



Canada Energy  
Regulator

Régie de l'énergie  
du Canada

Suite 210  
517 Tenth Avenue SW  
Calgary, Alberta  
T2R 0A8

517, Dixième Avenue S.-O.  
bureau 210  
Calgary (Alberta)  
T2R 0A8

File OF-Surv-OpAud-N081-2019-2020 0101  
CV1920-419  
11 January 2021

██████████  
Senior Vice President, Technical Centre  
NOVA Gas Transmission Ltd.  
TC Energy  
450 – 1 Street SW  
Calgary, AB T2P 5H1  
Email ██████████

Dear ██████████

**Canada Energy Regulator Audit Report  
NOVA Gas Transmission Ltd. (NGTL) (The Auditee)  
Audit Topic: Contractor Oversight**

Please find attached a copy of the final audit report for the audit of NGTL Contractor Oversight conducted during the period from 27 January 2020 to 29 July 2020. The audit was conducted by the Canada Energy Regulator (CER) in accordance with section 103 of the *Canadian Energy Regulator Act* (CER Act).

On 16 October 2020, the CER sent NGTL the Draft Audit Report documenting the evaluation of TMPU's contractor oversight for review and comment. NGTL was also advised that the CER intends to post the Final Audit Report on the CER's website. To that end, NGTL was advised that if it had any objections to the release of the audit report, or to specific parts of the report, to provide a list of those objections along with a detailed rationale and specific reference to applicable sections of the *Access to Information Act and Privacy Act*. NGTL was advised that the CER redacts the personal information of TMPU employees with the exception of the personal information of TMPU executive staff, which the CER considers publicly known figures of the company.

On 14 November 2020, NGTL responded with its proposed edits and comments to the findings in the report. NGTL also advised the CER of its redaction requests. The CER has now finalized its Final Audit Report and appendices, attached to this letter, which it will now post on the CER's website.

The CER wishes to address NGTL's comments on the draft audit report relating to Audit Protocol – 02, which has a non-compliant finding in relation to contracting and the role of the prime contractor. As stated in NGTL's letter, NGTL, is statutorily accountable for all aspects of safety throughout the full life-cycle of its assets. While NGTL acknowledges its legislated accountability for safety, the CER identified language within documents which are provided to contractors that does not support this position.

The NGTL Occupational Health and Safety Standards for Prime/General Contractors states "*It is the Prime/General Contractor's sole responsibility to ensure that all applicable occupational health and safety requirements have been identified and are complied with in*

*the performance of the Work associated with the Agreement. By providing these minimum requirements, TC Energy is not directing the work or assuming control over occupational health and safety nor agreeing to correct deficiencies. The Prime/General Contractor is solely responsible for compliance with the requirements and for implementing measures necessary to achieve compliance” (emphasis added).*

These references to sole responsibility need to be clarified in the Standard as this apportionment of responsibility and liability is only between the parties to the Contract and associated Standard. NGTL as the certificate holder, cannot contract out or apportion its regulatory liability pursuant to the federal legislative framework as it may be able to do under the provincial framework. NGTL, as the certificate holder, is responsible for upholding conditions within the certificate and all requirements within the OPR.

The CER notes that the OPR allows companies to contract for the provision of services in respect of the construction of pipelines, however those companies must still exercise the control and oversight as required to comply with the OPR and the certificate conditions. Once NGTL hires a contractor, it is still responsible for checking, inspecting, monitoring and conducting quality assurance activities against the contractor(s) to ensure they are performing their work safely, in compliance with the OPR. The CER is mindful that in the provincial framework, once NGTL has contracted for a prime contractor, NGTL does not want to assume control over the work. The CER however takes the position that there is a distinction to be made between NGTL not having the authority to “start work”, but retaining the responsibility and authority to stop the work if it is not being undertaken in a safe manner or in compliance with legislation. The CER is concerned with the use of terminology such as ‘nor agreeing to correct deficiencies’ as this text indicates that NGTL will not be monitoring, inspecting or conducting quality assurance activities of its contractors which is required by various sections of the OPR.

NGTL is required to develop a Corrective and Preventive Action (CAPA) Plan to address the non-compliant findings and submit it to the CER by 08 February 2021. Please use the CER standard CAPA Plan template. Once approved, the CER will monitor the implementation of the CAPA Plan to confirm that it is completed in a timely manner.

The CER will monitor and assess NGTL’s corrective and preventive actions until they are fully implemented. Additionally, it is ordered that, where applicable, the approved CAPA Plan requirements will be implemented on a system-wide basis to address similar deficiencies. In addition, the CER will continue to monitor the implementation and effectiveness of NGTL’s management system and programs through targeted compliance verification activities as a part of its on-going regulatory approaches.

.../2

If you require any further information or clarification, please contact:

- [REDACTED], Lead Auditor, Systems Operations Business Unit at [REDACTED]; or
- [REDACTED], Lead Auditor at [REDACTED] or at [REDACTED] toll free.

Yours sincerely,

*Original signed by*

[REDACTED]  
Lead Auditor  
Inspection Officer Number [REDACTED]

Attachment

c.c. [REDACTED], Regulatory Compliance Specialist, TC Energy,  
Email [REDACTED]



Canada Energy  
Regulator

Régie de l'énergie  
du Canada

**Suite 210, 517 Tenth Avenue SW  
Calgary, AB T2R 0A8**

**NOVA Gas Transmission Ltd.**

**Final Audit Report  
Audit of Contractor Oversight**

**Compliance Verification Activity: CV1920-419  
File OF-Surv-OpAud-N081-2019-2020 0101**

**NOVA Gas Transmission Ltd.  
TC Energy  
450 – 1 Street SW  
Calgary, AB, T2P 5H1**

**Date: 11 January 2021**



## Executive Summary

In accordance with section 103(3) of the *Canadian Energy Regulator Act* (CER Act), the Canadian Energy Regulator (CER) conducted a compliance audit (the audit) of NOVA Gas Transmission Ltd. (the Auditee) between 27 January 2020 and 29 July 2020. The topic of the audit was contractor oversight.

The objectives of the audit were to verify that the Auditee had developed and implemented adequate oversight of people, and contractors, working on their behalf in accordance with the requirements of the *Canadian Energy Regulator Onshore Pipeline Regulations* (SOR/99-294) (OPR). As part of this evaluation, the company's management system was evaluated for the integration of construction and pipeline maintenance work into its associated processes, programs, registries, and inventories which make up a functional management system.

The scope of the audit included personnel, processes, and activities used by the company when providing oversight of its contractors and people hired to conduct work on its behalf. The scope included multiple programs under section 55 of the OPR. The audit reviewed various aspects of these programs to ensure adequate oversight has been provided during construction and operational maintenance.

The audit consisted of 20 regulatory audit protocols, 6 of which were non-compliant. The non-compliances involved:

- Management system components insufficiently extending to Level A (e.g. small scale projects);
- The transfer of all safety related responsibilities to the general contractor which is not allowable under the OPR;
- Components of the management system not being implemented as established in NGTL documentation;
- Lack of a communication process which is required under section 6 of the OPR ; and
- Deficiencies in the Auditee's quality assurance program relating to legal requirements, environmental protection, and safety management.

For further information refer to Table 1. Summary of Findings.

When comparing the results of this focused audit against TC Energy's most recent audit (NGTL is owned and governed by TC Energy), the Keystone XL pre-construction audit, the Auditors found that the Auditee demonstrated marked improvement in its management system.

The CER is of the view the non-compliant findings do not result in imminent or immediate safety or environmental protection issues. Findings from the current audit are explained in detail in Appendix 1 of this report.

As initially discussed in the audit reports cover letter, the CER wishes to reiterate the certificate holder's obligations to uphold conditions in their certificate and requirements within the OPR. While provincial legislation may allow for the prime contractor approach to be applied, this concept does not exist under federal legislation such as the OPR. The CER Act and the OPR require companies to be responsible for establishing, implementing and providing oversight of protective programs regarding safety, security and environmental protection throughout the lifecycle of a regulated facility. The statements that a contractor is solely responsible for the compliance with all requirements and that NGTL won't correct deficiencies, contradict OPR requirements and render



NGTL non-compliant to AP-02. The language used by NGTL in its contracts needs to take into consideration its obligations under the OPR such as pursuant to the management system requirements which require the certificate holder to monitor and inspect the company's activities and facilities and to take corrective and preventative actions where required. Such monitoring should increase should there be an indication of the contractor failing to comply with federal legislation, permit conditions or to the certificate holder's or contractor's management system.

The Auditee is required to develop a Corrective and Preventive Action (CAPA) Plan to address the non-compliant findings and submit it to the CER by 08 February 2021. Once approved, the CER will monitor the implementation of the CAPA Plan to confirm that it is completed in a timely manner.

The final audit report will be made public on the CER website.



## Table of Contents

<b>Executive Summary</b> .....	2
<b>1.0 Introduction</b> .....	5
1.1 Audit Objectives .....	5
1.2 Audit Scope and Methodology .....	5
<b>2.0 Facility and Process Description</b> .....	6
<b>3.0 Assessment of Compliance</b> .....	6
3.1 General .....	6
3.2 Assessment of the Auditee's Regulated Facilities .....	7
3.3 List of Audit Findings .....	7
<b>4.0 Conclusion</b> .....	10
<b>Appendix 1.0 - Audit Assessment Tables</b> .....	12
AP-01: Management System .....	12
AP-02: Organizational Structure, Roles & Responsibilities .....	14
AP-03: Hazard Identification .....	16
AP-04: Hazard Inventory .....	18
AP-05: Risk Assessment .....	19
AP-06: Controls .....	22
AP-07: Legal .....	24
AP-08: Management of Change .....	25
AP-10: Training and Competency Verification .....	29
AP-17: Quality Assurance Program .....	42
AP-18: Construction Safety – Contractor Management .....	44
AP-19: Construction Safety – Hazard and Informed .....	46
AP-20: Construction Safety – Construction Safety Manual .....	47
<b>Appendix 2.0 - Maps and System Descriptions</b> .....	<b>Error! Bookmark not defined.</b>
<b>Appendix 3.1 - Abbreviations</b> .....	49
<b>Appendix 3.2 - Glossary of Terminology and Definitions</b> .....	50
<b>Appendix 4.0 – List of Company Staff Interviewed and Documents Reviewed</b> .....	53

## 1.0 Introduction

In accordance with section 103(3) of the *Canadian Energy Regulator Act* (CER Act), the Canadian Energy Regulator (CER) conducted a compliance audit (the audit) of NOVA Gas Transmission Ltd. (the Auditee) between 27 January 2020 and 29 July 2020. The topic of the audit was contractor oversight.

