

US Gas Projects	Safety Management Plan Level A/B Projects	
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## Safety Management Plan

Project Name: All USGP Level A/B Projects *	Portfolio: All USGP
*This SMP is applicable to all Level A/B projects executed in accordance with <a href="#">USGP Project Playbooks</a> .	

### Approvals

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### Revision History

Rev.	Date (YYYY/MM/DD)	Originator	Review / Approvals	Brief Description of Change History
0	2025/11/19	Dustin Canterbury / Justin Ray	<i>DC</i> <i>JJR</i>	Updated to apply to all USGP Level A&B projects
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## Terms and Definitions

Term	Acronym	Definition
Active Control	-	Person or persons designated to act on behalf of TC Energy that manage the scope of work for facilities, maintenance, and construction in conformance with TC Energy Health, Safety and Environmental Policies, Standards, and Procedures and in compliance with TC Energy and legislative requirements.
American National Standards Institute	ANSI	U.S.-based non-profit organization that works to develop and promote standards in the United States and around the world.
Audit	-	A periodic systematic method/approach to assess the implementation of an HSE program, its elements and systems that are in place thereby ensuring that opportunities for loss control are recognized and managed.
Away from Work Case Rate	AWCR	<p>An incident that results in an injury or illness that prevents personnel from returning to work on the next scheduled shift. The number of Away from Work Cases, where the personnel would have worked but could not because of occupational injury or illness, is related to a common exposure base of 100 full-time workers. This performance indicator is often referred to as the lost time case rate (ref.: U.S. Bureau of Labor Statistics, Record Keeping Guidelines for Occupational Injuries and Illnesses).</p> <p>The rate is calculated as: <math>N \times 200,000 / EH</math>, where:</p> <p>N = number of Away from Work Cases</p> <p>EH = total hours worked by all personnel</p> <p>200,000 = base for 100 full-time equivalent personnel</p>
Code of Federal Regulations	CFR	the general and permanent rules and regulations published in the Federal Register by the federal government of the United States
Consequence	-	The potential impact arising from the occurrence of an operational risk event.
Contractor	-	The employer designated under the safe direction and hazard control of the Prime Contractor.
Controls	-	The existing systems, processes, devices, practices or other mechanisms that modify operational risks. Protective or preventive measures that reduce or eliminate risk
Contractor Safety Management Practice	CSMP	A consistent and formalized approach to anticipate, prevent, mitigate, and manage the occupational health and safety (OHS) risks and exposures associated with the use of contracted services on TC Energy projects, facilities and Work sites.
Electronic Document Management System	EDMS	An electronic system used to track and manage. An EDMS # is assigned to all approved documents stored in the Controlled Document Library.
General Work Permit	GWP	A permit to work process, which is a written record that authorizes specific work, at a specific work location, over a specific time.

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<b>Term</b>	<b>Acronym</b>	<b>Definition</b>
Hazard	-	A condition having the potential or practice of causing damage or harm to people, property, production, or the environment.
Imminent Danger	-	Any condition, activity or practice that could cause a Major/Critical incident.
Impact	-	Any change, positive or negative, to the environment or the health and safety of personnel, because of the organizations activities, products or services.
Incident	-	An undesired event which leads to an injury, illness, and/or damage to property or environment
Job Safety Analysis	JSA	A systematic process that breaks down a job into a sequence of steps, identifies hazards in each step, evaluates the actual and potential risk of the hazard and establishes risk control measures
Key Performance Indicator	KPI	A set of metrics to measure progress towards organizational goals. These key performance indicators drive operational behaviors.
Learning Management System	LMS	A software application for the administration, documentation, tracking, reporting, and delivery of educational courses, training programs, or learning and development programs.
Near Hit	-	An unplanned event that under slightly different circumstances could result in undesirable consequences.
Objective/Target	-	Overall OHS goal (quantifiable where practicable), from the Health, Safety and Environment Commitment statement and/or OHS Policy that the Project sets to achieve.
Project / Site Specific Safety Plan	P/SSSP	A structured and detailed plan to manage identified safety risks and hazards associated with the work during the execution and operations phases of the project management process
Project Delivery Standard	PDS	Provides the framework to manage (plan and execute) projects at TC Energy and its subsidiaries, outlines the roles and responsibilities of key personnel, contains an assurance check to ensure a successful project outcome
Project Execution Plan	PEP	Used as the guiding document for planning, executing, managing and monitoring a project. Outlines the minimum content required in each phase, from Definition through Implementation and Operation.
Prime Contractor	-	The employer who has been designated to have care and control or general supervisory authority over occupational Health and Safety at the worksite, including the power to correct OHS violations or requiring others to correct them.
Process	-	A set of interrelated/interacting activities that transform inputs into outputs
Program	-	Formalized, documented administrative control with a broad application.
Risk	-	The potential loss resulting from inadequate or failed internal processes and systems, human factors, or external events. It is measured in terms of the consequence of an event (impact) and the probability of its occurrence (likelihood).
Risk Assessment	-	The process of hazard identification, risk analysis and evaluation.
Risk Management	-	Coordinated activities to direct and control an organization risk

US Gas Projects	Safety Management Plan Level A/B Projects	
Term	Acronym	Definition
Safety Classification and Learning Model	SCL	Incident classification model that was created to help organizations consistently and reliably classify and define incidents and observations. SCL model classification is based upon the answer to the following four yes/no questions: 1. Was there high energy? 2. Was there an incident? 3. Was there direct control? 4. Was a serious injury sustained?
Serious Injury and Fatality  Potential Serious Injury and Fatality	SIF/PSIF	Two potential classifications within the SCL model: <ul style="list-style-type: none"> <li>• SIF = Serious Injury and Fatality</li> <li>• PSIF = Potential Serious Injury and Fatality</li> </ul>
Stuff That Can Kill You	STKY	Refers to high energy sources that when released without control can lead to serious injuries or fatalities. This emphasises the importance of identifying and controlling high energy hazards to prevent serious incidents and ensure safety in the workplace.
TC Energy Operational Management System	TOMS	TC Energy's Operational Management System (TOMS) provides requirements for our day-to-day work to protect us, our co-workers, our workplace and assets, the communities we work in, and the environment.
TC Energy Operating Procedures	TOPs	A documented method for carrying out an activity.
Total Recordable Case Rate	TRCR	The number of recordable cases related to a common exposure base of 100 full-time personnel represented by 200,000 hours. The 200,000 hours in the formula represents the equivalent of 100 personnel working 40 hours per week, 50 weeks per year, and provides the standard base for the incidence rates. Recordable Cases are all work-related deaths and illnesses, and those work-related injuries which result in: loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid. (Bureau of Labor Statistics, Record Keeping Guidelines for Occupational Injuries and Illnesses)  The rate is calculated as: $N \times 200,000 / EH$ , where: N = number of Recordable Cases EH = total hours worked by all personnel 200,000 = base for 100 full-time equivalent personnel
TC Energy Policies & Procedures	TPPs	TC Energy's business rules and guidelines that ensure consistency and compliance, providing specific instructions necessary to perform a task or a step in a Process.

Term	Acronym	Definition
Vehicle Incident Frequency	VIF	<p>The number of recordable vehicle incidents related to a common exposure base of 625,000 miles (1,000,000 kilometers) driven. A recordable vehicle incident is any incident (regardless of fault) involving a fleet, rental motor vehicle, or a personal vehicle being used for TC Energy business which results in an injury to any person or damage to any vehicle or property, unless the vehicle was safely and properly parked at the time of the incident.</p> <p>The rate is calculated as (Canadian Association of Petroleum Producers):  <math>N \times 1,000,000 / TK</math>, where:  N = number of recordable vehicle incidents  TK = total kilometers traveled  1,000,000 = common exposure base</p>

## 1.0 Introduction

### 1.1 SMP Purpose

The SMP is a high-level strategic plan that outlines the key safety roles, responsibilities, and requirements regarding health, safety, and emergency management throughout the lifespan of Level A/B Projects. This SMP facilitates a structured approach to the management of project related OHS risks and exposures. The plan identifies the project levels, the project phases, and delegation of Prime/General Contractor or TC Energy active control.

The SMP was developed by TC Energy to provide a minimum awareness of the potential construction hazards associated with Level A/B Projects and **is provided to the Prime/General contractor for reference in the development of their SSSP.**

### 1.2 SMP Scope

The provisions of this SMP are mandatory for all TC Energy employees and authorized representatives engaged on the project. This SMP is relevant to the applicable phases of the project listed below:

Project Phase(s):	Applicable	Not Applicable
Planning & Development	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> N/A
Pre-Construction	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> N/A
Construction	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> N/A
Post-Construction	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> N/A

Prior to any work activities taking place, the Prime Contractor will be required to develop for implementation a project site-specific safety plan (P/SSSP) aligned with the safety standards, specifications and requirements as set forth in this document. **The P/SSSP must be accepted prior to project mobilization.**

### 1.3 Safety Governance & Regulatory References

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This SMP has been developed in accordance with internal PDS and HSSEM governance documents and applicable regulatory OHS standards and regulations.

