

Project/Site Specific Safety Plan Template



Item ID: 1018025034

Rev.: 01

Status: Published

Driver: Regulatory

Publish Date: 2021/08/03

GUIDELINES AND INSTRUCTIONS FOR USE

TEMPLATE NOTE: It is possible multiple safety plans are developed for each Project:

1. **Safety Management Plan (SMP)** to be developed by the TC Energy Project Management Team (PMT) as the high-level strategic plan outlining the safety roles, responsibilities, and engagement for each component of the PMT throughout the lifespan of the Project.
2. **Project/Site-Specific Safety Plan (P/SSSP)** to be developed where TC Energy has engaged a "Prime Contractor" (British Columbia, Alberta, Manitoba, "Constructor" (Ontario) or where the Contractor has control of the Work Site whether as an "Employer" (Work Site regulated by the Canada Labour Code, Part II), "Principle Contractor/Maitre D'oeuvre" (Quebec), "Contractor" (New Brunswick), or either an "employer" or "contractor" (Saskatchewan) or a "controlling employer", "creating employer", "exposing employer", or "correcting employer" (United States) for occupational health and safety - referred to as the "Prime/General Contractor" in this template. TC Energy may engage a Prime/General Contractor for an entire Project or may contract out defined activities related to the Project.

The P/SSSP must provide a detailed plan of how occupational health and safety aspects of the contracted Project or Work will be managed. The Execution of the P/SSSP must be the responsibility of the Prime/General Contractor.

Where TC Energy is fulfilling the role of the Prime/General Contractor, the PMT would develop both Safety Plans into an integrated Project Safety Plan. Engage Maintenance Program Planning early on in communication between the PMT and resource planning for operations.

The PMT for each Project must customize the template to suit the purposes of the Project. Highlighted portions indicate places with **directions for completion/modification** or **where input/customization is required**. The template starts on the next page.

FORMATTING INSTRUCTIONS

Delete the grey-shaded GUIDELINES AND INSTRUCTIONS FOR USE text box. (the P/SSSP Title Page will be the beginning of the document).

Review and update highlighted areas as necessary before providing this document to any Prime/General Contractor (for their use in creating their P/SSSP).

Ensure that the header and footer are edited and updated and revise the Table of Contents page once the document is ready to be issued.

File the SMP and P/SSSP and all supporting documents according to the Information Management Policy.

("Prime/General Contractor" Name and Logo)**Project/Site Specific Safety Plan**

PROJECT NAME: XXXX	
Project Number: XXXX	
Project Sponsor: XXXX (TC Energy Department Manager/Director)	
Project Manager: XXXX	
VERSION NO.: XX	DATE: XXXX

Revision History

Rev. No.	Date (YYYY-MMM-DD)	Document Status	Brief Description of Change History	Originator (By)	Reviewer(s) (Checkers)	Approver(s)
XX	Year-Mon-XX	Draft	Issued for Review.	XXXXX	XXXXX	Project Manager/Director Name

APPROVALS**Name****"Prime/General Contractor"**
Project Manager, Department**Signature****Date** XXX**Name****"Prime/General Contractor"**
Health and Safety
Representative**Signature****Date** XXX

Table of Contents / Index

	Definitions and Abbreviations	1
1	Purpose of Project/Site Specific Safety Plan.....	4
1.1	(Insert Prime/General (P/G) Contractor's Name Here)	4
1.2	Project Commitment to Health and Safety	5
1.3	TC Energy's Life Saving Rules.....	6
1.4	Expectations	8
1.5	Project/Site Specific Safety Plan Requirements	8
2	Scope of Work.....	9
2.1	Work Site and Work Scope Delineation	9
3	(P/G Contractor)'s Role and Responsibilities	10
3.1	Obligation to Stop Unsafe Work	12
3.2	(P/G Contractor)'s Organization Chart	12
3.3	(P/G Contractor)'s Project Manager.....	13
3.4	(P/G Contractor)'s Construction Manager	14
3.5	(P/G Contractor)'s Safety Representative(s)	14
3.6	(P/G Contractor)'s Safety Officer(s).....	15
3.7	Visitors.....	16
4	Applicable Occupational Health and Safety Legislation, Regulations, Codes & Other Requirements.....	16
5	Work Safety Risk Identification	17
5.1	Pre-Work Authorizations.....	17
5.2	Project Hazard Assessment	17
5.3	Site Safety Requirements	18
5.4	Health & Safety Training, Awareness (Orientation), & Competence	19
5.5	Mobilization Planning.....	21
5.6	Operational Controls	21
5.7	Management of Change	22
5.8	Key Health and Safety Performance Indicators.....	22
6	Subcontractor Safety Management	23
7	Safety Documents and Records	23
8	Safety Communication and Consultation	23
9	Inspection/Periodic Evaluation/Audits	24
9.1	Inspections	24
9.2	Audits & Oversight	24
10	Incident Management	25
10.1	Initial Response	25
10.2	Reporting.....	26
10.3	CANADA ONLY - Timely Reporting to Canadian Regulatory Compliance (2 Hours).....	26
11	Emergency Preparedness & Response Plan.....	29
11.1	Drills or Mock Exercises.....	30
12	Non-Compliance & Disciplinary Action	30
13	Hours of Work.....	30
14	Health, Safety, and Emergency Management Documents and Records	32
	Appendix A – Prime/General Contractor Safety Team Resource Information.....	33

Appendix B – Policies, Programs, and Procedures	33
Appendix C – Forms.....	33
Appendix D – Audit Protocols	33
Appendix E – Safety Performance Report (Monthly and Yearly)	33
Appendix F – Emergency Response Plan.....	33
Appendix G – Emergency Response Plan Template	35

Definitions and Abbreviations

Definitions and Abbreviations	
Term / Abbreviation	Definition / Description
Active Control	<p>Refers to an arrangement whereby the Project assumes the role of the Prime Contractor. In this case, the Project accepts care and control of the Work Site and the overall responsibility for work site and workplace safety.</p> <p>Person or persons designated to act on behalf of TC Energy that manage the scope of work performed by Contractors 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.</p>
Agreement	Collectively the contract, all schedules to the contract, and any applicable release order(s), associated with and that govern the Work.
ANSI	American National Standards Institute
Construction Safety Manual	<p>The Construction Safety Manual consists of documents that link TC Energy's Operational Management Systems (TOMS) through the Project Delivery Standard (PDS) process and include, when available:</p> <ul style="list-style-type: none"> • Project Execution Plan (PEP; TC Energy); • Health, Safety, Security & Emergency Response Plan (HSSEM Plan)/Safety Management Plan (SMP; TC Energy); and, <p>Prime/General Contractor's Project/Site Specific Safety Plan (P/SSSP) and Emergency Response Plan (ERP) (post-Agreement award).</p>
Contractor	The entity identified as the "Contractor" in the Agreement.
CSA	Canadian Standards Association
EHSM	TC Energy's Environment Health and Safety Incident Management Tool, used to report Incidents, Near Hits, Safety 24/7, Safe Acts/Hazard Identification and Safety Observations.
General Work Permit	A TC Energy document utilized to authorize work to be conducted on TC Energy owned or operated locations. A General Work Permit is required when hazardous work is being performed, the work scope directly impacts existing facilities, and/or if the work is performed by a contractor or internal TC Energy group not from the region, facility, or plant.

Definitions and Abbreviations	
Term / Abbreviation	Definition / Description
Imminent Danger	<p>Any conditions or practices in any place of employment which are such that a danger exists which could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger can be eliminated through the enforcement procedures otherwise provided by local safety Acts and/or regulations, orders, directives, etc.</p> <p>The following conditions must be met before a hazard becomes an imminent danger:</p> <ul style="list-style-type: none"> • There must be a threat of death or serious physical harm. "Serious physical harm" means that a part of the body is damaged so severely that it cannot be used or cannot be used very well. • For a health hazard there must be a reasonable expectation that toxic substances or other health hazards are present and exposure to them will shorten life or cause substantial reduction in physical or mental efficiency. The harm caused by the health hazard does not have to happen immediately. • The threat must be immediate or imminent. This means that you must believe that death or serious physical harm could occur within a short time, for example before a regulatory body could investigate the problem. • If a regulatory body inspector believes that an imminent danger exists, the inspector must inform affected employees and the employer that they are recommending that the regulatory body take steps to stop the imminent danger. • The regulatory body has the right to ask a federal court to order the employer to eliminate the imminent danger.
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.
Off-Highway Vehicle	Off-Highway Vehicle means vehicles designed and used for access into and transportation across surfaces where road vehicles including 4-wheel drive trucks and sport-utility vehicles (SUVs) could not operate. This includes, but is not limited to, all-terrain vehicles (ATV), quads, utility task vehicles (UTV), snowmobiles, side by sides, amphibious vehicles, etc.
Personnel	Refers to any person involved in the Project, including TC Energy employees, third-party contractors, subcontractors and Prime/General Contractor representatives.

Definitions and Abbreviations	
Term / Abbreviation	Definition / Description
Prime/General Contractor	Employer responsible for Work Site/Workplace safety. Means a Contractor that is: The designated “Prime Contractor” (British Columbia, Alberta, Manitoba, Saskatchewan), “Constructor” (Ontario) or where the Contractor has control of the Worksite whether as an “employer” (Worksite regulated by the Canada Labour Code, Part II), “Principle Contractor/Maitre D’oeuvre” (Quebec), “Contractor” (New Brunswick), or a “controlling employer,” “creating employer,” “exposing employer,” or “correcting employer” (United States) for Occupational Health and Safety.
Project	A defined scope of work which will be contracted to be executed within a Work Site.
Project Hazard Assessment	Process for identifying safety hazards based on scope of work, plans, as-built drawings, weather conditions, environmental considerations, actual physical site assessments.
Project Management Team	Refers to an individual, including contingent contractors or independent consultants, directly hired by TC Energy to perform work on behalf of the Project. Collectively referred as Project Team members.
Project/Site-Specific Safety Plan (P/SSSP)	A detailed structured plan that outlines the safety roles, responsibilities and engagement for each component of the Prime Contractor’s Project Management Team throughout the lifespan of the Project.
Safety Representative	Employee of the Prime/General Contractor assigned to represent all Work Site personnel on a day-to-day basis to assist with meeting occupational health and safety requirements on the Work Site and promoting occupational health and safety and loss prevention principles. Applicable where number of Work Site personnel is 20 or less.
SHARE	Safety Hazard Awareness Reporting Events are the proactive identification and reporting of work related Safe/Unsafe Acts or Conditions. Also included are Safety 24/7 events occurring outside of work, while at home or at play.
Site Safety Lead	In addition to the duties of the Safety Representative, the Prime/General Contractor’s Site Safety Lead is the Prime/General Contractor’s designated employee who applies the expertise gained from a study of safety science, principles, practices and other subjects and from professional safety experience to create or develop procedures, processes, standards, specifications and systems to achieve optimal control or reduction of the hazards and exposures that may harm people, property, or the environment. Adequate numbers of safety personnel to be based upon the geographical area to be covered (e.g., Number of Spreads, Geotechnical Drilling Crews spread over distances, etc.).
Stop Work Authority	All personnel have the right and the obligation to stop unsafe work activities

Definitions and Abbreviations	
Term / Abbreviation	Definition / Description
Subcontractor	Each and every supplier, subcontractor, or contractor at any tier performing any part of the Work or providing any equipment, supplies, or materials to the Contractor in connection with the Work, directly or indirectly, for the Contractor.
TC Energy Company Representative	Person or persons designated to act on behalf of TC Energy to manage the scope of Work performed by contractors for facilities maintenance and construction in accordance with the terms, conditions and specification of the Agreement.
Work	All activities concerning the Project contemplated by the Agreement.
Work Site	A location where Project personnel is, or is likely to be, engaged in any occupation and includes any vehicle or mobile equipment used by an employee in an occupation. Note: The entire area required for the performance of the Work, including rights-of-way and temporary work space, as required.