On 1 April 2020, the *Canadian Energy Regulator Onshore Pipeline Regulations* (SOR/99-294) were renamed and updated. In addition to the name change, non-substantial amendments were made to the OPR, including section 6 where the management system regulations are located. Audit Staff are of the opinion that none of the changes are substantive or change the outcomes of this audit.

Detailed findings are discussed in Appendix 1 of this report. Abbreviations and terminology used in the report can be found in Appendix 3.

### 1.1 Audit Objectives

The objectives of the audit were:

- to verify that the Auditee had developed and implemented adequate oversight of people, and contractors, working on their behalf in accordance with the requirements of the *Canadian Energy Regulator Onshore Pipeline Regulations* (SOR/99-294) (OPR); and
- to evaluate the Auditee's management system for the integration of construction and pipeline maintenance work into its associated processes, programs, registries, and inventories which make up a functional management system as required by section 6 of the OPR.

### 1.2 Audit Scope and Methodology

The scope of the audit included the personnel, processes, and activities applied by the Auditee when providing oversight of its contractors and those people hired to conduct work on its behalf. The scope included multiple programs under section 55 of the OPR. The audit reviewed various aspects of these programs to verify they are providing adequate oversight during construction and operational maintenance.

To evaluate the Auditee's compliance, Audit Staff conducted interviews with company personnel and validated what was stated during these interviews by reviewing samples of the Auditee's documents and records.

An audit announcement letter was sent to the Auditee on 27 January 2020 advising the Auditee of the CER's plans to conduct a compliance audit of its contractor oversight. The Lead Auditor provided the audit protocol and initial information request (IR) to the Auditee on 27 January 2020. On 30 January 2020, the Auditor conducted a virtual meeting with the Auditee staff to discuss the plans and schedule for the audit. Document review began on 16 March 2020 and interviews were conducted between 20 April 2020 to 25 April 2020, and 4 June 2020 to 5 June 2020.

In accordance with established audit process, Audit Staff shared a pre-closeout summary of the results of the audit with the Auditee on 6 July 2020, which identified preliminary audit findings. At that time, the Auditee was given five business days to provide any additional documents or records to help resolve the identified gaps in information or compliance. Subsequent to the pre-closeout meeting, the Auditee provided additional information to assist Audit Staff in making their final assessment of compliance. Audit Staff conducted a final closeout meeting with the Auditee on 29 July 2020.

Audit Staff wish to note that this audit was conducted during the Covid pandemic. All interactions with the Auditee were virtual (i.e. through Microsoft Teams). No face to face contact between the Auditors and Auditee was possible, and no field inspections were conducted.



## 2.0 Facility and Process Description

NOVA Gas Transmission Ltd. (NGTL) is a natural gas gathering and transportation system in Alberta and northeastern British Columbia. NGTL transports natural gas produced in the Western Canadian Sedimentary Basin to markets in Canada and the United States. The pipeline commenced operations in 1957 and NGTL came under NEB jurisdiction in 2009. Prior to that date, NGTL was under provincial jurisdiction. NGTL is an asset owned and governed by TC Energy.

The Auditee, through its parent company TC Energy, had developed and implemented a management system that applies to all activities involved in the design, construction, operation and abandonment of pipeline systems. During the audit, the Auditors did not evaluate the entirety of the management system as it was beyond the scope for this focused audit. Instead, the Auditors evaluated whether the Auditee met the requirements of the OPR section 6.1(c), which states:

*A company shall establish, implement and maintain a management system that (c) applies to all the company's activities involving the design, **construction, operation**, {emphasis added} or abandonment of a pipeline and to the programs referred to in section 55.*

## 3.0 Assessment of Compliance

### 3.1 General

The OPR requires companies to provide contractor oversight for both construction and pipeline / facility maintenance work as part of the companies' management system. Carefully designed and well-implemented management systems are a reflection of companies' commitments to continual improvement in safety and environmental protection throughout the full life-cycle of facilities. Management systems also support strong cultures of safety and are fundamental to keeping people safe and protecting the environment. The CER expects the level and extent of contractor oversight must reflect the level of complexity of the pipeline, the pipeline operation, and the type of construction or maintenance work involved.

For the purposes of this audit, the CER's expectations included, but were not limited to, the Auditee having established and implemented:

- an effective management system that is comprehensive, proactive and is applied across the entire lifecycle of its system; to ensure construction and maintenance activities are conducted safely, and in a manner that protects people and the environment;
- effective processes for identifying and analyzing hazards and potential hazards, evaluating and managing the risks, establishing the necessary controls, and communicating this information to all that need to be made aware of it;
- an effective organizational structure, along with competency and training requirements, and training programs and processes to identify and communicate roles, responsibilities, and authorities, and to verify the competency of the Auditee's staff and those that complete work on its behalf;
- a process for the internal reporting, analysis, and investigation of hazards, potential hazards, incidents, and near-misses as a result of construction or maintenance activities, and for taking corrective and preventive measures, including measures to manage imminent threats; and
- quality assurance measures, such as audits and inspections, of construction and maintenance activities are being carried out to ensure that worker safety and environmental protection is being effectively carried out in a competent and safe manner.

Each company and its management system is required to comply with all applicable requirements of the CER Act, its regulations, standards referenced in the regulations, such as the CSA Z662, and any company-specific Orders and Certificates.

Section 6.1 of the OPR requires a company regulated by the CER to establish and implement a management system that:

- is explicit, comprehensive and proactive;
- integrates the company's operational activities and technical systems with its management of human and financial resources to enable the company to meet its obligations under the OPR section 6;
- applies to all of the company's activities involving the design, construction, operation, or abandonment of a pipeline, and to the programs referred to in the OPR section 55;
- ensures coordination between the programs referred to in the OPR section 55; and
- corresponds to the size of the company, to the scope, nature, and complexity of its activities, and to the hazards and risks associated with those activities.

### **3.2 Assessment of the Auditee's Regulated Facilities**

The audit team's assessment of the Auditee's compliance with the regulatory requirements is summarized in Table 1 of this report and explained in detail in Appendix 1 attached to this report. The audit team identified no issues of concern for 14 out of 20 audit protocol items.

Overall, by both process and through demonstrated activity, the Auditee demonstrated it was taking steps to provide oversight of contractors and those who work on behalf of the company.

### **3.3 List of Audit Findings**

The CER could assign one of two possible types of findings to each audit protocol item evaluated:

1. No Issues Identified – *No non-compliances were identified during the audit based on the information provided and reviewed within the context of the scope of the audit; or*
2. Non-compliant – *An evaluated regulatory requirement does not meet legal requirements. The company has not demonstrated that it has developed and implemented programs, processes and procedures that meet the legal requirements. A corrective and preventative action plan must be developed and implemented.*

Below is a table that provides a generalized description of the CER's audit findings. They correspond to Appendix 1 Summary of Findings that provides more information regarding the review and substance of each finding.

**Table 1: Summary of Findings**

<b>Audit Protocol Item</b>	<b>Regulatory Reference</b>	<b>Protocol Topic</b>	<b>Status</b>	<b>Summary of Finding</b>
AP-01	OPR s.6.1	Policy and Commitment Statements	Non-Compliant	For Level A projects, the Auditee's management system had not established minimum requirements related to environmental protection and risk management.
AP-02	OPR s.6.4	Organizational Structure, Roles and Responsibilities	Non-Compliant	The <i>OHS Standards for Prime/General Contractors</i> incorrectly states that the contractor holds <i>sole</i> responsibility for identifying and complying with OHS requirements.
AP-03	OPR s.6.5(1)(c)	Identifying and Analyzing all hazards	No Issues Identified	The Auditee demonstrated that it was identifying hazards.
AP-04	OPR s.6.5(1)(d)	Hazard Identification	No Issues Identified	The Auditee demonstrated that it had an inventory of hazards and potential hazards related to construction activities.
AP-05	OPR s.6.5(1)(e)	Risk Assessment	Non-Compliant	Audit sampling uncovered several projects that did not follow the risk management requirements set forth in Auditee's management system.
AP-06	OPR s.6.5(1)(f)	Controls	Non-Compliant	Audit sampling uncovered several projects where risk management controls set forth by the Auditee's management system were not implemented.
AP-07	OPR s.6.5(1)(g)	Legal Requirements	No Issues Identified	The Auditee demonstrated that it had a process to identify and monitor all legal requirements related to contractor oversight.
AP-08	OPR s.6.5(1)(i)	Management of Change	No Issues Identified	The Auditee demonstrated that it had a management of change process in place.
AP-09	OPR s.6.5(1)(j)	Training, Competence and Evaluation	No Issues Identified	The Auditee demonstrated that it had established competency criteria and training programs for both staff and those working on its behalf.

Audit Protocol Item	Regulatory Reference	Protocol Topic	Status	Summary of Finding
AP-10	OPR s.6.5(1)(k)	Training, Competence and Evaluation	No Issues Identified	The Auditee demonstrated that it had established and implemented a process for: verifying staff and those working on its behalf are trained and competent; and for supervising them to ensure they perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.
AP-11	OPR s.6.5(1)(l)	Awareness of Responsibilities	No Issues Identified	The Auditee demonstrated that it had a process in place to ensure both workers and those working on its behalf are aware of their responsibilities as it relates to contractor oversight.
AP-12	OPR s.6.5(1)(m)	Communication	Non-Compliant	The <i>TOMS Manual</i> does not explicitly indicate communication as a foundational element of the management system.
AP-13	OPR s.6.5(1)(q)	Operational Control	No Issues Identified	The Auditee demonstrated that it had established and implemented a process for coordinating and controlling the operational activities of its staff and those who are working on its behalf.
AP-14	OPR s.6.5(1)(r)	Internal Reporting of Hazards, Potential Hazards, Incidents and Near-misses	No Issues Identified	The Auditee demonstrated that, within the scope and objectives of this audit, it had established and implemented a process for the internal reporting of hazards, potential hazards, incidents, and near-misses related to contractor oversight.
AP-15	OPR s.6.5(1)(t)	Contingency Plans for Abnormal Events	No Issues Identified	The Auditee demonstrated that, within the scope and objectives of this audit, it had established and implemented a process to ensure adequate contingency plans are in place for contractor oversight.
AP-16	OPR s.6.5(1)(u)	Inspection and Monitoring	No Issues Identified	The Auditee demonstrated that it had an adequate inspection and monitoring process in place for its contractor oversight activities.

