Addresses immediate compensation claims (short term claims). • Provides information to Public Safety Section Chief on the status of evacuation activities.	• Determined by incident location. Refer to appropriate supplemental plan(s)
Emergency Coordination Centre or Emergency Operations Centre: • Municipal • Regional • Provincial	• Focal point for Provincial and Municipal Government local response.	• May assist with public safety. • Activates and assists with Government fan-out communication. • Monitors activities of Pembina. • Provides technical support and regulatory direction to the Pembina. • Sends representative to the ICP.	• Regional Provincial Energy Regulator's Office. • Local County Disaster Services Office. • City Offices. • Provincial Emergency Management Office.
Joint Information Centre (JIC)	• May be established as a central location for facilitating operation of the Joint Information System. Provides the mechanism to organize, integrate, and coordinate information to ensure timely, accurate, accessible, and consistent messaging across multiple jurisdictions and/or disciplines with nongovernmental organizations and the private sector.	• Perform critical emergency information functions of crisis communications and public affairs. • Includes the plans, protocols, procedures, and structures used to provide public information.	• Established at various levels of government, at incident sites, or can be components of Multi-agency Coordination (MAC) Systems (e.g., MAC Groups or EOCs). • A single JIC location is preferable, but the system is flexible and adaptable enough to accommodate virtual or multiple JIC locations, as required.

3.6 Control Centres

[redacted]

3.7 Governmental/Regulatory

Refer to Section 5.0 External Support and Regulatory Reporting.

3.8 Local First Responders

Refer to Section 5.0 External Support and Regulatory Reporting.

3.9 External Support Providers

Where support providers (i.e., contractors, vendors, suppliers) are required to support Pembina in carrying out emergency response related activities, Pembina will ensure support providers are appropriately qualified/competent to complete the required tasks.

To facilitate this, Pembina will endeavor to utilize pre-identified/pre-qualified stakeholders for the required activities. See the applicable Area or supplemental plan for support services information and contacts. For further information on external stakeholder competency and pre-qualification, refer to Pembina's Safety Management Program on the Pipeline.

3.10 Volunteers/External Workers

Depending on the size and scope of the incident, volunteers or other external workers may need to be engaged to assist with response activities – these may be individuals from local response agencies or members of the public at or near potential response locations (e.g., staff at facility established for the Reception Centre, volunteer organizations, members from the local community, etc.). In the event that an incident requires the use of volunteers, a management plan specific to the requirements of the incident will be developed.

4.0 EMERGENCY RESPONSE ZONES & PUBLIC PROTECTION MEASURES

4.1 Emergency Response Zones

The type of emergency response zone(s), and the method in which it is calculated, vary from one regulatory jurisdiction to another. Refer to the appropriate site/system data for details.

Entry procedures into an Emergency Response Zone:

- Only authorized personnel may enter the response zones.
- Use the "Buddy System" when required.
- Schedule reports or “Check-in” every 10 to 15 minutes while in the response zones.
- Wear personal protective equipment (PPE).
- Continuously monitor the concentration of hazardous products in the air.

4.1.1 Emergency Planning Zone

An Emergency Planning Zone (EPZ) is a geographical area surrounding a pipeline or facility that requires specific emergency response procedures based on a hazardous product. The extent of an EPZ is determined using industry accepted dispersion modeling software and/or analysis.

4.1.1.1 EPZs for Pipelines

High Vapor Pressure (HVP) Pipelines

The primary hazard associated with High Vapour Pressure (HVP) products is flammability.

HVP EPZs below are based on the recommended CAPP Companion Planning Guide to Directive 71, as included in the AER Manual 26 below:

Pipeline Size		Ethane, Propane & Butane Mix (without Ethylene)
3”	88.9 mm	250 m
4”	114.3 mm	300 m
6”	168.3 mm	500 m
8”	219.1 mm	700 m
10”	273.1 mm	900 m
12”	323.9 mm	1100 m
16”	406.4 mm	1600 m
20”	508.0 mm	Modeled
24”	609.6 mm	Modeled

Although these zones are referenced only in the Alberta regulations, it is expected that public protection measures will be initiated in this manner, where similar regulations do not exist.

Low Vapor Pressure (LVP) Pipelines

There are no pre-determined or calculated EPZs; however, the right-of-way (ROW) distance is the minimum recommended zone from the AER. Response Zones may be established in an LVP incident to help manage the area around the incident site as follows:

Hot Zone	• May also be named the red or work zone. • Defines the area affected by and in proximity to the release (i.e. release site). • This area is restricted to authorized personnel only. • All personnel in this area must be equipped with PPE, as required.
Warm Zone	• May also be named the yellow or decontamination zone. • This is the clearly defined buffer area around the hot zone. • This area is critical in keeping contaminants within the impacted area, therefore reducing and/or eliminating the spread of contaminants to clean areas.
Cold Zone	• May also be named the green or clean zone. • This is the clearly defined buffer area adjacent to or surrounding the warm zone. • Staging management, planning areas, and onsite command centres are in the clean zone.

Pembina has assumed a 50 m EPZ for sweet crude pipeline corridors based on the radiant heat of the initial ignition of a pool of crude oil resulting from a catastrophic release. Refer to the Corporate Spill Contingency Manual for further information.

Condensate

EPZs for condensate pipelines and storage containers may be assigned based on the radiant heat of the ignition of a pool of, or vapours from, condensate resulting from a release. In the absence of calculated values, initial isolation zones may be applied based on the recommended distances listed in the applicable Safety Data Sheet (SDS).

Natural Gas

EPZs for sweet natural gas pipelines may be assigned based on the radiant heat from a vapour cloud fire, resulting from the ignition of release product.

Sour Pipelines (Alberta)

The AER has developed a software program that calculates EPZs using thermodynamics, fluid mechanics, atmospheric dispersion, and toxicology modelling. This software includes both user input variables and model parameters to determine the size of the EPZ for pipelines containing sour gas with a H_2S concentration of 0.1 mol/kmol (100 ppm/0.01 %/0.0001 mole fraction) or greater.

Sour Pipelines (BC)

Planning zones are determined by reference to the maximum potential H_2S release volume from the pipeline, calculated in accordance with the prescribed regulated equations.

4.1.1.2 EPZs for Facilities

For facilities with HVP pipelines entering or exiting the location, the facility EPZ is equal to the largest planning zone assigned to an entering or exiting HVP pipeline.

For facilities that are licensed for H_2S, the EPZ of the facility is equal to the largest H_2S pipeline EPZ entering or exiting the facility.

For facilities that have storage vessels on site, EPZs are calculated for each of the vessels as per Canadian Environment Protection Act (CEPA) Environmental Emergencies (E2) Regulations. These calculations are based on the Guide for Major Industrial Accidents Reduction Council or independent plume dispersion modeling.

If a combination of HVP lines, sour lines, and storage vessels, or wells and caverns are on site, the facility EPZ is assumed to be the largest calculated EPZ, from the boundary of the facility.

4.1.2 Initial Isolation Zone (Alberta Only)

The Initial Isolation Zone (IIZ) is the area immediately surrounding the source of an emergency that represents the greatest hazard to the public. Members of the public in this area should receive top priority because they are located near the highest concentration of the hazard.

If safe to do so, an attempt to evacuate residents in this zone must occur.

4.1.3 Protective Action Zone (Alberta Only)

The Protective Action Zone (PAZ) is the downwind portion of the EPZ. Members of the public in this area should receive notification once the IIZ has been notified. This area is determined using wind direction and monitors that measure the appropriate hazard.

4.1.4 Hazard Planning Zone (BC Only)

A Hazard Planning Zone (HPZ) is a geographical area determined by using the hazard planning distance as a radius, and within which persons, property or the environment may be affected by an emergency.

A hazard planning distance is a horizontal distance and is measured from the site of an oil and gas activity that is subject to a Plan.

In BC, the geographical area that encompasses all the hazard planning zones for an oil and gas activity that is subject to a Plan will be referred collectively as the EPZ.

4.1.5 Hazard Response Zone (BC Only)

A Hazard Response Zone (HRZ) is the area affected by an incident/emergency.

4.1.6 High Consequence Areas

High Consequence Areas (HCA) are areas and/or receptors identified as having significant biophysical or socio-economic value, where an unplanned release could have the most significant adverse consequences and require additional focus, efforts, and analysis to ensure integrity. If a pipeline is in proximity to, or upstream of an HCA, increased contingency planning may be required, such as the development of critical spill control points. Additionally, if an unplanned release occurs into an HCA, recovery efforts must increase in these areas to maintain their integrity and to return the area to its pre-disturbance state.

HCAs may include, but are not limited to:

- High population areas
- Waterways
- Rivers
- Lakes
- Streams
- Wetlands
- Dams and reservoirs
- Traplines and fur management areas
- Environmentally significant areas
- Drinking water supplies
- Ecological reserves
- Parks
- Biodiversity areas
- Critical habitats
- Species and ecosystems at risk
- Heritage features

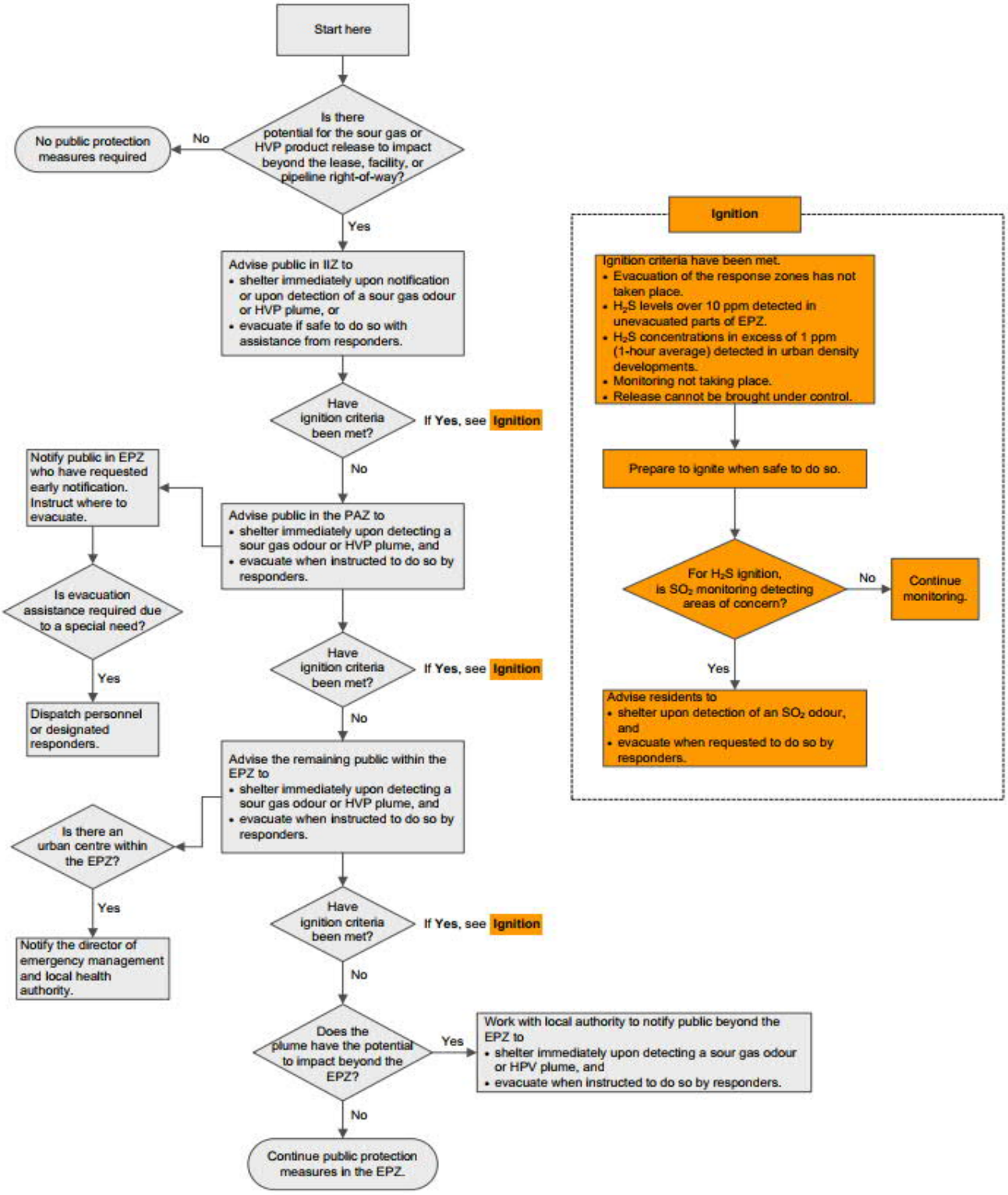
4.2 Public Protection

Public protection measures will be implemented at any level of emergency (or incident classification) when members of the public may be affected. Public protection measures can be implemented individually or simultaneously depending on the requirements of the emergency:

- Area Isolation – setting up roadblocks and barriers to prevent entry into a hazard area
- Shelter-in-Place – requesting members of the public to shelter indoors until the hazard ends or until it is safe to evacuate
- Evacuation – requesting members of the public to evacuate the area until safe to return
- Ignition – planned or intentional ignition of a release. This may be used in circumstances where regulated ignition criteria are met

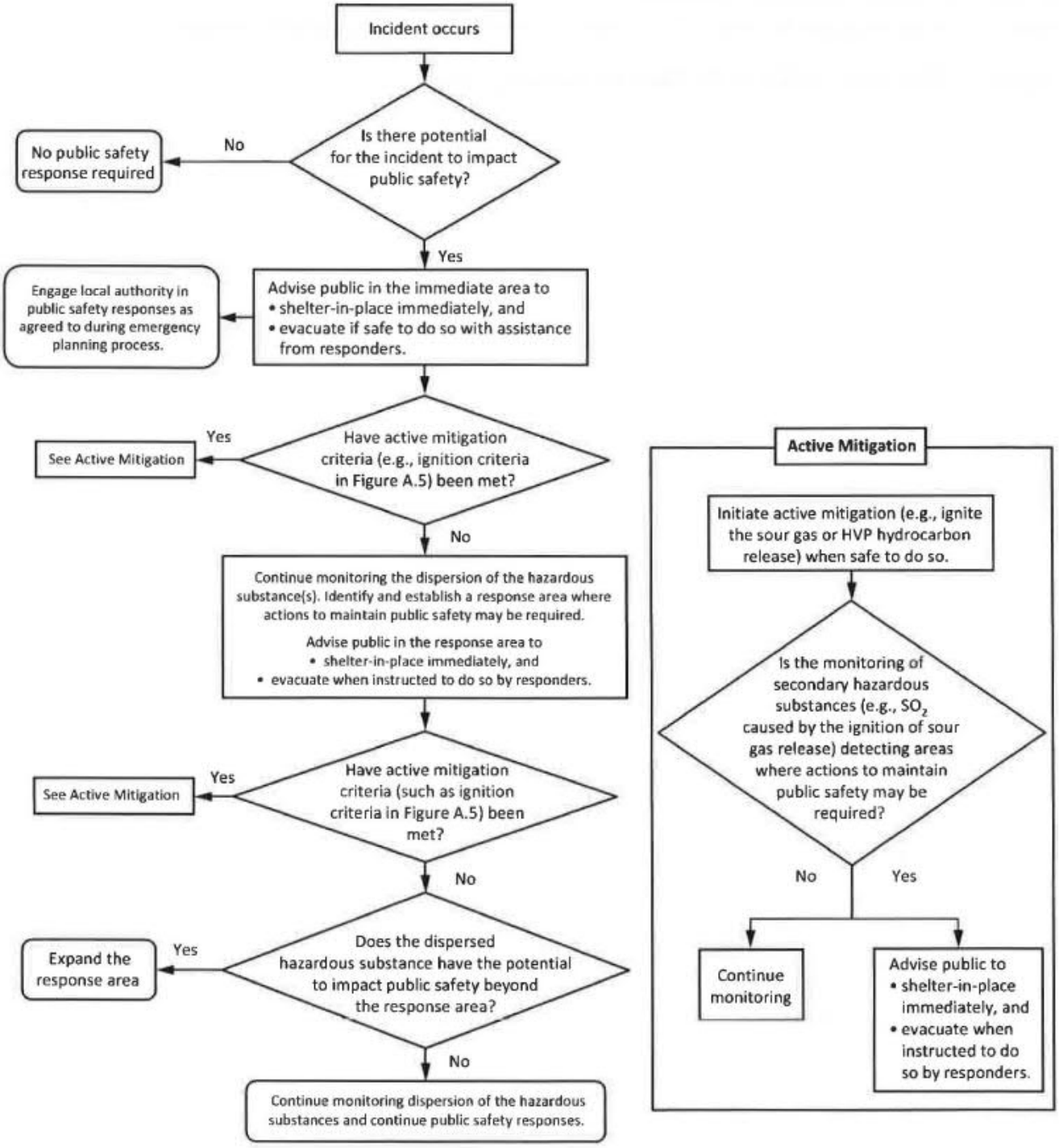
Additional information about each method is available further in this section.

4.2.1 Public Protection Measures Flowchart – Alberta



Source: AER Directive 71

4.2.2 Public Safety Decision Process – Other Jurisdictions



Source: CSA Standard Z246.2:23, Figure A.4

4.3 Air Quality Monitoring

Pembina facilities are designed, constructed, and operated in a manner that minimize emissions and ensures that regulatory air quality standards are met or exceeded. Facilities are equipped appropriately with remote monitoring devices (e.g., leak detection, gas detection, pressure, etc.) to alarm when equipment is being operated outside of normal conditions or when situations exist that may result in a potential hazard to the public, the environment, or personnel and facilities.

In addition to the remote monitoring, operations and maintenance personnel are responsible to conduct scheduled site inspection and surveillance.

In the event of an emergency, air quality monitoring will be dispatched to track and measure the concentration of product in an area regardless of the established level of emergency (or incident classification). Initial monitoring will be accomplished using Pembina personnel. As soon as possible, additional monitoring resources with portable or mobile air monitoring equipment will be contacted to monitor the atmosphere in conjunction with provincial/state environmental agencies.

Monitoring may occur downwind or upwind depending on how the plume is tracking. Priority should be directed to the nearest un-evacuated residence(s) or area(s) where people may gather, as well as any nearby urban density developments.

Monitoring information must be provided on a regular basis throughout an emergency to the regulators, provincial environmental agencies, health authorities, local authorities, and to members of the public that request it.

4.3.1 Equipment

Air quality monitoring equipment is used to:

- Track the plume
- Determine if ignition concentration criteria are met
- Determine whether evacuation and/or sheltering concentration criteria have been met
- Determine concentration levels in areas considered for evacuation/being evacuated to ensure that evacuation is safe
- Determine roadblock locations
- Assist in determining when the emergency can be downgraded

The type of air monitoring units and the number of monitors required are based on site-specific information, including:

- Access and egress points
- Area topography
- Population density and proximity to urban density developments
- Local conditions

Hand-held monitors may be readily available and easier to access but should not replace continuous monitors stationary or mobile monitors which can be requested from contractors/vendors, provincial/state environment agencies, regulators, or mutual aid groups.

4.4 Area Isolation (Roadblocks)

As a safety precaution, potentially hazardous area(s) should be isolated and secured using roadblocks to prevent unauthorized entry into response zones during emergencies.

Isolating the area prevents people from jeopardizing their own personal safety and could reduce the potential for unplanned ignition to occur.

All access roads to and from the incident site should be blocked. Roadblocks should be placed in locations that are clearly visible to oncoming traffic. The roadblocks should also be located at intersections or pullouts to enable traffic to easily turn around or take detour routes.

Roadblock personnel will be assigned as required; additional roadblock assistance may also be obtained from police, highway crews, local authorities, or contractors. For areas where there is a high volume of recreational activity, roadblocks may also need to be set up to block trailheads and waterways.

4.4.1 Major Highways/Traffic Control/Railways/Airspace

Where major highways and/or railways pass through the hazard area or EPZ, the provincial transportation authority and/or the railway company must be contacted for approval and assistance with road closures or blockades.

The protection of the public may require a closure of airspace. Transport Canada's Aviation Operations Centre (AVOPS) has the authority to issue air space closures and NAV Canada can be contacted to assist with the issue of a Notice to Airmen (NOTAM). If drones are being used in the hazard area or EPZ, a NOTAM can be requested to prohibit their use.

4.4.2 Identifying Members of the Public/Transients within the EPZ

A confidential database of contact information is maintained for residents who live within rural areas of the EPZs for HVP and H_2S pipelines and associated facilities, as well as E2 regulated assets.

In the event of an incident related to an HVP or H_2S pipeline or facility, members of the public must be notified within the EPZ radius around the location of the release/incident site.

Resident and business locations are referenced on the map by letter and corresponding contact information is maintained within the applicable supplemental plan(s).

Transient populations (e.g., recreational users, trappers, industrial operators, etc.) are identified in the applicable supplemental plan(s). Rovers will be dispatched to search the EPZ for individuals who may not have received the public protection notification(s).

If safe to do so, and weather permitting, a helicopter will be dispatched to visually identify the locations of recreational users, hunters, trappers, and others who may require notification and/or evacuation. These land users may be notified by air horns or loudspeakers, or their locations will be radioed to ground rover personnel to locate using appropriate search vehicles. Mutual aid support may also be used to support locating transient land users.

Refer to the Corporate Spill Contingency Manual for further information pertaining to isolating a liquid release area.

4.5 Conducting Notifications

Public notifications must begin as soon as possible upon confirmation of an emergency.
If a release has the potential to impact beyond the lease, facility boundary, or pipeline ROW, the licensee must notify:

- The public in the response zones and EPZ
- The Director of Emergency Management (DEM), if an urban centre is within the EPZ
- Individuals within the EPZ that have requested early notification and wish to voluntarily evacuate
- The local authority and provincial/state health authority

4.5.1 Notifications within the EPZ

Members of the public and stakeholders within the EPZ will be provided with directions relevant to the incident, including shelter-in-place, and/or evacuation instructions, as required.

As appropriate, the Public Protection Branch Director will designate a Notification Group Supervisor who will assemble a team of Telephoners to deliver the appropriate public protection messaging. The Notification Group Supervisor will report notification status to the Public Protection Branch Director.

Surface developments within the EPZ may be identified as “special needs” based on early notification requirements for reasons such as requiring evacuation assistance, no means to contact by telephone, communication barriers, or significant health or personal concern for which they have requested early notification.

Company or contract personnel will visit worksites and transient locations to deliver public protection messaging. All known transient locations, vacant residences, or locations with unknown telephone numbers are deemed special needs and must be personally contacted, if safe to do so.

When required, Pembina personnel will work with the local authorities to determine the best methods to protect the public based on parameters such as the magnitude of the incident, wind speed and direction, secondary fires, time of day, etc.

4.5.1.1 Notification System

Pembina may utilize a manual and/or electronic notification system to complete notifications to surface developments located within the EPZ, as appropriate to the incident.

4.5.1.2 Requirements by Regulatory Level of Emergency (AER Only)

When an Alert is declared, notify the AER if members of the public or media are contacted, to coordinate public messaging.

When a Level 1 Emergency is declared notify members of the public within the EPZ who have requested notification. If members of the public or media are contacted, notify the AER, Local Authority, and Health Authority, to coordinate public messaging.

When a Level 2 or 3 Emergency is declared, notify members of the public within the EPZ. Notify the AER, Local Authority, and Health Authority, to coordinate public messaging.

4.5.1.3 Urban/Population Centres

If an urban or population centre is located within the EPZ, notification of the public will be coordinated with the local or municipal authority. Communication will be made by local emergency responders, local media, and provincial alert systems.

4.5.1.4 Notifications outside the EPZ

In the unlikely event that public protection measures are required outside of the EPZ, they will be coordinated with Local Authorities. Provincial alerting or warning systems and/or broadcast media may be used to notify the public outside of the EPZ for immediate shelter or evacuation situations.

4.5.1.5 Information for Public Dissemination

Notifications, sheltering, and/or evacuation messages must be edited to suit the nature of the emergency and be confirmed by the IC prior to public dissemination. Initially, members of the public will be advised of:

- The type of incident
- Approximate location of the incident
- Public protection measures to follow
- Actions Pembina is taking to respond to the situation
- Contact numbers they can call for additional information

During the incident, the public within the EPZ must receive regular communication to keep them informed of the situation and actions being taken. Additional details are provided in the table below:

To those evacuated or sheltered – at the onset	To those evacuated or sheltered – during
• Type and status of the incident • Location and proximity of the incident to people in the vicinity • Public protection measures to follow, evacuation instructions, and any other emergency response measures to consider • Actions being taken to respond to the situation, including anticipated time	• Description of the products involved and their short term and long term effects • Effects the incident may have on people in the vicinity • Areas impacted by the incident • Action the affected public should take if they experience adverse effects
To the public – during	
• Type and status of the incident • Location of the incident • Areas impacted by the incident • Description of the products involved • Contacts for additional information • Actions being taken to respond to the situation, including anticipated time period	(Source: Adapted from AER Directive 71, Appendix 4)

4.6 Shelter-in-Place

Sheltering is considered the safest form of public protection in the following circumstances:

- There is insufficient time or warning to safely evacuate the public that may be at risk;
- Residents are waiting for evacuation assistance
- The release will be of limited size and/or duration
- The location of a release has not been identified
- The public would be at higher risk if evacuated
- Buildings considered to be within/near toxic or explosive gas plumes
- Escape routes traverse the hazards

Sheltering is recommended until the extent of the plume can be assessed and a safe evacuation can occur.

4.6.1 HVP Operations

Sheltering indoors is the primary public protection measure for a HVP product release.

4.6.2 Sour Operations

If evacuation is not possible, then sheltering in place can be used to protect members of the public, under certain conditions.

Depending on the volume, size, duration, or meteorological conditions, sheltering-in-place may not be a viable public protection measure within the IIZ during an H_2S release. In this situation, the public safety aspects of sheltering-in-place will have to be continuously re-evaluated during the incident and assisted evacuation may be necessary to ensure public safety.

Members of the public within the EPZ but outside of the PAZ may be contacted and advised to initially shelter-in-place pending further instructions from a Pembina representative.

4.6.3 General Shelter-in-Place Instructions

Advise impacted public to immediately gather everyone indoors and complete the following:

- ☐ Close and lock windows and outside doors – if possible, tape the gaps around door frames.
- ☐ Extinguish fires in fireplaces - if possible, close the damper
- ☐ Turn off appliances or equipment that either uses inside air, blows out inside air or sucks in outside air, such as:
  - Gas stoves and gas fireplaces
  - Clothes dryers
  - Air conditioners
  - Bathroom and kitchen fans
  - Built in vacuum systems
- ☐ Turn down furnace thermostats to the minimum setting
- ☐ Leave all inside doors open
- ☐ Avoid using the telephone, except for emergencies, so that you can be contacted by emergency personnel
- ☐ Stay tuned to local radio for possible information updates or for further instructions
- ☐ Even if you see people outside do not leave until told to do so
- ☐ Remain indoors until further instructions are provided

If you are unable to follow these instructions, please notify emergency response personnel.

4.6.4 Post Shelter-in-Place Instructions

After the hazardous substance has passed through the area, emergency response personnel will contact all sheltered persons with instructions to:

- ☐ Ventilate the building by opening all windows and doors
- ☐ Turn on fans, turn up thermostats, and furnace circulating fans
- ☐ Once the building is ventilated, return all heating, ventilating and other equipment to normal

Additional instructions may need to be provided based on the specifics of the emergency.

4.7 Evacuation

Pembina can advise members of the public to evacuate; however, mandatory evacuation can only occur when the local authority/health authority/or applicable governing body issues a State of Local Emergency (SOLE) allowing for the closure of roads and mandatory evacuations.

The Police may assist with evacuation efforts, as required; however, would be discouraged from entering the EPZ unless safe to do so.
During a hazardous release, the decision to evacuate should only be made by qualified individuals with access to appropriate monitors. Evacuation of the public should only proceed when it is safe to do so and after an assessment of:

- The size and expected duration of the release
- Egress routes
- Current and expected meteorological conditions
- The potential for unexpected ignition

In the event of evacuation, Rovers in the field and/or Telephoners will notify residents and businesses to evacuate to the appropriate Reception Centre and provide the following information:

- Gather all persons in the residence/business, secure your location, and immediately leave the area
- Follow the provided travel directions – this will take you away from any suspected unsafe areas by the safest route
- If required, transportation and support will be provided to those persons who require assistance
- Proceed to a designated Reception Centre where a Pembina representative will meet you. They will provide evacuation information, answer any questions, and attempt to address any immediate concerns that you may have

If large numbers of people are present in the EPZ, Pembina will provide evacuation assistance or a change in the normal notification procedures, as required. Buses may be used to transport large numbers of evacuees and helicopters may be used to locate transients in the EPZs.
Public located outside the EPZ must be notified and evacuated in the event that the hazard extends past the pre-determined EPZ. Broadcast media may be used to notify these residents located outside the EPZ if immediate evacuation or sheltering actions need to occur. Pembina will work with the local authority to coordinate response actions, as required, outside the EPZ

Prior to evacuation, ensure the following:

- Reception/evacuation centres have been established
- Clear evacuation routes are identified and communicated
- Evacuated locations check-in with established roadblock personnel and/or Reception Centre representatives
- Special needs locations are identified and assisted, as required

4.7.1 HVP Operations

Evacuation is recommended for incidents in which the plume is visible, and egress can occur in any direction away from the plume.

4.7.2 Sour Operations

For incidents where the public may be exposed to sour gas for long durations, evacuation should be used as the primary public protection measure when the public can be safely removed from the area during or prior to an emergency. Evacuation begins in the IIZ and expands outward into the PAZ (downwind of the release) so that members of the public are not exposed to H_2S.

Typically, residents within the EPZ but outside of the PAZ will be contacted and advised to initially shelter-in-place pending further instructions. A shift in wind direction will require immediate re-evaluation of the PAZ and the need for additional evacuation and/or sheltering.

Pembina must continually perform air quality monitoring within the EPZ. Monitoring results will dictate areas where evacuation is required. In the absence of monitored readings, responders should advise residents to shelter-in-place.

4.7.2.1 Sour Operations – Alberta Evacuation Requirements

H_2S Concentrations in Unevacuated Areas	Actions in the unevacuated areas
1 to 10 ppm (3 minute average)	Notify persons who requested notification so that they may voluntarily evacuate before exposure to H_2S.
Above 10 ppm (3 minute average) *	Assess local conditions and notify all persons to evacuate or shelter-in-place.
*Note: If monitored levels over the 3 minute interval are declining (i.e., three readings show a decline from 15 ppm to 10 ppm to 8 ppm over 3 minutes), evacuation may not be necessary even though the average over the 3 minute interval would be 11 ppm. Approval holder's should use proper judgment in determining if evacuation is required.	
SO_2 Concentrations in Unevacuated Areas	Actions in the unevacuated areas
5 ppm (15 minute average)	Notify all persons to evacuate immediately.
1 ppm (3 hour average)	
0.3 ppm (24 hour average)	

4.7.2.2 Sour Operations – BC Evacuation Requirements

H_2S Concentration	Requirement
1 to 9 ppm	Individuals who requested notification so that they can voluntarily evacuate before any exposure to H_2S must be notified.
10 ppm and above	Local conditions must be assessed, and all persons must be advised to evacuate and/or shelter.
Note: if monitored levels over the 3 minute interval are declining (i.e., three readings show a decline from 15 ppm to 10 ppm to 8 ppm over 3 minutes) evacuation may not be necessary even though the average over the 3 minute interval would be 11 ppm. Licensees should use proper judgment in determining if evacuation is required.	
SO_2 Concentrations	Requirement
1 to 4 ppm	Individuals who requested notification so that they can voluntarily evacuate before any exposure to H_2S must be notified.
5 ppm and above	Local conditions must be assessed, and all persons must be advised to evacuate and/or shelter.

4.7.3 Rover Personnel

Pembina and/or contract personnel will be dispatched to identify and advise public protection measures to transients, area users or locations where the public may gather within the EPZ or impacted area. Rover personnel will also confirm evacuation of residents and businesses contacted by telephone or where no telephone contact has been made.

4.7.4 Reception Centre

A Reception Centre may be activated when members of the public within the EPZ are displaced due to an emergency. The Receptions Centre(s) is established at a safe distance from the emergency site.

To ensure a coordinated response, the Reception Centre(s) is ideally activated jointly by Pembina and the local authority. These agencies have pre-established locations throughout the Municipality and should be notified early to discuss site options.

Hotels/Motels may be considered in situations where immediate access is required, or a location is required outside of normal business hours.

- The Reception Centre Group Supervisor is responsible for activating the Reception Centre, and meeting and registering evacuees. This role may be filled by the local authority or a local social services group.
- The Notification Group (if members of the public are contacted by phone) or Rovers (if members of the public are contacted in person) must ask for alternate destinations and phone numbers in the event evacuees choose not to check in at the Reception Centre.
- Designated Reception Centre locations are referenced in the applicable Area or supplemental plan(s).

Refer to Appendix - Forms for a copy of the Reception Centre Registration Form.

4.7.5 Special Considerations

Special procedures may be required for evacuating public facilities. If large numbers of people are involved, assistance with transportation (e.g., using buses) or changes in the normal notification procedures may be required. Pembina will coordinate efforts with the person in charge of that specific facility and the local authority.

Public concerns about livestock and pets are to be expected in emergency situations. Most emergencies involving HVP pipelines or releases from facilities have a limited duration and will likely not require residents to be away from their homes for extended periods of time. Public safety is the primary purpose of the response; however, when possible, residents will be advised to take their pets to the Reception Centre and/or to another pet-friendly accommodation. Actions involving livestock will be addressed on a case-by-case basis.

4.7.6 Return of Evacuees

The decision to permit the return of persons shall be made by Pembina, in consultation with the regulatory agency (i.e., AER, CER, BCER etc.), local authority, health authority and provincial emergency management agency.

4.8 Ignition

Until such time that a decision has been made to intentionally ignite a release, steps should be taken to minimize any chance of unplanned ignition in the area.

Ignition criteria and considerations are different for HVP and Sour Gas (H_2S) products.

The decision to ignite is assigned to a company representative on site and is based upon the following ignition considerations below. Time permitting; consultation with the IC, ECM, and regulator should be conducted.

Lead regulatory agencies may make the decision to ignite a release if the licensee does not agree to ignite the release or is not prepared to take the necessary steps.

4.8.1 Ignition – HVP Operations

Energy Safety Canada's Vapour Plume Ignition Training (2012) course materials suggest that in the case of a HVP product release, the heavier-than-air plume may tend to move along the ground, following surface contours and collecting in lower lying areas. There is a high probability of flammable product/air mixtures forming and potentially igniting accidentally.

Ignition of such an uncontrolled product release should be considered only as a last resort. A number of considerations for and against plume ignition are listed below.