1 PURPOSE OF PROJECT/SITE SPECIFIC SAFETY PLAN

Insert Purpose of P/SSSP, for example: This P/SSSP provides a detailed plan of how occupational health and safety aspects of the Work must be managed. The P/SSSP sets out how safety concerns must be identified and addressed and the key roles, responsibilities, and activities of the **(P/G Contractor)**'s Project Management Team. It also provides an overall framework incorporating all legal and Work-specific safety requirements in order to ensure a safe Work Site environment throughout the lifespan of the Project.

1.1 (Insert Prime/General (P/G) Contractor's Name Here)

The **(P/G Contractor)**'s organization is committed to the elimination of worker injuries, occupational illnesses and damage to equipment and property in all of its operations; to the protection of the general public whenever it comes in contact with **(P/G Contractor)**'s Work Site and to the prevention of pollution and environmental degradation. **(P/G Contractor)**'s occupational health and safety policy can be found in **Appendix B**; the **(P/G Contractor)**'s policy must be widely disseminated and understood by all Work Site personnel.

The health, safety and environment organization for the Project has been established and the safety and health policies, procedures, and guidelines contained or referenced herein have been compiled and adopted in order to:

- Provide safe and healthful working conditions for all **(P/G Contractor)** employees and other Work Site personnel.
- Provide adequate protection for the public, and for others who may be exposed to, or associated with, **(P/G Contractor)**'s operations. Should **(P/G Contractor)** identify a potential public exposure, it must be addressed, evaluated and resolved via a Job Safety Analysis (JSA), or equivalent, for that operation/work phase.
- Eliminate injuries to personnel, occupational illnesses, and equipment and property damage.
- Act as a guide in interpreting and applying the current safety and health rules, regulations, and codes that govern the jurisdiction(s) where the Work is taking place and the industries with which **(P/G Contractor)** is associated.

- **(P/G Contractor)**'s occupational health and safety policy and related code of safety practices can be found in **reference location in P/G Contractor's health and safety management system**.

1.2 Project Commitment to Health and Safety

The TC Energy Project team and **(P/G Contractor)** are committed to the principle that Zero is Real and that all occupational injuries and illnesses are preventable. TC Energy believes that effective health and safety management is an essential part of all Work activities conducted on behalf of the Project. The Project's commitment to a safe and healthy workplace is summarized in the following documents.

Copies of TC Energy documents have been reviewed and understood by **(P/G Contractor)** and can be found in Appendix A of the TC Energy Project Safety Management Plan (SMP):

- TC Energy's *Health, Safety, and Environment Commitment Statement*
- TC Energy's *Life Saving Rules*

Copies of **(P/G Contractor)**'s occupational health and safety policy documents listed below can be found in **(P/G Contractor)**'s health and safety management system:

- **List relevant (P/G Contractor) OHS policies here**

This Project must be executed in a manner that protects the health, safety, and security of all personnel associated with the Project and at the designated Work Site(s) including, but not limited to, TC Energy employees, contractors, visitors, and the public. The Project will be conducted in a manner that meets all applicable occupational health and safety laws and regulations.

Figure 1 represents the Project Safety Management framework and defines the relationship between TC Energy, **(P/G Contractor)**, and regulatory requirements which influence the TC Energy Project SMP as well as the relationship between the regional- and functional-specific site-specific safety plans that may be generated during the course of the Work, or are already in place.

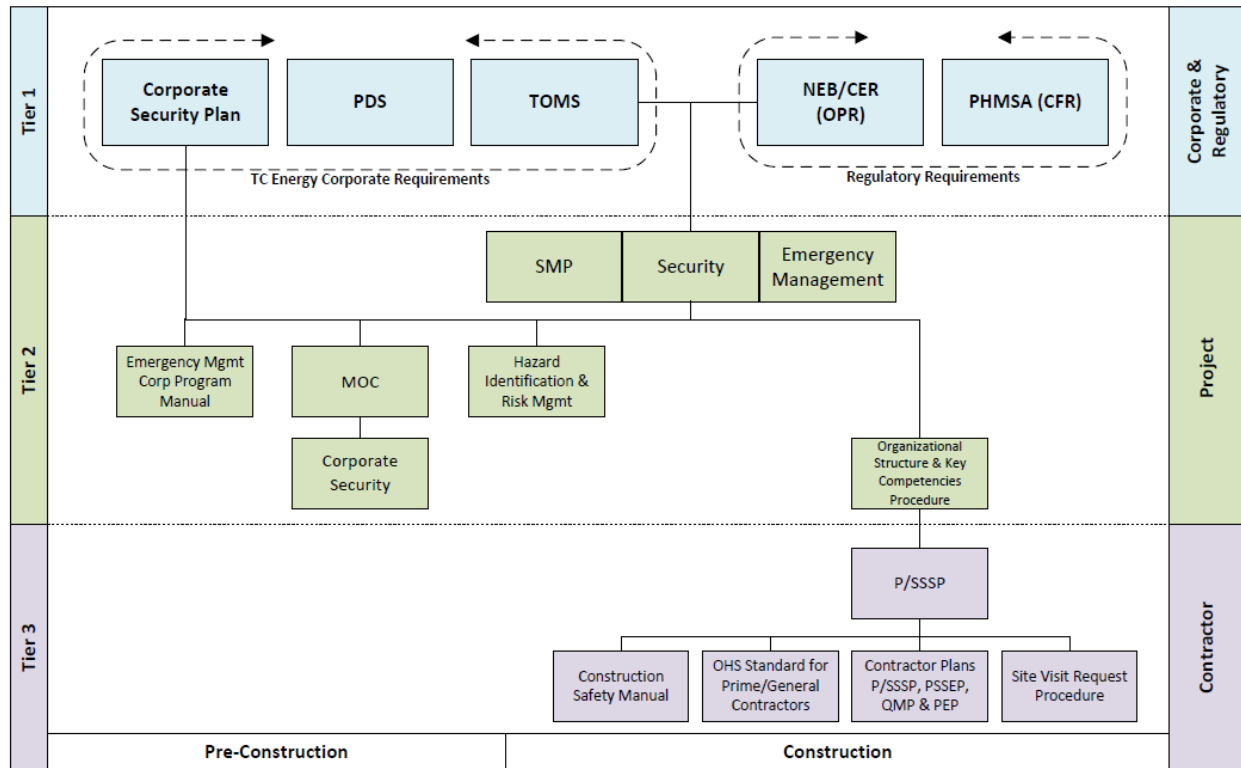


Figure 1: Project Health, Safety, Security, and Emergency Management Plan Framework

The TC Energy Project SMP outlines the key roles, responsibilities, and requirements regarding health, safety, security and emergency management when working on the Project and is an integral part of the Construction Safety Manual. While TC Energy does not specifically reference a stand-alone Construction Safety Manual, the compilation of several processes and related documents meet the overall purpose of a Construction Safety Manual. Documents that support this requirement include, where applicable:

- Project Execution Plan (PEP; TC Energy);
- Safety Management Plan (SMP; TC Energy); and,
- **(P/G Contractor)**'s P/SSSP and emergency response plan (ERP).

(P/G Contractor) must ensure that the compilation of documents making up the Construction Safety Manual is posted in a conspicuous location at the Work Site and available to all Work Site personnel.

1.3 TC Energy's Life Saving Rules

TC Energy's Life Saving Rules guide the way Work is undertaken and help to hold all personnel accountable to the highest possible safety standards, including all TC Energy policies and safety procedures. The Life Saving Rules were developed to highlight the high-risk activities that are part of the Work it does every day and emphasizes the importance of following the risk control measures we have in place to manage them. Adherence to the Life Saving Rules is not optional and is a condition of conducting business with TC Energy. Personnel knowingly violating a Life Saving Rule will be subject to disciplinary action up to and including termination of employment or removal from TC Energy Work Sites.

(P/G Contractor) must ensure that all personnel are informed of TC Energy's Life Saving Rules and that these rules are complied with at all times. If non-conformances are identified at any time during the course of the Project, **(P/G Contractor)** must have mitigation processes in place to correct identified

deficiencies promptly. **(P/G Contractor)** will have standards, processes, procedures, and/or systems in place to meet or exceed the minimum requirements outlined in Table 1 below and in TC Energy's related policies, procedures, standards, and specifications. The relevant **(P/G Contractor)** document references have been included in Table 1. ***(P/G Contractor) to insert those documents that they feel appropriately meet/exceed the minimum TC Energy requirements into the Table***

NOTE: TC Energy will review **(P/G Contractor)**'s relevant policies, procedures, standards, and/or specifications; if **(P/G Contractor)** cannot meet or exceed those requirements then it will be required to update its applicable policies, procedures, standards, and/or specifications, or accept in writing that of TC Energy.

TC ENERGY'S LIFE SAVING RULE	RELEVANT TC ENERGY PROCEDURES, STANDARDS, AND SPECIFICATIONS (AT A MINIMUM)	RELEVANT (P/G CONTRACTOR) PROCEDURES, STANDARDS, AND SPECIFICATIONS
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 Associated Forms/Checklists	
5. We will obtain authorization before entering a confined space	Confined Space Procedure Associated Forms/Checklists	
6. We will verify isolation before work begins	LOTO Procedure Electrical Work Permit Associated Forms/Checklists	
7. We will protect ourselves against a fall when working at heights	Working at Heights Procedure Associated Forms/Checklists	
8. We will follow prescribed lift plans and techniques	Hoisting, Lifting, Towing & Winching Procedures Critical Pre-Lift Checksheet Associated Forms/Checklists	
9. We will control excavations and ground disturbances	Ground Disturbance Specification Associated Forms/Checklists	

Table 1: Project Safety Program Cross-Reference

1.4 Expectations

(P/G Contractor) will ensure that all Work Site personnel are made aware of the TC Energy Life Saving Rules and that:

- All personnel must follow the Life Saving Rules;
- No variances will be given for work that falls under a Life Saving Rule and any identified non-conformances must be mitigated immediately;
- Work must be planned far enough in advance to ensure plans/systems are in place to allow all personnel to adhere to the Life Saving Rules;
- In the event a task cannot be completed in compliance with one of the Life Saving Rules, the work must stop, be re-assessed, and a revised work plan developed and submitted to the TC Energy Company Representative in writing for review and acceptance prior to commencing or continuing Work;
- Effective and timely solutions must be developed when conditions arise that prevent compliance with Life Saving Rules;
- All personnel must intervene if they notice a job that is in planning or underway without due consideration and compliance with the Life Saving Rules; and,
- Everyone must accept intervention where there is non-compliance with one or more Life Saving Rules.

