

Alberta Energy Regulator
Systems to Ensure
Sufficient Financial Security
for Land Disturbances
from Mining Followup

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Related Reports:

- [Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining](#) (July 2015 Report)
- [Management of Sand and Gravel Pits \(second followup\)](#) (July 2014 Report)
- [Management of Sand and Gravel Pits \(first followup\)](#) (April 2010 Report)
- [Management of Sand and Gravel Pits \(original audit\)](#) (October 2008 Report, p. 362)
- [Regulatory Approval Systems](#) (October 1999 Report, p 157)

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Report Highlights



With a long history of energy development & economic fluctuations, the oil and gas industry in Alberta has a growing liability related to abandoned or inactive oil & gas wells, pipelines, facilities, mines & their associated costs. p. 2



This audit focuses on the administration of the program not the overall MSFP program

AEP has yet to implement our July 2015 recommendation to improve the design of the MSFP system p. 3

MFSP

The Mine Financial Security Program (MFSP) is one of many government liability management programs p. 3

Alberta Environment & Parks (AEP) is responsible for the policy and design of the Mine Financial Security Program (MSFP)
The Alberta Energy Regulator (AER) administers the MSFP p. 3

As of June 30, 2018, AER held

\$1.46B
of financial security

VS

\$28.35B
(estimate)

in reclamation liabilities for mines p. 3

AER:

- uses a monthly assessment tool to monitor operators
- designed and uses an annual risk-based audit tool to assess operators
- applies a process to decide & complete sufficient numbers & types of audits guided by informed risk assessments p. 8



If a mine operator cannot or does not fulfill its reclamation obligations, **Albertans may have to pay the costs to complete conservation and reclamation work** p. 4



Under the program, AER oversees 10 oil sands sites & 18 coal mines

The coal industry provides full financial security to reclaim its mines because the industry elected to do so when the program began p. 3

AER's approach meets the intent of a risk-focused plan to monitor & verify the sufficiency of mine financial securities p. 8

Summary

With a long history of energy development & economic fluctuations, the oil and gas industry in Alberta has a growing liability related to abandoned or inactive oil & gas wells, pipelines, facilities, mines & their associated costs. The government has programs to limit financial exposures to Albertans and ensure operators are promptly completing conservation and reclamation work. One such program is the Mine Financial Security Program (MFSP) designed by the Department of Environment and Parks. The goal of this program is to obtain sufficient financial security to ensure conservation and reclamation of oil sands and coal mines sites is completed.

Effective March 2014, the Alberta Energy Regulator (AER) took over the administration of the program from the department of Environment and Parks, but the MFSP policy and design of the program remained the responsibility of the department. AER oversees 10 oil sands sites and at least 18 coal mines.

In 2015, we recommended AER develop and execute a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of MFSP security verification audits. In the same year, we recommended to the department to improve program design.

Our followup audit focused on the recommendation to AER. The department's management told us their recommendation is not yet implemented. We are planning a separate audit at the department to look at the overall MFSP system to gauge if it is well designed or effectively mitigates risks to Albertans.

We concluded as of August 31, 2018, AER had implemented our 2015 recommendation to develop and execute a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of MFSP security verification audits. Should there be significant MFSP program, policy and design changes, we may consider initiating a new audit at AER.

About this Audit

The Department of Environment and Parks designed the Mine Financial Security Program (MFSP) for obtaining sufficient financial security to ensure conservation and reclamation of oil sands and coal mine sites is completed. This program is one of many government liability-management programs that promote prompt conservation and reclamation to limit financial exposure to Albertans if industry fails to meet its obligations. The MFSP uses “asset-to-liability” as one of the approaches to managing financial risks in relation to reclamation liabilities for mining-related land disturbances in the oil sands and coal mining sectors. Effective March 2014, the Alberta Energy Regulator (AER) took over administration of the program from the department. The department is still responsible for MFSP policy and design changes.