## 1.4 Safety Management Philosophy

### 1.4.1 Project Commitment to Health and Safety and Life Saving Rules

**TC Energy's Core Values:** Safety in Every Step / Personal Accountability / One Team / Active Learning. Safe, reliable and sustainable operations are foundational in everything we do — in our culture, with Indigenous groups, landowners, stakeholder engagements and partnerships, and in our decision-making. It starts with our core values of Safety in every step, Personal accountability, One team and Active learning. We uphold these values in our sustainability commitments.

Strong governance, responsible management and committed leadership. We are committed to advancing our culture and conducting business with a disciplined approach through TC Energy's Operational Management System (TOMS). This integrated management system applies across the organization and throughout the full asset lifecycle.

To achieve this, everyone on the project must be responsible for their personal safety and the safety of those around. Through leadership, vigilance, integrity, and responsibility, the Project will be executed in a manner to maintain, exceed, and enhance the safety culture and applicable OHS regulations and standards.

TC ENERGY'S LIFE SAVING RULE	RELEVANT TC ENERGY PROCEDURES, STANDARDS, AND SPECIFICATIONS (AT A MINIMUM)
1.We will drive safely and without distraction	Motor Vehicle Operation Standard
2.We will use the appropriate Personal Protective Equipment	PPE Standard
3.We will conduct a pre-Job Safety Analysis (JSA)	Job Safety Analysis Procedure Risk Management Procedure Pre-job Planning Procedure Working Alone
4.We will work with a valid work permit when required	General Work Permit Procedure Hot Work Permit Procedure Electrical Work Permit Portable Gas Detection of the Atmosphere
5.We will obtain authorization before entering a confined space	Confined Space Procedure
6.We will verify isolation before work begins	LOTO Procedure Electrical Work Permit
7.We will protect ourselves against a fall when working at heights	Working at Heights Procedure
8.We will follow prescribed lift plans and techniques	Hoisting, Lifting, Towing and Winching Procedures Critical Pre-Lift Check sheet
9.We will control excavations and ground disturbances	Ground Disturbance Specification

The Value of Safety, Commitment Statement, and Life Saving Rules (LSR) are clearly communicated to all Project staff during their orientation and periodic communications, with copies visibly posted or made available at Project field office locations for both internal and external stakeholder display.

## Values

Our company values guide our behaviours, decisions and actions every day. By living these values, you contribute to our shared success and elevate our collective professional excellence.



### Safety in every step

I put safety first to protect myself, my teammates, the public and the environment.



### Personal accountability

I act with integrity and own my commitments and outcomes.



### One team

I am part of the greater whole, where our unique skills enable us to achieve more together.



### Active learning

I embrace learning in all aspects of my work with curiosity and creativity.

## 1.4.2 Stop Work Responsibility

In alignment with TCE's Safety Value, all personnel have the obligation and responsibility to stop work (SWR) whenever an employee, contractor, the public or the environment is at risk or in imminent danger.

The Project Management Team (PMT) fully supports anyone in the diligent execution of their SWR. No work will resume until all issues/concerns have been adequately addressed. No one will be reprimanded or punished for exercising a SWR intervention. The Prime Contractor is also expected to align their P/SSSP to include a SWR program.

## 2.0 Health and Safety Risk Management

### 2.1 Project Hazard Identification

TC has prepared a high-level hazard assessment for each worksite location and associated project activities that is recommended for Level A & B projects. Each hazard was developed based on collecting existing information from, (not all inclusive):

- Regional business unit inputs (i.e., info from Operations)
- Site Specific Orientation (at TC operating facilities)
- Project kickoff meeting materials
- Associated project documents, overviews, drawings, schematics, photos, etc.;
- Lessons learned from similar projects
- The Pre-Construction Worksite Assessment(s) as Attached in Appendix A;
- Below Safety wheel and Hierarchy of Controls.





***This section may be used by the TC Energy PMT and Safety rep. to identify additional hazards and controls based on the SOW***

PROJECT PHASE	PRIMARY TASK	HAZARDS /EXPOSURE	CONTROLS
<b>Planning &amp; Engineering</b>			
<input type="checkbox"/> Safety management strategy	-Interaction with different Teams for Project Coordination -Creation of Safety strategy -Motor Vehicle Operations -Generating initial drawings/plans -Creating cost estimates -Getting Environmental Permits if applicable -Reviewing equipment inspections and certifications -Reviewing personnel certification requirements  Click or tap here to enter text.:	-Ineffective Communication -Lack of planning. -Unknown roles and responsibilities. -Not compliance of current regulations -Negative Participation and support - Vehicle Incidents -Wildlife on the road -Incorrect drawings/misleading information -Animal Hazards/Animal encounter -Heat stress/Cold stress  Click or tap here to enter text.:	-Concentrate on initial and continuous OHS orientation -Open communication with stakeholder/contractors involved. -Continuous review of regulation and applicable permits. -Effective conflict resolution -Focus on flora (poisonous plants) and fauna (spiders, snakes, scorpions). -Heat/Cold stress control. -Active control procedure. -Application of Fatigue, drug and alcohol policies. -Focus on motor vehicle operation and defensive driving. -GPS installation to track and ensure safe driving habits. - Motor Vehicle Operation Standard. -Back up alarms/360 check. - USGP UTV Standard. - Contractor Safety Management Practice (CSMP) - Ergonomic Hazard Control  Click or tap here to enter text.:
<input type="checkbox"/> Up Front engineering and design			
<input type="checkbox"/> Engineering and legal survey			
<input type="checkbox"/> Environmental survey (e.g., historical, wildlife, etc.)			
<input type="checkbox"/> Other: Click or tap here to enter text.	Click or tap here to enter text.:	Click or tap here to enter text.:	Click or tap here to enter text.:
<b>Pre-Construction</b>			
<input type="checkbox"/> Right-of-way acquisition	-Defining crane location- Danger zones-parking areas Isolating Energized equipment -Defining Pipeline crossings -Designation of work location areas -Defining roles and responsibilities. -Moving equipment to site -Site assessment/Pre-inspection	-Conflict with landowners and communities -Motor Vehicle Incidents -Animal Hazards/ Animal encounter -Slips, trips, and falls -Pinch points -Struck by, Struck against -Cuts/abrasions/Pinch points -Increase of traffic in surrounding areas/school zones -Contact with OH powerlines	-Continuous OHS orientation -Open communication with stakeholder/contractors/landowners involved. -Continuous review of regulation and applicable permits. -Effective conflict resolution -PPE standard -Proper work radius to prevent struck by accidents -Safe use of Power & Hand Tools -Focus on flora (poisonous plants) and fauna (spiders,

PROJECT PHASE	PRIMARY TASK	HAZARDS /EXPOSURE	CONTROLS
<input type="checkbox"/> Worksite access	-Communication with local authorities -Coordination with CS personnel -Material ordering, transportation, loading, unloading, and storage  Click or tap here to enter text.:	-Losing load control/Equipment failure -Noise - Unforeseen mechanical defects -Eye damage -Falling objects -Contact with moving objects -Working at heights/falls -Inadequate performance expectations.  Click or tap here to enter text.:	snakes, scorpions). -Hazcom/SDS -OH Powerline Procedure -Hoisting, Lifting, and rigging process -Heavy Mobile Equipment Procedure -Working Alone Program -Working at heights procedure -Machine guarding safety -Heat/Cold stress control. -Active control procedure. -Application of Fatigue, drug and alcohol policies. -Follow ERP, Security plans, Critical lift, fall protection plans, etc -General work permit/JSA/FLHA -Focus on motor vehicle operation and defensive driving. - Motor Vehicle Operation Standard. - Commercial MV program and Hazmat transportation. -Traffic Control & Parking plans -Spotters/ signage, barriers, flags - WAME/LSRs. -Pipeline/railway Crossing procedures -Back up alarms/360 check. -USGP UTV Standard. -Supply Chain pre-qualification/ selection process. -Contractor Safety Management Practice (CSMP) -BBP standard  Click or tap here to enter text.:
<input type="checkbox"/> Tree clearing			
<input type="checkbox"/> Pipe load, transport, and stockpile			
<input type="checkbox"/> Other: Click or tap here to enter text.	Click or tap here to enter text.:	Click or tap here to enter text.:	Click or tap here to enter text.:
<b>Construction</b>			
<input type="checkbox"/> Mobilization	-Moving people/equipment to site -Designation of working areas/trailer set up/dumpsters -Location of buried facilities -Heavy equipment operations -Reviewing Isolating areas/SIMOPS with Operations -Guy wire removal -Crane Tower Decom by sections -Personnel ascending/descending for disassembling. -Welding/Cutting	-Inadequate Fall protection plans, Critical lift plans, ERP -Contact with personnel/vehicles -Slips, trips, falls -Poor road conditions -Dropped materials/objects -Spills/fires/explosion -Burns -Remote location for Emergency -Electrical shock from energized equipment -Falling objects/Working at heights -Eye damage Dust/Particles/debris -Contact with energized equipment /OH powerline -Crossing underground utilities with heavy equipment	-Continuous OHS orientation -Review of training certifications/qualified Operators -Open communication with stakeholder/contractors/landowners involved. -Effective conflict resolution -One call/ Marking of work zone areas/stake-out report -Follow Excavation procedures/plans -Follow Steep slopes procedure -Portable Gas Detection -Continuous review of regulation and applicable permits. -PPE standard and FR clothing -Hearing/Respiratory protection -Proper work radius to prevent struck by accidents -Safe use of Power & Hand Tools