Consequences:

The Prime/General Contractor must be authorized and prepared to impose disciplinary action on Work Site personnel who violate the Life Saving Rules, up to and including removal from the Work Site, if applicable. In addition, all TC Energy personnel are empowered with stop work orders and as owner can, and have the obligation to, prevent the presence of unsafe practices, including those who cause the unsafe practice.

1.5 Project/Site Specific Safety Plan Requirements

As part of this P/SSSP, **(the P/G Contractor)** must establish and implement a process for:

- The identification, analysis, and reporting of all P/SSSP-related hazards, potential hazards, incidents, and near hits;
- The evaluation and management of risks associated with the identified hazards;
- The development and implementation of controls to manage and mitigate the identified hazards and risks;
- The process for identification and implementation of corrective and preventative actions;
- The process to manage imminent danger/hazards and abnormal events;
- The communication of relevant control measures to anyone exposed to identified hazards and risks;
- The Management of Change process to be utilized to document any changes that could affect safety, security, or the protection of the environment, including any new hazard or risk, any changes in a design, specification, standard, or procedure, and any change in the TC Energy and **(P/G Contractor)** organizational structure or the legal requirements applicable to the Work; and,
- The review period to ensure this P/SSSP is updated in accordance with changing Work Site conditions, work scopes, legal and regulatory requirements, and lessons learned.

2 SCOPE OF WORK

This P/SSSP has been developed specifically for the described scope of Work as contemplated in the Agreement, the name of the over-all Project, and the location. The Work will be executed during **insert timeframe**.

As applicable, outline as part of the scope of the work – type of work, complexity, risk level, any details concerning Work Site location(s), anticipated personnel requirements (how many workers, whether subcontractors are to be used, etc.)

2.1 Work Site and Work Scope Delineation

(P/G Contractor) has clearly delineated the Work Site based on input from TC Energy Project and operational personnel. To achieve this **(P/G Contractor)**, in consultation with TC Energy, has outlined the following:

- 1. Work Site Delineation - Provide a detailed site map showing areas under its control that are clearly delineated in time and space including access/egress routes, emergency muster points, parking areas, laydown/stockpile areas, office complex areas, etc. (NOTE: this includes an 11 m buffer zone around operating equipment and/or single isolation equipment);**
- 2. Work Scope Delineation/Schedule of Prime/General Contractor - Inclusion of a Schedule of Prime/General Contractor designation for all phases/scopes of the Project – this Schedule will identify who is to retain Prime/General Contractor responsibility by work scope(s) and or work package(s) (e.g., in some cases TC Energy will take back Prime/Contractor responsibility such as when tying-in, or working on, live systems); and,**
- 3. The TC Energy Project Management Team/Construction Management Team representative and the Prime/General Contractor should also acknowledge and complete the Prime/General Contractor Readiness Verification Form, or approved equivalent, at the Work Site (while the form itself is not a TC Energy mandatory form, the contents listed therein are legally obligated requirements to be considered as a Prime/General Contractor; see Appendix A of the TC Energy OHS Standards for Prime/General Contractors).**

Sample Schedule of Prime provided below

Prime/General(s) to be used:	Scope of Work:	Approved by SCM Supplier Mgmt. System Procedure	
Click or tap here to enter text.	Click or tap here to enter text.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Click or tap here to enter text.	Click or tap here to enter text.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Click or tap here to enter text.	Click or tap here to enter text.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Click or tap here to enter text.	Click or tap here to enter text.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If a Prime/General Contractor is providing services for multiple scopes of work, and/or Work Site locations, then the Prime/General Contractor may provide one comprehensive P/SSSP so long as:

- 1) The work scopes and Work Site delineations are clearly outlined for each location;**
- 2) The Organizational Charts and Roles & Responsibilities for personnel associated with each location are clear; and,**
- 3) There are distinct, site-specific Emergency Response Plans for each Work Site.**

Corrective measures must be implemented if **(Prime/General Contractor)**'s safe work procedures do not provide an equivalent level of safety and/or if gaps are identified when compared against TC Energy requirements.

TC Energy and **(Prime/General Contractor)** must align safety policies and procedures with the requirements set forth in the Agreement. All Work must be conducted in compliance with the P/SSSP and procedures accepted by TC Energy. **(Prime/General Contractor)** must ensure all Work Site personnel, including subcontractors and TC Energy Company Representatives, comply with the requirements set forth in the accepted P/SSSP.

3 **(P/G CONTRACTOR)'S ROLE AND RESPONSIBILITIES**

As the Prime/General Contractor for the Work, **(P/G Contractor)** is responsible for all occupational health and safety concerns associated with the Work. Responsibilities include but are not limited to:

- Ensure all Project personnel demonstrate HSSEM leadership through an active involvement in the development and implementation of HSSEM initiatives;
- Conduct construction activities in accordance with the Construction Safety Manual documents requirements and adhering to, and enforcing the requirements of, the TC Energy Project SMP and this P/SSSP;
- Coordinate, organize and oversee the health and safety programs of all employers and contractors at their Work Site(s) to ensure that a collaborative commitment to Project safety is achieved;
- Clearly delineate the Work Site based on input from operational and TC Energy PMT personnel – provide a detailed site map showing areas under **(P/G Contractor)**'s control that are clearly delineated in time and space including access/egress routes, emergency muster points, parking areas, laydown/stockpile areas, office complex areas, etc. (NOTE: this includes an 11 m/36 ft buffer zone around operating equipment and/or single isolation equipment);
- The TC Energy Project Management Team (PMT)/Construction Management Team (CMT) representative and **(P/G Contractor)** should complete the TC Energy Prime/General Contractor Readiness Verification Form, or approved equivalent satisfactory to TC Energy, at the Work Site (while the form itself is not a TC Energy mandatory form, the contents listed therein are legally obligated requirements to be considered as a Prime/General Contractor; see Appendix A of the *TC Energy's OHS Standards for Prime/General Contractors*);
- Ensure that **(P/G Contractor)** has an accepted P/SSSP in place that has been reviewed with all personnel at the Work Site prior to mobilizing to the Work Site prior to commencing the Work;
- Identify, assess, and implement effective operational safety controls to manage the occupational health and safety risks and exposures associated with the performance and execution of the Work; these must be aligned, at a minimum, with legislated requirements and TC Energy's 9 Life Saving Rules and associated policies, procedures, standard, and specifications;
- Coordinate, organize, and oversee the performance of all Work and the occupational health and safety programs of all employers and subcontractors at the Work Site(s) to ensure that no person is exposed to unacceptable risks to their health and safety;
- Provide Project personnel, identified within the Organizational Chart for the Project, with clearly defined roles and responsibilities (and with sufficient expertise, knowledge, and training) to ensure the Work is carried out in accordance with the requirements set out in the Construction Safety Manual documents and to have the authority to stop the Work if those requirements are not being met;
- Provide a process to communicate to all Project personnel that they have the obligation and responsibility to stop unsafe work or refuse work if unsafe conditions or acts are present (for example,

through training, orientation or safety initiatives). The supervisor must be immediately notified of these conditions.

- Control and overall responsibility for occupational health and safety at the Work Site(s) including, but not limited to, the protection of the general public and protection of all Work Site personnel including those employed by:
 - TC Energy;
 - **(P/G Contractor)**;
 - Any subcontractors;
 - Any suppliers; and,
 - Any other contractors.
- Adhere to, and enforce, the requirements of the TC Energy Safety Management Plan (SMP); outlined in the Agreement, this document, and the associated Project/Site-Specific Safety Plan Template;
- Maintaining all safety programs including certification, if applicable;
- Maintaining Workers Compensation Board proof of good standing (*i.e.*, Clearance Certificate), or jurisdictional equivalent if any, throughout the duration of the Work;
- Protection and preservation of TC Energy's property and the property of all third parties on, along, adjacent to or near the Work Site(s) from damage resulting from the performance of the Work, including exercising suitable precautions necessary to prevent property damage;
- Ensuring compliance with and implementation by all organizations and individuals that have duties imposed upon them under all applicable occupational health and safety laws and regulations including all orders, directives, codes, guidelines, permits, licenses and municipal bylaws;
- Monitoring activities at the Work Site(s) to ensure that the health and safety system is functioning properly, and provide such records as TC Energy may require, to verify the health and safety system is functioning - this must include items such as key performance indicator reporting, incident trending, Project close-out reporting, etc.;
- Receive from each employer (*e.g.*, subcontractors) at the Work Site(s) the name of the person that has been designated to supervise the employer's workers at the Work Site(s);
- Ensuring that the supervisor(s) have received specific training for their duties and have proven and documented competency in regard to the execution of their duties. (*e.g.*, trenching and any ground disturbance supervisor(s), coordinator, etc.);
- Comply with the Roles and Responsibilities outlined in TC Energy's *OHS Standards for Prime/General Contractors*;
- Ensure that work activities comply with all applicable TC Energy requirements including, but not limited to, those outlined in:
 - The TC Energy *Project Safety Management Plan*
 - TC Energy's *OHS Standards for Prime/General Contractors*
 - TC Energy's *Excavation Specification*
 - TC Energy's *Overhead Powerline Specification*
 - TC Energy's *Slope Work Specification*
 - TC Energy's *Temporary Access Roads Specification*
 - TC Energy's *Incident, Quality, and Compliance Classification Guide*
 - TC Energy's *Contingency Planning Process*
- Develop this P/SSSP, aligned with the requirements listed above, appropriate for the scope and complexity of the work activity and tailored to address the specific risks/requirements present; and,
- Ensure that **(P/G Contractor)** has reviewed, and trained all workers, to carry out the duties within the scope of work as per the requirements contained in all the documents, including applicable laws, applicable to the scope of work and Agreements.

3.1 Obligation to Stop Unsafe Work

(P/G Contractor)'s process to communicate to all Project personnel that each person has the obligation and responsibility to stop unsafe work or refuse work if unsafe conditions or acts are present is **insert process here - for example, through training, orientation or safety initiatives**. The supervisor must be immediately notified of these conditions.

3.2 (P/G Contractor)'s Organization Chart

This section must set out the Prime/General Contractor's chain of command for safety matters. The positions and descriptions provided in this template are for GUIDANCE PURPOSES ONLY. Not all positions may be applicable, roles and responsibilities may differ, and the list may not be complete. It is the Prime/General Contractor's obligation to ensure all appropriate roles have been identified and detailed in this section. For further clarity, it is the Prime/General Contractor's responsibility to determine whether Safety Officers and/or Safety Representatives are required by legislation.

For the purposes of the Work, the (P/G Contractor) safety team (key personnel/representatives) is structured in accordance with the following organizational chart. This structure is required to provide key information TO and FROM Work Site personnel.

