Report of the Auditor General

June 2021

Auditor General
OF ALBERTA

Joseph Schow, MLA
Chair
Standing Committee on Legislative Offices

I am honoured to transmit my *Report of the Auditor General of Alberta—June 2021* to the
Members of the Legislative Assembly of Alberta, under Section 20 of the *Auditor General Act*.

We conducted our work under the authority of the Auditor General Act and in accordance with the
standards for assurance engagements as set out in the CPA Canada Handbook—Assurance.

W. Doug Wylie FCPA, FCMA, ICD.D
Auditor General

Edmonton, Alberta
June 2021

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**Alberta Environment and Parks
Alberta Energy Regulator
Alberta Transportation**

Processes to Provide
Information About
Government's
Environmental Liabilities

**Auditor
General**
OF ALBERTA

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About This Report

During the course of our financial statement audits, we consider whether key processes that support the preparation of the financial statements warrant further examination when indicators of process weaknesses are present.

As a result of our audit work on the government's environmental liabilities and disclosures included within the *2019-2020 Consolidated Financial Statements of Province of Alberta*, we identified process weaknesses where opportunities for improvement exist.

This report contains the key findings and resultant recommendations from our work related to the processes used to provide information about government's environmental liabilities.

Executive Summary

Environmental legislation in Alberta requires operators to clean up (remediate and reclaim) their sites to existing environmental standards—commonly known as the "polluter pay" principle. As a result, government is responsible for cleaning up the sites it owns and operates. However, there are also circumstances where the government may accept responsibility for sites that a non-government operator did not clean up—for example, sites where government has been unable to identify a responsible party and when an industry-funded backstop, like the Orphan Well Association (OWA), does not have responsibility for a particular type of site. For sites where government is responsible for or has accepted responsibility for clean up, accounting standards require that the cost of cleanup necessary to satisfy applicable environmental standards should be recorded as an environmental liability on the financial statements with disclosures when responsible parties are unknown. This provides information about the future resources required to protect people and the environment.

The government is currently managing more than 2,600 of these sites across various industries, including government owned sites. In addition, Transportation has 324 gravel pits, with approximately 2,500 hectares disturbed and 153 active and inactive highway maintenance yards. At March 31, 2020, the province recorded $248 million in its consolidated financial statements related to environmental liabilities based on available information at that time. The province may need to account for additional environmental liabilities as it completes further environmental assessments to determine who is responsible, the risks, and the work required at each of the sites to comply with environmental standards.

The scope of this report is on the underlying processes at the Alberta Energy Regulator (AER) and the departments of Environment and Parks and Transportation to provide information about the government's environmental liabilities. This report does not cover the province's regulatory systems to hold operators in various industries accountable to clean up sites, and it does not cover AER's systems to oversee the cleanup of orphan wells that OWA and industry are managing.

We examined the processes that are intended to maintain accurate and current information about:

- sites for which government is responsible, has accepted responsibility or where there is uncertainty as to whom is responsible
- what work is required to be done to comply with environmental standards
- the risks and priority of the sites and how much it will cost to clean up and manage the sites
- which government department or agency will pay for the work

Based on our examination of these processes, we found:

- within Environment and Parks and AER there is a lack of clarity about who is responsible, and in cases where the province has accepted responsibility or is responsible, who will do the work for certain sites

- there is a lack of clarity around funding sources available to AER to manage, and where needed, clean up sites for which they are responsible in the oil and gas and coal industries

- Environment and Parks and AER need to improve processes to prioritize sites and maintain up to date cost estimates to manage and clean up sites

- Transportation needs to improve its processes to account for environmental liabilities related to its sand and gravel pits and highway maintenance yards

- Transportation must improve its processes to comply with environmental legislation at its highway maintenance yards

Improvements to these processes are necessary to ensure government decision-makers, Members of the Legislative Assembly and Albertans are supplied with important and current information about the government's environmental liabilities. As a result, we have recommended that:

- Environment and Parks develop guidance to determine who is responsible for cleanup work

- Environment and Parks and AER complete case-by-case assessments of sites to determine who is responsible and what work is required

- Transportation improve its processes to assess, estimate, and account for its environmental liabilities

- Transportation improve its processes to ensure compliance with environmental legislation

The *Appendix* in this report includes a sample of sites we examined, with a background and the audit findings related to each site.

Quality Control of Our Work

We carry out our work under the authority of the *Auditor General Act*. 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 applicable professional standards and applicable ethical, legal and regulatory requirements. Our 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 behavior.

Context

Accounting for environmental liabilities provides information about the current and future resources required to comply with environmental legislation in order to protect people and the environment. Investigating, managing and cleaning up[1] sites is complex and can require considerable time, expertise and money.

Public Sector Accounting Standards (PSAS) require the government to record environmental liabilities for sites or components for which the government is responsible or has accepted responsibility. Accounting standards also require the government to disclose[2] information where uncertainty exists, such as when the regulators have been unable to identify a responsible party, or when a reasonable estimate for a liability cannot be made. Under accounting standards, environmental liabilities are broader than applying strict legal requirements. In effect, accounting judgements must reflect the economic substance and not merely the legal form of transactions.

Understanding what work is required to clean up sites, who is responsible to do that work and pay for it are fundamental to managing and accounting for environment liabilities.

Polluter Pay Principle

Environmental legislation in Alberta is based on the polluter pay principle, which aims to ensure that those responsible for the pollution or disturbance clean it up to applicable environmental standards and pay for it. In other words, operators—non-government and government—are responsible for their own environmental liabilities.

Departments and agencies manage their own sites

Government is responsible for required work at sites with environmental concerns resulting from government operations. The departments of Environment and Parks, Transportation, and Infrastructure manage the environmental impacts of their operations, including highway maintenance yards and government buildings. Culture, Multiculturalism and Status of Women manages environmental impacts at historical sites it operates, such as the Turner Valley Gas Plant and the Bitumount historic oil sands separating plant.

Government is also responsible if an inspector determines that additional reclamation work is required after the legislative warranty period expires[3] (from the time that regulators issued a reclamation certificate to non-government operators). Operators remain responsible for any remediation work that may be required after the regulator has issued a reclamation certificate.

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[1]   Remediation is to remove, contain or manage contaminants in soil and water in such a manner to prevent adverse effects or further adverse effects. Reclamation is the stabilization, contouring, maintenance, conditioning or reconstruction of the surface of land to an equivalent land capability.

[2]   In the notes to the financial statements.

[3]   Warranty periods depend on industry and range from immediate (for coal) to five or 25 years (for oil and gas), depending on when the regulator issued the reclamation certificate.

Role of regulators

The Department of Environment and Parks and the Alberta Energy Regulator (AER)[4] regulate operators, including provincial departments and agencies, to ensure they follow environmental legislation and requirements. The law defines the powers and duties of regulatory directors and inspectors, who in turn apply their expertise, code of conduct and authority to decide what course of action is required. If operators do not comply, the regulators can issue warnings, administrative penalties and orders or apply for a court order to enforce compliance. These systems support the polluter pay principle.

Who is responsible if an operator no longer exists or is unable or unwilling to do the work?

There may also be circumstances in which the government may be responsible or accepts responsibility when private operators do not complete the work required. The law enables the regulators to perform the required work when operators no longer exist or are unable or unwilling to do the work. The law enables the regulator to nonetheless issue an order and perform the necessary work. The regulators may also accept responsibility in cases of emergencies. The regulators may use security collected from operators to clean up sites and may also sue to recover the costs from operators.

This does not automatically mean that the government is responsible for environmental liabilities if an operator does not complete the work or if an operator cannot be found responsible to do the work. As a result, for some sites, there may be **no responsible party** to deal with an environmental liability.

For the oil and gas industry, AER collects an orphan levy from active operators to fund project closure, abandonment, remediation and reclamation costs for orphan sites. AER pays the levy to OWA who uses it to clean up eligible orphan oil and gas sites. (Note that OWA does not manage all orphan and legacy oil and gas sites. AER and Environment and Parks also manage certain legacy and orphan oil and gas sites—see next section). Additionally, there are no similar organizations equivalent to OWA to clean up orphan sites in other industries, such as coal mining.

Government manages other sites

In addition to regulating industries, Environment and Parks and AER also manage sites that:

- existed before current environmental legislation was in place. These sites operated over the last century or longer, and in most cases, operators no longer exist and there is no financial security to cover the cleanup costs. These legacy sites include various types of sites, such as coal mines, oil and gas wells and facilities[5], and wood treatment sites.

- are not transferred to OWA. This includes legacy sites and other sites, such as pipelines, since AER is not charging an orphan levy on all types of sites.

- where operators no longer exist, or regulators issued reclamation certificates, but legal warranty periods expired

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[4]   AER regulates the coal mining, oil and gas industries and oil sands mines. Environment and Parks regulates other industries, such as sand and gravel.

[5]   Environment and Parks also manages certain legacy refinery sites.

Managing and accounting for environmental liabilities

Each department, agency and board has its own systems to manage sites and account for environmental liabilities. In order to properly manage and account for environmental liabilities, these systems should include:

- complete and accurate information about sites for which government is responsible, where they accepted responsibility or when regulators have been unable to identify a responsible party[6]

- clear policies and processes to know who is responsible, and what level of responsibility government will accept, including the environmental standards that must be met when it has exhausted every option to identify and hold private operators responsible

- common policies and processes to determine consistently the priority of sites

- processes to determine how much it will cost to manage, investigate, clean up and monitor sites

- accurate information and identified sources of funding to know who will pay for costs associated with the work

Generally speaking, to plan, manage and clean up sites appropriately, responsible government entities need to consider the full life-cycle costs of sites with environmental concerns. Once a concern is identified, responsible government entities often need to hire specialists, such as engineers, to determine the nature and extent of environmental concerns, assess the risks to people and the environment and to develop appropriate action plans and cost estimates to do the required work. Some sites may also require long-term maintenance, operations and monitoring after the sites are cleaned up. The responsible government entities should record the estimated costs for the required cleanup work as well as the future projected costs to operate and maintain equipment and to monitor the sites after the cleanup work was completed. These estimated costs help to inform Treasury Board's funding decisions for environmental liabilities.

Each site should be assessed based on its unique facts and risks against the applicable legislation. For example, entities may be in the process of completing environmental site assessments to determine the nature and extent of contamination and the work required, while in other cases this may have already been determined. Some sites are close to communities and directly affect people through increased risks of contaminant-caused illnesses and physical danger. Other sites are remote and consequently have limited direct impact on people but can still pose a risk to the environment, water and animals. Other sites may have substances at levels that are acceptable and do not require cleanup or may only require periodic monitoring.

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[6]   If a responsible party cannot be identified, that fact does not automatically create an environmental liability for the government. Other factors must be considered before a conclusion is reached regarding whether a liability exists. Accounting standards require disclosure that regulators have been unable to identify a responsible party.

2019-2020 Consolidated Financial Statements of the Province of Alberta

As of March 31, 2020, the province recorded $248 million (2019: $217 million) for environmental liabilities in its *2019-2020 Consolidated Financial Statements*. This includes liabilities for sites it owns and operates and for which it has accepted responsibility.[7]

We concluded that the *2019-2020 Consolidated Financial Statements of the Province of Alberta* were presented fairly in accordance with public sector accounting standards. Estimates for environmental liabilities become known and/or improve over time as entities complete various phases of environmental site assessments. However, there may also be situations where it is still unclear who is responsible to complete the required work or what work is required to be completed. The government may need to account for additional liabilities in future years as it obtains information from new or updated environmental site assessments, determines what work is required and the cost of that work, and who accepts responsibility to complete the work.

Population of sites included in our work

Environment and Parks and AER provided us with various lists and information of sites that they manage, totaling more than 2,600 sites across various industries. In many cases, the responsible party and whether cleanup work, if any, is required are still unknown. Environment and Parks and AER are at various stages in the process to identify or conclude on the responsible party.

We selected sites from the lists to test the design, implementation, and operating effectiveness of the controls to provide information about government's environmental liabilities.

Throughout the report, we use the terms legacy sites and orphan sites to refer to sites across various industries, such as coal, oil and gas and wood treatment. The reference to orphan sites does not include orphan sites managed by OWA, unless we specifically refer to orphan sites that OWA manages.

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[7]   The sites not owned and operated by the government, but where government has accepted responsibility for environmental liabilities, are typically locations where private industrial and resource extraction activity has taken place.

Summary of Recommendations

RECOMMENDATION:
Develop guidance to determine who is responsible for cleanup work

We recommend that the Department of Environment and Parks develop clear guidance to determine who is responsible to do the required work and pay for it when private operators across various industries no longer exist or are unable to perform the required work.

Where it is determined that the government will do the work, we recommend that the Department of Environment and Parks:

- clarify what environmental standards apply

- provide guidance on which department or agency is responsible to do the work and pay for it across the various industries

- provide guidance on how the assessment, management and cleanup work of sites will be funded

RECOMMENDATION:
Complete case-by-case assessments of sites

We recommend that the Department of Environment and Parks and the Alberta Energy Regulator (AER) complete a case-by-case assessment to determine who is responsible to clean up each site.

Where it is concluded that either the Department of Environment and Parks or AER is responsible or accepts responsibility, we recommend that Environment and Parks and AER:

- determine what work, if any, needs to be done

- rank each site to help prioritize cleanup work

- estimate the costs to manage or clean up sites

- account for environmental liabilities, when appropriate to do so

RECOMMENDATION:
Improve processes to assess, estimate and account for environmental liabilities

We recommend that the Department of Transportation improve its processes to assess, estimate and account for environmental liabilities related to its sand and gravel pits and highway maintenance yards.

RECOMMENDATION:
Improve processes to ensure compliance with environmental legislation

We recommend that the Department of Transportation improve its processes to comply with environmental legislation at highway maintenance yards.

Detailed Findings and Recommendations

Alberta Environment and Parks
Alberta Energy Regulator (AER)

Current findings

Key findings

The Department of Alberta Environment and Parks and the Alberta Energy Regulator (AER) can improve processes to ensure they have complete and accurate information about how many sites they manage or should clean up.