PROJECT PHASE	PRIMARY TASK	HAZARDS /EXPOSURE	CONTROLS
<input type="checkbox"/> Construction	-Moving tower sections to dumpster with Forklift -Mobilizing equipment and personnel out -Restore site to original or better condition. -Delivering location to Operations  Click or tap here to enter text.:	-Poisonous animals/plants encounter -Noise -Fatigue/Mental health/drugs and alcohol -Ergonomics-force/back strain/vibration/temperature extremes -Cuts/abrasions/Pinch points -Miscommunication -Struck by heavy loads -UV light from welding/sun -Pressurized pipes/vessels - Breakdown/rollover of motorized vehicles and/or mobile heavy Equipment -Inadequate operator qualification-competent personnel -Interrupting normal gas operations Click or tap here to enter text.:	-Focus on flora (poisonous plants) and fauna (spiders, snakes, scorpions). -Soil Management Procedure -Hazcom/SDS -Asbestos, Lead, H2S, Benzene, Mercury Exposure Control procedures -Housekeeping -Handling & Storage of compressed gas cylinders -Fire prevention/plans -OH Powerline Procedure -LOTO Procedure -Confined Space Entry Procedure -Hoisting, Lifting, and rigging process -Heavy Mobile Equipment Procedure -Working Alone Program -Working at heights procedure -Work Platforms, Scaffolds, Barricades & Portable Ladders -Machine guarding safety -Heat/Cold stress control. -Active control procedure. -Application of Fatigue, drug and alcohol policies. -Follow ERP, Security, Critical lift, fall protection plans, etc -General work permit/JSA/FLHA -Focus on motor vehicle operation and defensive driving. -Motor Vehicle Operation Standard. -Commercial MV program and Hazmat transportation. -Traffic Control & Parking plans -Spotters/ signage, barriers, flags - WAME/LSRs. -Essential personnel only will remain in location. -Pipeline/railway Crossing procedures -Back up alarms/360 check. -USGP UTV Standard. -Supply Chain Management's selection process. -Contractor Safety Management Practice (CSMP) -BBP standard -Safety audits/inspections -Limit Radiation exposure -Spill kits/Environmental pollution control  Click or tap here to enter text.
<input type="checkbox"/> Commissioning and start up			
<input type="checkbox"/> Demobilization			
<input type="checkbox"/> Other: Click or tap here to enter text.	Click or tap here to enter text.:	Click or tap here to enter text.:	Click or tap here to enter text.
Post-Construction			

PROJECT PHASE	PRIMARY TASK	HAZARDS /EXPOSURE	CONTROLS
<input type="checkbox"/> Post construction reclamation	-Review of possible Environmental Reports-Waste management-disposal -Communication/delivery of project to other departments -Check for failures/additional corrective actions -Implementation of corrective actions-lessons learn for next tower Decom - Return the location to Operations and confirm clean-up is complete. Click or tap here to enter text.:	-Conflict with operations personnel -Violation of current regulations -Ineffective communication - Unsuccessful project deliverables -Unclear project documents/layouts -Spills/fires/explosion - Pollution -Leaving energized equipment, batteries, cables Click or tap here to enter text.:	-Open communication with stakeholders/contractors involved. -Continuous review of regulation and applicable permits. -Effective communication -Utility lines protected during Backfill -Heat/Cold stress control. -Active control procedure. -Application of Fatigue, drug and alcohol policies. -Focus on motor vehicle operation and defensive driving. - LOTO Procedure -Fire prevention plan - Motor Vehicle Operation Standard. - Contractor Safety Management Practice (CSMP) -Spill kits/Environmental pollution control measures Click or tap here to enter text.:
<input type="checkbox"/> Project turnover and punch list			
<input type="checkbox"/> Other: Click or tap here to enter text.	Click or tap here to enter text.:	Click or tap here to enter text.:	Click or tap here to enter text.:

PMT, Operations, and Safety Representative will be responsible for completing high-level hazard assessment and implementation of operational controls for the contracted scope of work.

The Prime/General Contractor will be responsible for developing their own specific hazard assessment, as well as identification and implementation of operational controls for the contracted scope of work inside the project site-specific safety plan (PSSSP).

### 2.1.1 Design Review

Safety and engineering controls will be a key aspect of the 30%, 60% and 90% design reviews. PMT will be responsible for ensuring that all key stakeholders are invited to participate.

### 2.1.2 Management of Change

Changes to this Safety Management Plan or variances to the Operational Controls will follow the company MOC processes. The MOC Framework describes the processes required to document the proposal of a change, conduct a review of the impact of the change, assess the risks and costs associated with approval or rejection of the change, document the approval or rejection of the change, develop a plan to implement the change and to communicate the reasoning and requirements of the change to affected employees including any contractors.

Prime/General Contractors shall review, update, and communicate changes to the P/SSSP(s) throughout the duration of the Work to ensure all reasonably foreseeable OHS risks and exposures are proactively identified, assessed, and appropriately managed. Revisions to the P/SSSP shall be reviewed by the designated TC Energy Authorized Representative.

### 2.1.3 Pre-Startup Safety Review (PSSR)

Projects shall complete a PSSR unless the Required Criteria questions in Table below indicate that it is not required (all answered “No”). The facility owner shall make this decision. If a PSSR is not required, this shall be documented using the Design Decision Summary Template.

**PSSR Required Criteria Table**

<b>PSSR Required Criteria</b>	
Does the project introduce (or reintroduce to a deactivated facility or facility having undergone a turnaround) hazardous process energy?	<b>Yes or No</b>
Does the work alter the safe operating limits (flow, pressure, temperature, level) or the controls/safeguards put in place to maintain safe operating limits?	<b>Yes or No</b>
Do modifications change process and instrument diagrams, plot plans, cause and effect diagrams/shutdown keys, operating procedures, control narratives or hazardous area classification drawings?	<b>Yes or No</b>
Is there a new control logic, loop, or modifications that affect safety controls or interlocks?	<b>Yes or No</b>
Did the project introduce new technology (e.g., first of its kind on site or substantially different from older, similarly purposed equipment)?	<b>Yes or No</b>

If determined applicable, the TC Energy PSSR procedure will be used to facilitate this safety review.

### 2.1.4 General Work Permit

Prior to the commencement of any Project activity on a TC Energy controlled site, TC Energy’s designated PM (or designee) will contact the appropriate TC Facility/Operations representative and request a General Work Permit (GWP) be prepared that defines the Work Scope to be performed, known hazards and environmental conditions at the location(s) the work is to take place as well as any special requirements/hazards. TC Facility/Operations will issue the General Work Permit to the TC PMT/CM/Designee. The PMT will relay the information outlined in the GWP to the designated Prime/General Contractor’s worksite representative. The contractor shall conform to all the controls/conditions contained with-in the GWP.

Greenfield projects at sites not operated by TC Energy but by approved Prime/General Contractor(s) who have implemented their own HSE management system DO NOT require a General Work Permit.

### 2.1.5 Job Safety Analysis (JSA)

All projects executed in accordance with this SMP will incorporate a JSA process to identify and control hazards associated with specific job tasks before work begins. The JSA should break down each task into steps, examines potential hazards at each step, and determines appropriate controls to eliminate or mitigate risks. Special emphasis should be placed on identifying STKY (Stuff That Kills You) hazards—high-energy hazards that have the greatest potential to cause serious injuries or fatalities. By focusing on STKY hazards, the JSA ensures that the most severe risks are recognized and directly controlled, helping to prevent life-altering incidents on the jobsite.

Where a Prime/General Contractor has been identified, their JSA process and form(s) shall be utilized as outlined in their Safety Management System and within their P/SSSP.

Company representatives are required to be informed and invited to participate in project related JSAs/hazard assessments. An effective process must be implemented to ensure JSA/hazard assessments applicable work tasks are reviewed with all affected individuals to address all onsite safety hazards prior to work activities taking place. The JSA/hazard assessment process must be accurately documented, reviewed, signed, and dated by all affected individuals. JSAs will be periodically reviewed by the Company during the duration of the project, or when conditions or other situations occur where additional or other hazards emerge or are eliminated.

