



SOUTHBOW

Emergency Management Corporate Program

APPROVALS

Approvals and revisions are captured electronically at publication. For current contacts, see the Controlled Document Library.

Document Contact	[Redacted]	Information has been redacted from this section to protect the safety and security of South Bow. Information redacted includes Company employees' names.
Document Owner Manager	[Redacted]	

Document Change and Control

This table captures a summary of the five most recent versions (Rev. No.) of this document and the signoffs obtained for each revision.

Version No.	Brief Description of Change	Date of Release	Updated By	Approved By
1.0	New Document	2024/08/01	[REDACTED]	[REDACTED]
2.0	Annual Revision, Response priorities update with LIPS and PEAR.	2025/08/01	Information has been redacted from this section to protect the safety and security of South Bow. Information redacted includes Company employees' names.	
2.1	Department Manager Change, minor material changes	2026/04/22	[REDACTED]	[REDACTED]

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1.0 PURPOSE

This document is an Emergency Management Corporate Program manual (herein called EMCP) and is one of the many programs under South Bows Management System. The EMCP establishes governance, incorporates regulatory requirements, plans, implements and continually improves EMCP operations. The EMCP aligns with applicable regulations, codes, and standards. This document outlines the EMCP governance and requirements to manage EMCP to protect ensure safety, security, and environmental protection for the pipeline, employees, the public, property, and environment.

2.0 SCOPE

The EMCP applies to all personnel who use, provision, and support South Bow operation or work activities under the Program. The EMCP also applies to authorized contractors, vendors or third parties who use, provide services, manage, or support the EMCP.

3.0 THE SOUTH BOW MANAGEMENT SYSTEM

The SBMS provides the framework for compliance, managing risks, and optimizing the value of South Bows assets. SBMS applies across the organization and is South Bow's single Management System for ensuring the integrity of South Bow assets and the health, safety and security of the public, personnel, and the environment. All Programs align with SBMS requirements and processes to address specific types of risks. Information from the EMCP is used to develop Procedures that support South Bow Personnel in executing work directed by the Program. This interaction is represented in *Figure 1: SMBS Structure* below and further developed in this section.

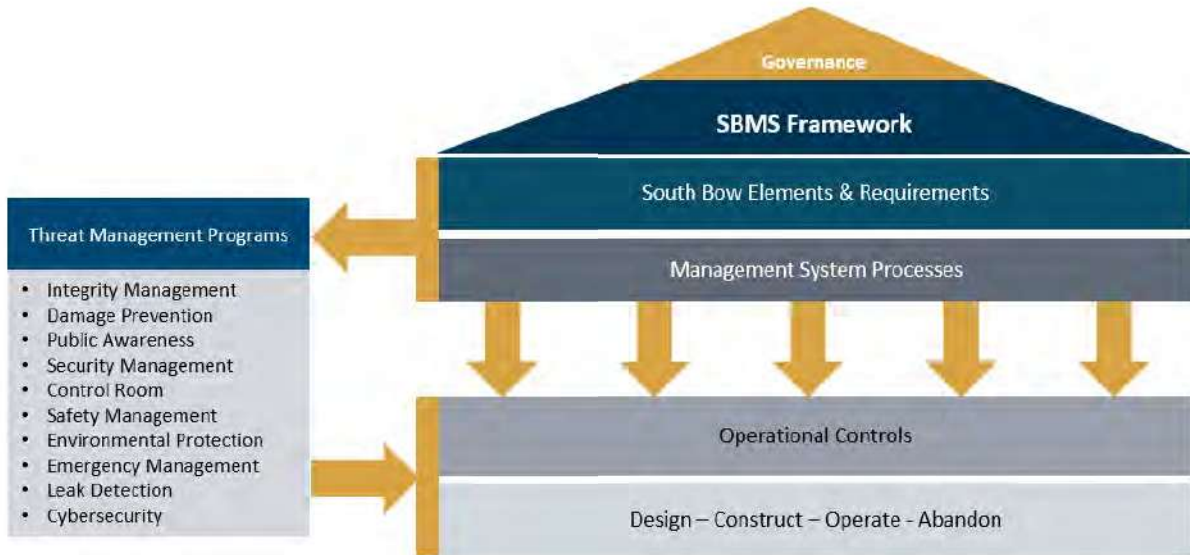


Figure 1: SMBS Structure

3.1 Program Governance

Program Governance Guide

South Bow Corporate has committed to responsible governance and emphasizes adherence at every level of management

Introduction and Program Overview

Introduction

South Bow develops and maintains state of the art emergency preparedness and response systems with the objectives of controlling, mitigating, and minimizing the impact of emergencies to life safety, property and the environment.

South Bow's Emergency Management Program focuses on these two key objectives:

- Promote a culture of emergency preparedness.
- Facilitate effective and expeditious emergency response.

South Bow's Emergency Management Program applies (as appropriate) the Emergency Management Standard and Emergency Management Process, using applicable procedures, across all assets operated by South Bow affiliates.

The figure below (*Figure 2*) shows the relationship between emergency preparedness and emergency response within South Bow.

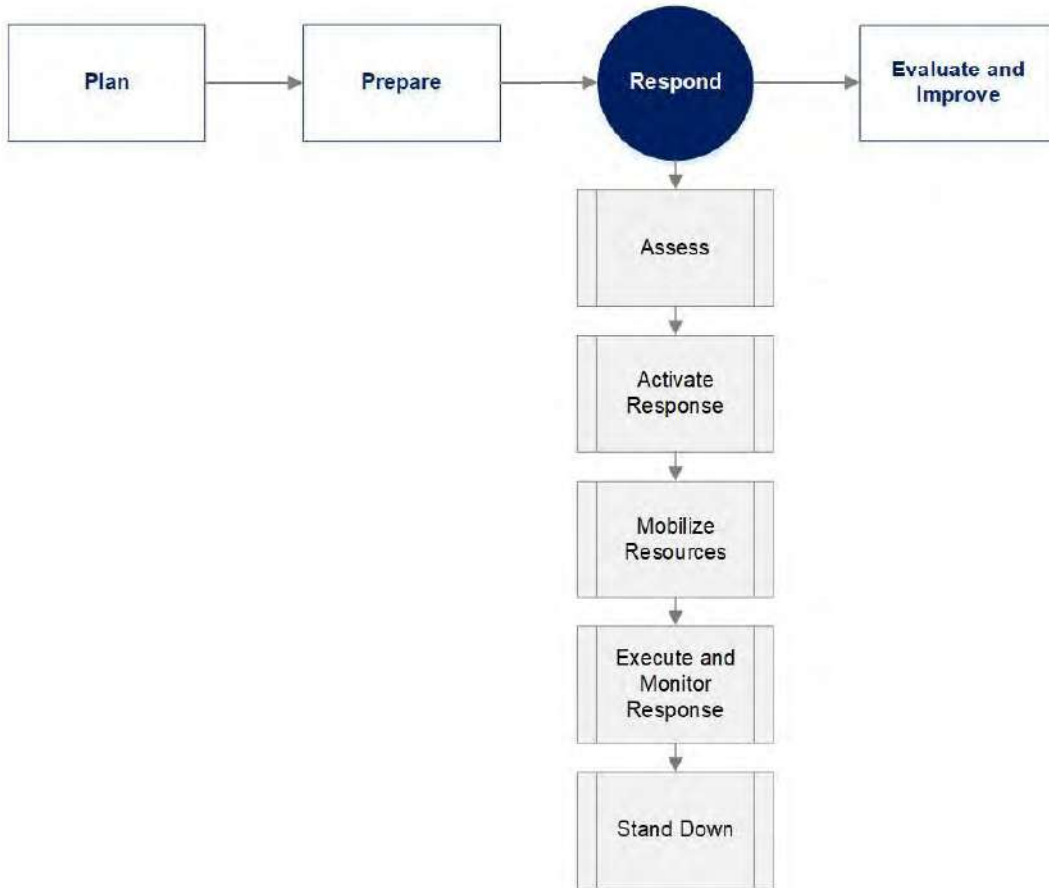


Figure 2: Relationship between emergency preparedness and emergency response.

Policy Statement and Guiding Principles (OMS)

South Bow's Operational Management System (OMS) applies across the organization and is the Company's single management system for ensuring the integrity of our assets and the safety and security of the public, our personnel, and the environment. OMS comprises the framework to ensure South Bow's Operational Management System (OMS) applies across the organization and is the Company's single management system for ensuring the integrity of our assets and the safety and security of the public, our personnel, and the environment. OMS comprises the framework to ensure our adoption of all applicable regulatory requirements for the Company's asset lifecycle, including design, construction, operation, and abandonment. The Emergency Management Program outlines further requirements that align with OMS in this section. Business units, including operations and projects, must implement and adhere to the requirements of OMS and the Emergency Management Program.

Projects align to OMS via the Project Governance Program, which requires projects to follow and apply the Project Delivery Standard (PDS). PDS provides framework and guidance on project execution and requires that projects and their contractors develop plans that ensure conformance with the Emergency Management Program and PDS.

3.2 Program Application and Integration

The EMCP outlines requirements, provides linkage to SBMS, and guidance for personnel. The EMCP establish the minimum requirements, specific to the scope of work, to consistently manage risks and conduct day-to-day activities. This EMCP document provides additional program controls as necessary for work that is incremental or specific to the EMCP.

The EMCP may have sub-programs underneath it or within it. (e.g. Safety Program with an Employee Safety Manual and a Contractor Safety Manual that are applied in different ways). The majority of these are contained in the Programs contained in separate documents.

3.3 SBMS and EMCP Element Structure

The EMCP is aligned with the SBMS which is comprised of 10 Elements that guide, support, and form the foundation for all pipeline activities. The EMCP implements SBMS Element requirements and adheres to process requirements to adequately and effectively manage pipeline safety EMCP threats.

4.0 ROLES AND RESPONSIBILITIES

The EMCP organizes and defines the structure for implementation throughout the asset lifecycle to achieve operational excellence.

The EMCP has a defined structure and set of responsibilities to define and communicate clear lines of accountability. Clearly defined roles, responsibilities and competency of personnel enable effective management of the program through a defined, documented and communicated structure. Ensuring personnel working with or on behalf of the EMCP understand appropriate authority and accountabilities.

4.1 Emergency Management Specialists

The Emergency Management Specialist is responsible for managing the details of the program. Generally, this position is responsible for:

- Maintaining and update Tier 1, 2 and 3 plans; ensure IMT is trained; maintain the company in a constant state of readiness
- Prepare for and response to emergencies
- Maintain the company in constant state of readiness

4.2 Manager – Land, Environment & Emergency Management

The Manager – Land, Environment & Emergency Management is responsible for organizing the activities of the Emergency Management Team (EMT). The Manager – Land, Environment & Emergency Management is also responsible for:

- Guiding and directing Emergency Management Specialists as required
- Oversight of critical decisions
- Accountability for the EMCP

5.0 The Elements

The EMCP incorporates 10 Elements, enabling a comprehensive and integrated approach to ensuring pipeline safety, operational efficiency, regulatory compliance, risk management, safety culture, stakeholder communication, and continual improvement. The Elements integrate with one another to enable effective governance through the aggregation of consistent information that supports prioritization and decision-making.

The Elements set mandatory requirements for the establishment, maintenance, and continual improvement of South Bow Programs and Processes). The 10 Elements are listed below.

Elements

Element 1: Leadership & Management Commitment

Element 2: Stakeholder Engagement

Element 3: Risk Management

Element 4: Operational Controls

Element 5: Investigation & Lessons Learned

Element 6: Assurance & Monitoring

Element 7: Management Review & Continuous Improvement

Element 8: Emergency Preparedness and Response

Element 9: Competency, Awareness & Training

Element 10: Document & Record Keeping

Element 1: Leadership Commitment and Strategy

Element Overview Guide

The EMCP provides an overview of how the Program is integrated with the Management System and supporting Processes within this Element. The Program may directly implement the Management System Processes or go beyond with Processes and Procedures that provide incremental detail to meet Program technical requirements.

Numerous corporate policies and commitments govern the Emergency Management Program, as described in the Policy and Commitment Section of this Manual. Through these overarching corporate commitments, adherence to program standards; and ongoing quality control measures the Emergency Management Program applies leadership commitment and strategy.

Management System Processes

The EMCP adheres to the SBMS Leadership and Management Commitment Element requirements using the following Processes.

- The **Goals, Objective, and Targets Process** describes how objectives and targets for EMCP management are established, cascaded and utilized to priorities activities conducted on pipeline assets in accordance with company goals.
- The **Planning Process** describes how EMCP evaluates resource needs to meet the requirements of the management system and company goals for pipeline safety.

- The **Compliance and Commitment Management Process** describes how EMCP regulatory requirements and stakeholder commitments are identified and implemented.

Continual Improvement

The Leadership and Management Commitment Element provides oversight and support through 9 other Elements. [MS] provides support and aligns South Bow personnel at all levels to improve visibility into organizational goals and provide the structure to systematically and consistently complete work. The Elements can be categorized into one of the four key steps of the Plan, Do, Check, Act (PDCA) cycle to drive continuous improvement as outlined in *Figure 3*.



Figure 3: Continuous improvement.

