

Environment

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Main points

The Ministry of Environment has made little progress in addressing our past recommendations. The Ministry continues to need to establish adequate processes for staff to follow and supervise staff to ensure they follow the Ministry's policies and procedures. The Ministry also needs to determine its current and future human resource needs and develop strategies to address any gaps between its current and future workforce. The Ministry should approve an adequate internal audit plan and receive regular reports from the internal auditor and take action.

The Ministry's processes to regulate reforestation of the provincial forest on Crown land were adequate except the Ministry needs to:

- ◆ establish processes to set reforestation fees at levels to cover reforestation costs
- ◆ monitor forest operators' compliance with reforestation requirements
- ◆ verify reforestation fees and the use of those fees
- ◆ establish a communication strategy to inform stakeholders about the effectiveness of reforestation and receive regular reports to oversee proper reforestation

Also the Ministry has made little progress in addressing our past recommendations for regulating air emissions and contaminated sites.

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Introduction

The Ministry of Environment (Ministry) is responsible for managing, enhancing, and protecting the Province's natural and environmental resources and sustaining them for future generations¹. Information about the Ministry is available on its website (www.environment.gov.sk.ca).

For the year ended March 31, 2009, the Ministry's program costs were \$173 million (2008 – \$168 million) and its net capital acquisitions were \$18 million. Also, the Ministry had revenue of \$50 million (2008 – \$47 million) from licences and permit fees for fishing, hunting, and forestry. It also collects non-refundable deposits on beverage containers. In addition, the Ministry raises revenue and incurs expenses through the Fish and Wildlife Development Fund.

Information about the Ministry's revenues and expenses appear in the Ministry's 2008-09 annual report, (see www.environment.gov.sk.ca). The Ministry's major programs and spending include:

	<u>Original Estimates</u>	<u>Actual</u>
	(Millions of dollars)	
Central Management and Services	\$ 17	\$ 17
Environmental Protection	29	28
Forest Services	15	14
Fire Management and Forest Protection	98	90
Fish, Wildlife and Biodiversity	10	10
Compliance and Field Services	16	16
Corporate Policy and Planning	21	17
Land	<u>3</u>	<u>3</u>
	<u>\$ 209</u>	<u>\$ 195</u>

The Ministry is responsible for managing the following special purpose fund and Crown agencies (agencies):

Year ended March 31

Fish and Wildlife Development Fund
 Operator Certification Board
 Saskatchewan Watershed Authority
 Water Appeal Board

¹ Section 3 of *The Environmental Management and Protection Act, 2002*.

The Commercial Revolving Fund is now the responsibility of the Ministry of Tourism, Parks, Culture and Sport. However, the Ministry of Environment continues to provide day-to-day administration of the Commercial Revolving Fund.

Audit conclusions and findings

We worked with Deloitte & Touche LLP, the appointed auditor for the Saskatchewan Watershed Authority, and Mintz & Wallace, the appointed auditor for the Operator Certification Board, to form our opinions. We used the framework recommended in the Report of the Task Force on Roles, Responsibilities and Duties of Auditors (www.auditor.sk.ca/rrd.html). Our Office and the appointed auditors formed the following opinions.

In our opinion, for the year ended March 31, 2009:

- ◆ **the Ministry and its agencies had adequate rules and procedures to safeguard public resources except for the matters described in this chapter**
- ◆ **the Ministry and its agencies complied with the authorities governing their activities relating to financial reporting, safeguarding public resources, revenue raising, spending, borrowing, and investing except for the matters described in this chapter**
- ◆ **the financial statements of the Ministry's fund and agencies are reliable**

In this chapter, we report on our audit of the Ministry's processes to regulate reforestation of the provincial forest on Crown land. We also report on the Ministry's progress on our recommendations relating to processes to regulate air emissions and contaminated sites.

The Ministry needs to do more to address our past recommendations so that it can properly protect public resources. The Ministry needs an adequate written analysis of its human resource needs (quantity and quality) and strategies to address those needs. The Ministry should obtain

any human resources needed, establish adequate processes, supervise staff, and comply with the law.

Better human resource plan

The Ministry needs to determine its human resource needs and develop strategies to address any competency gaps in its current resources.

The Ministry has a human resource plan, which links to its strategic plan. The plan outlines its priorities and human resource needs. The plan also identifies key human resource risks and some competency gaps in current resources as well as some strategies and implementation plans to bridge competency gaps.

The Ministry had identified in its human resource plan the importance of being accountable for the resources the Ministry manages. Accountability includes ensuring revenues are billed, recorded, and collected promptly; payments are properly supported and approved; and bank reconciliations are prepared and approved on a timely basis. The Ministry has determined some of its human resource needs and developed some strategies to address its needs. However, it needs to complete the determination of its current needs, determine its future human resource needs, and develop strategies to address any gaps between its current and future workforce.

During the audit, several items of documentation and comments from staff noted there were inadequate resources to achieve the Ministry's objectives. For example, the Ministry needs to determine its accounting human resource needs, the resources available, and how it will address any gaps. The Ministry can address these gaps by training or through recruitment. When employees do not have the needed competencies, they may hesitate to do the assigned tasks or do them incorrectly.

- 1. We recommend the Ministry of Environment complete the identification of its human resource needs and develop strategies to address any competency gaps.**

Management told us that it is conducting a gap analysis to determine the competencies required to support the Ministry's results-based regulatory reform; and, where needed, it will conduct competency assessments.

This information will then guide the Ministry's training and development plans, as well as a recruitment plan where it is not feasible to develop the required skills internally.

Supervision of staff needed

Since our 2005 Report – Volume 1, we have recommended that the Ministry clearly communicate to its employees its operating policies and ensure that its employees understand the reasons for the policies. The Standing Committee on Public Accounts (PAC) considered this matter in June 2005 and agreed with our recommendation.

The Ministry has various operating policies and procedures manuals that provide guidance to its employees. The manuals include direction to employees for initiating and processing payments and reconciling revenue billings and payment records to the accounting records. The Ministry also provides training to employees on the importance of following established policies and procedures. However, employees did not always follow those policies and procedures. It is important that supervisors ensure employees follow policies and procedures. The following are instances where supervision was lacking.

Controlling bank accounts

Since our 2004 Report – Volume 3, we have recommended that the Ministry follow its rules and procedures to reconcile (agree) its recorded bank balances to the bank's records promptly. In January 2005, PAC considered this matter and agreed with our recommendation.

In our 2008 Report – Volume 3, we recommended the Ministry supervise its employees to ensure they follow the Ministry's policies and procedures for reviewing the reconciliation of its recorded bank balances to the bank's records promptly. PAC considered this matter in December 2008 and agreed with our recommendation.

Regular reconciliation and review of recorded bank balances to bank records provides a check that all charges to the bank accounts are proper, the Ministry receives all the money, and deposits it in the right bank account.

The Ministry has a written policy to reconcile its recorded bank balances to the bank's records promptly. Its procedures require management to review and approve the reconciliations. During the year, the Ministry's main bank account was not reconciled promptly. For example, staff did not complete the October and November 2008 bank reconciliations until late March 2009. Annually, the main bank has about \$21 million in deposits and transfers. Staff also did not reconcile other bank accounts promptly. In addition, there were several bank accounts and months in which the supervisor did not promptly review the bank reconciliations.

We continue to recommend the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for reviewing the reconciliation of its recorded bank balances to the bank's records promptly.

Management told us it has since reviewed the bank reconciliations to ensure the Ministry has received and deposited all money in the correct bank account.