Audit Protocol Item	Regulatory Reference	Protocol Topic	Status	Summary of Finding
AP-17	OPR s.6.5(1)(w)	Quality Assurance	Non-Compliant	The Auditee's quality assurance program did not establish minimum requirements for contractor oversight related to environmental protection and safety management programs. The Auditee did not implement audits in accordance to OPR s.53.
AP-18	OPR s.18(1)(a), (b), (b.1),(d), (2)	Construction Safety	No Issues Identified	The Auditee demonstrated that, within the scope and objectives of this audit, it ensured construction safety requirements related to contractors were being met.
AP-19	OPR s.19	Construction Safety	No Issues Identified	The Auditee demonstrated that, within the scope and objectives of this audit, it ensured construction practices were not negatively impacting the environment and visitors were being protected.
AP-20	OPR s.20(1)(1.1)	Construction Manual	No Issues Identified	The Auditee demonstrated that it had the appropriate documentation in place.

#### 4.0 Conclusion

The CER conducted this audit to verify that the Auditee had implemented the essential management system processes to ensure the adequate supervision and management of its contractors. At the time of the audit, the CER determined that the Auditee was conducting many oversight activities of its contractors and those working on its behalf. Audit Staff identified that the Auditee was taking steps to protect the safety of its employees, those working on its behalf, and the protection of the environment. Through interviews and document review, Audit Staff confirmed that the Auditee's management system had incorporated contractor oversight for the lifecycle of its pipeline to ensure safety and environmental outcomes are met.

Out of 20 audit protocols, Auditors found 6 non-compliances. The non-compliances involved:

- Management system components insufficiently extending to Level A, or small scale, projects;
- The transfer of all safety related responsibilities to the general contractor which is not allowable under the OPR;
- Components of the management system not being implemented as established in NGTL documentation;
- Lack of a communication process which is required under section 6 of the OPR ; and
- Deficiencies in the Auditee's quality assurance program relating to legal requirements, environmental protection, and safety management.

With respect to the non-compliances identified, the CER is of the view these findings do not constitute an imminent hazard to the safety people or environmental protection. Furthermore, the

Auditors note that resolving these non-compliances can likely be achieved without interrupting daily operations.

The CER will monitor and assess the implementation of the Auditee's CAPA Plan to confirm that it is fully implemented on a timely basis and in a manner that protects the safety of employees, those working on behalf of the company, and the public, as well as the environment.

The CER will make its final audit report public on the CER website.

## Appendix 1.0 - Audit Assessment Tables

### AP-01: Management System

#### Regulatory Requirement:

**OPR s.6.1** a company shall establish, implement and maintain a management system that

(a) is systematic, explicit, comprehensive and proactive; and

(c) applies to all the company's activities involving the design, construction, operation, or abandonment of a pipeline and to the programs referred to in section 55.

#### Expected Outcome:

The company is able to demonstrate that:

- The company's management system is purposely designed to include the construction / maintenance phase of a pipeline's life cycle.
- The company integrates construction or maintenance activities of a pipeline's life cycle through a systematically designed, established and implemented management system.

#### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided, to demonstrate compliance with this requirement include:

- *TC Energy Operational Management System Manual (TOMS)*
- *Project Governance Program*
- *Project Delivery Standard*
- *Contractor Safety Management Practice*
- *Canada Gas Projects Level C Roadmap*
- *Project Delivery Standard – Environment Implementation Plan – Deliverable Description*
- *Canada Gas Projects Playbook*
- *Integrated PSR Operating Model Business Practice (Canada Gas Operations)*

#### Assessment:

NOVA Gas Transmission Ltd. (the Auditee) is an asset owned and governed by TC Energy. The *TC Energy Operational Management System (TOMS) Manual* is the foundational document which outlines the management system that the Auditee follows. It consists of 9 elements and 11 mandated programs. The 11 mandated programs includes the s.55 programs of the OPR. Examples of mandated programs relevant to this audit include the *Project Governance Program*, *Environment Program*, and *Safety Program*. It is worthwhile to note that the *Safety Mandated Program Document* identifies inadequate contractor safety management as one of the top safety hazards. A diverse array of practices, procedures, standards, and other instructional documentation are outputs from the elements and programs outlined in the *TOMS Manual*.

**Regulatory Requirement:**

**OPR s.6.1** a company shall establish, implement and maintain a management system that

(a) is systematic, explicit, comprehensive and proactive; and

(c) applies to all the company's activities involving the design, construction, operation, or abandonment of a pipeline and to the programs referred to in section 55.

The Auditee indicated that the *Project Governance Program* is a key component to their contractor oversight activities. The *Project Governance Program*, together with the *Project Delivery Standard*, another component of *TOMS*, requires each project to have a Project Specific Roadmap. This Roadmap outlines the specific requirements for each project.

Projects are categorized from Level A to D, according to cost, risk, and complexity. Level A projects have fewer requirements than Level D projects, the latter being more complex and costly to complete. The Roadmap requires each project to have plans that identify how it will conform to the Mandated Programs (e.g. Safety Management Plan indicates how the project will conform to the Safety Program).

Thus, the Auditee had demonstrated that their management system is comprehensive, explicit, and pro-active, and that it applies to all activities, with the following exceptions.

The *Project Delivery Standard Deliverable Descriptions* state that a *Risk Management Plan*, the *Environment Management Plan*, and an *Environmental Implementation Plan* are not required for Level A Projects. Audit Staff found that the Auditee's management system applies neither the s.55 Environmental Protection Program requirements nor risk management processes to Level A projects.

During the document review, Audit Staff did identify some samples of Level A projects where risk and environmental issues have been addressed. By activity the Auditee is taking steps to mitigate risk, but those activities are not documented or mandated (i.e. established) via the *Project Delivery Standard*.

As a result, the management system is not established across all company activities, and is non-compliant to 6.1(c).

**Finding: Non-Compliant**

Based on the information made available and reviewed by the Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. For Level A projects, the Auditee's management system has not established minimum requirements related to environmental protection and risk management. A CAPA Plan must be developed to analyze, address and manage these deficiencies.



## AP-02: Organizational Structure, Roles & Responsibilities

### Regulatory Requirement:

**OPR s.6.4** the company must have a documented organizational structure that enables it to (a) meet the requirements of the management system and meet its obligations under section 6; (b) determine and communicate the roles, responsibilities and authority of the officers and employees at all levels of the company; and (c) demonstrate, based on an annual documented evaluation of need, that the human resources allocated to establishing, implementing and maintaining the management system are sufficient to meet the requirements of the management system and to meet the company's obligations under section 6.

**Expected Outcome:** The company is able to demonstrate that:

- it has a documented organizational structure;
- it has determined and communicated the roles, responsibilities and authorities; and
- it conducts an annual documented evaluation of need of the human resources.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TC Energy Operational Management System Manual (TOMS)*;
- *Safety Management Program Document*;
- *Occupational Health and Safety Standards for Prime / General Contractors*.

### Assessment:

Key departments relevant to this audit include the:

- Canada Gas Business Unit (Canada Gas Projects and Canada Gas Operations);
- Technical Centre (engineering, integrity, quality, health, safety, emergency management, construction and project governance); and
- Environment, Land, & Indigenous Relations (ELIR).

As discussed in AP-01, the Auditee's management system is established and documented via the *TOMS Manual*, which is comprised of management system elements and mandated programs. A multitude of standards, practices, procedures, and other instructional documents are outputs of the *TOMS Manual*.

The *Occupational Health and Safety Standards for Prime/General Contractors* provides contractors with the Auditee's minimum OHS performance expectations. This document notes that it is the Prime/General Contractor's sole responsibility to ensure all applicable OHS requirements have been identified and complied with, and that the Auditee is not assuming control over OHS or agreeing to correct deficiencies. This transfer of all responsibilities to the contractor is not permitted under the OPR.

**Regulatory Requirement:**

**OPR s.6.4** the company must have a documented organizational structure that enables it to (a) meet the requirements of the management system and meet its obligations under section 6; (b) determine and communicate the roles, responsibilities and authority of the officers and employees at all levels of the company; and (c) demonstrate, based on an annual documented evaluation of need, that the human resources allocated to establishing, implementing and maintaining the management system are sufficient to meet the requirements of the management system and to meet the company's obligations under section 6.

The CER reminds the Auditee that it is ultimately the certificate holder that is statutorily accountable for all aspects of safety, not those working on NGTL's behalf. While companies can clearly use contracts for construction related services, as demonstrated in various sections of the OPR, the regulated company must still provide appropriate direction, approval, management and oversight of activities occurring on its facilities and at its projects.

**Finding: Non-Compliant**

Based on the information made available and reviewed by the Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. The *OHS Standards for Prime/General Contractors* incorrectly states that the contractor holds sole responsibility for identifying and complying with OHS requirements whereas this requirement rests with the regulated company. A CAPA Plan must be developed to analyze, address and manage these deficiencies.

## AP-03: Hazard Identification

### Regulatory Requirement:

OPR s.6.5(1)(c) establish and implement a process for identifying and analyzing all hazards and potential hazards;

### Expected Outcomes:

- The company has a compliant process that is established and implemented.
- The methods for identification of hazards and potential hazards are appropriate for the nature, scope, scale, and complexity of the company's operations, activities and s.55 programs.
- The identification of hazards and potential hazards must include the full life cycle of the pipeline.
- The company has comprehensively identified and analyzed all relevant hazards and potential hazards.
- The hazards and potential hazards have been identified for the company's scope of operations through the lifecycle of the pipelines.
- The identified hazards and potential hazards have been analyzed for the type and severity of their consequences

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TC Energy Operational Management System Manual (TOMS)*
- *Project Governance Program*
- *Project Delivery Standard*
- *Risk Management Standard*
- *Contractor Safety Management Practice*
- *OHS Standards Prime General Contractors*
- *Canada Gas Projects Level C Roadmap*
- *Project Delivery Standard – Environment Implementation Plan – Deliverable Description*
- *Canada Gas Projects Playbook*
- *Integrated PSR Operating Model Business Practice (Canada Gas Operations)*
- *Environmental Design Standard*
- *PDS – Risk Management Plan*
- *Job Safety Analysis Procedure*
- *System Wide Risk Assessment Procedure*
- *Consolidated Hazard Barrier Inventory*
- *Integrated PSR-Operating Model Business Practice Procedure*
- *General Work Permit Procedure*

### Assessment:

The process to identify and analyze hazards is initiated with Element 2 of the *TOMS Manual*, the *Risk Management Standard*, and the *Risk Management Procedure*, all of which reference hazard identification and analysis (step 2 of a 7-step risk management procedure) as a mandatory requirement within each business unit and mandated program.

**Regulatory Requirement:**

**OPR s.6.5(1)(c)** establish and implement a process for identifying and analyzing all hazards and potential hazards;.

Canada Gas Projects and Canada Gas Operations both follow the *Project Delivery Standard*, which had a series of deliverables mandated for each level of a project. Examples of these deliverables include *Project Roadmap Procedure*, *Process Hazard Analysis Decision and Report Deliverable Description*, *Environment Implementation Plan Deliverable Description* and the *Safety Management Plan Deliverable Description*. These deliverables are in alignment with the requirements of the mandated programs (such as the *Environment Program Framework*, and the *Safety Management Program Document*). These documents provide details as to how hazards specific to a project level and subject matter are to be identified and analyzed. Audit Staff reviewed records generated from these documents and interviewed the Auditee staff whose responses were consistent and in alignment with the documented process.