## 2.2 Safety Performance

### 2.2.1 Key Performance Indicators

The following is a list of both the leading and lagging KPIs. These are documented in the Corporate Scorecard. Current targets and rates are found on the [Safety Performance](#) webpage.

- Serious Injury and Fatality (SIF) rate
- Number of major, critical and catastrophic process safety events
- Percentage of asset availability
- Delivering projects on budget and on schedule

### 2.2.2 Achievement and Monitoring of Progress on KPIs

This SMP outlines the strategies, plans and procedures required to be undertaken to achieve the above established leading indicators and OHS objectives.

Progress towards the set objectives will be monitored by monthly scorecard and reviewed in applicable stakeholder meetings.

### 2.2.3 Exposure Data

All contractors implementing work across US Natural Gas Project Business Units shall utilize the *ISNetworld Site Tracker Process* to report contractor and subcontractor exposure data inclusive of hours worked, miles driven and safety observations.

Contractor exposure data shall be entered into the ISNetworld Site Tracker no later than the 10th business day of the following month. Specific instructions regarding completing contractor exposure data entries into ISNetworld has been included in **Appendix C**.

Additionally, all contractors must, at a frequency agreed to by the Project, provide a summary of the following:

- Number of SHARE Reports completed.
- A summary report of all SHARE (or similar program) Reports completed.
- Number of incidents and near hits, broken down by classification according to TC Energy's Incident, Quality, and Compliance Classification Guide, where applicable.

The frequency of this summary will be determined by the TC Energy Project.

## 2.3 Project/Site Security

A Security Plan shall be developed by Prime/Contractor designated as having care and control of Work Site safety. This plan shall be published and communicated to all parties on, or visiting, the site. Where security concerns arise, the TC Corporate Security resources will be consulted as appropriate. Security Plan will include at least identification of critical locations, associated risk and assessment, security management plan, security incident plan, and communication requirements, resources, roles and responsibilities, training, contingency plans, etc.

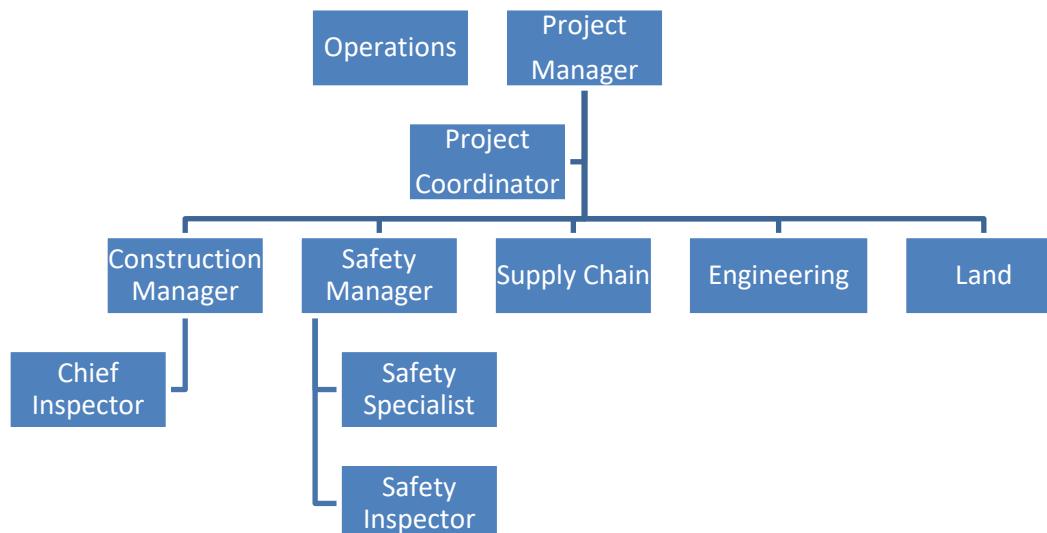
The designated Prime / General Contractor shall develop a project specific Security plan in their P/SSSP.

## 3.0 Implementation & Operation

### 3.1 TC Energy Project Organization, Safety Roles and Responsibilities

The Project SMP will only be as successful as the level of commitment demonstrated by its management and employees. The organizational structure for the Project including key safety roles is presented in the project specific organizational chart and contact list(s) maintained on the Project's Collaboration Portal (SharePoint) as defined by the Project's Document Control protocols.

**Example organizational chart:**



See Appendix B for example key TC Energy contact list

### 3.1.1 Safety Responsibility Matrix



<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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While the Project Manager holds the overall accountability for OHS management in the Project, other roles may hold responsibility, or need to be consulted and informed of various scope of work packages. The safety responsibility matrix below outlines the key roles and their responsibilities:

Project Safety Function, Task or Activity	Designated Project Safety Roles								
	PM	Eng.	CM	SCM	SM	CI	I	Ctr	Ops
Accountable for OHS project management	A	R	R	R	R	R	R	R	R
Delegate prime/general contractor	A	C, I	C, I	C, I	R	I	I	I	I
Identify safety requirements	A	I	C, I	C, I	R	I	I	I	I
Identify qualified contractors	A	I	I	R	R	I	I	I	I
Include safety requirements in RFP & Contract	A	C, I	I	R	C	I	I	I	I
Evaluate and select contractor	A	R	R	R	R	I	I	I	I
Award contract	A	C	C	R	C	I	I	I	I
Prepare SMP	A	I	C	I	R	I	I	I	C
Conduct pre-construction site assessment	A	I	R	I	R	I	I	C, I	C
Participate in detailed design reviews	A	R	R	I	R	R	I	C, I	R
Review Prime/General P/SSSP	A	I	R	I	R	I	I	I	I
Communicate SMP	A	I	R	I	R	R	I	I	I
Conduct internal onboarding session(s)	A	C, I	R	C, I	R, C	R	I	-	-
Hold kickoff meeting with Prime/General Ctr.	A	I	R	I	R	I	I	I	I
Inspect & Monitor Prime/General Ctr.	A	I	R	C, I	R	R	R	I	I
Conduct Prime/General Ctr. safety audits	A	I	R, I	C, I	R, I	R, I	I	C, I	I
Review Prime/General safety metrics	A	I	R	I	R	I	I	I	I
Initiate commission & turnover process	A	R	R	R	I	C	I	C, I	R, C
Include safety as a part of project close out	A	C	C	C	R, C	C	C	I	C
<b>PM – Project Manager, Eng. – Engineering, CM – Construction Manager, SCM – Supply Chain Management, SM – Safety Manager, CI – Chief Inspector, I – Inspector, Ctr – Prime/General Contractor, Ops – Field Operations. R – Responsible, A – Accountable, C – Consulted, I – Informed</b>									

### 3.1.2 Prime Contractor Organization

The designated Prime / General Contractor shall develop a project specific organizational chart and contact list(s) included in their P/SSSP and maintained throughout the lifecycle of the Project.



US Gas Projects	Safety Management Plan Level A/B Projects	
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The safety role and responsibilities of the designated Prime/General Contractors are defined within the Contract Terms and Conditions, the OHS Standard for Prime/General Contractors as well as within the contractor's P/SSSP document.

Safety related roles and responsibilities of key Prime/General Contractor staff members (i.e., Superintendent; Foreman; Safety Resources; etc.) shall be outlined by the Prime/General Contractor and included as a component of their P/SSSP.

The qualifications of the Prime/General Contractor's Site Safety Lead and span of influence is defined in the OHS Standard for Prime/General Contractors. Prime/General Contractors shall define the span of control for their safety resources within their P/SSSP. Safety support resources can vary depending on risk, geography, terrain, safety performance, etc.

**See appendix B for example key Prime/General Contractor contact list**

### 3.1.3 Hours of Work

#### TC Energy Employees

The hours of work to be adhered to by TC Energy employees on the Project will follow the **US Hours of Work Employment Practice Policy**. This policy also includes a variance process if long hours, extended, or irregular shift work is required to complete critical milestones of the Project.

#### Contractors

Hours of work for Prime/General Contractors and their employees are defined in the OHS Standard for Prime/General Contractors.

Hours worked in a single day and consecutive days should be within the guidelines of the OHS Standard including any exceptions to work extended hours and/or days.

Prime Contractors should provide a formal request to work extended hours for TC's review and acceptance. The requests should outline, at a minimum, what work tasks may require extended hours, the notification process to affected personnel including employees, support crews, and Inspection staff, what additional fatigue management safeguards will be implemented, and what process will be implemented to monitor the hours and days worked.

### 3.2 Awareness & Training

All Prime General Contractors performing work at the work site shall complete the online safety orientation prior to mobilization. All training completion certificates shall be provided to TC Energy authorized representative (PMT/CM).