In 2015, we audited the department and AER’s MFSP systems. At that time, we made 5 separate recommendations to each organization. In this audit, we focused on the steps AER took to implement the recommendation to improve MFSP program monitoring to ensure that, under a risk-based plan, AER completes the appropriate amount of verification.¹

The government is reviewing the liability management programs in the province in response to concerns surrounding the growing liabilities related to abandoned or inactive oil and gas wells, pipelines, facilities, mines and the associated sites. This review may recommend policy changes. If AER needs to significantly alter its monitoring systems to accommodate policy changes, we may consider initiating a new audit.

The MFSP is a tool the government uses to manage the liabilities associated with reclamation work in the oils sands and coal mining sectors, in particular the activity at the oil sands and coal mines to return them to the similar state before it was disturbed. The core principle guiding the program is the authority to collect sufficient financial security from oil sands and coal mine operators to encourage reclamation and help protect taxpayers from paying for end-of-life mine closure costs. Under Alberta’s program, AER oversees 10 oil sands sites and 18 coal mines. By law, coal and oil sands mining companies are responsible for removing all infrastructure, completing remediation work, and reclaiming the site. The Government of Alberta sets remediation and reclamation standards.

As of June 30, 2018, the regulator held \$1.46 billion of security in comparison to estimated reclamation liabilities of \$28.35 billion.² Because the MFSP applies an “asset to liability” approach, both the security held and the value of the resource in the ground are considered assets in the program, which is designed to offset liabilities. As the resources are depleted, the security requirements increase to reflect greater liability exposure. The security requirements are reduced as reclamation takes place, and accordingly the liability is reduced. The entire coal industry provides full³ financial security to reclaim its mines because the industry elected to do so when the program began.

¹ We did not followup the recommendation to the department to improve the program design related to the security calculation methodology because the department’s management informed us that the recommendation was not ready for followup. As of August 31, 2018, the department had not set a timeline for implementing the recommendation.

² Industry operators self-report estimated total reclamation liabilities to AER. AER uses monitoring processes to verify the accuracy of the operators’ estimates.

³ Under AER’s standards, full financial security is intended to equate the liabilities (primarily for abandonment, remediation and surface reclamation) covered under the MFSP program.

Objective and Scope

Our objective is to determine whether AER has implemented our 2015 recommendation⁴ to develop and execute a risk-based plan, as part of its enterprise risk assessment process, for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of verification.

Our audit scope was limited to AER, which since March 2014 took over the MFSP monitoring activities from the department. We audited the new processes applied by the regulator to implement our recommendation over the period July 2015 to August 2018.

Criteria

We used the same criteria from our original audit, and management agreed with their suitability.

What We Examined

Our followup audit examined AER's systems to monitor the MFSP program to ensure it collects financial securities from operators to conserve and reclaim mine sites in accordance with the formula and methodology prescribed in the program. The processes included:

- developing a risk-based plan to direct the nature and extent of monitoring activity
- ensuring the level of audit verification of operators is sufficient to mitigate risk
- performing monitoring activities

We reviewed the policies and procedures for each process and examined samples to determine if the regulator had implemented our recommendation. We conducted our field work between November 2017 and March 2018 and completed our audit on August 31, 2018.

Conclusion

We conclude that as of August 31, 2018, AER had implemented our recommendation to develop and execute a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of MFSP security verification audits. Our conclusion relates to confirmation of the design and operating effectiveness of AER monitoring systems. Our conclusion does not focus on whether the overall MFSP system is well designed or if it effectively mitigates risks to Albertans.

We have not assessed the overall MSFP program because the department of Environment and Parks has not yet implemented our 2015 program recommendation.



Why This Conclusion Matters to Albertans

In the event that a mine operator cannot fulfill its reclamation obligations, and no other private operator assumes the liability, the province may have to pay for costs to complete the conservation and reclamation work. Thus, a robust and responsive system will ensure sufficient security is collected from mine operators to reduce the risk of Albertans covering the liability.

⁴ Report of the Office of the Auditor General—July 2015, no. 3, page 31.

Summary of Recommendations

IMPLEMENTED Recommendation:
Improve Mine Financial Security Program monitoring

AER has implemented our recommendation to develop and execute a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of MFSP security verification audits.