With respect to contractors, hazards are identified and analyzed beginning with the contractor selection process. For Canada Gas Projects, it involves a series of back and forth discussions regarding hazards through project specific documents such as the Scope of Work, Request for Proposals (RFP), Safety Management Plan, Environmental Implementation Plan and the Site Specific Plans developed by potential contractors bidding on the project. Through this iterative process, the finalized Site Specific Plans *and the Master Service Agreements* are produced which identifies and analyses project related hazards. For Canada Gas Operations, the *Integrated PSR-Operating Model Business Practice Procedure* and the *General Work Permit Procedure* are the primary documents that guide this process. Audit Staff reviewed records generated from these documents and interviewed the Auditee staff whose responses were consistent and in alignment with the documented process.

The Site Specific Plans require that site specific hazards be identified and analyzed by such means as:

- Meetings such as project kickoff, pre-job, tailgate, weekly.
- Completion of Job Safety Analysis Forms.
- Completion of Field Level Hazard Assessments Forms.
- Issuance of General Work Permits.
- Daily Inspections.

Audit Staff reviewed records generated from these documents and interviewed the Auditee's staff whose responses were consistent and in alignment with the documented process. As a result, a process to identify and analyze hazards is established and implemented at a site level.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-04: Hazard Inventory

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(d)** establish and maintain an inventory of the identified hazards and potential hazards.

**Expected Outcomes:** The company is able to demonstrate that it has identified the hazards and potential hazards associated with the pipeline construction contractor oversight activities and has included them in the inventory. Specific areas for demonstration related to this protocol question include:

- the company has a compliant inventory that is established and maintained;
- the inventory includes hazards and potential hazards associated within the company scope of operations and activities through the lifecycle of the pipelines;
- hazards and potential hazards are identified for the control room;
- the inventory has been maintained, it is current, and is up-to-date including changes made to company operations and activities; and
- the inventory is being used as part of the risk evaluation and controls processes.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *Environment Program Framework*
- *Safety Management Program Document*
- *Program Hazard Barrier Inventory*
- Examples of project specific Risk Registers, Environmental Management Plans, and Safety Management Plans

### Assessment:

Audit Protocol #3 (above) describes in detail the process involved in identifying and analyzing a hazard. Outputs of those processes include a company-wide *Program Hazard-Barrier Inventory* that all projects can refer to when first identifying and analyzing project specific hazards and barriers. A refined list exists in the Project Risk Register and is elaborated in the Site Specific Plans. The mandated programs require that the hazard barrier inventory is updated at least annually. As a result, an inventory of the hazards are established for each project.

### Finding: No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-05: Risk Assessment

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(e)** establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal conditions.

**Expected Outcome:** The company is able to demonstrate that they have evaluated and are managing the risks of the identified hazards associated with the pipeline construction contractor oversight activities, including the risks related to normal and abnormal conditions. Specific areas for demonstration related to this protocol question include:

- the company has a compliant process for evaluating and managing risks that is established and implemented;
- the method(s) for risk evaluation and managing the risks are based on referenced regulatory standards and are appropriate for the nature, scope, scale, and complexity of the company's operations, activities, and s.55 programs ;
- risk is evaluated for all hazards and potential hazards and includes normal and abnormal conditions;
- risk levels are monitored on a periodic basis as-needed, and re-evaluated for changing circumstances;
- risk is managed using defined method(s) appropriate to the s.55 programs; and
- risk acceptance criteria is determined for all hazards and potential hazards.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TC Energy Operational Management System Manual (TOMS).*
- *Risk Management Standard*
- *Risk Management Procedure*
- *Contingency Planning Process*
- *Project Delivery Standard*
- *PDS – Risk Management Procedure*
- *PDS – Risk Management Plan*
- *Contractor Safety Management Practice*
- *OHS Standards Prime General Contractors*
- *Safety Management Program*
- *PDS- Environmental Management Procedure*
- *Project Delivery Standard – Environment Implementation Plan – Deliverable Description*
- *JSA Procedure*
- *General Work Permit Procedure*
- Project specific examples of deliverables related to the above documents

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(e)** establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal conditions.

**Assessment:**

Element 2 of the *TOMS Manual*, the *Risk Management Standard*, and the *Risk Management Procedure*, requires risk management as a mandatory requirement within each business unit and mandated program. The Risk Management Procedure outlines a 7 step process of which all Business Units and Mandatory Programs must follow.

Steps 5 and 6 of the *Risk Management Procedure* discuss how risks associated with hazards are to be evaluated and treated. Business Unit Leadership is accountable for determining the criteria and thresholds to prioritize the risk treatment. Business Unit Leadership, and Mandated Program owners determine options for risk treatment. The Auditee had recently implemented a *Contingency Planning Process*, which accounts for abnormal conditions. After reviewing the documentation, the Auditors are of the opinion that, for the focus of this audit, a process to evaluate and manage risk is established at a corporate level.

Canada Gas Projects and Canada Gas Operations both follow the *Project Delivery Standard*. This standard requires a set of deliverables based on the project level. The deliverables that project levels B to D all require include: a Risk Register, a Risk Management Plan, and Plans related to the mandated programs (e.g. Environmental Implementation Plan, and a Safety Management Plan). Each plan applies the *Risk Management Procedure* at a project specific level. These plans intersect with the risk requirements within each mandated program.

Risk management is connected to the contractor through several documents including: the Master Service Agreement, the Scope of Work, the *Occupational Health & Safety Standards for Prime/General Contractors*, the *Contractors Safety Management Practice*, the Safety Management Plan, and for projects of levels B to D, the Environmental Implementation Plan. The contractors are required to create Site Specific plans that further refine the risks evaluation and treatment (e.g. Site Specific Safety Plan and Site Specific Environmental Plan).

The *Job Safety Analysis Procedure* and the *General Work Procedure* further address how safety related risks are to be managed by both contractors and the Auditee staff.

Based on an evaluation of the documentation provided, and the scope of the audit, Audit Staff are of the opinion that the process had been established. However, record reviews and interviews with the Auditee's staff indicate that the process and supporting procedures and work instructions have not been fully implemented.

The *Project Delivery Standard – Risk Management Plan Deliverable Description* states a Risk Management Plan is required for project levels B, C, and D. Review of the sample projects yielded one level B project with a risk management plan that was insufficient for the nature, scale, and complexity of work of the project. Additionally the Auditors found inconsistencies during record sampling and interviews. During several interviews, the Auditee's staff who worked on specific projects were either not aware of the hazard barrier inventory, or were aware of it but did not use it during risk evaluation and mitigation.

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(e)** establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal conditions.

**Finding:** Non-compliant.

Based on the information made available and reviewed by the Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. Audit sampling uncovered several projects that did not follow the risk management requirements as developed for the Auditee management system. A CAPA Plan must be developed to analyze, address and manage these deficiencies.



## AP-06: Controls

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(f)** establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks.

**Expected Outcome:** The company is able to demonstrate that it has developed and implemented controls for the identified hazards associated with the pipeline construction contractor oversight activities and that it has communicated the risk controls to anyone exposed to the risks. Specific areas for demonstration related to this protocol question include:

- the company has a compliant process for developing and implementing risk controls;
- the method(s) for developing risk controls are appropriate for the nature, scope, scale, and complexity of the company's operations and activities and s.55 programs;
- risk controls are developed and implemented;
- risk controls are adequate to prevent, manage and mitigate the identified hazards and risks;
- risk controls are monitored on a periodic basis and as-needed and re-evaluated for changing circumstances; and
- risk controls are communicated to those exposed to the risks.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TOMS Manual*
- *Risk Management Standard*
- *Risk Management Procedure*
- Samples of:
  - Project Safety Management Plan
  - Project Environmental Implementation Plan
  - Site Specific Safety Plan authored by contractor
  - Site Specific Environmental Protection Plan authored by contractor
  - Project specific Job Safety Analysis
  - Project specific General Work Permits

### Assessment:

Element 2 of the *TOMS Manual*, the *Risk Management Standard*, and the *Risk Management Procedure*, mandates risk management as a mandatory requirement within each business unit and mandated program. The *Risk Management Procedure* outlines a 7-step process of which all Business Units and mandatory programs must follow. Step 6 specifically addresses risk treatment which encompasses the identification and implementation of controls.

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(f)** establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks.

Both the Auditee's staff and the contractors contribute to developing controls, which are listed in the Auditee management plans (e.g. Safety Management Plan, and the Environmental Implementation Plan); and the contractor developed site specific plans (e.g. Site Specific Safety Plan and the Site Specific Environmental Plan). Communication of the controls occurs through a variety of means, such as: access to the aforementioned plans; job training; various meetings with different audiences (pre-phase, kick-off, weekly, daily); Field Level Hazard Assessment Forms (FLHA's); Environmental Alignment Sheets; and daily supervision by the contractor foreman and the Auditee's inspectors. These same tools are used to monitor and re-evaluate risks and effectiveness of controls, when needed, in addition to inspections, and daily reports.

Audit Staff conducted interviews and sampled projects to assess implementation of this process. Interviewee responses were consistent with the written process. While records existed verifying that most activities were occurring, a review of Job Safety Analysis (JSA) forms and General Work Permits (GWP) across several projects found that numerous forms were not properly completed. As an example, some forms were incomplete, some were not signed-off, and some did not meet internally set requirements (e.g. GWP cannot extend beyond a 90 day limit but some GWP's were extended past this date). As a result, the Auditors found the process was not fully implemented.

**Finding:** Non-compliant

Based on the information made available and reviewed by the Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. Audit sampling uncovered several projects where risk management controls set forth by the Auditee's management system were not implemented. A CAPA Plan must be developed to analyze, address and manage these deficiencies.