This includes improvements to clarify:

- whether government is responsible or has accepted responsibility and whether Environment and Parks or AER is responsible to do the work and pay for it
- sources of funding for AER to manage certain legacy and orphan sites across various industries
- which sites are the highest risk or priority
- how much it will cost to complete the necessary work

Lack of clarity on whether government is responsible, has accepted responsibility and whether Environment and Parks or AER is responsible to do the work and pay for it

Legislation and regulatory approvals set out responsibilities for operators to remediate and reclaim their operations. These responsibilities are clear when:

- departments and agencies are the operator

- site operators exist and comply with the law, requirements, standards and regulators' orders, and are financially viable

- regulators successfully sue an operator responsible for the required work

- operators are in receivership or bankruptcy, and trustees must follow recent direction from the Supreme Court of Canada to first comply with environmental laws and environmental protection orders[8], provided sufficient resources are available to do the work

- OWA accepts responsibility for eligible oil and gas sites

However, government needs to improve its processes to determine across various industries:

- who is responsible if operators no longer exist or when the regulators have exhausted every option to identify a responsible party

- when it will accept responsibility to perform the work, and what environmental standards apply when departments and agencies accept responsibility

We found:

- instances where Environment and Parks and AER incorrectly concluded that government was not responsible, when evidence showed government was responsible or had accepted responsibility

- conflicting interpretations between legal, finance and regulatory staff, particularly between Environment and Parks and AER, regarding who is responsible for specific sites

- instances where entities did not complete case-by-case assessments that consider the unique facts for each site, in order to determine who is responsible to clean up sites when operators no longer exist or when legislative warranty timelines have expired after issuance of reclamation certificates

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[8]   Based on the decision of the Supreme Court of Canada in *Orphan Well Association v. Grant Thornton Ltd.*, 2019 SCC 5 (a.k.a. *Redwater*). *Redwater* represented a constitutional challenge based on the argument that, in event of conflict, federal bankruptcy laws were paramount to provincial environmental legislation. The majority of the court held there was no conflict in the circumstances. The Regulator was not asserting any provable claim in bankruptcy but instead seeking to compel the trustee of the bankrupt estate to comply with environmental orders. The majority of the court held that bankruptcy did not represent a license to ignore rules during the bankruptcy proceedings. Accordingly, the Regulator was granted an order for proceeds from the sale of assets to be used to address end-of-life obligations.

Lack of clarity and confusion over funding

There are a few options for funding the management of sites. Departments can use funds within their budgets to manage sites. They can also submit requests to Treasury Board for additional funding. Historically, another option was available. The Environmental Protection and Enhancement Fund was set up to pay for environmental protection, enhancement and emergencies, including environmental related emergencies at legacy and orphan sites.[9] On December 5, 2019, the government disestablished the Environmental Protection and Enhancement Fund.[10] Forfeited securities from the Environmental Protection Security Fund were historically transferred to the Environmental Protection and Enhancement Fund and are now being transferred to the general revenue fund.

There is lack of clarity over available funding sources to manage legacy and other orphan sites in the coal and oil and gas industries (excluding sites for which OWA is responsible), including whether AER can use the administrative levies to manage and clean up legacy sites.

This lack of clarity and confusion have been ongoing for some time. The systemic issues related to sources of funding for legacy and other orphan sites in the coal and oil and gas industries, in addition to the confusion about the appropriate use of the administrative levies that AER collects, remain unresolved. Without clarification, there are often delays in dealing with environmental concerns for legacy and other orphan sites in the coal and oil and gas industries.

In 2014, AER took over responsibility from Environment and Parks for most legacy and specific orphan sites that fall under its current regulatory purview. AER is funded from administrative levies charged to industries that AER regulates. AER management asserted to us and/or provided us with supporting evidence that:

- OWA is not responsible for these legacy and specific orphan sites

- the orphan levy is paid to OWA to manage and clean up only eligible orphan sites, and AER uses the administrative levies to regulate the oil and gas and coal industries

- administrative levies are insufficient to appropriately manage, investigate and clean up these legacy and specific orphan sites

- AER cannot use administrative levies collected from the oil and gas industry to clean up legacy and orphan coal mines

- the Legislature established the Environmental Protection and Enhancement Fund to deal with matters like environmental related emergencies at legacy and orphan sites and to protect and enhance the environment

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[9]   Alberta Hansard 1784, May 9, 1994, related to Bill 30: *Environmental Protection and Enhancement Amendment Act*, 1994.

[10]   Bill 20, *Fiscal Measures and Taxation Act*, 2019, received royal assent on December 5, 2019, and it disestablished the Environmental Protection and Enhancement Fund.

Furthermore, AER currently charges an orphan levy on only certain types of sites[11]. For example, AER does not charge an orphan levy on pipelines and large production facilities. The OWA is currently not responsible for managing or cleaning up orphan pipelines and orphan large production facilities, of which two such facilities currently exist in the province[12]. AER needs the approval of the Ministers of Energy, Environment and Parks, and Treasury Board to charge new levies.

Starting in 2014, AER management raised concerns with previous Ministers and Deputy Ministers of Environment and Parks that AER lacked sufficient funding to appropriately manage, investigate and clean up legacy and specific orphan sites. Management at Environment and Parks concluded that AER should use the levies to manage, investigate and clean up these sites. In 2017, AER received confirmation from the Deputy Minister of Environment and Parks at that time that it can apply to the Environmental Protection and Enhancement Fund for the reclamation of legacy coal mines, and in particular sinkholes caused by legacy coal mines. However, AER was unsuccessful in receiving any funding from the Environmental Protection and Enhancement Fund before its disestablishment on December 5, 2019.

AER responds to complaints through visual inspections, but due to lack of clarity and AER's concerns on funding, AER is not consistently able to undertake comprehensive site investigations. These investigations often require third-party specialists to determine the nature and extent of environmental concerns, to assess the risks to people and the environment, and to develop and implement appropriate actions if required. In some cases, AER's inspectors concluded that conditions at certain legacy sites constituted an emergency and needed to be dealt with urgently. As a result, AER used some of the administrative levies to partially deal with these urgent issues at a legacy oil and gas site, a legacy coal mine and the Smoky River Coal Mine.

No consistent ranking of which sites are highest risk or priority to clean up

While Transportation uses the National Classification System for Contaminated Sites[13] (NSCS), the government has not adopted nor required all departments and agencies to use a standardized ranking system like the NCSC or an equivalent. Environment and Parks and AER lack similar formal methods to rank sites consistently. This limits the government from consistently determining which sites are the highest priority for the government as a whole to clean up.

Each department or agency identifies its own priorities to fund from its budget and/or through an individual request to Treasury Board for additional funding. Sites are sometimes ranked with criteria developed within the specific department or agency, and work is typically completed based on a combination of judgement, risk assessment and available funding.

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[11]   AER Directive 006, Appendix 1 (https://www.aer.ca/documents/directives/Directive006.pdf).

[12]   On October 1, 2020, the Deputy Minister of Energy authorized OWA to use a portion of the loan that Treasury Board and Finance provided to OWA for well clean up to conduct work at the Mazeppa Gas Processing Plant. After completing our work, the ministers authorized AER to charge the orphan levy for large production facilities in order for OWA to repay the loan funds used at the sites.

[13]   Environment and Parks is part of the Canadian Council of Ministers of the Environment (CCME). CCME has developed a National Classification System for Contaminated Sites. The purpose of this classification system is "to provide scientific and technical assistance in the identification and prioritization of sites, which may be considered to represent high, medium, or low risk. The system classifies contaminated sites into these general categories of risk in a systematic and rational manner, according to their current or potential adverse impact on human health and/or the environment."

Insufficient systems to track how much it will cost to manage sites

Environment and Parks and AER do not have effective systems to know what it will cost to manage sites. We found that a case-by-case analysis was not always completed to consider inspectors and engineering assessments of the work required. Estimates to clean up sites were often outdated, including some estimates dating back over two decades, which would not take into consideration new technologies or changes to the site conditions.

RECOMMENDATION:
Develop guidance to determine who is responsible for cleanup work

We recommend that the Department of Environment and Parks develop clear guidance to determine who is responsible to do the required work and pay for it when private operators across various industries no longer exist or are unable to perform the required work.

Where it is determined that the government will do the work, we recommend that the Department of Environment and Parks:

- clarify what environmental standards apply

- provide guidance on which department or agency is responsible to do the work and pay for it across the various industries

- provide guidance on how the assessment, management and cleanup work of sites will be funded

RECOMMENDATION:
Complete case-by-case assessments of sites

We recommend that the Department of Environment and Parks and the Alberta Energy Regulator (AER) complete a case-by-case assessment to determine who is responsible to clean up each site.

Where it is concluded that either the Department of Environment and Parks or AER is responsible or accepts responsibility, we recommend that Environment and Parks and AER:

- determine what work, if any, needs to be done

- rank each site to help prioritize cleanup work

- estimate the costs to manage or clean up sites

- account for environmental liabilities when appropriate to do so

Consequences of not taking action

Due to the lack of clarity about responsibility, funding sources and priorities, departments and agencies are not providing Treasury Board with relevant information about the portfolio of sites for which the government is responsible, has accepted responsibility, or where regulators have been unable to identify a responsible party.

This information is essential to allow Treasury Board members to assess appropriately, and oversee the risks to government and to make informed decisions. As a result, funds may be allocated inefficiently or used on low-priority sites while higher priority sites are not cleaned up in a reasonable time. Without good information, the government may not accurately account for environmental liabilities, resulting in the province's financial statements not reflecting the total environmental liabilities of the province.

Alberta Transportation

Accounting for environmental liabilities related to sand and gravel pits and highway maintenance yards

Context

Transportation has 324 gravel pits, with approximately 2,500 hectares disturbed. It also has 153 active and inactive highway maintenance yards. Most highway maintenance yards have salt contamination, while some also have hydrocarbons contamination. Legislation[14] requires the department to clean up its sand and gravel pits and highway maintenance yards to acceptable environmental standards.

Public Sector Accounting Standards (PSAS) and government accounting policies require the department to account for the costs to meet environmental legislation. Management should use information available at the end of the year to estimate environmental liabilities. The liabilities should include all future costs that form part of the overall cleanup strategy for the site, such as the cost for ongoing operations and maintenance of equipment used for remediation and ongoing monitoring. As a result, management should use judgement and net present value techniques, where applicable, to estimate these costs on a site-by-site basis, as the facts and work required for each site are unique.

Current findings

Key findings

- Transportation does not have effective processes to assess, estimate and account for its environmental liabilities related to its sand and gravel pits and highway maintenance yards.

Sand and gravel pits

Management estimated the total future cost to reclaim all sand and gravel pits to be $38 million, but it only recorded environmental liabilities of $12.5 million related to one-third of the pits that it will reclaim in the near future. For the other pits, management stated it did not record a liability, since the sites will be reclaimed in the longer term or will not be reclaimed at all. However, Transportation was unable to provide us with appropriate support and rationale to show which pits it would reclaim in the near future, in the longer term, or not at all.

Highway maintenance yards

Management estimated the costs to develop risk management plans for all sites. However, management did not document a site-by-site assessment to determine what work is required to protect people and the environment nor if a risk management approach is acceptable or not, since legislation only allows a risk management approach in limited circumstances and under certain conditions.[15]

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[14] Such as the *Environmental Protection and Enhancement Act*, sections 112 and 137, and the related regulations, guidelines and regulatory approvals.

[15] See page 18.

Management told us they completed all the required environmental assessments at some sites, but they still needed to determine the most appropriate remediation or risk management approach for the sites. Management told us that, as a result, they did not have reasonable cost estimates to record a liability. However, Transportation already hired engineers who prepared remedial action plans that set out the remediation work required, with associated cost estimates.

PSAS requires Transportation to determine an estimate with information available at year-end and to adjust this estimate in future years when new information becomes available. In several of these cases, more than two years elapsed, yet management has still not completed their assessments or recorded the liabilities. In some cases, we noted that subsequent soil and ground water monitoring reports from engineers also recommended that Transportation implement remedial actions, as contamination continues to spread.

As part of the remediation strategy at six sites, Transportation operates groundwater recovery systems that require annual operations and maintenance. PSAS requires the department to estimate the future costs to operate and maintain these systems, using net present value techniques where applicable, and to record this estimate as an environmental liability. While the department estimated these future costs, it did not record a liability. In one case, Transportation suspended operating the groundwater recovery system for a period due to insufficient funding, increasing the risk of contamination spreading.

RECOMMENDATION:
Improve processes to assess, estimate and account for environmental liabilities

We recommend that the Department of Transportation improve its processes to assess, estimate and account for environmental liabilities related to its sand and gravel pits and highway maintenance yards.

Consequences of not taking action

The department may not accurately account for environmental liabilities, resulting in the province's financial statements not reflecting the total environmental liabilities of the province. Decision-makers need this information to know the resources required to comply with environmental legislation and in order to protect people and the environment.

Ensuring compliance with environmental legislation

Context

Most of Transportation's highway maintenance yards have salt contamination, while some also have hydrocarbons contamination. Environmental legislation[16] requires Transportation to clean up sites to acceptable environmental standards in order to protect people and the environment. The legislation sets out specific requirements as well as a sequence of activities that the department must follow. Management must determine the work required to meet environmental standards on a site-by-site basis, as the facts and work required for each site are unique.

Current findings

Key findings

- Transportation has been conducting environmental site assessments and soil and ground water monitoring at sites.

- Transportation lacks the required acceptance of risk management plans and consent from adjacent property owners to follow a risk management approach at certain sites, something that is required in legislation.

We noted instances at Transportation that, in our view, represent non-compliance with environmental legislation.