At a minimum, training for the Project's employees will include:

- The Project's SMP / P/SSSP including TC Energy's emergency response plan (ERP) and specific additional plans accepted by TCE PMT/Safety rep: **Ex. Critical Lift plan, Hazardous Slope Work Plan, Etc.**
- The designated Prime/General Contractor's project specific HSE orientation

US Gas Projects	Safety Management Plan Level A/B Projects	
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- Hazard identification and Operational Controls of this SMP and P/SSSP
- Office specific OHS orientations for employees, who are working exclusively in offices located across the project.
- TC HSE Field Orientation for external contractors (applicable only where Work is being completed at an existing TC Energy facility <http://tc.icomproductions.ca>);
- Excavation training where applicable (<http://tc.icomproductions.ca>);
- Communication plans, availability or means of communication on rural sites, facilities, and remote areas (e.g., satellite phones, radios, other means of reliable communication);
- An adequate number of First Aid/CPR/AED trained person(s) at the worksite. This relies on mutual assistance provided by the Prime/General Contractor;
- Defensive Driving Training (for personnel who operate a motor vehicle on the Project's behalf) shall be in accordance with the Motor Vehicle Operation Standard for employees and contractor training as outlined in the OHS Standard for Prime/General Contractors.
- A review of the Scope of Work;
- Applicable work permits (e.g., GWP/PTW, Hot Work, LOTO, etc.)
- Proof of training/certifications/licences for OQs (competency)
- Incident Reporting – Incidents (near hits, potential and actual) must be reported immediately to the onsite TCE Authorized Rep. and the PMT
- Health and Safety Acts / Codes / Regulations for Construction sites
- Other – as identified by the Prime/General Contractor as outlined in their Safety Management System and/or P/SSSP.

The Prime/General Contractor is required to ensure that all visitors report to the designated on-site safety representative and complete the appropriate safety orientation (to be developed and delivered by the Prime/General Contractor), and follow site safety procedures including, but not limited to:

- Proper on-site supervision, and sign in/out procedures, as required;
- Proper personal protective equipment (PPE) while at the work site;
- Understanding that they are empowered to utilize stop work authority; and
- Understanding the duty to notify the Prime/General Contractor's site foreman (or equivalent), or the Project CM, if requested to perform tasks without proper training or competency.

All TC Energy employees, visitors and direct hire Contractors accessing the Work Site(s) will have completed the most current version of TC Energy's Safety Orientation and have proof of successful completion.

The Prime/General Contractor shall, prior to allowing work activities to commence, ensure all personnel (contractors, employees, owner representatives', visitors, etc.) receive a site-specific orientation applicable to the hazards and duration associated with the intended scope of work. A list of orientations will be maintained by the Prime/General Contractor.

Prime/General Contractor construction site workers and TC Energy construction representatives specifically assigned to the project site, and/or who are performing high-risk work activities, must receive a comprehensive site orientation.

Prime/General Contractors must ensure that all employees are suitably trained and competent in proper work procedures and health and safety regulations pertaining to their duties.

Prime/General Contractors are expected to implement the training requirements as defined by their Safety Management System, Site Specific Safety Plan, regulatory requirements, and the applicable industry standard safety training requirements. Where regulatory certification or accreditation is required, the Prime/General Contractor shall ensure only persons who meet the requirements perform the specified task.

Prime General Contractor shall ensure that all personnel performing the covered tasks are qualified under the requirements of Pipeline and Hazardous Materials Safety Administration (PHMSA) of the U.S. Department of Transportation (DOT) Operator Qualification Program to perform tasks that may affect the integrity of the pipeline. The qualification for each of these tasks shall include recognition, response, skills, and knowledge to the tasks and to abnormal conditions that affect the integrity of the pipeline. Prime General Contractor shall submit documentation ("Contractor Employee Task Qualification List") showing these qualifications prior to beginning work. The Prime/General Contractor must identify which employee will be performing which covered tasks to complete this documentation. Should this change during the job, the General Contractor shall submit a revised document showing such changes. All individual performing OQ tasks must be registered properly through VeriForce.

Prime /General contractors will implement their own safety management system and training matrix.

### 3.3 Communication, Participation & Consultation

This section of the SMP has been developed to ensure effective and appropriate Occupational Health and Safety information is disseminated to Project's employees and interested parties.

#### 3.3.1 Communication

TC Energy's HSE Commitment Statement, OHS documentation and all other relevant OHS information is communicated to internal project staff, external Contractors, and visitors through the following means (where appropriate):

- The Project's Collaboration Portal (SharePoint)
- Emails directed to Project personnel;
- Orientation in Health, Safety and Environment;
- Lessons Learned;
- USGP Safety Bulletins;
- Life Saving Rules Posters;
- Safety signage; and
- Other means as established by the Project Management Team.

Relevant communications from external interested parties are received, documented, and responded by using the Document Control Procedure and the Project's Information Management Plan (IMP).

The Prime/General Contractor will develop their own at-worksite and off-worksite communication plan as a part of their P/SSSP accepted by TC Energy.

#### 3.3.2 Safety Communications

US Gas Projects	Safety Management Plan Level A/B Projects	
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Routine and effective safety communication will help provide cohesion throughout the Project to facilitate the safety efforts on the Project for top-tier safety performance. Safety communications involve both the PMT and the Prime/General Contractors. Project Safety meetings may include:

Type of Participation	Frequency
Toolbox-Talks/Tailgate Meetings	Daily
Project Kickoff Meeting	Once
Progress Meetings	Weekly
All Hands Safety Meetings	Weekly
Safety Stand Downs	As deemed appropriate by Project management.
Recognition Events	Coordinated between the PMT and Contractors
Safety Committee	Contractors may elect to have a safety committee on which a TC Energy rep. will be invited to.
Other (specify)	Click or tap here to enter text.

***The frequency, attendees, and method for the above meetings, as well as Contractor identified meetings, shall be outlined in the P/SSSP. Action items as the result of these meetings shall be tracked and monitored to completion.***

### 3.3.3 Participation & Consultation

Employee participation is an essential aspect of this Project SMP. The Project shall provide employees with time and resources to participate effectively in the development of the safety philosophy of the Project, and in the process of SMP planning, implementation, training, evaluation, and corrective action through the following mechanisms:

- Their obligation and right for Stop Work Responsibility
- The Safety program
- The Rewards and Recognition program

### 3.4 Rewards and Recognition

TC Energy values the safe work behaviors of personnel working on the Project. To show appreciation and reinforce positive safety behaviors, the Project may utilize TCE rewards & recognition program. Rewards and recognition is a way to reward someone for living the TC Energy values and promoting a positive safety culture. Prime/General Contractors may outline their Rewards & Recognition Program in their P/SSSP.

### 3.5 Safety Document Requirements

The Project will create and maintain the following safety documents and records during the execution of the project, if applicable. They will be made readily available. These documents may be updated throughout the lifecycle of the Project.

Safety Documents/Records/Forms
Project SMP
Pre-Construction Site Assessment
Prime/General Contractor P/SSSP

<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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<b>Safety Documents/Records/Forms</b>
TC Energy General Work Permit(s)
TC Energy HSE Orientation Completion Records
TC HSE Orientation: Certificate of Completion
TC Energy Excavation Certificate of Completions
PPE Hazard Assessment
Prime/General Safety Orientation and Completion
Tailgate/Toolbox Talk Form
JSA Form
MCA/MCP Alerts & LFI Bulletins
Hazard Alerts or Safety Bulletins
Safety Inspections/Audits
Safety Stand Downs & Return to Work Plan documents
Safety Data Sheets (SDS)
SHARE cards-Observations
Incident Reports
Incident Investigations
Prime/General Contractor Incident Trending Analysis
Safety Communications (newsletters, bulletins, etc.)
Prime Contractor's P/SSSP, ERP, and other applicable addendums
Other: Ex. Critical lift plan, Traffic Control plan, Hazardous Slope Work Plan, etc.

### **3.6 Procurement of Contracted Resources**

#### **3.6.1 Prime/General Contractors**

Various types of Contractors (i.e., Prime Contractor/Subcontractor) will be utilized to complete specific scopes of work for the Project. In managing these Contractors, the PMT will be implementing TC Energy's Contractor Safety Management Practice (CSMP).

Any Prime/General contractors used during any phase of the Project, will be managed under the TC Energy safety standards and specifications.

All Prime/General Contractors will be required to submit for TC Energy acceptance a Project/Site Specific Safety Plan as outlined in the [OHS Standards for Prime/General Contractors](#). Corrective measures must be implemented if the Prime/General Contractor's safe work procedures do not provide an equivalent level of TC safety and/or if gaps are identified.

TC Energy and the Prime/General Contractor shall align subcontractor's safety policies and procedures with the requirements set forth in the Contract. All Work shall be conducted in compliance with the P/SSSP and procedures accepted by TC Energy. The Prime/General Contractor shall ensure all site personnel, including subcontractors and TC Energy Representatives, comply with the requirements set forth in the accepted P/SSSP.

<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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### 3.6.2 Outsourcing

Construction Management & Inspection (CM&I) resources will be utilized throughout the life cycle of the project, and these resources will be procured via the Construction Management & Inspection department using the CM&I Resource Request Form.