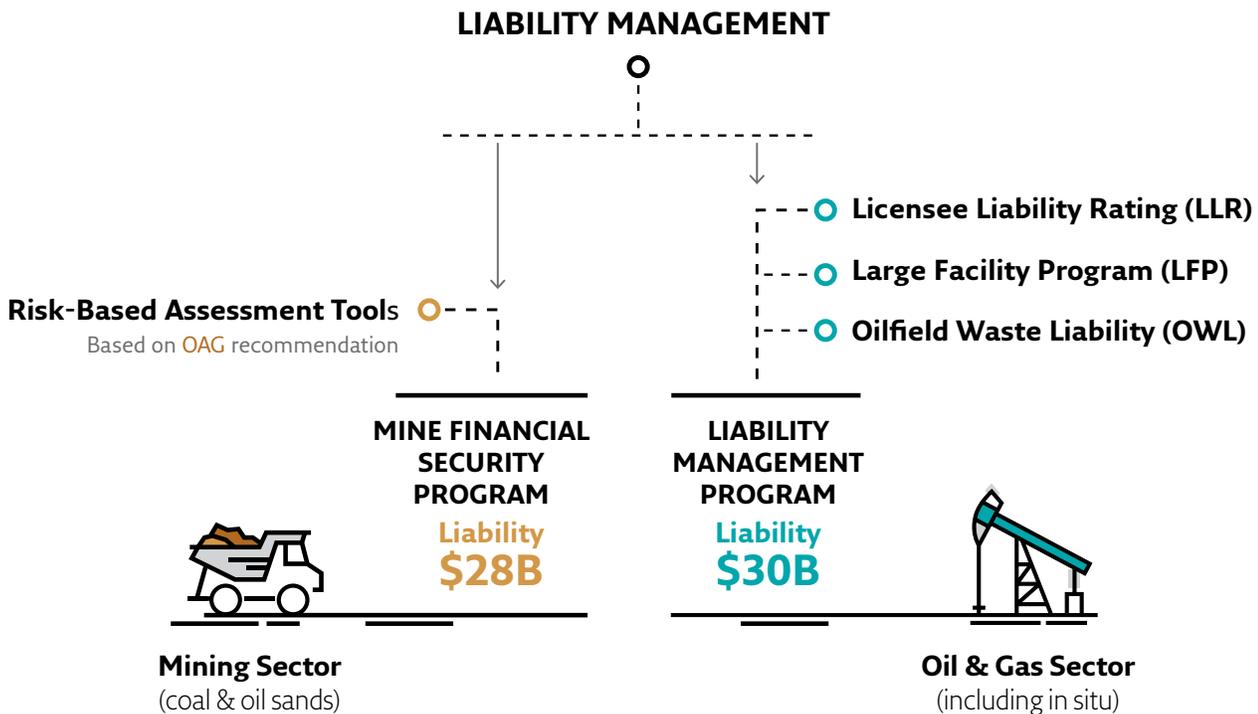
Detailed Findings and Recommendations

Improve Mine Financial Security Program Monitoring IMPLEMENTED

Context

AER works with the energy industry to manage energy development and to ensure energy operators meet their responsibilities to safely abandon, remediate and reclaim their energy development sites. At times, companies are not able to meet their responsibilities by the end of a project's life. With a long history of energy development & economic fluctuations, the oil and gas industry in Alberta has a growing liability related to abandoned or inactive oil & gas wells, pipelines, facilities, mines & their associated costs. The regulator has two core programs to manage liabilities: the Mine Financial Security Program and the Liability Management Rating program. An overview of the regulator's programs is illustrated below.

Current State of Liability Management Programs at AER



AER manages financial risks to Albertans by collecting security deposits from industry operators. For MFSP, the program was designed by the department and the regulator monitors financial security requirements prescribed by the program. Under this program, operators are required to file prescribed annual reports that disclose their conservation and reclamation liabilities, their resource assets and the components of the resource asset calculations, and the amounts required for each security deposit under the program. This report is certified by the operator's chief executive officer or chief financial officer. No supporting documentation is required with the report.