Element 2: Stakeholder Engagement

Element Overview Guide

In addition to this Commitment Statement, South Bow conducts its business in accordance with several other Corporate Commitment Statements, Policies, Programs, and Standards. The following section (Management System Processes) contains a list and brief description of those that would be most likely to impact Emergency Management; this is not a comprehensive list of all Corporate Commitment Statements, Policies, Programs, and Standards:

Management System Processes

The EMCP adheres to the SMBS Stakeholder Engagement Element requirements using the following Processes:

- The **SBMS Communication Process** facilitates two-way communication with external and internal stakeholders. Guiding development of communication plans to communicate South Bow policies, goals, objectives and Management System Requirements. These include the following:
 - Code of Business Ethics
 - South Bow prides itself on being a company that makes the right choices and does the right thing. South Bow's Code of Business Ethics (COBE) helps put the Company's values into practice in all daily decisions and activities. and clarifies what making the right choices and doing the right thing really means.
 - Communications Policy
 - Clear communication is key to facilitating transparent and informed dialogue with a diverse audience. South Bow's communications are integrated, consistent, timely, clear, and current.
 - Corporate Security Policy
 - South Bow provides a safe and secure work environment where security risks and threats to personnel, corporate assets and reputation are properly managed.
 - Indigenous Relations Policy
 - South Bow applies our Indigenous Relations Policy to manage our relationships with the Indigenous communities the Company may impact and the diversity of issues that are presented. Ensuring internal stakeholders understand Indigenous issues and related risks and opportunities, enabling the Company to manage the issues proactively and react positively. The Indigenous Relations Policy, contained under separate cover, should be referenced for more information.
 - Stakeholder Engagement Commitment Statement
 - South Bow recognizes that excellence in stakeholder engagement helps deliver value and ensures we do so in a socially and environmentally responsible manner. Engaging with stakeholders means listening, providing accurate information, and responding to stakeholder interests in a prompt and consistent manner. South Bow has adopted several key

values and commitments that extend to external stakeholders through the corporate Vision Statement . These are 1) We are safe, 2) We do the right thing, 3) We take pride in what we do; and, 4) We win as a team. More detail each of these commitments is described further in the Vision Statement contained under separate cover.

Element 3: Risk Management

Element Overview Guide

In accordance with the Threat Management Program and Risk Management Threat, each Business Unit (BU) is responsible to identify hazards (both from internal and external sources) which may result in an emergency affecting South Bow's operations. The BU reviews the identified hazards through a risk assessment to determine their likelihood and the nature and scope of their consequence. Risk assessments are used to develop and/or amend appropriate barriers, such as emergency response plans, to mitigate impacts of the hazard.

Management System Processes

The EMCP adheres to the SBMS Risk Management Element requirements using the following Process and following Program:

- The **SBMS Risk Management Process** details how hazards and risks are identified, assessed, and managed. Including demonstrating that risk prevention and mitigation controls are effective. When warranted, the Process also reviews and updates risks.

Risk Management and the Emergency Management Program

Risk management is a key element in ensuring the ongoing safety, integrity, and reliability of South Bow assets. Understanding risks through the execution of established risk management processes and incorporating these risks into the Emergency Management Program supports ongoing safe, reliable, and efficient emergency operations.

Risk management is a critical component of South Bow's Emergency Management Program. The outputs or identified hazards and risks drive annual program Assurance Standards and influence the annual strategy on emergency response exercise locations and outreach activities. This process drives continual improvement opportunities both within the Emergency Management Program and the across the Company.

The Risk Management Program, under separate cover, provides more detail on the risk management tools and activities used by the Emergency Management Program and the BUs during specific points in an asset's lifecycle; this includes the mandatory steps the Emergency Management Program takes (as mandated by the Risk Management Threat to interact with

BUs and contribute to their organizational risk management efforts and objectives.

Element 4: Operational Controls

Element Overview Guide

The Operational Controls element sets requirements for safeguarding operational stability and safety for all involved stakeholders through safe work practices, material management, change management, and contractor oversight. South Bow maintains Operational Procedures for its pipelines and facilities across operational phases that are aligned with safety policies and objectives. Requirements include identifying operating limits.

Management System Processes

The EMCP adheres to the SBMS Operational Controls Element requirements using the following Process:

- The **SBMS Control of Work Process** details how South Bow ensures safe execution of work and operation of assets. This includes guidance on identifying unsafe conditions, stopping work and documenting deviations.

Emergency Preparedness

Effective emergency response is directly related to effective preparedness. During an emergency, the activation process, lines of communications, management of resources, and response strategies shall already be defined and known. Emergency preparedness is the foundation that supports efficient and effective execution of response activities. This section documents the emergency preparedness requirements that apply to the entire Company.

Emergency Planning

Emergency response plans shall be in place to protect the health, safety and welfare of people, and to limit damage to property, company operations and the environment. Emergency response plans shall recognize the needs of South Bow, its employees, the community-at-large, and any regulatory and legislative requirements in efforts to prepare for all hazards and all magnitudes of emergencies.

Program Implementation

The flowchart on the next page illustrates the emergency preparedness process. This process is completed by the Emergency Management Team for Canadian and US Operations along with Business Continuity aspects for the company. The EM Specialist shall ensure emergency preparedness is achieved for facilities within their purview in accordance with the Emergency Management Program Implementation (*Figure 4*).

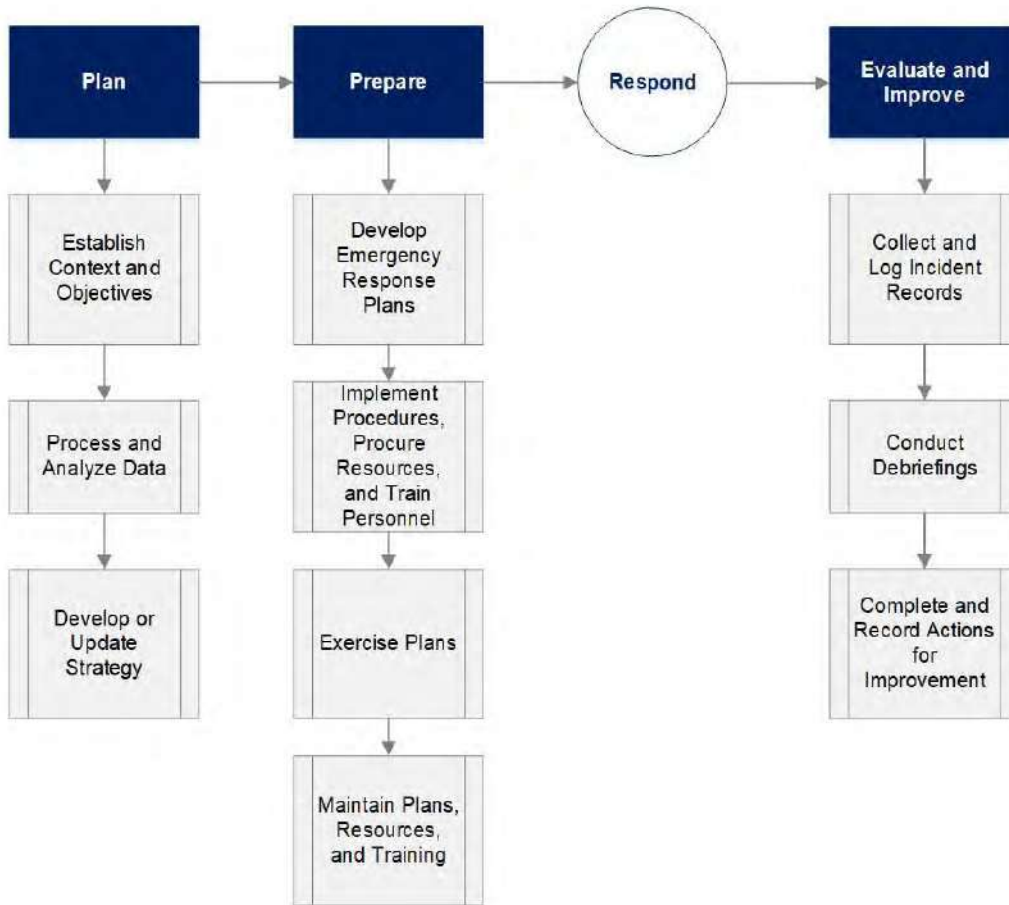


Figure 4: Emergency Management Program Implementation

Locations and Access to Plans

Emergency response plans shall be maintained and stored in accordance with this Manual to ensure users within the affected Region or Facility and all Support Departments can readily access appropriate plans in an emergency. The current and official version of all emergency response plans shall be hosted in SharePoint with more specific storage as follows:

- Tier 1 Plan (Emergency Management Corporate Program Manual) retains Item ID: MS-P02-03-000 and can be accessed through the SharePoint site or the Emergency Management Website within the Emergency Preparedness section. This document is maintained as a Business Practice Document, and therefore editable versions can only be retrieved through consultation with South Bow's Documents and Records Management Team.
- Tier 2 Plans can be accessed through the Emergency Management Website within the Emergency Preparedness section.
- Tier 3 Documents are housed in a document holding platform to be determined. It will be done in accordance with the applicable Tier 3 Emergency Response Reference Task Package.

If the current and official version of an emergency response plan is in PDF format, the editable version (Microsoft Word or other word processor) shall also be updated and hosted in the same location.

In addition to internal hosting of Emergency Response Plans, South Bow has posted redacted versions Emergency Response Plans and Procedures Manuals for CER Regulated assets on the externally accessible website, southbow.com. Public viewing of these documents encourages the Emergency Management Program to continuously improve and collaborate with stakeholders and rightsholders and demonstrates the commitment to transparency within the Emergency Management Program.

Organizational Control of Emergencies

When an emergency occurs, the chain of command and communication lines deviate from that during routine work. This section describes how South Bow emergency response personnel transition from the standard organization to implementation of the Incident Command System (ICS), which South Bow has adopted as its system of organizational control during emergencies.

Standard Organization

South Bow's standard organizational structure applies a single chain of command, unity of leadership (each employee has only one leader), and managed span of control (leaders have a limited number of direct reports). In general, South Bow emergencies have greatest direct impact on a specific Operational Area, then Region of Operations and overall a line of business. Each of these Regions eventually report to one of the following Executive/Senior Vice Presidents:

- Liquids Pipelines
- Storage Facilities

All Executive/Senior Vice Presidents of the lines of business listed above report to the Chief Operating Officer, and ultimately the President and Chief Executive Officer of South Bow.

Emergency Organization

In an emergency, the structure of leadership and decision making is altered from the standard organizational structure. The Incident Commander (IC) is the person responsible for all aspects of an emergency response including the development of incident objectives, managing all emergency operations, and applying resources. The IC has responsibility for all persons involved; this is a foundational element of the Incident Command System (ICS) which South Bow has adopted for on-scene incident management of all emergencies.

As in South Bow's standard organization, ICS applies a single chain of command, unity of leadership, and a managed span of control. However, roles and reporting relationships can change to align with the principles of ICS.

South Bow has many resources which may be used to support incident management, but all resources may not be on-scene or within the ICS structure. The following is a list of such resources:

- Incident Management Team
- Emergency Operations Center
- Incident Support Teams
- Crisis Management Team

These functions are further illustrated in the following diagram (Figure 5).

Emergency Management Organizations

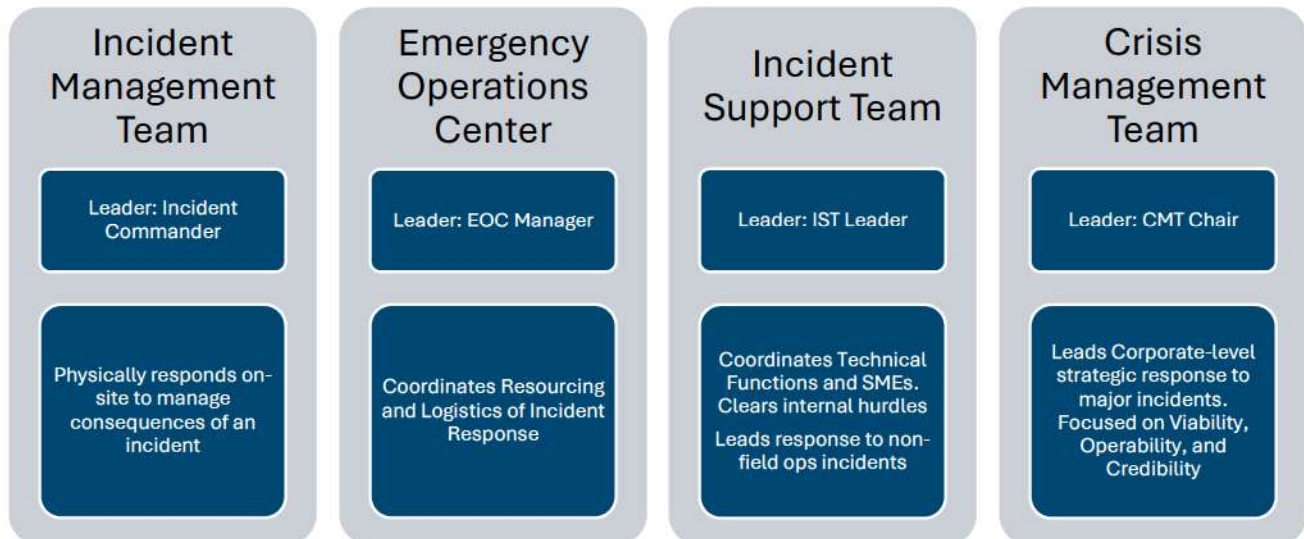


Figure 5: Emergency Management Organizations

Response Teams

Company First Responder

The Company First Responder is South Bow's first official representative at the emergency site and is the initial IC. The Company First Responder may be a South Bow employee, mutual aid partner, contractor or anyone representing the Company at the site of an emergency.

Company procedures provide for one individual to assume command and control from the beginning of emergency operations, usually the Company First Responder to the scene. The Company First Responder will take whatever actions are possible to mitigate the consequences of the emergency within the boundaries of his/her training and will communicate the details of the emergency to the Control Center or Control Room.

In all instances, the Company First Responder assures his/her safety and the safety of anyone in the immediate vicinity of the incident. In addition, the Company First Responder completes actions as prescribed in the appropriate Company First Responder Checklist.

