Chapter 10 Energy and Resources—Managing Future Cleanup of Oil and Gas Wells

1.0 Main Points

By February 2023, the Ministry of Energy and Resources improved its processes to regulate the future clean up of oil and gas wells by implementing the final two recommendations first made in our 2012 audit.

The Ministry continued to assess the environmental risks posed by legacy well sites through inspections. Saskatchewan has about 20,000 legacy well sites, of which, about 9,000 were producing wells (these wells were cleaned up, but not environmentally assessed by a third-party specialist). A well that previously produced oil or gas presents a higher environmental risk; the Ministry appropriately focused its inspection efforts on these formerly producing wells.

By February 2023, the Ministry inspected more legacy well sites than the minimum set by the Ministry to determine the environmental risks these well sites pose. It inspected 179 legacy well sites between 2015 and February 2023 and found only five out of the 179 sites with issues requiring further clean up work. We tested one of these five sites and found the Ministry took appropriate action and required the oil company to complete further site clean up and monitoring activities.

The Ministry also implemented *The Financial Security and Site Closure Regulations* in January 2023, requiring oil and gas companies to spend a pre-determined amount each year cleaning up their inactive wells in an effort to decrease the number of inactive wells over time. At December 2022, there were approximately 35,400 inactive wells in Saskatchewan.

In 2023, companies are required to spend 5% of their estimated total well and facility clean up costs, according to the formula set in the Regulations. We found the Ministry accurately calculated and communicated the required cleanup amounts to oil and gas companies. The Ministry expects over 200 oil and gas companies to spend about \$105 million cleaning up inactive wells in 2023. This will keep industry responsible for settling its obligations to clean up wells that are no longer productive in a timely manner.

2.0 Introduction

The Ministry of Energy and Resources is responsible for regulating the oil and gas industry under *The Oil and Gas Conservation Act*. Its responsibilities include regulating future clean up of oil and gas wells.

This chapter describes our third follow-up audit of management's actions on the recommendations we made in 2012 where we assessed the Ministry's processes for managing the future clean up of oil and gas wells. Our 2012 Report – Volume 2, Chapter 31, concluded for the period October 1, 2011, to September 30, 2012, the Ministry

did not have effective processes to manage the financial and environmental risks related to the future clean up of oil and gas wells and related facilities. We made seven recommendations. By February 2018, the Ministry implemented five recommendations and made progress on two others.

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 toward meeting our recommendations, we used the relevant criteria from the original audit. Ministry management agreed with the criteria in the original audit.

To carry out our follow-up audit, we interviewed Ministry staff responsible for managing its well cleanup programs and we assessed documents including relevant information tracked in the Ministry's related IT system (e.g., legacy well site inspection reports).

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 February 28, 2023, and the Ministry's actions up to that date.

3.1 Environmental Risk of Legacy Well Sites Assessed

We recommended the Ministry of Energy and Resources complete its assessment of the financial and environmental risks arising from legacy well sites, assess its liability, and develop a plan for cleaning up contaminated legacy well sites. (2012 Report – Volume 2, p. 253, Recommendation 8; Public Accounts Committee agreement December 9, 2013)

Status—Implemented

In 2018, the Ministry of Energy and Resources determined the proportion of legacy well sites needing to be inspected in order to assess the environmental risks of legacy well sites. The Ministry completed those inspections and results indicate limited environmental issues with legacy well sites.

Legacy well sites were cleaned up without an independent report by an environmental specialist. See **Figure 1** for a brief description of legacy well sites.

Figure 1—Legacy Well Sites

Legacy Well Sites are sites that received a release prior to 2007 from surface owners (e.g., farmers) or certificates issued pursuant to section 56(2) of *The Surface Rights Acquisition and Compensation Act*. The Ministry, in accordance with its legislation at the time, accepted the signed release or the certificate as evidence that the sites were restored to appropriate environmental standards or to the satisfaction of the landowner. The legislation <u>did not</u> require surface owners or licensees to provide the Ministry with independent reports by environmental specialists before the Ministry granted releases.

¹ 2012 Report - Volume 2, Chapter 31, pp. 239-255.

² 2018 Report – Volume 1, Chapter 17, pp. 219–232.

Saskatchewan has about 20,000 legacy well sites, of which, about 9,000 were formerly producing wells. Wells that produced oil or gas are more likely to present a higher environmental risk; the Ministry focused its inspections on formerly producing wells.

In 2018, a minimum sample of 137 legacy well sites, out of nearly 9,000 higher risk legacy well sites in Saskatchewan, were determined by the Ministry to need inspection to assure environmental risks are low. We found the minimum sample calculation appropriate.