For example, management at Transportation approved an internal policy in 2010 to implement a risk management approach, rather than remediating contamination at its highway maintenance yards. Transportation planned to follow this approach until the regulator formally declared a yard as contaminated or issued environmental protection orders requiring Transportation to remediate contamination. Transportation based this conclusion on a Part[17] in the *Environmental Protection and Enhancement Act* that states that Environment and Parks, as the regulator, may declare the site as a contaminated site if there is a significant adverse effect on people and the environment. Management told us that it has been adhering to the *Alberta Risk Management Plan Guide* that Environment and Parks issued in 2017.

Legislation only allows a risk management approach in limited circumstances and under certain conditions. However, management did not provide support, on a site-by-site basis, whether it:

- met all the requirements in environmental legislation to protect people and the environment

- evaluated if it is or will be appropriate to follow a risk management approach

- met all the required conditions for risk management when it is appropriate to follow a risk management approach

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[16]   Such as the *Environmental Protection and Enhancement Act* and related regulations, guidelines and regulatory approvals.

[17]   Part 5, Division 2, of the *Environmental Protection and Enhancement Act*.

Environment and Parks confirmed to us that all operators, including Transportation, must follow a different part of the *Act*,[18] as well as the *Remediation Regulation*,[19] requiring Transportation to:

- remediate contamination regardless of whether Environment and Parks declares yards as contaminated or issues an environmental protection order. Transportation should control the source of any contamination to prevent it from causing further adverse effects to the environment, delineate the extent of contamination, and implement appropriate remediation or risk management actions.

- only use a risk management approach in limited circumstances and under certain conditions. Transportation cannot use a risk management approach when there is an uncontrolled source of contamination that is causing further adverse effects to the environment, the contamination is not delineated fully, or owners of adjacent properties object to restrictions that may be imposed on them in a risk management plan when contamination has spread to their land. When adjacent landowners object, Transportation must remediate contamination that affects those landowners.

- obtain the regulator's acceptance of a risk management plan when it is appropriate to implement a risk management approach. The regulator needs to authorize a risk management plan for impacted land zoned as residential-only or agriculture-only.

- inform impacted adjacent landowners when contamination has spread to their properties. Transportation should involve the regulator and, when necessary, other landowners early in the process, if Transportation wants to pursue a risk management approach. Transportation must obtain the landowners' consent if the risk management plan could affect the use of their land.

While Transportation has been conducting environmental site assessments and soil and ground water monitoring at sites, it has not yet obtained the regulator's authorization to follow a risk management approach. Nor has it always informed or involved all affected landowners of the proposed risk management approach and has not obtained their consent as required. While there are no specified timelines in which these must occur, in most cases there have been extended periods from when Transportation first became aware of the contamination. In some cases, contamination continues to spread due to uncontrolled sources of contamination that Transportation has not remediated or controlled.

RECOMMENDATION:
Improve processes to ensure compliance with environmental legislation

We recommend that the Department of Transportation improve its processes to comply with environmental legislation at highway maintenance yards.

Consequences of not taking action

By not complying with legislation, Transportation may not take appropriate actions to clean up or manage environmental risks at sites for which it is responsible.

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[18] Part 5, Division 1, of the *Environmental Protection and Enhancement Act*, in particular Section 112.

[19] The *Alberta Exposure Control Guide and the Alberta Risk Management Plan Guide* form part of the *Remediation Regulation*. See https://www.alberta.ca/part-three-risk-management.aspx.

Appendix

Sample Sites and Related Findings

The following table provides background information about a sample of sites that we audited in relation to our key findings in this report.

ALBERTA ENVIRONMENT AND PARKS/ALBERTA ENERGY REGULATOR (AER)

Smoky River Coal Mine

> **Key findings**
> - Lack of clarity on whether Environment and Parks or AER is responsible to do the work and pay for it
> - Lack of clarity and confusion over funding sources

Context

This mine near Grande Cache produced coal since the 1960s. In 2000, the operating company went into receivership, leaving a major portion of the mine site not cleaned up. At that time, the government stated that it was working on a plan to restore the site.[20] Before 2010, Environment and Parks used the security and bankruptcy proceeds to conduct some cleanup work. In 2014, administration of the site transferred from Environment and Parks to AER along with the remaining security of about $1.7 million. In 2016, a third party hired by AER estimated it would cost about $80 million to fully remediate and reclaim the mine to the required environmental standards.

In 2018, AER inspectors concluded there was a significant risk of a pond failing that contained selenium. Due to the urgency, AER spent the remaining security and an additional $506,000 from its operating budget (funded with administrative levies) to remove the pond and install an engineered spillway.

Status

In November 2018, AER applied to Environment and Parks to reimburse the costs from the Environmental Protection and Enhancement Fund.[21] AER noted to senior management at Environment and Parks that it had been 18 years since the mine was abandoned and that AER needed a stable funding stream to deal with remaining environmental risks that pose a potential threat to people, endangered species, and another coal mine company. AER informed the Deputy Minister of Environment and Parks at the time that without a stable funding stream, it might not be able to ensure the safe regulatory management of the site or support further closure work and might have to return the mine to Environment and Parks as the landowner. Environmental and Parks, contrarily, concluded that AER was responsible to pay because AER regulates the coal industry.

AER did not receive a formal response from Environment and Parks regarding its application to the Environmental Protection and Enhancement Fund for reimbursement of the costs that AER incurred in 2018.

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[20]   Environmental Appeal Board, Appeal No. 99-164, Paragraph 19 (http://www.eab.gov.ab.ca/dec/99-164.htm).

[21]   The Environmental Protection and Enhancement Fund was disestablished on December 5, 2019.

Leaking gas well within Town of Athabasca

Key findings

- **Lack of clarity and confusion over funding sources**

Context

In 2018, AER received a complaint of a leaking sweet gas well, originally drilled in 1894 within the town of Athabasca on the bank of the Athabasca River. The well has never been properly abandoned and reclaimed. Due to the risks and urgency, AER spent funds from its operating budget to contain the leak. The work completed to contain the leak was ultimately unsuccessful. AER put a fence around the site to reduce the immediate public safety risk. However, the environmental risks remain. AER hired a specialist who estimated that it would cost about $335,000 to abandon the well. Once the well is abandoned, AER will need to determine the extent of any necessary remediation and reclamation work.[22]

Status

AER concluded that government is responsible for the costs for the clean up of this well. Consequently, AER submitted an application to the Environmental Protection and Enhancement Fund to recover the costs related to this legacy site but was unsuccessful because Environment and Parks concluded that OWA was responsible for the costs.

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[22] Subsequent to us completing our audit work, AER has approved the expenditure of funds from the administrative levy to have a third party undertake abandonment work of the well in early 2021.

Mazeppa Gas Plant

> **Key findings**
> - **Lack of clarity on whether government is responsible or has accepted responsibility to do the work and pay for it**
> - **Lack of clarity and confusion over funding sources**

Context

The Mazeppa Gas Processing Plant, located near High River, began operations in 1986. The plant is considered a large production facility. In March 2017, the operator went bankrupt. The licensee's 2013 site-specific liability assessment estimated that it would cost about $29 million to remediate contamination and reclaim this plant to required standards. This estimate does not include the ongoing costs to manage and secure the site.

Status

AER's management determined that it could not transfer the Mazeppa Plant to OWA because it does not fall within the scope of authority of OWA, as the AER has not charged an orphan levy on large production facilities. AER was paying the costs for security and some maintenance from its operating budget, funded with administrative levies from industry. On January 16, 2020, the land that houses the Mazeppa Sour Gas Plant vested with the Crown (Treasury Board and Finance) under the *Unclaimed Personal Property and Vested Property Act*. On October 1, 2020, the Deputy Minister of Energy authorized OWA to use a portion of the loan that Treasury Board and Finance provided to OWA for well cleanup to conduct work at the Mazeppa Gas Processing Plant.[23]

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[23] At the time of our audit, government had not yet authorized AER to charge the orphan levy for large facilities in order for OWA to repay the loan funds used at this site. In March 2021, AER received approval to charge this levy, effective 2021–2022.

AER

Legacy coal mine sinkholes

Key findings

- **Lack of clarity and confusion over funding sources**

Context

AER received complaints about sinkholes related to legacy coal mines in Southern Alberta. AER fixed a sinkhole using its operating budget, funded with administrative levies from industry.

Status

In 2017, AER received confirmation from the Deputy Minister of Environment and Parks at the time that it can use the Environmental Protection and Enhancement Fund to recover costs to fix sinkholes. AER has attempted to recover these costs from the Environmental Protection and Enhancement Fund but was unsuccessful prior to the disestablishment of the fund. AER has not fixed similar concerns associated with another legacy coal mine. The landowner in the second case has since hired a lawyer to get AER to fix the sinkholes.

AER

Legacy and orphan sites in the oil and gas and coal industries

Key findings

- **Insufficient systems to track how much it will cost to manage sites**

Context

Regulatory staff at AER maintain a list of legacy and orphan sites it manages that includes cost estimates based on judgment and experience with other similar sites.

Status

Finance staff at AER were initially unaware of the list or the estimates in order to assess the appropriate accounting or disclosure of these sites. They became aware of this list through our audit work.

ALBERTA ENVIRONMENT AND PARKS
Alkali Brine Pond

Key findings

- **Insufficient systems to track how much it will cost to manage sites**

Context

The Alkali Brine Pond site is located near the Saskatchewan border, just south of Wainwright. From 1958 to 1985, a company operated an unlined brine storage pond for the storage and disposal of salt cavern brines. That company no longer exists, and government accepted responsibility for this site many decades ago. After decommissioning the site, chloride concentrations were found to be significantly above acceptable environmental standards. The source of chloride contamination from the brine pond has not been remediated or controlled. As a result, the plume of contamination has since spread approximately 11 kilometres into creeks, a recreational lake and onto private land. Left untreated, engineering models show that the contamination levels in the recreation lake will peak in 2052 and continue beyond 2110.

At minimum, government will be required to monitor the spread of contamination over this time.

Status

The cost to clean up this particular site has grown substantially over the years. The most recent cost estimates, from 2002, range from $2 million to $146 million and include several options to control the source of contamination.

Despite Environment and Parks having care and custody of the site for several decades, environmental site assessments are still being completed. A simulation from the engineering report[24] below shows the brine plume in 1960 and again in 2020, depicting the spread of the contamination because of the lack of containment and remediation of the unlined brine storage pond.

Simulated brine plume (1960):

(in plan)
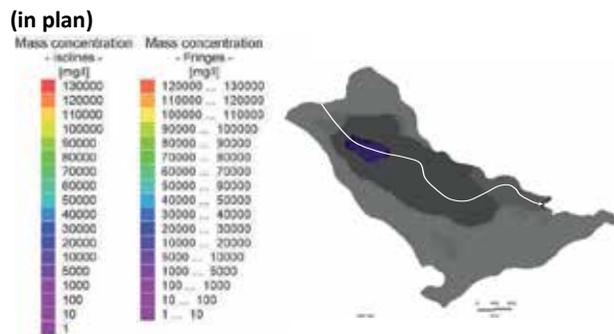
Simulated brine plume (2020):

(in plan)

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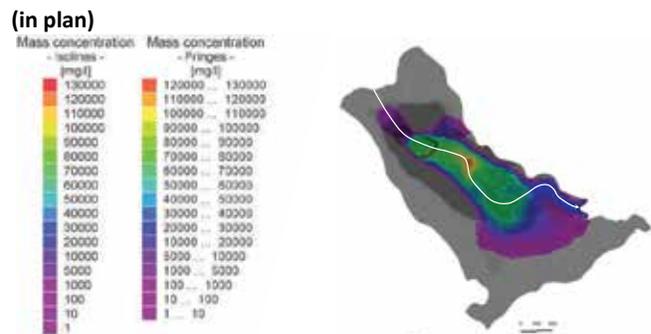
24   Herb Maier and Ken Howard, *Alkali Lake Brine Plume Modeling Project Final Report*, (Revised Draft) April 2015.

Wandering River Highway Maintenance Yard

> **Key findings**
>
> - **Ensuring compliance with environmental legislation**

Status

In 1979, government acknowledged that salt operations at the yard caused negative impacts on the adjacent property used for agriculture. A ditch was dug to the north to prevent the salt from entering the neighboring agriculture land. After continuous concerns from the adjacent landowner, government purchased a strip of land in 1995 from the landowner.

Transportation was advised in 2005 that the site should be decommissioned, as due to the site conditions, it did not meet the requirements for a highway maintenance yard as defined by the Transportation Association of Canada.

In 2013, Transportation removed some of the salt-impacted soils on the strip of land, which created a dugout that filled with water over time. Engineers reported that this water is impacted and can act as a secondary source of contamination that may cause further adverse effects to the environment.

In 2015, the adjacent landowner complained to Transportation that the pond was overflowing, preventing the landowner from seeding parts of his field.

In 2018, engineers concluded that Transportation should consider implementing measures to reduce the continued release of salt contaminated groundwater into the subsurface and take action on managing the migration of the contamination towards the river and its potential effects. In 2019, Transportation hired engineers to conduct additional ground water monitoring at the site.