Insert Project Org Chart that illustrates the designated positions; specifically, including names and contact numbers for each position outlined in Appendix A. The Project Org Chart must include:

- ***(P/G Contractor) organization from the Work Site to senior management***
- ***(P/G Contractor)'s organizational links to the TC Energy Project personnel (see TC Energy SMP for TC Energy Project-specific org chart)***
- ***Designated authority for the issuance of Project stop work orders***
- ***Designated point(s) of contact for safety information***
- ***Designated contact for communication with TC Energy Company Representative***

Sample of suggested wording for this section provided below

(P/G Contractor)'s Project-related HSE Organization will report to the **(P/G Contractor Senior Safety Role inserted here; for example, the Site Safety Lead)** and be accountable for establishment and governance of the Health and Safety requirements on the Project. The roles & responsibilities listed below:

- a) Have been identified as having Project Stop Work Authority – each of the personnel fulfilling the roles listed in that Section have the authority and sufficient training and experience to execute stop work authority if the requirements under the Construction Safety Manual documents are not being met; and,
- b) Have considered and outlined mandatory safety responsibility requirements including rationale for provision of an adequate number of qualified safety resources. **(P/G Contractor must review Appendix B of the TC Energy OHS Standards for Prime/General Contractors and staff the Project accordingly)**

(P/G Contractor)'s health and safety organization is divided into office and Project branches. **(P/G Contractor's Head of Safety, for example)** monitors (P/G Contractor)'s health and safety program(s) and is responsible for the development and administration of (P/G Contractor)'s safety and health policies and procedures, including those of affiliates and joint ventures.

All operating groups and Project health and safety organizations are subordinate to, and will receive direction and assistance from, **(P/G Contractor's Head of Safety, for example)**. The role of **(P/G Contractor's Head of Safety, for example)** is summarized as:

- **(P/G Contractor's Head of Safety, for example)** reports directly to the President of the company and serves in an advisory capacity to company and field management, and to other staff support departments.
- **(P/G Contractor's Head of Safety, for example)** assists in the formulation of and promulgates policies, standards, and procedures; and administers all phases of the company-wide safety, security, environmental protection and industrial hygiene programs as they apply to employee safety, public safety, equipment and property protection, and occupational health.
- **(P/G Contractor)** must provide a process to communicate to all Project personnel that they have the obligation to stop unsafe work or refuse work if unsafe conditions or acts are **present (for example, through Training, Orientation or Safety Initiatives)**. The supervisor will be immediately notified of these conditions.

3.3 (P/G Contractor)'s Project Manager

(Project Manager's Name) is designated as the Project Manager for the Work. **(list any applicable qualifications of the individual)**

The Project Manager is the primary window for engineering and planning functions. Review of potential occupational health and safety concerns identified during Work planning, design and contracting are included in the Project Manager's responsibilities. The Project Manager's roles and responsibilities include:

- Following the P/SSSP and all associated programs outlined by **(P/G Contractor)**'s health and safety management system and TC Energy (via the SMP and associated Agreement documents) and modifying same as required for continuous improvement;
- Ensuring that all Work Site personnel are aware of and comply with requirements of the documents that comprise the Construction Safety Manual and that those documents are disseminated and/or available to all personnel at the Work Site at all times;
- Maintaining effective communication with all members of the **(P/G Contractor)** safety team;
- Ensuring TC Energy PMT is notified immediately of any incident, all incidents are reported in a timely manner, reviewing all incidents including near hits with the TC Energy Construction Manager/Owners Manager and, when required, developing appropriate corrective action plans which are communicated accordingly;
- Selecting appropriate personnel for the **(P/G Contractor)** safety team with the proper skill sets/competencies (i.e., construction manager, safety inspector, environmental coordinator, and other safety personnel) and clearly communicating the team's roles and responsibilities;
- Leading and actively participating in major or critical investigations and/or special Work Site safety meetings to re-enforce the Project's safety commitment;
- Providing the **(P/G Contractor)** safety team with appropriate support and resources to effectively manage the health and safety at the Work Site;
- Completing at least one field visitation and leading/participating in a formal site inspection;
- Requesting safety and environmental support from the TC Energy PMT when required;
- Monitoring and identifying safety trends and issues;
- Coordinating a monthly meeting, at a minimum, with the **(Prime/General Contractor)** safety team and TC Energy's Project team to review safety performance;

- Coordinating a meeting with senior management representatives from both **(P/G Contractor)** and TC Energy following a major/critical incident and/or inadequate safety performance;
- Coordinating with TC Energy a post-construction evaluation to review and discuss the safety performance, identify safety trends and/or “lessons learned”. If any system-wide builds/issues are identified a communication strategy will be developed; and,
- Ensuring **(P/G Contractor)** monthly health & safety report is completed and submitted to TC Energy per the Agreement and TC Energy OHS Standards for Prime/General Contractors.

3.4 **(P/G Contractor)’s Construction Manager**

(Name of Construction Manager) is designated as the Construction Manager for the Work. **(list any applicable qualifications of the individual)**

The Construction Manager acts as the primary window for construction implementation functions. The Construction Manager’s roles and responsibilities include:

- Understanding all applicable health and safety requirements identified in the P/SSSP, and other relevant documentation;
- Successfully completing any required health and safety training;
- Representing **(P/G Contractor)** at the Work Site and ensuring all applicable safety requirements are being adequately managed **(P/G Contractor)**;
- Participating in safety related meetings (pre-Job, tail-gates, special safety meetings, safety stand downs, etc.);
- Ensuring all tools and equipment required to execute the Work safely are available and maintained in safe working order;
- Participating in formal/informal occupational health and safety inspections of the Work Site, directing corrective action for any unsafe conditions noted, and informing the Project Manager of inspection results;
- Implementing incident reporting/emergency response processes with all on-site personnel;
- Acting as the one window contact for incident reporting (ensure incidents are investigated and assist as required, file incident reports with the Project Manager);
- Ensuring subcontractors deliver effective safety meetings, tailgates, JSAs, and other health and safety initiatives and providing coaching and mentoring and/or participating as required to ensure effectiveness;
- In the event of a major or critical incident, issue a stop work order and immediately notify the TC Energy PMT/CMT and the **(P/G Contractor)** safety team; and,
- Clearly understanding the responsibilities and accountabilities of all Work Site personnel prior to commencing Work and adequately communicating these expectations at the Work Site.

3.5 **(P/G Contractor)’s Safety Representative(s)**

(Name of Safety Representative(s)) is/are the designated Safety Representatives for the Work **(list any applicable qualifications of the individual e.g. educational background, professional designations, CRSP/CSP/NCSO etc.)**

The Safety Representative(s) provide a high level of detail review of occupational health and safety expectations and metrics, interfacing directly with the Project Manager and Construction Manager and other site safety personnel. The roles and responsibilities of the Safety Representative(s) for the Work include:

- Assisting in the development of the P/SSSP to ensure it meets or exceeds all applicable requirements;

- Ensuring a **(P/G Contractor)** Work Site/Project-specific orientation program is developed and implemented;
- Providing on-going support and periodic monitoring of the Work;
- Observe **(P/G Contractor)**'s ability to implement the safety requirements identified in the P/SSSP and applicable legislation;
- Continually monitoring, trending, and analyzing safety performance;
- Recommending and assisting in implementing mitigative measures for the Work as required;
- Leading and/or participating and assisting in incident investigations and ensuring the resulting reports are provided to TC Energy in alignment with the TC Energy *Incident, Quality and Compliance Classification Guide*;
- Leading a minimum of three safety audits per year for the duration of the Work; **Or another schedule agreed upon with the TC Energy PMT; in addition to the Agreement dollar value and/or duration, all Projects are to be assessed based on their scope of work and the associated health and safety risk(s) and an audit/formal inspection plan is to be generated**
- Developing a corrective and preventative action plan for implementation for corrective measures for any deficiencies found with assigned accountabilities and timelines for completion;
- Participating in Work-related meetings that discuss safety performance/issues; and,
- Providing coaching and mentoring to all Work Site personnel for continuous improvement.

3.6 **(P/G Contractor)'s Safety Officer(s)**

(Name of Safety Officer(s)) is/are the designated Safety Officer(s) for the Work. **(list any applicable qualifications of the individual)**

The Safety Officer(s) are responsible for all aspects of occupational health and safety and environment compliance and non-conformance reporting (Note: the Work may justify a separate position for environmental oversight) for the Work. The Safety Officer(s) roles and responsibilities include:

- Representing **(P/G Contractor)** at the Work Site and ensuring all applicable safety requirements are being adequately managed;
- Liaising with the **(P/G Contractor)** safety team;
- Understanding all applicable occupational health and safety requirements identified in the P/SSSP, applicable legislation, and other relevant documentation;
- Participating in the development and roll-out of P/SSSP orientations and worker orientation handbooks (a brief summary of procedures and Work Site requirements to be included in worker orientation handbooks);
- Continually monitoring, trending, and analyzing safety performance;
- Recommending and assisting in implementing mitigating measures;
- Participating in Work-related meetings that discuss safety performance/issues;
- Ensure that all incidents and near hits are immediately reported to the TC Energy PMT/CMT and, when needed, generate reports aligned with TC Energy's EHSM system (or sooner per regulatory, legislated and/or TC Energy *Incident, Quality and Compliance Classification Guide* requirements and, where applicable, Canadian Regulatory Compliance guidance provided in Section 10.3), reviewing all incidents with the **(P/G Contractor)** safety team and when required, developing appropriate corrective action plans;
- Leading and/or assisting in incident prevention, investigation analyses, and preparation of reports and summaries;
- Assisting in the identification of potential hazards, hazardous work, or work hazardous to the environment or facilities;

- Providing on-going support/monitoring of the Work;
- Observing the **(P/G Contractor)**'s ability to implement the safety requirements identified in the P/SSSP and applicable legislation;
- Completing formal Work Site occupational health and safety inspections and documenting findings and ensuring **(P/G Contractor)** adequately develops and implements effective corrective measures whenever deficiencies have been identified;
- Maintaining files of applicable safety documentation (e.g., inspections reports, site observations, tailgate meetings, safety meetings, Job Safety Analysis, General Work Permits, incident reports, and training and competency documentation);
- Reviewing **(P/G Contractor)**'s emergency response plan to validate appropriate First Aid equipment, qualified/assigned First Aid coverage for work crews, and to prepare site management and personnel through mock emergency evacuation exercises and/or table top exercises;
- Posting any (internal/external) occupational health and safety bulletins related to construction activities;
- Reviewing safety documentation for quality assurance; and,
- Providing coaching and mentoring to Work Site personnel for continuous improvement.

3.7 Visitors

All visitors at **(P/G Contractor)** Work Sites are required to report to the designated Work Site representative and complete **(P/G Contractor)** site safety orientation to be developed and delivered by **(P/G Contractor)**. NOTE: a separate orientation may be created for visitors who are escorted at all times by **(P/G Contractor)** representatives.

Visitors must follow the instructions provided at the **(P/G Contractor)**'s site safety orientation and must review and sign any Job Safety Analysis that **(P/G Contractor)** has put in place respecting any specific activity the visitor may be involved with.

4 APPLICABLE OCCUPATIONAL HEALTH AND SAFETY LEGISLATION, REGULATIONS, CODES & OTHER REQUIREMENTS

Along with this P/SSSP, the TC Energy Project SMP, applicable occupational health and safety legislation, regulations, codes and other requirements as listed below must be made readily available to all personnel at the Work Site.