Once an emergency has been confirmed by a Company First Responder, the Primary Initial Response Priorities (L.I. P. S listed below) are implemented.

1. Life Safety
2. Incident Stabilization
3. Property & Environmental Preservation
4. Stakeholder Communication

Emergency Operations Center

At South Bow, an Emergency Operations Center (EOC) is a coordination venue through which leadership and numerous support departments can collect information and offer assistance to the impacted business unit.

Emergency Operations Center	
Organizational Composition	The EOC is in a virtual environment whereas key members can provide input without having to deploy to a designated location.
Mobilization Criteria	Emergency Management along with impacted area leadership will review the incident potential and determine if EOC support is needed. If the need is determined, the EOC will activate to support field response components.
Demobilization Criteria	The EOC shall only be demobilized when such action is agreed upon by the Incident Management Team and the EOC Manager. Either of these groups may propose demobilization of the EOC if the incident does not require the level of support being provided from the EOC.
Scope of Responsibilities	The EOC manager evaluates the resources required to address the emergency and may propose resource deployment to the Incident Management Team; however, the EOC shall not deploy resources unless requested by the Incident Management Team.
	Not all EOC roles will be activated in every emergency; however, the EOC Manager role must be filled until the EOC is demobilized.

Emergency Operations Center (Cont'd)

	Once an EOC is established, the following activities begin:
	<ul style="list-style-type: none">• Establish the Emergency Conference Bridge.• Continuously reassess the situation.• Participate in incident briefings as scheduled by the Incident Management Team.• Identify issues and propose solutions.• Assign roles within the EOC to ensure requests of the Incident Management Team are met.• Identify resources required; propose a strategy for deploying resources, but do not deploy resources unless requested by the Incident Management Team.• Propose emergency response strategies, including identification of potential contingencies and conduct contingency planning for abnormal events that may occur during an emergency in support of the IMT.• Access and provide emergency response plans to the IMT.• Document facts and rumors. Assign rumors to be investigated.

The diagram on the next page (*Figure 6*) depicts the emergency activation flow for the EOC.

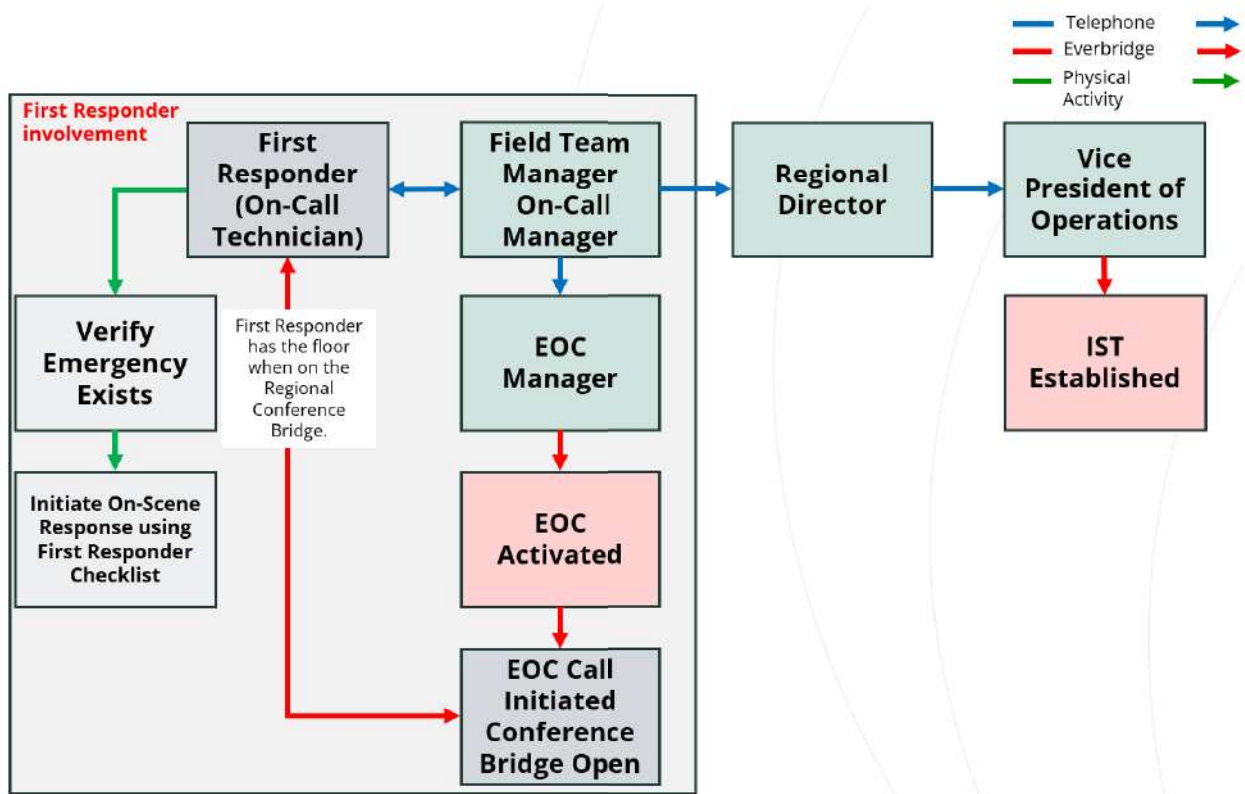


Figure 6: Emergency Activation Flow

Incident Management Team

An Incident Management Team (IMT) is a person or group of people who respond to emergencies to set objectives, manage resources and logistics, and otherwise support personnel executing the specific tactics to protect life safety, then stabilize and resolve the emergency. At South Bow, all IMTs use ICS to manage emergencies.

Once any level of an IMT is established, South Bow's Response Priorities (P.E.A.R listed below) are implemented:

1. People
2. Environment
3. Asset
4. Reputation

Once any level of IMT is established, the following response strategies are initiated:

- Ensure the safety of all responders and the public.
- Continuously reassess the situation and status of the emergency.
- Define the issues and prioritize the problems.
- Clarify response and secondary goals; establish objectives, strategies and tactics.
- Identify and request resources required.
- Develop an Incident Action Plan.
- Schedule briefings for supporting EOCs.

Detailed descriptions of IMT Roles and Role Kit contents for each role can be found on the Emergency Management Website.

Incident Support Team/Crisis Management Team

South Bow utilizes the support of Incident Support Teams (ISTs) to support the IMT when the situation warrants.

Corporate offices in Calgary and Houston have business continuity ISTs. The leaders of these ISTs have authority to make business continuity decisions on behalf of all personnel and business lines working in these locations (e.g., an office closure instruction from the IST Leader applies to all personnel as directed).

Facility offices affected by a business disruption shall be managed by the Operations IST to whom that office reports. Offices with multiple lines of business present will be managed by the region for emergency purposes and their respective Operations ISTs for the management of business impacts. These ISTs may draw in ad hoc members from the affected lines of business as necessary. Key functions of the IST include, but is not limited to the following.

- Coordinates Technical Functions and Subject Matter Experts to provide support to Incident Responses in the Areas of:
 - Operational Emergencies and Natural Disasters
 - Employee Health and Safety
 - Technological and Systems Incidents

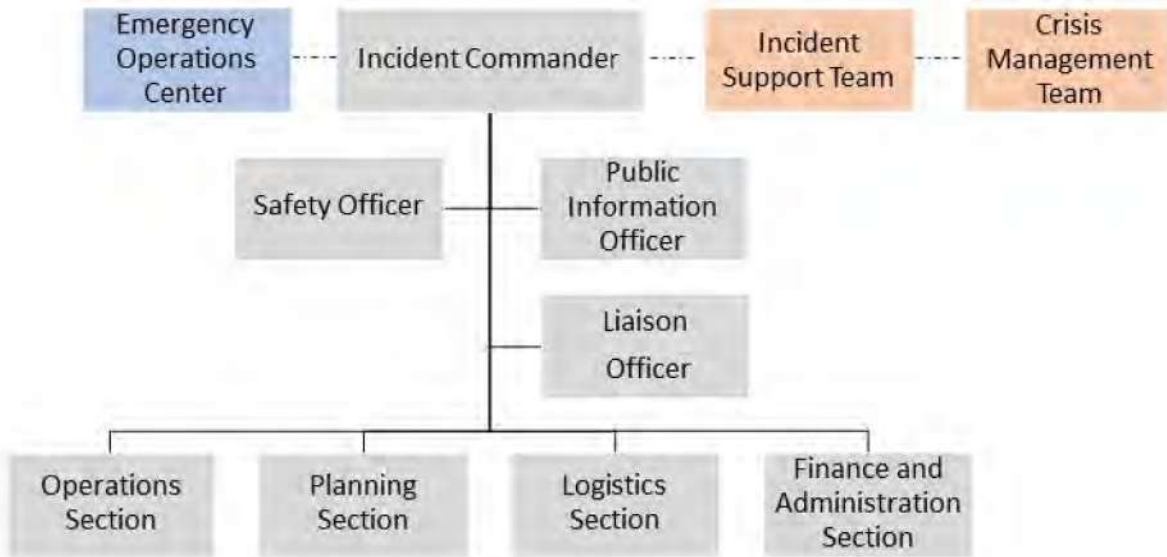
- Major Security Emergencies
- Clears internal “hurdles” where appropriate and provides/recommends extraordinary approvals
- Serves as point of contact and best available information to Crisis Management Team

Incident Command System

To effectively manage emergencies South Bow uses the Incident Command System (ICS) derived from ICS Canada or NIMS (US). ICS is a standardized on-scene emergency management system that has considerable flexibility, has been found to be cost-effective and efficient, and can be applied to both emergency and non-emergency events.

ICS is based on the knowledge that every emergency has certain major management activities that must be performed. Even if the event is very small and only one or two people are involved, these activities will always apply to some degree. the five major management activities in ICS are:

1. Command
2. Operations
3. Planning
4. Logistics
5. Finance/Administration



The ICS organization, as presented in *Figure 7*, has been developed from these five management activities. In the ICS organization job titles and responsibilities may not be changed, thus ensuring that any individual properly trained can come into an emergency and know their role. However, ICS provides the flexibility to allow each event to have its own unique organizational structure based on the size and type of event. It is the responsibility of the IC to determine the appropriate ICS organization based on the event.

Figure 7: EM Corporate Program

ICS Role Kits, including checklists and other role kit materials for the roles most commonly staffed in ICS, have been developed and can be accessed through the South Bow Emergency Management SharePoint site. Not all roles are required to be staffed in every emergency; however, when roles are not staffed, the responsibilities of unstaffed roles must be completed by other personnel.

South Bow accepts use of either the role kits included on the Emergency Management website or use of Incident Management Handbooks by IMTs. Either the ICS Role Kits or the Incident Management Handbooks shall be available to all IMTs in paper or app version; most commonly, these kits and handbooks are maintained as part of the Incident Command Post Kit.

Emergency Response

During an emergency, collection of information, relaying of information, and activation of the Emergency Management Program must be performed in a fluid, effective, and efficient manner. This Section of this Manual describes the specific protocol and procedures employed in concert with the Incident Command System (ICS) to properly relay accurate information and respond to specific hazards.

During initial response, local field staff will be faced with the immediate response activities. This includes direct response activities such as containment and control, coordination of response activities with emergency organizations (i.e. evacuations, medical treatment of the injured, and housing of those displaced by the emergency and securing safety at the site), responding to public and media inquiries, and eventually restoration of the South Bow asset. Local field staff shall be trained to deal with all aspects of the initial response until further support can be provided by the EOC or Incident Management Team.

During emergencies employees shall always strive to display professionalism in response efforts and regard the public and their safety concerns as paramount. They are trained to ensure a timely response is given by the Company or an assisting agency. Each inquiry and follow-up action shall be coordinated through the affected Facility. Citizens, the greater community, and provincial/state and federal officials should always be reasonably kept informed of the status of the emergency.

Emergency Detection

An emergency impacting a South Bow asset may be detected through a variety of means.

- Personnel on-site or in direct supervision of an asset may see something occur or identify an anomaly which precipitates an emergency; when personnel on-site or indirect supervision of an asset identify an emergency, it is categorized as Internal Detection of an Incident.
- South Bow may become aware of an emergency through notification by a third party; this is categorized as External Detection of an Incident.

Internal Detection of an Emergency

South Bow assets are monitored by control centers, Operations Personnel, and Aerial Patrol. It is the responsibility of personnel in these groups to recognize indications of an emergency. All indications of an emergency, including reported observation, are subject to confirmation; however, South Bow's policy is to shut down an asset if any doubt exists as to the integrity of the asset. Shut-down of an asset resultant of a suspected emergency triggers either the Incident Management process or Emergency Management process.

External Detection of an Emergency

South Bow may also learn of an emergency through external parties who detect and report emergencies. External parties are educated to notify South Bow through the appropriate South Bow Emergency Line if an emergency is suspected, allowing South Bow to implement the Emergency Management Program as quickly as possible. In some cases, an external party may identify an emergency before or at the same time as South Bow processes are triggered.

Emergency line Usages

If an emergency is detected by an external party, South Bow is normally notified of this occurrence by a call placed (or re-directed) to South Bow's Emergency Line (SureCall or appropriate Monitoring Center). South Bow emergency line numbers differ depending on the asset impacted; these telephone numbers are listed in the table below. Emergency Line telephone numbers are also communicated to the public through traditional public awareness efforts, posting of Right-of-Way and facility signage, and a variety of other communication methods.