Context

Transportation does not have an acceptable risk management plan and consent from adjacent property owners to follow a risk management approach at the Wandering River highway maintenance yard. Contamination has been spreading over an extended period towards the Wandering River.
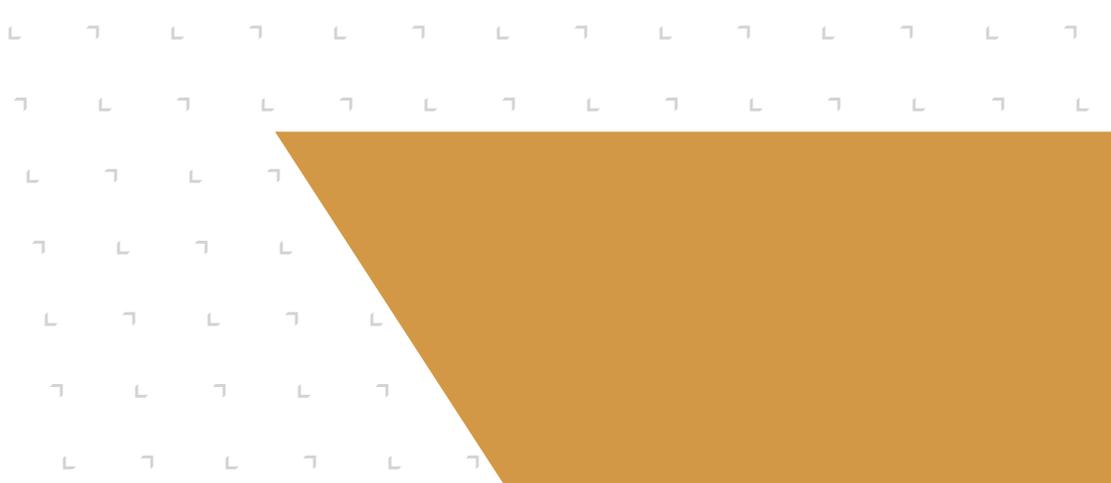
2 Progress Report

Progress Report

Alberta Environment and Parks

Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining

(July 2015)

Summary of Recommendations

In April 2021, we completed a review on progress of implementation on our July 2015 audit of *Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining*. We found that the department has made unsatisfactory progress in implementing the recommendation:

UNSATISFACTORY Progress:
Improve program design

Introduction

In 2015, we found a significant risk that the calculation of financial security for oil sand mine operators could result in insufficient security collected to cover reclamation costs.

We recommended that the department improve how security is calculated to ensure the design of the Mine Financial Security Program (MFSP) fully reflects the intended objectives of the program. Without these improvements, if a mine operator cannot fulfill reclamation obligations and no other private operator assumes the liability, the province is at risk of having to pay substantial amounts of public money.

Given the importance of our findings and that it has been six years since we made the recommendation, we decided to assess what steps management has taken to date and what remains to be completed. We based our followup work on the department's May 2017 implementation plan and the March 2019 MFSP Steering Committee Terms of Reference, which outlined further steps and deliverables related to implementing our recommendation.

We concluded that the department has not made satisfactory progress in implementing our recommendation. Although the department has completed three phases of analysis over the past six years, management has not made a final decision on whether changes to the calculation of security are needed. The department has identified what steps it wants to take prior to making a decision, but it has no implementation plan for how and when it will complete them.

Recommendation:
Improve program design

UNSATISFACTORY PROGRESS

Context

Background

The fundamental principle of the MFSP is that operators are responsible for carrying out suspension, abandonment, remediation and surface reclamation (going forward, referred to as reclamation in this report) work to the standards established by the province and to maintain care and custody of the land until a reclamation certificate has been issued.

The MFSP was created by the department in 2011 to ensure that financial resources will be available to reclaim disturbed lands if an operator is unable to complete the reclamation. The MFSP intends to protect Albertans from incurring costs associated with reclamation work while maximizing opportunities for responsible and sustainable resource development. The collection of security is a key element of the MFSP.

The MFSP requires a base amount of security for each mine project. Beyond the base amount, an asset-to-liability calculation is used to determine if additional security is necessary. The asset-to-liability calculation recognizes that the resource value associated with an approved project and the potential cash flows from operations are assets that enable an operator to cover the costs of reclamation (liability).

When a project has assets at least three times larger than its liability, is 15 years or more from the end of its reserves, and is keeping current with its reclamation plans, operators are not required to pay additional security above the base amount. Conversely, when a project has assets less than three times its liability, is nearing the end of its productive mine life, or is not meeting its reclamation plan targets, additional financial security is required.

The MFSP's asset-to-liability approach is risk-based. This means that Albertans bear a risk of having to cover the costs of reclamation if the mine operator has not met the reclamation plan targets. The MFSP is designed to manage this risk by requiring deposits (security) that will increase as assets are depleted or become less valuable or as liabilities increase and come closer to having to be paid.[25]

Responsibility for the administration of the program was transferred from the department to the Alberta Energy Regulator (AER) in March 2014. AER's responsibilities include the verification of assets and liabilities operators annually report. The department continues to be responsible for establishing the MFSP policy and design.

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[25] A variety of mine financial security approaches exist across North American jurisdictions with mining operations. For example, a number of jurisdictions use a full security approach that requires an operator to provide security deposit at the start of the mining project, based on estimated costs to abandon, remediate and reclaim the site.

Based on the most recent information operators reported in June 30, 2020, the government held $1.48 billion of security in comparison to estimated reclamation liabilities of $31.45 billion.[26]

History of our work in this area

In 1998, we performed an audit of the department's systems to collect financial security for land disturbances in the oil sands and coal mining sectors. We found that the department did not have a consistent process to determine the amount of security required from operators. We reported our original recommendation in 1998–1999,[27] and repeated it in 2000–2001,[28] 2004–2005[29] and 2009.[30]

Since our 2009 followup audit, the government has implemented a number of reclamation initiatives to improve clarity, security, and environmental performance in the oil sands and coal mining sectors. These new reclamation initiatives include the MFSP.

Our 2015 report

In 2015, we followed up to see if the department implemented our recommendation to implement a system for obtaining sufficient financial security to ensure that conservation and reclamation of mine sites is completed.[31] We found that the department needed to improve the MFSP design because the following factors could be overstating asset values in the MFSP calculation:

- the reserves estimate treats proven and probable reserves as equally valuable

- the resource asset valuation calculation applies a forward price factor to the average netback[32] for the last three years, which assumes that oil prices and operating costs move proportionally

- the resource asset valuation calculation does not reflect risks associated with the future economic value of the reserves (no discounting of assets)

[26] https://static.aer.ca/prd/documents/liability/MFSP_Liability.pdf

[27] *Report of the Office of the Auditor General—1998-1999*, pages 157-159.

[28] *Report of the Office of the Auditor General — 2000-2001*, page 90.

[29] *Report of the Office of the Auditor General — 2004-2005*, pages 180-182.

[30] *Report of the Office of the Auditor General—October 2009* pages 207-209.

[31] *Report of the Office of the Auditor General—July 2015*, page 29.

[32] Netback in the MFSP is calculated as (revenue - operating costs)/sales volume and is an indication of profit made per unit of commodity (i.e. per barrel of oil for oil sands mine operators).

Further, we found that the following circumstances could result in inappropriate extension of mine life and unnecessary deferrals in the collection of security under the program:

- some oil sands mine operators include reserves related to in situ (non-mining) production areas in their asset calculations

- oil sands mine operators are able to amend the areas covered by their mine approvals or combine multiple mines into one approval, thereby potentially extending the reserve life and size

Based on our findings, we had recommended that the department:

- analyze and conclude on whether changes to the asset calculation are necessary due to overestimation of asset values in the methodology

- demonstrate that it has appropriately analyzed and concluded on the potential impacts of inappropriately extended mine life in the calculation

We also made a recommendation to the AER to improve its monitoring and develop and execute on a risk-based plan for its MFSP monitoring activities to ensure it is carrying out the appropriate amount of verification. AER has since implemented our recommendation.[33]

Our current findings

Since 2015, the department has completed three phases of analysis for the MFSP asset calculation.[34] However, no final decision has been made.

Working groups analyzed the four aspects of the MFSP for which our 2015 audit found deficiencies:

1. proven and probable reserves

2. forward price factor

3. discounting of assets

4. extending mine life

In phases 1 and 2, the department used working groups to carry out the analysis and present the results and advice for changes to management. In phase 3, a Steering Committee was established to oversee the working groups and present the results and advice for changes to the department's assistant deputy ministers, Department of Energy, Department of Treasury and Finance, and AER.

Phase 1 took place over 2015 and 2016, and based on the analysis, the working groups advised that changes be made to the security calculation, as well as the need to collect more operator information. Management decided in December 2016 to conduct further analysis over the next 18 months, to have better support for a decision on changes to the MFSP, and to understand industry impact.

This prompted the initiation of phase 2 that occurred during 2017. The analysis during this phase also resulted in the working groups advising that changes to the security calculation are made. Management decided, in December 2017, to gather more information over three to five years and conduct further analysis to help inform potential changes to the MFSP.

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[33]   *Report of the Office of the Auditor General—November 2019*.

[34]   The analysis conducted in phases 1 and 2 used publicly available and hypothetical data. In phase 3, the department built upon the findings from previous phases and conducted analysis using operator data obtained from AER.

As a result, in 2018-2019, a third phase was undertaken, reviewing many of the same items from the previous two phases. The working groups provided advice based on the analysis completed in fall 2019. The Steering Committee presented the results and advice to management in March 2020. As of April 2021, no decision has been made.

After six years of analysis, the department has not decided if and how the calculation should change.

Below is the current status of the specific items we raised in our report in 2015:

Issue identified in 2015	Department's Analysis and Status
Proven and probable reserves Our 2015 audit found that treating probable reserves as equally valuable as proven reserves overestimates the MFSP assets, which could delay posting of additional security by operators.	Phase 3 analysis resulted in advice to calculate MFSP assets using only proven reserves (not proven and probable). The analysis also determined that exclusion of probable reserves from assets would result in additional security for two operators, of approximately $400 and $800 million. The department previously analyzed this issue in phase 1 and also advised that only proven reserves be included in the calculation. No final decision on this matter has been made.
Forward price factor Our 2015 audit found that applying the forward price factor to the average netback (price per barrel minus operating cost per barrel) may not reflect the intended objectives of the program because operating costs do not typically move proportionally to changes in revenues as oil prices change. Applying the forward price factor to the average netback therefore underestimates the impact of future price declines on the valuation of a mine's resource assets.	Phase 3 analysis resulted in advice to require operators to submit operating cost data and to use this information and other information already submitted to develop separate forward price factors for operating costs and revenue. The department previously analyzed this issue in phase 1 and advised to apply the forward price factor only to revenues. No final decision has been made.
Discounting of assets Our 2015 audit found that no discount rate, or risk-based adjustment, is applied in determining the asset value, which overstates the value of a mine's resource assets.[35]	Phase 3 analysis found that applying a discount rate to both assets and liabilities or only to assets would result in the MFSP calculations and security requirements being no longer sensitive to fluctuations in commodity prices. For example, the analysis showed that even with prolonged low oil prices the asset to liability ratio remained above three when assets and liabilities were discounted by 10 per cent. Conversely, discounting only assets by 10 per cent resulted in the asset to liability ratio consistently below or close to three under moderate to low oil prices, thus triggering requirements for additional security. Phase 3 concluded that the MFSP would no longer be effective at measuring risk associated with declining asset value if discounting was applied and thus advised maintaining the status quo of using undiscounted assets and liabilities. The need for discounting was analyzed in phases 1 and 2 and resulted in advice to require operators to submit forecasted production and cash flow, and review the need for discounting assets and liabilities based on the new information. A final decision on this area still needs to be made.

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35   The calculation of MFSP assets should reflect the business practice of discounting future profits to take into account the risk associated with the future economic value of the reserves.

Issue identified in 2015	Department's Analysis and Status
Extending mine life by adding in situ reserves In 2015, we reported that the inclusion of the oil reserves associated with in situ production in the calculations may inappropriately inflate the mine's resource assets and extend the life of the mine. This could potentially delay the collection of security for the open pit mining operation.	Phase 3 analysis resulted in advice to disallow the inclusion of reserves from in situ facilities in their assets, but to allow currently approved in situ to be included in asset value calculations. The department previously analyzed this issue in phase 1 and advised that in situ reserves can be added at the discretion of a regulator, if reclamation is not unduly delayed. A final decision has not been made.
Extending mine life by combining approvals In 2015, we reported that operators may combine an old mine operation with a new one and thus increase the resource assets associated with the approval. This could delay collection of security for the older mining operation as it reaches the end of its life.	The department has deferred the work required to analyze this area; thus, no conclusion has been made.

The department has identified the steps it wants to take to reach a decision but has not developed a plan

In March 2020, the department determined that it must complete the following steps before making a final decision on the areas being analyzed:

- review the analysis completed in phase 3 and obtain information from industry needed to fill data gaps
- use the new data from industry to update or complete the analysis, including financial impact on operators[36]

In April 2021, the department stated that the MFSP is also linked to other government policies currently underway. Therefore, the department wants to know the impact on operators from changes to the MFSP and the related policies before making a final decision.

In May 2021, after our followup work had been completed, the department announced that it is reviewing the MFSP and is also making adjustments to the 2020 calculations of security given adverse economic events (e.g. significantly depressed oil prices).

What needs to be done

The department needs to have a plan with specific actions and timelines for completing the steps it identified, including when management will make a final decision on the MFSP changes. When the department executes the plan, we will assess if our recommendations has been implemented.

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[36] The department's analysis in phase 3 showed that changes to the MFSP could significantly increase the amount of security that oil sands operators must pay.

3 Assessment of Implementation Reports

Contents

Introduction

About Our Assessment of Implementation Reports

Management is responsible for implementing our recommendations.

We review management's implementation plans and perform procedures to determine whether management has implemented our recommendation(s) when management has asserted they have been implemented. We repeat our recommendations if we do not find evidence they have been implemented. We may also issue new recommendations for matters that come to our attention in the course of our assessment.

Our Assessment of Implementation Reports are conducted under the authority of the *Auditor General Act*. 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 applicable professional standards and applicable ethical, legal and regulatory requirements.

Our 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 behavior.

Assessment of Implementation Report

Alberta Community and Social Services

Systems to Manage the Assured Income for the Severely Handicapped (AISH) Program

(October 2016)

Summary of Recommendations

In January 2021, we completed our assessment of implementation from our October 2016 audit of Alberta Community and Social Services' *Systems to Manage the Assured Income for the Severely Handicapped (AISH) Program*. We found that two of our three recommendations have been implemented:

IMPLEMENTED Recommendation:
Improve program accessibility

REPEATED Recommendation:
Set service standards and improve eligibility procedures and guidelines

IMPLEMENTED Recommendation:
Improve reporting on efficiency

Introduction

In 2016, we audited whether the department could demonstrate:

- services provided are accessible to eligible Albertans with disabilities
- eligibility decisions are timely and align with program objectives
- the program is efficient

We found in 2016 that the department was unable to demonstrate that the AISH program was efficient. The AISH application process favoured people who were good at completing forms and who were persistent. Assessing eligibility took too long and the department could not be sure if staff decisions were consistently applied. The reporting process did not provide sufficient information to allow the department to know what it needed to change to improve the program.