Considerations for ignition:	• Immediate threat to human life (e.g. sour gas or HVP product vapour plume) • Low likelihood of successful near-term control of the release • Immediate threat to environmentally sensitive areas
Considerations against ignition:	• Remote location with little or no human habitation • Low probability of product burn being sustained (e.g. low release pressure, entrained moisture, high wind, etc.) • Unacceptable collateral damage (e.g. drilling rig, adjacent wells, structures, forest fire potential, etc.) • Limited product volume (e.g. short pipeline segment affected) • High probability of successful control of release onsite (e.g. well control) • Potential for other control options (e.g. diverting, isolation, etc.) • Unacceptable level of risk to the ignition team (e.g. high probability of death while attempting to ignite a release)

Flammability Range

The Flammable Range (Explosive Range) is the concentration range of a gas or vapor that will burn (or explode) if an ignition source is introduced. Below the explosive or flammable range, the mixture is too lean to burn; above the upper explosive or flammable limit the mixture is too rich to burn. The limits are commonly called the "Lower Explosive or Flammable Limit" (LEL/LFL) and the "Upper Explosive or Flammable Limit" (UEL/UFL). The following information is provided to assist with the initiation of worker and public protection measures.

Product	Lower Explosive or Flammable Limit (LEL/LFL) (% by volume of air)	Upper Explosive or Flammable Limit (UEL/UFL) (% by volume of air)	IDLH (ppm)
Butane	1.8	8.41	-U-
Ethane	3	12.4	-A-
Methane	5	15	-A-
Pentane	1.5	7.8	1500
Propane	2.1	10.1	2100

Legend					
A	Asphyxiant	IDLH	Immediate danger to life and health	U	Data not available

The Alberta OH&S Occupational Limit is 20% of the LEL. Pembina's limit is 10% of the LEL. Based on monitoring data if the concentration of a flammable vapour or gas is greater than 10% of the LEL, consideration to evacuate members of the public should be evaluated.

4.8.2 Ignition – H2S Release

Ignition is the final means of providing public protection from a release of sour gas if the following criteria are met. Ignition does not, by itself, negate the need for continuing with an evacuation. It does, however, have an impact on the urgency of the notification or evacuation activities being carried out.

If an immediate threat to human life exists and there is not sufficient time to evacuate the Initial IIZ, PAZ or EPZ, qualified onsite personnel are authorized to ignite the release, and their decision to ignite will be fully supported by Pembina.

4.8.2.1 H2S Ignition Criteria - Alberta

During the release of H_2S, assess the following:

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

IGNITE THE RELEASE IF ANY OF THE FOLLOWING CONDITIONS ARE MET:

- Required evacuation of the response zones has not occurred
- Monitored H_2S concentrations exceed 10 ppm over a 3-minute average in unevacuated parts of the EPZ – If monitored levels are declining, the situation needs to be continuously assessed for ignition.
- Monitored H_2S concentrations exceed 1 ppm (1-hour average) in urban density developments
- Monitoring is not possible due to weather or other unforeseen circumstances
- The release cannot be brought under control in the short term (ignition decision will be made in consultation with the AER)

IGNITION MUST OCCUR WITHIN 15 MINUTES OF THE DECISION OT IGNITE

- Carry out pre-ignition planning
- Attempt ignition

Source: AER Directive 71, Appendix 5, Assessment and Ignition Criteria Flowchart

4.8.2.2 H2S Ignition Criteria – British Columbia

In certain circumstances, the ignition of flammable products being released into the atmosphere may be the recommended option for mitigating the risk of human exposure to hazardous substances such as hydrogen sulfide. The following criteria should be considered:

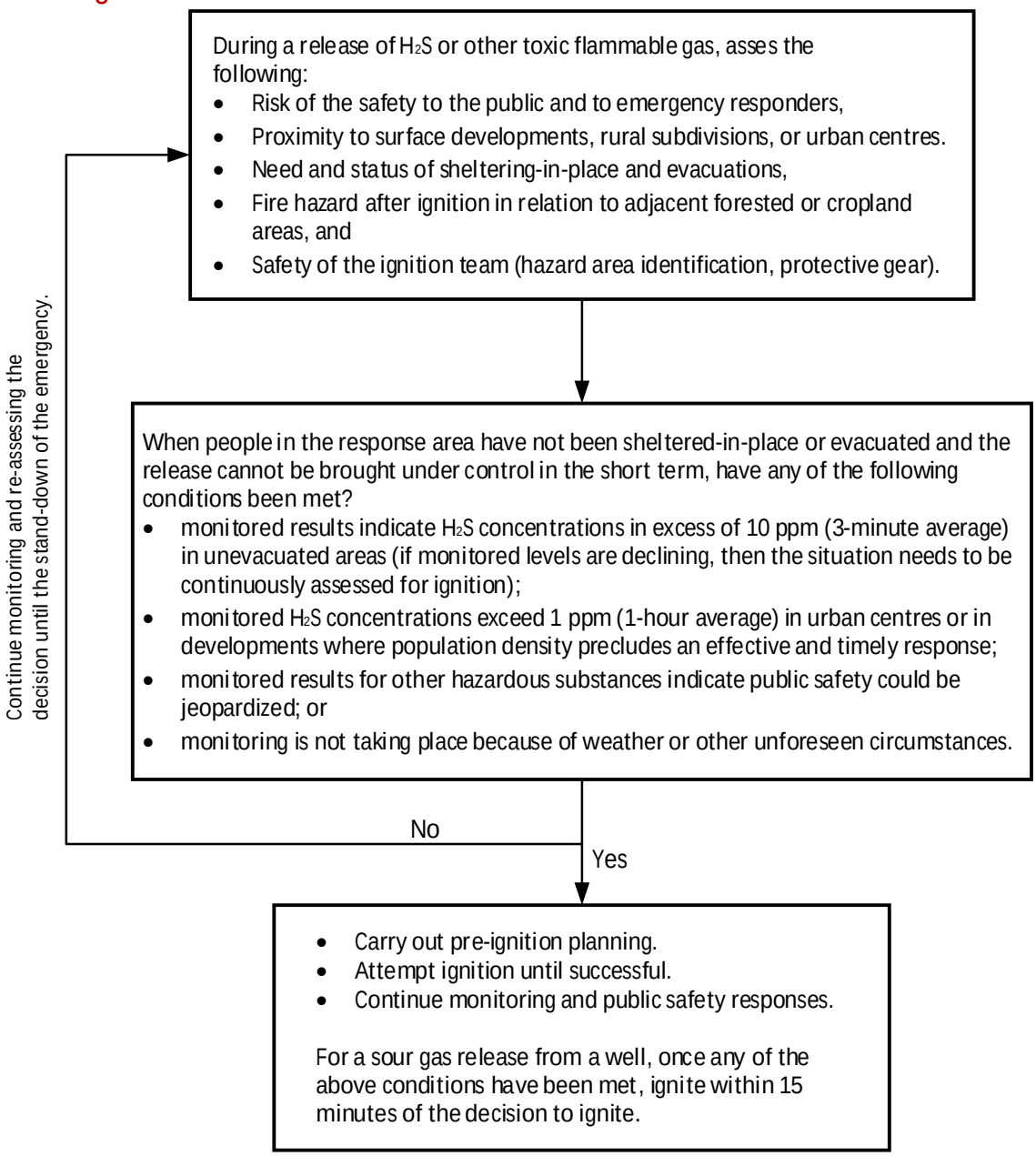
- Safety and health risks to emergency personnel
- Proximity of release to public areas
- Availability of air monitoring equipment and personnel
- Detectable concentration of H_2S and/or flammable gases near the source of the release and within the EPZ
- Weather conditions
- Duration of the release and potential volume
- Impacts to livestock
- Impacts to other values at risk including property, timber, or infrastructure

Decision to Ignite

In the event of planned ignition or immediate unplanned ignition:

- Evacuate incident site
- Relocate hazard boundaries to isolate based on heat exposure and air monitoring data
- Continue air quality monitoring for health hazards in conjunction with health services
- Conduct public notifications and shelter or evacuate as directed by health services
- Prepare to re-ignite if required

4.8.2.3 Ignition Criteria – Other Jurisdictions



Source: CSA Standard Z246.2:23, Figure A.5

4.8.2.4 Ignition Procedure – Manual/Flare Gun

The ignition team should be certified in HVP product and/or H_2S ignition and be properly equipped to ignite the release. Follow ignition procedures:	
1	Evacuate all people not directly involved in the actual ignition.
2	Evaluate the terrain for a protected ignition position. When igniting a vapor cloud or large gas cloud, workers must remain as far back from the vapor as possible and sheltered if possible, due to the large forces produced and heat radiated.
3	Make sure an equipped back-up team, ambulance, and first aid are available.
4	A two-person ignition team equipped with and wearing breathing equipment, heat protective clothing, gloves, and hearing protection will be assembled. The ignition team will have monitors calibrated to the product being ignited and will monitor incident area prior to ignition.
5	The attachment of safety lines to ignition team members will be at the discretion of the Response Branch Director who will evaluate terrain, effluent characteristics and routes in and out of the ignition area.
6	Approach the ignition area to approximately 100 metres from plume; monitor the lower explosive limit; if a safe atmospheric environment exists, ignite the effluent from the upwind side.
7	Using a flare shotgun or pistol, aim the flare to a point above the main plume where air and gas have mixed to form a combustible mixture. Approximately 30 flare shells must be available in case some do not work, and for relighting if the fire goes out.
8	The Response Branch Director will advise the Ignition Group Supervisor and ignition team of the possible air shock and heat flash that will occur upon a vapor ignition. Upon firing the flare, the team will assume a physical position that is the most protective – turn away from the flash area and lie flat on the ground or behind a solid barrier.
9	The Response Branch Director will advise the IC and ECM once ignition has occurred.

4.9 Toxic Gas Toxicity & Exposure Tables

Toxicity tables are available for Hydrogen Sulphide (H_2S) and Sulphur Dioxide (SO_2) on the next pages (Alberta and British Columbia jurisdictions).

Refer to Safety Data Sheets (SDS) for complete product details, including exposure limits, potential health effects, and response measures.

4.9.1 Hydrogen Sulphide (H2S)

Acute Health Effects of H_2S – Alberta	
Concentration H_2S in Air (ppm)	Description of Potential Health Effects
1	A noticeable odour that may be offensive to some individuals. People may temporarily experience mild symptoms of discomfort, including nausea, headache, and irritability due to the odour. Asthma symptoms may worsen.
10-20	An obvious offensive odour. Temporary eye irritation may occur after a single exposure and last several hours. Symptoms include mild itchiness, dryness, increased blink reflex and slight watering. Some people may experience headaches, nausea and vomiting. Symptoms of asthma, bronchitis or other forms of chronic respiratory disease may worsen.
50	A strong, intense offensive odour that may irritate eyes and breathing passages. Eyes may be itchy, stinging, and red with increased blinking, tearing and tendency to rub eyes. Breathing passages could feel tingly or sting, with increased tendency to clear throat and cough. Symptoms of pre-existing respiratory disease may worsen. No permanent injury to eyes or breathing passages is expected unless exposure is prolonged. Odour–sensitive individuals may experience headaches, nausea, vomiting and diarrhea.
100	Initially there is a strong objectionable odour that lessens with prolonged exposure due to olfactory “fatigue.” Eyes and breathing passages are often irritated within one hour of exposure. Eyes may be sore, stinging, burning, tearing, redness, swelling of eyelids, and possible blurred vision. Respiratory irritation may include sore throat, cough, soreness or stinging of breathing passages, and wheezing. The symptoms of asthma, bronchitis or other forms of chronic respiratory disease will worsen. Odour may cause headache, nausea, vomiting and diarrhea.
250	There may or may not be an odour present due to olfactory paralysis. Eyes and breathing passages will become irritated within minutes of exposure, and the irritation will worsen with longer exposure. The outer surface of the eyes and inner eyelids will be inflamed, red and sore. Eyes will begin watering and tearing immediately and vision may be blurred. Eyes may be permanently harmed if exposure is prolonged. Respiratory irritation will include sore throat, cough, difficulty breathing, soreness of chest, and wheezing. Asthma symptoms will worsen. People may experience “systemic” effects, including headache, nausea and vertigo depending on duration of exposure.

Acute Health Effects of H_2S – Alberta	
Concentration H_2S in Air (ppm)	Description of Potential Health Effects
500	No odour is present due to olfactory paralysis. Severe irritation and possible permanent injury to the eyes and breathing passages within 30 minutes of exposure. Lung and breathing passage damage may cause "chemical pneumonia" following exposure if the exposure was prolonged. Systemic effects involving the central nervous system may occur within one hour of exposure and include headache, anxiety, dizziness, loss of coordination and slurred speech. People may lose consciousness or collapse suddenly and die if exposure persists.
750	No odour is present due to olfactory paralysis. Central nervous system effects will be most obvious, and could include anxiety, confusion, headache, slurred speech, dizziness, stumbling, loss of coordination, and other signs of motor dysfunction. People may lose consciousness, collapse suddenly and possibly die, if exposure continues for more than a few minutes. Lung and breathing passage damage will likely cause "chemical pneumonia" among survivors.
1000	Immediate "knock-down" and loss of consciousness. Death within moments to minutes. Immediate medical attention needed if victim is to survive.

Source: Alberta Health Services. Information adapted from Technical Advisory Committee on Public Health and the Oil and Gas Industry, Environmental Public Health Manual for Oil and Gas Activities in Alberta, 2007

H_2S Toxicity Table – British Columbia	
Concentration in parts per million (ppm)*	Observations and health effects
<1	Most people smell "rotten eggs."
3 to 5	Odour is strong.
20-150	Nose and throat feel dry and irritated. Eyes sting, itch, or water; and "gas eye" symptoms may occur. Prolonged exposure may cause coughing, hoarseness, shortness of breath, and runny nose.
150 to 200	Sense of smell is blocked (olfactory fatigue).
200 to 250	Major irritation of the nose, throat, and lungs occurs, along with headache, nausea, vomiting, and dizziness. Prolonged exposure can cause fluid buildup in the lungs (pulmonary edema), which can be fatal.
300 to 500	Symptoms are the same as above, but more severe. Death can occur within 1 to 4 hours of exposure.
>500	Immediate loss of consciousness. Death is rapid, sometimes immediate.
* 1 ppm = 1 part of gas per million parts of air by volume H_2S levels of 100 ppm and higher are considered immediately dangerous to life and health (IDLH).	

Source: WorkSafeBC. Hydrogen Sulfide in Industry Factsheet (R02/10)/PH16

4.9.2 Sulphur Dioxide (SO2)

Acute Health Effects of SO_2 – Alberta	
Concentration SO_2 in Air (ppm)	Description of Potential Health Effects
0.1	Transient bronchoconstriction[1] in sensitive exercising asthmatic individuals that ceases when exposure ceases.[2]
0.3-1	Possible detection by taste or smell.
0.75	Transient lung function changes in healthy, moderately exercising, non-asthmatic individuals.
1-2	Lung function changes in healthy non-asthmatics. Symptoms in asthmatics would likely increase in severity. There may be a shift to clinical symptoms from changes detectable only via spirometry.
3.0	Easily detected odour.
6-12	May cause nasal and throat irritation.
10	Upper respiratory irritation, some nosebleeds.
20	Definitely irritating to the eyes; chronic respiratory symptoms develop; respiratory protection required.
50-100	Maximum tolerable exposures for 30 – 60 minutes.
>100	Immediate Danger to Life (NIOSH recommendation).

1. At low levels, bronchoconstriction was generally observed as changes in airway conductance detectable by spirometry rather than as clinical symptoms.
2. It should be noted that clinical studies on humans are generally designed to elicit a response and consequently subject study volunteers to challenging conditions such as exercising, mouth breathing, cold, dry air, etc. Real-life responses in asthmatics should be viewed as being individual-specific dependent on severity of asthma, whether the individuals are medicated or not, how cold and/or dry the air is, mouth breathing (vs. nose-breathing, which can act as an effective scrubber mechanism), and exercise.

Source: Alberta Health Services. Information adapted from Technical Advisory Committee on Public Health and the Oil and Gas Industry, Environmental Public Health Manual for Oil and Gas Activities in Alberta, 2007.

5.0 EXTERNAL SUPPORT & REGULATORY REPORTING

This section provides information on the regulatory agencies specific to our areas of operations, including the role and authority of regulator(s)/governments agencies, notice and reporting requirements, support capacity during incidents, and contact information, where appropriate.

Pembina recognizes that every incident is unique and will require specific response actions, supports, and resources. Accordingly, notification requirements should be reviewed in context of the specific event, and actioned by the appropriate responder or SME, as required.

Engaging SMEs to advise on notification requirements will ensure the appropriate information is available to all responders.

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5.1 Alberta

5.1.1 Alberta Overview

The Alberta Energy Regulator (AER) is the default lead agency in Alberta as they are the regulator for the petroleum industry – they will engage the expertise, assistance and cooperation of other agencies as determined by the individual incident.

The Government of Alberta, Petroleum Industry Incident Support Plan details the responsibilities of government departments, boards, and agencies designated to provide special services during an emergency. If the emergency escalates in seriousness, the Municipality may establish a Municipal Emergency Coordination Centre (ECC), and Alberta Emergency Management Agency (AEMA) may establish a Provincial Emergency Coordination Centre (PECC).

During a response when an ECC is required, the AER will establish an ECC at the Local AER Field Office. The AER encourages combining the industry and municipal EOCs into a single Regional Emergency Coordination Centre (RECC) location. The location of the RECC will be determined by discussion between Pembina and Municipal Emergency Management at a Level 2 Emergency. The AER will expand their ECC if a RECC is not established. This would make for enhanced coordination of all resources engaged in the emergency, as well as easily facilitate Unified Command (UC).

5.1.2 Establishing a Regulatory Level of Emergency

The AER uses a prescribed matrix to determine the Regulatory Level of Emergency. The Liaison Officer (or IC, where a Liaison Officer is not assigned), supported by the IMT, and the AER will determine the Regulatory Level of Emergency as soon as possible. First responders, applicable government agencies, and impacted stakeholders must be kept informed of the status of the Regulatory Level of Emergency throughout the response.

In Alberta, the AER may consult other applicable government agencies and confirm with the licensee that the emergency downgrade or stand-down is appropriate.

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5.1.3 Regulatory Level of Emergency Classification Matrix – Alberta Energy Regulator (AER)

Table 1. Consequence of Incident

Rank	Category	Example of consequence in category
1	Minor	• No injuries or public health effects • No environmental effects • Reportable liquid release is contained on site • Gas release effects are on site only • Minor on-site structure or geological feature damage • No or low public or media interest
2	Moderate	• Minor injuries or minor public health effects • Minor environmental effects • Reportable liquid release is not contained on site • Gas release effects may potentially extend beyond the site • Moderate on-site structure or geological feature impact • Public or media interest
3	Major	• Injuries requiring hospitalization or potential public health effects require precautionary public protection measure • Liquid spill extends beyond the site-not contained, potential for affecting water bodies and sensitive receptors • Gas release effects extend beyond the site • Major on-site structure or geological feature damage • Public or media interest
4	Catastrophic	• Multiple injuries, fatalities, or public health effects requiring public protection measures • Liquid spill extends beyond the site-not contained and is affecting water bodies, or sensitive receptors • Gas release effects extend beyond the site • Catastrophic on-site structure or geological feature damage • High public or media interest

Table 2. Likelihood of Incident Escalating**

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

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

- The combined total when adding the values from the "Rank" column in Table 1 & Table 2 will result in a number that can be used to determine the classification or "Risk Level" in Table 3.
- Use the colour assigned to the determined "Risk Level" in Table 3 to identify the Level of Emergency and the appropriate "Response by Incident Level" in the table to the right.

Table 3. Incident Classification

Risk Level	Regulatory Emergency Level
Very Low – 2-3	Alert: An incident that can be handled on site by the approval holder through normal operating procedures and is deemed a very low risk to the public.
Low – 4-5	Level 1 Emergency: The incident presents no danger outside the approval holder's property or threat to the public and has a minimal environmental impact. Approval holder personnel can manage the incident themselves with immediate control of the hazard. There is little or no media interest.
Medium - 6	Level 2 Emergency: The incident presents no immediate danger outside the approval holder's property but could potentially extend beyond the approval holder's property. Outside agencies must be notified. Imminent control of the hazard is probable, but there is a moderate threat to the public or the environment or both. There may be local and regional media interest.
High – 7-8	Level 3 Emergency: The safety of the public is in jeopardy from a major uncontrolled hazard. There are likely significant and ongoing environmental impacts. Immediate multiagency municipal and provincial government involvement is required.

Response By Incident Level

Responses	Alert	Level-1 Emergency	Level-2 Emergency	Level-3 Emergency
Communications				
Internal	Discretionary, depending on approval holder's policy.	Notification of off-site management.	Notification of off-site management.	Notification of off-site management.
External public	Courtesy, at approval holder's discretion.	Mandatory for individuals in the EPZ who have requested notification.	Planned and instructive in accordance with the specific ERP.	Planned and instructive in accordance with the specific ERP.
Media	Reactive.	Reactive, as required.	Proactive media management to local or regional interest.	Proactive media management to national interest.
Government	Reactive. Notify AER if public or media is contacted.	Notify local AER Field Centre. Call local authority and health authority if public or media is contacted.	Notify local AER Field Centre, local authority, and health authority.	Notify local AER Field Centre, local authority, and health authority.
Actions				
Internal	On site, as required by the approval holder.	On site, as required by the approval holder. Initial response is in accordance with the AER-approved ERP or Corporate ERP.	Predetermined public safety actions are under way. Corporate management team alerted and may be engaged to support on-scene responders.	Full implementation of incident command system.
External	On site, as required by the approval holder.	On site, as required by the approval holder.	Potential for multiagency response (i.e., operator, municipal, provincial, or federal).	Immediate multiagency response (i.e., operator, municipal, provincial, or federal).
Resources				
Internal	Immediate and local. No additional personnel required.	Establish what resources are required.	Limited supplemental resources or personnel required.	Significant resources are required.
External	None.	Begin to establish resources that may be required.	Possible assistance from government agencies and external support services.	Assistance from government agencies and external support services are required.

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5.1.4 External Contact Matrix – Alberta

Alberta Notification Matrix	Initial Responders			Lead Agencies						Supporting Agencies & Other Government Contacts													
This matrix provides guidance on conducting notifications to government agencies as required. • Select all incident types that apply • Refer to Provincial and Federal Agency tabs for specific contact instructions • Refer to area specific plan(s) for contacts Legend ✓ = Required Contact ■ = Contact if applicable to incident	Ambulance Services	Fire Departments	Police/RCMP	AER - Alberta Energy Regulator	AEMA - Alberta Emergency Management Agency	EPA - Alberta Environment & Protected Areas	Local Authorities	AHS - Alberta Health Services	CER - Canada Energy Regulator	OHS - Occupational Health & Safety	WCB - Workers' Compensation Board	ABSA - Alberta Boilers Safety Association	ASCA - Alberta Safety Codes Authority	Ministry of Forestry, Parks, & Tourism	Alberta EDGE	TSB - Transportation Safety Board	ERAC - Emergency Response Assistance Canada	CANUTEC	ECCC - Environment & Climate Change Canada	DFO - Department of Fisheries & Oceans	ISC / RO / FNIHB	IOGC - Indian Oil & Gas Canada
Incident Type																							
Product Release - Liquids	■	■	■	✓	■	✓	✓	■	✓	■	■	■		■	■	✓	■	■	■	■	■	■	
Product Release - Gas	■	■	■	✓	■	✓	✓	■	✓	■	■	■		■	■	✓	■	■	■	■	■	■	
Transportation Incident - Involving Product Release (Road/Rail/Air/Marine)	■	■	✓	✓	■	✓	✓	■	✓	■	■			■	✓	✓	✓	✓	■	■	■	■	
Fire/Explosion/BLEVE	■	✓	✓	✓	■	✓	✓	✓	✓	✓	■	■	■	■	■	✓	■	■	✓	■	■	■	
Serious Injury or Death - Including Vehicle Accidents	✓	■	✓	✓				■	✓	■	■					✓							
Motor Vehicle Accident (No Injuries) - Employee	■	■	■							■	■												
Security Related Incident	■	■	✓	■		■	■	■	■	■						■							
Radiation Related Incident	■	✓	✓	✓	■	■	■	✓	■	■	■					■		■			■	■	
Electrical Incident	■	■	✓	✓					■	■	■		✓										
Pressure Vessel or Piping Incident	■	■	✓	✓			✓	■	■	■	■	✓	✓						■				
Crosses Boundary (Interprovincial or International)	■	■	■	■		■	■		✓							✓							
Incident Involving E2 Regulated Substance	■	✓	■			■	✓	■	■	■	■			■	■	■	■	■	■	■	■	■	
Impacts First Nations & Indigenous Groups	For immediate life safety messaging, contact the Indigenous group directly and notify Pembina's Indigenous Engagement group after you have done so. For all other communications, contact Pembina's Indigenous Engagement group first to coordinate messaging.																				■	■	
Impacts Airspace	Request airspace closures through Transport Canada's Aviation Operations Centre (AVOPS) and Notice to Airmen (NOTAM) through NAV Canada.																						

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5.1.5 Agency Information

Alberta Agencies				
1. External Contact Matrix – Alberta will describe who you need to call – this table will provide the details about Alberta Lead Agencies. 2. Ensure you also check Canada – Federal Regulator(s) for additional information and directions for immediate and subsequent notifications. 3. Area specific contacts are available in the applicable Area-/Asset-specific ERP. 4. Responders are also encouraged to seek further information from relevant Pembina personnel/Subject Matter Expert (SME).				
Agency	Roles and Responsibilities During Emergencies What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Alberta Energy Regulator (AER)	The AER is the default lead agency in Alberta as they are the regulator for the petroleum industry – they will engage the expertise, assistance and cooperation of other agencies as determined by the individual incident. • Alert other applicable government and emergency agencies such as Alberta Environment & Protected Areas, Alberta Forestry, Parks and Tourism, Alberta Health Services, Alberta Emergency Management Agency, and Employment & Immigration - Occupational Health & Safety. • Provide representation at the incident site or ICP. • In conjunction with Pembina, estimate the product release rate. • If required, can issue a Fire Hazard (FH) order, which prevents anyone from entering the hazardous area. This allows legal road and access closure. • If required, can request a Notice to Airmen (NOTAM) restricting passage of aircraft over a designated hazardous area. • If required, can establish an EOC at the local AER Field Centre until Pembina or the local authority establishes a Regional EOC. • Ensure Pembina is advising the public of potential danger and conducting evacuation or sheltering in place. • If required, ensures Pembina establishes communications links with, and/or provide representation at, the government EOC. • Carry out investigations. • Notify all participants when the event has concluded and there is no longer any hazard to the public. AER may notify the ECCC in the event of incidents involving regulated substances at E2 registered facilities, incidents involving PCBs or any spills on first nations lands, in National Parks, into river or lake systems containing fish, or onto railway ROW. This notification does not remove Pembina's requirement to notify ECCC.	What must be reported: • Any substance release that may cause, is causing, or has caused an adverse effect* • Any unrefined product release of more than 2 m^3 on lease • Unrefined product release off lease • Any substance release into a waterbody • Any pipeline release or pipeline break (including during pressure testing) • Pipeline hits • Any uncontrolled gas release of more than 30 000 m^3 • Any well flowing uncontrolled • Any fire caused by a flare or incinerator • Any fire causing a loss of more than 2 m^3 of oil or 30 000 m^3 of gas, or causing damage to a wellhead • Any fire that occurs on an oilsands site that results in the deployment of major fire-fighting equipment How to report The release should be reported as soon as a person knows (or ought to have known of the release). This means reporting immediately at the first available opportunity. Calls can be made to the 24-Hour Energy & Environmental Response Line at 1-800-222-6514. This is a one call number for AER and Alberta Environment & Protected Areas (EPA) Minimum information to include: • The location and time of the release • A description of the circumstances leading up to the release • The type and quantity of the substance released • Details of any actions taken and proposed to be taken at the release site to contain, recover, and remediate the release • A description of the release location/immediate surrounding area • The AER authorizations number(s) if available	After notifying about a release, companies must complete a release report to record the release type, volume, location, any adverse effects on the environment, and other information. Once completed, the report must be submitted to the appropriate AER field centre within seven days of the incident. Check with appropriate SME for further details.	Mobile Incident Command Units: can deploy to incidents to establish the base of operations for government agencies working to coordinate the government response to an emergency.

Alberta Agencies			
Agency	Roles and Responsibilities During Emergencies What they do/How they can help	Immediate Notice/Verbal Report	Additional Supports
Ministry of Environment & Protected Areas (EPA)	Spills/Releases/Fish & Wildlife Alberta Environment and Protected Areas (EPA) is responsible for ensuring environmental impacts are mitigated during non-energy industry emergencies. They may support during energy industry emergencies, as required or requested. • Management of all off-site air/water quality monitoring activities – reports to the Response Branch Director. • Determine the area(s) of risk from the gas release; ensure that adequate equipment is available for monitoring. • Monitor discharges and mitigate impact of release related liquids entering watercourses. • Provide representatives to the incident site or the REOC on a 24-hour basis as required. • Monitor impacts on the environment and impacted species and provide direction on recovery efforts.	The 24-Hour Energy & Environmental Response Line (1-800-222-6514) is a one call number. See AER for reporting details.	Maintains emergency response resources, including a specialty air monitoring team and equipment used to oversee and verify air monitoring during incident response. Can act as SME, as required.
Alberta Health Services (AHS)	Provides technical expertise on potential health impacts to the public, linkages to health resources and considers provincial health system impacts. • AHS will assess the potential for and implications of human health issues and coordinate the provision of information and support to and from AHS. • Provide health and medical technical expertise as requested and as appropriate. • AHS in collaboration with AHS will monitor and assess the impact of health system and collaboration with AHS and other GoA ministries to communicate knowledge of situation to stakeholders (federal and provincial). • AHS will provide scientific advice and recommendations on human health risk assessments when addressing site specific cleanup, site specific de-commissioning and process impact assessments.	Contact Alberta Health Services (AHS) if the incident has the potential to impact public health (e.g., contaminated drinking water) Verify that AHS and/or FNIH (First Nations & Inuit Health) have been notified of the emergency – use the 24-Hour Emergency Notification number and email below for all notifications across Alberta: Phone: 1-844-755-1788 Email: edp@ahs.ca Check with appropriate Pembina SME for further details on reporting requirements.	AHS may provide safety messaging to the public and will relay situational information to the local health system.
Local Authorities	County/MD/Municipality Emergency Management Services/Public Works Emergency Services Act requires Local Authorities to be responsible for emergency planning and for the direction and control of emergency response in their jurisdiction. The plans outline measures and sources of assistance that can be obtained to support Pembina's emergency response effort. The local authority will provide assistance with resources and manpower as follows and in accordance with their Municipality/County policy. • If required, activates their municipal emergency operations centre and coordinates municipal activities at this centre. • Upon request, may assist with setting up and administration of the Reception Centre. • May assists with arrangements of temporary accommodations for residents who have been evacuated. • May assist with the establishing, set up and maintenance of roadblocks as resources and staff training permit/initiates public protection methods as required. • Ensures that if available, local emergency services and resources are available to the level that they are trained. • May assist with off-site fire protection where accessible. • Establish a public information service, including use of the news media to inform and instruct the public of the emergency, as required.	Report immediately at the first available opportunity Contact information available in the applicable Site-Specific Plan.	Activates the Emergency Public Warning System (EPWS) to alert public to life threatening hazards as required according to criteria set out by Alberta Emergency Management Agency (AEMA) If necessary, declares a "State of Local Emergency" to provide local authorities with special powers (mandatory evacuation, use of or entry into private property, conscription, demolition of private property structures for safety reasons, etc.) Assist as required with post incident damage assessment

Alberta Agencies				
Agency	Roles and Responsibilities During Emergencies What they do/How they can help	Immediate Notice/Verbal Report		Additional Supports
Alberta Emergency Management Agency (AEMA)	AEMA is an agency of Alberta Municipal Affairs. They are responsible for coordinating Government of Alberta (GoA) emergency management and assisting local authorities with emergency response, if required. • Request that Alberta Emergency Management Agency identify the affected local authorities and implement Emergency Services. The Emergency Management Field Officer may provide assistance in contacting some or all of the local authorities. • Coordinate notification of affected government departments, including affected municipalities and Alberta Health Services. Note: The AER or EPA will advise, as required. • Coordinate requests for provincial/federal resources. • Responsible to assist in the coordination of evacuation and reception plans within municipalities. • Provide ongoing situation reports to appropriate provincial officials. • Activates a POC if required.	Notify as indicated by the External Contact Matrix – Alberta. Check with appropriate Pembina SME for further details on reporting requirements.		As requested/available, depending on incident requirements.
Alberta Occupational Health & Safety (OHS)	When the response plan has been put into effect Occupational Health and Safety evaluates the safety of occupants at the work site and ensures that necessary precautions are taken to protect the workers' health and safety during the emergency. • Ensure that the appropriate employers provide equipment and personnel required on site to monitor worksite hazards. • Provide a representative to the incident site and the REOC on a 24-hour basis, as required.	The Director of Work Site Services Inspection must be notified immediately in the event of a serious accident or death at the work site as to the time, place and nature of the serious accident or death. Contact OHS and report when: an injury or accident results in death; an injury results in a worker being admitted to a hospital; a "potentially serious" incident that had the potential to cause serious injury, but did not; there is an unplanned or uncontrolled explosion, fire or flood that causes a serious injury or that has the potential to cause a serious injury; there is a collapse or upset of a crane derrick or hoist or; there is a collapse or failure of any component of a building or structure necessary for its structural integrity.	Check with appropriate Pembina SME for further details on reporting requirements.	
Alberta Forestry, Parks & Tourism	If a forest fire is associated with the emergency, forestry personnel: • Maintain emergency response resources to provide firefighting assistance. • Provide advice and input on the ignition decision. • Act as the liaison between farming/ranching community and the Government of Alberta (GoA). • Assist with campground and transient evacuation procedures. • Notify all forestry personnel of the incident hazards. • Provide a representative to the incident site and the REOC on a 24-hour basis, as deemed necessary.	Notify as indicated by the External Contact Matrix – Alberta. Check with appropriate Pembina SME for further details on reporting requirements.		