## 3.7 Emergency Action Plan

### 3.7.1 TC Energy's ERP

The objective of the [USNG Emergency Response Plan \(US\)](#) (ERP) is to prepare employees for dealing with emergency situations that may arise during the activities to complete the project. The ERP is designed to minimize the negative consequences of an emergency by training employees, procuring, and maintaining necessary equipment, and assigning responsibilities. This plan applies to all emergencies that may reasonably be expected to occur at the worksite(s) of the project.

The following templates and TOPS may be applicable in the Project's ERP.

#### Emergency Management Controls

Emergency Management Corporate Program Manual  
Tier 2 Emergency Response Plans Development & Maintenance Procedure  
General Emergency Plan Template  
Critical Injury and Fatality Response Procedures  
Emergency Management Procedures for Natural Disasters  
Prime/General Contractor's ERP  
Other: Click or tap here to enter text.

Project personal (including CM&I Resources) who are 1<sup>st</sup> to arrive on scene may be tasked with initial response activities. Care should be taken to:

1. Make the scene safe
2. Care and treatment for the injured
3. Preserve (freeze) the scene
4. Make Internal and External Notifications
5. Secure the scene

Emergency Response Immediate Actions should be prioritized as outlined below.

L – Life Safety  
I – Incident Stabilization  
P – Protection of property and the environment  
S – Stakeholder notification

The TC ERP must be communicated to all affected personnel.

### 3.7.2 Prime/General Contractor's ERP

The Prime/General Contractors must develop an ERP, applicable to their scope of work on the Project and in alignment with TC Energy incident management procedures, which includes the following items:



US Gas Projects	Safety Management Plan Level A/B Projects	
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- Identification of potential emergencies.
- Procedures to respond to each identified potential emergency;
- The hazard consequence management response process;
- Development and implementation of a contingency plan for imminent danger and abnormal events during construction; and,
- Additional detailed information as outlined in TC Energy's OHS Standards for Prime/General Contractors.

During the Project, all on-site personnel, including TC Energy employees will be covered under the Prime/General Contractor's ERP for the Work Site. The Prime/General Contractor's ERP will form a subsection of the P/SSSP, and will include travel to and from, hauling to and from, and activities at the Work Site. Emergency preparedness plans will be created for all Project work sites and unusually sensitive areas and/or High Consequence Areas. The ERP(s) will be communicated to all employees during the site specific HSE orientation including protocols for emergency notification and response. This ERP must be communicated to all affected Project personnel. Please include close Hospitals/clinics, maps, distances, times to treat Medical Emergencies inside the SSSP.

Emergency preparedness may be, in part, mandated by legislation. The number of trained individuals, level of training, and emergency/injury response equipment requirements must be defined in the ERP and adhere to applicable regulatory requirements (e.g. First Aid/CPR trained personnel). The Prime/General Contractors will provide first response capability, develop a remote medical evacuation plan, and ensure local emergency care is identified in their ERP.

The Prime/General Contractor is wholly responsible for emergency response during construction. All Emergencies will be immediately communicated to onsite TC Energy Representative, who will initiate the project's reporting and escalation protocols.

The Emergency Response Plan developed by Prime/General Contractor must include at a minimum:

#### **Site Description and Resources;**

- Description of the Work Site (physical location address, GPS coordinates), site map(s), site traffic routes for entrance and exit, identification of emergency exits or egress routes, and evacuation/muster points;
- Site emergency communication systems and equipment available (such as radios, cellphones, fire suppression systems, spill response equipment, and alarms);
- Work Site local emergency response agencies and contact listings (local fire, law enforcement, public health/EMS, emergency management, and nearest hospitals);
- Work Site personnel accountability/tracking process for emergency communication purposes;
- Work Site fire prevention processes and equipment (e.g., extinguisher inspection schedules, storage requirements for flammable and combustible substances, and fire hazard reductions site inspections).

#### **Organizational control of emergency;**

- Prime/Contractor emergency organization and management and contact listing; Emergency roles and responsibilities; and Escalation of emergency to TC Energy and TC Energy emergency point of contact.
- Response Process – response processes must include actions or steps to respond, and the emergency notifications required for each type of response.

<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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- Medical response actions;
- Hazardous material release or spill response actions;
- Fire/explosion response actions;
- Natural hazard response actions;
- Security incidents response actions; and,
- Additional hazard-specific response actions as identified by the hazard and risk assessments.

**Evacuation procedures;**

**Site recovery and return to operations** (on-site authority and process to recover post-incident and resume operations); and,

**Emergency response plan training and validation process** (drills/exercises).

### 3.7.3 ERP Activation

**Project Manager** Activates TC Energy Emergency Response Line according to table below. Please select the Telephone number according to the project location:

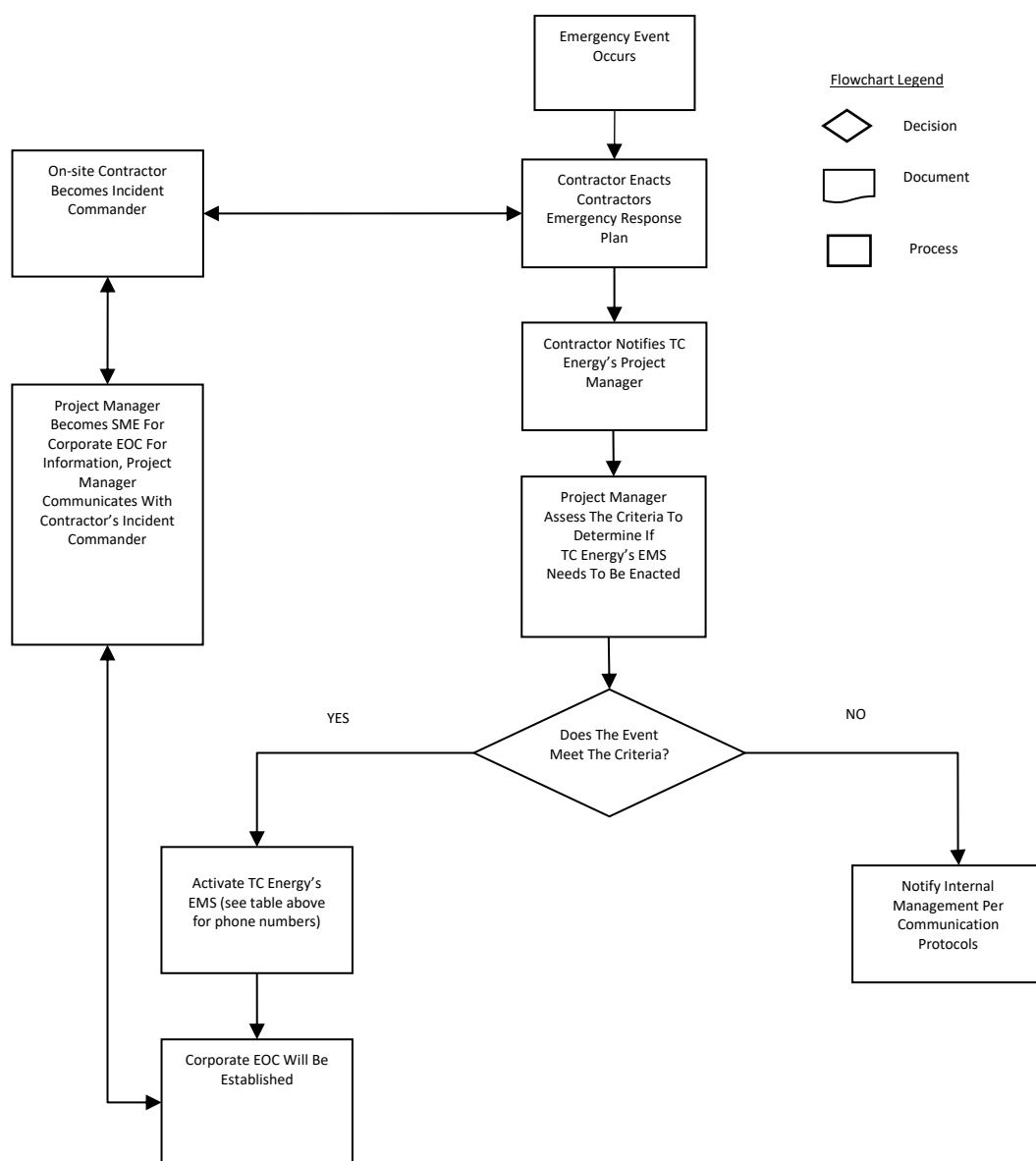
***TC Energy Emergency (24hr) Telephone Number***

Entity	Telephone Number	Address
Columbia Gas Transmission, Crossroads, and Millennium Pipeline Monitoring Center	800-835-7191	1700 MacCorkle Avenue SE Charleston, WV 25314
Columbia Gulf Monitoring Center	866-485-3427	1700 MacCorkle Avenue SE Charleston, WV 25314
PNGTS Monitoring Center	800-830-9865	1700 MacCorkle Avenue SE Charleston, WV 25314
American Natural Resources Corporation (ANR) ANR Storage Bison Pipeline GAP East/ TC Louisiana Interstate (TCLI) Gas Transmission Northwest (GTN) Great Lakes Gas Transmission (GLGT) Iroquois Gas Transmission System North Baja Pipeline System Northern Border Pipeline Company Tuscarora Gas Transmission Company (TGTC)	800-447-8066	Varied
Iroquois Gas Transmission System	800-888-3982	Varied

The events/issues shall include but may not be limited to the following incidents:

- Fatality on or in relation to our Work Site/activity;
- Events that result in serious adverse effects to the health of people;
- Result in the evacuation of the public;
- Explosion/fire/arc flash where the damage exceeds 500,000 (replacement cost of property, equipment – including labor);
- Specific Terrorist Threat to facility/project;
- Business/Project interruption due to blockade, rioting or labour disruption;
- Natural disasters affecting the project such as floods, hurricanes, tornados, etc.;
- A spill or release, on or offsite that poses an adverse effect to the environment (wildlife, fish, ground water, water body); and
- High profile/politically sensitive project where the PM believes the event may have a negative impact to TC Energy business operations.