In our 2016 audit, we made three recommendations to the department:[37]

- ensure its application processes are user-friendly
- set service standards for application processing times and regularly monitor against these standards and improve procedures and guidelines to ensure staff apply policy in a consistent manner
- improve its processes to measure, monitor and report on the efficiency of the AISH program

In January 2021, we completed our assessment of implementation and found the department has implemented two of our three recommendations. The department has improved program accessibility and processes to measure, monitor and report on the efficiency of the AISH program. However, the department has not set service standards for application processing times or made enough improvements to procedures to ensure staff apply policy in a consistent manner. We again recommend that the Department of Community and Social Services set service standards for application processing times and regularly monitor against these standards and improve procedures and guidelines to ensure staff apply policy in a consistent manner.

Recommendation:
Improve program accessibility

IMPLEMENTED

Context

Albertans applying to the AISH program have severe handicaps and some may have difficulty obtaining the information and completing the forms the application process requires.

In our 2016 audit, we found access to the AISH program through the intake process was complex and not supported by user-friendly guides or resources. The program had several accessibility barriers in the intake process:

- online resources for the application process were hard to find
- the application form was onerous
- there was inadequate prescreening
- the process for triaging applicants was inefficient

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[37] *Report of the Auditor General of Alberta—October 2016*, page 35

Our current findings

The department implemented our recommendation to ensure its application processes are user-friendly. While the department has identified that further enhancements to the application process can still be made, it has implemented an ongoing process for continuous improvement.

The department made AISH program information more accessible and user-friendly, simplified the AISH application form and improved the internal AISH application process.

We found management has:

- updated the AISH website for easier access and understandability and they included links to current and relevant information

- developed user-friendly guides for Albertans and physicians, which provide applicants and doctors with eligibility information and step-by-step instructions on how to complete the forms[38]

- simplified the AISH application form making it shorter, easier to understand and customizable to the applicant's situation[39]

- combined three medical forms into one, which can now be submitted with the AISH application

- shortened the medical section of the AISH application form and removed redundant medical information

- launched an online AISH application form, making it easier and faster for Albertans to apply

- implemented a centralized AISH application process to improve prescreening and triaging of applicants

- introduced an assessor role, which is responsible for completing the initial review and working with applicants to ensure the proper information is submitted

- revised the Notice of Appeal form so it is standardized and easier to understand; the form now contains information and links to additional resources to support the appeals process

The department evaluated its improved processes and concluded the majority of processes were implemented and operating effectively. Management's assessment identified areas that required improvement, such as further enhancing accessibility and user-friendliness of web information, the online application process, and the process to ensure completeness of forms. Management performs ongoing assessments of continuous improvement of the AISH application process through its monthly variance reporting, the AISH Continuous Improvement Committee, and the AISH Continuous Improvement Working Group.

Recommendation:
Set service standards and improve eligibility procedures and guidelines

REPEATED

We recommend that the Department of Community and Social Services:

- set service standards for application processing times and regularly monitor against these standards

- improve procedures and guidelines to ensure staff apply policy in a consistent manner

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[38] The guides were developed with input from community partners, health service organizations, medical professionals, AISH clients and applicants, and program staff from across the province.

[39] The application form was field tested with AISH applicants and clients, families, community organizations, provincial associations, ministry staff, and physicians.

Context

Consistent, efficient and accurate eligibility decisions are critical when they affect Albertans with disabilities.

In our original audit of the AISH program, we found:

- the department did not have standards to regularly monitor its application processing times against
- AISH workers have to use considerable judgment in their assessment of applications and receive inadequate training and guidance
- the department treats applicants and clients differently when applying its policy on "earning a livelihood"[40]

In 2016, we recommended the department:

- set service standards and regularly monitor against these standards
- improve procedures and guidelines to ensure staff apply policy in a consistent manner

We repeat our recommendation to set service standards and improve eligibility procedures and guidelines, as the department has yet to develop standards to monitor against or made sufficient improvements to procedures to ensure staff apply policy in a consistent manner.

Our current findings

The department has not yet:

- set service standards for application processing times
- improved procedures and guidelines to ensure staff apply policy in a consistent manner

Service standards

In our 2016 audit report, we found the department only actively monitored application timelines for the medical review stage and did not monitor against standards.

The department has improved its tracking of application processing times by identifying eight measures it regularly monitors for various stages of the application process. However, we found the department still does not have service standards for application processing times. Currently, the department is comparing monthly results in these application process areas to prior-period results and performing a variance analysis.

Standards provide a critical link between organizational strategy and day-to-day operations. Comparing results to established standards provides stakeholders with a clear sense of operating effectiveness.

Results compared to prior periods rather than to service standards may not provide adequate information about whether processes are operating effectively. The department is not able to say if the processing times are acceptable or if they need improvement. It also does not provide employees with an aspirational or motivational target.

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[40]   Clients are approved program participants whereas applicants are those being assessed for approval.
       In 2016, the department's policy defined "earning a livelihood" as being employed a minimum of 30 hours per week
       at a reasonable wage.

Management told us it has not established service standards yet as the recently improved AISH application processes had a significant impact on the measures, making it difficult to establish a baseline. Management indicated that it anticipates setting service standards in April 2021.

Improve eligibility procedures and guidelines

The department has implemented several processes to improve its eligibility procedures and guidelines to assist staff in applying program policy in a consistent manner. However, we found the department's training processes are not operating effectively and it has not implemented a process to respond to internal audit recommendations.

We found the department has enhanced its training program and updated its core training curriculum across all roles. Nonetheless, the department has not finished implementing its provincial training strategy nor does it have effective processes for accurately assigning, tracking, and monitoring employee training completion.

In our 2016 audit, we found management was not responding promptly to internal audit recommendations to improve AISH program processes. In 2017, management designed a process for responding to internal ministry audit recommendations, but implemented minimal change. Internal audit and management client file reviews continue to find deficiencies, such as discrepancies in benefit payments and documentation errors. Data provided to us by internal audit indicated total monetary and compliance error rates per client file increased by 61 per cent from 2016 to 2018.[41]

In November 2019, the department designed a new process to assess and prioritize audit criteria and respond to internal audit recommendations. In February 2020, the department created a terms of reference for an AISH and Income and Employment Supports (IES) Internal Working Group with the purpose of improving the department's response to internal audit recommendations. Management delayed the launch of the working group as staff were diverted to the COVID-19 pandemic response and redeployed to support remote service delivery. Management told us they will be convening the working group in February 2021 and implementing the new process in March 2021.

The department implemented the following:

- an AISH Adjudication Guide and complementary training to support consistent assessment of medical eligibility
- standardized denial letters, which include individualized descriptions of why the applicant is not eligible, information on how to submit additional information or appeal, and contact information for other resources
- a process and tracking tool to capture reasons for overturned eligibility decisions, analyze data, and identify opportunities for improvement
- a centralized Appeals Secretariat responsible for the appeals process
- a review of the 'severe handicap' and 'earning a livelihood' policies, leading to the removal of the previous policy that restricted applicants from working more than 30 hours/week

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[41]   We were unable to confirm the 2019 internal audit findings, as they were unavailable at the time of our audit.

Consequences of not taking action

Until management implements a process to ensure staff take mandatory training and to respond to internal audit recommendations, there may continue to be inconsistent application of policies resulting in repeated errors at the eligibility stage, possibly delaying benefits for applicants who need it most.

Without service standards for application processing times to regularly monitor against, the department is unable to say if it is achieving its desired results.

Recommendation:
Improve reporting on efficiency

IMPLEMENTED

Context

Before an organization can know what it needs to improve to achieve desired outcomes, it must measure and analyze the results it is achieving.

In 2016, we found the department had inadequate performance measures and processes to monitor and report on the operating efficiency of the AISH program.

Our current findings

The department implemented our recommendation to improve its processes to monitor and report on the efficiency of the AISH program.

Senior management receive monthly and quarterly reports on AISH program activities. Quarterly reporting covers 13 different performance measures and indicators[42] related to the application and appeals process. Monthly reporting focuses on eight measures.

As previously noted, the measures currently focus on comparing actual results to prior-period results rather than to a standard and are time metrics such as average time between:

- receipt of application and initial review
- receipt of application and application completion
- application completion and eligibility decision
- receipt of application and eligibility decision

The indicators look at items such as the number of eligibility decisions for both applications and appeals.

Management tested the operating effectiveness of its new monitoring processes and identified a data integrity issue that impacted the reported processing times. To improve operating effectiveness and mitigate the data integrity issue, management inserted a new date field in the application processing system and provided additional training to program employees. The department continues to use its monthly processing time variance analysis to detect further data issues along with other targeted improvements to its processes.

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[42]   Definitions provided by Community and Social Services:
        Performance Measures: Serve as a management and decision-making tool, providing information that can be used to make improvements in policy program design and service delivery.
        Performance Indicators: Provide supporting information to help understand the context of the other measures.

Management can consider other mitigating controls to prevent data issues from occurring, such as limiting who can initiate data changes, what changes can be made, and when changes can be made within the program's information technology system.

The department's AISH action plan[43] indicated the department would enhance its public reporting on AISH program outcomes. From July 2017 to June 2018, the department publicly reported its AISH program performance measures and indicators. Subsequently, the department decided to not publicly report AISH outcomes. Public reporting of program outcomes is not a Government of Alberta requirement but is determined by organizations, typically based on program stakeholder needs.

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[43]   The AISH action plan was created in response to the recommendations made in the *October 2016 Report of the Auditor General of Alberta*.

Assessment of Implementation Report

Alberta Education
Alberta Infrastructure

Systems to Manage the School-Building Program

(April 2016)

Summary of Recommendations

In January 2021, we completed our assessment of implementation from our April 2016 audit of Alberta Education and Alberta Infrastructure's *Systems to Manage the School-Building Program*. We found that the nine recommendations[44] have been implemented.

IMPLEMENTED
One Recommendation:
Clarifying roles and responsibilities

IMPLEMENTED
One Recommendation:
Improve the planning and approval process

IMPLEMENTED
Two Recommendations:
Improve systems to manage and control projects

IMPLEMENTED
Three Recommendations:
Improve reporting systems and controls

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[44] The implemented recommendations include the introduction of new roles and responsibilities for the school-building program, a gated-approval process, enhanced project management controls, and enhanced monitoring and reporting systems.

Introduction

In 2016, we audited Alberta Education's and Alberta Infrastructure's systems to plan, deliver, and report on the school-building program. The school-building program includes new schools, replacement schools, and school modernizations. In that audit, we made nine recommendations to Alberta Education and Alberta Infrastructure.

In 2018, the school-building program budget was transferred from Alberta Education to Alberta Infrastructure. The transfer of budget had an impact on which department was responsible for implementing some of our outstanding recommendations. We completed the assessment of implementation based on these updated responsibilities following the budget transfer.

We focused our work on assessing if the enhanced systems were designed adequately and implemented. The scope of our assessment of implementation excluded processes and controls related to public-private partnerships for the school-building program.

In our assessment of implementation, completed in January 2021, we found Alberta Education and Alberta Infrastructure implemented our nine recommendations for the school-building program related to:

- roles and responsibilities
- planning and approval processes
- managing and controlling projects
- reporting systems and controls
- capital funding requests

One Recommendation:
Clarifying roles and responsibilities

IMPLEMENTED

Context

Alberta Education and Alberta Infrastructure are both responsible for elements of the school-building program.

In our original audit, we found:

- Alberta Education lacked an adequate governance framework to oversee the school-building program
- policies and procedures between Alberta Education and Alberta Infrastructure were not adequate
- Alberta Education did not have clear decision-making authorities for the program

Our current findings

Alberta Education and Alberta Infrastructure implemented our recommendation to clarify the roles and responsibilities of each department and established supporting policies and procedures. Alberta Education also implemented our recommendation to develop clear decision-making authorities for the program.

We found that Alberta Education and Alberta Infrastructure updated their Memorandum of Understanding (MOU) for the school-building program and implemented a detailed governance matrix that defines responsibilities and accountabilities for the program. A joint steering committee and a joint operations committee, with representatives from Alberta Education and Alberta Infrastructure, now oversee the school-building program.

The MOU and the detailed governance matrix divide responsibilities and accountabilities for the school-building program into two stages—capital planning and project implementation. Alberta Education is accountable for the capital planning stage, which includes activities up to project approval. Alberta Infrastructure is accountable for the project implementation stage, which includes activities post project approval.

Alberta Education and Alberta Infrastructure have implemented several new processes to support the school-building program, including a gated-approval process, enhanced reporting processes, and a process to approve major project changes.

Alberta Education has also improved its decision-making authorities for the program and documented these in the gated-approval and major project change processes.

One Recommendation:
Improve the planning and approval process

IMPLEMENTED

Context

A gated-approval process divides a project into distinct "gates" separated by decision points. The entrance to each gate should have clear deliverables to provide assurances that preliminary planning requirements, including project scope, project schedule, and project budget, have been adequately defined prior to moving to the next gate.

In 2016, we found that Alberta Education did not use a gated project approval process to identify projects recommended for approval. The ministers approved projects and announced completion dates before projects were planned sufficiently, and in some instances, when the school sites were not ready.

Our current findings

Alberta Education implemented our recommendation to use a gated-approval process that is designed to:

- assess the merit of a proposed capital project based on established factors and criteria
- ensure required planning deliverables, including site readiness evaluations, are completed prior to project approval
- identify project risks and develop mitigation strategies

The gated-approval process includes 10 phases, each with defined deliverables and responsibilities. The initial phases focus on assessing the adequacy of the project scope, scoring the projects, and prioritizing projects using defined criteria. Projects that Alberta Education recommends for funding in the next three years are then sent to Alberta Infrastructure for costing. Once priority projects are costed, Alberta Education moves these projects through the funding phases.