Project-specific documentation includes, but is not limited to:

- The Project Construction Safety Manual documents;
- TC Energy Agreement requirements, terms, & conditions;
- TC Energy *OHS Standards for Prime/General Contractors*, including applicable specifications; and,
- TC Energy *Pipeline Construction Specifications*.

The applicable safety-related legislation for the Project includes the following, but is not limited to:

Update the following list as required for the Project scope, jurisdiction, etc.

- OSHA 29 CFR Part 1904 –Recordkeeping
- OSHA 29 CFR Part 1910 – General Industry
- OSHA 29 CFR Part 1926 – Construction
- Alberta Occupational Health and Safety Act (2017) (in effect June 1, 2018)
- Alberta Occupational Health and Safety Regulation

- Alberta Occupational Health and Safety Code
- The Saskatchewan Employment Act, 2013
- The (Saskatchewan) Occupational Health and Safety Regulations, 1996
- Criminal Code of Canada Section 217.1
- Canada Labour Code Part II
- Canada Occupational Safety and Health Regulations

(P/G Contractor) must apply the relevant safety-related legislation where applicable based on the location of the Work Site.

5 WORK SAFETY RISK IDENTIFICATION

5.1 Pre-Work Authorizations

If applicable, identify any required General Work Permits from the Company where the Company's facilities may be affected by the Work (e.g., pipeline isolation, gas handling, switching and tagging).

In certain circumstances, where TC Energy has retained Prime/General Contractor status per the Schedule of Prime/General Contractor, **(P/G Contractor)** becomes a contractor must obtain a General Work Permit from TC Energy where TC Energy's facilities may be affected by the Work (*i.e.*, pipeline isolation, hydro-testing, gas handling, switching and tagging, temporary work spaces, crossing agreements, or shore pulls); in all such cases, TC Energy will retain Prime/General Contractor status for the clearly delineated Work Site affected utilizing internal TC Energy Active Control measures. This must be reflected in the schedule of Prime/General Contractor responsibility and in an updated/detailed site map.

5.2 Project Hazard Assessment

Propose means of conducting and updating the Project Hazard Assessment to identify, evaluate and safely control hazardous conditions associated with the Work and the Work Site. The PHA must identify and incorporate mitigation plans to address common workplace health hazards such as fatigue, noise, respiratory hazards, stress, and violence and harassment.

(P/G Contractor) has performed a Project Hazard Assessment (PHA) as part of this P/SSSP, which will serve as an inventory of identified hazards and potential hazards related to the Work. This PHA, at minimum, includes:

- A list of all **(P/G Contractor)**'s activities related to their scope of work (including any subcontracted services);
- The identification of hazards related to each of those activities;
- A risk assessment of those hazards; and,
- An outline of the control measures required to properly mitigate the risks.

The PHA must be presented in tabular format in this Section (or an Appendix) and must, at a minimum, follow the steps listed below:

- ***Step 1 Establish Context & Objectives***
- ***Step 2 Hazard Identification***
- ***Step 3 Risk Identification***
- ***Step 4 Risk Analysis***
- ***Step 5 Risk Evaluation***
- ***Step 6 Risk Assessment***
- ***Step 7 Risk Monitoring & Reporting***

(P/G Contractor) must provide TC Energy with copies of any operational controls (work practices and procedures), including those of subcontractors, that are referenced as part of the PHA. **(P/G Contractor)** must also ensure that any operational controls implemented on the Project align with the requirements outlined and/or referenced in this P/SSSP, the TC Energy Project SMP, and related Agreement documents.

Beyond the initial PHA, **(P/G Contractor)** must outline an effective hazard and risk management strategy that will be implemented during the execution of the Work. Industry recognized processes such as a Job Safety/Hazard Analysis and Field Level Hazard Assessment, or equivalent, are required.

During the execution of Work, **(P/G Contractor)** must invite TC Energy Project team members to participate in the review of JSAs and Hazard Assessments.

In the case of Imminent Hazards or Imminent Danger, work must be immediately stopped, personnel must ensure personal safety, and supervision must be informed. The affected area of the Work Site must be closed and work may only continue after the hazard has been deemed safe by the **(P/G Contractor)** Site Management Team (including the Safety Team). **All personnel on the Work Site have the obligation to stop or refuse unsafe work if it presents an imminent hazard/danger.**

5.3 Site Safety Requirements

Identify and evaluate inherent site safety risks, for example:

- **Proposed traffic flow and parking plans**
- **Hazardous materials management**
- **Training**
- **Inspections**
- **Security**
- **Personal hygiene**
- **Emergency response planning and mutual aid (including management of imminent hazards and abnormal conditions)**
- **Appropriate tools**
- **Equipment and materials**

The use of vehicles is always considered to be a site safety risk, therefore any motor vehicle operation, or similar program, must meet the minimum standards outlined in the TC Energy Project SMP and OHS Standards for Prime/General Contractors and must provide but is not limited to:

- **Journey Management Plans**
- **Traffic Management Plans**
- **Driving in inclement weather considerations (e.g., Know When to Go)**
- **Driver/Operator Situational Awareness practises (e.g., Traffic Cones)**
- **Off-Highway Vehicle requirements**
- **Required “walk around” or “circle check” prior to the backing of vehicles or equipment.**
- **Driver Training which includes both in-classroom theory and in-vehicle practical evaluation.**
- **Pull through (drive through) parking as the preferred means for stopping/parking a vehicle or equipment.**
- **Back in parking as the secondary means for parking a vehicle or equipment so that the next movement of that vehicle or equipment will be in the forward direction.**

- **Vehicles and equipment require at least TWO of the following or for vehicles and equipment operated with reduced visibility THREE of the following:**
 - **operational backup alarm**
 - **spotter**
 - **backup camera**
 - **backup proximity sensors with audible alarm**
 - **Single blast of the vehicle horn prior to any reverse motion**

5.4 Health & Safety Training, Awareness (Orientation), & Competence

See Appendix C of the TC Energy OHS Standards for Prime/General Contractors for examples of safety training requirements that may be applicable to the Work. Outline the training requirements for the Work based on applicable provincial, federal, and/or state regulations and the specifications for the Work.

(P/G Contractor) must ensure that all employees and contractors working under their direction will have sufficient training that effectively manages the health and safety risk while meeting both legislative and TC Energy requirements. **(P/G Contractor)** has established a training matrix that addresses all training and orientation requirements as specified in the scope of work and within this P/SSSP, including the required training for Project personnel and visitors to the Work Site (see Appendix **XX**). **(P/G Contractor)** must ensure that proof of the completion of any required training and competency is readily available for review at the Work Site.

(P/G Contractor) has determined the system (or program) used to determine the selection, placement, training, and ongoing assessment of the qualifications, abilities, and competencies of all personnel required to meet the Work standards, must include:

- Initial health and safety orientation by **(P/G Contractor)**'s Safety Representative, or other representative of the **(P/G Contractor)**'s Work Site management team, through mandatory attendance in the site-specific Project orientation program which covers, at a minimum:
 - Information about the Project scope;
 - Information about the Project's safety and health policies and procedures;
 - Pertinent federal and/or provincial/state occupational safety and health administration (e.g., CER/OSHA) rules and regulations;
 - An overview of the Construction Safety Manual documents;
 - Emergency response plan review (including an overview of imminent danger and abnormal operations), as well as a pandemic response plan;
 - Identification of trained Work Site personnel (e.g., hard hat stickers or cards and/or a "Green Hands" program);
 - Site traffic plan and other motor vehicle situational awareness requirements;
 - TC Energy HSE Field Orientation for external contractors (applicable only where Work is being completed at an existing TC Energy facility (available online [here](#)));
 - Excavation training where applicable (available online [here](#)); and,
 - Any other special Project requirements.
- Documented daily pre-work briefing and demonstration by individual craft supervisors and must educate each employee with regard to approved safe and healthful operating or working procedures with existing job hazards;
- Mandatory attendance is required at weekly toolbox safety and health meetings held by supervisors for individual crews or departments. These meetings must emphasize the Project health and safety requirements, the causes of accidents in a particular craft, and ways of preventing future accidents.

Additionally, Work Site activities and potential hazards associated with ongoing Work will be discussed during these sessions (a record of these meetings must be maintained and include major topics discussed, the names of employees in attendance, and the signature of the supervisor conducting the meeting);

- Follow-up field training and supervision to ensure TC Energy and Project safety and health rules and regulations are fully understood and are being complied with;
- Training record-keeping system;
- Heavy mobile equipment training, certification and proficiency assessments, where applicable; and,
- When required by law, only qualified trainers with the ability to issue certificates of completion must be used.

An Environmental orientation will be provided for all Work Site personnel. **(P/G Contractor)**'s environmental and Safety Coordinators will utilize TC Energy supplied environmental and safety materials and provide additional environmental and safety training and reinforce **(P/G Contractor)**'s commitment to meeting TC Energy environmental and safety requirements. **(P/G Contractor)** will clearly communicate to the all employees that failure to meet these environmental and safety requirements may result in disciplinary actions up to and including removal from the Work Site.

Additional training beyond the minimum requirements for the Project, for both non-prime contractors, and/or **(P/G Contractor)** may be required for certain work activities or circumstances. All **(P/G Contractor)** companies and Project personnel working on behalf of the Project agree to comply with any additional training requirements that may arise.

Additional training requirements where additional training may be required include, but are not limited to:

- Scopes of work requiring access or working adjacent to an operational TC Energy facility;
- Scopes of work requiring access or working adjacent to third-party controlled or restricted areas; and,
- Scopes of work in jurisdictions with specific requirements.

(P/G Contractor) will ensure attendance of personnel at environmental and safety training sessions. **(P/G Contractor)** will schedule an appropriate amount of time for the environmental and safety training seminar for Work Site personnel.

All training must be performed by **(P/G Contractor)** or TC Energy personnel. ***If alternate trainers are to be used, identify who is going to provide the training (i.e., outsourcing, specialty firms, and/or in-house training).***

The table below outlines possible training programs that may be applicable to the scope of work: ***P/G Contractor to select and list the most applicable***

• Tunnels, Shafts, Caissons, and Cofferdams	• Motor Vehicle Control – Driver Training
• Supervision	• Traffic Control
• Scaffolds	• Signaler
• Hazardous Materials (WHMIS)	• Helicopter
• Pipeline Repair	• Propane
• Explosive-actuated Fastening Tool	• Formwork
• Drowning Protection	• Elevating Work Platforms
• Chainsaw	• Compressed Air
• ATV	• Forklift Operations
• Construction Safety Association Health and Leadership Safety Training	• Rigging Safety
• Collision Avoidance	• Ground Disturbance
• Excavation and Trenching	• Pipe and Cable Locating
• Confined Space Entry and Rescue	• H2S Alive or equivalent
• Welding and Cutting	• Working at Heights
• Crane Operations	• Hearing Conservation
• Industrial Hygiene	• Ergonomics
• Defensive Driver	• Radiation Safety
• Scaffolding	• Emergency Response
• Electrical Safety	• Respiratory Protection
• Personal Protective Equipment	• Lock-out and Tag-out Systems
• Standard First Aid and CPR	• Substance Abuse Systems
• Fire Fighting and Suppression	• Transportation of Dangerous Goods
• General Work Permit or Safe Work Permit	• Hazard Identification, Assessment and Control
• Hazard Communication	• Reporting (hazards, spills, incidents and near hits)
	• Working Alone

5.5 Mobilization Planning

Describe how the Prime/General Contractor proposes to have the appropriate resources on-site, or in place, prior to scheduled start date. Examples include:

- **Job trailer(s), permits, site plans, drawings and construction files;**
- **Equipment, materials and tools;**
- **Signs and barriers, fences, barricades;**
- **Appropriate safety and job procedures manuals;**
- **Safety files and posters;**
- **Copies of applicable federal and local occupational health and safety requirements;**
- **Training records and certifications;**
- **PPE; and,**
- **Emergency response equipment and supplies.**

5.6 Operational Controls

Through **(P/G Contractor)** safety program documents, the PHA mitigations and the outline of variations to the operational controls to meet those requirements, **(P/G Contractor)** will provide general and specific safety programs, practices, and procedures to mitigate the occupational health and safety risks and

exposures associated with the Work. These must align with and meet the minimum requirements contained within TC Energy's 9 Life Saving Rules and the associated policies, procedures, standards, and specifications. For the purposes of the Work, occupational health and safety policies, programs, practices, and procedures will meet all occupational health and safety requirements, TC Energy's 9 Life Saving Rules, and the Standards set out in the TC Energy *OHS Standards for Prime/General Contractors (specifically, Section 5)*, or accept in writing that of TC Energy.