Following revenue guidance

In our 2008 Report – Volume 3, we recommended the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for billing, collecting, and recording lease and forestry fee revenues promptly. PAC considered this matter in December 2008 and agreed with our recommendation.

Staff continue to ignore the Ministry's written guidance for recording revenue from land leases. Staff continue to record lease revenue that belongs to the Commercial Revolving Fund (CRF) and the Fish and Wildlife Development Fund (FWDF) as Ministry revenue. As a result, at March 31, 2009, the CRF's and the FWDF's annual financial statements presented for audit understated unearned revenue by \$287,000 and \$21,000, respectively. The error was corrected in the final CRF financial statements for the year ended March 31, 2009. The FWDF's financial statements were not corrected.

Through the FWDF, the Ministry has made agreements with agencies that have similar objectives of protecting wildlife habitat. The Ministry buys land and land easements with these agencies for protecting wildlife

habitat. Within some of these agreements, the FWDF is entitled to its share of any revenue collected from jointly-owned land in proportion to its ownership. Revenue could come from leasing the land for grazing and haying. The Ministry told us the revenue earned on jointly-owned land is insignificant. However, it could not provide us evidence to verify that this revenue is insignificant. The Ministry's processes require it to bill, record, and collect these revenues.

The Ministry has a computer system that records license revenue from fishing, hunting, and forest licenses. License revenue totalled approximately \$12 million for the year ended March 31, 2009. The Ministry has written guidance requiring staff to reconcile the license revenue in the license computer system to the Ministry's main financial record (MIDAS) monthly to ensure that the correct amount has been recorded in MIDAS. For several months, staff did not reconcile the license revenue in the license computer system to MIDAS.

Management told us that the reconciliation for March 31, 2009 between the license computer system and MIDAS was performed in September 2009. All revenues were properly recorded and the two systems agreed.

The Ministry requires forestry companies to submit monthly returns and pay forestry fees based on an estimated volume of trees delivered. It also requires the companies to submit an annual return reconciling the estimated volume to the actual volume of trees delivered. This annual return helps determine the total fees for the year. The companies do not remit any remaining fees owing until the Ministry verifies the annual returns. At March 31, 2009, the Ministry had not completed verifying the annual returns for all companies for March 31, 2008. Staff also had not completed the verification work of annual returns for some companies for years ending March 31, 2006 and March 31, 2007. The Ministry told us it has undertaken to improve its documentation of the process to verify returns and document its verification work, which it expects to complete in 2009/10.

When staff do not follow the Ministry's revenue procedures, the Ministry is at risk of a loss of public money.

We continue to recommend the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for billing, collecting, and recording lease and license revenue.

Management told us it amended agreements with agencies protecting wildlife habitat in the fall of 2009 to allow them to retain all revenue from jointly-owned lands.

Segregating duties

Since our 2005 Report – Volume 1, we have recommended that the Ministry properly segregate the duties of the employees responsible for disbursement or expenditure of public money. PAC considered this matter in June 2005 and agreed with our recommendation.

Proper segregation of duties ensures that no one employee or group of employees is in a position to perpetrate and conceal errors and fraud. Segregation of duties is important to prevent the misuse of public money. In our 2005 Report – Volume 1, we reported that the Ministry lost about a half a million dollars in public money because of a lack of segregation of duties.

The Ministry has established policies setting out proper segregation of duties for processing payments. It has also provided training to its employees about its policies. However, employees did not always follow the policies resulting in a lack of segregation of duties. The following are examples of where segregation of duties was lacking.

The Ministry's internal auditor reported for quarter ending June 30, 2008 to senior management that employees do not always comply with the segregation of duties policies for processing payments. For example, staff approved purchase orders after the purchase instead of before hand. Also, unauthorized individuals approved payments. The internal auditor did not examine the other three quarters of 2008-09 due to the lack of resources. However, the internal auditor reported to senior management that there is a potential for increased non-compliance with established procedures because of insufficient staff to do all of the work properly.

Also, the computer system the Ministry uses to process payments allows the same employee to record and approve payments. Some of these

employees are also set up as valid vendors for the purposes of travel advances. Independent staff reviewed some of the payments made by staff who both entered and approved payments to determine that all payments were appropriate. A supervisor reviewed and approved the listing. Management told us it did not find any improper payments. Management told us it has worked with the Ministry of Finance to fix this segregation issue in July 2009.

During the year, we found that two staff at the Public Service Commission had the ability to set up and make changes to the Ministry's employee payroll records including pay rates as well as enter hours employees worked. The risk employees are paid the incorrect amount and fictitious employees may be paid increases when staff do both the task of making changes to employee records and recording time worked. When we informed management of this lack of segregation, they took steps to correct it.

We continue to recommend the Ministry properly segregate the duties of the employees responsible for disbursement or expenditure of public money.

Following payroll guidance

In our 2008 Report – Volume 3, we recommended the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for preparing the amount owing to terminated employees. PAC considered this matter in December 2008 and agreed with our recommendation.

The Ministry's salaries and wages were approximately \$60 million for the year ended March 31, 2009.

Supervisors continued not to submit all staff termination notices to the payroll department prior to calculating final pay. As a result, the Ministry overpaid salary and vacation to terminated employees in the amount of \$17,000 for terminated employees of the Ministry and the Commercial Revolving Fund.

We continue to recommend the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for preparing the amount owing to terminated employees.

Following guidance for preparing financial records and financial reports

In our 2008 Report – Volume 3, we recommended the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for preparing accurate and timely financial records and financial statements for the Fish and Wildlife Development Fund and the Commercial Revolving Fund.

PAC considered this matter in December 9, 2008 and agreed with our recommendation.

The Ministry is responsible for administration of the Fish and Wildlife Development Fund (FWDF) and the Commercial Revolving Fund (CRF). It needs prompt and accurate financial reports. It needs to provide staff with adequate written guidance and direction for preparing financial records and financial reports promptly and accurately. The Ministry also needs to supervise staff to ensure they complete their duties.

The CRF's and FWDF's financial statements presented for audit contained errors. As mentioned above, the Ministry did not record \$287,000 and \$21,000 in unearned revenue, belonging to CRF and FWDF respectively; it incorrectly recorded them in the Ministry's financial information. The Ministry corrected the CRF's financial statements for these amounts.

Staff overestimated license revenue for FWDF by \$27,000, that the Ministry did not correct in the financial statements. Staff also did not disclose over \$400,000 in commitments in the financial statements, which the Ministry did correct. In addition, staff did not prepare a complete and accurate listing of grants and contract payments to support the financial statements presented for audit. In late July 2009 it prepared a complete and accurate listing.

We continue to recommend the Ministry of Environment supervise its employees to ensure they follow the Ministry's policies and procedures for

preparing accurate and timely financial records and statements for the Fish and Wildlife Development Fund and the Commercial Revolving Fund.

Established processes needed

The Ministry needs to establish processes to guide staff.

Written guidance helps staff to do those activities required to meet the Ministry's goals and objectives. The following are some examples where the Ministry needs to establish processes.

Controls to count and value inventory

The Ministry does not have adequate processes to count and value its inventory.

The Ministry had inventory of about \$19.3 million at March 31, 2009. The Ministry's inventory includes airplane parts, fire fighting equipment, and tools. The Ministry also manages inventory for the Commercial Revolving Fund (CRF). At March 31, 2009, this inventory totalled about \$1.1 million and consisted of items such as firewood and maps for resale.