As part of the phases, Alberta Education reviews the site evaluation, including site readiness. Priority projects that have unresolved site readiness risks are recommended only for project design funding. If a project is a priority and has a suitable site that has passed through all of the necessary site evaluation steps, Alberta Education will recommend the project for full construction funding.

Two Recommendations:
Improve systems to manage and control projects

IMPLEMENTED

Context

In 2016, we found:

- approval letters and grant agreements were not executed on a timely basis for projects managed by school jurisdictions
- there was no formal agreement between Alberta Education and Alberta Infrastructure on project expectations, other than budget, for projects managed by Alberta Infrastructure
- Alberta Education did not have adequate systems to manage project changes
- while Alberta Infrastructure and Alberta Education both approved planning deliverables, it was not clear which specific deliverables each department approved
- Alberta Education and Alberta Infrastructure provided the same level of oversight for all projects managed by school jurisdictions, regardless of risk

Our current findings

Alberta Education and Alberta Infrastructure implemented our two recommendations to:

- promptly agree on project expectations with school jurisdictions and implement change-management policies and procedures
- identify who must review and approve project planning deliverables and formally communicate these approvals to school jurisdictions and contractors, and base oversight of projects managed by school jurisdictions on risk

Project expectations

For all projects, Alberta Education and Alberta Infrastructure agree on the scope, budget, and preliminary schedule at the beginning of the project. For school jurisdiction managed projects, grant agreements outline project expectations including scope, budget, and other reporting required from the school jurisdictions. While the project schedule is not included in the grant agreement, Alberta Infrastructure discusses the project schedule with school jurisdictions following project approval and receives periodic schedule reports from school jurisdictions. For Alberta Infrastructure managed projects, Alberta Infrastructure has also clarified its expectations for school jurisdictions in a project memorandum of understanding.

Alberta Infrastructure has implemented enhanced monitoring controls to ensure project approval letters and grant agreements are executed in a timely manner, whenever possible.

Change management

Alberta Education and Alberta Infrastructure have implemented a new process for major project changes. The process outlines the criteria for determining if a change is considered major and includes the process steps and responsibilities. All major project changes must go through the joint operations committee to determine if the changes are supported.

Project planning deliverables

For projects managed by school jurisdictions, grant agreements outline project design deliverables that must be submitted to Alberta Education and Alberta Infrastructure at each planning stage. Alberta Education has also clarified the criteria it uses when assessing project design deliverables. Alberta Infrastructure and Alberta Education provide school jurisdictions with letters acknowledging their review of the project design deliverables and confirmation that the school jurisdiction can proceed to the next planning stage.

For projects managed by Alberta Infrastructure, Alberta Education reviews the same design deliverables that it does for school jurisdiction managed projects. Alberta Infrastructure has also updated its consultant contract template, which advises consultants not to proceed to the next planning phase until they have received approval from Alberta Infrastructure for project design deliverables in the previous phase.

Oversight

Alberta Education and Alberta Infrastructure implemented a new tool to assess a school jurisdiction's capacity, expertise, and experience for managing approved capital projects. Alberta Education and Alberta Infrastructure use the tool to determine if an approved capital project will be managed by the school jurisdiction or by Alberta Infrastructure. If a project is managed by a school jurisdiction and has additional complexities or risks, Alberta Infrastructure can recommend an enhanced oversight model to monitor the project.

Three Recommendations:
Improve reporting systems and controls

IMPLEMENTED

Context

Project status reports are a key part of project communication, as they:

- report project progress against plans
- inform stakeholders of the project schedule, cost, and risks
- help management understand and mitigate project risks

In 2016, Alberta Education and Alberta Infrastructure did not have:

- a scheduling system to track, manage, and report on school projects
- measures to assess project cost and schedule performance
- key performance indicators to assess the results of the school-building program
- a rigorous process to review and approve school-building program reports before posting them to the website

Our current findings

Alberta Education and Alberta Infrastructure implemented our three recommendations to:

- define reporting requirements, including measures to assess project performance and use a common reporting system that specifies where information will be retained, who will update it, and how it will be updated
- define and report on key performance indicators for the school-building program
- improve systems for publicly reporting on the status of school-building projects

Reporting requirements

With the updated responsibilities, Alberta Education is accountable for reporting on the school-building program prior to project approval. Alberta Infrastructure is accountable for reporting on the school-building program, post-project approval.

We found Alberta Education and Alberta Infrastructure now track, manage, and retain school-building project and program information in alignment with accountabilities for the program. Alberta Infrastructure has developed a reporting manual that defines reporting responsibilities, source information systems, and processes and controls to update project information and compile both internal and public reports.

Alberta Infrastructure has enhanced its tracking, updating, and reporting of project-related information for schedule milestones and other financial-related information. Alberta Infrastructure also has implemented measures for assessing cost and schedule performance for school-building projects.

Key performance indicators

Alberta Education and Alberta Infrastructure implemented several key performance indicators (KPIs), aligned with their accountabilities, to assess the results of the school-building program. For example, Alberta Education implemented an internal KPI to identify the number of projects with schedule delays due to gaps in the planning process. This indicator helps Alberta Education assess the quality of its gated-approval process. Alberta Infrastructure also implemented several performance indicators to assess schedule and cost performance of its projects and the program.

Public reporting

Alberta Infrastructure has enhanced its public reporting processes for the school-building program. Alberta Infrastructure reports estimated school opening dates only after the school jurisdiction has communicated these dates to Alberta Infrastructure. Alberta Infrastructure also improved its review and approval controls for school-building project information that is reported publicly.

Two Recommendations:
Match capital funding to project progress

IMPLEMENTED

Context

Within the Government of Alberta, annual funding allocations are important because departments can only spend as much money as is appropriated in the current year.

In our original audit, we found that Alberta Education's cash-flow forecasting systems were not supported by assumptions tied to project progress.

Our current findings

Alberta Education and Alberta Infrastructure implemented our two recommendations to:

- improve cash-flow forecasting systems and ensure capital funding requests are supported by assumptions tied to project progress
- submit a revised school-building program plan to Treasury Board for approval, if funding requests are adjusted

With the updated responsibilities, Alberta Education is accountable for submitting funding requests to Treasury Board for the program budget. Once Treasury Board approves the program budget, Alberta Infrastructure is accountable for providing quarterly cash-flow updates to Treasury Board.

Alberta Education enhanced its program budget controls and uses costing information provided by Alberta Infrastructure, which is tied to and supported by project schedule assumptions. Both Alberta Education and Alberta Infrastructure approve the budget submission before Alberta Education provides it to Treasury Board.

Alberta Infrastructure enhanced its processes and controls around its quarterly cash-flow updates to Treasury Board. Every month, project managers update the cash-flow for each project based on the current forecasted schedule milestones. The cash-flow forecast also goes through multiple reviews in the department, prior to submission to Treasury Board. Alberta Infrastructure also tracks and monitors the accuracy of its cash-flow forecasting performance to determine if process improvements are needed.

Should Treasury Board adjust funding requests, Alberta Infrastructure has a documented process that the department would follow to address any adjustments, but the department has not yet had to execute this process.

Assessment of Implementation Report

Alberta Environment and Parks

Design of Systems to Manage the Climate Leadership Plan and Adaptation

(February 2018)

Summary of Recommendations

In March 2021, we completed our assessment of implementation from our February 2018 audit of Alberta Environment and Parks' *Design of Systems to Manage the Climate Leadership Plan and Adaptation*. We did not complete a full assessment of implementation as the Climate Leadership Plan (CLP) is no longer being used as the guiding plan for the government's climate change related initiatives and programs. As a result, our recommendation directed at a comprehensive implementation plan for the CLP, monitoring the progress and reporting against the CLP is no longer relevant.

CHANGED Circumstance:
Develop and use an implementation plan, improve quality of the monitoring data, and report on total cost

Recommendation:
Develop and use an implementation plan, improve quality of the monitoring data, and report on total cost

CHANGED CIRCUMSTANCE

Context

The Alberta government started taking action on climate change in 2002 when it released a climate change plan and a target to reduce emissions.[45] In 2008, the government released a new climate change strategy focused on reducing emissions through carbon capture and storage, using energy more efficiently and producing cleaner energy. In 2015, the government released another strategy, the CLP. The CLP introduced new measures for reducing emissions, including an economy-wide carbon tax and phase-out of coal generated electricity.

The Department of Environment and Parks has been responsible for leading the implementation of all three climate change strategies.

We have audited the department's systems for managing the climate change strategies four times. Our original audit of the 2008 strategy found that the department needed to improve how it plans, monitors progress and reports on the strategy results.[46] We made three recommendations and followed up on their implementation in 2012 and 2014.[47] The department did not implement any of the three recommendations, which we subsequently closed off when the CLP was introduced.

In 2018, we audited the department's systems to manage the CLP. Again, we found deficiencies in how the department planned, monitored progress and reported on the strategy results. In our February 2018 report, we recommended that the department develop an implementation plan, improve quality of the monitoring data and report on the total cost of the CLP.[48]

After we made our recommendation in 2018, the CLP was discontinued following the provincial election in 2019.

During the course of our monitoring of the department's progress since 2018, we noted that the department took the following actions:

- developed and published a plan for how it will continue implementing the CLP in 2018-2019[49]
- published the 2018-2019 CLP progress report[50]
- published the CLP highlights for 2017-2018 and 2018-2019[51]

We did not complete the full assessment of implementation because the discontinuation of the CLP has made our recommendation no longer relevant.

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[45] The target was to reduce emissions by 10 per cent below 1990 levels by 2020.

[46] *Report of the Auditor General of Alberta—October 2008*, pages 93-107.

[47] *Report of the Auditor General of Alberta—October 2012*, pages 35-40 and *Report of the Auditor General of Alberta—July 2014*, pages 39-47.

[48] *Report of the Auditor General of Alberta—February 2018*, pages 93-105.

[49] https://open.alberta.ca/dataset/da6433da-69b7-4d15-9123-01f76004f574/resource/b42b1f43-7b9d-483d-aa2a-6f9b4290d81e/download/clp_implementation_plan-jun07.pdf.

[50] https://open.alberta.ca/dataset/83285ecd-dbbe-4b6f-a1a2-ceaebf289fa3/resource/f6b4da5f-76d7-4ed2-9fd7-9a133c323440/download/clp-progress-report-2017-18-final.pdf.

[51] https://open.alberta.ca/dataset/83285ecd-dbbe-4b6f-a1a2-ceaebf289fa3/resource/9932c8ce-516a-4fcc-9bda-97cbedbc581a/download/clp_policyandprogramhighlights.pdf.

Assessment of Implementation Report

Alberta Environment and Parks

Wetland Replacement

(April 2010) (October 2015)

Summary of Recommendations

In February 2021, we completed our assessment of implementation from our April 2010[52] audit, which was repeated in October 2015,[53] on *Alberta Environment and Parks' Wetland Replacement*. We found that the recommendation has not been implemented.

We are repeating our recommendation with updated wording:

We recommend that the Department of Environment and Parks have clear, enforceable agreements and effective monitoring to ensure wetland replacement parties meet their responsibilities.

We expect the department to implement the recommendation for the 2013 policy and for the remaining wetland replacement under the 1993 policy.

> **REPEATED** RECOMMENDATION:
> Improve controls over wetland replacement

Introduction

In our 2010 audit, we found that the department lacked processes for monitoring the wetland replacement agencies' responsibilities and did not know if the funds they collected were appropriately spent.

In 2015, we repeated our recommendation because the department still did not:

- retain sufficient records of its assessment of whether project proponents met requirements to avoid wetland loss
- require the two agencies, Ducks Unlimited Canada (DUC) and the County of Vermilion River (Vermilion), to report all the information needed to assess if the wetlands were appropriately replaced
- have effective monitoring to ensure the agencies were meeting their responsibilities
- have an agreement with the City of Calgary (Calgary) to ensure the money it collected from project proponents was spent on wetland replacement

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52   *Report of the Office of the Auditor General—April 2010*, page 71.
53   *Report of the Office of the Auditor General—October 2015*, page 45.

Our assessment focused on the department's working relationships with the agencies and Calgary and on the department's control procedures under the 1993 policy. We also reviewed the design of the department's processes under the 2013 policy.[54]

Recommendation:
Improve controls over wetland replacement

REPEATED

Context

The department's 1993 policy governed wetland replacement in Alberta until 2015, when the current policy took effect.[55] Under both policies, project proponents are required to avoid or minimize wetland loss whenever possible.[56] If wetland loss cannot be avoided, project proponents must pay a fee for wetland replacement.

Two wetland replacement agencies operated in Alberta under the 1993 policy:

1. Ducks Unlimited Canada (since 2005)

2. County of Vermilion River (2013–2018)[57]

Agreements with the department required the agencies to collect wetland replacement fees from project proponents, keep records of replacement activities, and report to the department about the activities, results, and spending.

The City of Calgary had its own wetland policy since 2007. It collected fees from project proponents for wetland replacement in the municipality.

Table 1: Wetland replacement and spending 2005–2018

Agency	Spent on wetland replacement	Wetland area replaced (hectares)	Still to be spent	Still to be replaced (hectares)
DUC	$37M	2,730	$16M[58]	863
Vermilion	$0.2M	3	$0.5M[59]	80
Calgary	$0.8M	8	$34M[60]	77

Under the 2013 policy, project proponents pay the department,[61] and the department hires contractors to replace the lost wetland.[62]

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[54] The department's implementation of the 2013 policy was still being set up when we completed our assessment in September 2020. By December 2020, the department replaced 158 hectares of lost wetland, for which fees have been collected under the 2013 policy.

[55] Alberta Wetland Policy, September 2013.

[56] Wetland is low-lying area of land covered by water long enough to support aquatic plants and wildlife for part of their life cycles. They store and slowly release water and reduce the damaging effects of flooding. They also purify runoff and help keep lakes and rivers clean. Over 20 per cent of Alberta's surface area is covered by wetland.

[57] Vermilion operated as an agency between from 2013 to 2018, as part of a pilot project.