Between 2015 and February 2023, the Ministry inspected 179 legacy well sites. Based on its inspections, the Ministry determined legacy well sites pose an overall low environmental risk, as less than 3% of sites inspected (5 of 179) resulted in finding contamination or sites requiring further reclamation work. When an inspection finds issues, it remains the industry's responsibility to pay for additional clean up work.³

Of the 179 sites inspected, the Ministry identified five sites with issues. We assessed one of these five well sites. We found when the Ministry identified environmental issues (e.g., crop growing poorly on remediated area, tanks remaining on site), it took appropriate action, including:

- Revoked the released status of the legacy well site
- Set milestones for the oil company to complete additional clean up work over time (e.g., assess area to identify all potential contaminants, remove tanks, conduct clean up work required based on contamination assessment)
- Required ongoing groundwater monitoring

For 16 inspections we tested, we found the Ministry completed site inspections as expected. We found the Ministry uses drones to photograph well sites at multiple heights and angles for efficient inspection. The Ministry plans to continue reviewing additional legacy well sites (beyond the 179 completed) using drones.

Sufficient inspection of legacy well sites helps the Ministry identify environmental issues that may exist at legacy well sites, as these sites lack independent assessment by environmental specialists. This allows the Ministry to hold oil and gas companies responsible for any issues found.

3.2 New Financial Requirement to Clean Up Inactive Wells

We recommended the Ministry of Energy and Resources manage the financial and associated environmental risks related to the timely cleanup of inactive wells and facilities. (2012 Report – Volume 2, p. 253, Recommendation 7; Public Accounts Committee agreement December 9, 2013)

Status—Implemented

³ If the legacy well site was owned and operated by an existing oil and gas company that company would pay for cleanup. For sites where the oil and gas company that operated the site no longer exists, the money for cleanup comes out of the Oil and Gas Orphan Fund, which collects levies from current oil and gas companies.



Effective January 1, 2023, the Ministry of Energy and Resources implemented the Inactive Liability Reduction Program to manage the increase of inactive wells in Saskatchewan. This requires oil and gas companies to spend a pre-determined amount each year on cleaning up inactive wells.

See Figure 2 for a brief description of inactive wells and facilities.

Figure 2—Inactive Wells and Facilities

Inactive wells and facilities are wells and facilities (equipment and structures) without any reported production, injection, or disposal activities for 12 consecutive months or longer. Inactive wells and facilities are owned by active licensees; licensees remain responsible for the associated clean up costs of inactive wells.

The number of inactive wells has increased steadily over time, until 2021, as noted in **Figure 3**. At December 2022, there were approximately 35,400 inactive wells in Saskatchewan.

Between 2020 and 2023, the Ministry's Accelerated Site Closure Program used funding of \$400 million provided by the Federal Government to stimulate economic activity and assist in the clean up of inactive oil and gas wells. Since the Accelerated Site Closure Program's implementation, the number of inactive wells has started to decrease.⁴

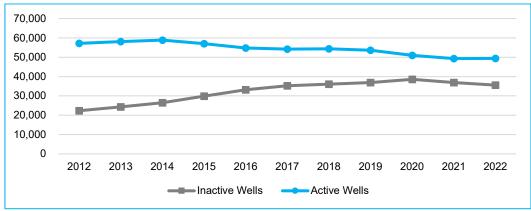


Figure 3—Number of Active and Inactive Wells in Saskatchewan

Source: Ministry of Energy and Resources records. Amounts for each year are as at December 31.

Effective January 1, 2023, the Ministry implemented *The Financial Security and Site Closure Regulations*. One aspect of these new regulations is the new Inactive Liability Reduction Program, which requires oil and gas companies to continually clean up inactive wells over time.

The new Inactive Liability Reduction Program requires companies to spend an amount determined by the Ministry each year on cleaning up inactive wells. For 2023, each oil and gas company is required to spend 5% of its estimated total well and facility cleanup cost, using the formula set in the Regulations. Also, the Regulations state the spend percentage will increase by 1% per year after 2023.⁵

⁴ The Accelerated Site Closure Program contributed to the clean up (i.e., abandonment) of about 8,800 previously inactive oil or gas wells. Well abandonment means pumping cement into the well hole to prevent any subsurface formation containing gas or fluids from leaking below ground or escaping above ground. https://www.saskatchewan.ca/government/news-and-media/2023/april/06/accelerated-site-closure-program-a-huge-success (6 April 2023).

⁵ The Financial Security and Site Closure Regulations, section 5-2(2).

We found the design of the program to be reasonable. We also found the Ministry's process to set the 2023 spend percentage of 5% to be reasonable. The Ministry estimated the impact of different percentages on the inactive well population in Saskatchewan. It selected percentages that it estimated would gradually reduce the population of inactive wells over time so the cost to clean up inactive wells is paid for by industry ('the polluter pay principal').

We assessed the Ministry's calculation of the 2023 spending requirements for each company and found the amounts to be appropriate. In addition, we found the Ministry appropriately communicated to the companies the requirements under this Program and provided the required cleanup spending amounts for the year. Based on this, the Ministry expects over 200 oil and gas companies to spend about \$105 million cleaning up inactive wells in 2023.

Effectively managing the inactive well population helps keep the industry sustainable while preventing an increase in inactive wells. It also helps to hold the industry responsible for settling its obligations to clean up wells that are no longer productive in a timely manner.