## 4.0 Verification

### 4.1 Worksite Safety Inspections

TC personnel or Safety rep. may perform a Pre-Construction Worksite Assessment in Appendix A before starting to work. The purpose is to conduct a baseline hazard assessment prior to mobilization to have a reference document for the execution team (internal/external) to utilize in development of site specific safety management strategy.

At minimum, the TC Energy PMT and/or Prime/General Contractors must ensure the following activities are performed by anyone conducting Work at their Work Sites:

<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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- Daily pre-use inspections of tools and equipment;
- Daily documented pre-use inspections of vehicles, powered mobile equipment, and heavy equipment;
- Weekly documented field Work Site inspections (when engaged in a work scope at a Work Site for longer than one week); and,

Copies of all documented inspections must be retained in accordance with this document and will be made available for review by the TC Energy PMT/Safety representative upon request.

The following types of safety inspections will take place during the lifespan of the project:

<b>WHEN TC ENERGY HAS DESIGNATED A PRIME/GENERAL CONTRACTOR</b>
<p>In accordance with its contract, the Prime/General Contractor must conduct safety inspections as set out in its P/SSSP and its Audit Protocol.</p> <ul style="list-style-type: none"> <li>• <b>Informal Work Site Inspections</b> – Prime/General Contractor on a daily basis and results discussed with affected personnel.</li> <li>• <b>Weekly Safety Inspections</b> – Conducted by the Prime/General Contractor as per the SSSP and discussed in meetings with affected personnel. Notification will be provided to the TC Energy PMT in advance to allow participation. Recorded and discussed at weekly safety meetings. Ideally, takes place the day of, and before, the weekly safety meeting.</li> </ul>

## Regulatory Inspections

The Prime/General Contractor will cooperate fully with all regulatory occupational health and safety inspections and audits and provide a copy of any associated reports to the Project Manager and Safety Representative and retain a copy on the work site for the duration of the project.

### 4.2 Construction Safety Audits

The following types of safety audits may take place during the project:

<b>WHEN TC ENERGY HAS DESIGNATED A PRIME/GENERAL CONTRACTOR</b>
<ul style="list-style-type: none"> <li>• All Prime/General Contractors awarded a scope of work or Agreement greater than \$10,000,000 and/or with an estimated duration of six months or longer, must be required to perform an internal health and safety audit. The audit must measure the Prime/General Contractor's execution against the commitments made in the P/SSSP, the Agreement, and any relevant aspects of their own health and safety management system; Notification will be provided to the Project's PMT in advance to allow TC Energy to participate.</li> <li>• TC Energy may conduct independent Health and Safety Field Audits for the purpose of verifying that Prime/General Contractor is meeting all OHS requirements and the requirements of its P/SSSP. Deficiencies will be shared with the TC Energy PMT and Prime Contractor.</li> </ul>

### 4.3 Incident, Non-Conformity and Corrective/Preventative Action

#### 4.3.1 Incident Reporting and Investigation

Prime/General Contractors shall be responsible to report all incidents and Near Hits as defined in TC Energy's Incident & Quality Management Classification Guide to the designated on-site TC Energy representative immediately as practicable. All recordable injury and/or vehicle incidents, Major or Critical incidents, and/or potential Major or Critical must be reported verbally to the Construction Manager immediately. The Construction Manager is then expected to provide immediate notification to the applicable TC Energy Project Manager and Safety Resource. If the Construction Manager cannot be reached in, the TC Energy Project Manager should be notified.

Project escalation protocols are outlined below:

Incident Classification Type	Reporting Requirements by Role							
	Site Team	CM	SS	PM	Mgr.	Safety Mgr.	Dir.	VP
Near Hit	X	X	X	X				
Minor	X	X	X	X				
Serious	X	X	X	X	X	X	X	
Major	X	X	X	X	X	X	X	X
Critical	X	X	X	X	X	X	X	X

Site Team: Site Safety/CMT Designate  
 CM: Construction Manager  
 SS: Safety Support (Manager/Specialist)  
 PM: Project/Program Manager

Mgr: Implementation Mgr, PM Mgr  
 Safety Mgr: USGP Safety & Quality Mgr  
 Dir: Project/Program Director  
 VP: USNGP Vice President

The Prime/General Contractors shall provide written reports of all incidents (with sensitive reporting) in a timely manner, i.e. within 24 hours or sooner as required by regulations for required spill, injury events, etc. to TC Energy. Prime/General Contractor Incident report forms may be utilized however the information must include all required information to populate TC Energy's into Enablon.

PMT to ensure that Incidents are entered into the TC Energy Enablon system within 24 hours of their occurrence.

The response to an incident will adhere to the Safety Incident Response and Safety Stand Down Guidance tables found in the [OHS Standards for Prime/General Contractors](#).

Incidents will be classified in accordance with the most current version of the Incident, Quality and Compliance Classification Guide.

The Incident & Quality Management Classification Guide and the Safety Metrics established per year will determine if an event qualifies as:

- CA = Critical Actual Severity
- CP = Critical Potential Severity
- MCA = Major Critical Actual Severity
- MCP = Major Critical Potential Severity (includes Near Hits)

Incidents will be classified in accordance with the Safety Classification and Learning (SCL) model to determine if high energy was present to lead to the following possible outcomes:

- High- Energy Serious Injury and Fatality (HSIF)
- Capacity
- Potential Serious Injury and Fatality (PSIF)
- Success
- Exposure
- Low-Energy Serious Injury and Fatality (LSIF)
- Low-Severity

The CA/CP **Alert** is required for events with Critical actual and/or potential severity only. Events with an actual and/or potential severity of major or critical (MCA/MCP) require the completion of **investigation** within 90 days from the Discovery Date in the system, and the submittal of the Learning from Incidents (**LFI**) Bulletin draft within 15 days after the investigation closure in the system. Exemptions to this process include the following:

- a) Third Party Responsible
- b) Not work-related events
- c) Events not Under Management Employee Control (UMEC) such as Pre-existing Conditions (medical), Third Party Interference (TPI), and No Corrective Action (NCA)
- d) Abnormal Operations
- e) Third party pipelines with low risk (i.e. telephone lines, waterlines, etc.)

Posters may be posted in each construction trailer in order to promote awareness and understanding of TC Energy incident reporting expectations:

- 5 Steps of Incident Management; and,
- SHARE/Observations
- Other:

Incidents and Near Hits, regardless of severity, must be diligently evaluated by the Prime/General Contractor to identify cause, typically using an incident reporting form with basic cause identification. However, the complexity of the investigation must be appropriately scaled to the incident category, event type, and severity.

It is the responsibility of the Prime/General Contractor to lead the investigation of incidents at their work sites or involving their workers (including their subcontractors) and provide a competent person to lead it. TC Energy representatives reserve the right to participate in joint incident investigations with the Prime/General Contractor.

The Prime/General Contractor is required to investigate and report the incident to the legislated Occupational Health and Safety authorities in accordance with regulatory requirements. The Prime/General Contractor shall keep a copy of all incident/investigation reports at the work site.

The Prime/General Contractor must perform thorough Root Cause Analysis (RCA) investigation for all incidents classified as Major, Critical or potential Major or Critical, recordable injury incidents as defined in TC Energy's Incident Classification Guide. Prime/General Contractors are also expected to perform thorough Root Cause Analysis (RCA) investigations for any incident deemed required by TC Energy (e.g. recordable vehicle incidents). Investigation RCA must have a comprehensive report containing recommended control measures to prevent reoccurrence. Investigation reports must be submitted to the PMT and receive acceptance from the Project Manager / Safety Resource to ensure it meets the standard of a quality RCA investigation report. Incident investigations must commence immediately as practicable following the incident. Incident investigations and corresponding reports must be completed in a timely fashion.

