

## Chapter 22

# Energy and Resources—Regulating Pipelines

### 1.0 MAIN POINTS

This chapter reports the status of three recommendations we first made in our 2012 audit on the Ministry of Energy and Resource's processes to ensure compliance with *The Pipelines Act, 1998* and *The Pipelines Regulations, 2000*.

By March 2019, the Ministry had implemented all three recommendations we first made in our 2012 audit. The Ministry developed and implemented a risk-based assessment approach to verify pressure tests and assessed the risk of all pipelines in the province. The Ministry developed guidance for staff to evaluate ongoing pipeline operations. The Ministry is using reviews of operator Integrity Management Programs and Emergency Response Plans to monitor pipeline integrity and safety.

Effective regulation reduces the risk of pipeline failures. Pipeline failures caused by poor design or inadequate maintenance can seriously affect people, the environment, and the economy. A pipeline leak can contaminate both land and water.

### 2.0 INTRODUCTION

Saskatchewan people rely on the Ministry to regulate the safety of oil and gas pipelines. They expect the Ministry to verify that companies comply with applicable regulations, and have an effective regulatory regime. Effective regulatory processes and standards minimize the risk of disasters occurring.

Our *2012 Report – Volume 1*, Chapter 5 concluded that the Ministry of Energy and Resources did not have effective processes to ensure full compliance with *The Pipelines Act, 1998* and *The Pipelines Regulations, 2000*. We made seven recommendations. By March 31, 2017, as reported in our *2017 Report – Volume 1*, Chapter 18, the Ministry had implemented four of the recommendations.

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance (CSAE 3001)*. To evaluate the Ministry's progress towards meeting our recommendations, we used the relevant criteria from the original audit. The Ministry's management agreed with the criteria in the original audit.

We interviewed Ministry management and employees responsible for regulating pipelines, reviewed revised policies and procedures, and examined risk templates now used by the Ministry. We also tested a sample of the Ministry's risk assessment and inspection of pressure tests completed during the audit period.



## 3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at March 15, 2019, and the Ministry's actions up to that date.

### 3.1 Guidance for Monitoring of Compliance Provided

***We recommended that the Ministry of Energy and Resources develop written policies and procedures to guide staff when assessing pipeline design, monitoring pipeline construction, and evaluating pipeline operations*** (2012 Report – Volume 1, p.66, Recommendation 1; Public Accounts Committee agreement December 9, 2013)

**Status** – Implemented

The Ministry has developed and implemented guidance for assessing pipeline design and construction, and to monitor ongoing operations.

During 2018, the Ministry developed a pipeline inspector manual to provide staff with guidance when assessing pipeline operations and programs. The Ministry hired an independent consultant to help develop the manual. The Ministry and the consultant also provided training for staff once this guidance was completed.

The Ministry is required to enforce *The Pipelines Act, 1998* and *The Pipelines Regulations, 2000*. This legislation sets the minimum requirements for the design, construction, testing, operation, maintenance, and repair of pipelines to be the *Canadian Standards Association Standards – Z662 Standard*. The Standard is complex and contains detailed, technical requirements. We found the contents of the manual consistent with this Standard.

Also, at March 2019, the Ministry is working toward developing a Pipeline Regulatory Enhancement Program, which will integrate the licensing of monitoring of pipelines into an IT system. The Ministry expects to implement the first phase of the system by July 2019. The Ministry plans to develop a program manual, which will provide guidance to industry operators and Ministry staff as part of this initial phase.

Adequate written policies and procedures on each aspects of the Z662 Standard provide staff with the guidance necessary to carry out their work.

***We recommended that the Ministry of Energy and Resources monitor pipeline operator compliance with integrity management and safety processes for existing pipelines*** (2012 Report – Volume 1, p.69, Recommendation 6; Public Accounts Committee agreement December 9, 2013)

**Status** – Implemented

The Ministry assessed and completed a review of high-risk operators and pipelines in Saskatchewan during 2018 (i.e., assessed each pipeline's risk level and identified operators with the most high-risk pipelines).

During 2018, the Ministry developed a risk assessment tool to assess the risk of all pipeline licences in Saskatchewan (see recommendation on risk-based assessments below). It contracted a third-party engineering firm to help complete a review of four operators' Integrity Management Programs and Emergency Response Plans.

The objective of this work was to assess whether operators have sufficient systems and programs in place to mitigate and respond to pipeline incidents. The Ministry completed its review of the four operators. In March 2019, the Ministry gave findings to the operators and requested each operator to provide it with a corrective action plan.

Operators were also required to complete and submit compliance declaration forms for the approximately 2,200 licenced pipelines in the province. The Ministry used this information to update and monitor pipeline licences. As of March 2019, the Ministry received all compliance declaration forms, which the Ministry used to assess pipeline risk.

Monitoring pipeline operators' safety and integrity programs of their pipelines, reduces the risk of pipeline incidents that can affect the health and safety of people and the environment.

***We recommended that the Ministry of Energy and Resources implement a risk-based assessment approach to monitor pipeline construction and verify pressure tests*** (2012 Report – Volume 1, p.68, Recommendation 5; Public Accounts Committee agreement December 9, 2013)

**Status** – Implemented

At March 2019, the Ministry has developed and implemented a risk-based approach to monitor pipeline construction and verify pressure tests.

In 2018, the Ministry completed a risk assessment of all pipeline licences and operators in Saskatchewan. Ministry staff assessed the risk level of each pipeline based on multiple factors (e.g., length and age of pipeline, pipelines crossing water bodies, operator history of incidents, etc.). The assessment concluded that there are 42 high-risk pipelines (seven different operators have ownership of these pipelines). The Ministry used these risk assessments to direct a review of the operators' safety programs (see above for description of contracted work).

The Ministry also developed a risk matrix tool to guide staff in assessing whether a field inspection is required for specific events (e.g., construction of new pipelines, pressure tests, pipeline repairs, etc.). This tool also considers different pipeline risks (e.g., pipeline location and length, material transported, proximately to water bodies or urban centres, etc.). The risk tool indicates what level of staff (e.g., pipeline engineers, field technicians) are required to complete an inspection.

In 2018, Ministry staff reviewed and assessed 25 pressure tests on new and existing pipelines. Of the 25 pressure tests, the Ministry on-site inspected 18 of them based on the risk matrix tool. The Ministry assessed the remaining seven pressure tests as low risk using the risk matrix tool and did not complete an on-site inspection. It assigned responsibility to observe pressure tests to either pipeline engineers or technicians depending on its risk assessment of the pipeline.



We found that the Ministry consistently completed a risk assessment for each pressure test and appropriate staff completed a field inspection.

Having a specific risk-based assessment approach reduces the risk of the Ministry not focusing its monitoring resources on pipelines and operators presenting the highest risk to health and safety.