[58] The department's agreement with DUC requires the replacement to be completed by 2022.

[59] The department's agreement with Vermilion expired March 31, 2018.

[60] Calgary collected the money under its own policy, which required a higher fee per hectare than Alberta's policy.

[61] As of December 2020, the department collected $35 million for wetland replacement under the 2013 policy. The money is held in a designated account.

[62] The 2013 policy also allows the fees to be spent for non-replacement activities such as research and public education.

Our current findings

The department has not implemented our recommendation to improve wetland replacement relationships and control procedures and ensure replacement agencies meet their responsibilities.

The department did not monitor wetlands replaced under the 1993 policy

In 2015, we reported that the agreements with DUC and Vermilion did not require the agencies to report about key aspects of wetland replacement. The department did not change the requirements. But DUC and Vermilion chose to report on wetland area lost and replaced since 2017.[63]

In 2015, we also reported that the agreement with DUC did not require the agency to monitor the replaced wetlands, and report whether the wetlands have established and are functioning.[64] In other words, the department did not know if the replacement was successful. The department stated that the fees collected under the 1993 policy were set to replace an area three times larger area than the area lost. This approach intended to achieve the policy goal of no-net-loss of wetland area.[65] Therefore, monitoring of replaced wetlands was not required under the 1993 policy.

Under the 2013 policy, the department aims to ensure that all replaced wetlands are functioning. The department requires monitoring of the replaced wetlands to ensure they have established and achieved the planned function.

The department still lacks effective monitoring to ensure agencies meet their responsibilities

In 2015, we reported that the department did not have effective monitoring to ensure that agencies were meeting their responsibilities.

The department still has not improved monitoring and lacked assurance that the agencies met their responsibilities.

We found the following issues:

- The interest earned on the funds collected for wetland replacement, totaled $2 million[66] for DUC and $40,000 for Vermilion. The department's agreements with the agencies required them to spend the interest on wetland replacement. The department did not request information to make sure the agencies met this requirement.

- The department stated that a review of the agencies' annual reports was performed to check for errors and omissions, but we found no evidence of the department's review.

- DUC reported the total amount spent on each replaced wetland. The department did not ask DUC to provide supporting documents for the reported expenses to confirm that the funds were fully spent on wetland replacement.

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[63] DUC's 2017–2019 and Vermilion's 2017–2018 reports included information on wetland area lost and replaced.

[64] Functioning wetlands provide benefits such as ecological value (food, water, and shelter for fish, birds, and mammals), hydrological benefits (water storage and release), and improved water quality (trapping of sediment and pollution control).

[65] The no-net-loss approach was adopted in many North American jurisdictions at that time due lack of available science on what is a successfully functioning wetland.

[66] The $2 million interest is based on our estimate.

- There were notable differences in per hectare replacement cost reported by DUC and Vermilion.[67] Vermilion spent over 30 per cent of the funds collected but replaced only four per cent of the wetland area.[68] The department expected Vermilion's costs to be higher because it was a new agency. But it did not follow up with Vermilion to determine if the costs were reasonable and how the higher costs impact the wetland area to be replaced.

We acknowledge that the department focused on developing and implementing the 2013 policy. However, it took little action toward obtaining assurance that the agencies met their responsibilities under the previous policy.

Under the 2013 policy, the department hires contractors to replace wetlands, reviews their replacement plans, completed project reports, and supporting documents prior to reimbursing them for replacement costs.

The department has an agreement with the City of Calgary but has no agreement with Vermilion

The department signed an agreement with Calgary in March 2021. The agreement states that Calgary will aim to use all of the fees collected to replace the lost wetland or to undertake alternative wetland projects.[69] It requires annual reporting to the department about replacement activities and funds spent.

The department's agreement with Vermilion expired in 2018. Vermilion still has over $500,000 and is required to replace 80 hectares of wetland. The department stated that it is determining if the money collected by Vermilion should be transferred to the department or spent by Vermilion under a new agreement. However, the department lacks a concrete plan for what needs to be done and by when.

The department has sufficient records to support minimization of wetland impact

The department implemented procedures to assess if project proponents complied with the requirement to avoid or minimize wetland loss. Our testing found that project proponents provided support for why wetland loss was unavoidable and how they minimized the loss, and the department reviewed the support before approving development.

Consequences of not taking action

Without clear agreements and effective monitoring of wetland replacement activities, spending, and success, the department does not know if replacement parties are meeting their responsibilities. As a result, Alberta's wetland policy goals may not be met.

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[67] Our analysis used collected and spent fees, restored area, and estimated replacement cost per hectare reported in DUC's 2017–2019 annual reports.

[68] Our analysis used information reported in Vermilion's 2012–2018 annual reports.

[69] Alternative wetland projects include projects that support the maintenance of wetland value (for example wetland monitoring, research and education) and the protection of wetlands (for example stream restoration and intermittent watercourse protection).

Assessment of Implementation Report

Alberta Health

Electronic Health Records

(October 2009)

Summary of Recommendations

In January 2021, we completed our assessment of implementation from our October 2009 audit of Alberta Health's *Electronic Health Records* (Alberta Netcare).[70] We found that the recommendation has been implemented:

IMPLEMENTED Recommendation:
User access management

Introduction

In 2009, we audited whether the Department of Health had appropriate controls to prevent unauthorized access to Albertans' health records (Netcare).[70]

We found that:

- user access management policies were not consistently followed
- many terminated users still had access
- there was no process in place to review active accounts

At the conclusion of our 2009 audit, we recommended the department ensure that its user access management policies are followed and that user access to health information is removed when access privileges are no longer required.[71]

In 2013, we performed a followup on several other recommendations from our 2009 report. At that time, we found the recommendation on user access management was not yet ready for us to assess.[72]

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[70]   Alberta Netcare, also known as the provincial Electronic Health Record (EHR), is a system accessible to health professionals and contains Albertans' personal health information.

[71]   *Report of the Auditor General of Alberta—October 2009*, page 80.

[72]   *Report of the Auditor General of Alberta—October 2013*, page 67.

Recommendation:
User access management
IMPLEMENTED

Context

During our 2009 audit, we found the department was not reviewing user access in Netcare and access was not always suspended or disabled when no longer needed.

Our current findings

We examined the process the department has in place to make sure its policies requiring that only the right people have access to Albertans' electronic health records are followed. We also analyzed access permission data to make sure that system users are removed when they no longer need to access health records.

We found the department:

- developed processes to certify that system users need access to do their jobs
- periodically checks whether users understand their responsibilities for system use and access
- automatically flags users who have not accessed the system within 180 days to investigate whether or not they still need access

Assessment of Implementation Report

Alberta Health

Pure North Grants

(February 2018)

Summary of Recommendations

In February 2021, we completed our assessment of implementation from our February 2018 audit of Alberta Health's *Pure North Grants*. We found that the recommendation has been implemented:

IMPLEMENTED Recommendation:
Improve conflict of interest processes

Introduction

In 2018, we assessed the Department of Health's grant processes used to award two grants to Pure North S'Energy Foundation (Pure North). This included processes around conflict of interest, and whether those processes were followed.

We concluded the department's processes around conflict of interest needed improvement and we recommended the department improve them by:

- improving the supplementary code to clearly outline the disclosure requirements of the deputy minister
- centrally managing conflicts in the department to ensure adherence to the conflict of interest policies
- providing advice to department staff on conflict of interest matters when necessary

In February 2021, we completed our assessment of implementation and found the department implemented our recommendation to improve conflict of interest processes.

Recommendation:

Improve conflict of interest processes

IMPLEMENTED

Context

Strong conflict of interest policies are important to ensure government employees remain objective and conduct their duties with impartiality. These policies define the rules and requirements when a possible conflict exists and how to manage it.

The department follows the Government of Alberta's Code of Conduct and Ethics Policy, which outlines the expectation that public service employees act with impartiality and integrity. The department also has a supplemental code of conduct to provide further guidance and hypothetical examples that employees can use to help them determine if they have a potential conflict of interest.

In our 2018 audit, we reported the department's supplemental code of conduct was not clear when it comes to the disclosure requirements of a deputy minister. The department's processes should require a deputy minister to disclose potential conflicts at the department level so that any risks can be proactively managed or mitigated.

Our current findings

The department implemented our recommendation[73] by updating its supplementary code of conduct to clearly outline the process the Deputy Minister of Health must follow to disclose a potential conflict of interest. The code now requires that if a potential conflict is identified, the Deputy Minister of Health must declare this conflict to the Deputy Minister of Executive Council.

The department also:

- established a central repository of disclosed conflicts for all employees, including the deputy minister
- has human resource staff available from the Public Service Commission to provide advice on any potential conflict of interest matters

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[73]   *Report of the Auditor General of Alberta—February 2018*, page 7.

Assessment of Implementation Report

Alberta Health Services

Information Technology Disaster Recovery Planning

(October 2015)

Summary of Recommendations

In March 2021, we completed our assessment of implementation from our October 2015 audit of Alberta Health Services' *Information Technology Disaster Recovery Planning*. We found that the recommendation has been implemented:

IMPLEMENTED Recommendation:
Develop a detailed plan for implementing risk-based disaster recovery processes

Introduction

In July 2012, Alberta Health Services (AHS) was unable to perform some key healthcare services for patients because a fire brought down some of its critical IT systems. In 2014, we looked at what AHS did to improve its IT disaster recovery capabilities since that incident.

AHS shared their high-level plan for IT disaster recovery and made some progress on this plan. However in October 2015, we recommended AHS develop and follow a detailed, complete and risk-based plan for IT disaster recovery, including the necessary IT infrastructure.

Recommendation:
Develop a detailed plan for implementing risk-based disaster recovery processes

IMPLEMENTED

Context

In October 2015, we recommended AHS develop and follow a comprehensive plan for implementing risk-based disaster recovery processes, including the necessary IT infrastructure. Our audit at the time found AHS did not:

- have a detailed project plan on how and when it will implement and test its infrastructure and processes to recover its critical IT applications

- have documentation to support recovery objectives for one of its primary critical IT applications

- define the technical infrastructure needed to meet recovery time objectives for its primary critical IT applications

- document the process to either mitigate recovery time gaps or analyze and accept risks where recovery objectives aren't met

Our current findings

We reviewed AHS four-phase IT Disaster Recovery Action Plan. We tested every application AHS considers critically important,[74] as well as a sample of those considered highly important,[75] against its disaster recovery processes.

We found AHS developed and deployed a detailed IT Disaster Recovery Action Plan. The plan includes four phases:

- identifying recovery point and time objectives for each application

- determining infrastructure required to meet the objectives

- putting in place infrastructure (where required) and documenting recovery process

- testing the process to recover the application

We found AHS used this process to plan, evaluate its infrastructure and test its process for the IT applications key to its patient-facing and administrative operations.

[74]   Defined by AHS IT as being "primary critical."
[75]   Defined by AHS IT as being "secondary critical."

Assessment of Implementation Report

Alberta Transportation

Commercial Vehicle Safety

(October 2009) (July 2014) (February 2018)

Summary of Recommendations

In December 2020, we completed our assessment of implementation from our October 2009 audit, which was repeated in July 2014 and February 2018, of Alberta Transportation's *Commercial Vehicle Safety*. We found that the recommendation has been implemented:

IMPLEMENTED Recommendation:
Progressive sanctions

Introduction

In 2009, we evaluated the systems used by the department to monitor and enforce commercial vehicle safety programs. The department demonstrated it was examining its processes and identifying potential changes to systems. To support these efforts, we made three recommendations:

- develop risk-based methods for selecting vehicles for inspection and improve the quality of information available to inspectors at roadside
- strengthen enforcement processes relating to, or arising from, roadside inspections
- use data better to develop strategies and performance measures

In our followup audit in 2014, we found the department improved its inspection processes and use of data analysis, and as a result, we concluded two of the three recommendations were implemented. However, we found the department was not following up on non-compliant carrier files with timely and appropriate action. As a result, we repeated our recommendation to strengthen enforcement processes.

In our followup audit in 2018, we found that although the department improved its monitoring processes, it was still not consistently applying its enforcement policy. We found:

- correspondence to carriers was not provided within required time frames
- the department lacked current information and clear guidance to take appropriate disciplinary action
- non-compliant carriers were not suspended as required

As a result of these findings, we recommended for the third time that the department strengthen its enforcement processes.

In December 2020, we completed our assessment of implementation and found the department implemented our recommendation to consistently comply with its policy to take disciplinary and enforcement action against non-compliant carriers.

Recommendation:
Progressive sanctions

IMPLEMENTED

Context

Alberta Transportation is responsible for regulating and enforcing carriers with commercial vehicles that travel within the province. The department can take action when a carrier does not comply with various acts, regulations, and codes. Non-compliance does not automatically mean that there are unsafe commercial vehicles on the road. It means a carrier is not operating within all required transportation legislation.

Our original audit in 2009, and followup audits in 2014 and 2018, found the department was not consistently complying with its policy to take progressive disciplinary and enforcement action against non-compliant carriers. Based on our findings, we recommended the department consistently comply with its policy to take disciplinary and enforcement action against non-compliant carriers.[76]

Our current findings

The department has implemented our recommendation. To verify the department implemented our recommendation, we found it eliminated its backlog of outstanding actions against carriers by:

- improving its guidance to staff regarding what actions to apply to carriers, including eliminating extensions for carriers that have not met conditions, and implementing a new risk assessment system to assist in the determination of penalties and fines
- adding processes to identify and monitor actions coming due

Based on the results of our testing, we found the department took action against non-compliant carriers in a reasonable timeframe.

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[76] *Report of the Auditor General of Alberta—October 2009*, page 127 (repeated February 2018).

4 Glossary and Acknowledgments

Glossary

Accountability for results

The obligation to demonstrate results achieved through the use of public resources in the context of fair and agreed on expectations. To demonstrate value for money for Albertans, all those who use public resources must:

- set and communicate measureable results and responsibilities
- plan what needs to be done to achieve results
- do the work and monitor progress
- identify and evaluate results, and provide feedback for continued improvement
- publicly report on results

Accrual basis of accounting

A way of recording financial transactions that puts revenues and expenses in the period when they are earned and incurred.