Well-managed agencies establish processes to control inventory. Those processes include clearly identifying where the inventory is stored, securing the storage against loss or theft, and periodic counts to ensure inventory exists. Agencies also establish processes to determine the value of the inventory and adjust their accounting records to agree with inventory on hand.

The Ministry has policies for recording, storing, counting, and valuing inventory. However, it does not have any written guidance for staff on how often to count the physical inventory and how to value the inventory. Because it does not have clear guidance for staff, staff did not properly value the inventory. At March 31, 2009, the inventory value lacked proper support and did not follow the established policy of using average cost to value the inventory. Also, there was no evidence of supervisory review of the support that staff had prepared. For example, management at one point noted that certain items were obsolete; later, management told us these items were not obsolete. Incorrect inventory value results in

incorrect financial statements. Incorrect financial statements could result in incorrect or inappropriate financial decisions.

For the CRF audited financial statements at March 31, 2009, management overstated the value of the inventory by approximately \$100,000. The Ministry's inventory was overstated by approximately \$200,000. Management did not determine the extent that inventory was incorrectly valued nor did it adjust CRF's financial statements.

2. We recommend the Ministry of Environment establish adequate processes to determine its inventory.

Processes for monitoring agreements

In our 2008 Report – Volume 3, we recommended the Ministry of Environment establish processes to monitor compliance with its agreements. PAC considered this matter in December 2008 and agreed with our recommendation

The Ministry does not have adequate processes for monitoring its agreements.

Agencies need written guidance to monitor their agreements. Guidance helps agencies ensure that the terms and conditions of the agreements are complied with. Guidance should include maintaining records of the agreements, amounts paid, owed, and committed. Without adequate written guidance, there is a risk agencies will not receive what they are entitled to, will fail to do what they have agreed to do, and will pay the incorrect amount for the goods/services.

During the year, the Ministry did not have an adequate record of its agreements for FWDF. For example, the Ministry did not have a complete record of the agreements it administers including the amounts paid, owed, and amounts committed. Without such a record, it is difficult for staff to estimate the correct amount owed and committed. During 2008-09, the Ministry began enhancing its contract management policy to include written guidance on monitoring compliance with terms of agreements.

We continue to recommend the Ministry of Environment establish processes to monitor compliance with its agreements.

Management told us beginning in September 2009 it updates monthly its listing of agreements.

Adequacy of service level agreement

In our 2008 Report – Volume 3, we recommended the Ministry of Environment sign an adequate agreement with the Information Technology Office (ITO) for information services. PAC considered this matter in December 2008 and agreed with our recommendation.

The Ministry signed a service level agreement with ITO on April 1, 2008. The agreement, however, does not adequately address disaster recovery and the Ministry's ability to obtain assurance as to security of its information systems. As a result, the Ministry does not know whether ITO can restore the systems and data when needed in the event of a disaster and that the Ministry's data is secure. The Ministry made no progress in improving its agreement with ITO. ITO billed the Ministry \$4.7 million for the services it provided to the Ministry for the year ended March 31, 2009.

We continue to recommend the Ministry of Environment sign an adequate agreement with the Information Technology Office for information technology services.

Management told us the Ministry is in discussions with the ITO to address disaster recovery within the scope of the agreement.

Multi-year plan for information technology

In our 2008 Report – Volume 3, we recommended the Ministry of Environment establish an adequate information technology (IT) plan. PAC considered this matter in December 2008 and agreed with our recommendation.

The Ministry needs an adequate IT plan to ensure its use of resources supports its strategic objectives. An IT plan can also help management to address threats and risks to the Ministry's security.

The Ministry does not have a multi-year IT plan that links to its strategic objectives. Nor has it prepared an annual IT operational plan. The Ministry should establish an IT plan and IT policies and procedures. Then it should communicate the approved IT plan, policies, and procedures to all employees. In 2008-09, the Ministry made no progress in developing an IT plan.

We continue to recommend the Ministry of Environment establish an adequate information technology plan.

Management told us it expects to develop this plan in 2009-10.

Establishing processes to secure data

In our 2008 Report – Volume 3, we recommended that the Ministry of Environment establish adequate processes to secure its systems and data. PAC considered this matter in December 2008 and agreed with our recommendation.

The Ministry needs to ensure it has strong security to protect its information technology (IT) systems and data. Without strong security processes, the Ministry cannot ensure the confidentiality, integrity, and availability of its systems and data. Also, management may not know if it has addressed all the threats and risks to the Ministry's systems and data. An IT plan can help management do so. Below are examples where processes were not adequate.

The Ministry continues not to have adequate security measures over some data. The Ministry uses laptop computers that contain sensitive data. It has not adequately secured all laptops through measures such as encryption.

The Ministry's internal auditor examined employees' access to computer systems. The auditor found the access given to some employees was improper and lacked a written reason for the need for their access. The auditor also found there was a general lack of review of user access to ensure it remained appropriate and a review of some transactions by supervisors to ensure transactions were properly processed. For example, several staff no longer employed with the Ministry still had access to some computer systems.

The Ministry accepts credit card payment for some fees, such as the Big Game Draw. The Ministry is required to comply with industry standards for credit cards as part of its agreement with its credit card service provider. The Ministry does not have processes to determine if it complies with these standards. A lack of compliance with the industry security standards increases the risk of unauthorized access to credit card information by others without ready detection. This could lead to a loss of public money, loss of reputation, and loss of the ability to process payments by credit card.

To know that its computer systems and data are secure, the Ministry also needs to monitor whether the security ITO provides is adequate. The Ministry did not ask for or receive any information on the security or availability of its systems from ITO for the period April 1, 2008 to March 31, 2009. Also, ITO did not adequately configure, monitor, and update firewalls at the Ministry. Firewalls help to maintain security of the Ministry's systems and data.

As a result of these weaknesses, the Ministry's systems and data were at risk of inappropriate access. In addition, because of the lack of adequate communication about security, the Ministry was not aware of the risk.

We continue to recommend the Ministry of Environment establish adequate processes to secure its systems and data.

Management told us it is in discussion with the ITO to address these security concerns within the scope of the agreement it has with ITO.

Completing a business continuity plan

In our 2006 Report – Volume 3, we recommended that the Ministry prepare a complete business continuity plan. PAC considered this matter in March 2007 and agreed with our recommendation.

The Ministry provides a number of environmental programs and services to the residents of Saskatchewan as part of its mandate. It must carry out its mandate, even if a disaster disrupts its ability to deliver its programs and services in the usual manner. Without an adequate business continuity plan, the Ministry is at risk of not being able to deliver its programs and services in a timely manner.

The Ministry made no progress on this matter in 2008-09. The Ministry does not have a complete and tested business continuity plan. In prior years, it ranked its critical services and began developing procedures for the recovery and restoration of these critical services. The Ministry has now contracted ITO to carry out its information technology services. It still needs to ensure that its agreement with ITO supports its business continuity plan once completed.

We continue to recommend the Ministry of Environment prepare a complete business continuity plan.

Management told us the business continuity plan is being developed and tested in 2009-10.

Making changes to lease rates

In our 2008 Report – Volume 3, we recommended the Ministry of Environment establish processes for changing lease rates and customer information on its computer systems. PAC considered this matter in December 2009 and agreed with our recommendation.

The Ministry lacks written guidance for staff making changes to lease rates and customer information maintained on its computer systems. Some staff have the authority to make changes to lease rates and customer information as well as access to do billings in the computer system. This deficiency increases the risk that the Ministry incorrectly bills customers.