Emergency lines are the responsibility of the respective lines-of-business, overseen by their control centers. Emergency lines are answered by either controllers, monitoring center staff on behalf of controllers, or a third-party contractor and then transferred to South Bow personnel. The scope of responsibilities includes:

- Where calls are answered by a third party, training their trainers/agents in South Bow requirements.
- Answering "South Bow Emergency Line" incoming calls.
- Providing 24-hr trilingual (English, French & Spanish) call service (Surecall only).
- Documenting/recording the call.
- Contacting the Control Center/Control Room and informing them of the emergency call.
- Participating in emergency exercises.
- Re-directing calls appropriately to other provided numbers if the call is not an emergency.
- Maintaining ability to retrieve archived emergency call files.

Investigation of Public Inquiries, Complaints, and Reports

Assets	Emergency Telephone Number	Answered By
CANADA PIPELINES <ul style="list-style-type: none"> • Grand Rapids Pipeline • MacKay East Pipeline • White Spruce Pipeline • Black Rod Pipeline • McMillian North Lateral Pipeline • Keystone (CA Oil) Pipeline System 	1-866-920-0007	3rd Party (Surecall – Calgary), then transferred to CA Liquids Pipelines Control Center
US LIQUIDS PIPELINES <ul style="list-style-type: none"> • Keystone (US Oil) Pipeline System • Gulf Coast Pipeline (Keystone extension) 		3rd Party (Surecall – Calgary), then transferred to Liquids Pipelines Control Center

Activation Criteria

The emergency response process is activated when an incident has been verified and meets the definition of an emergency. The emergency response process may also be activated at the discretion of EMCP leadership if an incident has the potential to develop into an emergency.

Initial Actions and Notifications

The following section explains the initial actions and the notifications made once all data has been received and the emergency verified.

Liquids Pipeline Control Center Actions

When an emergency has been detected, the Control Center makes the following notifications as required by procedure or as directed by the Incident Commander/First Responder:

- Emergency Services, if requested by the Company First Responder
- Manager for the affected Area or Facility
- Compliance Specialist

Additionally, the Control Room or Control Center may take some or all the following actions in accordance with procedures:

- Verify the authenticity of the emergency using:
 - SCADA system where available

- First Responder verification
- Reports from emergency service agencies
 - Note: The investigation includes immediate contact with the Public Safety Access Points (PSAP) (9-1-1 Emergency Call Center) serving the area to inquire if the PSAP has received any reports that indicate a possible pipeline emergency.
- Reliable resources (Corporate Teaming Partners other industry, etc.)
- Emergency Line (SureCall or Monitoring Center)
- Develop an isolation strategy and commence initial isolation in conjunction with the Facility, prior to the establishment of the EOC (where applicable.)

Affected Area or Facility

When an emergency has been detected by or reported to Operations personnel, the Facility is responsible to complete the following actions:

- Call the Control Center and provide them with the information gathered
- Dispatch a team to verify the report.
- If the emergency is verified, set up an on-site Incident Command Post.
- Activate the EOC if appropriate.

The notification and reporting process begins once an emergency has been confirmed and an Incident Commander/First Responder has assumed command of the incident. Notifications may be made by the IC or a designate. Notification requirements and associated contact information is contained in Section 6 (Regulations, Codes, & Standards / Regulatory Requirements) of this document).

If further activation information is needed please view the applicable Teir II document for more information.

Incident Classifications/Levels

Each incident requires a different response based on the specifics of the incident. The following Emergency Classification Matrix (Figure 8) should be utilized when the proper level of support is required.

EMERGENCY CLASSIFICATION MATRIX			
Consequence of Emergency Rank		Likelihood of Escalation Rank	
CONSEQUENCE EXAMPLE	RAN K	RAN K	LIKELIHOOD DESCRIPTION
<ul style="list-style-type: none"> No worker injuries. No/low media interest. Impacting only South Bow property. 	1	1	<ul style="list-style-type: none"> Emergency is contained or controlled and is unlikely to escalate. There is no chance of additional hazards.
<ul style="list-style-type: none"> First aid treatment required for employee. Local/regional media interest. Incident has potential to impact off South Bow property/ROW. 	2	2	<ul style="list-style-type: none"> Control of the emergency may have deteriorated, but imminent control of the hazard is probable. It is unlikely that the emergency will further escalate.
<ul style="list-style-type: none"> Employee requires hospitalization. Regional/national media interest. Has impacted off South Bow property - public health/safety could be jeopardized. 	3	3	<ul style="list-style-type: none"> Imminent and/or intermittent control of the emergency is possible. South Bow has the capability of using internal and/or external resources to manage and bring the hazard under control in the near term.
<ul style="list-style-type: none"> Fatality. National/international media interest. Has impacted off South Bow property - public health/safety could be jeopardized and environmentally sensitive areas are impacted. 	4	4	<ul style="list-style-type: none"> Emergency is uncontrolled. There is little chance that South Bow can bring the hazard under control in the near term.
CHOOSE THIS COLUMN'S RANK HERE >>		+	<< CHOOSE THIS COLUMN'S RANK HERE
TOTAL EMERGENCY SCORE		=	

EMERGENCY SCORE >	Alert (Non-Emergency) (Score = 2-3)	Level 1 Emergency (Score = 4-5)	Level 2 Emergency (Score = 6)	Level 3 Emergency (Score = 7-8)
RESPONSE TEAM POSTURE	Managed by Local Area Operations using ICS.	Various IMT members deployed IST notified.	IMT Activated. IST active.	IMT Activated. Consider Mutual Aid if required. IST active.
EOC POSTURE	EOC Manager Notified.	EOC active.	EOC active.	EOC active.
RESOURCE REQUIREMENTS	Immediate and locally available.	Begin to establish resources that may be required.	Limited supplemental resources required.	Significant incremental resources required.

Figure 8: Emergency Classification Matrix

USER NOTES:

- 1) If any of the consequence/likelihood criteria of a higher-level category are met, score to that category.
- 2) If any rank score or response posture selections are borderline/in doubt, activate to the higher level - and scale back response after as needed.

Repair and Restart

The Repair and Restart Phase of the Emergency Management Program generally focuses on restoration of the environment and the South Bow asset impacted by an emergency. This can only be completed after the safety of personnel, neighboring communities, and the environment are confirmed and stabilized through the ICS process.

Repair and Restart activities will begin soon after the emergency response process has begun to return the affected asset to service as soon as safely possible. When ICS is in place, the Operations Section Chief is responsible to ensure Repair and Restart activities are integrated into the larger emergency response process. Repair and Restart cannot occur in isolation from the emergency response process.

Emergency Debriefings and Documentation

Following all emergency responses and exercises, participants shall conduct a debriefing, or after actions review. A debriefing is a structured process for analyzing what happened, why it happened, and how it can be done better by the participants and those responsible for response to the next emergency.

Formal debriefing is run by a facilitator and can be chronological or tightly focused on a few key issues selected by participants.

Debriefings evaluating the:

- Efficiency and effectiveness of response
- Effectiveness and use of management systems (e.g. ICS, Safety), special procedures, Incident Action Plans, emergency response plans, and response-support documentation
- Achievement of (goal-focused) objectives and correct use of strategies and tactics
- Exercise planning process

Documentation and Record Keeping

In many cases, properly documenting an emergency or exercise is just as important as conducting the event itself. Proper documentation allows South Bow to prove compliance with regulations and provides a forum for vetting and addressing issues which arose during an event.

All emergencies and exercises are documented through the document of record. The documentation specifies:

- The type of event
- Date and time of the event
- A description of the event
- The objectives met in the event
- Lessons learned and associated action items.

Response Resources

South Bow allows Facilities to meet response resource requirements in a variety of ways. However, the general resource philosophy at the company level guides Facilities to procure resources through the following prioritized means:

1. Maintaining contracts with qualified equipment rental companies, spill removal organizations, and environmental contractors
2. Participating in Cooperatives with industry partners
3. Owning and maintaining response equipment (Company Owned Resources)
4. Establishing Response Assistance Agreements with neighboring industry partners

Contract Resources

South Bow maintains contracts with Oil Spill Removal Organizations (OSROs) and other response contractors. Additional contracts have been established with equipment rental companies, spill removal organizations, and environmental contractors; these contracts should be referenced in the local or asset specific emergency response plans for the assets supported by contract resources.

When feasible, contract resources shall be vetted and approved through Supply Chain's contractor approval process prior to an emergency. However, during emergencies, when approved contractors are not available in a timely manner, resources can still be accessed. For further explanation, see Emergency Procurement Section of this manual.

Company Owned Resources

South Bow owns and operates emergency response equipment. South Bow's company owned response equipment is contained within warehouses or response trailers strategically staged to expedite response; this considers asset-based risk and availability of contract, mutual aid, and cooperative resources.

During emergencies Company equipment is identified and mobilized by EOC for IC.

South Bow owned equipment may be deployed to Mutual Aid Partners and governmental agencies for non-South Bow emergencies; Leadership accountable for the specific resource

shall approve loaning equipment to third parties. Before loaning equipment, consideration is given to maintaining South Bow's ability to respond to a potential internal emergency.

Cooperatives

Industry Cooperatives are industry funded organizations which maintain a cache of equipment available for use by any members of the cooperative. Operation of cooperatives is funded through annual dues; these dues fund procurement and maintenance of equipment, and sometimes include an annual training exercise. Typically, cooperatives offer only equipment, not equipment operators or personnel with subject matter expertise to operate equipment; in this case, South Bow must ensure availability of equipment operators from another source.

South Bow is a member in good standing with numerous cooperatives in Canada. The cooperatives allow industry partners capable of responding to an emergency to work collaboratively to achieve the most efficient response. South Bow recognizes and uses industry cooperatives to augment our responses when feasibly necessary and more information can be seen in the respective Tier II document.

For more information on the cooperative and associated training opportunities and specific equipment available, access the cooperative's website.

Publicly Owned Resources

Public agencies, including federal, provincial/state, municipalities and local emergency response agencies, often retain their own emergency response equipment. While South Bow will not rely on these resources to respond to a Company emergency, they may be used if the agency owning the resources wishes to engage in the response. In all cases, local emergency response agencies will maintain their accountabilities to their jurisdiction which likely require them to employ local resources to provide public security, emergency medical services, and public health services. If public resources are not required to be involved in the emergency response, South Bow and the public agency may mutually agree that use of the public agency's equipment would improve the response; if this occurs, the public agency may willfully support South Bow's response, but shall never be dictated to do so by South Bow. If South Bow requests use of publicly owned, South Bow expects to reimburse associated costs based on established rates for use of the equipment used.

Publicly owned resources shall not be requested or expected to support long-term operations; if long term support is required, these resources shall be procured through contract resources.

Response Assistance Agreements

Response assistance agreements are documented understandings between South Bow and counter parties regarding emergency assistance. They typically document an intention to provide services, equipment or personnel, on a one-way or reciprocal basis. The scope and standard of their performance obligations can range from assisting on a 'best-effort' basis, to providing more guaranteed assistance.

In Canada and the US, response assistance agreements are generally not required for emergency services (i.e. Fire, Police and Ambulance) that are tax funded and provided by states, provinces, municipalities, as a core public service.

Element 5: Investigation & Lessons Learned

Element Overview Guide

The effectiveness of the EMCP is enhanced through constant review and feedback from various stakeholders.

Management System Processes

The EMCP adheres to the SBMS Investigation & Lessons Learned Element requirements using the following Process:

- The **SBMS Incident Management Process** guides the EMCP to monitor, inspect, report, and resolve incidents. The Process provides information on how investigations are addressed, documented and communicated with periodic re-evaluations of significant past incidents for organizational learning.

Element 6: Assurance & Monitoring

Element Overview Guide

The Assurance element sets the requirements for audits, assessments, and evaluation processes to ensure South Bow maintains regulatory compliance, a strong safety culture, and persistent advancement of operations.

Management System Processes

The EMCP adheres to the SBMS Assurance & Monitoring Element requirements using the following Processes:

- The **SBMS Audit & Evaluation Process** guides EMCP audit criteria, scope, frequency, and other audit methods necessary for audits and evaluation.
- The **SBMS Performance Monitoring Process** guides the establishment and monitoring of KPI's, targets and safety performance. This includes reviewing, developing, measuring and reporting on leading and lagging KPIs.

Assurance Standards

The Emergency Management Program follows the goals, objectives and targets requirement in OMS Element 1 Leadership Commitment and Strategy (see South Bow's Operational Management System (OMS) Framework. Assurance Standards are developed in alignment with all other affected South Bow management system programs to meet overarching Corporate and divisional strategies.

South Bow affiliates are audited or inspected by Regulators, owners of systems we operate, and our partners in projects. These audits or inspections ensure compliance with regulations, Company policies and procedures and/or contractual agreements. The audits or inspections produce findings which result in action plans created by South Bow affiliates to correct any issues identified through the audit process.

The following process helps ensure efficient use of resource availability when addressing audit findings. The process has several filters to help ensure activities meet regulatory, Company or contractual requirements. This process is separate from internal audits but reflects the typical process for external audits or inspections.

External Audits and Inspections, Phase	External Audits and Inspections, Action
<p>1 – Draft report received from regulator. Audit/Inspection is completed, and draft report is emailed to the Regulatory Compliance representative.</p>	<p>Regulatory Compliance representative emails a copy of the draft report to the appropriate SME, Legal, and the Emergency Management and cc’s the Manager, Emergency Management Manager and other relevant Managers and Directors.</p>
<p>2 - Confirm accuracy of draft report and develop timeline for implementation of any corrective/preventive actions.</p>	<p>All representatives ensure accuracy of draft report and develop timelines for implementation of any actions (where applicable).</p> <p>The Regulatory Compliance representative sends the draft report with any comments to the Regulator.</p>
<p>3 - Final Report received from regulator.</p>	<p>Regulatory Compliance representative receives a copy of the Final Report and circulates it to Legal and Emergency Management representatives, as well as relevant Managers, Directors and VPs.</p> <p>The Regulatory Compliance representative shall attach the report to the Regulatory Visit notification in SAP (previously created by the Regulatory Compliance representative) and monitors implementation of any actions.</p>
<p>4 - The reviews the list of regulatory compliance and contractual issues.</p>	<p>The EMT will address any systemic issues related to the Emergency Management Program and will keep the Regulatory Compliance representative and Facility EM specialist apprised of the completion of each action item when the issue has been addressed relative to any regulatory timelines.</p>

External Audits and Inspections, Phase	External Audits and Inspections, Action
5. - Close-out of Audit or Inspection	Regulatory Compliance representative provides the Regulator with responses to each of the action items for their consideration. relative to any regulatory timelines. When confirmation is received from the Regulator that the audit or inspection has been closed, this confirmation will be forwarded to the SME, Legal and Emergency Management representatives as well as relevant Managers and Directors.