AER is able to “audit” the information documented in the annual report; however, our previous audit found there was a lack of direction on the number and types of audits to be completed.

There are four levels of audits under the program.

- **Level 1 audit**—phone or in-person discussions with the operator to clarify information in the annual report.
- **Level 2 audit**—written questions and responses to confirm the scope of and the methodology used in preparing the annual report.
- **Level 3 audit**—detailed audits performed by AER staff, with possible involvement of the Department of Environment and Parks or Department of Energy staff, on all or a portion of the data and assumptions in the annual report. These audits are typically performed at the operator's offices.
- **Level 4 audit**—detailed audits performed by a third-party auditor. These audits are typically performed at the operator's offices.

Criteria

AER should demonstrate that it has effective risk-based processes and tools to plan and carry out the appropriate amount of MFSP security verification audits.

Our followup audit findings

AER implemented our recommendation by:

- regularly using a monthly assessment tool to monitor operators
- designing and using an annual risk-based audit tool to assess operators
- applying a process to decide and complete sufficient numbers and types of audits guided by informed risk assessments

Our findings relate to the design and operating effectiveness of AER monitoring systems. It does not reflect the effectiveness of the overall MFSP system to manage and appropriately mitigate risks to Albertans as that responsibility is a function of the overall design performed by Environment and Parks. We have a separate audit planned at Environment and Parks to assess the design of the program.

MFSP monthly monitoring activities to mitigate risks

We tested a sample of operators on which the monthly monitoring assessment process was applied for both oil sand and coal mines and found this process to be operating effectively. AER uses a monthly assessment tool to identify material changes to an operator's continuing operations and financial conditions. The assessment is completed for each mine and allows the regulator the opportunity to promptly respond to new risks. Using criteria such as policy changes, commodity prices, and production changes, the tool assesses a mine and assigns it a risk rating (extreme, high, moderate, or low).

MFSP annual risk-based audit plan assessment tool

We tested a sample of operators to assess how the annual risk assessment tool was applied and found the process to be appropriately followed. Each June, the operators submit their annual reports to AER, and the regulator applies an annual risk-based audit tool to assess these annual reports. This tool assesses the mine's annual report based on criteria such as MFSP liability ratio, reserves depletion, and incidents affecting operations. The tool generates a risk rating of extreme, high, moderate, or low. During its annual audit selection process, AER uses the tool's results to determine if a mine should be selected for an audit.

MFSP annual mine audit selection and verification

AER has designed and is using a risk-based approach to carry out, in management's judgment, a sufficient level of verification work guided by a plan. Each year, AER plans the number and type of audits to be performed for the operators. The results from the monthly monitoring activities and the annual risk-based audit plan assessment tool are inputs to the annual audit selection process and identify risks for focus. The overall audit selection process heavily relies on AER's judgment as to which operator to select and the type of audits to be completed.

We found AER focused its resources to perform audits on high-risk mines to ensure sufficient audit verification of the data in the annual reports that the operators submit. For example, in 2016, risk to the coal sector increased due to declining coal prices and demand. To respond to the risk, AER hired a third-party consultant to analyze mines with elevated risks. AER performed audit verifications on those mines the third party consultant identified as high risk.

Overall, AER's approach met the intent of a risk-focused plan to monitor and verify the sufficiency of mine financial securities.

Audit Responsibilities and Quality Assurance Statement

Management of AER is responsible for monitoring the MFSP.

Our responsibility is to express an independent conclusion on whether AER has implemented recommendation to develop and execute on a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of verification.

We conducted our audit in accordance with Canadian Standard on Assurance Engagements 3001 issued by the Auditing and Assurance Standards Board (Canada). The Office of the Auditor General applies Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. The office complies with the independence and other ethical requirements of the Chartered Professional Accountants of Alberta Rules of Professional Conduct, which are founded on fundamental principles of integrity and due care, objectivity, professional competence, confidentiality and professional behaviour.



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ISSN 1999-4242 (print)
ISSN 1927-9604 (online)

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