Alberta Agencies			
Agency	Roles and Responsibilities During Emergencies What they do/How they can help	Immediate Notice/Verbal Report	Additional Supports
Alberta EDGE	Alberta Environmental and Dangerous Goods Emergencies (EDGE)* is a 24-hour emergency response centre for reporting releases, or anticipated releases of dangerous goods during any aspect of transport. • Manages TDG emergency calls and assesses the severity of dangerous goods incidents. • Liaises with AER/EPA and handles inter-departmental communication as needed during energy resources industry emergencies. • Provide response support if dangerous goods are released. • Provide assistance to emergency response personnel attending the scene of an incident in which dangerous goods are involved or may become a matter for concern.	AT-EDGE is the first call for all transportation related spills/incidents. If spill is contained on-site, Alberta Transportation and Economic Corridors (ATEC) will contact the AER. If the spill moves off-site or into a waterbody, ATEC will contact Alberta Environment and Protected Areas (EPA) and/or Environment & Climate Change Canada (ECCC). Contact ATEC or the Police if an oil & gas emergency affects a highway designated by 1, 2, or 3 digits (e.g., Hwy 2, Hwy 47, Hwy 837). Check with appropriate Pembina SME for further details on reporting requirements.	Provide information on the impacts to transportation routes. Supplies technical information to industry about TDG Regulations and associated standards.
ABSA	Alberta Boilers Safety Authority (ABSA) Safety regulator for pressure vessels and equipment in Alberta.	Unsafe conditions, accidents or fires involving pressure equipment are to be reported. Refer to ABSA Information Bulletin IB18-004 for further details on reporting requirements. Notify as indicated by the External Contact Matrix - Alberta Check with appropriate Pembina SME for further details on reporting requirements	
ASCA	Alberta Safety Codes Authority (ASCA) Safety regulator for electrical incidents/accidents.	Notify as indicated by the External Contact Matrix - Alberta Reporting of electrical incidents/accidents is governed under Safety Codes Act (Administrative Items Regulation) – Check with appropriate Pembina SME for further details on reporting requirements.	
Workers Compensation Board (WCB)	WCB has the overall responsibility for the administration of the workers' compensation system in Alberta.	Immediately report fatalities and serious injuries to the OHS Contact Centre 1-866-415-8690 Employer must report to WCB within 72 hours of being notified of an injury/illness that results in or will likely result in: • Lost time or the need to temporarily or permanently modify work beyond the date of accident • Death or permanent disability (amputation, hearing loss, etc.) • A disabling or potentially disabling condition caused by occupational exposure or activity (poisoning, infection, respiratory disease, dermatitis, etc.) • The need for medical treatment beyond first aid (assessment by a physician or chiropractor, physiotherapy, etc.) • Medical aid expenses (dental treatment, eyeglass repair/replacement, prescription medications, etc.) • Determines whether the injury or illness is caused by work. • Responds to all client inquiries forwarded by the Minister and all other elected officials.	

5.2 British Columbia

5.2.1 BC Overview

British Columbia uses the British Columbia Emergency Response Management System (BCERMS) as a comprehensive management system that ensures a coordinated and organized response to all major emergency incidents. BCERMS utilizes a unified approach to managing emergencies, with personnel trained for any type of emergency through Temporary Emergency Assignment Management System (TEAMS) and not necessarily responding as a representative of a specific government agency.

The first contacts for any emergency will be Emergency Management and Climate Readiness (EMCR) and the British Columbia Energy Regulator (BCER) who will determine the seriousness of the emergency, and the actions to be taken. The BC Ministry of Environment and Climate Change Strategy (ENV) may also be a lead agency depending on the incident type.

If Emergency Management and Climate Readiness (EMCR) determines that the emergency is of a minor nature, the BCER may initiate an EOC if required.

If the EMCR determines the emergency is a major emergency that will require an integrated response (i.e., several ministries/departments), the EMCR may establish a Provincial Regional Emergency Operations Centre (PREOC) manned by TEAMS personnel. The emergency will be managed from this location and Pembina representative(s) will be required to re-locate to assist in directing operations.

The BCER and EMCR will not assist in calling down the required ministries/departments, it is up to Pembina representative(s).

5.2.2 Establishing a Regulatory Level of Emergency

The BCER uses a prescribed matrix to determine the Regulatory Level of Emergency. The BCER requires Pembina to classify the incident immediately after becoming aware of the event using the BCER's classification matrix and selecting a Regulatory Level of Emergency that most closely describes the most severe event or consequence of the incident.

The Liaison Officer (or IC, where a Liaison Officer has not been assigned), supported by the IMT, will determine the Regulatory Level of Emergency.

First responders, applicable government agencies, and impacted stakeholders must be kept informed of the status of the Regulatory Level of Emergency throughout the response.

5.2.3 Regulatory Level of Emergency Classification Matrix – BCER

Instructions: To classify an incident, start at the top of the consequence ranking section and move down until you check one box. Then repeat for the probability ranking.

Consequence Ranking

Rank	Probability of Escalation or Control (one of the following)
4	☐ Major on site equipment or infrastructure loss ☐ Persistent and malicious equipment damage or tampering ☐ Liquid spill or gas release beyond site, affecting persons, property or the environment
3	☐ Major on site equipment failure ☐ Malicious equipment damage or tampering ☐ Liquid spill or gas release beyond site, potentially affecting persons, property or the environment
2	☐ Major on site equipment damage ☐ Kick size in excess of 3 cubic metres or shut-in casing pressure in excess of 1,000 kilopascals ☐ Persistent/multiple minor vandalism or security incidents ☐ Liquid spill or gas release on site or potentially beyond site, not affecting persons, property or the environment
1	☐ Moderate on site equipment damage ☐ Minor vandalism or facility security incident ☐ Liquid spill or gas release confined to site
0	☐ No consequential impacts

Probability Ranking

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

Incident Risk Score and Classification

Consequence _____ + Probability _____ = Risk Score _____

Notification Requirements

Risk Score	Notification Requirement
Minor (1-2)	Notify the regulator within 24 hours of becoming aware of an incident; using the online reporting tool. Minor incidents that involve a spill must also be reported to EMCR (1-800-663-3456)
Level 1 (3-4) Level 2 (5-6) Level 3 (7-8)	Notify the regulator within one hour of becoming aware of the incident; EMCR (1-800-663-3456)

Note: This matrix should be attached upon submission of an incident via the online reporting tool.

5.2.4 Emergency Notifications – During Emergency

The BCER's Emergency Management Regulation requires Pembina to notify the BCER within one hour of becoming aware of an incident classified as a Regulatory Level of Emergency equaling Level 1, Level 2, or Level 3.

5.2.5 Emergency Notifications – After a Minor Incident

A permit holder must notify the BCER within 24-hours of becoming aware of an incident classified as a Regulatory Level of Emergency equaling a Minor Incident.

For spill related Minor Incidents, EMCR is called and for a Dangerous Goods Incident Report (DGIR) number.

Minor Incidents (both spill and non-spill) must be reported by entering information into the BCER's online reporting tool within 24-hours of discovery.

5.2.6 Spill Reporting Criteria

Permit holders must consult the BC Environmental Management Act, Spill Reporting Regulation for reporting thresholds and requirements.

Source: BCER Incident Classification Matrix Guidance – October 31, 2025.

5.2.7 Other Reportable Incidents Requirements

The Incident Classification Matrix is designed to assist permit holders in determining which incidents must be reported. Some incidents may not meet the criteria outlined in the matrix but still require notification to the regulator as a minor incident. These include the following:

- Major damage to oil and gas roads
- Pipeline incidents such as spills during construction or exposed pipeline
- Seismic events M4 or above

Source: BCER Incident Classification Matrix Guidance – October 31, 2025.

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5.2.8 External Contact Matrix – British Columbia

British Columbia Notification Matrix		Initial Responders			Lead Agencies						Supporting Agencies & Other Government Contacts													
This matrix provides guidance on conducting notifications to government agencies as required. • Select all incident types that apply • Refer to Provincial and Federal Agency tabs for specific contact instructions • Refer to area specific plan(s) for contacts Legend ✓ = Required Contact ■ = Contact if applicable to incident	Agency/Resource	Ambulance Services	Fire Departments	Police/RCMP	BCER - BC Energy Regulator	EMCR - Emergency Management & Climate Readiness	ENV - Ministry of Environment & Climate Change Strategy	Local Authorities	HEMBC - Health Emergency Management BC	CER - Canada Energy Regulator	WorkSafe BC	Technical Safety BC	MOF - Ministry of Forests	BC Ministry of Agriculture & Food	MOTT- Ministry of Transportation & Transit	PSPC - Public Services & Procurement Canada	TSB - Transportation Safety Board	ERAC - Emergency Response Assistance Canada	CANUTEC	ECCC - Environment & Climate Change Canada	DFO - Department of Fisheries & Oceans	FNHA - First Nation Health Authority	IOGC - Indian Oil & Gas Canada
Incident Type																								
Product Release - Liquids		■	■	■	✓	✓	✓	✓	■	✓	✓	■	■	■	■	■	✓	■	■	■	■	■	■
Product Release - Gas		■	■	■	✓	✓	✓	✓	■	✓	✓	■	■	■	■	■	✓	■	■	■	■	■	■
Transportation Incident - Involving Product Release (Road/Rail/Air/Marine)		■	■	✓	✓	✓	✓	✓	■	✓	✓	■	■	■	■	■	✓	✓	✓	■	■	■	■
Fire Explosion/BLEVE		■	✓	✓	✓	✓	✓	✓	■	✓	✓	■	■	■	■	■	✓	■	■	✓	■	■	■
Serious Injury or Death Including Vehicle Accidents		✓	■	✓	✓	✓			■	✓	✓						✓					■	
Motor Vehicle Accident (No Injuries) - Employee		■	■	■							■												
Security Related Incident		■	■	✓	✓	✓		■		■	■						■						
Radiation Related Incident		■	✓	✓	✓	✓		■	■	■	✓						■		■			■	■
Electrical Incident		■	■	✓	✓	✓		■	■	■	■												
Pressure Vessel or Piping Incident		■	■	✓	✓	✓	■		■	■	■	✓								■		■	
Crosses Boundary (Interprovincial or International)		■	■	■	■	■	■	■		✓			■				✓						
Incident Involving E2 Regulated Substance		■	✓	■	✓	■	■	✓	■	■	■		■	■	■	■	■	■	■	■	■	■	■
Impacts First Nations & Indigenous Groups		For immediate life safety messaging, contact the Indigenous group directly and notify Pembina's Indigenous Engagement group after you have done so. For all other communications, contact Pembina's Indigenous Engagement group first to coordinate messaging.																				■	■
Impacts Airspace		Request airspace closures through Transport Canada's Aviation Operations Centre (AVOPS) and Notice to Airmen (NOTAM) through NAV Canada.																					

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5.2.9 Agency Information

British Columbia Agencies				
1. External Contact Matrix – BC will describe who you need to call – this table will provide the details about Lead Agencies. 2. Ensure you also check Federal Regulator(s) for additional information and directions for immediate and subsequent notifications 3. Area specific contacts are available in the applicable Area-/Asset-specific Plan 4. Responders are also encouraged to seek further information from relevant Pembina personnel/SMEs.				
Agency	Roles and Responsibilities During Emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Emergency Management and Climate Readiness (EMCR)	The Ministry of Emergency Management and Climate Readiness (EMCR) is British Columbia's lead coordinating agency for all emergency management activities, including mitigation, preparation, response and recovery. EMCR serves as the 24-hour incident reporting line for all incidents. • EMCR will notify the BCER on call Emergency Response Officer and initiate British Columbia's notification of government agencies including MOF, ENV, MOTT, Health Unit, WorkSafe BC, affected municipalities and all other level of government and industry, depending on the level of "coding" (notification Code: 1,2,3 is determined by the Lead Agency, ENV, or BCER); depending on the code level Standard Operating Procedures (SOP) will determine who is notified). • Provide representatives to help coordinate provincial response as required.	When a spill occurs, or there is the risk of one occurring, it must be reported immediately by calling 1-800-663-3456. This is known as the initial report or Dangerous Goods Incident Report (DGIR). The Initial Report must be completed by the responsible person (spiller) if the quantity for the substance of the spill is equal to or greater than the quantity outlined in the schedule of the Spill Reporting Regulation; or if the spill has, or might, impact a body of water. Additional information on spill reporting requirements is available in the Spill Reporting Regulation of the Environmental Management Act. When reporting a spill, the following information must be provided to the dispatcher: • The contact information for the individual making the report, the responsible person in relation to the spill, and the owner of the substance spilled • The date and time of the spill • The location of the spill site • A description of the spill site and the surrounding area • A description of the source of the spill • The type and quantity of the substance spilled • A description of the circumstances, cause and adverse effects of the spill • Details of any action taken or proposed to comply with Section 91.2 (2) of the Act (Responsible Persons - spill response fact sheet (PDF)) • Names of any provincial, federal, local, and/or first nation government agencies at the spill site • The names of any other persons or government agencies advised about the spill	Note to responders: The following spill reports do not apply to oil or gas activity(ies) governed by the Emergency Management Regulation, B.C. Reg. 204/2013: • section 5 [updates to minister] • section 6 [end-of-spill report]; and • section 7 [lessons-learned report].	

British Columbia Agencies				
Agency	Roles and Responsibilities During Emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
British Columbia Energy Regulator (BCER)	The BC Energy Regulator (BCER) plays a critical role in regulating energy activities in British Columbia, ensuring public safety and environmental protection throughout the full life cycle of energy resource activities. During a permit holder emergency, the BCER oversees the permit holder's response, ensures compliance with provincial legislation, and supports the safe management of energy resources. The BCER will, based on the severity of the incident, take the following actions: • Establish Communication with the permit holder. • Confirm the incident level with the permit holder. • Oversee the permit holder's response to the incident. • Deploy BCER representative(s) to one or more of the permit holder's command post/sites. • Activate a government emergency operations centre (EOC) at the BCER office. • Confirm stand down of the emergency. Additionally, BCER staff may take the following actions, as necessary: • Confirm the ignition decision with the operator, if time permits. • Confirm and coordinate media releases issued by the permit holder. • Issue orders to secure the incident site for investigation purposes.	Minor Incidents • Minor incidents must be reported to the BCER within 24 hours through their online reporting tool. • If the minor incident involves a spill, EMCR must also be called at 1-800-663-3456 to receive a Dangerous Goods Incident Report (DGIR) number. Level 1, 2, or 3 Emergencies Level 1, 2, or 3 emergencies must be reported to the BCER within 1 hour of the incident via calling Emergency Management and Climate Readiness (EMCR) by at 1-800-663-3456 (EMCR one call number). Oil and Gas Road Closures In Emergency situations, permit holders must phone the BCER's 24-hour Incident Reporting line to notify the BCER of needed emergency oil and gas road closures.	Post Incident Report The permit holder must complete post-incident evaluations for all Level 2 and Level 3 emergencies and submit them to the BCER through the online reporting tool within 60 days. Each of Emergency Management, Environmental, and Technical will have a separate review.	
Ministry of Environment and Climate Change Strategy (ENV)	The Ministry of Environment and Climate Change Strategy is responsible for the effective protection, management and conservation of B.C.'s water, land, air and living resources. • A Ministry representative – Environmental Emergency Response Officer (EERO) – will provide regulatory oversight and monitor the situation to ensure appropriate response actions. • Monitors discharges to the land, atmosphere and all water bodies. • May provide a representative to the incident site and the BCER EOC and/or the PREOC on a 24-hour basis. In a larger scale incident, based on risk, additional ministry resources such as Incident Management Teams (IMT) may be deployed to establish Unified Command and monitor, augment, or take over the response if Pembina fails to take appropriate action as deemed necessary by the EERO or Provincial Incident Commander. • May assist to ensure other required agencies and affected stakeholders are contacted. • May provide assistance with hazardous waste management. • May conduct sampling for monitoring and enforcement purposes.	If a spill occurs, or is at imminent risk of occurring, responsible persons (spillers) must ensure that it is immediately reported to EMCR by calling 1-800-663-3456 (EMCR one call number). An Initial Report must be made immediately if any of the following occur or is at imminent risk of occurring: 1. If the volume spilled, or likely to be spilled, is equal to or greater than the minimum quantity outlined in the Spill Reporting Regulation. 2. If the spill enters, or is likely to enter, a body of water, the spill is reportable. A release of natural gas is reportable if: 1. The spill is caused by a breakage in a pipeline or fitting operated above 100 pounds per square inch (psi) that results in a sudden release of natural gas; and 2. The amount of the spill is, or is likely to be, equal to or greater than 10 kilograms (kg).	Note to responders: The following spill reports do not apply to oil or gas activity(ies) governed by the Emergency Management Regulation, B.C. Reg. 204/2013: • section 5 [updates to minister] • section 6 [end-of-spill report]; and • section 7 [lessons-learned report]	As requested/ available, depending on incident requirements.

British Columbia Agencies				
Agency	Roles and Responsibilities During Emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Local Authorities	Regional Districts and Municipalities have formal Emergency Management Plans, which outline the measures and sources of assistance that can be obtained to protect the public and support emergency response efforts within their jurisdiction. Upon request from the BCER, the Regional District may address emergency response capabilities, expectations and preparedness. If required, the Regional District may activate their emergency plan in order to achieve any of the following: • Dispatch representative(s) to the BCER EOC, if established. • Ensure notification of endangered area residents. • Coordinate Emergency Social Services (ESS). • If necessary, declare a State of Local Emergency. • Assist in a public information service.	Report immediately at the first available opportunity Contact information available in the applicable Site-Specific Plan.		
WorkSafe BC	Supports injured workers and promotes workplace health and safety across B.C. • Evaluates the safety of occupants at the work site, and ensures necessary precautions are taken to protect worker health and safety during the emergency. • Ensures that the appropriate employers provide equipment and personnel required on-site to monitor worksite hazards. • May provide a representative to the emergency operations centre as required.	You must immediately notify WorkSafe BC of any incident that: • resulted in serious injury to or the death of a worker, • involved a major structural failure or collapse of a building, bridge, tower, crane, hoist, temporary construction support system or excavation, • involved the major release of a hazardous substance, • involved a fire or explosion that had a potential for causing serious injury to a worker, or • was an incident required by regulation to be reported.	Check with appropriate Pembina SME for further details on reporting requirements. NOTE: If you're required to report to BCER / EMCR, ensure you also report to WorkSafe BC. Do not assume BCER or EMCR has notified them. Except as otherwise directed by an officer of the Board or a peace officer, you must not disturb an incident scene unless it is necessary to attend to persons injured or killed, prevent further injuries or death, or protect property that is endangered as a result of the accident.	
Ministry of Forests (MOF)	Responsible for the stewardship of provincial Crown land and natural resources, and for the protection of B.C.'s archaeological and heritage resources. Oversees BC Wildfire Service for the province. If a forest fire (designated as a provincial emergency only) is associated with the emergency, Forestry Personnel will fight forest fires within their jurisdiction.	Notify as indicated by the External Contact Matrix – BC. Check with appropriate Pembina SME for further details on reporting requirements.		Maintains up-to-date information on current wildfires of note – these wildfires can also be viewed on the active wildfires map.

British Columbia Agencies				
Agency	Roles and Responsibilities During Emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Public Services & Procurement Canada (PSPC)	Public Services & Procurement Canada (PSPC) is a federal agency that regulates the Alaska Highway (Hwy 97) north of mile 83.5 (km 133) to the border of British Columbia and Yukon Territories at km 968. • Oversee Alaska Highway response routes – a network of pre-identified routes that can best move emergency services and supplies to where they are needed in response to a major disaster. • Authorize closure of the Alaska Highway where the safety of the public is at risk. • Assist in public notification of an emergency through the MOTT's DriveBC website, as well as posting advisories on overhead message boards along designated routes. • Provide response support if dangerous goods are released.	Notify as indicated by the External Contact Matrix – BC for any incidents that affect Alaska Highway (Hwy 97) north of mile 83.5 (km 133) to the border of British Columbia and Yukon Territories at km 968. Check with appropriate Pembina SME for further details on reporting requirements.		
Ministry of Transportation & Transit (MOTT)	Ministry of Transportation & Transit (MOTT) Role and function in an emergency would be to manage any impacts to traffic both on numbered highways as well as on side roads in the event of an emergency. • Authorizes the closure of provincial transportation routes, including highways and inland ferries, where the safety of the public is at risk. • Assists in public notification through the DriveBC website, as well as posting advisories on overhead message boards along designated routes.	Notify as indicated by the External Contact Matrix – BC. Check with appropriate Pembina SME for further details on reporting requirements.		
HEMBC	Health Emergency Management BC (HEMBC) • Notifies Health Region of incident and assists Region in preparing for and responding to the incident. • Monitors facilities and developments. • Enforces health legislation.	Notify as indicated by the External Contact Matrix – BC. Check with appropriate Pembina SME for further details on reporting requirements.		Educates the public on public health issues.
FNHA	First Nation Health Authority (FNHA) • Ensures that communities are effectively linked within the provincial emergency response system and receive emergency management support at a level equivalent to non-First Nations. • Provides leadership within FNHA during an emergency and as a central FNHA contact for health emergencies in First Nations communities. Supports various mitigation, planning, response and recovery activities, including internal and external communications during an emergency; such as, Provincial Regional Emergency Operations Calls (PREOCs) attendance, situational awareness reports, information dissemination to communities, and emergency event debriefs.	Notify as indicated by the External Contact Matrix – BC. Check with appropriate Pembina SME for further details on reporting requirements.		

British Columbia Agencies				
Agency	Roles and Responsibilities During Emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Mistry of Agriculture and Food	The Ministry of Agriculture and Food assists industry mitigate impacts to agricultural stakeholders/producers during emergencies. • Maintains various emergency management guides for farmers. • May provide information to support Pembina SMEs with the development of a livestock management / relocation plan.	Notify as indicated by the External Contact Matrix – BC. Check with appropriate Pembina SME for further details on reporting requirements.		
Technical Safety BC	Technical Safety BC administers the Safety Standards Act and associated regulations that apply throughout British Columbia, including on lands that are subject to federal regulation for other purposes. Technical Safety BC may investigate incidents involving regulated work or regulated equipment.	Technical Safety BC is to be notified immediately in cases of Boilers, Pressure Vessels, Piping and Fittings, Electrical & Gas incidents resulting in a moderate, major and fatal injury or moderate, major or severe property damage. All other incidents must be reported within 24 hours (or as soon as practical). Rail accidents where a person sustains a serious injury or is killed as a result of being on board or getting on or off the rolling stock, or coming into contact with any part of the rolling stock or its contents, or the rolling stock is involved in a grade crossing collision or a derailment, sustains damage that affects its safe operations, or causes or sustains a fire or explosion, or causes damage to the railway, that poses a threat to the safety of any person, property or the environment, or any dangerous good is released.	Additional reporting may be required depending on the incident or involved technology. Check with appropriate Pembina SME for further details on reporting requirements.	

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5.3 Saskatchewan

5.3.1 Saskatchewan Overview

Upstream oil and gas operators are required to notify and report any incidents that occur in the field to the Government of Saskatchewan's Ministry of Energy and Resources (ER).

5.3.2 Regulatory Level of Emergency

Saskatchewan ER has not specified a matrix to be used to classify the Regulatory Level of Emergency. The Corporate Incident Classification Matrix will be used for internal classification purposes.

5.3.3 Incidents Subject to Notification and Reporting

Saskatchewan ER - Incident Subject to Notification and Reporting				
Type	Incident	Substance	Location	Description
General Field Operations	Fire	All	All	Any fires resulting from the operation of a licensed well, facility, pipeline or flowline.
	Escape or Release	Naturally Occurring Radioactive Materials (NORMS)	All	Any volume
		Oil by-products or oily produced sands	All	Any volume released that is not approved under GL97-02[1]
		Gas Containing H_2S	On Lease	Any volumes where the concentration of H_2S exceeds 0.1% or 1,000 ppm or 1.0 mole H_2S/kilomole from solids, liquids or gas.
			Off Lease	Exceeding ambient air quality, reported by public, or when the public can potentially be impacted.
		Refined Chemical	On Lease	All volumes ≥ 0.5 m^3 or 500 liters.
	Blow-out	All	All	Any uncontrolled release of gases or fluid from a well.
	Kicks	All	All	Any controlled diversion of gases or fluid from the well to a flare tank.
	Transportation	Unrefined and upstream products, oilfield waste	All	Any volume release during transportation.
Pipeline or Flowline	Contact Damage	All	All	Any contact damage to a flowline or pipeline.
	Break	All	All	Any escape of substance from the pipeline or flowline which immediately impacts the operability of the pipeline or flowline system.
	Leak, malfunction of any equipment or a worker error resulting in the escape or release of a substance	Oil, salt water, condensate or other product	On Operating Area	All releases that are > 2.0 cubic metres (m^3) of fluid.
			Off Operating Area, On Lease	All volumes ≥ 0.1 m^3 or 100 litres.
			Off Lease	Any volume
		Gas Containing H_2S	All	Any volume at any concentration.
		Natural Gas	All	Any volumes where: 1. the released volume exceeds 30,000 m^3; 2. the release is within a road or railway right-of-way (ROW); or 3. the release is within 150 metres of any dwelling.
	Pressure Test Failure	Any	Any	Any pressure test that does not result in confirming the integrity of the pipeline or flowline system intended to be put into operation.
Horizontal Directional Drilling (Pipeline/Flowline Installation)	Release, Spill or Frac-Out	Drilling Fluid	All	Releases deemed critical (See Appendix 2 of Directive PNG014)

Saskatchewan ER - Incident Subject to Notification and Reporting				
Type	Incident	Substance	Location	Description
Drilling or Fracturing Operation	Break, leaks, malfunction of any equipment or intentional or unintentional action resulting in an escape or release	Oil, salt water, condensate, oil & gas waste, emulsion or other product	On-Lease	All volumes ≥ 2.0 m^3 or 2,000 litres requires reporting but only volumes ≥ 10.0 m^3 or 10,000 liters require immediate notification.
			Off-Lease	Any volume
	Escape or release	Drilling Wastes	All	Any volume released that is not approved under GL 99-01[2].
		Fracturing Wastes	All	Any volume released that is not approved under GL 2000-01[3].
		Fracture Communication Fluids and Gasses	All	Any volume
		Gas containing H_2S	On Lease	Any volumes where the concentration of H_2S exceeds 0.1% or 1,000 ppm or 1.0 mole H_2S/kilomole from solids, liquids or gas.
			Off Lease	Exceeding ambient air quality, reported by public, or when the public can potentially be impacted.
Well or Facility Operation	Break, leaks, malfunction of any equipment or intentional or unintentional action resulting in an escape or release	Oil, salt water, condensate, oil & gas waste, emulsion or product	On Operating Area	All volumes ≥ 2.0 m^3 or 2,000 liters requires reporting but only volumes ≥ 10.0 m^3 or 10,000 liters require immediate notification.
			Off Operating Area, On Lease	All volumes ≥ 0.1 m^3 or 100 litres.
			Off Lease	Any volume
		Refined Chemical	On Lease	All volumes ≥ 0.5 m3 or 500 litres
	Escape or Release	Gas containing H_2S	On Lease	Any volumes where the concentration of H_2S exceeds 0.1% or 1,000 ppm or 1.0 mole H_2S/kilomole from solids, liquids or gas.
			Off Lease	Exceeding ambient air quality, reported by public, or when the public can potentially be impacted.

Note: please refer to the following guidelines for reference:
[1]GL 97-02: https://publications.saskatchewan.ca/#/products/75542
[2]GL 99-01: http://www.publications.gov.sk.ca/details.cfm?p=75536
[3]GL 2000-01: http://www.publications.gov.sk.ca/details.cfm?p=76209

5.3.4 External Contact Matrix - Saskatchewan

Saskatchewan Notification Matrix		Initial Responders			Lead Agencies						Supporting Agencies & Other Government Contacts														
This matrix provides guidance on conducting notifications to government agencies as required. • Select all incident types that apply • Refer to Provincial and Federal Agency tabs for specific contact instructions • Refer to area specific plan(s) for contacts Legend ✓ = Required Contact ■ = Contact if applicable to incident	Agency/Resource	Ambulance Services	Fire Departments	Police/RCMP	Saskatchewan ER - Ministry of Energy & Resources	SPSA - Saskatchewan Public Safety Agency	Ministry of Environment	Local Authorities	SHA - Saskatchewan Health Authority	CER - Canada Energy Regulator	OH&S - Ministry of Labour Relations & Workplace Safety	WCB - Workers' Compensation Board	TSAS - Technical Safety Authority of Saskatchewan	SaskPower - Electrical Safety	WSA - Saskatchewan Water Security Agency	MOH - Ministry of Highways	MOH - Transportation Programs & Services Unit (Rail)	TSB - Transportation Safety Board	ERAC - Emergency Response Assistance Canada	CANUTEC	ECCC - Environment & Climate Change Canada	DFO - Department of Fisheries & Oceans	ISC/RO/FNIHB	IOGC - Indian Oil & Gas Canada
Incident Type																									
Product Release - Liquids		■	■	■	✓	✓	✓	✓	■	✓	■	■			■	■	✓	✓	■	■	■	■	■	■
Product Release - Gas		■	■	■	✓	✓	✓	✓	■	✓	■	■			■	■	✓	✓	■	■	■	■	■	■
Transportation Incident - Involving Product Release (Road/Rail/Air/Marine)		■	■	✓	✓	✓	✓	✓	■	✓	■	■			■	■	✓	✓	✓	✓	■	■	■	■
Fire/Explosion/BLEVE		■	✓	✓	✓	✓	✓	✓	■	✓	■	■	✓		■	■	✓	✓	■	■	✓	■	■	■
Serious Injury or Death - Including Vehicle Accidents		✓	■	✓	✓	■				✓	■	■					■	✓						
Motor Vehicle Accident (No Injuries) - Employee		■	■	■																				
Security Related Incident		■	■	✓	■		■	■		■	■	■						■						
Radiation Related Incident		■	✓	✓	✓	■	✓	■	■	■	■	■						■		■			■	■
Electrical Incident		■	■	✓						■	■	■		✓										
Pressure Vessel or Piping Incident		■	■	✓	✓			✓		■	■	■	✓									■		
Crosses Boundary (Interprovincial or International)		■	■	■	■	■	■	■		✓						■		✓						
Incident Involving E2 Regulated Substance		■	✓	■	■	✓	■	✓	■	■	■	■			■	■	✓	■	■	■	■	■	■	■
Impacts First Nations & Indigenous Groups		For immediate life safety messaging, contact the Indigenous group directly and notify Pembina's Indigenous Engagement group after you have done so. For all other communications, contact Pembina's Indigenous Engagement group first to coordinate messaging.																					■	■
Impacts Airspace		Request airspace closures through Transport Canada's Aviation Operations Centre (AVOPS) and Notice to Airmen (NOTAM) through NAV Canada.																						

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5.3.5 Agency Information

Saskatchewan Agencies				
1. External Contact Matrix – Saskatchewan will describe who you need to call – this table will provide the details about Lead Agencies. 2. Ensure you also check Canada – Federal Regulator(s) for additional information and directions for immediate and subsequent notifications 3. Area specific contacts are available in the applicable Site-Specific ERP 4. Responders are also encouraged to seek further information from relevant Pembina personnel/SMEs.				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/ Verbal Report	Subsequent Reporting	Additional Supports
Saskatchewan Ministry of Energy and Resources (ER)	The Saskatchewan Ministry of Energy and Resources (ER) is the **primary regulatory authority for the oil and gas industry in Saskatchewan.** Saskatchewan ER mandates the following process: 1. NOTIFY Saskatchewan ER in accordance with the requirements of this Directive; see below table for list of reportable incidents Source: *Directive PNG014* 2. ACTIVATE ERP where required and take immediate steps to resolve the incident; 3. REMEDIATE or, where necessary, reclaim the affected area to the satisfaction of ER officials; 4. SUBMIT detailed information and reports in the Integrated Resource Information System (IRIS) on the incident and the actions taken to resolve the matter.	Immediate Telephone Notification by Operator An operator is required to immediately notify Saskatchewan ER's Emergency Support line at 1-844-764-3637 on the discovery of any incident listed in Appendix 1 except for the following types of incidents: • Contact damage to a flowline or pipeline that does not result in a break or leak; or • Any on-lease release of oil, condensate, emulsion or saltwater that is less than 10.0 m^3 • Non-critical drilling fluid releases from Horizontal Directional Drilling (HDD) for Pipeline Construction as referenced in section 7.5 of Directive PNG014 On-lease releases or contact damage that are exempt from immediate telephone notification still require ER notification using IRIS. Determine the Ministry's Field Office responsible for the area where the incident has occurred; you will be prompted for this information when you call the Emergency Support Line.	IRIS Notification by Operator All incidents listed in Appendix 1 must be promptly reported in IRIS not later than five (5) business days after the discovery of the incident. 1. Refer to the Directive PNG014 to ensure you have the required information and documentation available. 2. Log in to IRIS and complete the initial incident report process. Detailed Incident Report Upon successful submission of the initial report a countdown calendar is initiated in IRIS – you must complete the subsequent detailed incident report within 90 days to avoid penalty: 1. Refer to the Directive PNG014 to ensure you have the required information and documentation available. 2. Log in to IRIS and complete the detailed incident report process. Reclamation Report When the initial incident notification indicated that a reclamation report is required, you must submit the report within six months of completing the remediation of the incident. 1. Refer to the Directive PNG014 to ensure you have the required information and documentation available. 2. Log in to IRIS and complete the reclamation report information process.	• Provide representatives to the site of the incident, as required. • Provide consultation regarding emergency response levels, decisions, activities. • Directly alert other provincial agencies and responders
Saskatchewan Ministry of Environment (MOE)	The Ministry of Environment (MOE) provides science-based solutions, compliance and mitigation measures aimed at protecting the environment, and safeguarding communities. They will work with Environment Canada during emergencies to ensure appropriate response, clean up and remediation to product release. Any spill, release or emergency that may harm the environment or pose a risk to public health or safety must be reported immediately. If you're unsure if a spill is reportable, you should call it in right away.	To report a spill, call the 24/7 Spill Control Centre at 1-800-667-7525. Provide detailed information about the discharge and discovery, including: • Site location • Responsible party • Substances involved in the occurrence • Surrounding land use • Agencies involved in the discharge	For spills exceeding reportable limits as defined by legislation, the responsible party must also submit a Written Spill Report within 30 days. Forms section "MOE 30 Day Written Spill Report Form" for report.	MOE has a Wildfire operations/ management program.