## AP-07: Legal

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(g)** establish and implement a process for identifying, and monitoring compliance with, all legal requirements that are applicable to the company in matters of safety, security and protection of the environment

**Expected Outcome:** The company is able to demonstrate that it has established and implemented a process for

- The company has a process for identifying and monitoring compliance with legal requirements.
- The method(s) for identifying and monitoring compliance with legal requirements are appropriate for the nature, scope, scale, and complexity of the company's operations and activities and s.55 programs.
- The identification of legal requirements includes an adequate method to identify all of the applicable regulation and standards, including CER orders and conditions, to the clause level.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Legal Requirement Monitoring Process*
- *Safety Management Program*
- *Environmental Program Framework*
- *Project Governance Program*
- *PDS – Regulatory Management Procedure*
- *PDS – Commitment and Compliance Procedure*
- Project specific examples of deliverables related to the above documents

### Assessment:

Element 7 of the *TOMS Manual* outlines compliance requirements that each business unit and mandated program must follow. Each mandated program, such as the *Safety Management Program* and the *Environment Program Framework*, outlines how it meets the compliance requirements set forth in the *TOMS Manual*. The *Legal Requirement Monitoring Process* further details how legal requirements are identified and monitored via a Legal Registry. Various other tracking tools are used to manage legal and other commitments. Based on the scope of the audit, Audit Staff are of the opinion this process is established and implemented.

### Finding: No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-08: Management of Change

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(i)** establish and implement a process for identifying and managing any change that could affect safety, security or the protection of the environment, including any new hazard or risk, any change in a design, specification, standard or procedure and any change in the company's organizational structure or the legal requirements applicable to the company;

**Expected Outcome:** The company is able to demonstrate that it has established and implemented a process for

- The company has a compliant process for identifying and managing change.
- Methods are defined to identify and manage change.
- Impacts to the company management system and s.55 programs are identified and assessed.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Management of Change Element Standard*
- *Controlled Document Library Major Change Management Procedure*
- *Controlled Document Library Minor Change Management Procedure*
- *Controlled Document Library Retirement Change Management Procedure*
- *Controlled Document Variance Procedure*
- *PDS – Management of Change Plan*
- *PDS – Project Design Management of Change Procedure*
- *Operations & Engineering MOC Project Change Procedure*
- *Technical and Physical Change Procedure*
- *TOMS Leadership Management of Change Procedure*
- *HR Change Management Toolkit*
- samples of project specific documents including:
  - Project Controls Plan
  - Project Execution Plan
  - Request for Information
  - Change Order Request Notice
  - Pipeline Integrity Project Change Request Form
  - Master Service Agreement

### Assessment:

Element 5 of the *TOMS Manual* discusses management of change requirements that business units and mandated programs must follow. Changes are categorized as either document; technical; and/or people. The type of change, business unit, and discipline dictates which management of change procedures and work instructions must be followed. Management of change requirements that are related to Contractors is communicated via documents such as the Master Service Agreement, the Project Execution Plan, the discipline specific plans and the Quality Management Plan.

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(i)** establish and implement a process for identifying and managing any change that could affect safety, security or the protection of the environment, including any new hazard or risk, any change in a design, specification, standard or procedure and any change in the company's organizational structure or the legal requirements applicable to the company;

Auditors sampled the aforementioned plans plus a variety of forms used for management of change between the company and the contractor including, Request for Information, Design Change Notice, Change Order Request Notice. Based on the scope of the audit, Audit Staff are of the opinion this process is established and implemented.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-09: Competency and Training Programs

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(j)** establish and implement a process for developing competency requirements and training programs that provide employees and other persons working with or on behalf of the company with the training that will enable them to perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

**Expected Outcome:** The company is able to demonstrate that it has established and implemented a process for

- The company has a compliant process for developing competency requirements and training programs.
- The company has defined what competency requirements are required.
- Training programs are traceable and trackable to the defined competency requirements and effective at achieving the desired competencies.
- Employees and those working on behalf of the company are competent to carry out their assigned work.
- Provide persons working with or on behalf of the company with adequate training applicable to s.55 programs and the management system.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Roles, Responsibilities and Competency Procedure*
- *PDS Procurement and Contracting Procedure*
- *PDS Supplier Qualification Process*
- Samples of:
  - Master Service Agreement
  - Request for Proposal
  - Project Management Plans
  - Site Specific Plans authored by the contractor
  - Competency Assessment Forms
  - Contractor Management Systems Requirements Template

### Assessment:

Element 4 of the *TOMS Manual* describes requirements relating to the roles, responsibilities and competencies required by each business unit and mandated program. The mandated programs further discuss how the roles, responsibilities and competencies will be met. Contractor specific training and competency requirements are achieved via a series of screening tools. First, the *PDS Supplier Qualification Process Procedure* describes minimum requirements a contractor, as an organization, must meet prior to qualifying as a contractor which the Auditee can use. The *PDS - Procurement and Contracting Procedure* outlines how training requirements and competency assessments are further identified and assessed via the Request for Proposal, Bid Package, Master Service Agreements, Company Project Management Plans, and contractor Site Specific Plans. These documents also include the minimum expectations that contractors need to meet for their training and competency procedures and work instructions. Based on the scope of the audit, Audit Staff are of the opinion that this process is established.

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(j)** establish and implement a process for developing competency requirements and training programs that provide employees and other persons working with or on behalf of the company with the training that will enable them to perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

Interviews with Auditees and record checks indicate that the established process is being used. Based on the scope of the audit, Audit Staff are of the opinion that this process is implemented.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-10: Training and Competency Verification

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(k)** establish and implement a process for verifying that employees and other persons working with or on behalf of the company are trained and competent and for supervising them to ensure that they perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

**Expected Outcome:** The company can demonstrate that it has established and implemented a process for

- The company has a compliant process for verifying employees and other persons are trained and competent.
- Records are maintained demonstrating employees and other persons working on behalf of the company are trained and competent as applicable to s.55 programs.
- The company has a compliant process for supervising employees and other persons working on behalf of the company.
- Supervision of employees and other persons is adequate to ensure they perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Roles, Responsibilities and Competency Procedure*
- *PDS Procurement and Contracting Procedure*
- *PDS Supplier Qualification Process*
- *Contractor Management Systems Requirements Template*
- Samples of:
  - Master Service Agreement
  - Request for Proposal
  - Project Management Plans
  - Site Specific Plans authored by the contractor
  - Competency Assessment Forms

### Assessment:

Training and competency of the contractor, as an organization, is assessed during the prequalification phase, and during the bidding process, as described in the previous Audit Protocol section.

The training and competency of personnel working for a contractor begins with ensuring the personnel onsite have the basic minimum training qualifications. Various communication tools provide instruction to the contractor personnel with respect to minimum expectations. These tools include: kick-off meetings; pre-phase meetings, onboarding training, weekly and daily meetings and morning tailgate meetings. Specific roles, such as heavy equipment operators, are specifically assessed for competency during early stages of the work, and this assessment is recorded. General competency is assessed on an on-going basis through inspections, feedback from on-site personnel, daily reports and incident tracking. For example, interviewees indicate that they target their inspections to assess 100% of the requirements specified in the Safety Management Plans and



**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(k)** establish and implement a process for verifying that employees and other persons working with or on behalf of the company are trained and competent and for supervising them to ensure that they perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

Environmental Protection Plans. The Auditee provides discipline specific inspectors to assess all work being conducted in the field. Audit Staff interviewed environmental, safety, and quality specialist's specific to several projects where they discussed their participation is assessing competency against the Management Plans. Based on the scope of the audit, the Auditors are of the opinion that the process is established.

The Auditors sampled completed inspection forms, daily reports and completed competency assessments, all of which were in alignment with the provided procedures, processes, and interviewee comments. Based on the scope of the audit, the Auditors are of the opinion that the process is implemented.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-11: Communication – Awareness of Responsibilities

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(I)** establish and implement a process for making employees and other persons working with or on behalf of the company aware of their responsibilities in relation to the processes and procedures required by this section.

**Expected Outcome:** The company can demonstrate that it has established and implemented a process for

- The company has a compliant process for making employees and other persons aware of their responsibilities.
- Responsibilities are defined for employees and those other persons working on behalf of the company in relation to the processes and other requirements for OPR s.6.5.(1) a-x.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TOMS Manual*
- *Project Governance Program*
- *CGP Playbook*
- *Contractor Safety Management Practice*
- *Occupational Health Safety Standards for Prime/General Contractors*
- *Pipe Integrity Playbook*
- *PDS – Communication Management Procedure*
- *Environment Program Framework*
- *Environment Design Standard*
- *Environment and Socio Economic Commitment Tracking*
- *Public Affairs Commitment Tracking Work Instruction*
- *Indigenous Relations Commitment Tracking Procedure*
- *Land Commitment Tracking Procedure*
- *PDS – Commitment and Compliance Procedure*
- *Safety Management Program*
- Project specific examples of deliverables related to the above documents (e.g. safety management plans, environmental implementation plans etc.)

### Assessment:

Element 4 of the *TOMS Manual* specifies requirements relating to roles, responsibilities, and competency. From these requirements, each mandated program and business unit further details how these requirements will be met. Contractor responsibilities are communicated via a variety of means.

Project specific documentation such as the Construction Management Plan, Emergency Response Plan, Environmental Protection Plan, and the Project Quality Plan outline the roles and responsibilities for all persons working on-site. Contractor developed procedures and work plans, such as

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(l)** establish and implement a process for making employees and other persons working with or on behalf of the company aware of their responsibilities in relation to the processes and procedures required by this section.

the Site Specific Safety Plan, Site Specific Environmental Plan and Site Specific Quality Management Plan, further specifies roles and responsibilities of all persons working on-site.

The responsibilities in these documents are provided to the contractor's staff through onboarding orientations, kick-off meetings, tailgate meetings, and through forms such as the Field Level Hazard Assessment Form. Based on the scope of this audit, the Auditors are of the opinion that the process is established.

Interviews and record sampling align which indicates this process is being used. Based on the scope of this audit, the Auditors are of the opinion that the process is implemented.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-12: Communication – Internal and External

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(m)** establish and implement a process for the internal and external communication of information relating to safety, security and protection of the environment.

**Expected Outcome:** The company can demonstrate that it has established and implemented a process for

- The company has a compliant process that is established and implemented.
- The methods for both internal communication and external communication are defined.
- The company is communicating internally and externally related to safety, security and protection of the environment.
- Internal and external communication is occurring and it is adequate for the management system and s.55 program implementation.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Project Governance Program*
- *CGP Playbook*
- *Pipe Integrity Playbook*
- *PDS – Communication Management Procedure*

### Assessment:

The *TOMS Manual* is composed of 9 elements, each of which are foundational, or a required element, to the management system. The standards, procedures, practices, programs applied by the Auditee all cascade from the TOMS manual. Associated with each element is a list of requirements to which all business units and mandated programs must adhere. Mandated Programs are structured to discuss how these element requirements will be fulfilled. However, communication is not one of the 9 elements. As a result, Audit Staff are of the opinion that this process is not yet established.