Safe work plans will be developed by **(P/G Contractor)** and subsequently reviewed and accepted by TC Energy Project personnel for all high-risk activities (e.g., Confined Space, Lockout/Tagout, Working at Heights, Critical Lifts and other high-risk activities as identified via hazard assessment(s)) prior to commencing these activities..

(P/G Contractor) to outline operational controls below that are not aligned with their internal health and safety management system – this should ONLY include any gaps that have been identified between TC Energy requirements, as listed in the TC Energy OHS Standards for Prime/General Contractors (Section 5.0 and Appendix D) and the P/G Contractor's relevant policies, programs, procedures, and specifications must be in writing and listed below.

OHS STD FOR PRIME/GENERAL CONTRACTORS OPERATIONAL CONTROL REFERENCE	DESCRIPTION OF DIFFERENCE(S) BETWEEN OHS STD AND PRIME/GENERAL CONTRACTOR'S PROCEDURE	APPLICABLE TO SCOPE OF WORK (Y/N)

5.7 Management of Change

(P/G Contractor) to outline:

- **The Management of Change process to be utilized to document any changes that could affect safety, security, or the protection of the environment, including any new hazard or risk, any changes in a design, specification, standard, or procedure, and any change in the TC Energy and (the P/G Contractor) organizational structure or the legal requirements applicable to the Work; and,**
- **The review period to ensure this P/SSSP is updated in accordance with changing Work Site conditions, Work scopes, legal and regulatory requirements, lessons learned, etc.**

5.8 Key Health and Safety Performance Indicators

Identify key leading and lagging health and safety performance indicators and targets

NOTE: Sample table: Prime/General Contractor can modify table and add/modify indicators as they see fit

The TC Energy Business Units have the ability to use and edit the [Contractor Monthly Health & Safety Report](#) or use a different method to collect contractor exposure to suit their internal needs. The contractor exposure gathered by the Business Unit must be shared with the TC Energy Health, Safety, and Emergency Management (HSEM) Program Governance team on the 14th calendar day of every month and sent to ii_tracking@tcenergy.com in order for correct contractor rates to be calculated.

The report(s) must be submitted monthly and at year end by the Prime/General Contractor, where applicable, per the P/SSSP. The TC Energy PMT is accountable to ensure that Contractor Safety

Performance is reported to the HSEM Program Governance team on the **14th calendar day** of every month.

6 SUBCONTRACTOR SAFETY MANAGEMENT

Outline any procedures and criteria for the pre-qualification, selection, Pre-Job preparation, Work Site monitoring and post Agreement performance feedback of subcontractor provision of services.

7 SAFETY DOCUMENTS AND RECORDS

Identify the documentation that must be maintained, how it must be maintained during the Work and how it must be made readily available at the Work Site. For example: P/SSSP, Orientation Handbooks, General Work Permits, permits, JSA, tailgate forms and safety meeting minutes, incident/audit/inspection reports, Safety Data Sheet(s) (SDS), etc.).

Provide samples of all Forms and references to where they can be found as part of Appendix C to this P/SSSP.

8 SAFETY COMMUNICATION AND CONSULTATION

Identify what safety meetings and communications must be conducted and how they must be delivered, personnel responsible and/or involved, frequency, etc.

Describe how the Prime/General Contractor proposes to have appropriate Work Site personnel participation and effective communication regarding occupational health and safety matters. For example: joint committee meetings, tailgate meetings, daily/weekly supervisory meetings; weekly safety meetings; pre-job safety meetings; newsletters; bulletin boards for posting policies, procedures and other safety information.

Communication must be delivered in a format understood by all Work Site personnel.

Identify how reports on safety will be communicated to the Company (by whom, how often etc.). For example:

Timely and effective communication and consultation regarding health and safety issues is critical to effective safety management on the Project. This must occur in various formal and informal methods during the life-cycle of the Project. Examples of communication that will occur throughout the Project include, but are not limited to:

- Health and safety moments must be shared at the start of all Project-related meetings;
- Hazard advisories and health and safety alerts must be shared with Project personnel following an incident and on an 'as needed' basis;
- Health and safety surveys should be developed to solicit feedback from Project personnel to improve health and safety; **this will depend on the scope of the Project and must be discussed with the TC Energy Project Manager to evaluate if it is required for the requirements of the Work**
- Health and safety campaigns must be developed in association with Project strategies and/or corporate objectives, as required, to enhance health and safety awareness on the Project;
- A Project health and safety newsletter must be developed and communicated quarterly to Project personnel to highlight key topics related to health and safety on the Project **NOTE: this is dependent on scale/risk of the Project; determine, in consultation with the PMT, if this is necessary**; and,

- Project health and safety meetings must occur monthly, be facilitated by various members of the Project team, and must provide the opportunity for presentation and discussion on topics related to health and safety on the Project.

9 INSPECTION/PERIODIC EVALUATION/AUDITS

(P/G Contractor) must ensure that the following inspections and audits will occur during the Work:

- **(P/G Contractor)** HSE personnel and/or other Work Site Supervision must conduct **XX** Formal HSE Inspections per week;
- **(P/G Contractor)** Project Manager and Superintendent must conduct **XX** additional HSE inspections; and,
- **(P/G Contractor)** must conduct **XX** HSE audits.

TC Energy Project personnel must be invited to participate in each inspection and audit prior to their occurrence. All inspections and audit records and associated findings and/or corrective actions must be documented; all findings and/or corrective actions must be addressed in a reasonable time and their outcomes documented accordingly.

9.1 Inspections

(P/G Contractor) must ensure that all Work Site personnel must ensure that their Work Sites and equipment are regularly inspected to ensure safe working conditions. All inspection programs must meet the most stringent requirements outlined in relevant legislation, this P/SSSP, the TC Energy Project SMP and referenced documents.

At minimum, **(P/G Contractor)** must ensure the following activities are performed by anyone conducting Work at their Work Sites:

- Daily pre-use inspections of tools and equipment;
- Daily documented pre-use inspections of vehicles (including personal and rental vehicles driven for Project purposes), powered mobile equipment, and heavy equipment;
- Weekly documented field Work Site inspections (when engaged in work at a Work Site for longer than one week); and,
- Monthly office or non-field work site (for example, personnel camps) inspections.

Copies of all documented inspection must be retained and will be made available for review by the TC Energy Project team upon request.

9.2 Audits & Oversight

All Prime/General Contractors awarded a scope of work or Agreement greater than \$10,000,000 (local currency) and/or with an estimated duration of six months or longer, must be required to perform a health and safety audit that meets the following criteria (NOTE: TC Energy reserves to the right to request an audit/formal inspection regardless of Agreement value and/or duration; in addition to the Agreement dollar value and/or duration, all Projects are to be assessed based on their scope of work and the associated health and safety risk(s) and an audit/formal inspection plan is to be generated):

- The audit/formal inspection must, at minimum, measure **(P/G Contractor)**'s execution against the commitments made in this P/SSSP, the Agreement, and any relevant aspects of their own health and safety management system;

- **Prime/General Contractors may use any audit protocol they deem suitable provided it measures the criteria listed above – describe the audit protocol to be utilised;**
- The audit/formal inspection must be conducted when a representative sample of the personnel and Work activities can be observed;
- The audit/formal inspection must be scheduled at a mutually convenient time so that a representative of the TC Energy Project health and safety team may observe the audit/formal inspection being conducted;
- An audit/formal inspection report, along with an action plan to address any deficiencies or opportunities for improvement identified, must be completed and submitted to the TC Energy Project health and safety team within two weeks of the audit/formal inspection's completion;
- **(P/G Contractor)** must provide the TC Energy PMT/CMT with at least bi-weekly updates on the status of any unresolved audit/formal inspection deficiencies; and,
- The TC Energy PMT/CMT reserves the right to request or conduct a follow-up audit at the PMT/CMT's discretion.

Prime/General Contractors awarded scope of work or Agreement less than \$10,000,000 (local currency) or with an estimated duration of less than six months may be requested to perform an audit at the TC Energy Project team's discretion. The audit may include all or some of the criteria listed above. The audit may also be focused on (Prime/General Contractor)'s entire scope of work or a limited scope as agreed to by the TC Energy Project team.

The following is additional guidance that must be incorporated per the TC Energy OHS Standards for Prime/General Contractors:

- **Describe how the Prime/General Contractor must monitor and measure safety performance, identify and implement preventive and corrective measures when required, and review the on-going suitability, effectiveness, and adequacy of the P/SSSP. This may include:**
 - **Informal and formal documented safety inspections;**
 - **Audits;**
 - **Hazard identification systems; and,**
 - **Identify the frequency of audits and inspections.**

10 INCIDENT MANAGEMENT

10.1 Initial Response

(P/G Contractor) must ensure that if a Project-related incident occurs, the priority is to protect the health and safety of those present at the Work Site and provide treatment to any injured personnel. Any Work activity taking place in the immediate area must be stopped until the safety of personnel can be assured.

If a serious, major, critical, or high potential incident, or a near hit with the potential to have been critical or major as well as imminent danger situations occurs, all work activity at the Work Site must stop, the scene will be secured, equipment shut down (if safe to do so), and nothing moved or altered, unless required to provide immediate assistance to injured persons. The scene will remain frozen until the TC Energy Project Manager provides the approval to proceed (NOTE: at such time, all relevant work permits must be re-issued (General Work Permit, Hot Work Permit, Confined Space Entry Permit, Excavation Permit, etc.) and applicable JSA, FLHAs, and tailgates must be updated, reviewed, and acknowledged by relevant Work Site personnel).

10.2 Reporting

(P/G Contractor) must ensure that information provided through the incident management system must be transferable and translatable to the TC Energy Incident Management Process by aligning with the TC Energy *Incident, Quality, and Compliance Classification Guide*.