Saskatchewan Agencies				
1. External Contact Matrix – Saskatchewan will describe who you need to call – this table will provide the details about Lead Agencies. 2. Ensure you also check Canada – Federal Regulator(s) for additional information and directions for immediate and subsequent notifications 3. Area specific contacts are available in the applicable Site-Specific ERP 4. Responders are also encouraged to seek further information from relevant Pembina personnel/SMEs.				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/ Verbal Report	Subsequent Reporting	Additional Supports
Saskatchewan Public Safety Agency (SPSA)	The Saskatchewan Public Safety Agency (SPSA) coordinates activation of provincial resources and equipment. • Coordinate provincial operations in response to a provincially or nationally declared emergency. • Provide direction, leadership and support to the conduct of emergency operations. • Manage the preparedness, activation, support and operations conduct of the Provincial Emergency Operations Centre and alternate centres. • Coordinate information gathering and dissemination. • Prepare and distribute all communications such as situation reports and alerts. • Coordinate provincial operations in response to requests for assistance from the Federal Government or other government ministries, Crown corporations, agencies or municipal governments dealing with emergencies. • Liaise with Public Safety Canada and, through this agency, other federal government departments and agencies where federal assistance or information is required. • Liaise with local governments, other Ministries, Crowns, Agencies, provincial and territorial governments and Critical Infrastructure stakeholders where assistance, involvement and/or information are required. • Through the Chief of Emergency Management provide reports to the Deputy Minister/President responsible for Emergency Management and/or the Ministers' Committee on Emergency Management, Federal/Provincial/Territorial Senior Official Committee on Emergency Management, Cabinet or Cabinet Committees.	Report immediately at the first available opportunity Contact information available in the applicable Site-Specific Plan.		

Saskatchewan Agencies				
1. External Contact Matrix – Saskatchewan will describe who you need to call – this table will provide the details about Lead Agencies. 2. Ensure you also check Canada – Federal Regulator(s) for additional information and directions for immediate and subsequent notifications 3. Area specific contacts are available in the applicable Site-Specific ERP 4. Responders are also encouraged to seek further information from relevant Pembina personnel/SMEs.				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/ Verbal Report	Subsequent Reporting	Additional Supports
Local Authorities	Municipalities/Band Councils Municipalities are obligated to establish emergency plans; their role and function in an emergency may include but is not limited to: • Maintain an emergency line (24/7) where incidents can be reported. • Provide representatives to the site of the incident or Operator Emergency Operations Centre. • Declare a "State of Local Emergency" to exercise special powers • Activate warning systems • Initiate public protection measures as required, and coordinate municipal resource and equipment support			
Saskatchewan Health Authority (SHA)	Saskatchewan Health Authority (SHA) • Provide accurate information to the public concerning the incident. • Provide guidance and assistance at evacuation centre(s). • Provide health related information about toxic chemicals and by-products. • Provide guidance on public health advisories, public evacuation and sheltering. • Provide guidance on rescinding a declaration of public evacuation and on allowing re-occupancy. • Investigate health complaints from the public. • Provide advice to the POC and to the REOC on existing or potential health effects associated with the incident where possible. • Provide health advice and safety levels for any health or special care facilities and for other persons that are likely to be sensitive from the impact as a result of the incident. • Ensure local hospitals are alerted when there is potential for an impact from a release. • Coordinate the provision of medical services during an emergency. • Where appropriate and necessary, can declare a Local State of Public Health Emergency.	Contact the Saskatchewan Health Authority (SHA) if the incident has potential to impact public health (e.g. contaminated drinking water). Verify that SHA and/or FNIH (First Nations & Inuit Health) have been notified of the emergency – use the 24-Hour Emergency Notification number and email below for all notifications across Saskatchewan: Phone: 1-306-5149-8570 (Ministry of Health – Health Emergency Management Unit) Email: HEMonCall@health.gov.sk.ca Check with appropriate Pembina SME for further details on reporting requirements.		SHA may provide safety messaging to the public and will relay situational information to the local health system.

Saskatchewan Agencies				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
Saskatchewan Supporting Agencies				
OHS	Saskatchewan Ministry of Labour Relations and Workplace Safety (OHS) • This ministry works with employers and employees, as well as industry stakeholders to reduce and eliminate workplace injuries and create a safe work environment. • Dispatches representatives, when deemed appropriated, to evaluate and enforce compliance of regulations under provincial and territorial jurisdiction. • Ensure that the company is monitoring the health and safety of all contractors and other workers who are not under the Canada Labour Code Jurisdiction. • Will inspect and review the events of serious injuries or death to workers under provincial and territorial jurisdiction to ensure compliance with the provincial OHS legislation.	Notify the Ministry of any "critical incident" – a serious adverse health event including, but not limited to: • The actual or potential loss of life • Limb or function related to a health services provided by, or a program operated by, SHA, or health care organization. Check with appropriate Pembina SME for further details on reporting requirements.		
Workers' Compensation Board (WCB	WCB has the overall responsibility for the administration of the workers' compensation system in Saskatchewan.	Contact the WCB within 5 days after the date on which an employer has become aware of an injury that prevents a worker from earning full wages or that necessitates medical aid, or situations where: • The accident causes, or may cause the death of a worker • Will require hospitalization for 72 hours or more • Structural failure or collapse of scaffold • Accidental contact with an energized electrical conductor • Or an uncontrolled spill of a toxic substance Check with appropriate Pembina SME for further details on reporting requirements.		
TSAS	The Technical Safety Authority of Saskatchewan (TSAS) is the safety regulator for pressure vessels and equipment in Saskatchewan. • Issue certificate of inspection permits for pressure equipment before the equipment is placed into service. • Ensure that regular inspections of in-service pressure equipment are conducted. • Examine, certify, and register Pressure Welders and Welding Examiners, Power Engineers, and Pressure Equipment Inspectors. • Conduct safety education and training. • Investigate accidents or unsafe conditions that involve boilers and/or pressure equipment.	Notify as indicated by the External Contact Matrix.		
WSA	The Water Security Agency (WSA) is a one window service for Saskatchewan core water management responsibilities.	Notify for any incident that affects or may affect waterbodies, raw water supplies, or potable water sources.		
SaskPower	SaskPower is the principal electricity provider in Saskatchewan. • SaskPower would disconnect electrical services as required in the event of an incident.	Notify as indicated by the External Contact Matrix.		

Saskatchewan Agencies				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports

Ministry of Highways (MOH)	Ministry of Highways (MOH) assists with road closures and safe highway management.
	MOH Transportation Programs & Services Unit – Rail
	
	• Manages Saskatchewan's regulated railway infrastructure, The Railway Act and reviews and authorizes construction/opening of provincially regulated railway.
	• May inspect all or any part of a railway and provide a written report where the minster:
	  • Receives a complaint about the state of repair of any part of a railway.
	  • For any reason an inspection of a railway is necessary.
	• May conduct audits of the facility and rail operations to ensure compliance with provincial regulations.
	• Provide authorization and assistance for the cancellation of services and closure of provincial railway infrastructure.
	• Investigate incidents and can issue orders to rectify any deficiencies to bring provincially regulated railway into compliance.
	• Accidents and incidents will be investigated as required by Rail Services pursuant to Section 32 of The Railway Act. Accident/Incidents must be reported following the provincial guideline PRG 1006.
	• Work with appropriate local and federal entities to facilitate the restoration of provincial railway infrastructure.
		Notify MOH Transportation Programs & Services Unit when:
		• A person is killed or sustains a serious injury as a result of:
		  • getting on or off or being on board the rolling stock; or
		  • coming into direct contact with any part of the rolling stock or its contents.
		• The rolling stock or its contents:
		  • are involved in a collision or derailment;
		  • sustain damage that affects the safe operation of the rolling stock;
		  • cause or sustain a fire or explosion, or
		  • cause damage to the railway that poses a threat to the safe passage of rolling stock or to the safety of any person, property or the environment.
		• There is an accidental release on board or from a rolling stock consisting of a quantity of dangerous goods or an emission of radiation that is greater than the quantity or emission level specified in Part 8 of the Transportation of Dangerous Goods Regulations (Canada).
		• An incident where:
		  • a risk of collision occurs between rolling stock;
		  • an unprotected main track or subdivision track switch is left in an abnormal position;
		  • a railway signal displays a less restrictive indication than that required for the intended movement of rolling stock;
		  • rolling stock occupies a main track or subdivision track, or track work takes place, in contravention of the rules or any regulation or order made under The Railway Act;
		  • rolling stock passes a signal indicating stop in contravention of the rules or any regulation or order made under The Railway Act;
		  • there is an unplanned and uncontrolled movement of rolling stock;
		  • a crew member whose duties are directly related to the safe operation of the rolling stock is unable to perform their duties as a result of physical incapacitation which poses a threat to the safety of person, property or the environment;
		  • a person gains unauthorized entry onto railway property;
		  • the railway line sustains damage that affects its safe use, that is not a direct result of the operation of a train or;
		  • a death or serious injury occurs involving railway property that is not a direct result of the operations of a train.
		
		Notify as indicated by the External Contact Matrix.		

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5.4 Ontario

5.4.1 Ontario Overview

Pembina is a member of the Chemical Valley Emergency Coordinating Organization (CVECO), which is a branch of the Community Awareness and Emergency Response (CAER) Group based in the Sarnia area of Ontario. CVECO has its own emergency level designations (or Codes), which can be found in the Corunna Facility Site Addendum.

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5.4.2 External Contact Matrix – Ontario

Ontario Notification Matrix	Initial Responders			Lead Agencies						Supporting Agencies & Other Government Contacts												
This matrix provides guidance on conducting notifications to government agencies as required. • Select all incident types that apply • Refer to Provincial and Federal Agency tabs for specific contact instructions • Refer to area specific plan(s) for contacts Legend ✓ = Required Contact ■ = Contact if applicable to incident	Ambulance Services	Fire Departments	Police/RCMP	EMO - Emergency Management Ontario	MNRF - Ministry of Natural Resources and Forestry	Ministry of the Environment, Conservation & Parks	Local Authorities	PHO - Public Health Ontario	CER - Canada Energy Regulator	MOL - Ministry of Labour	WSIB - Workplace Safety and Insurance Board	TSSA - Technical Standards & Safety Authority	ESA - Electrical Safety Authority	Ontario Hydro/Hydro One	MTO - Ministry of Transportation	TSB - Transportation Safety Board	ERAC - Emergency Response Assistance Canada	CANUTEC	ECCC - Environment & Climate Change Canada	DFO - Department of Fisheries & Oceans	ISC/RO/FNIHB	IOGC - Indian Oil & Gas Canada
Incident Type																						
Product Release - Liquids	■	■	■	✓	✓	✓	✓	■	✓	■	■	■		■	■	✓	■	■	■	■	■	■
Product Release - Gas	■	■	■	✓	✓	✓	✓	■	✓	■	■	■		■	■	✓	■	■	■	■	■	■
Transportation Incident - Involving Product Release (Road/Rail/Air/Marine)	■	■	✓	✓	✓	✓	✓	■	✓	■	■			■	■	✓	✓	✓	■	■	■	■
Fire/Explosion/BLEVE	■	✓	✓	✓	✓	✓	✓	■	✓	■	■	■		■	■	✓	■	■	✓	■	■	■
Serious Injury or Death - Including Vehicle Accidents	✓	■	✓					■	✓	✓	■					✓						
Motor Vehicle Accident (No Injuries) - Employee	■	■	■								■											
Security Related Incident	■	■	✓	✓	■	■	■	■	■					■		■						
Radiation Related Incident	■	✓	✓	✓	✓	■	■	■	■	■	■					■		■			■	■
Electrical Incident	■	■	✓					■	■	■	■		✓									
Pressure Vessel or Piping Incident	■	■	✓	✓	■	■	✓	■	■	■	■	✓							■			
Crosses Boundary (Interprovincial or International)	■	■	■	■	■	■	■		✓						■	✓						
Incident Involving E2 Regulated Substance	■	✓	■	✓	✓	■	✓	■	■	■	■	■		■	■	■	■	■	■	■	■	■
Impacts First Nations & Indigenous Groups	For immediate life safety messaging, contact the Indigenous group directly and notify Pembina's Indigenous Engagement group after you have done so. For all other communications, contact Pembina's Indigenous Engagement group first to coordinate messaging.																				■	■
Impacts Airspace	Request airspace closures through Transport Canada's Aviation Operations Centre (AVOPS) and Notice to Airmen (NOTAM) through NAV Canada.																					

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5.4.3 Agency Information

Ontario Agencies				
1. External Contact Matrix – Ontario will describe who you need to call – this table will provide the details about Lead Agencies. 2. Ensure you also check Canada – Federal Regulator(s) for additional information and directions for immediate and subsequent notifications 3. Area specific contacts are available in the applicable Site-Specific ERP 4. Responders are also encouraged to seek further information from relevant Pembina personnel/SMEs.				
Agency	Roles and Responsibilities During emergencies: What they do/How they can help	Immediate Notice/Verbal Report	Subsequent Reporting	Additional Supports
MNRF	Ministry of Natural Resources and Forestry (MNRF) Provides provincial support when local authorities are unable to cope with the capacity of emergency response operations.	All reporting of incidents involving hydrocarbons is done through the Ontario Spills Action Centre. They can be reached at 1-800-268-6060 or 1-416-325-3000, 24 hours a day, seven days a week. *One call agency – MNFR receives calls reported through the Ontario Spills Action Centre (24/7 Call Centre). Landowner(s) should also be notified as soon as practicable.	Further written reporting will be required for reportable releases. See Ontario Petroleum Industry Release Reporting Requirements for thresholds	
MOE & C/F	Ministry of Environment, Conservation and Parks (MOE & C/F) Responsible for spills of pollutants to the natural environment and drinking water. • Coordinates and manages provincial effort to detect, identify, contain, clean up and dispose or minimize release of hazardous materials.			
TSSA	Technical Standards and Safety Authority (TSSA) promotes and enforces public safety. Operates in four sectors in Ontario: • Boilers and Pressure Vessels and Operating Engineers • Elevating Devices, Amusement Devices and Ski Lifts • Fuels • Upholstered and Stuffed Articles	Receive calls reported through the Ontario Spills Action Centre (24/7 Call Centre). Reporting an incident to SAC meets the regulatory requirement of reporting incidents to TSSA.		
Ministry of Labour (MOL)	Ministry of Labour (MOL) Once notified of an incident, MOL will assign an inspector who will respond to the report. The inspector may: • view the incident location • take photographs and measurements • interview witnesses, co-workers, supervisors, employers, and anyone else who might have relevant information (for example, equipment manufacturers) • examine and test the equipment involved The inspector may identify hazards and issue orders, which the workplace parties must address to prevent this type of incident from happening again. Once the investigation is complete, the inspector may recommend that charges be laid when there has been a violation of the OHSA related to a worker fatality or injury. No one should change or disturb the accident scene before an inspector gives permission to do so.	In workplaces that fall under the Occupational Health and Safety Act (OHSA), the employer must immediately report any critical injury or fatality. Refer to appropriate Safety SME for further information and reporting requirements.		
WSIB	Workplace Safety & Insurance Board (WSIB) administers compensation and provides liability insurance and access to industry specific health and safety information.			
Ontario Supporting Agencies				
Emergency Management Ontario (EMO) provides emergency framework to all ministries and communities. Coordinates response when multiple ministries are required for emergency response. Responsible for invoking the Provincial Emergency Plan if required.		Notify as indicated by the External Contact Matrix - Ontario. Check with appropriate Pembina SME for further details on reporting requirements.		
Public Health Ontario (PHO) does not have any roles and responsibilities developed for the oil & gas industry. In the event of an incident that poses an environmental threat to human life or health, PHO is to be notified and will work closely with Pembina to provide support as needed.				
Ontario Ministry of Transportation (MTO) assists in traffic control, evacuation planning and coordination of transportation activities on provincially controlled routes, assisting with the implementation of emergency highway traffic control measures in conjunction with the Ontario Provincial Police (OPP).				
Ontario Hydro/Hydro One would disconnect electrical services as required in the event of an incident.		Report power outages and incidents to 1-800-434-1235.		
Electrical Safety Authority (ESA)		Report all serious electrical incidents, including those causing death, critical injury (life-threatening burns, major loss of limb, unconsciousness), or fires/explosions of electrical origin, within 48 hours to 1-877-372-SAFE (7233).		

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5.5 Federal Regulator(s)

Canadian Federal Agencies	
Roles and Responsibilities	**Immediate Notice/Verbal Report**
Canadian Energy Regulator (CER) The Canadian Energy Regulator (CER) – formerly National Energy Board (NEB) – regulates companies that own and/or operate interprovincial or international pipelines. During the implementation of the CER Act, decisions and orders made by the NEB stand and will be enforceable by the CER; regulations made under the Onshore Pipeline Regulations (OPR) or NEB Act also stand and will be in force until repealed or replaced. The CER and the Transportation Safety Board of Canada (TSB) have adopted a single window approach for pipeline event reporting. Call the Transportation Safety Board for pipeline emergencies: 1-819-997-7887 (24-hour hotline). Section 52 of the OPR also requires companies to immediately notify the CER of any incident relating to the construction, operation, or abandonment of its pipeline. The OPR also requires companies to submit a Preliminary Incident Report5 (PIR) and Detailed Incident Report (DIR) as soon as is practicable. The information required for a DIR must be submitted via OERS within 12 weeks (84 days) of the company's notification to the CER. For complex incidents, companies may request an extension for submission of a DIR via the Send a Message to the CER function within OERS. Call the CER for emergencies with operations, a facility, or an activity: 403-299-2773 Call the Spill Report Line for spills from an exploration or production facility under the Canada Oil and Gas Operations Act or the Canadian Energy Regulator Act in the Northwest Territories, Nunavut, or Canadian Arctic Waters: 1-867-920-8130 The CER, on its own or working with other government bodies (e.g., the TSB), may open a formal investigation of an event.	Immediate Notice - Verbal and Written Notification within 3 hours Where an event meets any of the criteria below, verbal and written notification is required within 3 hours. An Incident that Harms People or the Environment: • A death; • A serious injury as defined in the Canadian Energy Regulator Onshore Pipeline Regulations • an unintended or uncontrolled release of LVP hydrocarbons in excess of 1.5 m^3 that leaves company property or occurs on or off the ROW; • an unintended or uncontrolled release of gas or HVP hydrocarbons >30,000 m^3; • any unintended or uncontrolled release of sour natural gas or hydrogen sulfide; and/or • a significant pollution event under Canada Oil and Gas Drilling and Production Regulations or Northwest Territories' Oil and Gas Drilling and Production Regulations. A Rupture: • an instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained. A Toxic Plume: • a band of service fluid or other contaminant (e.g. hydrogen sulfide or smoke) resulting from an incident that causes people, including employees, to take protective measures (e.g. muster, shelter-in-place or evacuation). Verbal notification is done through the TSB reporting Hotline (1-819-997-7887) followed by a Preliminary Incident Report via OERS. The verbal and written notification must be completed as soon as possible and no later than 3 hours after the event was discovered. Precautionary Reporting The CER expects companies to take a precautionary approach to event reporting. This means that even if there is some doubt as to whether an event needs to be reported, the CER expects the company to notify the CER on a precautionary basis. There is a selection in OERS that allows a company to indicate when it is reporting an event on a precautionary basis. Precautionary notifications are not included in event reporting data and resources unless subsequent information demonstrates the event has met a regulatory reporting requirement. Written Notification within 24 hours For all other events that require companies to "immediately" notify or report, but which do not meet any of the Immediate Notice (within 3 hours) criteria, companies must submit a written notification via OERS as soon as possible and no later than 24 hours after the event was discovered. This includes precautionary notifications. Additional details on Event Reporting can be found in the CER Event Reporting Guideline (Revised December 2024).

<table>
<tr><th colspan="3">Canadian Federal Agencies</th></tr>
<tr><th>Roles and Responsibilities</th><th>Immediate Notice/Verbal Report</th><th>Subsequent Reporting</th></tr>
<tr><td>Transportation Safety Board of Canada (TSB)

TSB operates a 24/7 emergency hotline. They investigate and provide support to partner agencies such as CER and Transport Canada during air, marine, pipeline, and rail transportation incidents.</td><td>Call the TSB reporting hotline as soon as possible after discovery of a reportable occurrence. Follow the steps indicated in Section CER Immediate Notice/Verbal Report. Information must be entered in the OERS as well as by telephone.

Information required by the TSB is separately identified in the OERS. It is the responsibility of the company to ensure the information required by the TSB is entered into OERS in accordance with their 30-day timeline. OERS will automatically forward this information to the TSB within the timeline.</td><td>Provide the remainder of the information required by the TSB through the OERS as soon as it becomes available and no later than 30 days after the occurrence.</td></tr>
<tr><td>Emergency Response Assistance Canada (ERAC)

Pembina has registered Emergency Response Assistance Plans (ERAPs) with ERAC which provides first response to road, rail, and stationary tank incidents involving flammable gases, or for rail incidents involving flammable liquids (>450L).</td><td colspan="2"></td></tr>
<tr><td>Transport Canada CANUTEC

CANUTEC is the Canadian Transport Emergency Centre operated by the Transportation of Dangerous Goods (TDG) Directorate of Transport Canada. The Directorate's overall mandate is to promote public safety in the transportation of dangerous goods by all modes.

CANUTEC staff do not go to the site of an incident, however, should on-site assistance be required, CANUTEC can assist in the activation of industry emergency response plans. CANUTEC may also provide communication links with the appropriate industry, government or medical specialists.

Responders are encouraged to review the Emergency Response Guidebook 2024 (available online).</td><td colspan="2">In the event of an emergency involving dangerous goods, call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone.

Federal TDG regulations require that CANUTEC be contacted in the event of a dangerous goods incident involving the road, rail, marine transportation modes when the incident results in:
• The death of a person;
• A person sustaining injuries that required immediate medical treatment;
• An evacuation of people or their shelter in place;
• The closure of a facility used in loading or unloading of dangerous goods;
• The closure of a road, a main railway or a main waterway;
• The means of containment has been damaged to the extent that its integrity is compromised, or;
• The centre sill or stub of a tank car is broken or there is a crack in the metal equal to or greater than 15 cm

Contact local authorities/emergency services if the release or anticipated release of the dangerous goods are, or could be, in excess of the following quantities:

<table>
<tr><th>Class</th><th>Description</th><th>Packing Group or Category</th><th>Quantity</th></tr>
<tr><td>1</td><td>Explosives</td><td>II</td><td>Any quantity</td></tr>
<tr><td>2</td><td>Gases: Compressed, deeply refrigerated, liquefied or dissolved under pressure</td><td>Not applicable</td><td>Any quantity</td></tr>
<tr><td>3</td><td>Flammable and combustible liquids</td><td>I or II</td><td>Any quantity</td></tr>
<tr><td>4</td><td>Flammable solids</td><td>III</td><td>30 L or 30 kg</td></tr>
<tr><td>5</td><td>Oxidizing substances; organic peroxides</td><td>A or B</td><td>Any quantity</td></tr>
<tr><td>6</td><td>Poisonous (toxic) and infectious substances</td><td></td><td></td></tr>
<tr><td>7</td><td>Nuclear substances that are radioactive</td><td>Not applicable</td><td>A level of ionizing radiation greater than the level established in section 39 of the "Packing and Transport of Nuclear Substances Regulation, 2015"</td></tr>
<tr><td>8</td><td>Corrosives</td><td></td><td></td></tr>
<tr><td>9</td><td>Miscellaneous products, substances or organisms dangerous to life, health, property or the environment when handled</td><td>II or III, or without packing group</td><td>30 L or 30 kg</td></tr>
</table>
Refer to Part 8 of the TDG Reporting Requirements for further information, including details to include in the report, report distribution, and manner of submission.

A follow-up report in writing is required to be submitted to the Minister within 30 days after the day on which the initial report was made. Refer to Part 8 of the TDG Reporting Requirements for further information, including details to include in the report, report distribution, and manner of submission.</td></tr>
</table>

Canadian Federal Agencies		
Roles and Responsibilities	Immediate Notice/Verbal Report	Subsequent Reporting
Environment and Climate Change Canada (ECCC) Pembina has several sites that meet the criteria for a Canadian Environmental Protection Act (CEPA) Environmental Emergency (E2) Plan. These locations have storage vessels and/or tanks that contain reportable flammable or toxic substance(s) in amounts specified by E2 regulations, either in a pure form or as a flammable mixture. Note: ECCC may be contacted by the applicable provincial regulator. Despite this, if you meet the reporting requirements, you must still independently report to ECCC.	E2 Regulations – reporting a spill or release You must report any environmental emergency that: a) has or may have an immediate or long-term harmful effect on the environment; b) constitutes or may constitute a danger to the environment on which human life depends; or c) constitutes or may constitute a danger in Canada to human life or health. A verbal notification is to be made as soon as possible under the circumstances to the authorities identified in the Release and Environmental Emergency Notification Regulations (Notification Regulations) under CEPA 1999. Guidance for responders: Refer to the written report section for details on what to include in the verbal report –it is understood you may not have all the details during the initial notification. The person notifying Environment and Climate Change Canada must take all reasonable measures consistent with the protection of the environment and public safety, including preventing, mitigating or recovering from any negative effects on the environment or on human life or health. The person must make a reasonable effort to notify any member of the public who may be adversely affected by the environmental emergency.	A written report should be made as soon as possible under the circumstances to the Regional Director, Environmental Enforcement Directorate, Enforcement Branch, Department of the Environment, in the region where the environmental emergency occurs. Information to Be Included in the Written Report of Environmental Emergency 1. The name, civic address and telephone number of the person who is providing the written report. 2. If applicable, the name of the entity or person that is responsible for the facility that is associated with the environmental emergency. 3. If applicable, the North American Industry Classification System codes, consisting of at least four digits, that describe the operations at the facility that is associated with the environmental emergency. 4. The date and time of the environmental emergency and the location where it occurred, including the latitude and longitude, expressed in decimal degrees to five decimal places, and, if applicable, the civic address of that location. 5. The name, CAS registry number and, if applicable, UN number of the substance that was released or likely to be released. 6. The quantity of the substance that was released or likely to be released or, if the quantity cannot be determined, an estimate of it. 7. If the substance is or was in a container system, a description of the container system, including a description of its condition. 8. A description of the harmful effects or potential harmful effects of the environmental emergency on the environment and on human life or health, including effects on any surrounding hospitals, schools, residential, commercial or industrial buildings, highways, public transit infrastructure, parks, forests, wildlife habitats, water sources or water bodies. 9. A description of the circumstances of the environmental emergency and its cause, if known, and of the measures taken to mitigate any harmful effects on the environment or on human life or health. 10. A description of all measures taken or planned to be taken to prevent similar environmental emergencies from occurring. (Source: Adapted from Environmental Emergency Regulations, 2019: SOR/2019-51)

<table>
<tr><th colspan="3">Canadian Federal Agencies</th></tr>
<tr><th>Roles and Responsibilities</th><th>Immediate Notice/Verbal Report</th><th>Subsequent Reporting</th></tr>
<tr><td>Royal Canadian Mounted Police (RCMP)

Federal police agency. Notify as required for initial response and support.
May provide the following supports during emergencies:
• Notifies applicable lead agencies (i.e., AER, BCER, EMCR) and other municipal authorities/authorities with jurisdiction of reported release
• Provides security and traffic control, and supports public protection measures; may assist in initial area isolation, roadblocks, evacuation, etc. Conducts incident investigation, as required.
• Clarifies responsibility when fatalities are involved and assist the coroner in the event of a fatality in which there is no criminal wrong-doing.</td><td>RCMP must be notified in the case of a fatality; request that the RCMP contact the Medical Examiner.

The RCMP must also be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infections substances.</td><td>Dependent on situation – refer to appropriate Pembina SMEs (Safety, Security)</td></tr>
<tr><td>Department of Fisheries and Oceans (DFO)

DFO monitors impacts to the environment and species; they investigate all reports of marine pollution in Canada in conjunction with other federal departments.
DFO may send personnel to the site if there has been or could be an impact to fish or fish habitat(s).
They can also aid in search and rescue operations.
Note: DFO may be initially notified of incidents by ECCC.</td><td>Any amount of hydrocarbons entering a waterway frequented by fish or occupied by waterfowl is deemed in contravention of the Federal Fisheries Act and must be reported to DFO.</td><td>Dependent on situation – refer to appropriate Pembina SMEs (Environmental or Regulatory).</td></tr>
<tr><td>Indigenous Services Canada (ISO)

Indigenous Services Canada (ISC) partners with First Nations communities to prevent, prepare for, respond to, and recover from emergencies.</td><td colspan="2" rowspan="3">Dependent on situation – refer to appropriate Pembina SMEs for direction (Indigenous Engagement, Regulatory, and other service areas).</td></tr>
<tr><td>Regional Operations (RO)

Regional Operations (RO) liaise, communicate, cooperate, coordinate and collaborate with First Nations and public, private, and non-government sector partners in support of on reserve emergency management service delivery.</td></tr>
<tr><td>First Nations and Inuit Health Branch (FNIHB)

First Nations and Inuit Health Branch (FNIHB) carries out the Public Health preparedness and response related to natural and man-made disasters including communicable disease control and environmental public health services. FNIHB also provides non-insured health benefits, extending coverage for medical transportation, pharma-care, medical devices, and crisis mental health support via funding of community-based counsellors and crisis support workers.</td></tr>
<tr><td>Indian Oil and Gas Canada (IOGC)

IOGC is an operating agency within Indigenous Services Canada (ISC) that manages and regulates oil and gas resources on First Nation reserve lands.</td><td>As soon as practicable, notify IOGC of any unforeseen incident that occurs during operations that results, or could result, in bodily injury or death, or in damage to First Nation lands or property. Spill reporting: Off-lease spills, and on-lease spills greater than 1 m^3 must be reported immediately</td><td>Dependent on situation – refer to appropriate Pembina SMEs for direction (Aboriginal).</td></tr>
</table>

6.0 COMMUNICATIONS PLANNING

At the onset of an incident, communication needs must be immediately identified and then monitored throughout the response to ensure effective incident management.

6.1 Internal Communication

6.1.1 Within Emergency Response Organization(s)

Internal communication refers to communication within or between Pembina emergency response personnel and/or Pembina's ICS organization(s) – i.e., how we communicate with each other. This includes response specific communications taking place at or between the incident site, the SPCC, the Incident Command Post (ICP), and the Emergency Coordination Centre (ECC). Status updates and the sharing of incident related information will follow the ICS chain of command.

Communications related to the response that go beyond the responders are external and are only to be conducted by the appropriate response roles within the ICS organization given the appropriate authority and approvals.

6.1.1.1 Communications Equipment

Pembina will ensure appropriate communications equipment is made available to key response personnel. Equipment may include telephones, two-way radios, computer networks, and/or the Virtual Command System (VCS) tool. Outside resources should be procured to assist with equipment needs, as required.

Any site-specific radio and communications infrastructure existing within an area owned either by Pembina, or through mutual aid, should be integrated into the response communication plan. Specific telephone lines may be identified for incoming and outgoing purposes.

6.2 External Communication

Pembina is responsible for communicating vital information about an emergency to the public and the appropriate government agencies. This may include notifications to area stakeholders directly affected by the incident, families in the event of an injury or accident, and/or the public outside the area through the media.

External communications may impact the public's perception of the incident as well as their perception of the company's response to the incident.

It is vitally important that all external communications are brief, appropriate to the audience, and factually accurate.

6.2.1 First Responders

Pembina will ensure appropriate communications equipment is made available to first responders, as required, to facilitate communications during emergencies.

6.2.2 Government and Regulatory Agencies

The Liaison Officer is responsible for ensuring that the appropriate government agencies are notified and kept informed throughout the emergency.

The appropriate regulator, environmental agency, local authority, and regional health authority will be notified. If an urban centre is located within the EPZ, that urban centre must also be notified.

6.2.3 Members of the Public and Affected Parties

If an incident occurs that has the potential to impact beyond the facility boundary or pipeline ROW, Pembina will determine the Corporate Incident Classification and the Regulatory Level of Emergency, where applicable. Pembina will then notify the public within the EPZ. Members of the public within the EPZ must be advised of any public protection measures required.

The Public Protection Branch Director, with the assistance of the Notification Group and Rover/Evacuation Group, is responsible for ensuring that the public within the EPZ are notified and kept informed throughout the emergency.

6.2.4 Media

Media communications are conducted in accordance with Pembina's Crisis Communications Plan. The Public Information Officer (PIO) ensures information for external communications is reviewed and approved by the IC prior to release to employees, the general public, and the media.

Clarification must be established immediately with contractors, suppliers, or partners as to who the Pembina spokespersons are. Pembina employees must not respond to media requests, but instead refer them to the Public Information Officer or the Media Relations line.

7.0 HAZARDS & EMERGENCY TYPES

This section has been developed to support an "All Hazards" approach to emergency response. During the development of the District/Area or Site/System specific plans and during a response the following factors should be considered, as appropriate:

- Properties/characteristics and quantities of products being transported and/or stored
- Regular activities on site or within the Emergency Planning Zone (EPZ), where established
- Potential consequences to human life and health, as a result of an operational upset
- Potential consequences on the environment, as a result of an operational upset

The provided response actions may be applied to incidents at any site operated by Pembina and should be reviewed in context of the specific event, and actioned by the appropriate responder, as required. Responders are reminded to follow Pembina's Initial On-Site Actions when responding to emergencies:

	1	EVACUATE – STOP. THINK. PROTECT YOURSELF ➢ Identify the correct PPE. ➢ Evacuate or have people shelter in place. ➢ Is it quicker to move upwind or cross wind to get to a safe location?
	2	PROVIDE MEDICAL AID ➢ DO NOT put yourself or anyone else in harm's way when providing medical attention. ➢ Contact 911 and request emergency services. Provide them with the location and nature of the emergency, number and condition of affected people, and a call-back number. ➢ Provide First Aid to any persons injured if safe to do so. ➢ Record information about casualties and provide this information to emergency services personnel when they arrive. ➢ Maintain care of casualties throughout.
	3	RAISE THE ALARM ➢ Assume command of the current situation. ➢ Call the Pembina Emergency Response Line to activate the call down procedure: 1-800-360-4706. Provide them with: Location and nature of emergency - what Business Unit (BU) is involved, call-back number, and a time for the Activation Conference Call. This must be within 30 minutes of the incident occurring.
	4	ASSESS THE SITUATION ➢ Perform a size-up. ➢ Identify an initial hazard area – identify and prioritize hazards. ➢ Consider impacts to members of the public. ➢ Allocate tasks for people to conduct such as: conducting a head count, and dispatching people to meet emergency services (any actions that can stabilize the incident and prevent it from getting worse). ➢ If safe to do so, act to shut down, isolate, control or contain the incident.
	5	SECURE THE SCENE ➢ Control access into and out of the impacted areas. ➢ Maintain a list of areas cleared. ➢ Record details of any person entering or leaving a potentially hazardous area.
	6	CONTROL THE SITUATION ➢ Ensure people are briefed on the hazards in the area. ➢ Continue to monitor the hazardous area. ➢ Provide regular updates to your supervisor on the status of the incident.

7.1 Preparing for Operational Upset/Failure

7.1.1 Hazard Assessment

Management of hazards and risk is a continuous process, and it is the foundation of all safety, environment, and security elements.

Risk is managed by actively identifying hazards, assessing consequences and probabilities, and evaluating and implementing prevention and mitigation measures. Risk assessments are conducted for ongoing operations, for projects, and for products in order to identify and address potential hazards to personnel, the public, the environment, and Pembina assets.