The Auditee had provided numerous documents to demonstrate that communication to internal and external audiences relating to safety, security and the protection of the environment is occurring:

- Communication to and between the Auditee's staff and contractors start at the Request for Proposal (RFP) stage, through the Auditee's developed plans for mandated programs, the supporting contractor developed site specific plans, a variety of meetings and training, reports, JSA's, FLHA's and environmental alignment sheets.
- The PDS procedures also provide communication requirements. The *PDS – Communication Procedure* requires a communication plan for projects classified as levels C or D.
- The *PDS Environment Management Procedure*, and the *Canadian Environmental Design Standard* applies to projects where an Environment and Socio-Economic Assessment (ESA) is required. Consultation is required for these projects. Several instructional documents describe how commitments to Indigenous Communities and Stakeholders are tracked.

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(m)** establish and implement a process for the internal and external communication of information relating to safety, security and protection of the environment.

While many activities are occurring with respect to communication, they are not systematically or explicitly bound together via the foundational elements within the *TOMS Manual*.

**Finding:** Non-compliant

Based on the information made available and reviewed by Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. The *TOMS Manual* does not explicitly indicate communication as a required element of the management system, however it is a requirement under section 6 of the OPR. A CAPA Plan must be developed to analyze, address and manage these deficiencies.

## AP-13: Communication – Co-ordinate and Control

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(q)** establish and implement a process for coordinating and controlling the operational activities of employees and other people working with or on behalf of the company so that each person is aware of the activities of others and has the information that will enable them to perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

**Expected Outcome:** The company can demonstrate that it has established and implemented a process for

- The company has a compliant process that is established and implemented.
- The methods for coordinating and controlling operational activities are defined.
- Employees and other people working with or on behalf of the company are aware of the activities of others.
- Employees operational activities are planned, coordinated, controlled, and managed.
- People working for or on behalf of the company:
  - are pre-qualified for their assigned duties to ensure safety, the security of the pipeline and to protect the environment;
  - are assigned work plans that have been reviewed by the company and are assessed for the interoperation with the work to be performed by other people working on behalf of the company; and
  - have adequate oversight performed by company representatives for their assigned tasks to ensure safety, security of the pipeline and the protection of the environment.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Environmental Design Framework*
- *Safety Management Program*
- *Project Governance Program*
- *General Work Permit Procedure*
- *Occupational Health and Safety Standards for Prime / General Contractors*
- Samples of project related documents (Master Service Agreements, Management Plans, Site Specific Management Plans)

### Assessment:

Element 3 of the *TOMS Manual* provides requirements related to Operational Controls. Each mandated program is required to demonstrate how it will meet the requirements of the *TOMS Manual*. Coordinating and controlling operational activities is completed in a variety of means. It starts with the set of project related documents authored by both the company and the contractor. The information in these documents are provided to all workers through orientations, a variety of meetings (kick-off meetings, daily tailgate meetings, weekly and other daily meetings), general work permits and through FLHA's. Based on the scope of this audit, the Auditors are of the opinion that the process is established.

Through interviews and sampling of project specific documentation, Audit Staff saw evidence of the process being implemented.

**Finding:** No Issues Identified

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(q)** establish and implement a process for coordinating and controlling the operational activities of employees and other people working with or on behalf of the company so that each person is aware of the activities of others and has the information that will enable them to perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment.

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-14: Hazard Identification, Reporting and Control

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(r)** establish and implement a process for the internal reporting of hazards, potential hazards, incidents and near-misses and for taking corrective and preventive actions, including the steps to manage imminent hazards.

**Expected Outcome:** The company can demonstrate that it has established and implemented a process for

- The company has a compliant process that is established and implemented.
- The company has defined its methods for internal reporting of hazards, potential hazards, incidents and near-misses.
- Hazards and potential hazards are being reported as required by the company's process;
- Incidents and near-misses are being reported as required by the company's process;
- The company has defined how it will manage imminent hazards;
- The company is performing incident and near-miss investigations;
- The company's investigation methodology's are consistent and appropriate for the scope and scale of the actual and potential consequences of the incidents or near misses to be investigated;
- The company has defined the methods for taking corrective and preventive actions;
- The company can demonstrate through records that all corrective and preventative actions can be tracked to closure.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Safety Management Program*
- *Environmental Design Framework*
- *Project Governance Program*
- *Incident Management Program*
- *Occupational Health and Safety Standards for prime / general contractors*
- *Contractor Safety Management Practice*
- Samples of project specific documents relating to incident management

### Assessment:

Element 8 of the TOMS Manual specifies the requirements related to Incident and Non-Conformance Management. Each mandated program and business unit must demonstrate how the requirements will be met. The Incident Management Program specifies 5 key steps: response; notification; investigation; documentation; follow up and sharing of learnings. The documentation indicates that hazards, near misses, and incidents are all within its scope.

The project specific plans together with the *Occupational Health and Safety Standards for prime / general contractors* and the *Contractor Safety Management Practice*, are all developed by the Auditee and specify how contractors are to integrate into this process. The Auditee's staff indicated that contractor incident management processes are vetted and approved by the Auditee prior to signing a Master Service Agreement. The level of



**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(r)** establish and implement a process for the internal reporting of hazards, potential hazards, incidents and near-misses and for taking corrective and preventive actions, including the steps to manage imminent hazards.

involvement of the Auditee's participation in contractor incident management is determine by the nature of the incident and the capacity of the contractor. However, the classification of the severity of the incident will follow the Auditee's system.

For both imminent hazards and incidents, the worker is to notify the supervisor immediately, who then initiates response and notification protocols. The Auditee enters the incident into their software system. Depending on circumstances the contractor and/or the Auditee will participate in the investigation. Corrective actions are identified and assigned. Follow-up and sharing of learnings are completed via incident alerts, hazard advisories and through safety meetings. Based on the scope of this audit, the Auditors are of the opinion that the process is established.

Audit Staff sampled project specific documentation and conducted interviews with the Auditee's staff, which when combined indicated that the process is implemented as required.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-15: Contingency Plans

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55, **OPR s.6.5(1)(t)** establish and implement a process for developing contingency plans for abnormal events that may occur during construction, operation, maintenance, abandonment or emergency situations.

**Expected Outcome:** The company has a compliant process that is established and implemented.

- The company has methods for developing contingency plans for abnormal events that include construction, operations, maintenance, abandonment, and emergency situations.
- The company's contingency plans are developed, maintained, and apply to all s.55 programs.
- The company has the ability to implement contingency plans when required, for one or all s.55 programs at the same time.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Contingency Planning Process*
- *Contingency Planning Form*
- Project specific documentation

### Assessment:

Contingency processes followed by the Auditee are located under element 3 (operational controls) of the TOMS Manual. *The Contingency Planning Process* was implemented in 2019. Based on the scope of this audit, the Auditors are of the opinion that the process is established.

The Auditee will evaluate abnormal conditions through the use of existing operational controls. If no operational control exists, then a Contingency Plan will be triggered. To date pre-existing contingency plans have been sufficient in managing abnormal events. Thus, no new Contingency Plans have been created using this process at the time of the audit. Based on the scope of this audit, the Auditors are of the opinion that the process is implemented.

### Finding: No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-16: Hazard Identification, Inspecting and Monitoring

### Regulatory Requirement:

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(u)** establish and implement a process for inspecting and monitoring the company's activities and facilities to evaluate the adequacy and effectiveness of the programs referred to in section 55 and for taking corrective and preventive actions if deficiencies are identified.

### Expected Outcome:

- The company has a compliant process that is established and implemented.
- The company has developed methods for inspecting and monitoring their activities and facilities.
- The company has developed methods to evaluate the adequacy and effectiveness of the programs referred to in s.55.
- The company has developed methods for taking corrective and preventive actions when deficiencies are identified.
- The company is completing inspections and monitoring activities as per the company's process.
- The company retains records of inspections, monitoring activities, and corrective and preventative actions implemented by the company.

### Summary of Information Made Available by the Auditee:

- *TOMS Manual*
- *Safety Management Program*
- *Environmental Design Framework*
- *Quality Management Program Manual*
- *Quality Assurance Audit Procedure*
- *Project Governance Program*
- *PDS - Construction Management Procedure*
- *Contractor Safety Management Practice*
- *Construction Worksite Health Safety Environment Inspection Procedure*
- *Pipeline Construction Inspection Standard*
- *Non-conformance and Opportunity for Improvement Procedure*
- Samples of records relating to the above documents

### Assessment:

Element 9 of the *TOMS Manual* provides requirements related to Performance, Measurement and Monitoring. Each mandated program provides further details as to how these requirements will be met. The *Quality Management Program* requires the company and contractor to identify required product-specific verification, validation, monitoring, measurement, inspection and test plans, and product acceptance criteria. Inspection personnel independent of the construction contractors are on-site to ensure contractors are performing work according to the Auditee's specifications.

The *Project Governance Program*, through the *Project Delivery Standard*, requires that each project develop plans, such as a Safety Management Plan; Quality Management Plan; and Environmental Management plan. These plans must outline inspection requirements, and the Site Specific

**Regulatory Requirement:**

**OPR s.6.5(1)** a company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(u)** establish and implement a process for inspecting and monitoring the company's activities and facilities to evaluate the adequacy and effectiveness of the programs referred to in section 55 and for taking corrective and preventive actions if deficiencies are identified.

Plans developed by the contractors must align with these Auditee inspection requirements. Inspection results are reviewed by the Auditee's Construction Managers, Project Managers, and other relevant subject matter experts.

To resolve deficiencies, and initiate corrective actions, the contractor must follow the *Non-conformance and Opportunity for Improvement Procedure*. The *PDS – Construction Management Procedure* mandates that records of all inspections and monitoring activities, as well as their corrective actions, be retained within the Project Turnover Package. The Project Turnover Package is a set of documents compiled by the contractor, and given to the Auditee. It provides the Auditee a record of all key activities and monitoring results related to the project.

Audit Staff sampled project specific documentation and conducted interviews with the Auditee's staff, which when combined, indicate that the process is implemented as required.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-17: Quality Assurance Program

### Regulatory Requirement:

**OPR s.6.5(1)** A company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(w)** establish and implement a quality assurance program for the management system and for each program referred to in section 55, including a process for conducting audits in accordance with section 53 and for taking corrective and preventive actions if deficiencies are identified.

**Expected Outcome:** The company has a compliant quality assurance program.

- The quality assurance program comprises an integrated set of processes and procedures including inspections, monitoring, and auditing activities.
- The company's quality assurance program tests the adequacy and effectiveness of its management system.
- The company's quality assurance program examines each program referred to in s.55.
- The company's quality assurance program will conduct compliance and program audits as well as inspections.
- The company's quality assurance program takes corrective and preventive actions if deficiencies are identified.
- The company regularly monitors and evaluates its quality assurance program to check that the program is achieving the intended results.
- The company retains records of the quality assurance program monitoring and evaluation.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TOMS Manual*
- *Quality Management Program*
- *Quality Assurance Audit Procedure*
- *Contractor Quality Management System Requirements Template*
- *Integrated Assurance Process*
- *Environment, Land, Indigenous Relations Assurance Framework*
- *PDS – Project Quality Management Procedure Level A Projects*
- *PDS – Quality Management Procedure Level BCD Projects*
- Project specific examples of deliverables related to the above documents

### Assessment:

Element 9 of the *TOMS Manual*, Performance Monitoring, Assurance and Management Review, requires the Auditee to perform assurance activities to evaluate if its activities are aligned with requirements set forth in the *TOMS manual*. The *Quality Management Program* requires Business Units to develop their own Quality Plan and/or Playbook to describe quality related requirements, which include activities such as inspections, structured testing, and audits.