Element 7: Management Review & Continuous Improvement

Element Overview Guide

The Management Review element sets requirements for reviewing both the Management System and the organizational performance to guide leadership in decision-making by providing visibility into the EMCP.

Management System Processes

The EMCP adheres to the SBMS Management Review and Continuous Improvement Element requirements using the following Process:

- The **SBMS Management Review Process** guides the annual review of the management system and the company's safety performance to assess performance goals and objectives.

The Emergency Management Program abides by the management review requirement in OMS Element 7 Performance Monitoring, Assurance and Management Review (see South Bow's Operational Management System (OMS) Framework. The Management Review requirements are established to ensure the results of Program maturity assessments, and Program performance measures and assurance activities are reviewed by management to assess the effectiveness of the Program. The outputs of Management Review are documented, communicated to the appropriate stakeholders, and considered for continual improvement.

A Management Review Presentation is developed, communicated to leadership, and records are retained by the Emergency Management Program to track actions, continual improvement opportunities and any need for changes to the Program.

Continual Improvement, and Corrective and Preventative Actions

Continual improvement is driven by:

- Management Review of the Program; and
- Review of internal and external audit findings, governance activities, exercise debriefings to assure adherence with business processes, procedures, standards and regulatory requirements.

The activities enable the effective identification, evaluation, and implementation of continual improvement actions and is achieved by working towards defined goals, objectives, and targets. Incidents and nonconformance reports (NCR's) support the development of corrective actions or feed into initiatives.

When opportunities for improvement are identified, they are reviewed and addressed. If action is required to remediate an issue, such action is deemed either a corrective action or a preventative action.

Corrective actions, as defined in South Bow's Nonconformance and Opportunity for Improvement Procedure are:

1. Actions to eliminate the cause of a detected nonconformity or other undesirable situation.
2. The process of completing a root cause analysis, the subsequent correction of the root cause(s) that led to the nonconformance, and the follow up to confirm that changes were implemented successfully.

Preventative action is an activity completed to prevent the occurrence of potential nonconformities.

Element 8: Emergency Preparedness and Response

Element Overview Guide

Emergency Management and Response is the core function of the EMCP. Preparedness is the key to quickly responding and setting the correct priorities during a response. This is accomplished through drills and exercise, training and actual emergencies. Details of these programs are contained in the various Elements presented throughout this document with the most information pertaining to Emergency Preparedness and Response contained in Element 4 – Operational Controls.

Management System Processes

The EMCP adheres to the SBMS Management Review and Continuous Improvement Element requirements using the following Process:

- The **SBMS Management Review Process** guides the annual review of the Emergency Management Program and Business Continuity Program and the company's safety performance to assess performance goals and objectives.

Element 9: Competency, Awareness & Training

Element Overview Guide

Training is a key element to the EMCP. The general framework of FEMA's Homeland Security's Homeland Security Exercise and Evaluation Program (HSEEP) and the National Preparedness for Response Exercise Program (PREP) are used during the continued execution of the EMCP training and drills program.

Management System Processes

The EMCP adheres to the SBMS Competency, Awareness and Training Element requirements using the following Processes:

- The **SBMS Qualification & Competency Verification Process** assesses the criticality of all roles that conduct work on the pipeline and verifies the competency of personnel. In addition, the Process assures contractors have the competency to complete work.
- **The SBMS Training Process** defines and verifies training requirements to provide regular refresher training and maintain training for personnel. This includes maintaining training records within the Learning Management System.

Training

Emergency Management System training provides participants with a clear chain of command; efficient, accurate communications; strategic thinking and informed decision making in preparation for an emergency.

The Emergency Management Team is responsible to ensure that personnel are trained:

- EMs to understand their roles and obligations within the Emergency Management Program
- EOC Managers to understand the responsibilities of their role. The Facility, or Support Department EM are responsible to:

- Ensure Facility, and Support Department staff meet their regulatory obligations for new hire and recurrent emergency response related training
- Ensure the EOC Team is properly staffed and trained
- Ensure resources are dedicated to staffing and training IMTs
- Provide awareness information to their local emergency service agencies

Training will vary slightly between Facilities, and Support Departments depending on the entity type(s). The core training program consists of a variety of courses which are managed in the company current learning management system of record. And, while the course content may vary, all Emergency Management courses must follow established course standards.

The Emergency Management Training Task Force meets on a regular basis to review training requirements and training related concerns. The task force duties may include:

- Reviewing requests for training sections
- Reviewing requests to approve new training vendors
- Developing and maintaining training standards
- Ongoing improvement of the training program and its entities

Safety Training Regulations

Portions of South Bow is subject to, and abides by, the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard, 29 CFR 1910.120. This standard shall be applied to all personnel who may be directly engaged in response operations for releases of, or substantial threats of releases of, hazardous substances. South Bow's Emergency Management Team shall work collaboratively with Regional Operations and Facilities to determine which personnel shall take the required level of HAZWOPER Training.

Responder Classification	Required Training Hours	Refresher
29CFR 1910.120(q) Emergency Response		
First Responder - Awareness Level	2-4 hrs. demonstration of competency	2-4 hrs.
First Responder - Operations Level	8 hrs.	8 hrs.
Hazardous Materials Technician	24 hrs. plus competency	8 hrs.
Hazardous Materials Specialist Incident Commander	24 hrs. plus competency in specialized areas	8 hrs.
29CFR 1910.120(e) Clean Up sites		
General Site Workers	40 hrs. / 3 days on the job training	8 hrs.
Occasional Workers (Limited Tasks)	24 hrs. / 1 day on the job training	8 hrs.
General Site Workers (Low Hazard)	24 hrs. / 1 day on the job training	8 hrs.
Supervisors	8 hrs. supervisor training	8 hrs.
* Previous work experience and/or training certified as equivalent by employer.		

Incident Command System Training

Several Incident Command System (ICS) Courses are listed within the Emergency Management Training Matrix; these courses are required of personnel who have a role in emergency response. However, depending on their role and the magnitude of incidents to which they may respond, different levels of training are required. More information is provided in the ICS Training Program contained under separate cover.

Element 10: Document & Record Keeping

Element Overview Guide

South Bow Corporation has a stringent document review and record keeping process. It involves the review and approval of management, the Manager, Director or VP levels depending on the document. The EMCP is consistent with the intent of Element 10 which is provided in the paragraphs that follow.

More information on the documentation of drills and exercises is provided in Element 4 under *Document and Record keeping*.

Management System Processes

Title And Copyright

This South Bow Corporation Emergency Management Corporate Program Manual (Manual) is primarily for the use of South Bow Corporation (referenced as South Bow or Company throughout this document) personnel. The complete text of this Manual may not be reproduced in any form by any photographic, electronic, mechanical or other means, or used in any information storage and retrieval system without the prior written permission of the South Bow Emergency Management Team. A redacted version of this manual is made publicly available. **South Bow shall not be held liable for unauthorized use or inaccurate interpretation.**

Document Approval and Signatures

This Manual is maintained in accordance with South Bow's SharePoint site requirements.

Responsibilities of Approvers

- Approvers of the Manual shall, at minimum, fulfill the following responsibilities:
- Review the Manual to ensure content is current and correct and regulatory requirements within the scope of the Emergency Management Program are addressed.
- Bring forward all concerns regarding content, structure, or revision processes related to revision of the Manual.
- Enable employees to enforce policies and procedures described in the Manual.
- Encourage peers and internal stakeholders to abide by policies and procedures described in the Manual.

Review Cycle

This Manual may be modified at any frequency and at any time throughout the calendar year; however, it must be reviewed and updated at intervals not exceeding 15 months, but at least once each calendar year.

Audits and Inspections, and Reviews

The Planned Inspection Program conducts Reviews within each Facility. The following pre-Review activities prepare Facilities for the Planned Inspection. The Facility EM Specialist is required to complete the following tasks in preparation for a Planned Inspection:

- Organize opening and closing meetings.
- Provide an orientation to local hazards and emergency procedures.
- Assist in gathering of emergency management documentation.
- Be available throughout the Planned Inspection for any other logistical concerns or questions raised by the reviewer.
- Prepare the following documentation for review:
 - Record of Tabletop and Field Exercises
 - Listing of emergency service agencies contacted by the Facility
 - Emergency Response Training Records
 - Emergency Response Plans
 - Record of incorporation of lessons learned from prior emergencies and exercises

The following people are recommended for participation in the opening and closing meetings:

- The Facility EM Specialist
- Any other employees who wish to attend

6.0 DEFINITIONS AND REFERENCES

6.1 Definitions and Acronyms

Term	Definition
BU	Business Unit
CER	Canadian Energy Regulator
CMP	Crisis Management Program
CMT	Crisis Management Team
COML	Communications Unit Leader
COMP	Compensation Unit Leader
CPS	Contributory Pipeline Segment
CS&E	Community, Safety, and Environment
DIVS	Division Supervisor
DMOB	Demobilization Unit Leader
DOCL	Documentation Unit Leader
EM	Emergency Management
EDRC	Estimated Daily Recovery Capacity
ENVL	Environmental Unit Leader
EOC	Emergency Operations Center
ERAP	Emergency Response Action Plan
ERG	Emergency Response Guidebook
ERP	Emergency Response Plan
FACL	Facilities Unit Leader
FDUL	Food Unit Leader
FOBS	Field Observer
FOSC	Federal On-Scene Coordinator
FSC	Finance/Administration Section Chief
HBI	Hazard and Barrier Inventory
HSR	Highly Sensitive Receptor

HSEEP	Homeland Security Exercise and Evaluation Program
HS&E	Health, Safety, and Environment
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IMT	Incident Management Team
LOFR	Liaison Officer
LPCC	Liquids Pipelines Control Center
LSC	Logistics Section Chief
MOC	Management of Change
N-PREP	National Preparedness for Response Exercise Program
OMS	Operational Management System
OPBD	Branch Director
OSC	Operations Section Chief
OSRO	Oil Spill Removal Organization
PIO	Public Information Officer
PHMSA	Pipeline and Hazardous Materials Safety Administration
PROC	Procurement Unit Leader
PSAP	Public Safety Access Point (or emergency dispatch center)
PSC	Planning Section Chief
QI	Qualified Individual
EOC	Emergency Operations Center
RESL	Resource Unit Leader
SCADA	Supervisory Control and Data Acquisition
SCAT	Shoreline Clean up and Assessment Team
SECM	Security Manager
SITL	Situation Unit Leader

SOFR	Safety Officer
SPUL	Supply Unit Leader
STAM	Staging Area Manager
SOSC	State On-Scene Coordinator
STCR	Strike Team Leader
SUBD	Support Branch Director
SVBD	Service Branch Director
TFLD	Task Force Leader
THSP	Technical Specialist
TIME	Time Unit Leader
TSB	Transportation Safety Board
TSC	Temporary Storage Capacity
UC	Unified Command
WCD	Worst Case Discharge

DEFINITIONS

Abnormal Condition Any event, circumstance, or outcome, that:

- (1) is not generally or routinely anticipated but is reasonably foreseeable and probable during emergency management related activities
- (2) reasonably could, if it materializes, have either a significant impact upon the health, safety, or security of South Bow affiliate employees, contractors, or the public, or a significant impact on the environment, or an impact to customers, and
- (3) is not effectively addressed by existing legislative, regulatory, engineered, administrative, procedural, other internal or external controls or existing contingency plans, either alone or in combination.

Accident An undesired or unplanned event that results in harm to a person and/or damage to property.

Accident (as defined in 49 CFR 195) An event that results in the release of the hazardous liquid resulting in an event described in § 195.50 of any failure that:

- (1) Caused a death or a personal injury requiring hospitalization;

- (2) Resulted in either a fire or explosion not intentionally set by the operator;
- (3) Caused estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000;
- (4) Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines; or (5) In the judgment of the operator was significant even though it did not meet the criteria of any other paragraph of this section.

Air Operations Branch Director Organize air operations, request/declare restricted air space, air traffic control requirements, supervise all air operations, and coordinate with Federal Aviation Authorities.

Alberta Energy Regulator The AER is the energy regulator for provincially-regulated facilities in Alberta. At South Bow, this includes the underground gas storage facilities and South Bow's liquids pipelines (Grand Rapids, Northern Courier and White Spruce). The AER also has some specific Alberta Environment and Parks (AEP) responsibilities for provincially regulated facilities.

Allocated Resources Resources dispatched to an incident.

Assigned Resources Resources checked in and assigned work tasks on an incident.

Assignments Tasks given to resources to perform within a given operational period, based upon tactical objectives in the Incident Action Plan.

Assistant Title for subordinates of the Command Staff positions. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions.

Agency Executive Chief Executive Officer (or designee) of the agency or jurisdiction that has responsibility for the incident. At South Bow the IST Leader - or their on-scene designate (e.g. Regional Director) - is the Agency Executive (also called Agency Administrator.) There is only one Agency Executive at a time and is the single representative to the Incident Commander.