Health and safety hazards need to be identified, assessed, controlled, and communicated to all impacted personnel prior to the commencement of any work and/or visits. Hazards that are not identified, assessed, eliminated, or controlled have the potential to result in loss, including workplace injuries, property damage, environmental impacts, or operational down time.

Often emergency response efforts will require Non-Routine tasks to be carried out by personnel. Pembina's Safety Management Program's Hazard Identification, Assessment, and Control Standard requires workers, who have identified the work they are about to perform as Non-Routine, to develop a Task Hazard Assessment (THA) or procedure to control the hazard. A THA is an evaluation used to document job steps and health and safety hazards. Potential hazards are to be identified for each step of the task, and controls are to be listed.

7.1.2 Mitigation and Leak Detection

Pipeline routes are chosen to avoid geologically unstable areas and to minimize environmental impact. To further mitigate the risk and impact of an incident, pipelines are designed so that they can be safely shut down and that segments can be isolated by installing block valves at strategic intervals along the system. Where appropriate, extra safety precautions such as increasing pipe wall thickness or depth-of-cover are undertaken to help mitigate risks.

Inspectors oversee all phases of pipeline construction. Each weld is assessed using appropriate technology to ensure they are sound and prior to installation, Pembina coats the entire external surface of pipelines with materials that are designed to safeguard against environmental damage and corrosion. As part of pipeline operations, a very low-voltage electrical current called cathodic protection is applied to the external surface of the pipeline, which further protects the pipe from external corrosion. Once construction is complete, above-ground warning signs are erected to clearly mark pipeline ROW so that the risk of third-party damage to the below-ground pipeline is minimized.

Pembina's Operators monitor our pipeline flow and leak detection software 24 hours a day, 365 days per year. Through our Integrity Management Program, we use in-line inspection technologies such as magnetic flux leakage to detect corrosion and ultrasonic devices to detect cracks. Our extensive geotechnical database is designed to help minimize integrity hazards associated with ground movement and watercourse channeling.

7.2 Product Release – Liquids

This section will provide initial actions and general response strategies - detailed spill response procedures can be found in the Corporate Spill Contingency Manual and applicable plan(s).

In the event of a spill (liquids release), responders should follow Pembina's Initial On-Site Actions:

1. Evacuate – Stop. Think. Protect Yourself
2. Provide Medical Aid
3. Raise the Alarm
4. Assess the Situation
5. Secure the Scene
6. Control the Situation

Containment and recovery efforts focus on minimizing the effects of the spill on the surrounding areas. Should it become apparent that the entire spill cannot be contained; procedures for the protection of sensitive areas will be considered.

7.2.1 Land Based Containment

A spill is considered land based if it is into any area lacking the presence of water at the time of the release. Land based receptors include agricultural land, private residences, public facilities, crown land, forested areas and ROW.

General Response Actions

- ☐ Initiate Initial On-Site Actions
- ☐ Evacuate and complete any required notifications
- ☐ Isolate the spill source and complete lock out/tag out operations, if safe to do so (refer to Pembina policies and procedures for additional information)
- ☐ Assess the properties and hazards of the released product, refer to Safety Data Sheet (SDS)
- ☐ If required promote ventilation
- ☐ Based on chemical composition, wear the appropriate PPE (refer to SDS for additional information)
- ☐ Assess the release and determine the extent of visual impacts
- ☐ Block any open drainage ports using universal absorbent and/or plastic booms or available non-reactive materials
- ☐ Recover any free liquids utilizing suction equipment and remove any residuals using universal absorbent materials if safe to do so
- ☐ Place a plastic tarp over solid chemicals, such as powders or granular, to prevent airborne distribution and to prevent leachate should chemical come in contact with water and
- ☐ Shovel solid and contaminated material in an empty drum and seal for disposal
- ☐ Review Corporate Spill Contingency Manual

7.2.2 Wetland Containment

Wetlands are classified as areas of land covered by or saturated with water for enough time to support water tolerant vegetation, promote development of water altered soils and other biological activities adapted to wet environments. Wetlands are considered sensitive receptors due to their species diversity, sensitivity to disturbance and importance in maintaining a healthy watershed.

In the event of a spill (liquids release), responders should follow Pembina's:

- ☐ Initiate Initial On-Site Actions
- ☐ General Response Actions
- ☐ Review Corporate Spill Contingency Manual

7.2.3 Open Water Containment

Open water is classified as any water body with primarily wind driven surface movement and negligible subsurface flow. This can include large open water wetlands, lakes, reservoirs or dugouts.

In the event of a spill (liquids release), responders should follow Pembina's:

- ☐ Initiate Initial On-Site Actions
- ☐ Review Corporate Spill Contingency Manual

7.2.4 Flowing Water Containment

Receptor Types: This type of containment encompasses any other water body with flowing water along a defined route or channel, not influenced by wind driven movement. This includes rivers, creeks, streams, tributaries, ephemeral watercourses and ditches.

In the event of a spill (liquids release), responders should follow Pembina's:

- ☐ Initiate Initial On-Site Actions
- ☐ Review Corporate Spill Contingency Manual

7.2.5 Crude/Condensate Rail Incident

Pembina is a member of Emergency Response Assistance Canada (ERAC). ERAC acts on behalf of Pembina to develop, submit, update, and respond to the requirements of the Pembina Emergency Response Assistance Plan (ERAP) submitted to and approved by Transport Canada. ERAC provides a network of experienced, trained Technical Advisors, Remedial Measures Advisors, and Response Teams who respond to rail, road, and stationary tank Liquefied Petroleum Gas (LPG) emergencies and Flammable Liquids rail transport emergencies.

For LPG incidents (road, rail, and stationary tanks), ERAC's scope of work includes technical advice, containment, transfer, flaring, and purging.

ERAC is Pembina's provider of emergency preparedness and response for rail transportation incidents.

If a railcar(s) derailment occurs that causes a leak, the car to flip on its side, or poses a safety or environmental threat, the following actions shall be taken:

For transportation related incidents, notify ERAC to activate the ERAP. Contact [redacted] and provide the following information:

[redacted]

☐ Name & telephone number	☐ Environmental and climatic conditions
☐ Location	☐ Container information, e.g., tank type, size and status of tank (damaged, leaking, etc.)
☐ Incident Location	☐ ERAP No. from shipping document
☐ Incident type/description	☐ Consignor
☐ Injuries	☐ Carrier
☐ Rail shut down	☐ Company responsible for tank
☐ Evacuation of public required or underway	☐ Name and contact number of Incident Commander

7.3 Product Release – Gaseous

In the event of a gaseous product release responders should follow Pembina's Initial On-Site Actions:

1. Evacuate – Stop. Think. Protect Yourself
2. Provide Medical Aid
3. Raise the Alarm
4. Assess the Situation
5. Secure the Scene
6. Control the Situation

7.3.1 HVP

The primary hazard associated with HVP products is direct exposure to flame. Upon release, immediate ignition could occur resulting in a jet fire, or a dense gas cloud which could travel to a delayed ignition source, resulting in a flash fire or an explosion. Vapors may travel to the source of ignition and flashback.

Indications of a potential leak include:

- ☐ Noise of escaping vapour – hissing or roaring noise coming from the pipeline
- ☐ Slight mist of ice or frozen area on the pipeline
- ☐ Plume of white spray – condensation and freezing moisture in atmosphere
- ☐ Moisture forming on windshields
- ☐ Stalling vehicles or racing diesel engines
- ☐ An unusual odour or scent of gas
- ☐ Dense white cloud or fog
- ☐ Discolored or dead vegetation
- ☐ Yellow-stained snow, which may indicate NGL accumulation under the snow
- ☐ Continuous bubbling in wet, flooded area
- ☐ A rainbow or sheen on water

General Response Actions:

- ☐ Initiate Initial On-Site Actions
- ☐ Assess the situation and identify additional hazards which may include:
  - Flammable/toxic vapors, fire/flashback, temperatures/freezing, lack of oxygen surrounding the leak. The danger from fire/explosion exists when an escaping vapour mixes with air to within the upper explosive limit (UEL)
  - Ignition sources can include vehicles, electrical switches, cell phones, lighters, furnaces/hot water heaters, static electricity, earthworks construction near escaping gas (e.g., stones/rocks being moved violently against other hard objects)
  - Topography/low lying areas such as river valleys, coulees where plume/drifting gases may collect
- ☐ Consider the possibility of an explosion. Eliminate ignition sources
- ☐ Ensure personal safety. Don appropriate personal protection equipment and reassess requirement as the incident progresses
- ☐ Determine how to respond to any persons injured or trapped. If safe to do so, treat and/or evacuate injured
- ☐ Account for all personnel on site. Establish personnel accountability system for onsite responders. If safe to do so, conduct search and rescue procedures for anyone missing
- ☐ If safe to do so, shutdown, isolate and depressurize and/or contain the release
- ☐ In the event of an LPG/NGL release, allow liquids to evaporate and disperse
- ☐ Initiate initial monitoring for toxic or explosive gas mixtures. Warn people in the immediate vicinity and down wind
- ☐ Initiate public protection measures in the EPZ, as required
- ☐ If an evacuation has occurred, set up a Reception Centre and address evacuee needs and concerns. Coordinate evacuation beyond EPZ with the local authority, if required
- ☐ Determine the Corporate Incident Classification and the Regulatory Level of Emergency, where applicable, and complete any required notifications/reporting
- ☐ Notify local authorities and health authorities, as required
- ☐ Notify Police and provincial highway authorities for approval to close and detour municipal and/or provincial highways, as required
- ☐ Request a Fire Hazard Order, Closure Order, Airspace Closure, or NOTAM, as required
- ☐ Develop an Incident Action Plan

7.3.1.1 Sour gas release

In addition to the above General Response Actions:

- ☐ Prepare for ignition
- ☐ Place an Ignition Team on standby or activate if ignition criteria are met
- ☐ Continue air monitoring for H_2S/SO_2 after ignition takes place

7.3.1.2 Release contained inside a diked area

In addition to the above General Response Actions:

- ☐ Do not walk into a product contaminated area
- ☐ Apply film forming firefighting foam on the spill area to suppress vapors, if available
- ☐ Test the area for explosive atmosphere with explosion meter, if spilled material is flammable
- ☐ Flush spilled material to water treatment facilities
- ☐ Use vacuum trucks to remove pools of spilled material if safe to do so

7.3.1.3 Release into tank farm where tanks have heaters and fire tubes

In addition to the above General Response Actions:

- ☐ Shutdown equipment
- ☐ Be aware of indirect heat from the fire tubes

7.3.2 Liquified Petroleum Gas

The primary concern in responding to a Liquified Petroleum Gas (LPG) release is to ensure the safety of all on-site personnel and public that could be affected, especially if the release increases in size or is ignited – removing potential ignition sources to avoid detonation of the vapour plume is critical.

LPG vapors are heavier than air and will tend to collect in low lying areas, well cellars, and sumps if winds are calm. LPG bullets are fitted with self-closing valves. If a sudden drop in feeder line pressure occurs, the valve closes. However, a release may continue if it is because of a small tear or pin hole in a line or fitting where the pressure drop is insufficient to actuate the valve. In this case, manually closing the valve may stop the release, if the release is downstream of the valve. The most appropriate course of action if the release cannot be safely stopped is to evacuate, isolate the release site and allow the LPG to escape and disperse into the atmosphere. Residual environmental consequences associated with an LPG/butane release are unlikely.

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For LPG incidents (road, rail, and stationary tanks), ERAC's scope of work includes technical advice, containment, transfer, flaring, and purging.

ERAC provides emergency response support to road, rail and stationary tank incidents (>450L) involving flammable gases (Class 2.1) including:

▪ Propane	UN 1978
▪ Butane	UN 1011
▪ Propylene	UN 1077
▪ Butylene	UN 1012
▪ Isobutene	UN 1969
▪ Isobutylene	UN 1055
▪ Butadiene 1.3 (stabilized)	UN 1010

All of which may also be placarded and transported as UN1075 Liquefied Petroleum Gas (LPG)

For transportation related incidents, notify ERAC to activate the ERAP. Contact [redacted] and provide the following information:

[redacted]

☐ Name & telephone number	☐ Environmental and climatic conditions
☐ Location	☐ Container information, e.g., tank type, size and status of tank (damaged, leaking, etc.)
☐ Incident Location	☐ ERAP No. from shipping document
☐ Incident type/description	☐ Consignor
☐ Injuries	☐ Carrier
☐ Road or rail shut down	☐ Company responsible for tank
☐ Evacuation of public required or underway	☐ Name and contact number of Incident Commander

For stationary tank incidents (>450L) involving flammable gases (Class 2.1):

- ☐ Contact SPCC and inform of the incident.
- ☐ Isolate release location (e.g. mobilize roadblocks).
- ☐ Assess hazards and remove potential ignition sources, if safe to do so.
- ☐ Stop product flow and isolate source, if possible/safe to do so.
- ☐ Initiate public protection activities (shelter, evacuation)
- ☐ Inform first responders (e.g., police/sheriff, fire, or ambulance) about the hazards.
- ☐ Do not direct water at spill or source of leak.
- ☐ Notify the appropriate oil and gas regulator(s) and complete any required notifications/reporting.
- ☐ If the release cannot be safely stopped, keep the release site isolated and allow the LPG to escape and disperse into the atmosphere, if safe to do so.
- ☐ If possible, monitor air quality at incident site to ensure safety of responders.
- ☐ Notify ERAC to assist with transfer of dangerous goods and temporary containment.

7.4 Fire/Explosion

IMPORTANT – YOUR PERSONAL SAFETY IS PRIORITY.
Pembina personnel are not expected or required to perform the duties of professional firefighters. Local first responders will be engaged to respond as required to incidents involving fire/explosion hazards. For all types of fires, Pembina personnel must not attempt to fight any fire unless they have been trained, are competent to do so, and are using the correct extinguishing equipment with the goal of preventing a small fire from becoming a large fire.

In the event of a fire or explosion responders should follow Pembina's Initial On-Site Actions:
1. Evacuate – Stop. Think. Protect Yourself
2. Provide Medical Aid
3. Raise the Alarm
4. Assess the Situation
5. Secure the Scene
6. Control the Situation

General Response Actions
- ☐ Initiate Initial On-Site Actions
- ☐ Ensure personal safety. Don appropriate personal protection equipment and reassess requirement as the incident progresses
- ☐ Complete a visual hazard assessment; assess for further hazards (e.g., subsequent explosions from chemical storage areas, gas migration)
- ☐ Call for assistance, as needed: Industrial Firefighting service providers, Emergency Services, Backup Personnel, Response Specialists. Guide fire-fighting personnel to the scene upon arrival
- ☐ Determine how to respond to any persons injured or trapped. If safe to do so, treat and/or evacuate injured
- ☐ Account for all personnel on site. Establish personnel accountability system for onsite responders. If safe to do so, conduct search and rescue procedures for anyone missing
- ☐ Remove combustible materials and equipment from threatened areas if possible
- ☐ Shut off source of the fuel and other energy sources if applicable
- ☐ Isolate the area and allow fire to burn out or try to extinguish fire if safe to do so
- ☐ Perform investigations with any appropriate regulatory agencies and insurance companies
- ☐ Institute cleanup and recovery activities
- ☐ Ensure all extinguishers are recharged after the fire

7.4.1 Storage Tanks and Vessel Fires

In addition to the above General Response Actions:
- ☐ In the event of a fire or explosion involving product storage tanks or vessels, additional regulatory response actions may be required. Refer to Section 5.0 External Support and Regulatory Reporting.

7.4.2 Small Grass Fires

In addition to the above General Response Actions:

- ☐ If safe to do so, use shovels, backpack water sprayers and/or ABC type handheld portable fire extinguishers. Use only a defensive strategy. If grass fires enter coulees, river or creek banks or forests, do not continue.
- ☐ Call for assistance, as needed: Industrial Firefighting service providers, Emergency Services, Backup Personnel, Response Specialists. Guide fire-fighting personnel to the scene upon arrival.

7.4.3 Large Grass/Forest Fires

In addition to the above General Response Actions:

- ☐ Do not attempt to extinguish. Call for assistance, as needed: Industrial Firefighting service providers, Emergency Services, Backup Personnel, Response Specialists. Guide fire-fighting personnel to the scene upon arrival.
- ☐ For large threatening grass/forest fires that have the possibility of involving pipelines, facilities, plants, or well sites etc., contact the appropriate Wildfire Reporting Line and/or local forest protection office for assistance.

7.4.4 Wildfire

Wildfires are uncontrolled fires noted for the speed at which they can spread from their original source, with potential to change direction unexpectedly, and have the ability to jump gaps such as roads, rivers, and fire breaks. Wildfires have been deemed a high-risk hazard to our operations.

It is important that personnel monitor and follow the instructions, Alerts, and Evacuation Orders given by local authorities in their area.

In addition to the above General Response Actions:

- ☐ When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- ☐ If there is potential for the main access routes to be cut off by a wildfire, alternative emergency evacuation routes (two-way access) should be identified and developed including:
  - Identify potential helicopter landing
  - Identify adjacent waterways that can be accessed by boat, if applicable

Before bringing an asset back online following an emergency shut down, it is important to complete all required hazard assessments and follow site-specific re-start procedures.

7.5 Extreme Weather / Natural Hazards

This section includes guidelines and response information for the types of natural hazards deemed higher risk to Pembina based on our areas of operations. In the event of extreme weather or natural hazards, responders should follow Pembina's Initial On-Site Actions:

1. Evacuate – Stop. Think. Protect Yourself
2. Provide Medical Aid
3. Raise the Alarm
4. Assess the Situation
5. Secure the Scene
6. Control the Situation

7.5.1 Flood

In the event of a flood, responders should follow Pembina's:

- ☐ Initiate Initial On-Site Actions
- ☐ Ensure personal safety. Don appropriate personal protection equipment and reassess requirement as the incident progresses
- ☐ Complete a visual hazard assessment; assess for further hazards
- ☐ Act to shut down, isolate and de-pressure equipment, as required. Do not attempt to shut off electricity if water is already present. The combination of water and live electrical current can be lethal
- ☐ Evacuate area as directed

7.5.2 Severe Storms

Severe weather can happen anywhere, at any time. Severe weather can include hazardous conditions produced by thunderstorms, including damaging winds, tornadoes, large hail, flooding and flash flooding, and winter storms associated with freezing rain, sleet, snow and strong winds.

- ☐ Initiate Initial On-Site Actions
- ☐ Assess potential hazards and take actions to reduce the danger of equipment falling and causing other damage during a storm. Secure everything that might be blown around or torn loose. Flying objects can injure people and damage property.
- ☐ If you are in a vehicle, stop the vehicle away from trees or power lines that might fall on you. Report where you are and stay there.

Subsequent actions depend upon potential hazards and the type of damage anticipated.

For a complete list of workplace hazards resulting from extreme weather and the associated safe work practices and response actions, please see Pembina's Safety Management Program on the Pipeline.

7.6 Security Related Incident

As part of the Security Management Program, the Security Threat Response Plan (STRP) assists management in responding to and mitigating the identified threat in an effective and efficient manner. Security countermeasures are employed appropriately at each threat level to enhance the security of any Pembina asset that may be under threat of harm. Contact Corporate Security for actual or suspected incidents involving:

- ☐ Bomb threats / suspicious packages
- ☐ Active protest / civil disobedience
- ☐ Trespass/vandalism (in progress)
- ☐ Kidnap and ransom

7.6.1 Bomb Threats

Refer to the Bomb Threat Form in Appendix - Forms
Bomb threats are delivered in a variety of ways, which include, but are not limited to, threats received via the telephone, voicemail, mail, or email. It is important to obtain as much information from the threat as possible.

When a bomb threat is received by telephone, the person receiving the call should attempt to do the following:

[redacted]

After the caller hangs up, the person receiving the threat should do the following:

[redacted]

If a threat is received via a voice message left on a recording device, the person to first listen to the message should do the following:

[redacted]

The most likely recipients to receive a threat by mail are those who open mail, whether it is mail room personnel or the addressee. If the mail is opened and a threat is identified, the person should do the following:

[redacted]

If a threat is via email, the recipient should do the following:

[redacted]

Threat Response Analysis

Addressing the following types of questions should allow for a determination as to whether there is a high or low risk of a threat being carried out, or danger of another event occurring. In the event of a threat, decisions need to be made with respect to searches, evacuations, and shut-down of operations.

[redacted]

Decision to Evacuate

The decision to search and/or evacuate rests on the threat and/or event analysis and other factors such as the following:

[redacted]

Decision to Re-Occupy

Once an evacuation has been completed, local management, site supervisor, and/or the IC, in consultation with the ECM, Security Response Team, and/or police, will, at some point, have to decide when the property can be re-occupied. However, where a suspicious object has been found, the police (if not already present) will attend immediately and assume control of the response of the bomb or suspicious package, until the object is declared safe. The IC should remember that there may be another suspicious object somewhere else if all searches were not completed prior to the initial discovery of an object; and, in consultation with the police, should therefore have the remainder of the property searched before considering re-occupation.

7.6.2 Facility Searches

If during a threat event, where no suspicious and/or foreign object has been noted, a search may be warranted to provide assurance that there is no such object on the property. Search activities should be conducted in accordance with the advice and guidance of law enforcement professionals.

Police's Role in Searches

It is often assumed that it is a police responsibility to conduct searches; however:

- ☐ The police do not know the layout of the property and the various places where a device could be concealed
- ☐ The police, unlike company personnel, will not know what is out of place. As a result, they may miss something that is not readily suspicious
- ☐ It is not the role of the police to make a determination regarding plant evacuation and/or shut-down, etc. While this is done in consultation with the company, the ultimate decision rests with management
- ☐ If a foreign object is found, the police will be responsible for dealing with the object

In order to ensure the safety of all those concerned, personnel will be expected to conduct a visual search only of their work area. A search coordinator should identify search teams and team leaders in advance and assign areas to search on a site drawing and/or sketch of offices, operations areas, and property. Once an area has been searched, the search team leader can record the results on the site drawing and/or sketch and provide the site drawing and/or sketch to the search coordinator. This will speed up the search process and, in the event of a suspicious object being found, proper countermeasures can be initiated.

Searchers must be cautioned of the following:

[redacted]

The Incident Commander will:

[redacted]

The Search Coordinator will:

[redacted]

Search Teams will:

[redacted]

No Suspicious Object Found

If no explosive device or suspicious object is found, the IC should advise upper management accordingly about returning to a normal state

Suspicious Object Found

If a suspicious object is located, the Search Coordinator and IC should:

[redacted]

7.6.3 Suspicious Packages

SHOULD A PERSON AT ANY TIME SUSPECT MAIL OR A PACKAGE TO CONTAIN A CHEMICAL OR BIOLOGICAL AGENT THERE IS THE OPTION OF REFUSING TO ACCEPT DELIVERY AND REPORTING THE CIRCUMSTANCES TO A SUPERVISOR.

If a package or envelope is suspicious:

[redacted]

Warning Signs

Examine all packages that are received, and give envelopes a light feel. There are a number of signs that may lead you to become suspicious of a letter or parcel. By themselves these signs may be innocent, but perhaps a combination of a few will cause for a cautious approach. The following are warning signs that an article of mail or a received package may be suspicious:

[redacted]

Chemical or Biological Agents

Suspicious Mail or Packages may have no physical identifiers or cause any concern, until they are opened. These threats include, but are not limited to chemical agents, biological agents or radioactive agents.

[redacted]

[redacted]

Chemical or Biological Agents suspected of Being Onsite

If a piece of mail or package is onsite and is suspected of containing a harmful agent, the following steps should be taken:

[redacted]

Decision to Re-Occupy

In the event that an evacuation has taken place due to a chemical or biological threat, local management, site supervisors, and/or the IC, in consultation with the ECM, Security Response Team, local law enforcement, and the appropriate health authority, will decide when the property can be re-occupied.

7.6.4 Managing Complaints and Threats

Your safety is paramount – If at any time you feel unsafe, remove yourself from the situation.

If you receive complaints, or experience threats while carrying out emergency response related activities, advise your supervisor at once, or as soon as practicable. Public interaction / conflict resolution is managed through Pembina's Security Management Program. Refer to the Pipeline for further details.

7.7 Other Emergencies

7.7.1 Imminent Worker Safety Issue

Worker health and safety is managed through Pembina's Safety Management Program – for a complete list of workplace hazards and associated safe work practices and response actions, please see the Pipeline.

7.7.2 Medical Emergencies

This section has been developed to address the requirements and methods of dealing with an emergency medical situation which requires more than basic first aid and most likely transport of an injured or sick worker to hospital.

- ☐ Initiate Initial On-Site Actions
- ☐ Complete a visual hazard assessment of the incident scene
- ☐ Ensure personal safety. Don appropriate personal protection equipment and reassess requirement as the incident progresses
- ☐ Conduct first aid within qualification limits until a health care professional takes over
- ☐ Notify Medical Aid as required (ground or air ambulance) and provide/request the following:
  - Your name and location (GPS coordinates if appropriate based on location)
  - Description of injuries and assistance required
  - Mechanism of injuries
  - What response is coming and when
  - Situational awareness to responders including description of hazards in the area
  - Directions to your location
- ☐ Stay on the line until you receive clearance to hang up
- ☐ A crew vehicle should be sent to the nearest road crossing to await and direct incoming medic. When the medic(s) arrive on site, they will assume assessment and treatment. Crew first aiders should continue to support and help the situation by supporting the medic(s).
- ☐ The patient may be loaded into the emergency transport vehicle and taken to a landing zone to meet with an incoming helicopter, intercepting ambulance or directly to hospital.
- ☐ For injury or medical evacuation, notify the next of kin as to status and hospital that will receive the injured (prepared statement). All fatality reporting through Police.
- ☐ Ensure the incident site is not disturbed for any required investigations.

Work at the scene of an injury or fatality may not be resumed until permission has been obtained from the Medical Examiner's Office, the police, and appropriate provincial Occupational Health and Safety Department.

7.7.2.1 Air Ambulance Activation

Refer to District/Area or Site/System specific plan(s), as applicable, for established air ambulance activation information and directions.

7.7.3 Motor Vehicle Accident (MVA)

This is a general guideline for any motor vehicle collision involving company personnel, company vehicles, or company operated roads.

- ☐ Initiate Initial On-Site Actions
- ☐ Move the vehicle out of the traveled roadway, if it is clear, safe and legal. Turn off the ignitions of the cars involved, if safe to do so. Turn on your emergency flashers.
- ☐ Secure the area and make sure that people are not out in traffic (in harm's way) to prevent potential additional accidents. Mark the scene of the accident with flares or reflective triangles.
- ☐ Notify your Supervisor/Field Office/Plant of the accident before going to investigate the possibility of injuries.
- ☐ Request any other Pembina or contract vehicles in the area be sent to assist and set up roadblocks if necessary.
- ☐ If safe to do so, make a first aid check of all persons involved in the accident. Conduct first aid within qualification limits until a health care professional takes over.
- ☐ If a person is unconscious or complains of neck or back pain, it is best not to move them until qualified medical personnel arrive. Do not move victims with possible spine or neck injuries unless a fire or other hazard is present.
- ☐ Do not attempt a rescue if it requires you to endanger your own life.
- ☐ If the vehicle is transporting any kind of product, a fire or toxic atmosphere could occur. Pay attention to fuel leaks and possible ignition sources.
- ☐ Conduct ongoing hazard assessments and adjust response actions accordingly.
- ☐ Exchange insurance information with any other parties involved in the collision.
- ☐ Obtain the names and contact information of any witnesses to the collision.
- ☐ If possible, make a quick diagram of where the vehicle occupants were seated and indicate the vehicles' direction of travel and lane. Also note the date, time and weather conditions. If possible, get a copy of the police report of the accident.
- ☐ If a fatality has occurred do not move the victim; leave the accident scene undisturbed for investigation by the Police.

7.7.4 International Travel Related Emergencies

In the event of an emergency during international business travel contact International SOS through their Assistance App, which can be accessed on their website or via mobile app.

[redacted]

International SOS provides all necessary international business travel emergency services on behalf of Pembina, including:

- Arranging medical transportation and care
- Monitoring an employee's condition and provide advice
- Evacuating employees when necessary
- Contacting families so they know employees are in good hands

The Security Management Program's Travel Risk Management Standard outlines the framework Pembina employs to assess medical and security risks associated with business trips. When required, Travel Safety and Security Plans will be developed. Business travel crises and emergencies will be managed according to processes outlined within the Corporate ERP and the relevant standards of Pembina's Security Management Program.

7.7.5 Radiation Related Incidents

Pembina's 24 hour emergency response number is posted on all warning signs for company radiation devices (nuclear densitometers). In the event of an incident involving radiation devices, callers will contact the SPCC who will then notify Corporate and Site Radiation Safety Officers (RSO). RSOs will then provide direction on appropriate response actions.

Radiation devices are designed to withstand normal physical damage; however, if shielding fails, contamination and radiation exposure can result. To minimize unnecessary radiation exposure, personnel and emergency responders must remain at least five meters or more away from the device.

Refer to the Radiation Safety Program for additional information.

7.8 General Guidance for Responders

The following general guidance has been provided for responders. It contains high-level information based on topics responders may encounter during emergencies while conducting response actions. Responders are reminded that if they are not sure what actions they should be taking, to request support or direction.

7.8.1 Notification of Next of Kin

Death is never to be presumed and first aid must be administered, by trained personnel, until relieved by a health care professional. Notification of a fatality does not occur until the casualty has been pronounced dead by a medical doctor or medical examiner. Under no circumstances are the names of casualties or missing persons to be released before the next of kin are notified. No telephone or radio discussion is to take place regarding the name(s) of the injured.

In the case of an incident that results in the death of, or serious injury to, a Pembina employee or contract person, or where a Pembina employee or contract person is missing, it will be the responsibility of the IC or Management appointed individual to ensure the immediate family is notified in coordination with, and following approval from, the applicable policing agency.

If the incident involves contract personnel, the IC will inform the contractor's management who, in turn, will be responsible for assisting police in notifying the next of kin.

If the incident involves a member of the public, the police will notify the next of kin.

Prior to notification:

- ☐ Ensure you have approval from the appropriate policing agency to notify the next of kin
- ☐ Triple check the victim's identity before notifying the family
- ☐ Confirm the relationship of the victim to the relative being notified

When carrying out the notification:

- ☐ Identify the time and location of the accident and the current location of the casualty
- ☐ Provide the relatives with as much factual information as possible
- ☐ Offer assistance, such as transportation, if necessary
- ☐ Leave your name and telephone number with the family members
- ☐ Advise the family that a senior Pembina Representative will be contacting them to discuss any immediate and future needs
- ☐ Ensure that notified individuals are not left alone

Following an incident where a fatality or serious injury has taken place, government agency representatives will probably carry out an investigation into the cause of the injury/fatality. After presenting their credentials, these representatives should be given full cooperation in the execution of their duties.

Work at the scene of an injury or fatality may not be resumed until permission has been obtained from the Medical Examiner's Office, the police, and appropriate Occupational Health and Safety Department.

7.8.2 Emergency Response within a Shared Right-Of-Way

If Pembina is notified of an incident or operational upset, including concomitant failures, within a shared ROW where there is the potential to impact the safety and wellbeing of people, property, the environment, or Pembina's finances or reputation, the SPCC must be notified. Following notification to the SPCC, event notification and validation activities begin, as required.

8.0 POST INCIDENT & RECOVERY ACTIVITIES

8.1 Incident Close

Once a situation improves, the decision to downgrade the Corporate Incident Classification (or Regulatory Level of Emergency, where declared) is made by the IC and the ECM, when activated. This decision may be based on monitoring data, control/containment of the situation, or reduced risk to the public or environment.

Note: When a Regulatory Level of Emergency (AB/BC) is declared, the decision to downgrade is made by the IC and the ECM in coordination with the provincial energy regulator.

If there has been an evacuation, the health authority may also want to be included in the decision to return evacuees to their homes.

Action Summary

- All response team members and on-site personnel, including contract personnel and emergency services, will be notified of the change of status.
- All previous contacts including public, Government, and industrial operators must also be notified.
- Maintain security of any evacuated area until it is deemed safe and all residents and workers have returned to their home or worksites. Provide assistance as required.
- Provide instructions for settlement of costs directly caused by the emergency. Ensure any claims are promptly processed.
- Prepare a media statement in coordination with the Regulator and provide to all those previously notified.
- Debriefing meetings with Pembina personnel (e.g., insurance, legal, human resources) should be conducted.
- Arrange critical incident stress management de-briefing if appropriate.
- Post-incident investigation procedures will be conducted, ensuring all activities are documented appropriately. All reporting requirements will be completed.

8.2 Returning Public/Community Relations

When an incident has resulted in a public evacuation, complete the following when returning members of the public to their homes/businesses:

- Ensure residences are checked and ventilated before allowing residents to enter;
- Ensure transportation is available if required
- Follow up with residents to answer any questions or address any concerns they have;
- Ensure all claims are promptly handled

It may also be necessary to carry out additional community relations activities. These may include:

- Repair to any structures damaged by the incident
- Clean up of debris

- Meeting to inform the public about the cause of the incident and what Pembina is doing to prevent a recurrence

All communications to the general public will be prepared and/or approved by Pembina's Crisis Communications Team as per the procedures outlined in the Crisis Communication Plan.

8.3 Critical Incident Stress Management

Pembina will engage a contract medical consulting firm to complete debriefing, as required. The debriefing should occur within 24-72 hours post-incident. When scheduling the debriefing, it is important to be flexible and sensitive to events and demands related to the incident.

8.4 Post Incident Review/Post Incident Analysis

8.4.1 Debriefing Activities

Debriefing activities are intended to review the response efforts and identify where existing processes, response personnel, and resources performed as anticipated, or where there may be opportunities for improvement. Post incident debriefing activities should begin once emergency response or crisis management activities are safely completed, the incident is stabilized, and recovery activities have commenced. Debriefing activities may:

- Include the key players from the response
- Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation
- Assign information-gathering responsibilities for an After-Action Report (AAR) or Post-Incident Analysis (PIA)
- Summarize the activities performed by each sector, including topics for follow-up
- Reinforce the positive aspects of the response
- Identify the person conducting the debrief and the date/time

8.4.2 After-Action Report or Post-Incident Analysis

An After-Action Report (AAR) or Post-Incident Analysis (PIA) is a detailed, step-by-step review of the response that took place as a result of the incident. These terms may be used synonymously between the differing regulatory bodies. The AAR is not the same as an investigation(s) conducted to establish the probable cause of the accident for administrative, civil, or criminal proceedings. Responsibility should be assigned to the appropriate individual or office to collect information about the response during the debriefing, from command post logs, incident reports, and/or eyewitness accounts. The AAR should consider/utilize all the following:

- Maps, charts, and forms used in the response
- A review of the events leading up to the incident
- A review of all external notifications, including government agencies and area stakeholders
- An evaluation of the safety procedures used
- An evaluation of the communications between command posts
- An evaluation of public relations efforts, e.g., website updates, media statements
- An evaluation of the plan(s), and how emergency responders executed their roles

- Gaps in process, procedures, policies, plans, or training
- An evaluation of any legal or environmental issues raised
- A summary of all recommendations for follow-up
- Assignment of action items to responsible parties

Once all available data has been assembled, key responders should verify that the details in the AAR have been accurately reported. The AAR should focus on the following:

- Command and Control – Was command established? Was appropriate Span of Control and Command and Control practices followed? Were response objectives communicated to the personnel expected to carry them out?
- Tactical Operations – Were the tactical operations implemented by emergency response personnel effective? What worked? What did not?
- Resources – Were the resources adequate for the job? Are improvements needed to apparatus and/or equipment? Were personnel trained to do the job effectively?
- Support Services – Were the support services received from other organizations adequate? What is required to bring support to the desired level?