The *Integrated Assurance Process* coordinates assurance activities, which include inspections, self-assessments, management reviews, and audits. Assurance activities are categorized in tiers:

**Regulatory Requirement:**

**OPR s.6.5(1)** A company shall, as part of its management system and the programs referred to in section 55,

**OPR s.6.5(1)(w)** establish and implement a quality assurance program for the management system and for each program referred to in section 55, including a process for conducting audits in accordance with section 53 and for taking corrective and preventive actions if deficiencies are identified.

- Tier 1 – self conducted assurance activities such as inspections.
- Tier 2 – internal independent assurance activities such as audits conducted by internal personnel independent of the audited activity.
- Tier 3 – internal audits conducted by the internal audit department.
- Tier 4 – external audits conducted by an external or third party to the Auditee.

One of the output of the *Integrated Assurance Process* is an *Integrated Assurance Matrix*, which identifies items such as: the types of assurance activities; the departments involved; the tier; and the frequency the activity is to occur.

The *Quality Audit Assurance Procedure* provides direction on how audits are to be conducted and is applicable to the Technical Centre QA team.

The *PDS – Project Quality Management Procedure Level A Projects*, and the *PDS – Quality Management Procedure Level BCD Projects* further defines what is required for these various types of audits.

The CER Auditors sampled records generated from assurance activities of different tiers, and interviewed NGTL Auditors specialized in quality, health, and environment. The Auditee provided a list of tier 2 audits that had occurred over the last 2 years for environment (5), safety (19), and quality (>50). Interviews with NGTL-Auditors verified that audits of contractors related to the various disciplines had occurred, and many of the audits included an evaluation of contractor performance. However, no minimum criteria for quality assurance activities related to contractor oversight for the disciplines of environmental protection and safety management exists. As a result, the quality assurance program is not fully established for safety management and environmental protection.

To evaluate the implementation of the quality assurance program to section 53 of the OPR, the Auditors, among other items, reviewed *The Project Governance Quality Assurance Audit Report* dated 2019-06-03. Appendix A indicated that OPR sections 4(1), 4(2), and 54(1) were assessed. However, the Auditors saw no evidence of other legal requirements addressed in audit interviews and audit samples. The quality assurance program related to OPR s.53 is not fully implemented.

**Finding:** Non-compliant

Based on the information made available and reviewed by Audit Staff, the Auditee has been found Non-Compliant relating to items described in this protocol item. The Auditee's quality assurance program did not establish minimum requirements for contractor oversight related to environmental protection and safety management programs. The Auditee did not implement audits in accordance to OPR s.53. A CAPA Plan must be developed to analyze, address and manage these deficiencies.

## AP-18: Construction Safety – Contractor Management

### Regulatory Requirement:

**OPR s.S.18(1)** if a company contracts for the provision of services in respect of the construction of a pipeline, the company shall

- (a) inform the contractor of all special conditions associated with the construction;
  - (b) inform the contractor of all special safety practices and procedures necessitated by the conditions or features specific to the construction;
  - (b.1) inform the contractor of the contractor's responsibilities referred to in paragraph 6.5(1)(l);
  - (d) authorize a person to halt a construction activity in circumstances where, in the person's judgement, the construction activity is not being conducted in accordance with the manual developed under section 20 or is creating a hazard to anyone at the construction site
- s.18(2) The person referred to in paragraph s.18(1)(d) must have sufficient expertise, knowledge and training to competently carry out the obligations set out in that paragraph.

**Expected Outcome:** Contractors have adequate information from the Auditee regarding special conditions associated with the construction activities.

- Subcontractors have adequate information from contractors regarding applicable special conditions.
- Contractors have adequate information on the Auditee special safety practices and procedures.
- Subcontractors have adequate information on the applicable special safety practices.
- Contractors and subcontractors have been made aware of their responsibilities by the Auditee.
- The Auditee will perform adequate oversight over the contractors and subcontractors to ensure activities are conducted in accordance to the construction safety manual s. 20.
- A competent person has responsibility to halt construction activity as required by the construction safety manual or if the construction activity is creating a hazard.

### Summary of Information Made Available by the Auditee:

Examples of key documents the Auditee provided to demonstrate compliance with this requirement include:

- *TOMS Manual*
- *Safety Management Program*
- *Occupational Health and Safety Standards for Prime / General Contractors*
- *Contractor Safety Management Practice*
- Project specific examples of deliverables related to the above documents

### Assessment:

The Auditee informs its contractors of all special conditions, special safety practices, and responsibilities through processes previously described in AP-03, AP-04, AP-05, AP-06 and AP-11. Communication begins at the bidding stage through the Request for Proposal document, and continues through contractor selection, development of JSA's, through various meetings with contractor staff, and through FLHA's.

**Regulatory Requirement:**

**OPR s.S.18(1)** if a company contracts for the provision of services in respect of the construction of a pipeline, the company shall

- (a) inform the contractor of all special conditions associated with the construction;
  - (b) inform the contractor of all special safety practices and procedures necessitated by the conditions or features specific to the construction;
  - (b.1) inform the contractor of the contractor’s responsibilities referred to in paragraph 6.5(1)(l);
  - (d) authorize a person to halt a construction activity in circumstances where, in the person’s judgement, the construction activity is not being conducted in accordance with the manual developed under section 20 or is creating a hazard to anyone at the construction site
- s.18(2) The person referred to in paragraph s.18(1)(d) must have sufficient expertise, knowledge and training to competently carry out the obligations set out in that paragraph.

The *Safety Management Program Document* provides authority to all employees, contractors and subcontractors to halt construction if they believe an unsafe condition exists or is imminent. The program also expects personnel to understand all risks and hazards in their specific operations. That expectation, in addition to the presence of an inspector and foreman onsite, positions which require significantly more experience than that of the crew, satisfies the requirements for individuals to be on-site who have sufficient competence to recognize a situation that is potentially unsafe.

Auditors sampled project specific documentation and conducted interviews with the Auditee’s staff, which when combined indicated that the process is implemented as required.

**Finding:** No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.



## AP-19: Construction Safety Hazard and Informed

### Regulatory Requirement:

**OPR s. S.19(a)(b)** 19 a company shall, during the construction of a pipeline, take all reasonable steps to ensure that

(a) the construction activities do not create a hazard to the public or the environment; and

(b) all persons at the construction site who are not involved in the construction of the pipeline are informed of the practices and procedures that are to be followed for their safety.

### Expected Outcome:

- Risks have been mitigated associated with the hazards of the construction activities.
- Adequate controls are in place to ensure the safety of visitors.
- Visitors to the site are aware of the hazards, practices and procedures to be followed.

### Summary of Information Made Available by the Auditee:

- *Occupational Health and Safety Standards for Prime / General Contractors*
- *Environmental Program Framework*
- *Safety Management Program*
- *Canadian Environmental Design Standard*
- *Facilities Construction Specification*
- *Pipeline Construction Specification*
- *Project Tour Request Form*
- sampled records related to specific projects (e.g. safety management plans, site specific safety plans, environmental management plans)

### Assessment:

AP-03 to AP-06 as described above discuss the processes employed by the Auditee to manage hazards to the public and the environment.

Persons at the construction site but not involved in the construction of the pipeline are informed of safe practices and procedures by a mandatory visitor orientation, and by being accompanied by the Auditee's staff while visiting a site.

Similarly, for active control projects, visitors are not allowed in work areas without being accompanied by a company representative, and must complete an orientation prior to entering the site. Typically, active control projects are those that occur during operations and maintenance of the pipeline, where all supervisory activities are conducted by the Auditee's staff.

Visitors are also required to review the JSA's and sign the FLHA's for the sites they are visiting.

### Finding: No Issues Identified

Based on the information made available and considering the scope of this audit, Audit Staff did not identify non compliances relating to this protocol item at the time of the audit.

## AP-20: Construction Safety – Construction Safety Manual

### Regulatory Requirement:

**OPR s. S.20 (1)** a company shall develop a construction safety manual and shall submit it to the Board.

(1.1) If a company contracts for the provision of services in respect of the construction of a pipeline, the construction safety manual shall set out the contractor's responsibilities referred to in paragraph 6.5(1)(l).

(2) A company shall keep a copy of the construction safety manual or the relevant parts of it at each construction site of the pipeline, in a location where it is accessible to every person engaged in construction at the site.

### Expected Outcome:

- Construction safety manual contains the project construction activities organizational structure, defined roles, responsibilities, practices, procedures and references associated site specific safety plans.
- The construction safety manual is adequately accessible to the construction workforce.