BC Oil & Gas Commission The BCOGC is the energy regulator for provincially-regulated facilities in British Columbia.

Branch The organizational level having functional or geographic responsibility for major parts of the Operations or Logistics functions. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional name (e.g., medical, security, etc.).

Business Partner A member of the Corporate Emergency Management Team whose job is to liaise and build working relationships with their respective EM, provide support, guidance, and tools for consistent, efficient, and effective Program implementation, and solicit feedback for Program improvements.

Canadian Energy Regulatory The regulator of South Bow's Canadian federally-regulated pipelines. The CER's top priority in any emergency is to make sure that people are safe and secure, and that property and the environment are protected. Any time there is a serious incident, the CER Inspectors may attend the site to oversee a company's immediate response. The CER will require that all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that the regulated company conducts adequate and appropriate clean-up and remediation of any environmental effects caused by the incident.

Chain of Command A series of management positions in order of authority.

Chief The ICS title for individuals responsible for functional Sections: Operations, Planning, Logistics, and Finance/Administration.

Command The act of directing and/or controlling resources by virtue of explicit legal, agency, or delegated authority. May also refer to the Incident Commander.

Command Staff The Command Staff consists of the Public Information Officer, Safety Officer and Liaison Officer. They report directly to the Incident Commander. They may have an Assistant or Assistants, as needed.

Communications Unit Leader Prepares and implements the Incident Communication Plan, distributes and maintains communications equipment, supervises the Incident Communications Center and establishes adequate communications over the incident.

Company First Responder A South Bow employee, mutual aid partner, contractor or anyone representing the Company first-on-scene of an emergency. The Company First Responder is

the initial South Bow Incident Commander, functioning within a narrow scope of responsibilities until relieved by a fully qualified Incident Commander. As with incident command, there is only one designated Company First Responder at a time; all other company personnel on-scene are their resources.

Compensation/Claims Unit Functional Unit within the Finance/Administration Section responsible for financial concerns resulting from property damage, injuries, or fatalities at the incident.

Communication Unit An organizational Unit in the Logistics Section responsible for providing communication services at an incident. A Communications Unit may also be a facility (e.g., a trailer or mobile van) used to provide a major part of an Incident Communications Center.

Contingency Planning The process for developing alternative response strategies for a possible future event or circumstance.

Cost Unit Functional Unit within the Finance/Administration Section responsible for tracking costs, analyzing cost data, making cost estimates, and recommending cost-saving measures.

Crisis Any incident, outside the normal scope of the company management structure (e.g. Non- Operational Incident), that has potential to cause significant security, financial, operational or reputation impacts.

Crisis Management Strategic action to effectively manage a crisis event which has the potential to greatly affect the operations and credibility of the Company. Crisis management includes anticipating, preventing, preparing and reacting to a crisis which falls outside the normal Company management structure.

Critical Incident Stress Management A program to accelerate recovery of people who are having normal reactions to abnormal events.

Demobilization Unit Functional Unit within the Planning Section responsible for assuring orderly, safe, and efficient demobilization of incident resources.

Department of Transportation - Pipeline and Hazardous Materials Safety Administration (PHMSA) U.S. Federal Regulatory Agency whose mission is to serve the United States by ensuring a fast, safe, efficient, accessible, and convenient transportation

system that meets the vital national interests and enhances the quality of life the American people, today and into the future.

Deputy A fully qualified individual who, in the absence of a superior (Commander, Chief, or Director), could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy could act as relief for a superior and therefore must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.

Detection The instant the operator has an indication of an abnormal event that is not verifiable through SCADA system or by repetitive acknowledgement. This could be a single call from a passer-byer. During this stage the operator is conducting a number of activities to determine if there is an operational emergency.

Director The ICS title for individuals responsible for supervision of a Branch.

Divisions Divisions are used to divide an incident into geographical areas of operation. A Division is located within the ICS organization between the Branch and the Task Force/Strike Team. (See Group.)

Documentation Unit Functional Unit within the Planning Section responsible for collecting, recording, and safeguarding all documents relevant to the incident.

Emergency An unforeseen or imminent event which requires prompt coordination of resources, special communications and/or heightened authority for employees to protect the health, safety, or welfare of people first, and then to limit damage to property, the environment or company operations. (Note: An 'Alert' classification is not an emergency.)

Emergency Operations Center The physical location(s) within Region/Facility or major people facility which has been designed unequipped support emergency response personnel at an emergency site. (See also Virtual EOC.)

Emergency Services Local emergency response agencies - Police, Fire and Ambulance services May include utilities emergency responders, municipal Emergency Measures Coordinators and staff.

Emergency Measures/Management Organization A local or provincial organization in Canada responsible for the development and maintenance of effective provincial emergency preparedness, response and recovery measures with a view to mitigating the human

suffering and loss of property caused by actual or imminent emergencies or disasters. Also known as an Emergency Management Organization or Agency.

Emergency Planning Zone A calculated distance used to determine an impacted area based on the size of pipe, pressure and product within the pipeline.

Emergency Preparedness Coordinator This person leads the Emergency Preparedness Team in accomplishing their duties, and represents the Region/Facility on issues dealing with Emergency Preparedness and Response.

Emergency Preparedness Team A permanent or ad hoc team that represents the majority of the Areas within the Region/Facility on Emergency Preparedness matters. This team ensures the Region/Facility is in compliance with the requirements of the Emergency Management Program, and takes the lead role in organizing emergency exercises and training for the Region/Facility.

Environmental Protection Agency An independent federal agency established to coordinate programs aimed at reducing pollution and protecting the environment.

Environmental Unit Consults with natural resource trustees, provides input on wildlife protection strategies, and determines the extent of contamination, provides analysis of weather forecasts, monitors the environmental consequences of cleanup actions, identifies the need for permits and develops disposal plans. Shoreline cleanup and assessment, environmental surveillance, and remediation planning.

Environmental Incident A release or suspected release into the air, land, or water of any material or Hazardous Substance that has potential to cause damage to the environment, impact property, or have an adverse effect on public health.

Exercise Controllers Selected group of people who assist with conducting local emergency exercises. Their roles are to document actions and ensure the exercise stays on track through coaching and directing those participants in the exercise.

Facilities Unit Functional Unit within the Support Branch of the Logistics Section that provides fixed facilities for the incident. These facilities may include the Incident Base, feeding areas, sleeping areas, sanitary facilities, etc.

Federal Of or pertaining to the Federal Government of Canada or of the United States of America.

Federal Emergency Management Agency The US lead emergency management and preparedness agency. FEMA's Mission is to reduce the loss of life and property and protect communities nationwide from all hazards, including natural disasters, acts of terrorism, and other man-made disasters. FEMA leads and supports the nation in a risk-based, comprehensive Emergency Management Program of preparedness, protection, response, recovery, and mitigation.

Federal Energy Regulatory Commission The US Federal Energy Regulatory Commission, or FERC, is an independent agency that regulates the interstate transmission of natural gas, oil, and electricity. FERC also regulates natural gas and hydropower projects.

Finance/Administration Section The Section responsible for all incident costs and financial considerations. Includes the Time Unit, Procurement Unit, Compensation/Claims Unit, and Cost Unit.

First Responder Individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers such as Fire, Police or Ambulance personnel. [See also Company First Responder].

Food Unit Functional Unit within the Service Branch of the Logistics Section responsible for providing meals for incident personnel.

Function Refers to the five major activities in ICS: Command, Operations, Planning, Logistics, and Finance/Administration. The term function is also used when describing the activity involved, e.g., the planning function. A sixth function, Intelligence, may be established, if required, to meet incident management needs.

Functional Plan Defines how the departmental response activities and notifications will be executed (i.e. contact lists, maps/drawings, reference documents, etc.).

General Staff A group of incident management personnel organized according to function and reporting to the Incident Commander. The General Staff normally consists of the Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

Ground Support Unit Functional Unit within the Support Branch of the Logistics Section responsible for the fueling, maintaining, and repairing of vehicles, and the transportation of personnel and supplies.

Group Groups are established to divide the incident into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. (See Division.) Groups are located between Branches (when activated) and Resources in the Operations Section.

Hazard A situation that poses a level of threat to life, health, property, or the environment. Most hazards are dormant or potential, with only a theoretical risk of harm; however, once a hazard becomes “active”, it can create an emergency situation.

HAZWOPER As used in this document, the Hazardous Waste Operations and Emergency Response standard refers to the training program established by United States Occupational Safety and Health Administration.

Heightened Authority Normal levels of authority will change – any team member may be in charge, spending limit authorities may change.

Homeland Security Exercise and Evaluation Program A set of guiding principles and a common approach for exercise and evaluation programs in the whole community. It helps to shape planning, assess and validate capabilities, and address areas for improvement for homeland security and incident preparedness.

Imminent Liable to happen soon; impending.

Incident (as defined by Onshore Pipeline Regulations, 1999 (SOR/99-294)) An occurrence that results in:

- (a) the death of or serious injury to a person;
- (b) a significant adverse effect on the environment;
- (c) an unintended fire or explosion;
- (d) an unintended or uncontained release of LVP hydrocarbons more than 1.5m³;
- (e) an unintended or uncontrolled release of gas or HVP hydrocarbons;
- (f) the operation of a pipeline beyond its design limits as determined under the latest version of CSA Z662 or CSA Z276 or any operating limits imposed by the Board

Incident (as defined in 49 CFR 191)

- (1) An event that involves a release of gas from a pipeline, or of liquefied natural gas,

liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:

- a. A death, or personal injury necessitating in-patient hospitalization;
 - b. Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
 - c. Unintentional estimated gas loss of three million cubic feet or more;
- (2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

Incident (as defined by South Bow Incident Management Standard) Any event that results in an actual undesirable consequence which impacts Health & Safety, Environment, Property, or Corporate Security.

Incident Action Plan An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.

Incident Commander The South Bow employee given the authority to command-and-control company operations at the site of an emergency. The IC sets the incident objectives, strategies, and priorities and has overall responsibility for the incident.

Incident Command Post The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities.

Incident Command System A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is

used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.

Incident Management Team The Incident Commander and appropriate Command and General Staff personnel assigned to an incident.

Incident Objectives Statements of guidance and direction necessary for the selection of appropriate strategy(ies), and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.

Incident Support Team Senior management engaged during all significant incidents and emergencies that occur in South Bow at the discretion of the Vice President of the affect facility / line of business.

Joint Information Center A facility established to coordinate all incident-related public information activities when using National Incident Management System (NIMS) ICS in the United States. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies should collocate at the JIC.

Joint Information System Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations when using National Incident Management System (NIMS) ICS in the United States. The mission of the JIS is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies on behalf of the Incident Commander; advising the Incident Commander concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Jurisdiction A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, State, or Federal boundary lines) or functional (e.g., law enforcement, public health).

Jurisdictional Agency The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.

Leader The ICS title for an individual responsible for a Task Force, Strike Team, or functional unit.

Liaison A form of communication for establishing and maintaining mutual understanding and cooperation.

Liaison Officer A member of the Command Staff responsible for coordinating with representatives from cooperating and assisting agencies. The Liaison Officer may have Assistants.

Local Authority The elected officials of a city, town, village, county, or municipal district; or the park superintendent of a national park; or, in some cases, the chief and band council of an indigenous/tribal band. The local Fire Chief, Police Chief, Mayor, Reeve, etc. Local Emergency Measures/Management Organization, Disaster Services etc.

Logistics Providing resources and other services to support incident management.

Logistics Section The Section responsible for providing facilities, services, and materials for the incident.

Management by Objective A management approach that involves a four-step process for achieving the incident goal. The Management by Objectives approach includes the following: establishing overarching objectives; developing and issuing assignments, plans, procedures, and protocols; establishing specific, measurable objectives for various incident management functional activities and directing efforts to fulfill them, in support of defined strategic objectives; and documenting results to measure performance and facilitate corrective action.

Managers Individuals within ICS organizational Units that are assigned specific managerial responsibilities, e.g., Staging Area Manager or Camp Manager.

Major People Facilities Identified as facilities primarily administrative or service center in nature. Examples of South Bow's Major People Facilities are:

- South Bow Head Office, Calgary, Alberta Canada
- USPC Head Office Houston, Texas, USA

Medical Unit Functional Unit within the Service Branch of the Logistics Section responsible for the development of the Medical Emergency Plan, and for providing emergency medical treatment of incident personnel.

Mobilization The process and procedures used by all organizations (Federal, State, Provincial, and local) for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

Multiagency Incident An incident where one or more agencies assist a jurisdictional agency or agencies. May be single or unified command.

Municipality The area comprising a city, town, new town, village, hamlet, county, municipal district, improvement district or special area.

Response Assistance Agreement Written agreement between agencies and/or jurisdictions that they will assist one another on request, by furnishing personnel, equipment, and/or expertise in a specified manner.

National Incident Management System A system that provides a consistent nationwide approach for Federal, State, local, and tribal governments; the private sector; and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, local, and tribal capabilities, the NIMS includes a core set of concepts, principles, and terminology. These are identified as the ICS; multiagency coordination systems; training; identification and management of resources (including systems for classifying types of resources); qualification and certification; and the collection, tracking, and reporting of incident information and incident resources.

Natural Disasters A major adverse event resulting from the natural processes of the Earth (i.e., earthquakes, floods, volcanic eruptions, etc.).

National Preparedness for Response Exercise Program Developed to establish a workable exercise program that meets the intent of section 4202(a) of the Oil Pollution Act. PREP was developed to provide a mechanism for compliance with the exercise requirements, while being economically feasible for the U.S. Government and oil industry to adopt and sustain.

Observer Someone who is invited to observe an emergency exercise. This person has no responsibilities to the exercise.

Occupational Safety and Health Administration An administration under the United States Department of Labor. OSHA's role is to assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health.