8.4.3 Critiquing the Response

The purpose of a critique is to improve response efficiency and address areas for improvement. A critique should:

- Identify lessons learned and areas for improvement
- Support continued training to improve skills and techniques
- Identify gaps in resource needs
- Promote pre-planning to improve confidence in the response process
- Encourage cooperation through teamwork
- Be communicated with parties that could benefit from the learnings

8.5 Incident Investigation

Emergencies will be investigated based on the OEMS Incident Reporting, Investigation, and Analysis Standard and the ECMP Incident Debriefing Standard.

Where loss or damage to Pembina property or loss of revenue has occurred, evidence will not be disturbed until permission has been received from the Pembina insurance contact, the insurance company adjuster, or any government agencies involved.

8.6 Documentation and Collection

The forms referenced by this Plan serve as reporting tools to assist responders in obtaining, recording, and verifying the appropriate information and must be utilized for every incident or accident. Each Pembina employee and contractor that is assigned an emergency responder role shall, during an incident, record their actions, any phone calls/notifications made, etc. so that an accurate record of Pembina's response is documented.

Personal documentation tools, such as day timers or personal notebooks, are not to be used for record keeping during an incident and may be confiscated following the incident to complement

the documentation record. Forms completed during an emergency response, including those logged in the VCS, are to be submitted to the ECMP. The information collected on these forms will be reviewed in the post-emergency debriefing session. They may also be reviewed for auditing and training purposes.

All incidents are recorded in Pembina's Incident Reporting System. Reports may be selected for presentation to and review by Pembina's Incident Review Panel. Incident documentation and reports will be retained for the life of the impacted asset(s).

8.7 Insurance, Compensation, and Legal Implications

All requests for compensation and insurance claims should be forwarded to the legal department in the Calgary head office. An inability to operate as a result of injury to personnel, damage to the physical plant/pipeline, or government regulatory action may adversely affect delivery agreements. This effect may be felt for an extended period, depending on the severity of the incident. The Legal department should be engaged in an incident affecting delivery or service agreements.

8.8 Post Incident Clean-Up

Non-emergency related repairs must wait until any investigations have been completed. Before cleaning the site, the following must be considered:

- Investigation requirements, including pictures of the scene and forms used by emergency responders during the emergency
- Procedures (e.g., Incident Action Plan, SDS)
- Personal protective equipment for the crew
- Contract specialist cleanup services, if necessary
- Restoration of the area(s) affected

Once permission has been given for resumption of normal activities, obtain confirmation from the Investigation Team that initial investigation and evidence information is complete and proceed with clean-up and restoration of any damaged equipment/facilities.

8.9 Regulatory Reporting

Ensure post incident and regulatory reports are developed, as required. Reports required by government regulations shall be prepared promptly and with care, reporting only facts and expressing no opinion as to cause. Reports will be submitted in the prescribed manner and within timelines required by the relevant regulator.

8.10 Restoration of the ICP/ECC

See the applicable Command Post & Role Specific Guides for specific instructions on how to return the ICP/ECC to a state of readiness following the incident.

APPENDIX – GLOSSARY

Glossary	
After-Action Report (AAR)	Another term for Post-Incident Analysis (PIA), commonly used by regulators, referring to a formal document, designed to identify best practices, review lessons learned, initiate corrective actions, and capture recommended plan and procedure changes.
Corporate Emergency Response Plan (ERP)	The Corporate ERP provides guidance and direction to Pembina personnel to ensure effective response actions during emergencies, to aid in the prevention of injury to employees, emergency responders, and members of the public, and to minimize impacts to the environment, property, and infrastructure.
Corporate Incident Classification	Systematically identifies and evaluates the hazards and risks associated with Pembina's operations and is determined using the Corporate Incident Classification Matrix.
Corporate Security	Dedicated Pembina personnel, responsible for the development, maintenance, and implementation of the Security Management Program (SMP).
Damage Prevention and Public Awareness (DPPA) Program	The DPPA Program is designed to prevent damage to Pembina's owned and operated pipelines, facilities, and associated infrastructure by communicating with, and educating, stakeholders about the presence of pipelines in their communities.
Director of Emergency Management (DEM)	Role filled by a trained Emergency Management specialist to help guide process and priorities during a response.
Emergency Coordination Centre (ECC)	The ECC provides coordinated, corporate support and resources to assist the ICP in the planning and execution of response activities.
Emergency Coordination Manager (ECM)	Oversees and coordinates all response activities within Pembina during an incident.
Emergency & Continuity Management Program (ECMP)	Pembina's ECMP is based on a comprehensive suite of policies, procedures, and processes that supports Pembina's commitment to the safety of the public and workers, protection of the environment, and minimizing business interruptions and impacts to our customers.
Emergency & Continuity Management SME	Dedicated Pembina personnel, responsible for the development, maintenance, and implementation of the Emergency Management Program (ECMP).
Emergency Planning Zone (EPZ)	An EPZ is a geographical area surrounding a pipeline or facility that requires specific emergency response procedures based on a hazardous product. The extent of an EPZ is determined using industry accepted dispersion modeling software and analysis. In BC, an emergency planning zone is a geographical area that encompasses all the hazard planning zones for an oil and gas activity that is subject of an ERP.
Emergency Response Team (ERT)	A team of trained Emergency Responders who focus on the control, containment, and stabilization activities related to a response.
Field On-Call	A local Pembina Operations representative assigned to receive incident notification from the SPCC.

Glossary	
Field Responders	Field Responders deliver the tactical response actions required during the incident. They are most likely to be first on scene and will deliver the actions defined by Pembina's Initial On-Site Actions.
Gas Control	Gas Control monitors the Alliance Pipeline System 24 hours a day, seven days a week and supports the Alliance specific Activation Procedure. Gas Control has the ability and authority to remotely isolate and shut in pipelines, as required.
Geocortex	Pembina's internal GIS Application for viewing and searching assets and locations, as well as viewing spatial information and various other datasets.
Hazard Planning Zone (HPZ) (BC Only)	A Hazard Planning Zone is a geographical area determined by using the hazard planning distance as a radius, and within which persons, property or the environment may be affected by an emergency.
High Consequence Areas (HCA)	Specific locales and areas where a release could have the most significant adverse impacts.
Incident Commander (IC)	Manages the overall response to emergency incidents. The IC is responsible for: developing objectives, strategies and tactics that guide the response; assigning personnel to fill necessary positions; ensuring the safety of all personnel; keeping internal and external stakeholders updated; coordinating with other response agencies.
Incident Command Post (ICP)	The location at which Command and General Staff plans and directs the execution of response activities.
Incident Command System (ICS)	A standardized on-scene emergency management system designed to provide an integrated organizational structure that reflects the complexity and demands of a specific incident or multiple concurrent incidents. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure to aid in the management of resources and information during incidents.
Incident Management Team (IMT)	The entire team of responders which could be comprised of Field Responders, the RRT, the ITRT, the ECM, the CMT and/or ERTs.
Incident Technical Response Team (ITRT)	An ITRT is a collection of personnel that provide subject matter expertise during a response.
Initial Isolation Zone (IIZ) (Alberta)	The IIZ is a circular area surrounding the source of an emergency that represents the greatest hazard to the public.
Initial On-Site Actions	Defined initial response actions for responders.
Learning Management System (LMS)	The Pembina LMS is a centralized and standardized program where Pembina personnel will access and control their own learning. The LMS will provide each employee with a customized assignment of training activities (tasks) that is unique to their individual job role. The LMS links out to Pembina's document control system so Learners will always be presented with the most current, up to date documents. The LMS allows supervisors to track and report on staff competency.

Glossary	
Operational Excellence Management System (OEMS)	Pembina's OEMS drives consistency by providing clear expectations and a structured framework, OEMS supports safe, efficient and sustainable ways of working, while proactively managing risks and aligning with regulatory and policy requirements.
Pembina	Pembina Pipeline Corporation and each of its subsidiaries and/or entities operating within Canada.
(the) Pipeline	Pembina's internal intranet site, which acts as a repository for information within the organization.
Protective Action Zone (PAZ) (Alberta)	The PAZ is the downwind portion of the EPZ. This area is determined using wind direction and monitors that measure the hazard.
Post Incident Analysis (PIA)	Another term for After Action Report (AAR), commonly used by regulators, referring to a formal document, designed to identify best practices, review lessons learned, initiate corrective actions, and capture recommended plan and procedure changes.
Reception Centre	A registration centre for members of the public that have been evacuated. May provide temporary lodging.
Regional Emergency Operations Centre (REOC)	An operations centre established in a suitable location to manage the larger aspects of the emergency that is manned jointly by government and industry staff.
Regional Response Team (RRT)	A group of trained and competent personnel that plan and execute response activities during an incident. RRTs may be allocated responsibility for a specific geographical area.
Regulatory Level of Emergency	Emergency level classification designated by the Provincial energy regulator to help them understand the level of resources they will need to notify and/or activate.
Right-of-Way (ROW)	A strip of land containing one or more pipelines.
Role Guides	Documents designed to support members of the IMT during a response by outlining tasks and responsibilities assigned to their role.
Sherwood Park Control Centre (SPCC)	Pembina's Control Centre monitors incoming SCADA information for most pipeline systems. The SPCC plays a role in the Activation procedure.
State of Local Emergency (SOLE)	A declaration enabling local authorities to take actions necessary to provide maximum protection to people, property and the environment.
Subject Matter Experts (SME)	A SME is a person with a deep understanding of a particular process, function, technology, machine, material or type of equipment.
Supervisory Control Data Acquisition System (SCADA)	A real time system of hardware and software elements designed to monitor and control industrial processes and data.
Technical Specialist(s)	SMEs activated to support a response within the ICS structure.
Unified Command (UC)	An Incident Command System application used when more than one agency has incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the Unified Command, often the senior persons from agencies and/or disciplines participating in Unified Command, to establish a common set of objectives and strategies and a single Incident Action Plan.

Glossary	
Virtual Command System (VCS)	A tool based on the Microsoft Teams platform used to communicate in real-time during an emergency. Additional functions allow for report development and the sharing of ongoing response activities between command posts.

APPENDIX – FORMS

ICS Forms	
Copies of the following ICS Forms, typically included in an Incident Action Plan (IAP), are included in printed copies of the Corporate ERP and are available on the Pipeline or the ICS Canada Website.	
Name / Description	Typically Prepared By
ICS Form 201: Incident Briefing	Initial Incident Commander
ICS Form 202: Incident Objectives	Planning Section Chief
ICS Form 203: Organization Assignment List	Planning Section
ICS Form 204-AH: Assignment List	Planning Section or Operations Section
ICS Form 205A: Communications List	Operations Section
ICS Form 206: Medical Plan	Safety Watch / Safety Officer
ICS Form 208: Safety Message/Plan	Safety Officer
ICS Form 214: Activity Log	All Sections and Units
The following additional ICS forms are available on the Pipeline or the ICS Canada Website.	
ICS Form 205: Radio Communications Plan	Operations Section
ICS Form 207: Organization Chart	Planning Section
ICS Form 209: Incident Status Summary	Planning Section
ICS Form 211: Incident Check-In	All Sections and Units
ICS Form 213: General Message	Any Message Originator
ICS Form 215: Operational Planning Worksheet	Operations Section
ICS Form 215A: Incident Action Plan Safety Analysis	Safety Officer
ICS Form 216: Radio Requirements Worksheet	Operations Section
ICS Form 217: Communications Resource Availability	Operations Section
ICS Form 218: Support Vehicle Inventory	Operations Section
ICS Form 220: Air Operations Summary	Operations Section
ICS Form 221: Demobilization/Checkout	Operations Section
ICS Form 224: Crew Performance Rating	Section Chiefs or Leads
ICS Form 225: Incident Personnel Performance Rating	Section Chiefs or Leads
ICS Form 230: Daily Meeting Schedule	Planning Section
ICS Form 232: Resources at Risk Summary	Operations Section
ICS Form 233: Incident Open Action Tracker	Planning Section
ICS Form 234: Work Analysis Matrix	Operations Section Planning Section
ICS Form 260: Resource Order Form (Generic)	Logistics / Supply Unit
ICS Form 309: Communications Log	All Sections and Units

Corporate ERP Forms	
Copies of the following forms are included in printed copies of the Corporate ERP and are available on the Pipeline.	
Name / Description	Typically Prepared By
Air Monitoring Log	Air Monitoring Group
Pre-Ignition Hazard Assessment	Ignition Group
Bomb Threat Form	Individual receiving a Bomb Threat
Incident Action Plan Cover Sheet	Planning Section Chief or Planning Support Lead
Public & Media Statements	All responders, as necessary
Public Notification/Verification Record	Notification Group
Reception Centre Registration Form	Reception Centre Group
Resident Expense Claim Form	Reception Centre Group
Roadblock Vehicle Log	Roadblock Group
Sheltering Notification Script	Notification Group
Evacuation Notification Script	Notification Group
Security Witness Statement Form	Witness to Security Event
Missing Person Report	Individual reporting a missing person

Government Reporting Forms/Tools	
The following forms/tools are available to responders through government agencies to aid in the collection of information during a response effort.	
Agency	Form Description / Guidance
Alberta Energy Regulator (AER)	AER Release Report - After verbal notification, companies must complete a release report to record the release type, volume, location, any adverse effects on the environment, and other information. Once completed, the report must be submitted to the AER field centre closest to where the release occurred.
British Columbia Energy Regulator (BCER)	Compliance Management Information System (CM-IS) – This online tool replaced previous reporting forms and is required to be used by industry members who report and manage incidents reportable to the BCER.
Canada Energy Regulator (CER)	Online Event Reporting System (OERS) - This is an online form and must be completed for all incidents under CER jurisdiction. OERS is the automated single-window pipeline occurrence notification system established by the CER and TSB.
Saskatchewan Ministry of Environment (MOE)	Integrated Resource Information System (IRIS) – Initial and Detailed Incident Reports an 90-Day Written Reports are to be submitted through IRIS.

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Incident Briefing (ICS 201)

1. INCIDENT NAME/NUMBER	2. DATE PREPARED	3. TIME PREPARED

4. MAP SKETCH

5. SITUATION SUMMARY AND SAFETY BRIEFING

6. PREPARED BY (Name and Position)	SIGNATURE

Incident Briefing (ICS 201)

7. CURRENT AND PLANNED OBJECTIVES

8. CURRENT AND PLANNED ACTIONS, STRATEGIES AND TACTICS

Time:	Actions:

ICS 201-CAN Page 2 of 4	6. PREPARED BY (Name and Position)	SIGNATURE

Incident Briefing (ICS 201)

9. CURRENT ORGANIZATION

6. PREPARED BY (Name and Position)

SIGNATURE

Incident Briefing (ICS 201)

10. RESOURCES SUMMARY

Resources Ordered	Resource Identification	ETA	On Scene	Location/Assignment

ICS 201-CAN Page 4 of 4	6 PREPARED BY (Name and Position)	SIGNATURE

Incident Objectives (ICS 202)

1. INCIDENT NAME	2. DATE PREPARED	3. TIME

4. OPERATIONAL PERIOD (Date/Time)	Date From:	Date To:
	Time From:	Time To:

5. GENERAL CONTROL OBJECTIVES FOR THE INCIDENT (Include alternatives)

6. WEATHER FORECAST

7. GENERAL SAFETY MESSAGE

8. ATTACHMENTS (Check if attached)

- ☐ Organization List (ICS 203)
- ☐ Medical Plan (ICS 206)
- ☐
- ☐ Assignment List (ICS 204)
- ☐ Incident Map
- ☐
- ☐ Communications Plan (ICS 205)
- ☐ Traffic Plan
- ☐

9. PREPARED BY (Planning Section Chief)	10. APPROVED BY (Incident Commander)
SIGNATURE	SIGNATURE

Organization Assignment List (ICS 203)

1. INCIDENT NAME	2. DATE	3. TIME	4. OPERATIONAL PERIOD
			From:Date _____ Time _____ To: Date _____ Time _____

5. INCIDENT COMMAND AND STAFF

Incident Commander/ Unified Commanders	
Deputy	
Safety Officer	
Information Officer	
Liaison Officer	

6. AGENCY/ORGANIZATION REPRESENTATIVES

Agency/Organization	Representative

7. PLANNING SECTION

Chief	
Deputy	
Resources Unit	
Situation Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

8. LOGISTICS SECTION

Chief	
Deputy	
a. SUPPORT BRANCH	
Director	
Supply Unit	
Facilities Unit	
Ground Support Unit	
b. SERVICE BRANCH	
Director	
Communications Unit	
Medical Unit	
Food Unit	

9. OPERATIONS SECTION

Chief		
Deputy		
a. BRANCH		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
b. BRANCH		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
c. BRANCH		
Branch Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
d. AIR OPERATIONS BRANCH		
Air Operations Br. Dir.		
Air Tactical Group Sup.		
Air Support Group Sup.		

10. FINANCIAL/ADMINISTRATION SECTION

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

11. PREPARED BY (Resources Unit)	SIGNATURE

Assignment List (ICS 204)

1. BRANCH	2. DIVISION/GROUP/STAGING

3. INCIDENT NAME	4.OPERATIONAL PERIOD	From:Date _____ Time _____ To: Date _____ Time _____

5. OPERATIONAL PERSONNEL

Operations Chief _____ Division/ Group Supervisor _____

Branch Director _____ Staging Area Manager _____

6. RESOURCES ASSIGNED TO THIS PERIOD

Resource Identifier	Leader	No. of Persons	Contact Cell #, radio freq. etc.	Reporting Location, Special Equipment and Supplies, Remarks

7. WORK ASSIGNMENTS

8. SPECIAL INSTRUCTIONS

9. DIVISION/GROUP COMMUNICATIONS SUMMARY

Function		Frequencies	System	Chan.	Function		Frequencies	System	Chan.
Command	Local				Logistics	Local			
	Repeat					Repeat			
Div./Group Tactical					Ground to Air				

PREPARED BY (Resource Unit Leader)	APPROVED BY (Planning Section Chief)	Date	Time
Signature	Signature		

COMMUNICATIONS LIST (ICS 205A)

1. Incident Name:	2. Operational Period: Date/Time From: Date/Time To:

3. Basic Local Communications Information:

Incident Assigned Position	Name (Alphabetized)	Method(s) of Contact (phone, pager, cell, etc.)

4. Prepared by: Name: _____ Position/Title: _____ Date/Time: _____

ICS 205A-CAN | **IAP Page** _____ Signature: _____

This document may contain sensitive personal information.

Not to be posted on information boards or in documents distributed to general incident population or the public.

Medical Plan (ICS 206)

1. INCIDENT NAME	2. DATE/ TIME PREPARED Date / Time	3. OPERATIONAL PERIOD From:Date ____ Time ____ To: Date ____ Time ____

4. INCIDENT MEDICAL AID STATION

Medical Aid Stations	Location	Contact (number or frequency)	Paramedics Yes	Paramedics No
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

5. TRANSPORTATION (indicate air or ground)

Ambulance Service	Location	Contact (number or frequency)	Level of Serv. ALS	Level of Serv. BLS
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

6. HOSPITALS

Hospital Name	Address (Lat. and Long. if Helipad)	Travel Time Air	Travel Time Grnd	Contact (number or frequency)	Helipad Yes	Helipad No	Burn Ctr. Yes	Burn Ctr. No
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

7. SPECIAL MEDICAL EMERGENCY PROCEDURES

8. PREPARED BY (Medical Unit Leader)	9. APPROVED BY (Safety Officer)
SIGNATURE	SIGNATURE

Safety Message/Plan (ICS 208)

1. INCIDENT NAME	2. OPERATIONAL PERIOD: From:Date _____ Time _____ To: Date _____ Time _____

3. SAFETY MESSAGE/EXPANDED SAFETY MESSAGE, SAFETY PLAN, SITE SAFETY PLAN:

4. SITE SAFETY PLAN REQUIRED? Yes ☐ No ☐

Approved Site Safety Plan(s) Located At:

5. PREPARED BY (Name and Position)	Date Prepared:
SIGNATURE	Time Prepared:

Activity Log (ICS 214)

1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

4. NAME	5. ICS POSITION	6. OPERATIONAL PERIOD
		From:Date _____ Time _____ To: Date _____ Time _____

7. PERSONNEL ASSIGNED

Name	ICS Position	Home Base

8. ACTIVITY LOG

Time	Major Events

9. PREPARED BY (Name and Position)	SIGNATURE

Activity Log (ICS 214)

1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

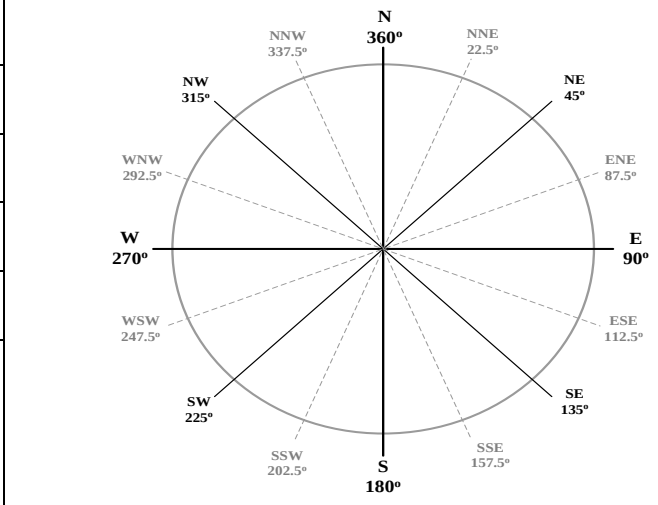
4. NAME	5. ICS POSITION	6. OPERATIONAL PERIOD
		From:Date _____ Time _____ To: Date _____ Time _____

8. ACTIVITY LOG

Time	Major Events

9. PREPARED BY (Name and Position)	SIGNATURE

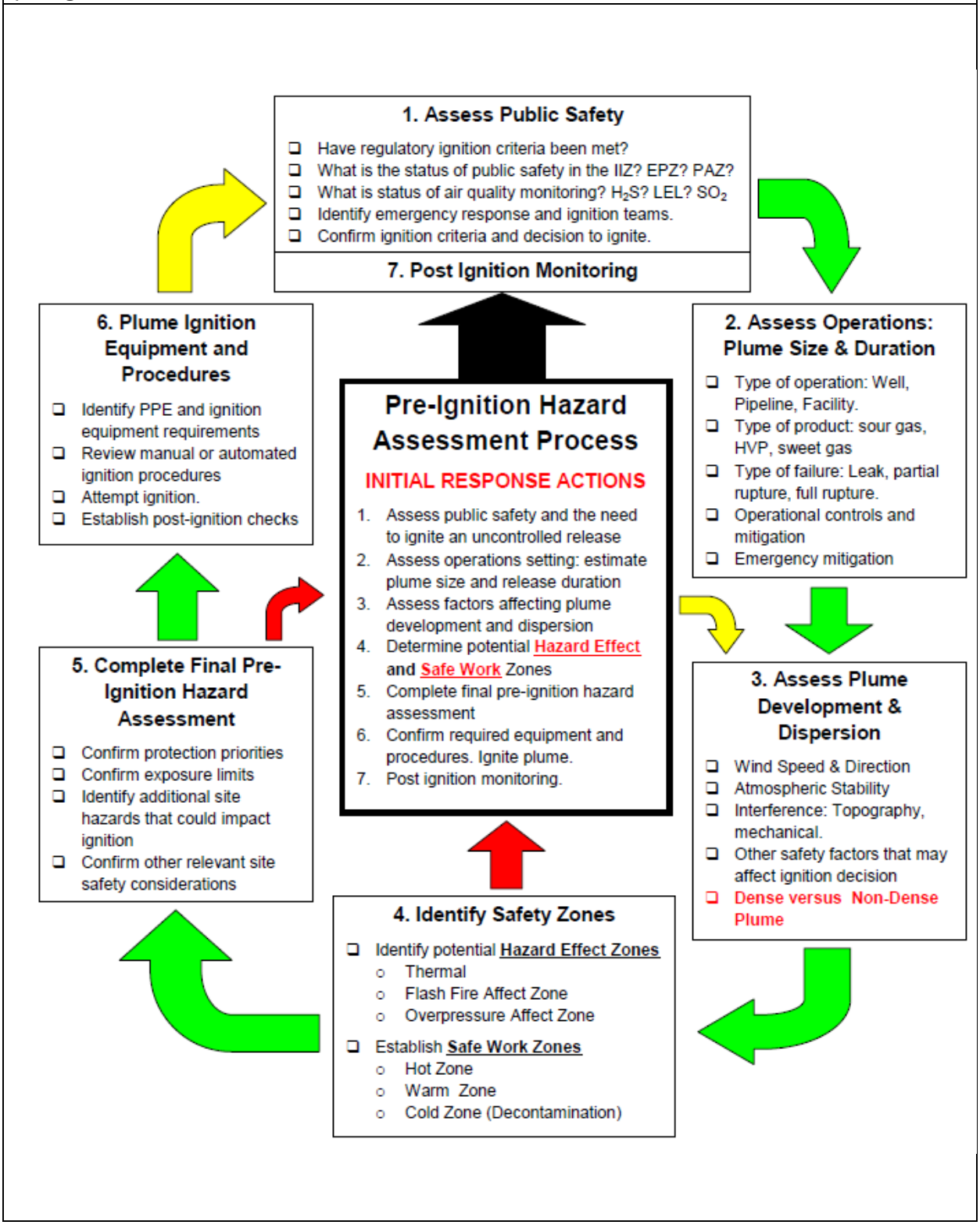
AIR MONITORING LOG

AIR MONITORING LOG	
DATE:	
NAME:	
TITLE:	
ICS POSITION:	
PAGE NO.:	
NOTE: Take readings at ground level.	

TIME	LEL %	H_2S	$S0_2$	O_2 %	WIND DIRECTION		WIND SPEED/ TEMP. (Est.)	LOCATION OF READING AND COMMENTS
					FROM	TO		

PRE-IGNITION HAZARD ASSESSMENT

The below flow diagram published by Energy Safety Canada is intended to assist with a pre-ignition hazard assessment.



Bomb Threat Form

GENERAL INFORMATION					
CALL RECEIVED BY (Name):		DATE (mm/dd/yyyy):		TIME OF CALL:	☐ AM ☐ PM

THREAT

Note: Try to use exact wording.

QUESTIONS TO ASK THE CALLER

When will the bomb go off?
Where exactly is the bomp located?
What does the bomb look like?
What will make the bomb explode?
Where are you now?
Did you plant the bomb?
What is your name?
What kind of bomb is it?

VOICE AND BACKGROUND SOUNDS CHECKLIST

VOICE	ATTITUDE	BACKGROUND SOUNDS	ACCENT
☐ Male or ☐ Female	☐ Calm	☐ Office Machines	☐ English
☐ Adult or ☐ Child	☐ Angry	☐ Airplanes	☐ French
☐ Slurred	☐ Laughing	☐ Factory Sounds	☐ Italian
☐ Distorted/Synthesized	☐ Emotional	☐ Traffic Street Noises	☐ German
☐ Deep	☐ Accusatory	☐ Trains	☐ Asian Specify:
☐ Raspy	☐ Incoherent	☐ Music	☐ Other:
☐ Intoxicated	☐ Nasal	☐ Children	
☐ Stutter	☐ Nervous	☐ Voices	
☐ Nasal	☐ Other:	☐ Office Machines	
☐ Deep Breathing		☐ Animals	
☐ Lisp		☐ Other:	
☐ Altered		☐ No Noise	
☐ Other:			

INCIDENT ACTION PLAN COVER SHEET

To be completed by the Planning Section Chief.

INCIDENT INFORMATION	
1. INCIDENT NAME:	**2. OPERATIONAL PERIOD TO BE COVERED BY IAP (Date/Time)** From: / To: /

3. APPROVED BY INCIDENT COMMANDER(S)

Organization:	Name:	Signature:

4. INCIDENT ACTION PLAN
The items checked below are included in this Incident Action Plan.

- ☐ ICS 202 – Incident Objectives
- ☐ ICS 203 – Organization Assignment List
- ☐ ICS 204 – Assignment List
- ☐ ICS 205A – Communications List
- ☐ ICS 206 – Medical Plan
- ☐ ICS 208 – Safety Message / Plan
- ☐
- ☐
- ☐
- ☐
- ☐

5. PREPARED BY: **DATE/TIME:** /

PUBLIC & MEDIA STATEMENTS

Taken from the Initial Response Guide

MEDIA REMINDER
In the event of an incident, all leaders should provide the following reminder to employees and contractors:

Due to the sensitive nature of this incident, refrain from any social media or contact with media related to the incident. Please be mindful that today's technology enables your actions and conversations to be recorded covertly and shared instantly.

[redacted]

PUBLIC AND MEDIA STATEMENT
If approached by a member of the public or media and asked for information, the following statement should be used:

I am not a company spokesperson but will gladly put you in touch with our Media Relations team. [redacted]

If pressed for information:

I am responding to an operational incident which requires my full attention. Please contact our Media Relations Team for information [redacted]

PUBLIC NOTIFICATION / VERIFICATION RECORD

PUBLIC NOTIFICATION / VERIFICATION RECORD							
PREPARED BY:						**DATE:**	
NAMES (List Everyone)	**MAP AND LOCATION**	**CONTACT TIME**	**SHELTERING?**		**EVACUATING?**		**DETAILS** (Destination, Phone, Help Required, etc.)
			YES	**NO**	**YES**	**NO**	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	
			☐	☐	☐	☐	

RECEPTION CENTRE REGISTRATION FORM

RECEPTION CENTRE REGISTRATION FORM					
NAME AND NO. OF PEOPLE	**RESIDENCE PHONE NO.**	**DESTINATION PHONE NO.**	**ARRIVAL TIME**	**DEPARTURE TIME**	**COMMENTS**

OCCUPANT EXPENSE CLAIM FORM

OCCUPANT EXPENSE CLAIM FORM								
INCIDENT NAME:								
DATE SUBMITTED:								
RESIDENT NAME:								
MAILING ADDRESS:								
LOCATION/ADDRESS OF RESIDENCE/BUSINESS/EMERGENCY RESPONSE PLAN MAP NO.:								
HOME PHONE:				**PHONE WHILE EVACUATED:**				
ADDRESS WHILE EVACUATED:								
EXPENSES (Attach Receipts)*	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**TOTAL**
Accommodation:								
Meals:								
Transportation (kms):								
							TOTAL EXPENSES:	
OTHER EXPENSES (Describe)	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**DATE**	**TOTAL**
							TOTAL OTHER EXPENSES:	
							ALL EXPENSES TOTAL:	
** If not pre-arranged and paid for directly by Pembina.*								
PEMBINA CONTACT:				**PHONE NO.:**				
				SUBMITTED BY:				

ROADBLOCK VEHICLE LOG

ROADBLOCK VEHICLE LOG						
PREPARED BY:					**DATE:**	
VEHICLE MAKE/ MODEL	**LICENSE PLATE NO.**	**DRIVER'S NAME**	**NO. OF PASSENGERS**	**TIME ENTERING EPZ**	**TIME LEAVING EPZ**	**COMMENTS**

SHELTERING NOTIFICATION SCRIPT

Hello, this is *(your name)* of Pembina Pipeline. Is this the *(name)* residence at *(telephone number)*?

Pembina is responding to an emergency at *(location)* in your area.

For your safety, it is extremely important that you, and those with you, stay indoors until the potential hazard no longer exists, or you are advised to evacuate.

To help us understand your immediate needs, we need to know:

How many people are at your location now?	
Is there anyone in your household that you cannot contact to inform them of the situation and advise them to evacuate away from the area?	Y / N
Do you have children in school at this time?	Y / N
Details	
Do you have the shelter-in-place instructions provided to you?	Y / N

If NO.....verbally explain:

- Immediately gather everyone indoors and stay there. Do not leave even if you see people outside.
- Close and lock all outside doors and windows. Tape gaps around doors and windows. Leave all inside doors open.
- Turn off appliances or equipment that blows out indoor air or sucks in outside air.
- Turn down furnace thermostats to the minimum setting and turn off air conditioners.
- Extinguish all potential sources of ignition (do not smoke or attempt to start your vehicle).
- Stay off the phone so that you can be contacted by emergency personnel.
- Stay tuned to local radio and television for possible updates.

Is there an alternate number we can contact you at?	
Do you understand everything I have told you?	Y / N
Are you leaving immediately?	Y / N

Thank you for your cooperation. Thank you for your cooperation. If you have any urgent questions, please call [redacted]

EVACUATION NOTIFICATION SCRIPT

Hello, this is (your name) of Pembina Pipeline. Is this the (name) residence at (telephone number)? Pembina is responding to an emergency at (location) in your area. For your safety, it is extremely important that you and your family leave your residence immediately and travel in a north / east / south / west direction to our reception centre located at (location of reception centre). To help us understand your immediate needs, we need to know:	
How many people are at your location now?	
Is there anyone in your household that you cannot contact to inform them of the situation and advise them to evacuate away from the area?	Y / N
Do you have children in school at this time?	Y / N
Details	
If YES..... we will contact the school to ensure the safety of your children. Buses will be directed to leave the area immediately. If school is in session, your children will be redirected to the reception centre by their regular bus driver when the school day is over.	
Do you require evacuation or transportation assistance?	Y / N
If YES.....we are sending someone to assist you. Please stay indoors and close all doors and windows until a Rover or the local police arrive to evacuate you.	
Please contact Pembina if you are unable to make it to the reception centre for any reason. Please keep your phone line free so that we can contact you if necessary.	
Is there an alternate number we can contact you at?	
A company representative at the reception centre will address any questions you may have and will make arrangements for your temporary accommodations.	
Do you understand everything I have told you?	Y / N
Are you leaving immediately?	Y / N
Thank you for your cooperation. If you have any urgent questions, please call [redacted]	

Security Witness Statement Form

WITNESS STATEMENT		
PROJECT:		
NAME:	TITLE/POSITION:	
WORK PHONE:	CELL PHONE:	EMAIL:
DATE (mm/dd/yyyy):	TIME:	LOCATION:

DESCRIPTION OF CIRCUMSTANCES

Who was present? Exactly what happened and was said?: Cover the 5 W's (who, what, why, when, where).