The Ministry has begun preparing written guidance for staff to follow for making changes to lease rates. The Ministry also assessed the access of staff to change lease rates, customer information, and bill customers.

We continue to recommend the Ministry of Environment establish processes for changing lease rates and customer information on its computer systems.

Management told us ITO made changes to staff access in October 2009.

Improving compliance reporting

Since our 1998 Fall Report - Volume 2, we have recommended the Ministry define and document its compliance reporting needs for compliance with governing authorities.

PAC considered this matter in January 1999 and agreed with our recommendation.

The Ministry has developed a compliance plan. It has prioritized its risks and defined compliance actions to reduce these risks. However, the Ministry has not yet documented all of its compliance reporting needs.

We continue to recommend the Ministry define and document its compliance reporting needs.

Internal audit needs strengthening

The Ministry needs to ensure that the internal auditor can provide it with information on the effectiveness of its controls to safeguard public resources and to ensure that its revenues and expenses comply with the law.

The internal auditor provides an annual work plan to the Ministry's senior management team for review and approval. However, this plan is incomplete. The plan does not outline the strategic and operating risks the Ministry faces and how the internal auditor's work would help to mitigate those risks. The plan also needs to include the resources required to complete the work plan and expected completion dates of work.

The senior management team needs to determine the frequency and the types of reports the internal auditor needs to provide it. In 2008-09, internal audit reported once in September 2008 to senior management on the work it had completed to June 2008. In April 2009, the internal auditor provided an update on its 2008-09 audit plan. This update indicated much of the planned work had not been completed due to a lack of resources. Also, in April 2009, the internal auditor provided senior management with the results of its work on reviewing employees' access to the Ministry's various computer systems. The internal auditor had completed this work

in September 2008 and noted several concerns with employees' access to computer systems.

In April 2009, senior management approved an Internal Audit Charter. The Charter requires the internal auditor to develop a financial risk-based plan for senior management's review and approval and seek approval for changes to the plan. The internal auditor is also required to provide senior management with quarterly reports on the work it has done.

3. We recommend the Ministry of Environment:

- ◆ **approve an adequate internal auditor work plan**
- ◆ **receive regular reports from the internal auditor and take action**

Regulating reforestation

Over half of Saskatchewan, approximately 34 million hectares^{2,3} is forest. This includes Crown land of approximately 32 million hectares⁴. Forests provide people with a multitude of benefits. Forests are an important part of the economy and landscape of many Saskatchewan communities⁵. Saskatchewan people use forests for many purposes (e.g., recreation and economics). Forests consume carbon, produce oxygen, protect watersheds, and provide habitat for wildlife. Managing forest ecosystems⁶ helps maintain their productivity and the diversity of life within them.

Under *The Forest Resources Management Act* (Act), the Ministry of Environment (Ministry) is responsible for the sustainable use of the forest for the benefit of current and future generations. It must balance the needs for economic, social, and cultural opportunities with the needs to maintain and enhance the health of forests. Under the Act, forests are Crown resource land designated by Cabinet as provincial forests and any Crown land outside the designated provincial forests described in forest management agreements, term supply licenses, or forest product permits.

² Report on Saskatchewan's Provincial Forests, March 2007, Department of Environment, pg.35.

³ Hectare is a metric measure of area and represents approximately 2.5 acres.

⁴ Ministry of Environment Geomatics Branch.

⁵ Report on Saskatchewan's Provincial Forests, March 2007, Department of Environment, pg. 1.

⁶ An ecosystem is a system involving interaction between organisms and the non-living environment.

The Saskatchewan forest commercially viable for harvesting is about 12 million hectares⁷. In 2007-08, forest operators harvested over 14,000 hectares of forest⁸. As at June 30, 2009, the Ministry had four forest management agreements and twenty-five term supply licenses.

Forest management agreements (FMAs) require operators to reforest harvested areas to maintain the long-term productive capacity of forests and the integrity of the ecosystem. Three FMA operators pay fees into a forest management fund for reforestation and one operator pays fees into a trust fund. Twenty-one of the term supply licenses are volume based licenses (VTSL) that do not require operators to reforest but they must pay fees into a forest management or trust fund. The other four area based term supply license (ATSL) operators are required to pay into and maintain a reforestation trust fund. At June 30, 2009, there were three forest management funds and eight reforestation trust funds holding amounts totalling approximately \$1.8 million and \$2.6 million, respectively.

Reforestation includes planting trees as well as allowing harvested areas to regenerate on their own. Annually, the forest industry plants about 16 million trees⁹. The Ministry must monitor forest operators' compliance with the FMAs and licenses relating to reforestation.

The Ministry is also responsible for reforestation of certain forest areas harvested prior to the current FMAs and ATSLs. In 2008-09, the Ministry spent over \$3 million reforesting these areas.

Why is reforestation necessary?

Prompt reforestation is necessary to maintain the long-term productivity of the forest and health of forest ecosystems. In 2008-09, the Ministry spent about \$4 million to regulate forest companies. Under the Act, the Ministry regulates how forest companies build roads in forests, harvest, process, and reforest the provincial forest. The Ministry does so by setting out terms and conditions including reforestation activities in agreements, licenses, and permits it signs with operators. Prompt reforestation is

⁷ Report on Saskatchewan's Provincial Forests December 2008, Ministry of Environment

⁸ Ministry of Environment Forest Service Branch

⁹ Ibid.

imperative to achieve a sustained flow of forest products and to maintain forest ecosystem health.^{10 11}

Sustainable use of natural resources contributes more than \$1 billion to the provincial economy. Forestry initiatives in northern Saskatchewan maintain thousands of jobs and opportunities to expand business. Nature-based tourism, i.e., hunting, fishing, and camping generate more than \$453 million of revenue annually for business in the regions and increases provincial GDP by about \$126 million and creates 3,591 full-time equivalent jobs¹².

Reforestation is a long-term process. It takes 80 years to grow a mature deciduous tree and 90 years for a coniferous tree¹³. Reforestation of a forest can occur naturally but this may not be with the original species of trees. Certain coniferous trees need help initially to grow, otherwise vegetation can make it difficult for them to grow. Some of the most economically valuable trees require such help to become established.

An adequate process to monitor reforestation helps ensure that the forest will regenerate with the right kind of trees that are not susceptible to higher risk of disease or produce less merchandisable forest products.