(P/G Contractor) must ensure that all Project personnel are made aware that they are required to immediately report all serious, major, critical, and high potential incidents, or near hits with the potential to have been critical or major as well as imminent danger situations, and hazards to their supervisor, who must ensure that the appropriate TC Energy Project Manager (or designate) and the TC Energy Project health and safety team are immediately notified.

All serious, major, critical, and high potential incidents, or near hits with the potential to have been critical or major as well as imminent danger situations, and hazards must be entered by a TC Energy Project representative into TC Energy's EHSM system within 24 hours of occurrence. All incidents will be classified according to TC Energy's *Incident, Quality, and Compliance Classification Guide*.

The TC Energy Project Leadership Team, including the accountable director and vice president will be immediately informed of any major or critical incident as defined by TC Energy's *Incident, Quality, and Compliance Classification Guide*.

The following is additional guidance that must be incorporated per the TC Energy OHS Standards for Prime/General Contractors:

- **Describe how incidents and Near Hits must be reported to the Company for entry into the Company's Incident and Issue Tracking Database (EHSM) system.**
- **Describe how incidents and Near Hits must be addressed including the issuance of non-conformance reports and associated corrective action plans.**
- **All Major and Critical Incidents and those events classified as High Potential Incidents (i.e. incidents with a high potential to result in a serious, debilitating injury to a worker) must be investigated and include a detailed investigation report and Root Cause analysis. RCA investigations are recommended for all Serious Incidents and for all Incidents with the potential severity rating of Serious or greater. Investigation results to be provided within 30 days of the incident, or sooner depending on severity and risk of recurrence at the Work Site.**
- **The intent of all investigations is not to place blame on individuals, but to determine Root Cause and preventative measures developed and implemented to prevent incident recurrence. Describe the process to document and implement these measures.**
- **Indicate accountability and responsibility for investigation and reporting. Generally, the Project Manager will be responsible for ensuring those incidents requiring investigation are investigated and a report issued and the findings and associated corrective measures shared with the Company.**

10.3 CANADA ONLY - Timely Reporting to Canadian Regulatory Compliance (2 Hours)

Outside of Canada – unlike the Canadian Energy Regulator Act and from a code of federal regulations-perspective, PHMSA does not apply the rules to report an incident to a construction Project that does not have material (natural gas, highly volatile liquid or oil) flowing in the facility; or, in other words, in service.

If a fatality or hospitalization was reported during a construction Project with 'no' unintended release of material was noted to inflict injuries or cause the fatality, it is 'not' reportable to PHMSA, but of course it is an OSHA concern. Since these requirements are covered in the TC Energy O&M Manual from a code-perspective (reporting an accident/incident), then they are not needed for a construction Project.

In Canada, this section must be included by the Project Manager (or designate) in consultation with the Safety and Emergency Management Designate(s) and site representatives.

In order to meet regulatory timely reporting requirements and comply with Government regulations, an emergency or significant event is reportable immediately but **no later than 2 hours after the event occurred** to TC Energy's Canadian Regulatory Compliance (CRC) 24/7/365 hotline @ **403-920-7733**.

In the event of any of the following occurrences, call **CRC IMMEDIATELY at 403-920-7733**:

- **Death**
- **Suspected or actual serious injury**
 - Suspected or actual fracture of a major bone (skull, mandible, spine, scapula, pelvis, femur, humerus, fibula, tibia, radius or ulna) (see note below)
 - Loss of a body part, including amputation or potential or actual loss of function of a body part
 - Loss of sight in one or both eyes
 - Suspected Internal hemorrhage
 - Third degree burns
 - Unconsciousness for any period of time

Note: A suspected or actual work-related injury or death does not necessarily mean being at a Work Site during a work shift (e.g., a work-related injury resulting in a fatality may not always present itself during the work shift). Similarly, a suspected or actual fracture may present itself after a work shift has been completed.

- **Unintended or uncontrolled releases:**
 - **a liquid hydrocarbon release > 1.5 m³** that leaves company property or occurs on or off the right-of-way
 - **a sweet natural gas or HVP release >30,000 m³**
 - **a rupture** (an instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained)
 - **a toxic plume** (a band of service fluid or other contaminant resulting from an incident that causes people to take protective measures (e.g., muster, shelter-in-place, evacuation))
 - **a release of sour natural gas or hydrogen sulfide**
- **Potential or significant adverse effect on the environment**
 - Release of a substance (chemical or physical) at a concentration or volume sufficient to cause or potentially cause:
 - an irreversible; or
 - long-term; or
 - continuous changeto the environment in a manner that causes harm or potential harm to human life, wildlife or vegetation.
 - Examples of locations include:
 - **watercourse or wetland** (e.g., frac-outs of any volume into a watercourse during HDD); or
 - **pathway** to ground or surface water that is used for drinking, irrigation or by livestock; or
 - **designated national/provincial area** (e.g., National Park, Provincial Park, wildlife refuge); or

- **critical habitat.**

TC Energy's CRC team must contact the Canada Energy Regulator (CER) or the provincial regulatory body (when applicable) immediately, but no later than 3 hours after an event involving any of the above. This applies to events that occurred on a Project, regardless of size, as well as on any of TC Energy's operational assets (pipelines and associated facilities). The requirement to contact (403) 920-7733 immediately but no later than 2 hours after an event is necessary to give CRC time to determine reportability to a regulator.

It is recognized that TC Energy may not always have all the facts immediately after such an event; however, CRC must report such an event to the CER/provincial regulator as a "precautionary" within 3 hours (or less) of event occurrence to ensure compliance. If, at a later point in time, further facts demonstrate that the event was not reportable to the regulator, CRC will request a retraction. However, if further facts demonstrate the event to be reportable, CRC will then use that information to finalize a report about the event for submission to the regulator.

If any of the following has occurred, please contact **CRC IMMEDIATELY at 403-920-7733**:

- **Events which attract media or social media coverage, or was identified by a member of the public** (*e.g.*, unplanned blowdown in a populated area where a member of the public has called TC Energy);
or
- **US Operations impacting Canadian Operations** where an unplanned shutdown on a US facility due to an integrity issue resulted in a shutdown of a Canada facility.
- **Someone from a Federal or Provincial regulatory authority has contacted you.** To maintain one window contact, do not provide responses but please do the following:
 - Request contact information (name, job title, phone number, email address)
 - Record their questions and time of call
 - Advise the caller that someone from TC Energy will contact them with responses
 - Call **CRC immediately at 403-920-7733** and provide the above details

11 EMERGENCY PREPAREDNESS & RESPONSE PLAN

Outline Emergency Response Plan – see TC Energy OHS Standards for Prime/General Contractors and template provided as Appendix F and G for specific guidance

(P/G Contractor) has developed an Emergency Response Plan (ERP), applicable to the scope of work on the Project and in alignment with TC Energy incident management procedures, which include the following items (see **Appendix XX**):

- 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 as specified in TC Energy's Contingency Planning Process; and, **(P/G Contractor) to refer to this document for additional information on abnormal event management**
- Additional detailed information as outlined in TC Energy's *OHS Standards for Prime/General Contractors*; specifically, Section 4.12 of that document.

(P/G Contractor)'s ERP must include activities at the Project Work Site(s) as well as travel between Work Sites. This ERP must be communicated to all affected Project personnel.

(P/G Contractor) has submitted the ERP for review and acceptance by the TC Energy Project team prior to mobilization in accordance with timelines set out in the Agreement. This ERP is specific to the Project and scope of work being completed.

Some aspects of **(P/G Contractor)**'s ERP may be finalized or modified after mobilization occurs. In these cases, a draft plan or outline must be prepared and submitted for acceptance by the TC Energy Project team prior to mobilization and a finalized plan to be submitted for acceptance no later than one week after mobilization.

The ERP may contain certain information that if made public, could infringe upon individual privacy, national security, third party confidentiality and environmentally sensitive information. Before releasing an ERP to the public, redaction of the afore mentioned information shall occur.

All emergency events experienced during the Work must be coordinated as outlined in **(P/G Contractor)** site-specific ERP and coordinated directly with local emergency services (for example, fire, emergency medical services, and law enforcement). In emergency events, the following actions must be taken immediately:

1. Communicated to the on-site TC Energy Project or Company Representative (such as the Construction Manager or Active Control Representative);
2. Communicated to the TC Energy Project Manager; and,
3. Escalated within the TC Energy Project team, and TC Energy by the Project Manager.

In addition, if a Project-related emergency event impacts or potentially impacts an operational TC Energy asset (such as facility or pipeline), the on-site TC Energy Project or Company Representative (for example, Construction Manager or Active Control Representative) must ensure that the applicable TC Energy oil or gas control centre has been notified. This contact information must be made available anytime Work takes place at or near an operational TC Energy asset (such as facility or pipeline).

11.1 Drills or Mock Exercises

Regardless if a scope of work is being directed by **(P/G Contractor)** or under TC Energy Active Control, when an ERP has been established, a drill or table top exercise must be completed at least once to assess its effectiveness. Scopes of work lasting longer than six months require this assessment at least semi-annually.

(P/G Contractor) must include the specific requirements related to assessing the effectiveness of the ERP and those requirements must be outlined in this P/SSSP.

12 NON-COMPLIANCE & DISCIPLINARY ACTION

Describe how violations of the P/SSSP, regulatory requirements, etc. may result in the issuance of a Non-Conformance Report (NCR) or disciplinary action.

Describe the disciplinary action policy and how it will be documented.

13 HOURS OF WORK

(P/G Contractor) must accept responsibility to ensure that the consecutive hours of work guidance (see below) **and** all applicable legal requirements regarding Hours of Work are met.

Note: In the event that this standard exceeds the maximum hours of work or consecutive days of work prescribed by any applicable federal, provincial, state and local legislation, the applicable legislation governs.

Hours worked in a single day and consecutive days must be within the guidelines found in this section including any exceptions to work extended hours and/or days. **(P/G Contractor)** will provide a formal request to work extended hours for TC Energy's review and acceptance. The requests will outline, at a minimum:

1. What work tasks may require extended hours;
2. The notification process to affected Work Site personnel including employees, support crews, and inspection staff;
3. What additional fatigue management safeguards must be implemented; and,
4. What process must be implemented to monitor the hours and days worked to maintain compliance to the standard outlined below and/or any approved extended hours.

In some cases, a revision to **(P/G Contractor)**'s P/SSSP or an addendum may be needed.