STATEMENT OF:

DESCRIPTION OF PERSON(S)/PERPETRATOR(S)

If Person(s)/Suspects are unknown, describe as best you can:

HEIGHT:	WEIGHT:	EYE COLOUR:
COLOUR OF HAIR:	FACIAL HAIR, IF ANY:	

GENDER: ☐ Male ☐ Female

CLOTHING (for example, colour of cap, jacket, pants, gloves, and type of footwear):

DISTINCTIVE MARKINGS, SUCH AS TATTOOS AND SCARS:

VOICE AND BACKGROUND CHARACTERISTICS:

Security Witness Statement Form

DESCRIPTION OF VEHICLE		
If a vehicle was involved:		
TYPE:	MAKE:	MODEL:
COLOUR:	LICENCE NO.:	PROVINCE:
DISTINCTIVE MARKINGS ON THE VEHICLE, SUCH AS DAMAGE ANYWHERE:		
DIRECTION OF TRAVEL		
OTHER:		

ADDITIONAL DETAILS
If a threat was uttered/directed at you – what exactly was said and describe any physical actions (for example, clenching of fists, brandishing an object) the person did when making the threat:
If you were assaulted, describe in exactly the nature (for example, pushed, punched in the face or elsewhere, etc.). Include if you sustained injuries and type (for example, cut, bruised, etc.) and if you obtained medical attention:
Did you report the threat or assault to the police? If so, provide the name of the officer receiving your complaint and any related file number given to you.
Note: Continue on additional paper if you run out of room.

MISSING PERSON REPORT

You do not have to wait 24 hours before you report someone missing. As soon as you cannot find the person and you are worried for their safety and welfare, you can report them missing to the police. It is important that you share all your concerns with police.

Record completed by	
Role	
Contact details (email/mobile)	
GENERAL DETAILS	
Name of missing person, DOB/age	
Role	
Organization	
Address	
Home country	
Staying at:	
Last seen where, when, by whom, and clothing description.	
Reported missing by	
Time reported missing	
Contact details (e.g., cell phone)	
Efforts to find person up until now	
Who has been notified (police case # etc.)	
Do they have a prominent profile or are they connected to someone who does	
Physical appearance (e.g., height, weight, build, marks, scars, tattoos, hair length & color, eye color, facial hair, glasses. (attach a recent photograph)	
MISSING PERSON SPECIFICS	
Primary language	
Familiarity with the area	
Possible reason for disappearance	
Possible/stated destination	
Possible route/means travel	

Note - the Police will likely request that someone from the family volunteer to be a liaison or spokesperson during the Police investigation. Discuss with the family do determine who the family contact will be, noting that immediate family members may be overwhelmed, and a close family friend may be a more appropriate choice.

MISSING PERSON REPORT

Vehicle description (make, model, colour etc.)	
Possible causes of disappearance	
Wearing what clothes (glasses/hat/coat /etc.)	
Carrying (pc/cash/passport/blackberry etc.)	
Hobbies / habits	
Impairment	
Medical conditions / disabilities (carrying medication)?	
Recent injuries / trauma / lifestyle changes	
Any known problems / addictions	
Suicidal / dangerous to others	
Last known conversation / topic	
Facebook / social media user	
Recent access to a computer/work device (#)	
Has the person previously been abducted?	

NEXT OF KIN/FAMILY DETAILS					
Name		Relation		Contact	
Name		Relation		Contact	
Name		Relation		Contact	
Name		Relation		Contact	

Special notes on next of kin (Religion, DNA sample of missing person)

ESCALATION	
To	
From	
At what date and time	

Note - the Police will likely request that someone from the family volunteer to be a liaison or spokesperson during the Police investigation. Discuss with the family do determine who the family contact will be, noting that immediate family members may be overwhelmed, and a close family friend may be a more appropriate choice.

PART 2 – DISTRICT/AREA OR SITE/SYSTEM SUPPLEMENTS

District/Area or Site/System specific supplements are maintained separately from the Corporate ERP. Supplements contain information that may be common throughout a geographical operating area or the entirety of a site or pipeline system, including:

- Internal and external contact information
- Support services and mutual aid
- Pembina owned response equipment

Site/System specific supplements may also include the following details, eliminating the need for an asset specific addendum(s)(Part 3):

- Site description and overview of operations
- Technical data
- Maps

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DEEP BASIN DISTRICT
FORT ST. JOHN AREA

EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE LINE:
1-800-360-4706

BCER 24-HR INCIDENT REPORTING NUMBER: 1-800-663-3456

CER PIPELINE EMERGENCIES: 1-819-997-7887
(VIA TRANSPORTATION SAFETY BOARD)

This supplement is intended to work in conjunction with the Pembina Corporate (Canada) Emergency Response Plan (ERP). Pouce Coupé Pipe Line Ltd., Plateau Pipeline Ltd., Pembina NGL Corporation and Pembina Energy Services are wholly-owned subsidiaries of Pembina Pipeline Corporation.

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DEEP BASIN DISTRICT, FORT ST. JOHN AREA

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ADDENDUM(S)

Birch Storage Terminal Site-Specific Details
NEBC Town Terminal Site Specific Details
Taylor Terminal Site Specific Details
Fort St. John Area Pipeline Systems Specific Details

DISTRIBUTION LIST

The Emergency & Continuity Management Program (ECMP), in coordination with the appropriate Operations staff, shall be responsible for the maintenance of this plan.

Company personnel are expected to become familiar with site or system specific response related duties and responsibilities outlined within this document.

Overall responsibility for the distribution of the plan rests with the ECMP.

Copies of this plan are distributed according to the following distribution list.

Internal Manuals				
Number	Name	Title	Location	Plan Type
[redacted]				

External Manuals				
Number	Name	Title	Address	Plan Type
Federal				
[redacted]				
Alberta				
[redacted]				

External Manuals				
Number	Name	Title	Address	Plan Type
[redacted]				
[redacted]				
[redacted]				
[redacted]				
[redacted]				
[redacted]				
British Columbia				
[redacted]				
[redacted]				
[redacted]				
[redacted]				
[redacted]				

External Manuals				
Number	Name	Title	Address	Plan Type
[redacted]				
[redacted]				
[redacted]				
[redacted]				
[redacted]				

This document is not intended for external distribution without approval from the Emergency & Continuity Management Program (ECMP).

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REVISION RECORD

This plan will be reviewed, validated, and updated regularly, or on an as-needed basis, to ensure all applicable regulations are met.

All updates shall be distributed to each individual plan holder, who will be responsible for incorporating them into their copy of the plan, as they are received.

Version	Date of Revision	Description of Revisions
-	Prior to 2020	Revision records have been archived. Outdated manuals are to be recalled.
1.0	February 29, 2020	Restructured the ERP document. Reviewed and completed necessary revisions to content.
2.0	February 28, 2021	Reviewed and completed necessary revisions to content.
3.0	March 31, 2022	Annual Update. Reviewed and completed necessary revisions to content. Addition of NEBC Town Terminal and associated pipelines.
4.0	March 31, 2023	Annual Update. Reviewed and completed necessary revisions to content.
5.0	March 31, 2024	Annual Update. Reviewed and completed necessary revisions to content.
5.1	July 2, 2024	Birch Terminal facility addendum update due to 10-19-088-23 W6M Birch Terminal expansion project.
5.2	October 22, 2024	Installation of NPS 8 North Inga to Birch (Conoco Lateral)
6.0	March 31, 2025	Annual Update. Reviewed and completed necessary revisions to content.
6.1	July 11, 2025	Addition of NPS 8 Attachie C3+ and C5+ pipelines after license transfer from Arc Resources to Pembina.
6.2	August 01, 2025	Amended two unlicensed Gundy pipelines to 26803 lines 1 (12") and 2 (6").
7.0	March 31, 2026	Annual Update. Reviewed and completed necessary revisions to content including removal of Mile 73 addendum due to facility being discontinued.

To request plan revisions, refer to the Revision Request Form located within the Corporate ERP.

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1.0 INTRODUCTION

The Deep Basin District includes the Fort St. John and Grande Prairie Areas, which have been separated into two Emergency Response Plans (ERPs), based on operational areas.

The Fort St. John Area includes pipeline systems and supporting infrastructure regulated by the BC Energy Regulator (BCER) as well as pipelines crossing the BC/AB provincial border that are regulated by the Canada Energy Regulator (CER). Sites with product storage meeting or exceeding capabilities outlined by Environment and Climate Change Canada (ECCC) are registered as required by the Environmental Emergencies Regulation (E2).

Site or system addendums for this area include:

- Birch Storage Terminal
- NEBC Town Terminal
- Taylor Terminal
- Fort St. John Pipeline Systems

For Deep Basin District pipelines regulated by the Alberta Energy Regulator (AER), refer to the Deep Basin District, Grande Prairie Area ERP.

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2.0 CONTACT NUMBERS

2.1 Pembina Emergency Numbers

Name	Location	Phone
Corporate Contact Numbers		
Pembina Emergency Response Line		1-800-360-4706
[redacted]		
[redacted]		
[redacted]		[redacted]
[redacted]		

2.2 Pembina Corporate Numbers

Name	Location	Phone
Calgary Corporate Office - Main Reception	Calgary	403-231-7500
Business Unit Leadership		
[redacted]		
[redacted]		

2.3 Pembina Deep Basin District / Fort St. John Area Contacts

Name	Cell	Office
Field Office		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

2.4 Response Teams

Field Responders
Field Responders deliver the tactical response actions required during the incident. They are most likely to be first on scene and will deliver the actions defined by Pembina's Initial On-Site Actions. This team is usually made up of local Operations staff. If additional support is needed, the Regional Response Team and/or members of the Incident Technical Response Team can be activated to assist with Command and Control functions within the Incident Command Post (ICP).
Regional Response Team (RRT)
Activation of the RRT can be requested by the Incident Commander during the Activation Conference Call. The Fort St. John area falls within the geographic area primarily supported by the West RRT. RRT members are trained to plan and execute response activities during an incident. They may be deployed to fill additional ICS roles within the Incident Command Post.
Incident Technical Response Team (ITRT)
Members of the ITRT can be requested by the Incident Commander during the Activation Conference Call. If the Incident Commander determines the incident response warrants additional support, they may request the activation of individuals assigned to the ITRT, who may be deployed to the Incident Command Post or provide support remotely from another location. The ITRT is a collection of Technical Specialists that provide subject matter expertise during a response. Technical Specialists may include, but are not limited to, subject matter experts (SME) from Asset Integrity, Corporate Security, Crisis Communications, Cyber Security, Environment, GIS, Human Resources, Indigenous Affairs, Land & Regulatory, Information Services, Insurance, and/or Legal.

2.5 Potential Incident Command Post Locations

Name	Address	Phone	Notes
[redacted]			
[redacted]			
[redacted]			

Where Pembina offices are not available or suitable for ICP locations, a local hotel or conference centre may be used. Additionally, Pembina may deploy their Command Trailer(s), where suitable, to manage incident response activities.

2.6 Emergency Services

Name of Organization	Address	City/Town	Phone
[redacted]			
Fire Departments			
[redacted]			
Police			
[redacted]			

Name of Organization	Address	City/Town	Phone
[redacted]			
Ambulance			
[redacted]			
Hospitals			
[redacted]			

2.7 Government Reporting Contacts

Contact information (organized by map area) for initial notifications is also included in the Maps and Stakeholders section of the area/site specific addendums.

2.7.1 Federal

Agency	Reporting	Location	Phone
Regulators			
[redacted]	[redacted]	[redacted]	[redacted]
Other Government Agencies			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]			
[redacted]	[redacted]		
[redacted]			

Agency	Reporting	Location	Phone
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

2.7.2 Alberta

Pipelines crossing the Alberta / British Columbia border are regulated by the CER.

Agency	Reporting / Notes	Location	Phone
Local Authority			
[redacted]		[redacted]	
[redacted]			
[redacted]			
	[redacted]		[redacted]
[redacted]			[redacted]
			[redacted]
[redacted]			
Health Authority			
[redacted]	[redacted]	[redacted]	

Agency	Reporting / Notes	Location	Phone
Transportation			
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]		
[redacted]	[redacted]		
Additional Agencies			
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]		
[redacted]			
[redacted]	[redacted]		[redacted]

Agency	Reporting / Notes	Location	Phone
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]		
[redacted]			
[redacted]		[redacted]	[redacted]
[redacted]	[redacted]		

2.7.3 British Columbia

Agency	Reporting	Location	Phone
Regulators			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Agency	Reporting	Location	Phone
Local Authorities			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Agency	Reporting	Location	Phone
	• [redacted]		

Agency	Reporting	Location	Phone
Health Authorities			
[redacted]			
Transportation			
[redacted]			

Agency	Reporting	Location	Phone
Additional Agencies			
[redacted]			
[redacted]			
[redacted]			
[redacted]			
[redacted]			

2.8 Emergency Response Support Services

Vendors that provide support services during regular operations can be utilized during an emergency; however, contact information for those services is maintained outside of this plan.

To access Pembina's current approved vendor listing or for assistance identifying support services that are currently utilized by Pembina, contact your Supply Chain Procurement Advisor. Current listings are available on the Supply Chain page on the Pipeline.

If the appropriate Procurement Advisor is not available, contact the Procurement Supervisor for assistance.

Company Name	Equipment	Location	Phone
Aircraft			
[redacted]			
[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]		

Company Name	Equipment	Location	Phone
Air Monitoring		Ensure monitors are capable of reading LEL levels	
[redacted]			
Communications Equipment			
[redacted]			
Environmental Services			
[redacted]			

Company Name	Equipment	Location	Phone
Emergency Management Consultants			
[redacted]			
Industrial Firefighting / Fire Suppression			
[redacted]			
Security Companies			
[redacted]			

Company Name	Equipment	Location	Phone
[redacted]			
Spill Response Specialists			
[redacted]			
[redacted]			
Wildfire Monitoring			
[redacted]			
Wildlife Management			
[redacted]			
[redacted]			
[redacted]			

2.9 Industry Assistance, Cooperatives, and Mutual Aid Groups

2.9.1 Industry Mutual Emergency Assistance Agreement (MEAA)

Pembina has a MEAA in place with industry members that can be initiated through the ECMP.

The MEAA provides members with a ready mechanism to request emergency assistance from one another by clarifying the terms and conditions upon which the emergency assistance is to be provided, with the intent of improving timeliness and efficiency of the response.

2.9.2 Taylor Industrial Mutual Aid Group (TIMAG)

Taylor Industrial Mutual Aid Group (TIMAG)	
Activation through	24-Hr
[redacted]	
[redacted]	

2.9.3 Central Peace Regional Emergency Management (CPREM)

Central Peace Regional Emergency Management (CPREM)	
Activation through	24-Hr
[redacted]	
[redacted]	

2.9.4 Western Canadian Spill Services Cooperative (WCSS)

Western Canadian Spill Services (WCSS)		
Name	Contact	24-Hr
[redacted]		

2.9.5 Emergency Response Assistance Canada (ERAC)

Emergency Reporting Line	ERAP Plan Reference
[redacted]	[redacted]

2.10 Alberta Government Roles and Responsibilities

In addition to the government agency duties listed in the Corporate ERP, consultations were conducted with the following local agencies.

2.10.1 Birch Hills County

Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]

2.10.2 Clear Hills County

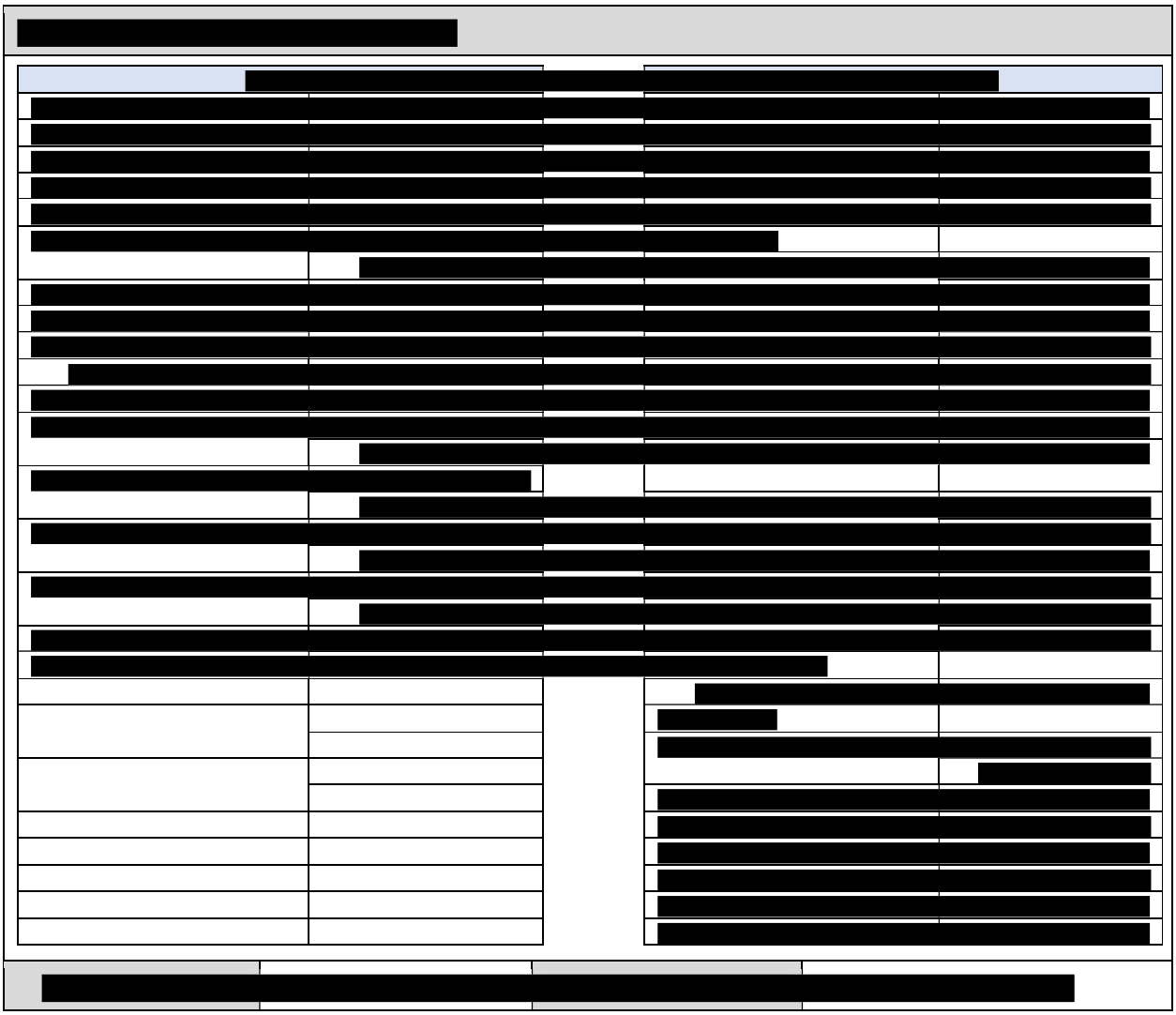
Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

2.10.3 M.D. of Spirit River

Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]

2.10.4 Saddle Hills County

Roles and Responsibilities
[redacted]
[redacted]
[redacted]



2.10.5 Town of Spirit River

Roles and Responsibilities
[redacted]
[redacted]
[redacted]

2.10.6 Alberta Health Services (AHS)

Roles and Responsibilities
[redacted]

2.11 British Columbia Government Roles and Responsibilities

In addition to the government agency duties listed in the Corporate ERP, consultations were conducted with the following local agencies.

2.11.1 City of Dawson Creek

Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]

2.11.2 City of Fort St. John

Roles and Responsibilities
[redacted]

2.11.3 District of Taylor

Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

2.11.4 Peace River Regional District (PRRD)

Roles and Responsibilities
[redacted]
[redacted]
[redacted]
[redacted]

[redacted]

[redacted]
[redacted]
[redacted]
[redacted]

2.11.6 First Nations Health Authority (FNHA) - Northern

Health Emergency Management BC Roles and Responsibilities
[redacted]

2.11.7 Northern Health Authority (NHA)

Health Emergency Management BC Roles and Responsibilities
[redacted]

Health Emergency Management BC Roles and Responsibilities
[redacted]

3.0 RESPONSE EQUIPMENT & RESOURCES

Pembina may respond using a wide variety of equipment depending upon the severity of the event. Additional resources may be obtained from area emergency services, mutual aid partners, third party contractors, or additional Pembina-owned equipment caches, depending on the nature of the emergency.

3.1 Pembina Response Equipment

Fort St. John Office			
Contact(s)		Location	
[redacted]		[redacted]	
Unit Type	Unit Number	Unit Description	Transportation Method
[redacted]		[redacted]	
[redacted]		[redacted]	
[redacted]		[redacted]	

Fort St. John Office			
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]

Grande Prairie			
Contact		Location	
[redacted]		[redacted]	
Unit Type	Unit Number	Unit Description	Transportation Method
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
[redacted]			[redacted]
[redacted]		[redacted]	[redacted]

Grande Prairie - Wapiti Pump Station	
Contact	Location
[redacted]	[redacted]

Unit Type	Unit Number	Unit Description	Transportation Method
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Grande Prairie - Wapiti Pump Station			
[redacted]		[redacted]	[redacted]
[redacted]		[redacted]	[redacted]

For a detailed listing or locations of Pembina owned response equipment, refer to Pembina's internal intranet portal, The Pipeline and/or Pembina's GIS mapping platform, Geocortex.

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3.2 Personal Protective Equipment (PPE)

The following is a list of personal protective equipment employees and contractors are required to wear, as appropriate:

- Fire-resistant clothing
- Hard hats
- Safety glasses
- Safety boots
- Gloves
- Personal monitor

3.3 Radiation Safety

Contact an authorized on site Radiation Safety Officer (RSO) for further information or documentation related to Pembina's Radiation Safety Program.

3.4 Communications / Radio Frequencies

Landlines at the field office and facilities, cell phones and/or truck radios are regularly used for communications. As required, additional radios and satellite phones will be resourced and used for communications.

In an emergency, confirm the use of any area specific radio channels or special instructions for radio-controlled roads with local personnel.

3.5 Control Points

Control Points are a set of predeveloped response locations and strategies designed to assist the Incident Management Team during the initial phases of a response. The control point data sheets detail the resources and considerations required to implement the suggested response strategy.

Control point data sheets are located on Pembina's mapping system, Geocortex and on Pembina's intranet site, The Pipeline.

For additional strategies and processes, refer to the Corporate Spill Contingency Manual located on Pembina's intranet site, The Pipeline.

3.6 Safety Data Sheets

For Safety Data Sheets (SDS), including first aid treatment, firefighting measures, potential short and long term effects from exposure, and initial response to an accidental release, refer to Pembina's SDS database on Pembina's internal intranet site, The Pipeline.

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4.0 OVERVIEW MAPS

4.1 FORT ST. JOHN AREA

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DEEP BASIN DISTRICT- FORT ST. JOHN AREA

PEMBINA

Draft Date: January 9, 2024 FSC	Scale: 1:860,000	Map: 14842
Revision Date: February 26, 2026 GLG	UTM ZONE 10 NAD83	

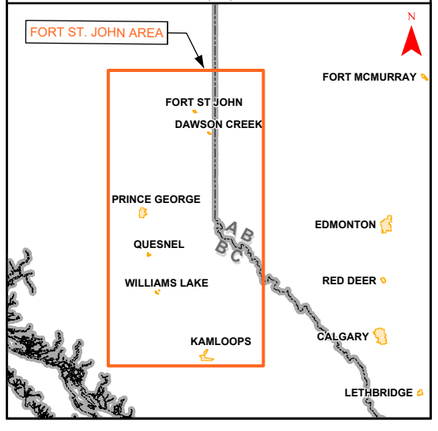
0 10 20 40 km

- Facility
- Oil Pipeline
- Discontinued Oil Pipeline
- HVP Pipeline
- Discontinued HVP Pipeline
- LVP Pipeline
- Discontinued LVP Pipeline
- Highway
- Railway
- Hydrology
- Waterbody
- Urban Area
- First Nations
- Protected Area
- Map Boundary

AREA OVERVIEW MAP

0 100 200 400 600 800 km

1:15,000,000



MAP PRODUCED BY H2Safety h2safety.ca

PART 3 – ASSET SPECIFIC ADDENDUMS

Asset specific addendums include details specific to an individual site, or type of operation within a larger operating area, such as:

- Site description and overview of operations
- Technical data
- Maps

Asset specific addendums may not be required for site or system specific operations, as the above details are common throughout the entirety of the asset's operation or geographical location, and are therefore captured in Part 2 (District/Area or Site/System Specific Supplements).

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BIRCH STORAGE TERMINAL

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1.0 SITE DESCRIPTION

[redacted]

1.1 Potential Hazards

Potential hazards and emergency scenarios related to the storage of hydrocarbons on site include:

Hazard Category	Worst Case Emergency Scenarios	Other Potential Scenarios
[redacted]	[redacted]	[redacted]

The above hazards could lead to threats to human health, environmental damage, and/or property damage.

1.2 Land Use

The area surrounding the facility is heavily forested and used mainly for agricultural purposes.

Contact information for Stakeholders within the EPZ is included in the Stakeholders & Maps section of this plan.

1.3 Site Access

[redacted]

2.0 SITE SPECIFIC EMERGENCY PROCEDURES

2.1 Site Muster

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
- Ensure personal safety.
- Leave the work area (on foot) and report to the closest Muster Point, if safe to do so. If the closest Muster Point is compromised, report to an alternate Muster Point.
- Check in at the Muster Point. If more than one Muster Point has been established ensure communication occurs between the locations to complete an accurate head count.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- Remain at the Muster Point until further instructions are given.

2.2 Site Evacuation

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
- Ensure personal safety. Ensure individuals requiring mobility assistance during muster and evacuation activities are identified and provided the necessary supports (physical aids or additional support from personnel).
- Leave the work area (on foot) and report to the closest Muster Point, if safe to do so. If the closest Muster Point is compromised, report to an alternate Muster Point.
- Check in at the Muster Station. If more than one Muster Point has been established ensure communication occurs between the locations to complete an accurate head count.
- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Develop an evacuation plan and ensure all individuals are aware of the decision to evacuate.
- Once evacuated, report to the appointed check-in location.
- Do not return to the site until the “All Clear” has been given, and Safe Work Permits have issued. Before bringing an asset back online following an emergency shut down, it is important to complete all required hazard assessments and follow site-specific re-start procedures.

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3.0 TECHNICAL DATA

Technical data has been inserted on the following pages

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Birch Terminal - Facility

LICENSEE	NAME	FACILITY ID / LICENSE #	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	FACILITY TYPE	STATUS	EPZ (m)
[redacted]		PEMBINA OPERATING						

[redacted]

LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant BS=Booster Station LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm OS=Oil Sands Processing Plant OM=Oil Sales Meter

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

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Birch Terminal - Inlet/Outlet Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	LICENSEE/OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
PEMBINA OPERATED PIPELINES																
[redacted]																

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Birch Terminal - Onsite Storage Registration

Product	CAS Registry No.	UN No.	ERG-Guide-Number	Largest Container on Location (Tonnes)	Maximum Expected Quantity on Location (Tonnes)	Hazard Category
[redacted]						
[redacted]						
[redacted]						

NOTES:

- CEPA Registration is done at Safe Fill Limits as required by ECCC.
- EPZ Calculations are done at 100% Fill Volumes to account for process piping.
- Under the CEPA regulations, mixtures of C2+/C3+ products are categorized as "Natural Gas, Petroleum, Raw Liquid Mix". Mixtures in LPG tanks (which are dominantly C3/C4 components) and process vessels which may have any combination of C2+ components fall into this category.
- For Safety Data Sheets (SDS), including specific composition, initial response actions to an accidental release, and potential short- and long- term effects from exposure, refer to Pembina's SDS database available on Pembina's internal intranet site, The Pipeline.
- Additional response instructions for first responders can be referenced in the above noted guide from the Emergency Response Guidebook (ERG) 2024.

H2Safety

Birch Terminal - Tanks / Bullets

Facility / Location	Substance	Tank ID	Tank Volume (m^3)	Area of Pool (m^2)	CALCULATED HAZARD RADIUS (m)				[redacted]
					Radiant Heat from Pool Fire to 5 kW/m^2 (m)	Flammable Area (LEL) from a Release (m)	Overpressure to 1 psi (m)	Radiant Heat from Explosion to 5 kW/m^2 (m)	
[redacted]	[redacted]	[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							
		[redacted]							

H2Safety

Birch Terminal - Tanks / Bullets

Facility / Location	Substance	Tank ID	Tank Volume (m^3)	Area of Pool (m^2)	CALCULATED HAZARD RADIUS (m)				EPZ (m)
					Radiant Heat from Pool Fire to 5 kW/m^2 (m)	Flammable Area (LEL) from a Release (m)	Overpressure to 1 psi (m)	Radiant Heat from Explosion to 5 kW/m^2 (m)	
[redacted]									

LEGEND:
EPZ=Emergency Planning Zone

NOTES:
- Additional details pertaining to the Emergency Planning Zone (EPZ) calculations can be requested from the ECMP.

H2Safety

4.0 STAKEHOLDERS & MAPS

4.1 Data Collection

Pembina conducts continuous public involvement activities within identified Emergency Planning Zones (EPZs). These activities allow Pembina to collect emergency contact numbers from surface developments (residents/businesses) within the EPZ, in order to notify them of an emergency and provide them with appropriate response actions.

Only select copies of this plan contain occupant data collected from surface developments. Refer to the Distribution List for additional details.

Occupant data is collected and validated on a continuous schedule, separate from the ERP; therefore, in an emergency the preference is to utilize the “live” or “real-time” data available through Pembina’s mass notification system; however, if inaccessible for some reason, the printed reports can be used to begin initial notifications.

Printed Occupant Data Reports are valid as of the date indicated in the report itself.

If real-time data or additional occupant data is required, it can be requested through the Emergency Management On-Call line.

4.2 Data Identification

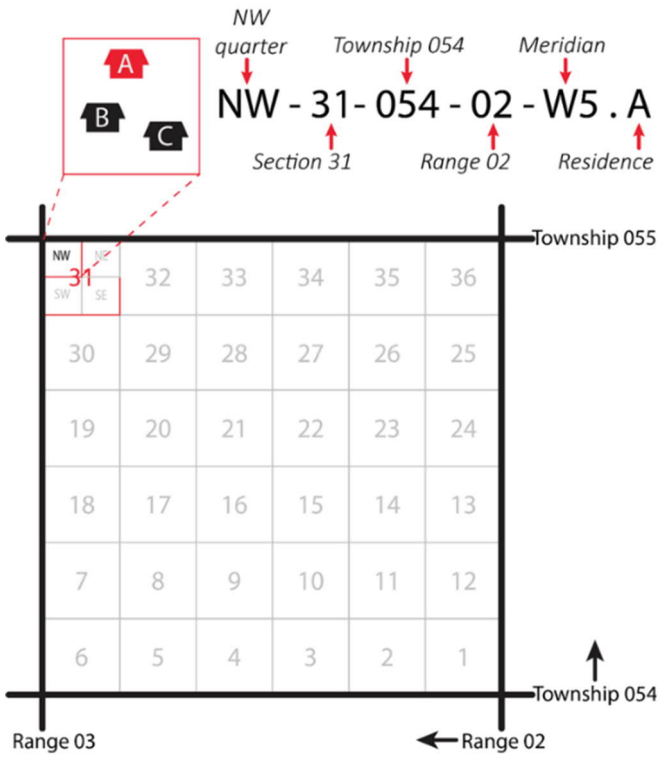
Surface developments within the EPZ are each given a unique identifier which corresponds to a land location on a corresponding map.

The Dominion Land Survey (DLS) system is used within Alberta, Saskatchewan, and portions of northeast British Columbia. Confidential occupant data within each mapped area is sorted by geographical location; organized by meridian, then range (east to west), then township (south to north), then section, then quarter section, and the unique resident ID.

Example: NW-31-054-02 W5.A

NW	31	054	02	W5	A
Quarter Section	Section	Township	Range	Meridian	Unique Resident ID

Note: The unique ID for surface developments within a subdivision may include additional values specific to the subdivision's name or location.



4.3 Birch Storage Terminal Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.

There are no wildlife management zones or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Pembina STARS Sites
[redacted]
[redacted]
[redacted]

Special Area Considerations
[redacted]

Water Bodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Grazing Lease Holders		
Lease Name	Contact	Phone
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]		

Industrial Operators	
Name	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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4.4 Maps & Drawings

When applicable, maps and drawings will be found within this section.

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NEBC TOWN TERMINAL

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4.2 Data Identification....10
4.3 NEBC Town Terminal Stakeholder Details....11
4.4 Maps & Drawings....13

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1.0 SITE DESCRIPTION

[redacted]

1.1 Potential Hazards

Potential hazards and emergency scenarios related to the storage of hydrocarbons on site include:

Hazard Category	Worst Case Emergency Scenarios	Other Potential Scenarios
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	

The above hazards could lead to threats to human health, environmental damage, and/or property damage.

1.2 Land Use

The area surrounding the facility is heavily forested and used mainly for agricultural purposes.

Contact information for Stakeholders within the EPZ is included in the Stakeholders & Maps section of this plan.

1.3 Site Access

[redacted]

2.0 SITE SPECIFIC EMERGENCY PROCEDURES

2.1 Site Muster

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
- Ensure personal safety.
- Leave the work area (on foot) and report to the closest Muster Point, if safe to do so. If the closest Muster Point is compromised, report to an alternate Muster Point.
- Check in at the Muster Point. If more than one Muster Point has been established ensure communication occurs between the locations to complete an accurate head count.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- Remain at the Muster Point until further instructions are given.

2.2 Site Evacuation

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
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- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Develop an evacuation plan and ensure all individuals are aware of the decision to evacuate.
- Once evacuated, report to the appointed check-in location.
- Do not return to the site until the “All Clear” has been given, and Safe Work Permits have issued. Before bringing an asset back online following an emergency shut down, it is important to complete all required hazard assessments and follow site-specific re-start procedures.