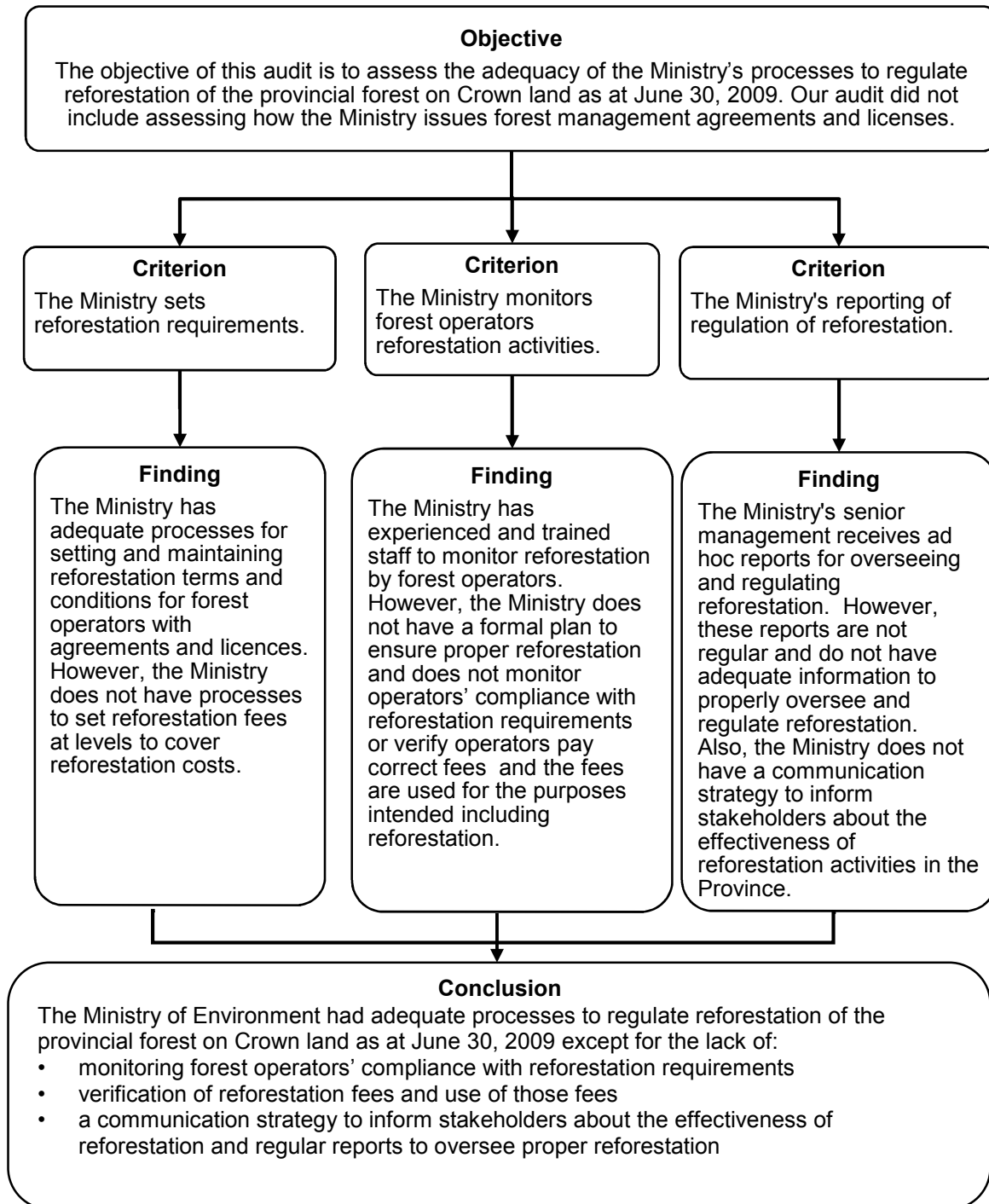
¹⁰ Regeneration Assessment – Forest Operations Manual, July 2008, Ministry of Environment, pg. 1.

¹¹ Criteria and Indicators of Sustainable Forest Management in Canada, National Status 2005, Canadian Council of Forest Ministers, pg. 6.

¹² Saskatchewan Environment 2006-2007 Annual Report, pg. 33.

¹³ Saskatchewan Environment - Forest Service Forest Management Planning- Forest Planning Manual August 2007, pg. 234.

Audit objective, criteria, findings and conclusion



Throughout our audit, we followed *The Standards for Assurance Engagements* established by The Canadian Institute of Chartered Accountants.

We used criteria, set out in the exhibit, to assess the Ministry's processes. We based the criteria on related work, reviews of literature including reports of other auditors, and consultations with management. The Ministry agreed with the criteria.

Key findings by criterion

We provide below our expectations (in italics), detailed findings for each criterion, and our recommendations.

Setting out reforestation requirements

We expected that the Ministry would have processes to:

- ◆ *set out its reforestation requirements in licenses, permits, and forest management agreements*
- ◆ *maintain its reforestation requirements (i.e., in response to changes in science)*

To comply with the Act and regulations, the Ministry has established standards called Regeneration Assessment Standards¹⁴ (standards) for reforestation that operators must follow. These standards help ensure that Saskatchewan's forests regenerate promptly and effectively after harvesting. The standards address adequate distribution of trees, survival, and growth rates of reforested areas. Standards help regulatory agencies, the forest industry, and the public to assess the success of forest regeneration.

The Ministry has written reforestation requirements that forest operators must follow. The Forest Resource Management Regulations specify that forest operators shall ensure the renewal of harvested areas as required by the terms of the license, permit, or agreement.

Forest management agreements (FMAs) and area based term supply licenses (ATSLs) require forest operators to reforest as outlined in the

¹⁴ Regeneration Assessment Standards can be found on the Ministry's website at <http://www.environment.gov.sk.ca/Default.aspx?DN=c3d2f225-11df-4893-9684-fb3546bffeeb>

Ministry's standards. FMAs and ATSLs account for most of the commercially viable forest area. The Ministry has the authority to issue forest product permits (FPP) or volume based term supply licenses (VTSL) to operators to harvest trees on areas of forest allocated under FMAs or ATSLs. The Ministry uses regeneration assessment surveys to measure the achievement of these standards.

Operators with FPPs or VTSLs harvest trees on forest areas allocated to operators under an FMA or ATSL. Operators with FPPs and VTSLs must pay reforestation fees to the Ministry based on the volume and type of wood harvested. Operators must also comply with other terms and conditions of the FPPs or VTSLs.

The Ministry has some written guidance for issuing permits. It does not have complete written guidelines for setting conditions for reforestation and approving permits. The Ministry allows all staff to issue FPPs. FPPs allow operators to remove trees for harvest as well as for mineral, oil and gas exploration, developing a gravel pit, or road construction. In some cases, the Ministry issued FPPs without a requirement to pay the reforestation fees required under the regulations. Management could not tell us the nature and extent of FPPs lacking reforestation or fee requirements because the Ministry's central record of issued permits is not complete. In addition, the Ministry could not provide us evidence of analysis supporting withdrawal of land from the forest for other purposes such as building a road, a cabin, or a subdivision. Land withdrawn from the forest affects the ecosystem.

As stated earlier, the Ministry requires FMA and ATSL operators to maintain a forest management or trust fund for reforestation. Operators harvesting trees in the forest area covered by FMAs or ATSLs must pay reforestation fees into the related management or trust fund. Operators with trust funds account for about one-third of the commercially viable forest. Operators harvesting trees in an area outside the FMAs or ATSLs are required to pay reforestation fees to the Ministry. The Ministry establishes the reforestation fees after consulting with operators. However, the Ministry does not have a formal process to ensure the reforestation fees set in regulation for TSL and FPP operators are enough to pay for the desired reforestation. As a result, there is a risk the TSL and FPP operators do not pay their fair share of reforestation and FMA operators and the Ministry pay for this reforestation.

Some ATSL operators with trust funds are only required to undertake reforestation activities to the extent of the resources available in the trust funds. FMA and some ATSL operators with management funds or trust funds must meet the reforestation standards regardless of the amount of resources available in the management funds. This is the case even if another operator has harvested the forest and paid the required fees into the forest management fund or trust. The reforestation activities of other operators with VTSLs and FPPs are often limited to paying reforestation fees to the trust or management funds for the area in which they are harvesting.

To maintain the reforestation standards, Ministry staff work with their counterparts in other provinces and the forestry industry. Annually, the Ministry's staff meet with operators of FMAs to review the forestry management standards including reforestation and make changes as needed. Biannually, Ministry staff meet with all FMA, ATSL and some VTSL operators to discuss compliance with reforestation standards. The Ministry's forestry staff and all licensed operators receive revised standards.