Office of Pipeline Safety The Department of Transportation's (DOT) Pipeline and Hazardous Material Safety Administration (PHMSA), acting through the Office of Pipeline Safety (OPS),

administers the Department's national regulatory program to assure the safe transportation of natural gas, petroleum, and other hazardous materials by pipeline. Codevelops regulations and other approaches to risk management to assure safety in design, construction, testing, operation, maintenance, and emergency response of pipeline facilities.

Officer The ICS title for the personnel responsible for the Command Staff positions of Safety, Liaison, and Public Information.

Operational Period The period scheduled for execution of a given set of operation actions as specified in the Incident Action Plan. Operational Periods can be of various lengths, although usually not over 24 hours.

Operations Section The Section responsible for all tactical operations at the incident. Includes Branches, Division and/or Groups, Task Forces, Strike Teams, Single Resources, and Staging Areas.

Sure Call South Bow's CA-based 3rd Party Emergency Answering Service for some emergency lines.

Pipeline A line that is used or to be used for the transmission of oil, gas, or any other commodity and that connects a province with any other province or provinces or extends beyond the limits of a province or the offshore area as defined in section 123, and includes all branches, extensions, tanks, reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegrapher radio and real and personal property, or immovable and movable, and works connected to them but does not include a sewer or water pipeline that is used or proposed to be used solely for municipal purposes.

Planning Meeting A meeting held as needed throughout the duration of an incident, to select specific strategies and tactics for incident control operations, and for service and support planning. On larger incidents, the Planning Meeting is a major element in the development of the Incident Action Plan.

Planning Section Responsible for the collection, evaluation, and dissemination of information related to the incident, and for the preparation and documentation of Incident Action Plans. The Section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident. Includes the Situation, Resources, Documentation, and Demobilization Units, as well as Technical Specialists.

Policy Group A group that advises on and/or determines incident-specific policy, sets overall direction, and conducts extraordinary approvals. At South Bow the Incident Support Team (IST) members serve as a policy group for the IST Leader, who in turn may counsel the IC and/or EOC managers.

Procurement Unit Responsible for financial matters involving vendor contracts.

Program Leaders Senior Management, Directors, and Emergency Management Program team leaders.

Public Information Officer Provides information to internal and external stakeholders and rightsholders, including the media or other organizations seeking information about the incident or event.

Reception Center An evacuation center. Typically set up and administered by the local EMO or Public Health Agency, usually staffed by a non-profit such as the Red Cross.

Recognition The instant when an emergency has been assumed because any of the following have occurred:

- It has been verified by SCADA; or
- Repeated calls from the public, emergency response agencies, local authorities, industry partners have been received by the emergency line identifying an operational upset; or
- Abnormal conditions are such that declaration of an emergency is the best course of action

Residence A permanent structure which is designed for habitation and is regularly inhabited by humans.

Resources Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an incident or at an EOC.

Response Times Measured from recognition to the activation of emergency response activities.

Repair and Restart The repair process initially begins during the emergency phase which involves determining resources needed to repair any damages to company facilities. Repairs

will not be conducted until the emergency phase is over i.e. no further risk or damage to people, property, or the environment. Restoration activities including restoring an area back to its pre-emergency state. Restoration activities may go on for an extended period of time (long-term) depending on the severity of the impacts. Restoration can include environmental remediation activities.

Resource Management Efficient incident management requires a system for identifying available resources at all jurisdictional levels to enable timely and unimpeded access to resources needed to prepare for, respond to, or recover from an incident. Resource management under the ICS includes mutual aid agreements; the use of special Federal, State/Provincial, local, and tribal teams; and resource mobilization protocols.

Resources Unit Functional Unit within the Planning Section responsible for recording the status of resources committed to the incident. The Unit also evaluates resources currently committed to the incident, the impact that additional responding resources will have on the incident, and anticipated resource needs.

Safety Officer Ensures safety of personnel, and use of safe practices on site. NOTE: This position must be assigned immediately at the site of an emergency.

Section The organizational level having responsibility for a major functional area of incident management, e.g., Operations, Planning, Logistics, Finance/Administration, and Intelligence (if established). The section is organizationally situated between the Branch and the Incident Command.

Sensitive Area, High Consequence Area, or Highly Sensitive Receptor An area which is politically, environmentally, or culturally sensitive in nature (i.e., Municipality, indigenous/tribal land claims, etc.) or where South Bow's facility is located within a prescribed distance from residents.

Serious Injury Includes an injury that results in: (a) the fracture of a major bone; (b) the amputation of a body part; (c) the loss of sight in one or both eyes; (d) internal hemorrhage; (e) third degree burns; (f) unconsciousness; or (g) the loss of a body part or function of a body part.

Service Branch A Branch within the Logistics Section responsible for service activities at the incident. Includes the Communication, Medical, and Food Units.

Significant Adverse Effect Release of any chemical or physical substance at a concentration or volume sufficient to cause an irreversible, long-term, or continuous change to the ambient environment in a manner that causes harm to human life, wildlife, or vegetation.

Significant Incident A Significant Incident is an incident or emergency of:

- a) regulatory non-compliance;
- b) operational or project disruption;
- c) serious potential for growth; or
- d) reputational impact

of such severity as to warrant the immediate notification of the Project or operating unit's Vice President (for the purposes of:

- Accountability &/or oversight;
- Authorizations&/or approvals;
- Operational decisions; or
- Executive notification.)

Situation Unit Functional Unit within the Planning Section responsible for the collection, organization, and analysis of incident status information, and for analysis of the situation as it progresses. Reports to the Planning Section Chief.

Span of Control The number of individuals a supervisor is responsible for, usually expressed as the ratio of supervisors to individuals. (Under ICS, an appropriate span of control is between 1:3 and 1:7, with optimum 1:5. Span of control is reduced based on higher risk.)

Special Communications Communications with external and internal parties which are not the norm for regular business operations.

Staging Area A site outside of an emergency area where equipment and resources are kept.

Strategic Strategic elements of incident management are characterized by continuous long-term, high-level planning by organizations headed by elected or other senior officials. These elements involve the adoption of long-range goals and objectives, the setting of priorities, the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness.

Strategy The general direction selected to accomplish incident objectives set by the Incident Commander.

Supervisor The ICS title for individuals responsible for a Division or Group.

Supply Unit Functional Unit within the Support Branch of the Logistics Section responsible for ordering equipment and supplies required for incident operations.

Support Branch A Branch within the Logistics Section responsible for providing personnel, equipment and supplies to support incident operations. Includes the Supply, Facilities and Ground Support Units.

Support Departments Corporate Business Departments, which provide support to South Bow's Emergency Management Program.

Support Resources Non tactical resources under the supervision of the Logistics, Planning, or Finance/ Administration Sections, or the Command Staff.

Tactics Deploying and directing resources on an incident to accomplish incident strategy and objectives.

Time Unit Leader Responsible for recording time for incident personnel and rented hired equipment.

Transportation Safety Board The Canadian federal investigator of marine, rail, aviation and commodity pipeline occurrences. The TSB's role is to advance transportation safety through the investigation of transportation occurrences in the marine, pipeline, rail, and aviation modes by determining the cause and contributing factors.

Unified Command An authority structure in the Incident Command System where the role of incident commander is shared by two or more individuals, each already having authority in a different responding agency of jurisdiction. It is noted by its use of a common shared set of objectives, single Incident Action Plan, jointly nominated Operations Section Chief (where appropriate) and shared leadership by the Unified Commanders. Unified Command should be limited to five commanders or less.

United States Coast Guard The United States Coast Guard safeguards the United States maritime interests and environment. Additionally, they are the regulatory agency for spills in navigable waters.

Virtual Emergency Operations Center A non-physical gathering of EOC personnel via conference line to collectively gather and share information about an incident to support emergency response personnel at an emergency site.

6.2 Regulations, Codes, & Standards / Regulatory Requirements

Regulatory Requirements and Standards

The U.S and Canadian regulations that are pertinent to crude oil operations are listed in Section 6 (Regulations, Codes, & Standards / Regulatory Requirements). At minimum, emergency response plans shall meet all applicable Federal, State/Provincial, and Local regulations related to emergency response. If the specific details of the regulation are not met through the emergency response plan, the plan will point to documentation of where the regulation is met.

Due to size of the South Bow’s operations, and because the Company operates in two countries, and several states and provinces, this Manual does not list all requirements. Instead, Field EPTs in consultation with their local Regulatory Compliance Specialists and the Emergency Management Team, are responsible for being aware of and meeting regulations which apply within their jurisdiction. For reference, some emergency response planning regulations are listed below, but this list is not comprehensive.

Authority	Regulatory Reference
Canadian Energy Regulator	National Energy Board Onshore Pipeline Regulations SOR/99-294 (32) http://laws-lois.justice.gc.ca/eng/regulations/SOR-99-294/
Canada – Environment Canada	Environmental Emergency Regulations http://laws-lois.justice.gc.ca/PDF/SOR-2003-307.pdf
United States DOT/PHMSA	https://www.ecfr.gov/ Title 49 CFR 194 (Onshore Oil Pipelines) Title 49 CFR 195 (Onshore Oil Pipelines)
United States Coast Guard	https://www.ecfr.gov/ Title 33 CFR Part 154 Subparts A, B, C, D and F
United States Environmental Protection Agency	https://www.ecfr.gov/ Title 40 CFR Part 112 Subparts A, B and D
United States Occupational Safety & Hazard Administration	https://www.ecfr.gov/ Title 29 CFR Part 1910, Subpart H
United States Federal Energy Regulatory Commission	http://www.ferc.gov/industries/hydropower/safety/guidelines/eng_guide/chap6.asp
Alberta Energy Regulator (AER)	https://aer.ca/regulating-development/rules-and-directives/directives/directive-071

Several groups within South Bow have responsibility to notify regulators following an emergency. Below, a sample and general overview of the regulatory notification process is included for Oil Pipelines and Tank Farm facilities shall refer to their local emergency response plans for regulatory notifications and reporting requirements.

Canada

EOC/IMT	Canadian Regulatory Compliance
For CER Regulated Assets	
<ul style="list-style-type: none"> • Notify the appropriate health, safety and environmental regulatory agencies. • Notify local emergency responders if they have not already responded to the site. • Make a courtesy notification to the provincial regulatory if applicable. <ul style="list-style-type: none"> ○ AER Emergencies: 1-800-222-6514 	<ul style="list-style-type: none"> • Notify the (Canadian) Transportation Safety Board (TSB) 24-hour Occurrence Hotline (819.997.7887) (preferably within 1 hour but no later than 3 hours after incident discovery) of emergencies occurring on assets under: <ul style="list-style-type: none"> ○ Grand Rapids System ○ Keystone Pipeline • The TSB shall notify the Canada Energy Regulator (CER) pursuant to the Memorandum of Understanding between the TSB and the CER. • Process all verbal and written requests for additional information from either TSB or CER. • Enter incident details in the CER's Online Event Reporting System (OERS) no later than 3 hours after incident discovery. • Notify the CER (403.807.9473) of any incidents involving personnel in the Calgary Corporate Office and Regional Offices. The CER shall notify Employment and Social Development Canada (ESDC) of the incident.

For Provincially Regulated (i.e. AER) Pipeline Systems	
<ul style="list-style-type: none"> • Notify the appropriate health, safety and environmental regulatory agencies. • Notify local emergency responders if they have not already responded to the site. 	<ul style="list-style-type: none"> • Notify the Alberta Energy Regulator (AER) 24-hour Response Line (1-800-222-6514, Energy and Environmental Emergency Response) of emergencies occurring on the Grand Rapids System and Canadian portion of the Keystone Pipeline System. • Canada (owner) on 1-877-479-5248 as they are responsible for reporting an emergency to the AER. • Place a courtesy call to the Regulator’s Head Office to ensure proper messaging was forwarded.

CER

Guidelines for Reporting to Canada Energy Regulator

Canadian Regulatory Compliance shall notify the TSB Reporting Hotline (819) 997-7887) in the event of:

- A death or serious injury (as defined in the OPR or TSB Regulations);
- An unintended or uncontrolled LVP hydrocarbon release in excess of 1.5 m3 that leaves company property or occurs on or off the right-of-way (liquids pipelines);
- An unintended or uncontrolled sweet natural gas or HVP release > 30,000 m3;
- Any unintended or uncontrolled release of sour natural gas or hydrogen sulfide which meets certain criteria;
- A significant adverse effect on the environment;
- A rupture which immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained;
- A toxic plume (e.g. hydrogen sulfide or smoke) that causes people, including employees, to take protective measures (e.g. muster, shelter-in-place or evacuation);
- a heightened response increased public attention, and increased media attention involving federally-regulated pipelines.
- a third party unauthorized activity affecting the safety and integrity of a federally-regulated pipeline when the third party is unwilling to take direction from company personnel to cease and desist further operations.

AER

Guidelines for reporting to Alberta Energy Regulator

The AER 24-hour Energy/Environmental Emergency and Operational Complaint Line at (800) 222-6514 in the event of:

- Any leak or break from a pipeline.
- Release of a substance that has caused, is causing, or may cause an adverse effect.
- Release of a substance into a water body, watercourse, ground water or surface water.
- Release of oil, water or unrefined product off site or exceeding 2 m³ on site that has caused, is causing or may cause an adverse effect.
- Release of substance in excess quantity identified in the schedule of the Release Reporting Regulation.
- Release of an oilfield waste

USA

US Pipelines Emergency Notifications and Reporting

The Regulatory Compliance Specialist, Compliance Specialist, Area Manager shall verbally, or electronically, notify the appropriate regulator in the event of an emergency. For emergencies on the USA portion of the Keystone pipeline system emergency notifications shall be directed to agencies below in accordance with local Emergency Response Plans:

Agency	Contact Information
National Response Center	800-424-8802 http://www.nrc.uscg.mil
Department of Transportation, Pipeline and Hazardous Materials Administration (PHMSA) Accident Investigation Division	888-719-9033
Federal Energy Regulatory Commission	202-502-8390 888-889-8030
Department of Energy, Emergency Operations Center	202-586-8100

All applicable State Emergency Response Agencies (see Tier 2 Emergency Response Plan, Response Zone Annex)

Asset Regulators

Federal Regulators also have specific responsibilities during South Bow emergencies. The table below describes the responsibilities of South Bow's primary Federal Regulators.