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3.0 TECHNICAL DATA

Technical data has been inserted on the following pages

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Town Terminal - Facilities

LICENSEE	NAME	FACILITY ID / LICENSE #	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	FACILITY TYPE	STATUS	EPZ (m)
[redacted]		PEMBINA OPERATING						

[redacted]

LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant BS=Booster Station LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm OS=Oil Sands Processing Plant OM=Oil Sales Meter

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

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Town Terminal - Inlet/Outlet Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	LICENSEE/OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
PEMBINA OPERATED PIPELINES																
[redacted]																
THIRD PARTY OPERATING PIPELINES [1]																
[redacted]																

[1] **Assigned EPZ is shown for reference only.**

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Town Terminal - Onsite Storage Registration

Product	CAS Registry No.	UN No.	ERG-Guide-Number	Largest Container on Location (Tonnes)	Maximum Expected Quantity on Location (Tonnes)	Hazard Category
[redacted]						
[redacted]						
[redacted]						

NOTES:

- CEPA Registration is done at Safe Fill Limits as required by ECCC.
- EPZ Calculations are done at 100% Fill Volumes to account for process piping.
- Under the CEPA regulations, mixtures of C2+/C3+ products are categorized as "Natural Gas, Petroleum, Raw Liquid Mix". Mixtures in LPG tanks (which are dominantly C3/C4 components) and process vessels which may have any combination of C2+ components fall into this category.
- For Safety Data Sheets (SDS), including specific composition, initial response actions to an accidental release, and potential short- and long- term effects from exposure, refer to Pembina's SDS database available on Pembina's internal intranet site, The Pipeline.
- Additional response instructions for first responders can be referenced in the above noted guide from the Emergency Response Guidebook (ERG) 2024.

H2Safety

Town Terminal - Tanks / Bullets

Facility / Location	Substance	Tank ID	Tank Volume (m^3)	Area of Pool (m^2)	CALCULATED HAZARD RADIUS (m)				EPZ (m)
					Radiant Heat from Pool Fire to 5 kW/m^2 (m)	Flammable Area (LEL) from a Release (m)	Overpressure to 1 psi (m)	Radiant Heat from Explosion to 5 kW/m^2 (m)	
[redacted]	[redacted]	[redacted]							

LEGEND:
EPZ=Emergency Planning Zone

NOTES:
- Additional details pertaining to the Emergency Planning Zone (EPZ) calculations can be requested from the ECMP.

H2Safety

4.0 STAKEHOLDERS & MAPS

4.1 Data Collection

Pembina conducts continuous public involvement activities within identified Emergency Planning Zones (EPZs). These activities allow Pembina to collect emergency contact numbers from surface developments (residents/businesses) within the EPZ, in order to notify them of an emergency and provide them with appropriate response actions.

Only select copies of this plan contain occupant data collected from surface developments. Refer to the Distribution List for additional details.

Occupant data is collected and validated on a continuous schedule, separate from the ERP; therefore, in an emergency the preference is to utilize the “live” or “real-time” data available through Pembina’s mass notification system; however, if inaccessible for some reason, the printed reports can be used to begin initial notifications.

Printed Occupant Data Reports are valid as of the date indicated in the report itself.

If real-time data or additional occupant data is required, it can be requested through the Emergency Management On-Call line.

4.2 Data Identification

The National Topographic (NTS) Grid System is used in portions of British Columbia. Confidential occupant data within each mapped area is sorted by geographical location; by NTS map number, map sheet, grid, block, resident ID, and concludes with the quarter unit and unit.

Example: a-20-B / 94-H-9.A

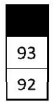
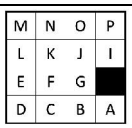
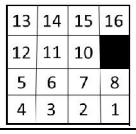
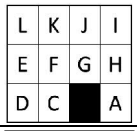
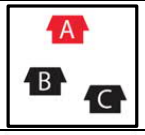
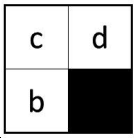
Read first; from left to right

a – 20 – B / 94 – H – 9 . A

Read second; from right to left

Read ID Last

Note: The unique ID for surface developments within a subdivision may include additional values specific to the subdivision's name or location.

NTS Sections		Example
1	NTS Map Number: Numbered 82 to 104	a-20-B / 94-H-9.A 
2	Map Sheet: Lettered A to P (uppercase)	a-20-B / 94-H-9.A 
3	Grid: Numbered 1 to 16	a-20-B / 94-H-9.A 
4	Block: Lettered A to L (uppercase)	a-20-B / 94-H-9.A 
5	Resident ID: Alpha/Numeric	a-20-B / 94-H-9.A 
6	Quarter Unit: Lettered a-d (lowercase)	a-20-B / 94-H-9.A 
7	Unit: Numbered 1 to 100 (each unit is ± 1 km by 1 km)	a-20-B / 94-H-9.A

4.3 NEBC Town Terminal Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.

There are no highways, grazing leases, wildlife management zones or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
Regulators		
[redacted]		[redacted]
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Pembina STARS Sites
[redacted]
[redacted]
[redacted]

Special Area Considerations
[redacted]

Water Bodies
[redacted]

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]	[redacted]	
	[redacted]	
	[redacted]	
[redacted]		

Industrial Operators	
Name	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	

4.4 Maps & Drawings

When applicable, maps and drawings will be found within this section.

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TAYLOR TERMINAL

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1.2 Land Use....4
1.3 Site Access....4
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1.0 SITE DESCRIPTION

[redacted]

1.1 Potential Hazards

Potential hazards and emergency scenarios related to the storage of hydrocarbons on site include:

Hazard Category	Worst Case Emergency Scenarios	Other Potential Scenarios
[redacted]		

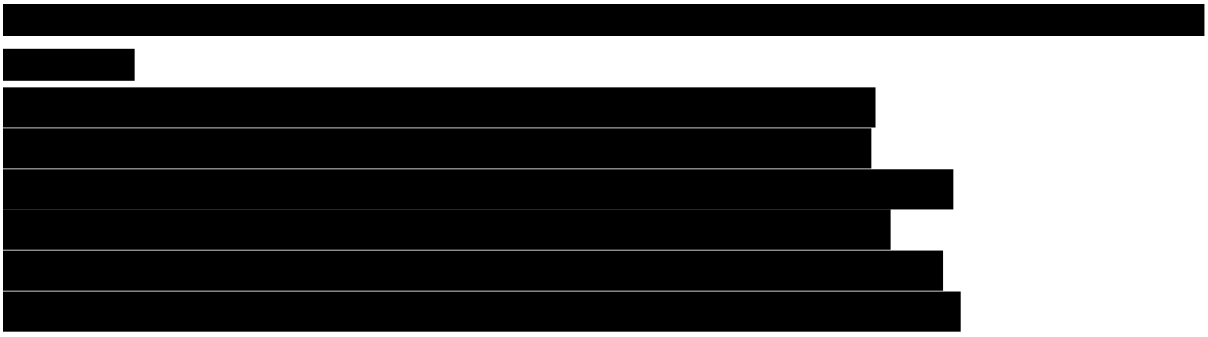
The above hazards could lead to threats to human health, environmental damage, and/or property damage.

1.2 Land Use

The area surrounding the facility includes the District of Taylor, oil and gas related operations, and land used for agricultural purposes.

Contact information for Stakeholders within the EPZ is included in the Stakeholders & Maps section of this plan.

1.3 Site Access



2.0 SITE SPECIFIC EMERGENCY PROCEDURES

2.1 Site Muster

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
- Ensure personal safety.
- Leave the work area (on foot) and report to the closest Muster Point, if safe to do so. If the closest Muster Point is compromised, report to an alternate Muster Point.
- Check in at the Muster Point. If more than one Muster Point has been established ensure communication occurs between the locations to complete an accurate head count.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- Remain at the Muster Point until further instructions are given.

2.2 Site Evacuation

- Sound the appropriate alert or signal.
- Shut down operating equipment and/or processes, if possible. When safe to do so, ensure all process equipment is taken offline in a safe manner. Complete the required Process Hazard Analysis (PHA) documentation and follow site-specific emergency shut down procedures.
- Assess the situation and identify additional hazards.
- Ensure personal safety. Ensure individuals requiring mobility assistance during muster and evacuation activities are identified and provided the necessary supports (physical aids or additional support from personnel).
- Leave the work area (on foot) and report to the closest Muster Point, if safe to do so. If the closest Muster Point is compromised, report to an alternate Muster Point.
- Check in at the Muster Station. If more than one Muster Point has been established ensure communication occurs between the locations to complete an accurate head count.
- Establish a roadblock at the site entrance, if safe to do so, to ensure all persons entering or leaving the site are accounted for.
- If safe to do so, conduct search and rescue procedures for any missing individuals.
- Develop an evacuation plan and ensure all individuals are aware of the decision to evacuate.
- Once evacuated, report to the appointed check-in location.
- Do not return to the site until the “All Clear” has been given, and Safe Work Permits have issued. Before bringing an asset back online following an emergency shut down, it is important to complete all required hazard assessments and follow site-specific re-start procedures.

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3.0 TECHNICAL DATA

Technical data has been inserted on the following pages.

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Taylor Terminal - Facility

LICENSEE	NAME	FACILITY ID / LICENSE #	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	FACILITY TYPE	STATUS	EPZ (m)
[redacted]		PEMBINA OPERATING						

[redacted]

LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant BS=Booster Station LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm OS=Oil Sands Processing Plant OM=Oil Sales Meter

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

H2Safety

Taylor Terminal - Pembina Inlet/Outlet Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	LICENSEE/OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
PEMBINA OPERATED PIPELINES																
[redacted]																

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Taylor Terminal - Onsite Storage Registration

Product	CAS Registry No.	UN No.	ERG-Guide-Number	Largest Container on Location (Tonnes)	Maximum Expected Quantity on Location (Tonnes)	Hazard Category
[redacted]						
[redacted]						
[redacted]						
[redacted]						

NOTES:

- CEPA Registration is done at Safe Fill Limits as required by ECCC.
- EPZ Calculations are done at 100% Fill Volumes to account for process piping.

*Under the CEPA regulations, mixtures of C2+/C3+ products are categorized as "Natural Gas, Petroleum, Raw Liquid Mix". Mixtures in LPG tanks (which are dominantly C3/C4 components) and process vessels which may have any combination of C2+ components fall into this category.

**There are two Condensate tanks that are interconnected without any valving between them, thus, the largest container capacity is the total of the two tanks.

- For Safety Data Sheets (SDS), including specific composition, initial response actions to an accidental release, and potential short- and long- term effects from exposure, refer to Pembina's SDS database available on Pembina's internal intranet site, The Pipeline.
- Additional response instructions for first responders can be referenced in the above noted guide from the Emergency Response Guidebook (ERG) 2024.

H2Safety

Taylor Terminal - Tanks / Bullets

Facility / Location	Substance	Tank ID	Tank Volume (m^3)	Area of Pool (m^2)	CALCULATED HAZARD RADIUS (m)				EPZ (m)
					Radiant Heat from Pool Fire to 5 kW/m^2 (m)	Flammable Area (LEL) from a Release (m)	Overpressure to 1 psi (m)	Radiant Heat from Explosion to 5 kW/m^2 (m)	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	5640.09	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

LEGEND:
EPZ=Emergency Planning Zone

NOTES:
- Additional details pertaining to the Emergency Planning Zone (EPZ) calculations can be requested from the ECMP.

H2Safety

4.0 STAKEHOLDERS & MAPS

4.1 Data Collection

Pembina conducts continuous public involvement activities within identified Emergency Planning Zones (EPZs). These activities allow Pembina to collect emergency contact numbers from surface developments (residents/businesses) within the EPZ, in order to notify them of an emergency and provide them with appropriate response actions.

Only select copies of this plan contain occupant data collected from surface developments. Refer to the Distribution List for additional details.

Occupant data is collected and validated on a continuous schedule, separate from the ERP; therefore, in an emergency the preference is to utilize the “live” or “real-time” data available through Pembina’s mass notification system; however, if inaccessible for some reason, the printed reports can be used to begin initial notifications.

Printed Occupant Data Reports are valid as of the date indicated in the report itself.

If real-time data or additional occupant data is required, it can be requested through the Emergency Management On-Call line.

4.2 Data Identification

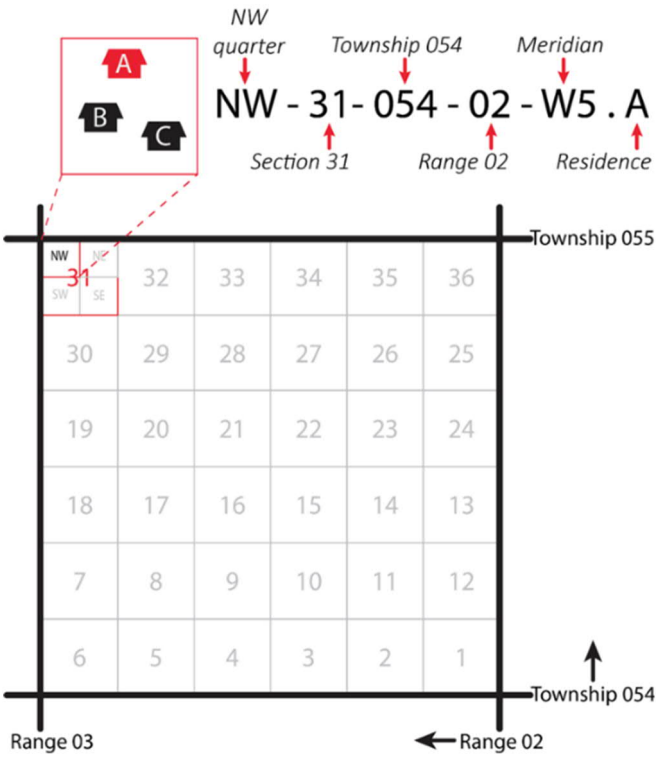
Surface developments within the EPZ are each given a unique identifier which corresponds to a land location on a corresponding map.

The Dominion Land Survey (DLS) system is used within Alberta, Saskatchewan, and portions of northeast British Columbia. Confidential occupant data within each mapped area is sorted by geographical location; organized by meridian, then range (east to west), then township (south to north), then section, then quarter section, and the unique resident ID.

Example: NW-31-054-02 W5.A

NW	31	054	02	W5	A
Quarter Section	Section	Township	Range	Meridian	Unique Resident ID

Note: The unique ID for surface developments within a subdivision may include additional values specific to the subdivision's name or location.



4.3 Taylor Terminal Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.

There are no Pembina registered STARS site, highways, grazing leases, wildlife management zones or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
Regulators		
[redacted]		[redacted]
Local Authorities		
[redacted]	[redacted]	[redacted]
[redacted]		

Immediate Reporting		
Name	Contact	Phone
[redacted]	[redacted]	
	[redacted]	
Health Authorities		
[redacted]		

Special Area Considerations
[redacted]

Water Bodies
[redacted]

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		

Industrial Operators	
Name	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	

Industrial Operators	
Name	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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4.4 Maps & Drawings

When applicable, maps and drawings will be found within this section.

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DEEP BASIN DISTRICT, FORT ST. JOHN AREA - PIPELINE SYSTEMS

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1.0 FORT ST. JOHN AREA PIPELINES

1.1 [redacted]

[redacted]

1.2 Land Use

Land within the operating area is mainly used for agricultural purposes. Agricultural Land Reserves are located throughout the operating area and the land is used mainly for agricultural purposes. Forested areas are primarily used for oil and gas development and recreational purposes.

Contact information for Stakeholders within the EPZ is included in the Stakeholders & Maps section of this plan.

Many areas along the southern portion of the Western Pipeline System is sparsely populated; however, there are areas where the system runs through populated areas including the city of Prince George, Quesnel, 100 Mile House, and the city of Kamloops.

Less populated areas are heavily forested and used for recreation, agricultural, industry, or timber management purposes.

2.0 TECHNICAL DATA

Technical data has been inserted on the following pages.

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Deep Basin - Fort St. John - Facilities

LICENSEE	NAME	Facility ID / License No.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	FACILITY TYPE	STATUS	EPZ (m)
[redacted]								
BLUEBERRY SYSTEM								
BOUNDARY LAKE SYSTEM								
LGS SYSTEM								
NEBC SYSTEM								
[redacted]								
PEACE SYSTEM								

H2Safety

Deep Basin - Fort St. John - Facilities

LICENSEE	NAME	Facility ID / License No.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	FACILITY TYPE	STATUS	EPZ (m)
[redacted]								
[redacted]								
[redacted]								
[redacted]								

[redacted]

LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant BS=Booster Station LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm OS=Oil Sands Processing Plant OM=Oil Sales Meter

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

H2Safety

Deep Basin - Fort St. John - BCER Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
PEMBINA PIPELINES OPERATED BY DEEP BASIN DIST																
[redacted]																
BLUEBERRY SYSTEM																
[redacted]																
BOUNDARY LAKE SYSTEM																
[redacted]																

H2Safety

Deep Basin - Fort St. John - BCER Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
[redacted]																
[redacted]																
[redacted]																
UNLICENSED			[redacted]													
UNLICENSED			[redacted]													
LGS SYSTEM																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
UNLICENSED			[redacted]													
NEBC SYSTEM																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]

Deep Basin - Fort St. John - BCER Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
[redacted]																
NORTHERN SYSTEM																
[redacted]																
PEACE SYSTEM																
[redacted]																
UNLICENSED		[redacted]														
[redacted]																
WESTERN SYSTEM																
[redacted]																

H2Safety

Deep Basin - Fort St. John - BCER Pipelines

LICENSE NO.	LINE NO.	MAP No.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
[redacted]																

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

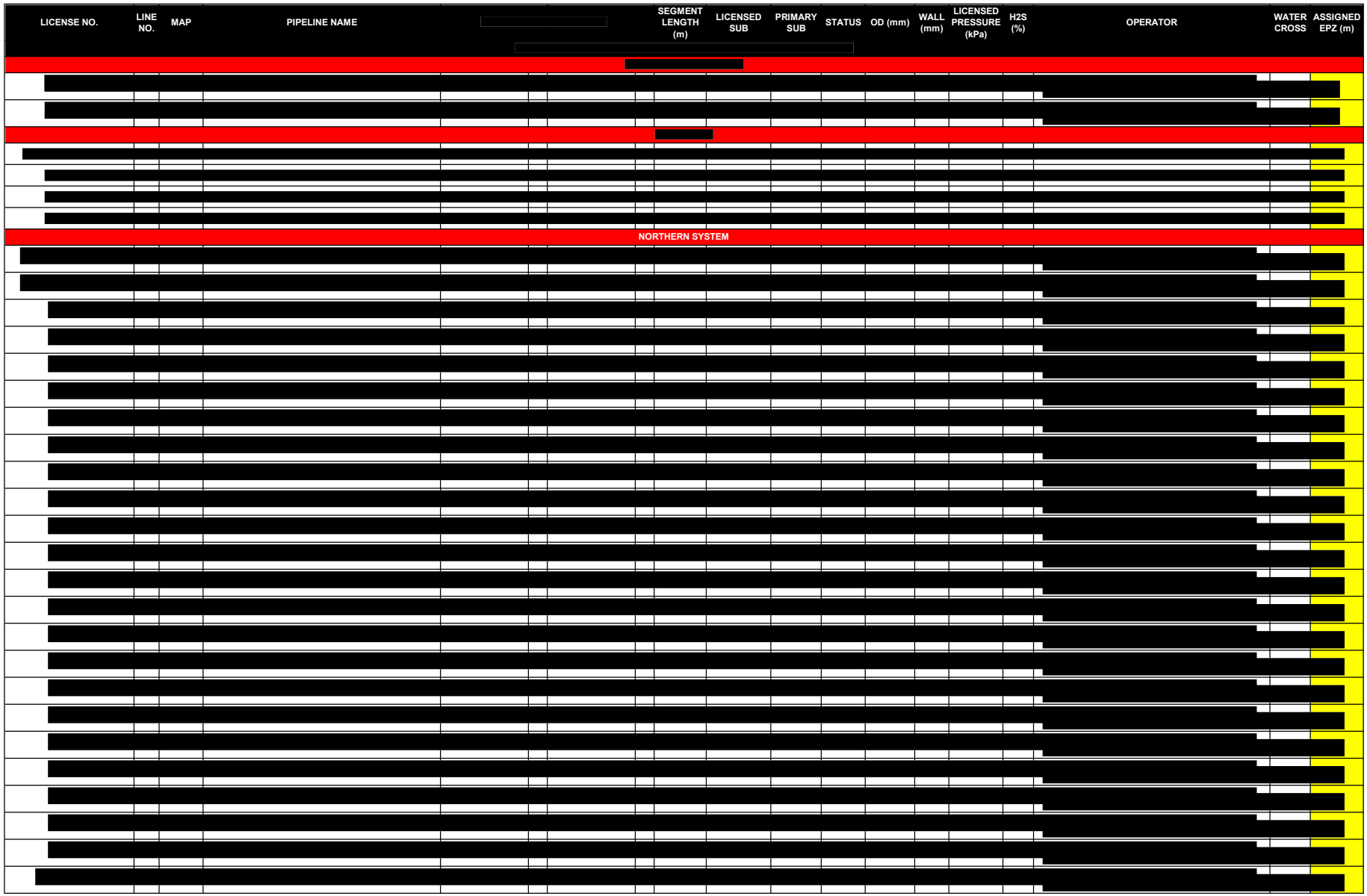
Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Deep Basin - Fort St. John - CER Pipelines



H2Safety

Deep Basin - Fort St. John - CER Pipelines

LICENSE NO.	LINE NO.	MAP	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	ASSIGNED EPZ (m)
[redacted]																
[redacted]																
[redacted]																
PEACE SYSTEM																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																
[redacted]																

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Deep Basin - Fort St. John - Pembina Contract Operated Pipelines

LICENSE NO.	LINE NO.	MAP	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	PRIMARY SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	LICENSEE	WATER CROSS	Assigned EPZ (m)
[redacted]																
[redacted]																
[redacted]																
[redacted]																

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

Deep Basin - Fort St. John - Third Party Operated Pipelines

LICENSE NO.	LINE NO.	PIPELINE NAME	FROM	TO	SEGMENT LENGTH (m)	LICENSED SUB	STATUS	OD (mm)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	OPERATOR	WATER CROSS	Assigned EPZ (m)**
[redacted]														
[redacted]														
[redacted]														

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite TL=Terminals WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

H2Safety

3.0 STAKEHOLDERS & MAPS

3.1 Data Collection

Pembina conducts continuous public involvement activities within identified Emergency Planning Zones (EPZs). These activities allow Pembina to collect emergency contact numbers from surface developments (residents/businesses) within the EPZ, in order to notify them of an emergency and provide them with appropriate response actions.

Only select copies of this plan contain occupant data collected from surface developments. Refer to the Distribution List for additional details.

Occupant data is collected and validated on a continuous schedule, separate from ERP maintenance activities; therefore, in an emergency the preference is to utilize the “live” or “real-time” data available through Pembina’s mass notification system; however, if inaccessible for any reason, the printed reports can be used to begin initial notifications.

Printed Occupant Data Reports are valid as of the date indicated in the report itself.
If real-time data or additional occupant data is required, it can be requested through the Emergency Management On-Call line.

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3.2 Data Identification

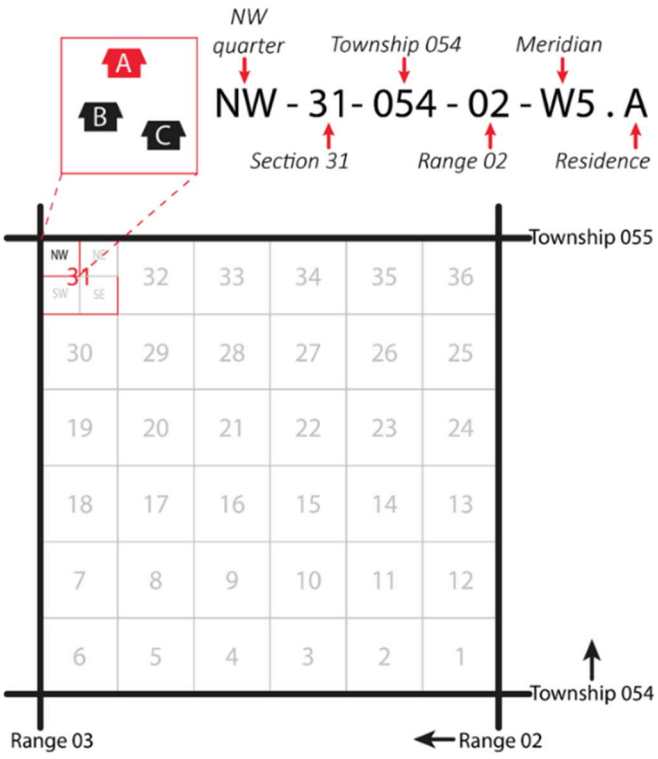
Surface developments within the EPZ are each given a unique identifier which corresponds to a land location on a numbered map.

The Dominion Land Survey (DLS) system is used within Alberta, Saskatchewan, and portions of northeast British Columbia. Confidential occupant data within each mapped area is sorted by geographical location; organized by meridian, then range (east to west), then township (south to north), then section, then quarter section, and the unique resident ID.

Example: NW-31-054-02 W5.A

NW	31	054	02	W5	A
Quarter Section	Section	Township	Range	Meridian	Unique Resident ID

Note: The unique ID for surface developments within a subdivision may include additional values specific to the subdivision's name or location.



The National Topographic Grid System (NTS) is used in portions of British Columbia. Confidential occupant data within each mapped area is sorted by geographical location; by NTS map number, map sheet, grid, block, resident ID, and concludes with the quarter unit and unit.

Example: a-20-B / 94-H-9.A

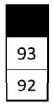
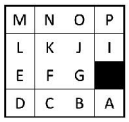
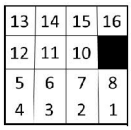
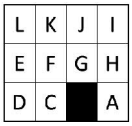
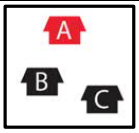
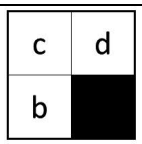
Read first; from left to right

a – 20 – B / 94 – H – 9 . A

Read second; from right to left

Read ID Last

Note: The unique ID for surface developments within a subdivision may include additional values specific to the subdivision's name or location.

NTS Sections		Example
1	NTS Map Number: Numbered 82 to 104	a-20-B / 94-H-9.A 
2	Map Sheet: Lettered A to P (uppercase)	a-20-B / 94-H-9.A 
3	Grid: Numbered 1 to 16	a-20-B / 94-H-9.A 
4	Block: Lettered A to L (uppercase)	a-20-B / 94-H-9.A 
5	Resident ID: Alpha/Numeric	a-20-B / 94-H-9.A 
6	Quarter Unit: Lettered a-d (lowercase)	a-20-B / 94-H-9.A 
7	Unit: Numbered 1 to 100 (each unit is ± 1 km by 1 km)	a-20-B / 94-H-9.A

3.3 Pipeline Map 1

3.3.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no special area considerations, grazing leases, forest management units, traplines or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Pembina STARS Sites
[redacted]
[redacted]
[redacted]

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]		

Wildlife Management Unit (WMU) Holders		
WMU	Contact	Phone
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	

Industrial Operators	
[redacted]	[redacted]

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3.3.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.4 Pipeline Map 2

3.4.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites, grazing leases, forest management units, or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
Regulator		
[redacted]		[redacted]
Local Authorities		
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	
Health Authorities		
[redacted]		

Special Area Considerations		
Name	Contact	Phone
[redacted]	[redacted]	[redacted]
[redacted]		

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Traplines		
Trapline	Contact	Phone
[redacted]	[redacted]	[redacted]

Wildlife Management Unit (WMU) Holders		
WMU	Contact	Phone
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Wildlife Management Unit (WMU) Holders		
WMU	Contact	Phone
[redacted]	[redacted]	
	[redacted]	

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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3.4.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.5 Pipeline Map 3

3.5.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no special area considerations or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
	[redacted]	
[redacted]		[redacted]
	[redacted]	
[redacted]	[redacted]	
	[redacted]	
	[redacted]	
[redacted]		

Pembina STARS Sites
[redacted]
[redacted]
[redacted]
[redacted]

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Grazing Lease Holders		
Grazing Lease	Contact	Phone
[redacted]	[redacted]	
	[redacted]	
	[redacted]	
[redacted]		
[redacted]		
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]	[redacted]	

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Wildlife Management Unit (WMU) Holders		
WMU	Contact	Phone
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Industrial Operators	
Company	24-Hr Emergency
[redacted]	[redacted]

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	

3.5.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.6 Pipeline Map 4

3.6.1 Stakeholder Details

Pipeline Map 4 contains 2 separate inset maps.

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		

Special Area Considerations
[redacted]

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
Alberta		
[redacted]		

Grazing Lease Holders		
Grazing Lease	Contact	Phone
Alberta		
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
Alberta		
[redacted]		

Traplines		
Trapline	Contact	Phone
Alberta		
[redacted]	[redacted]	[redacted]
[redacted]		
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	

Wildlife Management Unit (WMU) Holders		
Alberta		
WMU	Contact	Phone
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
British Columbia		
Guide Area	Name	Phone
[redacted]	[redacted]	[redacted]

Industrial Operators	
Alberta	
Company	24-Hr Emergency
[redacted]	

3.6.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

Pipeline Map 4 contains 2 separate inset maps.

This page intentionally left blank.

3.7 Pipeline Map 5

3.7.1 Stakeholder Details

Pipeline Map 5 contains 1 separate inset map.

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Special Area Considerations		
[redacted]		
[redacted]		
[redacted]		

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		

Wildlife Management Unit (WMU) Holders		
Guide Area	Name	Phone
[redacted]		

Grazing Lease Holders		
Grazing Lease	Contact	Phone
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]
[redacted]		
[redacted]	[redacted]	
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

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3.7.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

Pipeline Map 5 contains 1 separate insets map.

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3.8 Pipeline Map 6

3.8.1 Stakeholder Details

Pipeline Map 6 contains 2 separate inset maps.

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
Regulator		
[redacted]		
[redacted]		
[redacted]		
Local Authorities		
[redacted]	[redacted]	
	[redacted]	
	[redacted]	
[redacted]	[redacted]	
	[redacted]	
	[redacted]	
[redacted]	[redacted]	

Immediate Reporting		
Name	Contact	Phone
[redacted]	[redacted]	
	[redacted]	
Health Authorities		
[redacted]		

Special Area Considerations
[redacted]

[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Waterbodies
[redacted]

Railways		
Name	Contact	Phone
[redacted]		

Highways		
Highway	Contact	Phone
[redacted]		
[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]

Wildlife Management Unit (WMU) Holders		
Guide Area	Name	Phone
[redacted]		

Grazing Lease Holders		
Lease Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]	[redacted]	[redacted]
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

3.8.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

Pipeline Map 6 contains 2 separate inset maps.

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3.9 Pipeline Map 7

3.9.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites, highways or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		

Special Area Considerations
[redacted]

Waterbodies
[redacted]

Grazing Lease Holders		
Lease Name	Contact	Phone
[redacted]		

Wildlife Management Unit (WMU) Holders		
WMU	Name	Phone
Alberta		
[redacted]	[redacted]	
[redacted]	[redacted]	

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
Alberta		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
Alberta	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

Industrial Operators
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

3.9.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.10 Pipeline Map 8

3.10.1 Stakeholder Details

Pipeline Map 8 contains 1 separate inset map.

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites, highways, grazing leases or wildlife management zones within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
Local Authorities		
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
Health Authorities		
[redacted]		

Special Area Considerations
[redacted]

Waterbodies
[redacted]

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		

Railways		
Name	Contact	Phone
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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3.10.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

Pipeline Map 8 contains 1 separate inset map.

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3.11 Pipeline Map 9

3.11.1 Stakeholder Details

Pipeline Map 9 contains 1 separate inset map.

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no wildlife management zones within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		

Special Area Considerations
[redacted]

Pembina STARS Sites
[redacted]

Waterbodies
[redacted]

Railways		
Name	Contact	Phone
[redacted]		

Highways		
Highway	Contact	Phone
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		

Grazing Lease Holders		
Lease Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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3.11.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

Pipeline Map 9 contains 1 separate inset map.

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3.12 Pipeline Map 10

3.12.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no wildlife management zones or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]	

Pembina STARS Sites
[redacted]
[redacted]
[redacted]

Waterbodies
[redacted]
[redacted]
[redacted]

Grazing Lease Holders		
Grazing Lease	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Highways		
Highway	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

3.12.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.13 Pipeline Map 11

3.13.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no Pembina registered STARS sites, highways or railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		

Special Area Considerations
[redacted]

Waterbodies
[redacted]

Wildlife Management Unit (WMU) Holders		
British Columbia		
Guide Area	Name	Phone
[redacted]		

Grazing Lease Holders		
Grazing Lease	Contact	Phone
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		

Industrial Operators	
Company	24-Hr Emergency
[redacted]	

Industrial Operators	
Company	24-Hr Emergency
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	
[redacted]	

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3.13.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.14 Pipeline Map 12

3.14.1 Stakeholder Details

The following details apply to the calculated Emergency Planning Zones (EPZs) for this mapped area.
There are no railways within the EPZ(s).

Number of Surface Developments
[redacted]

Immediate Reporting		
Name	Contact	Phone
[redacted]		

Special Area Considerations
[redacted]

Pembina STARS Sites
[redacted]

Waterbodies
[redacted]

Highways		
Highway	Contact	Phone
[redacted]		
[redacted]		
[redacted]	[redacted]	

Grazing Lease Holders		
Grazing Lease	Contact	Phone
[redacted]		
[redacted]		

Wildlife Management Unit (WMU) Holders		
British Columbia		
Guide Area	Name	Phone
[redacted]		

Forestry Management Agreement (FMA) Holders		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]		
[redacted]		

Traplines		
Trapline	Contact	Phone
[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]

Industrial Operators	
Company	24-Hr Emergency
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

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3.14.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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3.15 Pipeline Maps 13-21

3.15.1 Stakeholder Details

These portions of the pipeline system are currently discontinued and shut in; therefore, an Emergency Planning Zone (EPZ) has not been assigned. As a result, the location and contact information for surface developments, as well as other area users, has not been collected. Local authorities, health authorities and indigenous communities remain listed as Special Area Considerations.

Immediate Reporting		
Name	Contact	Phone
[redacted]		
[redacted]		
[redacted]		
[redacted]		

Special Area Considerations		
[redacted]		
[redacted]		
[redacted]		
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	
[redacted]	24-Hr Emergency	24-Hr: 1-800-667-1959
George (RDFFG)	Admin	Admin: 250-960-4400

Special Area Considerations
[redacted]

3.15.2 Maps & Drawings

Associated maps and drawings will be found on the following pages.

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PART 4 – SUPPORTING DOCUMENTS

Additional supporting documents are maintained independently from the ERP but may be located in this section because they could provide additional supporting information during a response. Supporting documents may include:

- Spill control point data sheets
- Site specific procedures
- Fire Safety and/or Fire Pre-plans
- Office evacuation plans
- Supplemental plan(s) or bridging documents for newly constructed or acquired assets

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