- 4. We recommend the Ministry of Environment establish processes for setting reforestation terms and conditions and for approving forest product permits.**
- 5. We recommend the Ministry of Environment establish processes to set reforestation fees at a level to cover reforestation costs.**

Monitoring forest operators' reforestation activities

We expected that the Ministry would monitor forest operators' reforestation activities by:

- ◆ *assigning responsibility for evaluating reforestation (e.g., qualified staff with required expertise)*
- ◆ *maintaining guidance for evaluating reforestation*
- ◆ *regularly obtaining reforestation information from operators (e.g., annual operating plan, reforestation plans)*
- ◆ *assessing operators compliance with reforestation requirements (e.g., independent certified surveyor for performance survey,*

- reforestation plan approved and achieved, site inspections of reforestation, surveys, use of trust funds for reforestation)*
- ◆ *maintaining records of forest operators reforestation requirements, activities, and compliance*
 - ◆ *promptly following up on operators non compliance with reforestation requirements*

The Ministry has experienced and trained forestry staff. Forestry staff include Forestry officers and Area foresters with post-secondary education in forestry or resource management. Forestry staff hold certifications such as Registered Professional Foresters or Registered Forest Technologists. These Forestry Officers study the impact forestry activities have on the environment and forest management practices. Area foresters manage harvesting and reforestation of forests. Forestry Officers and Area Foresters monitor and approve the harvesting and reforestation of forests by industry. Forestry Officers and Area Foresters monitor forest operators' compliance with reforestation requirements. One employee is referred to as the "Forest Renewal Expert" and is responsible to keep abreast of changes in best practices for forest renewal, reforestation standards, and monitoring operators' compliance with those standards.

The Ministry established reforestation standards in April 2004. At June 2009, the Ministry is surveying the forest to assess the adequacy of reforestation completed prior to April 2004. Management notes that early results show that several thousands of hectares of forest are not properly reforested. The Ministry and industry have shared responsibility for reforesting these areas. The Ministry has begun developing a plan to reforest these areas. The Ministry needs to complete its plan setting out who will correct this condition, how, and when. It must do so to ensure proper reforestation of all forestlands.

The Ministry's reforestation monitoring processes do not set out what reforestation reports operators must provide and the monitoring procedures forestry staff must do. At June 2009, operators of FMAs and ATSLs provide the Ministry with annual operating plans including information about expected areas of harvest but little information on reforestation. Management told us it is developing guidance on the types and frequency of reports its wants operators to provide the Ministry. Also, operators with FPPs and VTSLs provide little or no information about

reforestation. The Ministry must establish a robust process to monitor the adequacy of reforestation. Absence of such a process increases the risk of deteriorating forest ecosystem health and less desirable species resulting in less merchandisable forest products.

The Ministry inspects and audits forest operators to determine their compliance with the reforestation standards. Inspections include site visits with a focus on tree harvesting. Compliance audits examine operators forest harvesting and reforestation practices along with its day-to-day operating practices. However, these procedures are not timely. We note the Ministry completed the most recent compliance audit in 2005. The Ministry does receive some information from audits conducted of FMA operators. However, the focus of these audits is forest harvesting.

The Ministry receives, analyzes, and stores information from forest operators manually. Forest operators and their regulators in many other jurisdictions in Canada use a computer-based geographical information system (GIS) to help them analyze forest data and readily retrieve it out of storage. For example, the landscape level impacts of regeneration and mining, and oil and gas developments are difficult to assess without such a system.

The Ministry must ensure all operators of FMAs and ATSLs pay the correct amount of fees into the relevant forest management fund or trust fund for reforestation and for other activities such as maintaining forest inventories. The Ministry must also ensure that managers of those funds spend money in those funds for intended purposes including reforestation. Since 2006, the Ministry has not carried out its processes to verify that the correct fees were paid into the funds and that the funds' managers spent the money for allowable purposes which include reforestation. The Ministry receives audited financial statements of the revenues and expenses of the management and trust funds. However, audited financial statements do not provide assurance that operators paid the correct fees into their related funds or that the funds' managers spent the money on allowable expenses.

6. We recommend the Ministry of Environment set a formal plan to ensure proper reforestation of the forest.

- 7. We recommend the Ministry of Environment establish processes to monitor operators' compliance with reforestation requirements.**
- 8. We recommend the Ministry of Environment establish processes to verify that:**
 - ◆ the operators paid the correct fees to the relevant forest management fund or forest trust fund**
 - ◆ the managers of these funds use the money collected for the purposes intended including reforestation.**

Report on reforestation activities

We expected that the Ministry would have processes to:

- ◆ regularly report to senior management the requirements and forest operators' success in meeting the requirements (e.g., summary of planned and actual harvest and reforestation, establishment and performance surveys, treatment activity)*
- ◆ recommend changes to the reforestation requirements to senior management and forestry operators*
- ◆ develop a communication strategy to inform the public about reforestation requirements and forest operators' compliance*

Senior management of the Ministry has not set out what information about reforestation activities it needs to receive, how often, and from whom. To properly oversee and regulate reforestation activities, management must receive regular information about the level of operators' compliance with reforestation requirements, how much operators paid into forest management and forest trust funds, what they spent out of those funds, and for what. Currently, senior management of the Ministry receive ad hoc reports on the regulation of reforestation. For example, in June 2009, senior management received an update on reforestation of forestlands which are the responsibility of the Ministry. The Ministry is responsible for reforestation of certain forest areas harvested prior to the current FMAs and TSLs.

The Ministry does not have a formal communication strategy to inform the public about reforestation requirements or operators' compliance with those requirements. The Ministry reports in its annual report the forest areas it regulates through forestry agreements and licenses.

Management told us that the Ministry plans to include in its *State of the Forest Report* more information about reforestation. *The Forest Resources Management Act* requires the Ministry to provide the Legislative Assembly the *State of the Forest Report* every ten years. Management told us that the Ministry has drafted this report and plans to release this report in late 2009.

- 9. We recommend senior management of the Ministry of Environment receive regular reports with adequate information to properly oversee and regulate reforestation.**
- 10. We recommend the Ministry of Environment develop a communication strategy to inform stakeholders about the effectiveness of reforestation activities in the Province.**

Management told us it is drafting guidance for staff as to the information about reforestation activities it needs to receive, how often, and from whom.

Selected references

Auditor General of Alberta. (2005-06). Annual Report of the Auditor General of Alberta 2005-2006, Volume 1 of 2, Reforestation. Edmonton: Author. pp 109-132.

Auditor General of British Columbia. (1999-2000). Forest Renewal BC: Planning and Accountability in the Corporation, The Silviculture Programs. Victoria: Author.

Auditor General of New Brunswick. (2001). Report of the Auditor General, 2001. Chapter 6 Department of Natural Resources and Energy – Crown Lands Management. Fredericton, Author.

Auditor General of Nova Scotia. (June 2006). Report of the Auditor General to the Nova Scotia House of Assembly. 2006 June Report, Chapter 11; Sustainable Timber Supply. Halifax: Author.

Auditor General of Ontario. (2002). Forest Management Program: Follow-up. Ontario: Author.

Auditor General of Ontario. (2000). Forest Management Program.
Ontario: Author.

Canadian Council of Forest Ministers (2005). Criteria and Indicators of Sustainable Forest Management in Canada: National Status 2005.
Ottawa: Author.