The resultant final incident investigation report and any additional supporting information will be attached to Enablon associated with the applicable incident.

#### 4.3.2 Non-Conformity

Non-conformances with the SMP, Prime/General Contractor's P/SSSP, Construction Safety Manual, regulatory requirements, etc. may result in the issuance of a Non-Conformance Report (NCR). These may be issued for repetitive minor or for major non-conformances. Any non-conformance (NCR) issued by TC Energy will be addressed and managed under the Quality Management System.

All NCRs will be investigated, and root causes identified along with corrective and/or preventative actions.

#### 4.3.3 Corrective/Preventative Actions

The Prime/General Contractor has the primary responsibility for monitoring and measuring safety performance and behaviors as well as identifying and implementing preventative and corrective measures, as required. Preventive/corrective actions will be documented and tracked to closure in a timely manner.

Prime/General Contractors shall define their discipline policy in their P/SSSP. It shall include criteria for discipline as well as examples of minor and serious violations which may lead to discipline. TC reserves the right to have any individual(s) removed from the worksite for repeated safety violations at the discretion of the PM, or their designee, without prior notification or approval by the Prime/General Contractor. A record will be maintained of all disciplinary actions.

## 5.0 Management Review & Lessons Learned

### 5.1 Management Review

This SMP will be reviewed and updated as necessary. Any revisions to this SMP will be made by the designated safety representative and provided to appropriate USGP stakeholders.

The P/SSSP is considered a living document and will be continually updated based on the following:

- Any material changes in the scope of the work of the Project;
- Any additional or new safety hazards not previously identified
- Incident trends and learnings including near hits
- Incident investigations root cause analysis results;
- Worksite safety inspections and focus/general safety audit findings;
- Any citations issued during an announced or unannounced OSHA workplace inspections;
- Material changes in any applicable Federal or State OSHA standards and regulations;
- Recommendations provided by employees.

### 5.2 Lessons Learned

Any lessons learned with respect to safety/quality will be captured and documented by the USGP Lessons Learned Process as well as NCR's, LFI bulletins, etc.

### 5.3 Post-Project Contractor Safety Reviews

<b>US Gas Projects</b>	<b>Safety Management Plan Level A/B Projects</b>	
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Post-Project Prime/General contractor safety reviews must be held near the completion of a scope of work. These reviews may be completed for Non-Prime/General Contractors at the discretion of the TC Energy PMT.

Post-Project contractor safety reviews must include the following:


- Contractor health and safety performance;
- Any outstanding corrective action items; and,
- Lessons learned.

Representation at these reviews must include, at minimum, an accountable member of the TC Energy PMT (PM or CM) and a health and safety team representative from both the TC Energy PMT and the contractor.


A written summary report of these reviews will be completed prior to the completion of demobilization and stored as a Project record by the TC Energy PMT.

## Appendix A – U.S. Pre-Construction Worksite Assessments

If applicable, please see the following forms for your reference:



**Pre-Construction Hazard Assessment**



Date: \_\_\_\_\_

Project Number and Name: \_\_\_\_\_

Location (MP, Roads, Facility, Station Number, etc): \_\_\_\_\_

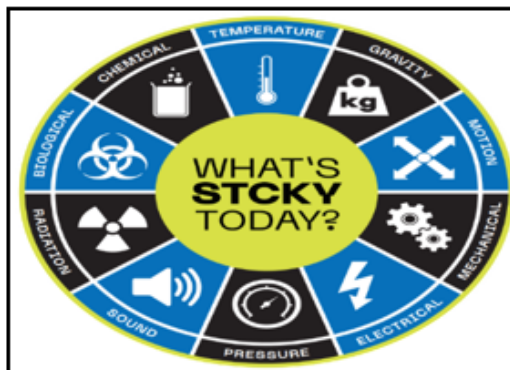
Region: \_\_\_\_\_

Conducted by (Title & Cell Number): \_\_\_\_\_

### ACCESS TO WORK AREA

	Yes	No	Unk
One Call Active			
Alignment Sheet Review			
Type of Rd/Name:			
Remarks:			
Line of Site Limited at Entr.			
Remarks:			
Access Point to Work Area:			
Remarks:			
Can you enter the site from either direction?			
Remarks:			
Depth of Water >1ft			
Buried Utilities			
Remarks:			
Cross Client Lines			
Cross Foreign Lines			
Overhead Utility Lines			
Height of Lines:			
Railroad Tracks w/in 75ft			
Cell Phone Reception			
Remarks:			

	Yes	No	Unk
Adjacent Client Lines			
Adjacent Foreign Lines			
Remarks:			
People Living w/in 300ft			
School Bus Route			
ATV/UTV Trails			
Client Facility			
Foreign Facility			
Security Recommended			
Remarks:			
Cathodic Protection			
Parking off ROW			
Remarks:			
Additional Hazards:			



What is STCKY in this general work area?

## WORK AREA

Work Area (Topography / Terrain Hazards):			
	Yes	No	Unk
Depth of Water >1ft			
Buried Utilities			
Remarks:			
Adjacent Client Lines			
Adjacent Foreign Lines			
Cross Client Lines			
Cross Foreign Lines			
Overhead Utility Lines			
Height of Lines:			
Protected Species			
Wetlands			
Noise and Dust Potential			
Adjacent Road			
Barriers Needed			
Additional Traffic Control			
Remarks:			
People Living w/in 300ft			

Are there any landowner issues?			
	Yes	No	Unk
ATV/UTV Trails			
Client Facility			
Foreign Facility			
Security Recommended			
Remarks:			
Cathodic Protection			
Parking off ROW			
Railroad Tracks w/in 75ft			
Hazardous Slopes			
Shoring/Trench Box			
Additional Hazards:			






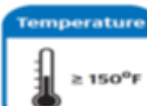







Additional Hazards (e.g. valves, poison ivy, wild fire, slope, flooding, weather, etc.)

Remarks:

•Pictures: Access, Line of Sight (both directions), Work Area, All Hazards, travel routes, utilities,etc.

### STCKY HAZARDS

**Stuff That Can Kill You (STCKY) hazards** release more energy increasing the risk of injury severity and serious injuries or fatalities (SIF).  
Use the below **icons** to identify STCKY hazards.

<b>Gravity</b>  Suspended Load	<b>Gravity</b>  Fall from Elevation	<b>Motion</b>  Mobile Equipment and Workers on Foot	<b>Motion</b>  Motor vehicle Incident (occupant)	<b>Mechanical</b>  Heavy Rotating Equipment
<b>Temperature</b>  High Temperature	<b>Temperature</b>  Fire with Sustained Fuel Source	<b>Temperature</b>  Steam	<b>Pressure</b>  Excavation or Trench	<b>Pressure</b>  Explosion
<b>Electrical</b>  Electrical Contact with Source	<b>Electrical</b>  Arc Flash	<b>Chemical / Radiation</b>  High Dose of Toxic Chemical or Radiation	Once the STCKY hazards are identified, have the discussion to ensure that direct controls are in place and verified.	



## Appendix B – Example Key Contact Lists

The key TC Energy contact list is as follows:

Name	Title	Contact Information
	Project Manager	
	Project Coordinator	
	Construction Manager	
	Engineering	
	Supply Chain Management	
	Chief Inspector	
	Safety Specialist	
	Safety Inspector	
	Operation's Representative	
	Other:	
	Other:	

The key Prime/General Contractor contact list is as follows:

Name	Title	Contact Information
	Project Manager	
	Superintendent	
	Site Foreman	
	Safety Manager	
	Field Safety Coordinator	
	Other:	
	Other:	

## Appendix C – USNG - ISNetworld Site Tracker Contractor Exposure Data Reporting Instructions and Guidance

Listed below are the step-by-step instructions:

1. Log into ISNetworld
2. Click Company Information from the left-hand navigation menu.
3. Click Site Tracker
4. Click Add Hours and Incidents
5. Click TC Energy
6. Deadlines to report information *will be the 10th business day of the following month.*
7. Click on the US Natural Gas Exposure Hours and Miles project.
8. Click Submit
9. Indicate if your company performed work for the reporting month.
10. Enter all required information.
11. Click Save and Submit

Additional Guidance:

No Work Performed – If your company did not perform onsite work for TC Energy US during the monthly reporting period, please follow the steps below:

1. Click 'No Work Performed' in the top right-hand corner.
  2. Select the US Natural Gas Exposure Hours and Miles project.
  3. Check the boxes for the month(s) where no work was performed.
  4. Select 'No Work Performed'
- Historical Reports – View historical information your company has reported to TC Energy by following steps 1-3 above, then select Reports.
  - Reporting Errors – If there is an error in information previously submitted, please submit a change request in Site Tracker. Once the request has been approved by TC Energy, you will be notified and will need to log in to your ISNetworld account and access this section again to make the necessary changes within the allotted time frame.