### Summary of Information Made Available by the Auditee:

- Samples of project specific Construction Safety Manuals

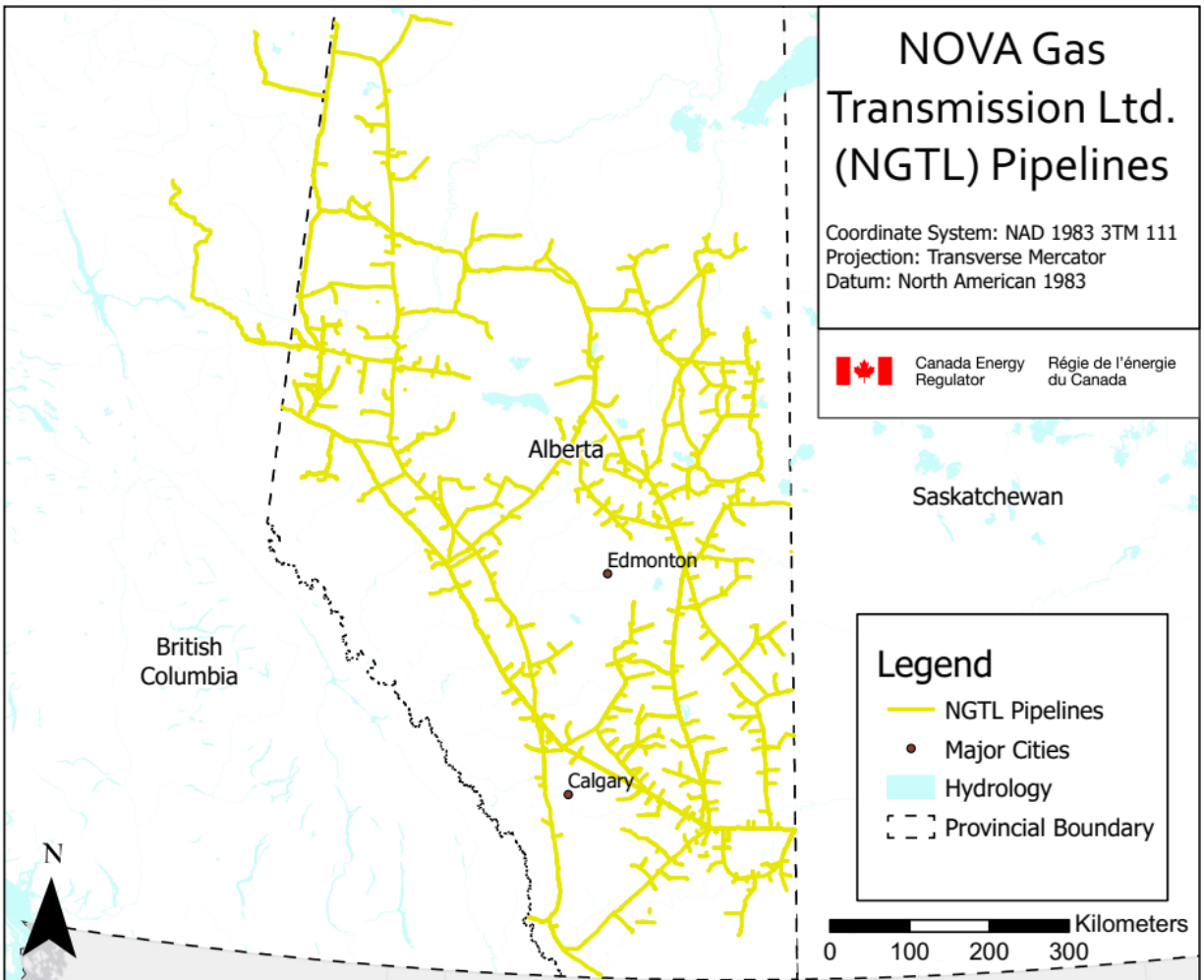
### Assessment:

Construction Safety Manuals were submitted to the CER for the projects sampled. Because this audit was conducted virtually, Auditors did not visit any work sites and were not able to observe the presence or absence of these manuals on site. However, interviewees confirmed that the manual was onsite and accessible to relevant persons.

### Finding: No Issues Identified

Based on the information made available and considering the scope of this audit, audit staff did not identify non compliances relating to this protocol item at the time of the audit.

## Appendix 2.0 - Maps and System Descriptions



The map is a graphical representation intended for general informational purposes only. Map produced by the CER, October, 2020, Last updated on Oct 16

## Appendix 3.1 - Abbreviations

The following abbreviations were used in this report:

AO: Accountable officer

AP: Audit Protocol

CAPA: Corrective and Preventative Actions

CER: Canada Energy Regulator

CER Act: *Canadian Energy Regulator Act*

CSA: Canadian Standards Association

EHS: Environment, Health and Safety

FLHA: Field Level Hazard Assessment

IR: CER Audit Information Request

JSA: Job Safety Analysis

MOC: Management of change

MR: Management Review

MS: Management System

NEB: National Energy Board, replaced by CER on 28 August 2019

OMS: Operating Management System

OPR: *Canadian Energy Regulator Onshore Pipeline Regulations*

SOP: Standard Operating Procedure

SWP: Safe Work Permit

## Appendix 3.2 - Glossary of Terminology and Definitions

*(The CER has applied the following definitions and explanations in measuring the various requirements included in this audit. They follow or incorporate legislated definitions or guidance and practices established by the CER, where available, and this will continue under the CER.)*

**Adequate:** The management system, programs or processes complies with the scope, documentation requirements and, where applicable, the stated goals and outcomes of the CER Act, its associated regulations and referenced standards. Within the CER's regulatory requirements, this is demonstrated through documentation.

**Audit:** A systematic, documented verification process of objectively obtaining and evaluating evidence to determine whether specified activities, events, conditions management systems or information about these matters conform to audit criteria and legal requirements and communicating the results of the process to the company.

**Compliant:** The CER uses this term to indicate that, based on the information made available and reviewed, no non-compliances relating to the protocol item referenced were identified during the audit. A Corrective and Preventive Corrective Action (CAPA) plan is not required to be developed.

**Corrective Action Plan:** A plan that addresses the non-compliances identified in the audit report and explains the methods and actions that will be used to correct them.

**Developed:** A process or other requirement has been created in the format required and meets the described regulatory requirements.

**Effective:** A process or other requirement meets its stated goals, objectives, targets and regulated outcomes. Continual improvement is being demonstrated. Within the CER's regulatory requirements, this is primarily demonstrated by records of inspection, measurement, monitoring, investigation, quality assurance, audit and management review processes as outlined in the OPR.

**Established:** A process or other requirement has been developed in the format required. It has been approved and endorsed for use by the appropriate management authority and communicated throughout the organization. All staff and persons working on behalf of the company or others that may require knowledge of the requirement are aware of the process requirements and its application. Staff has been trained on how to use the process or other requirement. The company has demonstrated that the process or other requirement has been implemented on a permanent basis. As a measure of "permanent basis", the CER requires the requirement to be implemented, meeting all of the prescribed requirements, for three months.

**Finding:** The evaluation or determination of the compliance of programs or elements in meeting the requirements of the *Canadian Energy Regulator Act* and its associated regulations.

**Implemented:** A process or other requirement has been approved and endorsed for use by the appropriate management authority. It has been communicated throughout the organization. All staff and persons working on behalf of the company or others that may require knowledge of the requirement are aware of the process requirements and its application. Staff has been trained on how to use the process or other requirement. Staff and others working on behalf of the company have demonstrated use of the process or other requirement. Records and interviews have provided evidence of full implementation of the requirement, as prescribed (i.e., the process or procedures are not partially utilized).

**Inventory:** A documented compilation of required items. It must be kept in a manner that allows it to be integrated into the management system and management system processes without further definition or analysis.

**List:** A documented compilation of required items. It must be kept in a manner that allows it to be integrated into the management system and management system processes without further definition or analysis.

**Maintained:** A process or other requirement has been kept current in the format required and continues to meet regulatory requirements. With documents, the company must demonstrate that it meets the document management requirements in OPR, section 6.5(1)(o). With records, the company must demonstrate that it meets the records management requirements in OPR, section 6.5 (1)(p).

**Management System:** The system set out in OPR sections 6.1 to 6.6. It is a systematic approach designed to effectively manage and reduce risk, and promote continual improvement. The system includes the organizational structures, resources, accountabilities, policies, processes and procedures required for the organization to meet its obligations related to safety, security and environmental protection.

*(The CER has applied the following interpretation of the OPR for evaluating compliance of management systems applicable to its regulated facilities, and this will continue under the CER).*

*As noted above, the CER management system requirements are set out in OPR sections 6.1 to 6.6. Therefore, in evaluating a company's management system, the CER considers more than the specific requirements of section 6.1. It considers how well the company has developed, incorporated and implemented the policies and goals on which it must base its management system as described in section 6.3; its organizational structure as described in section 6.4; and considers the establishment, implementation, development and/or maintenance of the processes, inventory and list described in section 6.5(1). As stated in sections 6.1(c) and (d), the company's management system and processes must apply and be applied to the programs described in section 55.*

**Manual:** A document that contains a set of instructions on methods which are employed to accomplish a result. These instructions will be detailed and comprehensive. The document will be organized for ease of use.

**Non-Compliant:** The audited company has not demonstrated that it has developed and implemented programs, processes and procedures that meet the legal requirements relating to the protocol item referenced. A Corrective and Preventive Corrective Action (CAPA) plan must be developed for approval and implemented.

**Plan:** A detailed, documented formulation for action to achieve an end.

**Practice:** A repeated or customary action that is well understood by the persons authorized to carry it out.

**Procedure:** A procedure indicates how a process will be implemented. It provides a documented series of steps followed in a regular and defined order thereby allowing individual activities to be completed in an effective and safe manner. A procedure also outlines the roles, responsibilities and authorities required for completing each step.

**Process:** A documented series of actions taking place in an established order, with identified roles and responsibilities, and directed towards a result. A process includes the roles, responsibilities and authorities for the actions. A process may contain a set of procedures, if required.

*(The CER has applied the following interpretation of the OPR for evaluating compliance of management system processes applicable to its regulated facilities.)*

*OPR section 6.5(1) describes the CER's required management system processes. In evaluating a company's management system processes, the CER considers whether each process or requirement: has been established, implemented, developed or maintained as described within each section; whether the process is documented; and whether the process is designed to address the requirements of the process, for example a process for identifying and analyzing all hazards and potential hazards. Processes must contain explicit required actions including roles, responsibilities and authorities for staff establishing, managing and implementing the processes. The CER*

*considers this to constitute a common 5 w's and h approach (who, what, where, when, why and how). The CER recognizes that the OPR processes have multiple requirements; companies may therefore establish and implement multiple processes, as long as they are designed to meet the legal requirements and integrate any processes linkages contemplated by the OPR section. Processes must incorporate or contain linkage to procedures, where required to meet the process requirements.*

*As the processes constitute part of the management system, the required processes must be developed in a manner that allows them to function as part of the system. The required management system is described in OPR section 6.1. The processes must be designed in a manner that contributes to the company following its policies and goals established and required by section 6.3.*

*Further, OPR section 6.5(1) indicates that each process must be part of the management system **and** the programs referred to in OPR section 55. Therefore, to be compliant, the process must also be designed in a manner which considers the specific technical requirements associated with each program and is applied to and meets the process requirements within each program. The CER recognizes that single process may not meet all of the programs; in these cases it is acceptable to establish governance processes as long as they meet the process requirements (as described above) and direct the program processes to be established and implemented in a consistent manner that allows for the management system to function as described in section 6.1.*

**Program:** A documented set of processes and procedures designed to regularly accomplish a result. A program outlines how plans, processes and procedures are linked, and how each one contributes toward the result. Program planning and evaluation are conducted regularly to check that the program is achieving intended results.

*(The CER has applied the following interpretation of the OPR for evaluating compliance of programs required by the CER regulations.)*

*The program must include details on the activities to be completed including what, by whom, when, and how. The program must also include the resources required to complete the activities.*

## **Appendix 4.0 – List of Company Staff Interviewed and Documents Reviewed**

The lists of company staff interviewed and documents reviewed are maintained on file at the offices of the Canada Energy Regulator.