Progress toward improving its regulation of air emissions

The Ministry is responsible to protect Saskatchewan’s air quality by regulating air pollutants that originate in the Province. The Ministry regulates air emissions from operators and monitors ambient (overall) air quality.

In 2003, we audited the Ministry’s process to regulate air emissions. In our 2004 Report –Volume 1, we reported the Ministry did not have adequate processes to regulate air emissions. We made seven recommendations to help the Ministry improve its practices. PAC considered these matters in December 2004 and agreed with our recommendations.

In 2006, we followed up on the Ministry’s progress in addressing our recommendations. In our 2006 Report – Volume 3, we concluded the Ministry had not adequately addressed our past recommendations relating to regulation of air emissions.

In September 2009, we completed our second follow-up to assess the Ministry’s progress towards addressing our past recommendations. The section below describes our past recommendations (*in italics*) and our findings.

Sound and consistent terms and conditions for permits

Recommendation 1: The Ministry should set sound and consistent terms and conditions for permits to regulate air emissions.

In 2008, the Ministry approved written guidance for staff to follow in setting terms and conditions. The Ministry’s *Clean Air Permitting Protocol* (Protocol) includes guidance on who is authorized to approve permits,

frequency of operators' inspections, reporting requirements of operators, and a template to help ensure consistent terms for similar operators. Some operators seek to have their permit terms and conditions waived. The guidance does not outline what these operators have to do while their request for waiving the permit is reviewed and approved. Management told us that to help them better understand the guidance in the Protocol, the Ministry plans to provide a training session to environmental project officers in the fall of 2009.

Some permits expired in 2006 and the Ministry records them as current. However, the Ministry has placed no terms and conditions on the operator. Management told us it is seeking approval to waive the permit for these operators as it views the air emission risk as low.

We continue to recommend the Ministry set sound and consistent terms and conditions for permits to regulate air emissions.

Prompt follow-up and approval of expired permits

Recommendation 2: The Ministry should establish processes to ensure permits to regulate air emissions are properly approved and expired permits are followed up promptly.

The Ministry has made progress in addressing this recommendation but more work remains.

The Ministry continues to maintain an inventory of permits and their expiry dates on a spreadsheet. Employees use the spreadsheet to identify permits that will soon expire and notify the operators to apply for renewal of those permits. However, the spreadsheet is not current. For example, some permits do not have their permit number, operator locations, and reasons why the identified permit is not renewable. Some permits that expired in 2006 remain on the spreadsheet as current permits. Management told us for some of the expired permits it is seeking a permit waiver. Under *The Clean Air Act*, the Minister can waive a permit for a minor source of air contaminants. The Ministry does not have a process to seek timely waiver of permits. Operators are required to apply for a clean air permit renewal sixty days prior to expiry. The Ministry is not monitoring to ensure operators do so.

Management told us that the Ministry still plans to track permits on a central database similar to how it tracks compliance of water and wastewater permits.

We continue to recommend the Ministry establish processes to ensure permits to regulate air emissions are properly approved and expired permits are followed up promptly.

Monitoring compliance with permits

Recommendation 3: The Ministry should set sound and consistent processes for monitoring compliance with permits to regulate air emissions and for handling air emission complaints.

The Ministry needs to do more to address this recommendation.

The Clean Air Permitting Protocol and the Air Monitoring Directive for Saskatchewan provide employees of the Ministry written guidance on what to monitor and when. The established guidance requires employees to review operators' annual compliance reports and prepare a summary report for management on non-compliance matters identified. Employees use a standardized form to monitor operators and take action on complaints. However, the Ministry still does not have comprehensive written guidance for employees to follow for inspecting operators for monitoring compliance with permits. As a result, inspection staff used different frequencies for inspecting operators without documenting the reasons. Management told us that the Ministry plans to develop written guidance for inspections in 2010-11.

The Ministry has processes to record, investigate, and document resolution of complaints. The Ministry needs to ensure employees follow those processes. Employees use a spreadsheet to track complaints. We noted that the spreadsheet does not always contain information about how employees resolved the complaints and when; and how they communicated the resolutions to the complainants, operators, management, and the public. Also, the spreadsheet does not contain all complaints because often employees record complaints about permitted operators in the operators' files.

We continue to recommend the Ministry should set sound and consistent processes for monitoring compliance with permits to regulate air emissions and for handling air emission complaints.

Complete human resource plan

Recommendation 4: The Ministry should complete its human resource plan including a plan for employee training to regulate air emissions.

The Ministry has made progress towards addressing this recommendation but more work remains.

The Ministry has documented some of the competencies employees need to regulate air emissions. Management told us that in 2009/10 the Ministry plans to hire an air quality director to oversee the permitting and monitoring of air emissions and an air quality technician. Also, the Ministry has hired a chief engineer to help deal with air monitoring matters.

Employees attend air quality training and participate in air quality management and information exchanges with other provinces. Also, some employees are members of the Canadian Council of Ministers of the Environment's Air Management Committee. This Committee discusses how best to regulate air emissions.

The Ministry still does not have a human resources plan that includes a formal analysis of its competency needs, the competencies staff have, and strategies to address gaps such as planned hiring and training. It should do so.

Also, the Ministry does not document how many permits it expects to issue and monitor, how many inspections it may need to complete, and how many complaints it expects to investigate. Doing so will help the Ministry to determine its human resource needs and the required competencies.

We continue to recommend the Ministry complete its human resource plan including a plan for employee training to regulate air emissions.

Collecting and maintaining information to prepare reliable reports

Recommendation 5: The Ministry should establish systems to collect and maintain information to prepare reliable reports.

The Ministry needs to do more to address this recommendation.

The Ministry maintains manual records for each of its permit holders and uses a spreadsheet to collect and maintain centrally some information, such as number and the date of issued permits, and their expiry dates for each operator. However, as we reported earlier the spreadsheet is not always up-to-date. Also, it does not contain information about monitoring results. Management told us it did not design the spreadsheet to record monitoring results. We examined a sample of permit holder records to assess how the Ministry documents its monitoring of operators. The Ministry could not provide all the files we requested.

The Ministry collects and stores air quality data from five monitoring stations in the province. The Ministry plans to provide the public access to this data in the fall of 2009. The Ministry reports an Air Quality Health Index that is available to the public on the Ministry's website and on the Meteorological Services of Canada website. The Ministry has established the Southeast Saskatchewan Airshed Association which annually reports regional air quality results on its website.

Management told us that the Ministry continues to consider the merits of storing permit information on a central database. A database would allow quick access to information on any permit holder (i.e., compliance with terms and conditions, number of inspections, complaints received, past enforcements) to monitor operators and prepare reports.

We continue to recommend the Ministry establish systems to collect and maintain information to prepare reliable reports.

Progress on internal and external reporting on air emissions

Recommendation 6: The Ministry should improve its internal and external reporting on air emissions.

The Ministry has not fully addressed this recommendation.

The Ministry has not established and communicated to employees the operational reports management needs for regulating air pollutants and how often. Nor has the Ministry set out performance targets for regulating air emissions. The Ministry must establish processes to collect timely and relevant information for regulating air emissions.

Senior management receives some reports, such as a progress report on developing a public website to report the air quality daily and status of a joint project with the Government of Alberta to set up 2-3 interprovincial air sheds to enhance monitoring and reporting of air quality. It also receives updates on the Ministry's involvement on the Canadian Council of Ministers of the Environment Air Management Committee.