Adverse auditor's conclusion

An auditor's written statement that the underlying subject matter being audited does not meet the applicable criteria, and that the effect of the deviations are material and pervasive.

Assessment of Implementation (AOI)

Work we perform to determine whether management has implemented our recommendations arising from our audits. If we do not find evidence the recommendation has been implemented, we repeat our recommendation.

Assurance

An auditor's written conclusion about something audited. Absolute assurance is impossible because of several factors, including the nature of judgment and testing, the inherent limitations of control and the fact that much of the evidence available to an auditor is only persuasive, not conclusive.

Audit

An auditor's examination and verification of evidence to determine whether the subject matter meets applicable criteria, such as whether financial information is reliable, activities or outcomes are in compliance with laws, or that management has effective processes and controls to achieve results or manage risks.   The Office carries out financial statement audits and performance audits.

Auditing and Assurance Standards Board (AASB)

The board that sets audit and assurance standards in Canada.

Auditor

A person who examines and evaluates a specified subject matter against appropriate criteria and provides a conclusion.

Auditor's conclusion

An auditor's written communication on whether the subject matter audited meets, in all material respects, the criteria that apply to them.

Auditor's report

An auditor's written communication on the results of an audit.

Business case

An assessment of a project's financial, social and economic impacts. A business case is a proposal that analyzes the costs, benefits and risks associated with the proposed investment, including reasonable alternatives.

Capital asset

A long-term asset.

Chartered Professional Accountants of Alberta (CPA Alberta)

The professional organization for chartered professional accountants in Alberta. CPA Alberta sets rules of professional conduct that apply to our work.

Chartered Professional Accountants of Canada (CPA Canada)

The national professional accounting organization established to support a unified Canadian accounting profession.

It replaced the Canadian Institute of Chartered Accountants (CICA), the Society of Management Accountants of Canada (CMA Canada) and Certified General Accountants of Canada (CGA Canada).

COBIT

COBIT is a framework that provides good practices for managing IT processes to meet the needs of enterprise management. It bridges the gaps between business risks, technical matters, control needs and performance measurement requirements.

Committee of Sponsoring Organizations of the Treadway Commission (COSO)

A joint initiative of five private sector organizations dedicated to the development of frameworks and guidance on risk management, internal control and fraud deterrence.

Criteria

Reasonable and attainable standards of performance and control that auditors use to assess systems or information.

Cross-ministry

A section of this report covering systems or problems that affect several ministries or the whole government.

Crown

Government of Alberta.

Deferred maintenance

Any maintenance work not performed when it should be. Maintenance work should be performed when necessary so that capital assets provide acceptable service over their expected lives.

Disclaimer of conclusion

An auditor's written communication that they have not been able to obtain sufficient appropriate evidence to support a reliable conclusion on whether the subject matter meets the criteria.

Enterprise risk management (ERM)

The systems and processes within an organization used to identify and manage risks so it can achieve its goals and objectives. An ERM creates linkages between significant business risks and possible outcomes so that management can make informed decisions. An ERM framework helps organizations identify risks and opportunities, assess them for likelihood and magnitude of impact, and determine and monitor the organization's responses and actions to mitigate risk. A risk-based approach to managing an enterprise includes internal controls and strategic planning.

Enterprise resource planning (ERP)

ERP integrates and automates data and processes of an organization into one comprehensive system. ERP may incorporate just a few processes, such as accounting and payroll, or may contain additional functions, such as accounts payable, accounts receivable, purchasing, asset management, and/or other administrative processes. ERP achieves integration by running modules on standardized computer hardware with centralized databases used by all modules.

Exception

Something that does not meet or is a deviation from criteria.

Expense

The cost of acquiring or consuming an economic resource.

Financial statement audit

Procedures an auditor carries out to evaluate and express a conclusion on the reliability of financial statements.

Generally Accepted Accounting Principles (GAAP)

Established in Canada by the Public Sector Accounting Board and the Accounting Standards Board. GAAP are criteria for financial reporting.

Governance

A process and structure that brings together capable people and relevant information to achieve cost effective results.

Government business enterprise

A commercial-type enterprise controlled by government. A government business enterprise primarily sells goods or services to individuals or organizations outside government and is able to sustain its operations and meet its obligations from revenues received from sources outside government.

Internal audit

A group of auditors within an organization that performs assurance activities to evaluate and improve an organization's governance, risk management and internal control processes. The group typically reports its findings directly to the deputy minister or governing board. Internal auditors need an unrestricted scope to examine business strategies; internal control systems; risk management practices; compliance with policies, procedures, and legislation; economical and efficient use of resources and effectiveness of operations.

Internal control

A process designed and implemented to provide reasonable assurance that an organization will achieve its objectives. Management is responsible for an effective internal control system in an organization. The organization's governing body, in its oversight role, should challenge management to demonstrate that the control system operates as intended. A control system is effective when the governing body and management have reasonable assurance that:

- they understand the effectiveness and efficiency of operations
- internal and external reporting is reliable
- the organization is complying with laws, regulations and internal policies

International Financial Reporting Standards (IFRS)

Global accounting standards, adopted by the Accounting Standards Board in Canada. They are required for government business enterprises.

Management letter

A letter to management of an entity we audit, communicating:

1. the scope of our work
2. our findings
3. our recommendation(s) of what the entity should improve
4. the risks if the entity does not implement the recommendation

We also ask the entity to explain specifically how and when it will implement the recommendation(s).

Material, materiality, significant

Something that makes a difference to decision-makers.

Misstatement

A misrepresentation of financial information due to error, fraud or other irregularities.

Outcomes

The results an organization tries to achieve based on its goals.

Outputs

The goods and services an organization actually delivers to achieve outcomes. They show "how much" or "how many."

Oversight

The role of monitoring and evaluating whether an entity or its management have used resources efficiently, economically, and effectively to achieve desired results through:

- being vigilant,

- challenging management to demonstrate that processes/systems are working well,

- requiring accountability for results, and

- signalling preferred behaviour, all in the pursuit of desired results.

Performance audit

To help improve the use of public resources, we audit and recommend improvements to systems designed to achieve value for money. Paragraphs (d) and (e) of Subsection 19(2) of the *Auditor General Act* require us to report every case in which we observe that:

- an accounting system or management control system, including those designed to ensure economy and efficiency, was not in existence, or was inadequate or not complied with, or

- appropriate and reasonable procedures to measure and report on the effectiveness of programs were not established or complied with.

To meet this requirement, we do performance audits. Performance audits are conducted in accordance with the assurance standards established by the Auditing and Assurance Standards Board (AASB). First, we develop criteria that a system or procedure should meet. We always discuss our proposed criteria with management and try to gain their agreement that the criteria are appropriate for the audit. Then we design and carry out procedures to gather audit evidence. Next, we compare our evidence to the criteria.

If the audit evidence indicates the entity meets all the criteria, we conclude the system or procedure is meeting its objective. But if the evidence indicates that not all criteria have been met, we have an audit finding that leads us to recommend what the ministry or organization must do to ensure that the system or procedure will meet all the criteria. For example, if we have five criteria and a system meets three of them, the two unmet criteria lead to the recommendation. A performance audit should not be confused with assessing systems with a view to relying on them in an audit of financial statements.

Performance measure

Indicator of progress in achieving a desired result.

Performance reporting

Reporting on financial and non-financial performance compared with plans and targets.

Performance target

The expected result for a performance measure.

Public Sector Accounting Standards (PSAS)

Standards applicable to the public sector in Canada. PSAS are set by the Public Sector Accounting Board (PSAB).

Qualified auditor's conclusion

An auditor's written communication that some parts of a subject matter being audited do not meet the applicable criteria, while other parts do.

Recommendation

A solution we—the Office of the Auditor General of Alberta—propose to improve the use of public resources or to improve performance reporting to Albertans.

Review

Reviews are different from audits in that the scope of a review is less than that of an audit; consequently, the level of assurance is lower. A review consists primarily of inquiry, analytical procedures and discussion related to information supplied to the reviewer with the objective of assessing whether the information being reported on is plausible in relation to the criteria.

Risk

Anything that impairs an organization's ability to achieve its goals.

Sample

A sample is a portion of a population. We use sampling to select items from a population. We perform audit tests on the sample items to obtain evidence and form a conclusion about the population as a whole. We use either statistical or judgmental selection of sample items, and we base our sample size, sample selection and evaluation of sample results on our judgment of risk, the nature of the items in the population and the specific audit objectives for which sampling is being used.

Systems (accounting)

A set of interrelated accounting processes for revenue, spending, preservation or use of assets and determination of liabilities.

Systems (management)

A set of interrelated management processes designed to achieve goals economically and efficiently.

Unqualified auditor's conclusion

An auditor's conclusion that the subject matter audited meets the criteria.

Value for money

The concept underlying a performance audit is value for money. It is the "bottom line" for the public sector, analogous to profit in the private sector. The greater the value added by a government program, the more effective it is. The lower cost of or fewer resources used to create that value, the more economical or efficient the program is. "Value" in this context means the impact that the program is intended to achieve or promote on conditions such as public health, highway safety, crime, farm incomes, etc. To help improve the use of public resources, we audit and recommend improvements to systems designed to ensure value for money.

Acknowledgments

Our Legislative Auditors

Auditor General

Doug Wylie FCPA, FCMA, ICD.D

Assistant Auditors General

Robert Driesen CPA, CA, ICD.D
Brad Ireland CPA, CA, ICD.D
Eric Leonty CPA CA, ICD.D

Business Leader, Audit Practice

Karen Zoltenko CPA, CA

Audit Principals

Najib Alamyar CPA, CA, CISA
Graeme Arklie CPA, CA
Maureen Debaji CPA, CMA, PFA, CFE
Michelle Fleming CPA, CA
Tim Gallagher CISA, CRISC
Pamela Hlewka CPA, CA
Monica Jeske CPA, CA
Fouad Kamel CPA, CA
Wade Knittig CPA, CA, CFE
Tim Lamb CPA, CA, CISA
Maureen Manning CPA, CGA, CIA, CFE
Phil Minnaar CPA, CA
Wayne Morgan PhD, CPA, CA, CISA
Phillip D. Peters CPA, CA, JD, LL.M
Diana Potapovich CPA, CA
Ram Rajoo MBA, CPA, CA
Nelson Robe-From CPA, CA
Ruth Schneidmiller CPA, CMA, CIA
Mike Shorter CFE
Jeff Sittler CPA, CA
Sergio Valacco CPA, CA
John Zabos CPA, CA
Marcela Zicha CPA, CA, CFE

Douglas Zurbrigg CPA, CA

Audit Managers

Ada Adeleke-Kelani CPA, CA, MBA
Palvinder Bagri CPA, CA
Jean Becker CPA, CA
Matthew Cardoza CPA, CA
Annie Chan CPA
Tej Deol CPA CMA
Mandeep Dhaliwal CPA
Don Easton CPA, CA
Hamit Gandoke CPA, CA
Ellen Gao CPA, CA
Jaspreet Gill CPA, CA
Michael Hoffman CPA, CA
Kent Lam P.Eng., CISA, CISSP
Lisa LaRocque CPA, CA
David Lee CPA
YiLing Miao CPA, CA
Tanja Misita CPA, CMA
Faezeh Moeini CPA
Jey Naicker CPA
Sergii Panov CPA
Martina Petrova CPA
Medley Russell CPA, CA
Rufaro Sangarwe, CPA, CA, CFE
Colin Semotiuk CPA, CA
Ian Sneddon CPA, CA
Zack Suelzle CPA, CA
Martin Sun CPA, CA
Edna Wang CPA, CGA, CIA
Nancy Wang CPA, CA
Zan Wang CPA, CA
Lori Warrington CPA, CA
Todd Wellington CPA, CGA, FCCA
Gilbert Woo CPA, CGA, FCCA
Mark Wright CPA, CGA, CFE
Christopher Zindi PhD

Staff Auditors

Peter Awala CPA, CGA, ACCA
Amarveer Bajwa CPA
Anterpreet Bawa CPA
Anggie Belas CPA
Kyle Berger
Funmi Bolaji CPA, CGA, ACCA
Robert Burgess CPA, CGA
Karl Capupus CISA
Michelle Carter CPA, CIA
Eric Chan
Taylor Collins
Carmen Dam
Stephen Dawe CPA
Colleen Day
Holly DeBelser CPA
Matthew Denning
Harjup Dhillon CPA
Marielle Diaz CPA, CA
Alexa Dzmitrenka
Uyi Edivri
Zineb El Filali
Faysal El Masri CPA
Chimezie Emmanuel CPA, CGA, ACCA
Asia Esanwa CPA, CGA, ACCA
Licette Galorio CPA
Gen Kenya Gerardo CPA
Nicole Greenwald
Natalia Cajamarca Guevara
Keaton Harris CPA
Peter Heese CPA
Joshua Jackman
Jae Hui Kim CPA
Theodore Kim CPA
Ruslana Krasivska MPA
Alexander Lam CPA

Alex Lee
Jeline Lee CPA
Ruochen Li CPA, CMA
Kevin Lourenco CPA
Oliver Luetjen CPA
Kim Lyttle
Debbie Ma
Vitalie Maimescul
Christopher Maraguinot
Harvey Minhas
Daniel Navaratnam
Jacob Nay
Arthur Oriarewo
Hanna Park CPA
Heonwoo Park
Jackie Pfupa
Susan Qi CISA, ACDA
Jayna Rasmussen CPA, CA
Kirstie Roehler CPA
Terry Salame
Depinder Sandhu
Arthur Schilling CPA
Alisha Singh CPA
Robert Smadella CISA, CRISC
James Steele CPA
Pirtpal Thind
Jennifer Truong CPA
Heather van Straaten CPA
Alyssa Wang CPA
Curtis Wispinski
Brian Wong CPA
Han Xiao
Christopher Yong
Sherry Zhou