Canadian Federal Regulatory Agencies – Roles & Responsibilities
<p>The Transportation Safety Board's (TSB) role is to advance transportation safety through the investigation of transportation occurrences in the marine, pipeline, rail and aviation modes</p>
<p>The Canadian Energy Regulator's (CER) role and responsibilities generally include:</p> <ul style="list-style-type: none">• Ensuring that people are safe and secure, and that property and the environment are protected. Any time there is a serious incident, the CER Inspectors may attend the site to oversee a company's immediate response as the Federal Incident Commander in Unified Command with South Bow. The CER will require that all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that the regulated company conducts adequate and appropriate clean-up and remediation of any environmental effects caused by the incident <p>And/or, as lead regulatory agency, the CER:</p> <ul style="list-style-type: none">• Monitors, observes and assesses the overall effectiveness of the company's emergency response in terms of:<ul style="list-style-type: none">○ Emergency Management○ Safety○ Security○ Environment○ Integrity of operations and facilities; and○ Energy Supply• Investigates the event, either in cooperation with the Transportation Safety Board of Canada, under the Canada Labour Code, or as per the National Energy Board Act or Canada Oil & Gas Operations Act (whichever is applicable)• Inspects the pipeline or facility• Examines the integrity of the pipeline or facility• Ensures appropriate repair methods are being used• Ensures appropriate environmental remediation of contaminated areas is conducted• Coordinates stakeholder and rightsholders feedback regarding environmental clean-up and remediation• Confirms that the company is following its Emergency Procedures Manual(s) commitments, plans, procedures, and CER regulations and identifies non-compliances• Initiates enforcement actions as required• Approves the restart of the pipeline

US Federal Regulatory Agency – Roles & Responsibilities

The **United States Coast Guard (USCG)** and the **United States Environmental Protection Agency (US EPA)**, under the mandate of the Oil Pollution Act of 1990 (OPA '90) have the responsibility for the prevention, preparation for and response to oil spills to navigable waters of the U.S. The USCG is the lead federal agency for response to hazardous substance spills occurring on U.S. coastal waters and deep water ports, while the EPA is the lead federal agency for spills into and around inland waterways.

The USCG, under OPA '90, has been given jurisdiction over Marine Transportation Related (MTR) Facilities. MTR facilities by federal definition include all vessels and those facilities located on coastal waters that “use, store, ship or transfer oil.” All MTR facilities that meet the USCG definition of Significant and Substantial Harm must have a USCG approved Facility Response Plan and Emergency Response Action Plan. They must also prove that they have the means to respond to a Worst Case Discharge of oil. If the facility transfers oil over or near water, they must also have an approved Operations Manual. The USCG, as the Federal On-Scene Coordinator, will work with state and local agencies and South Bow, in response to oil spills at facilities under its jurisdiction. They are a response agency in that they, when necessary, will provide human and material resources to assist in the response.

The EPA (under the Oil Pollution Act, 1990 [OPA '90],) has been given jurisdiction over Non-Marine Transportation Related (NMTR) facilities (i.e. any facility that is not an MTR). NMTR facilities that meet the EPA definition of Substantial Harm must have an approved Facility Response Plan and Emergency Response Action Plan. They must also prove that they have the means to respond to a Worst Case Discharge of oil. In addition, any facility that has an aggregate aboveground oil storage capacity of 1,320 gallons or a combined totally buried oil storage capacity of 42,000 gallons and has the potential to pollute navigable waters must have a Spill Prevention Control and Countermeasure (SPCC) plan. The EPA, as the Federal On-Scene Coordinator, will work with the state and local agencies and South Bow to respond to oil spills occurring on land or to inland waterways. They are a response agency in that they, when necessary, will provide human and material resources to assist in the response.

Both the USCG and the EPA require a vigorous training, drill and exercise program that is outlined in the National Preparedness for Response Exercise Program (PREP) guidelines.

US-DOT PHMSA

The **Pipeline and Hazardous Materials Safety Administration (PHMSA)** is the US federal regulator of pipelines. As such, PHMSA is notified of pipeline emergencies and may be closely involved in monitoring South Bow's response to an emergency; however, PHMSA is not traditionally a response agency and is not expected to provide human or material resources to assist in response.

7.0 APPENDICES

Appendices Guide

Appendix A Links to ICS Forms

Appendix B Emergency Planning Zones

Appendix C Procedures

APPENDIX A – ICS FORMS

Incident Command System forms are available on the Emergency Management Intranet site.

ICS Incident Action Plan Cover Sheet

The Incident Action Plan Cover Sheet provides general information about an incident, including the incident name, current Operational Period, and make up of Incident Command.

ICS 201 Incident Briefing Form

The Incident Briefing form provides the Unified Command (and the Command and General Staffs assuming command of the incident) with basic information regarding the response situation and the resources allocated to the incident. It is also a permanent record of the initial

ICS 202 Incident Objectives

The Incident Objectives form describes the basic incident strategy, control objectives, and provides weather, tide and current information, and safety considerations for use during the next operational period. The attachments list at the bottom of the form also serves as a table of contents for the Incident Action Plan.

ICS 203 Organization Assignment List

The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the Incident Organization Chart (ICS form 207-CG) which is posted on the Incident Command Post display. An actual organization will be event specific. Not all positions need to be filled. The size of the organizations dependent on the magnitude of the incident and can be expanded or contracted as

ICS 204 Assignment List

The Assignment List(s) informs Division and Group supervisors of incident assignments. Once the assignments are agreed to by the Unified Command and General Staff, the assignment information is given to the appropriate Divisions and Groups.

ICS 205 Incident Radio Communications Plan

The Incident Radio Communications Plan is a summary of information obtained from the Radio Requirements Worksheet (ICS form 216) and the Radio Frequency Assignment Worksheet (ICS form 217). Information from the Radio Communications Plan on frequency assignments is normally noted on the appropriate Assignment List (ICS form 204-OS).

ICS 205a Communications List

The Communications List records methods of contact for personnel on scene

ICS 206 Medical Plan

The Medical Plan informs incident personnel of the most accessible medical aid stations, emergency transportation, and hospitals. The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer.

ICS 207 Incident Organizations Chart

The Incident Organization Chart is used to indicate what ICS organizational elements are currently activated and the names of personnel staffing each element. The attached chart is an example of the kind of Organizational Chart used in the ICS. An actual organization will be event-specific. Not all positions need to be filled. The size of the organization is dependent on the magnitude of the incident and can be expanded or contracted as necessary. Personnel responsible for managing organizational positions are listed in each box as appropriate.

ICS 208 Site Safety Plan

The Site Safety Plan is an optional form that may be included in the IAP. The Safety Officer may choose to record the Site safety Plan using other templates. All Site Safety Plans are completed by the Safety Officer.

ICS Form 209 Incident Status Summary

The Status Summary:

1. Is used by Situation Unit personnel for posting information on Status Boards.
2. Is duplicated and provided to Command Staff members, giving them basic information for planning for the next operational period.
3. Provides information to the Information Officer for preparing news media

ICS 211e Check-In List - Equipment

Equipment arriving at the incident may check in at various incident locations: however, all check in locations shall use the Check-In List to record equipment descriptions, identifiers, assignments, and

ICS 211p Check-In List - Personnel

Personnel arriving at the incident may checked in at various incident locations; however, all check in locations shall use the Check-In List to record names, assignments, and contact information.

ICS 213 General Message

The General Message is used by:

- Incident personnel to record incoming messages which cannot be orally transmitted

to the intended recipients.

- Command Post and other incident personnel to transmit messages to the Incident Communications Center for transmission via radio or telephone to the addressee.
- Incident personnel to send any message or notification to incident personnel which requires a hard-copy delivery;

ICS 213RR Resource Request

The Resource Request Form is used by all incident personnel to request tactical and non-tactical resources.

ICS 214 Activity Log

The Unit Log records details of unit activity, including strike team activity. These logs provide the basic reference from which to extract information for inclusion in any after-action report.

ICS 214 Chronological Log

The Individual Log, while not required, records details of each individual's activities. These logs provide a basic reference from which to extract information for inclusion in any after-action report.

ICS 215 Operational Planning Worksheet

This form communicates to the Resources Unit the resources needed as a result of decisions made during the Tactics and Planning meetings. The Worksheet is used by the Resources Unit to complete the Assignment List (ICS form 204-OS) and by the Logistics Section Chief for ordering resources. The worksheet may also be used by the Resources Unit Leader to complete the Assignment List Attachment(s) (ICS form 204a-OS).

ICS 220 Air Operations Summary

The Air Operations Summary provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

ICS 221 Dembo Check-Out

This form provides the Planning Section information on resource releases from the incident.

ICS 230 Daily Meeting Schedule

The Daily Meeting Schedule records information about the daily scheduled meeting activities.

ICS 232 Resource at Risk Summary

The Resources at Risk Summary provides information about sites in the incident area which are sensitive due to environmental, archaeon- cultural, or socio-economic resources at risk,

and identifies incident- specific priorities and issues. The information recorded here may be transferred to ICS form 232a-OS, which acts as a key to the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site

ICS 233 Open Action Tracker

The Open Action Tracker is used by the Incident Commander/Unified Command (IC/UC) to assign and track tasks/actions to IMT personnel that do not rise to the level of being an Incident Objective.

ICS234 Work Analysis Matrix

The Work Analysis Matrix is designed to help select the best strategies and tactics to achieve the operational objectives. This optional form assists staff in carrying out incident objectives by outlining the who, what, where, when, and how of the response. The tactics from this form carry forward to the "Work Assignment" on the ICS-215. This form is simply a formalized version of how most OSCs tend to think to turn objectives into tactical field work.

APPENDIX B – EMERGENCY PLANNING ZONES

As per the CANUTEC Emergency Response Guidebook, 2016, evacuation distances for Crude Oil are:

- For Initial Isolation of Spills: 100 meters (330 feet) in all directions;
- For Large Spills 800 meters (0.5 miles) with evacuation of the Public within this zone;
- For Fires: 1.6 kilometers (1.0 miles) with evacuation of the Public within this zone

The information noted above, from the Emergency Response Guidebook, 2016, is used as a general reference if no other information is available. Various South Bow operated pipelines have calculated Emergency Planning Zones (EPZ) to be more specific than information in the Emergency Response Guidebook, 2016.

APPENDIX C – PROCEDURES

The following Procedures are maintained by the Corporate Emergency Management Team and augment this Manual. These procedures must be followed as prescribed to ensure adequate preparedness and safe and effective response to an emergency.

Preparedness Procedures

Title	Item ID
Emergency Management System Maintenance	000000000
Emergency Management System Maintenance Liquid Pipelines	000000000
Emergency Response Equipment Maintenance	000000000
Tier 2 Emergency Response Plan Development and Maintenance Procedure	000000000
Tier 3 Emergency Response Reference Task Package Liquids	000000000
Control Point and Geographic Response Plan (GRP) Development and Maintenance	000000000
Control Point Field Validation Task Package	000000000

Specific procedures for response to identified hazards are included in Tier II Emergency Response Plans where the procedures are specifically tailored to the asset and risk.

The procedures below augment the Tier II Emergency Response Plans and may be applied where applicable; this is not an exhaustive list of South Bow’s emergency procedures, and the applicable Tier II and Tier III Emergency Response Plans are referenced first for initial response procedures.

Critical Incident Stress Management

The purpose of the Critical Incident Stress Management (CISM) or individual counseling is to accelerate recovery of people who are having normal reactions to abnormal events.

The goals of CISM are to:

- Provide education on stress and stress management,
- Provide a mechanism for venting feelings,
- Normalize feelings resulting from the incident, and
- Make referrals for those requesting or requiring additional assistance.

There is an optimal time for conducting CISM interventions. Depending on the circumstances, it may be as soon as the same day, but should be no more than 24 to 48 hours after the event. Interventions may include individual or peer-counseling or CISM using the services of a mental health professional. Symptoms of post-trauma reactions can vary from intrusive thoughts and dreams to sleep disturbances, anxiety attacks, and depression.

During an emergency it is important that the Area Manager, Incident Commander, or Rominger notifies Health Services as early as possible, especially if responders are exhibiting signs of stress. If the ECO has been activated to support the emergency, then the Health Services representative in the ECO will make contact with a South Bow Health Service Provider to provide CISM if required. Health Services may also recommend support be coordinated through the Employee Family Assistance Program.

The EOC Manager or IC and Health Services will collectively determine what level of intervention is required, identify potential participants, and arrange for CISM sessions. At a minimum, a professional stress counselor will be present for all debriefings where the emergency involves an employee fatality. Participation in counseling or critical incident stress management is voluntary; however, it is strongly advised all employees exposed to the emergency event participate in critical incident stress counseling.

If CISM is provided, Health Services will support the Region or Facility by completing the following tasks:

- Facilitate CISM by ensuring appropriate, skilled mental health support is available.
- Participate in CISM where appropriate;
- Provide evaluation and referral for individual counseling;
- Provide follow-up for individuals affected by the emergency; and
- Remain in contact with the Region or Facility throughout the CISM process to identify any on-going need for their involvement.