The Ministry monitors the air quality in Saskatchewan at five different sites and updates this information on its website. Management told us that in late 2009, the Ministry would begin to provide daily air quality information on its website. The Ministry must ensure it has adequate processes to collect timely information so that it can provide on its website the most current air quality reports to the public.

We continue to recommend the Ministry should improve its internal and external reporting on air emissions.

Regulating contaminated sites

Under *The Environmental Management and Protection Act, 2002* (the Act) and the related regulations, the Ministry has responsibility to control and direct how best to manage a contaminated site.

The Ministry recognizes that clean air to breath, clean water to drink, and clean land to support the people of Saskatchewan are the building blocks to a healthy Saskatchewan. Uncontaminated land is essential for human health, clean water, and safe food production. Controlling potential impacts of contaminated sites helps minimize their harmful effect.

Regulating contaminated sites is necessary to prevent, minimize, or mitigate damage to human or ecosystem¹⁵ health. The Ministry is responsible to identify contaminated sites, assess risks to human and ecosystem health, and determine who was responsible for contaminating the sites. It then must ensure appropriate remediation of the contaminated sites.

In 2007, we audited to assess whether the Ministry had adequate processes to regulate contaminated sites at August 31, 2007. In our 2008 Report – Volume 1, we made the following four recommendations to help the Ministry improve its processes. We recommended the Ministry:

- ◆ establish an adequate system for tracking contaminated sites.
- ◆ complete its risk assessments for identified contaminated sites and rank them in terms of priority.
- ◆ complete its written guidance for monitoring contaminated sites.
- ◆ prepare a communication plan for internal and external reporting on the status of contaminated sites.

The Standing Committee on Public Accounts considered these matters in June 2008 and agreed with these recommendations.

In August 2009, we completed our follow-up to assess the Ministry's progress towards addressing our past recommendations. The section below describes our past recommendations (*in italics*) and our findings.

Adequate system needed for tracking contaminated sites

Recommendation 1: The Ministry should establish an adequate system for tracking contaminated sites.

The Ministry needs accurate and up-to-date information about contaminated sites for effectively regulating them.

¹⁵ System involving interaction between organisms and the non-living environment.

In 2008, we reported that the Ministry used a computer system to manage some information about contaminated sites such as landfills and spills. However, employees did not always use or update the system appropriately. As a result, the system did not have accurate, up-to-date information. Also, the Ministry's manual records relating to contaminated sites were not adequate. Without a complete and accurate tracking system for contaminated sites, the Ministry cannot effectively manage such sites. At August 31, 2009 the Ministry continues to use this system and our concerns continue.

In 2008, the Ministry developed a business plan that defines its requirements for the development of a Contaminated Sites Information Management System (CSIMS). This information system is intended to contain such items as the condition of a contaminated site, the contaminants found at the site, their toxicity levels, health and human safety issues, and identify risks that require remedial action.

The Ministry has plans to implement the National Contaminated Sites Classification System as developed by the Canadian Council of Ministers of the Environment (CCME) for all impacted sites in Saskatchewan. The Ministry is implementing this system to facilitate tracking of contaminated sites using the National Contaminated Sites Classification System score and to prioritize actions at impacted sites.

We continue to recommend the Ministry should establish an adequate system for tracking contaminated sites.

Assessing the risks of contaminated sites

Recommendation 2: The Ministry should complete its risk assessments for identified contaminated sites and rank them in terms of priority.

Risk assessments document the condition of sites, contaminants found, toxicity levels, health and human safety issues, and identify risks that require remedial action. The Ministry evaluates risk assessments using guidelines established by the CCME.

To manage sites that pose the greatest risks, the Ministry needs a complete assessment of risks and ranking of sites in terms of priority. The Ministry has made some progress but needs to do more.

The Ministry has developed a draft 10-year work plan to complete the clean up of the 33 abandoned non-uranium mines identified within the province. This plan outlines the objectives, issues, remediation process, identifies stakeholders, estimated costs, and prioritizes the sites based on a high-level risk assessment. The plan also includes a communication process. The Ministry should formally approve the plan. Also, the Ministry needs to do a detailed risk assessment for the non-uranium abandoned mines.

In addition, the Ministry has not formally assessed and prioritized other potential contaminated sites. These sites are industrial and commercial operations, e.g., storage facilities of hazardous substances. To manage sites that pose the greatest risks, the Ministry should complete its assessment of the risks and then rank sites in terms of priority.

We continue to recommend the Ministry should complete its risk assessments for identified contaminated sites and rank them in terms of priority.

Monitoring and reporting on the status of sites

Recommendation 3: The Ministry should complete its written guidance for monitoring contaminated sites.

Written guidance for monitoring contaminated sites helps to prevent contamination of sites and properly monitor contamination risks.

The Ministry has developed written guidance for monitoring contaminated sites. This guidance includes using the National Contaminated Sites Classification System site description sheet, contaminant characteristics sheet, migration potential sheet, exposure sheet and the summary score sheet. The Ministry does not plan to complete this guidance until late 2009 after it completes its processes for assessing and prioritizing risks.

We continue to recommend the Ministry complete its written guidance for monitoring contaminated sites.

Recommendation 4: The Ministry of Environment should prepare a communication plan for internal and external reporting on the status of contaminated sites.

Communication plans help to ensure stakeholders are aware of contamination risks and their management.

In 2009, the Ministry created a Communication Strategy Contaminated Sites and Hazardous Materials Environment Emergencies Communication plan. This plan provides limited direction regarding communication. The plan sets out the type of communication that may be used, stakeholders involved, goals and objectives, and an action plan. However, the plan does not identify who is responsible for components of the plan, e.g., who is to do website updates, timeline expectations, and templates/guidance to help ensure consistency in communication. Also, without an adequate system to record relevant and up-to-date information about all contaminated sites, it is difficult for employees to evaluate and prioritize risks of all sites as well as monitor them. In addition, an adequate system would provide better information to management.

We continue to recommend the Ministry prepare a communication plan for internal and external reporting on the status of contaminated sites.

Status of other outstanding recommendations of the Standing Committee on Public Accounts

The following table provides an update on recommendations previously made by PAC that are not yet implemented and are not discussed earlier in this chapter.¹⁶

¹⁶ For the definitions of the key terms used in the table, see Chapter 20 – Standing Committee on Public Accounts.

Table 1

PAC REPORT YEAR ¹⁷	OUTSTANDING RECOMMENDATION	STATUS
Saskatchewan Watershed Authority (Cross-Government Infrastructure)		
2005	PAC concurs: 3-1 that the Saskatchewan Watershed Authority should obtain an independent comprehensive dam safety review on each of its very high consequence dams (i.e., Rafferty, Alameda, Qu'Appelle River, and Gardiner) at least every five years.	Partially implemented (as at September 30, 2007). We plan a follow-up for 2010.
2005	PAC concurs: 3-2 that the Saskatchewan Watershed Authority should have up-to-date tested emergency preparedness plans for each of its major dams (i.e., Rafferty, Alameda, Qu'Appelle River, and Gardiner).	Partially implemented (as at September 30, 2007) We plan a follow-up for 2010.
2005	PAC concurs: 3-3 that the Saskatchewan Watershed Authority should set processes that ensure its manuals always include complete procedures to operate, maintain, and monitor dam safety.	Partially implemented (as at September 30, 2007). We plan a follow-up for 2010.

¹⁷ PAC Report Year refers to the year that PAC first made the recommendation in its report to the Legislative Assembly.