Consecutive Hours worked guidance:

- Contractors may work up to 12 consecutive hours per day
- Any hours worked beyond 12 hours requires TC Energy's acceptance of **(P/G Contractor)**'s request
- Contractors may work up to a maximum of 16 Hours for emergency work, pending TC Energy acceptance of **(P/G Contractor)**'s request
 - There may be occasions where it is necessary for personnel to work up to 16 consecutive hours to complete work tasks which must be completed without delay (*i.e.*, creek crossings, tie-ins, horizontal directional drill (HDD) pulls, etc.)
 - **(P/G Contractor)** will request authorization (in writing) from the TC Energy Construction Manager and/or Project Manager to obtain authorization to work the extended hours. **(P/G Contractor)**'s request must include what additional resources or coverage

- will be in place for the extended hours work (*i.e.*, emergency response resources, safety resources, etc.).
 - TC Energy PM/CM have the authority to approve work hours greater than 12 hours, which would include work up to 16 consecutive hours to complete a task considered “emergency” work.
 - Emergency work is defined as any activities directly related to, and necessary to address the impacts of, a sudden, unusual, unforeseen, or unpreventable occurrence that is either seriously interfering with, or could seriously interfere with the Work.
- Personnel must be given a minimum 8 hours rest in a 24hr day.
 - The requirement for 8 hours rest in any 24-hour period eliminates the ability to work longer than 16 hours.
- Travel time
 - Travel time is considered “yard to yard” – travel time from **(P/G Contractor)**’s yard to the ROW and back are considered travel time and part of the work day.
 - Travel time from residences (*e.g.*, hotel, camper, etc.) to the initial Work Site is considered personal commute time, not Project-related, and thus not included in travel time.
 - NOTE: personal commute times must be considered as part of **(P/G Contractor)**’s Fatigue Management Plan

Considerations for accepting Prime Contractor requests to work extended hours and / or days:

- In order to modify existing work schedules, TC Energy PM’s/CM’s will work with **(P/G Contractor)** to confirm the conditions under which modified work schedules will be documented and implemented at their locations.
- The day-to-day requests will be handled between the TC Energy PM/CM working with **(P/G Contractor)**. Blanket agreements to work extended hours on a routine and/or daily basis must be avoided.
- The TC Energy PM/CM will outline a daily deadline by which requests by **(P/G Contractor)** to work extended hours must be made. The intent is for the requests to be limited to specific crews/activities to avoid the entire Work Site working extended hours on a daily basis. This approach provides ample notification to both construction and inspection resources for preparation activities.
- When reviewing these requests, consideration will be given to inspection resources and support crews (*e.g.*, survey, NDT, emergency response, etc.) as they would also be affected by the extended hours.
- Language that allows the TC Energy PM/CM to immediately revoke any extension based off of safety performance without prior notice must be included in the acceptance/authorization documents.

Consecutive Days worked Requirements:

Subject to prescribed limitations in any applicable legislation, Work Site personnel may be scheduled to work up to a maximum of 24 consecutive days. Following 24 consecutive days of work, personnel must be given at least four consecutive days of rest (the equivalent of one day off for each workweek).

EXAMPLES have been provided below and are for Guidance Purposes ONLY

Examples of work schedules up to the maximum 24 consecutive days of work are:

- 6 consecutive days worked requires 1 consecutive day off; or,
- 12 consecutive days worked requires 2 consecutive days off; or,
- 18 consecutive days worked requires 3 consecutive days off; or,
- 24 consecutive days worked requires 4 consecutive days off.

(P/G Contractor) to provide a table outlining the planned work schedules for the various scopes/phases of the Work. The work schedule may be referenced elsewhere in the Project documentation; however, if there are any planned extended hours and/or days they must be outlined in this section of the P/SSSP.

14 HEALTH, SAFETY, AND EMERGENCY MANAGEMENT DOCUMENTS AND RECORDS

The following documentation must be maintained by the TC Energy Project team during the Project and readily available at the Work Site:

- Project SMP and P/SSSPs;
- **(P/G Contractor)**'s P/SSSP(s) and related plans (ERPs, traffic or journey management plans);
- Proof of training and orientations for Project employees;
- Work permits and access agreements;
- Inspection and audit reports;
- Incident and investigation reports; and,
- Safety performance reports and scorecards.

At a minimum, the following documentation must be retained by **(P/G Contractor)** and readily available at the Work Site:

- **(P/G Contractor)**'s P/SSSP;
- **(P/G Contractor)**'s safety program, including all applicable procedures;
- Copies of applicable occupational health and safety acts, Regulations and Codes for the jurisdictions(s) in which the work is being performed (*e.g.*, occupational health and safety acts, onshore pipeline regulations, CFR, etc.);
- Work permits and Job Safety Analysis (JSA) forms, or equivalent;
- Copies of any relevant hazard assessments completed;
- Proof of any required orientations/training/certifications/licenses;
- Tailgate forms;
- Safety pre-Job, tailgate, and committee meeting minutes;
- SHARE (hazard identification and observation), near-hit and incident reports;
- Investigation reports;
- Inspection and audit reports;
- Proof of required equipment inspections and certifications; and,
- Safety Data Sheets (SDSs) for any controlled/hazardous products being used at the Work Site.

All Project safety management-related documentation, including records, must be retained for the duration of the Project.

Any safety-related documentation, including records, that are generated at the Work Site must be retained by **(P/G Contractor)** for no less than 90 days following the completion of demobilization from the Work Site. **(P/G Contractor)** agrees to make these records available to the Project for review upon request.

APPENDIX A – PRIME/GENERAL CONTRACTOR SAFETY TEAM RESOURCE INFORMATION

Include Prime/General Contractor Safety Team personnel, with names professional designations, phone numbers (office and/or cell), and positions. Attach and email professional certification information to the Project Management Team.

APPENDIX B – POLICIES, PROGRAMS, AND PROCEDURES

Attach copies and provide reference to where the policies, programs and procedures can be found or provide the Safety Manual under a separate cover.

APPENDIX C – FORMS

EXAMPLES ONLY Forms may include but are not limited to:

- Equipment/Machine Checklist
- Forms to be submitted to the Company (Safety Performance Report for example)
- Green Hand evaluation form
- Hazard Assessment/JSA forms
- Incident forms
- Inspection forms
- Investigation form/checklist
- Near-hit forms
- Orientation Checklist
- Other Checklists
- Tailgate forms
- Safe work permit forms, etc.

APPENDIX D – AUDIT PROTOCOLS

Attach the audit protocol(s) that will be used to conduct audits (process, scoring/assessment, report, etc)

APPENDIX E – SAFETY PERFORMANCE REPORT (MONTHLY AND YEARLY)

The TC Energy Business Units have the ability to use and edit the [Contractor Monthly Health & Safety Report](#) or use a different method to collect contractor exposure to suit their internal needs. The contractor exposure gathered by the Business Unit needs to be shared with the TC Energy Health, Safety, and Emergency Management (HSEM) Program Governance team on the 14th calendar day of every month and sent to ii_tracking@tcenergy.com in order for correct contractor rates to be calculated.

[Contractor Monthly Health & Safety Report](#)

Please include subcontractor hours and kilometres when reporting.

APPENDIX F – EMERGENCY RESPONSE PLAN

The Emergency Response Plan (“ERP”) sets out **(P/G Contractor)**’s emergency response processes and procedures and are with the requirements outlined in TC Energy’s *OHS Standards for Prime/General Contractors*. Specifically, **(P/G Contractor)** will develop an Emergency Response Plan. There must be one Emergency Response Plan per Work Site. If there are multiple Work Sites/locations then additional attachments may be needed to ensure all Work Site-specific emergency information is included. This must

be submitted along with the P/SSSP to TC Energy prior to Work commencement or mobilization for review and acceptance (in line with conditions set out in the Agreement).

Note: TC Energy's Emergency Management Program uses the Incident Command System methodology for emergency response operations and it is identified as a best practice in North America. It is preferred that Prime/General Contractors use this same methodology or a similar incident management system.

The Emergency Response Plan developed 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; and,
 - 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 listing.
 - Response Process – response processes must include actions or steps to respond, and the emergency notifications required for each type of response. All emergencies at the Work Site require notification to TC Energy Company Representative, TC Energy safety and/or TC Energy emergency management contact;
 - 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 for each Work Site.
- 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).

If any of the items above are covered in another section of the P/SSSP or the TC Energy Project SMP, the ERP section does not require it to be duplicated.

The objective of the ERP is to ensure emergency response processes and procedures specific to the Work are addressed.

A draft of the ERP must be provided to the TC Energy PMT for review and acceptance prior to the pre-job meeting held before the start of the Work. The final version of the ERP must be provided to the TC Energy PMT before the start of Work and will be included as part of the Agreement documents for the Work. Review of the ERP by the TC Energy PMT is not to result in any responsibility or liability being incurred by the TC Energy.

(P/G Contractor) has prepared a distribution matrix for the ERP and will circulate this matrix to all ERP recipients. A copy of the ERP must be kept at all Work Sites used by the **(P/G Contractor)** in relation to the Work. ***Insert the ERP distribution list as approved by the TC Energy PMT here***

All forms and procedures referenced in the ERP must be attached to the ERP.

Emergency Response Plan Template – See Attached

NOTE: This is a template ONLY; the Prime/General Contractor may use this template as a guide to develop the ERP. It is the Prime/General Contractor's responsibility to ensure the ERP is complete and includes all applicable legal and other requirements.

APPENDIX G – EMERGENCY RESPONSE PLAN TEMPLATE

(Prime/General Contractor Name and Logo)**Emergency Response Plan**

PROJECT NAME: XXXX	
Project Number: XXXX	
Project Sponsor: XXXX (Department Manager/Director)	
Project Manager: XXXX	
VERSION NO.: XX	DATE: XXXX

APPROVALS

Name Prime/General Contractor Project Manager, Department	Signatures	Date XXX
Name Prime/General Contractor Health and Safety Representative	Signatures	Date XXX

Objective

Outline the purpose of this ERP.

Key Personnel

Outline key personnel for the ERP and their respective responsibilities

Communication and Training Plan

Outline how the ERP will be communicated and how personnel will be trained

Indicate where and how emergency numbers will be posted

Provide 24 hour communication link

Drills/Mock Incidents

In accordance with the Work specifications, outline the type of drills or mock incidents that will be carried out to ensure training efficiency

Types of Emergency Events

Outline possible emergency events that could occur at the Work Site. For Example, emergency events may include, but are not limited to:

Fire

Medical

Poisonous animals (rattlesnakes)

Line Strike (buried or overhead)

Severe Weather (Tornados, Floods, etc.)

Spills

Security Breach/Incident, etc.

Safety Equipment

Outline all safety equipment required and where it will be located

PPE

First Aid Kits

Fire Extinguishers

Emergency Conveyance Vehicle

Outline equipment inspection procedures, etc.

Safety Measures

Outline or reference procedures, policies, and programs that will be implemented to prevent emergency events – attach as appendix to the ERP.

Response Actions

Outline the response actions for each emergency event set out above (attach any emergency check lists).

Provide an evacuation procedure for the Work Site (muster points, third party emergency response information, etc.).

Outline safe shutdown and start up procedures.

Notification Procedures

Outline how Prime/General Contractor and the Company will be notified of an emergency event

Outline how Work Site personnel will be tracked for communication purposes

Include a flow chart

Include equipment/methods used (cell phone, satellite phone, etc.)

Reporting an Emergency Event

Outline the responsibility and process of reporting an emergency event – both internally and externally

Post Emergency Event Procedures

Outline the procedures taken after the emergency event. For example:

Investigations

Formal report

De-briefing meetings

Preservation of evidence

Replenishments of equipment/supplies

Return to work procedure

Etc.

Waste Disposal

Outline disposal procedures

Appendix A - Emergency Phone Directory

List all available emergency contact numbers and location (police, fire, ambulance, hospital, clinics, life flight, etc.)

Appendix B – Programs and Procedures

Attach as applicable

Appendix C – Glossary of Terms and Acronyms

If applicable, define all terms and acronyms used in the ERP