NOVA SCOTIA

May 1, 2014

Honourable Kevin Murphy
Speaker
House of Assembly
Province of Nova Scotia

Dear Sir:

I have the honour to submit herewith my Report to the House of Assembly under Section 18(2) of the Auditor General Act, to be laid before the House in accordance with Section 18(4) of the Auditor General Act.

Respectfully submitted

ALAN HORGAN, CA

Acting Auditor General

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# Office of the Auditor General

## Our Vision

A relevant, valued and independent audit office serving the public interest as the House of Assembly's primary source of assurance on government performance.

## Our Mission

To make a significant contribution to enhanced accountability and performance in the provincial public sector.

## Our Priorities

Conduct and report audits that provide information to the House of Assembly to assist it in holding government accountable.

Focus our audit efforts on areas of higher risk that impact on the lives of Nova Scotians.

Contribute to a better performing public service with practical recommendations for significant improvements.

Encourage continual improvement in financial reporting by government.

Promote excellence and a professional and supportive workplace at the Office of the Auditor General.

# Who We Are and What We Do

The Auditor General is an independent nonpartisan officer of the Legislature, appointed by the House of Assembly for a ten-year term.  He or she is responsible to the House for providing independent and objective assessments of the operations of government, the use of public funds, and the integrity of financial reports.  The Auditor General helps the House to hold the government to account for its use and stewardship of public funds.

The Auditor General Act establishes the Auditor General's mandate, responsibilities and powers.  The Act provides his or her Office with a modern performance audit mandate to examine entities, processes and programs for economy, efficiency and effectiveness and for appropriate use of public funds.  It also clarifies which entities are subject to audit by the Office.

The Act stipulates that the Auditor General shall provide an opinion on government's annual consolidated financial statements; provide an opinion on the revenue estimates in the government's annual budget address; and report to the House at least annually on the results of the Office's work under the Act.

The Act provides the Office a mandate to audit all parts of the provincial public sector, including government departments and all agencies, boards, commissions or other bodies responsible to the crown, such as regional school boards and district health authorities, as well as funding recipients external to the provincial public sector.  It provides the Auditor General with the authority to require the provision of any documents needed in the performance of his or her duties.

In its work, the Office of the Auditor General is guided by, and complies with, the professional standards established by the Canadian Institute of Chartered Accountants, otherwise known as generally accepted auditing standards.  We also seek guidance from other professional bodies and audit-related best practices in other jurisdictions.

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# Introduction

# 1 Message from the Acting Auditor General

## Introduction

1.1 I am pleased to present my May 2014 Report to the House of Assembly on work completed by my Office in early 2014.

1.2 Since fall 2013, we have submitted the following reports.

- Our Report to the House of Assembly on work completed in the summer and fall of 2013, dated October 31, 2013, was tabled on November 20, 2013.

- Our January 2014 Report to the House of Assembly on financial reporting issues, dated January 2, 2014, was tabled on January 23, 2014.

- Our Report on the Estimates of Revenue for the fiscal year ended March 31, 2015, dated April 1, 2014, was included in the budget address delivered by the Minister of Finance on April 3, 2014.

1.3 I wish to acknowledge the valuable efforts of my staff who deserve the credit for the work reported here. As well, I wish to acknowledge the cooperation and courtesy we received from staff in departments and agencies during the course of our work.

## Chapter Highlights

1.4 This report presents the results of audits completed in 2014 at a number of departments and agencies

*Chapter 2 – Follow-up of 2010 and 2011 Performance Audit Recommendations*

1.5 For more than five years, progress made to address identified weaknesses has been inadequate. Only 45% of our 2011 recommendations have been implemented. Overall, only 50% of recommendations from our 2010 and 2011 reports have been implemented. Government departments and agencies are not taking enough action to correct operational deficiencies they know to exist.

1.6     The low implementation rate of 45% for 2011 is, in large part, due to very low rates at four entities: the Chief Information Office (20%) and the Departments of Service Nova Scotia and Municipal Relations (33%), Labour and Advanced Education (40%), and Economic and Rural Development and Tourism (43%).

1.7     The Public Accounts Committee has accepted our proposals that the Committee formally accept and endorse the recommendations in our audit reports if Government agrees with them and request that the Government Audit Committee take responsibility for the ongoing monitoring and oversight of implementation.

1.8     We are encouraged by the Committee's actions and believe that these changes will result in more effective government monitoring and oversight leading to more timely correction of the operational deficiencies identified in our reports.

### *Chapter 3 – Communications Nova Scotia:  Advertising, Procurement, and Performance*

1.9     We found advertising campaigns and other communications from Communications Nova Scotia were generally nonpartisan in nature. However, the Agency persistently failed to follow the Province's procurement rules.  Eighty-four percent of the procurements we tested had problems.  This demonstrates a lack of regard for the Province's procurement policies.

1.10    We identified potential noncompliance with Canada Revenue Agency rules related to independent contractors who have certain characteristics of employees.  We recommended that Communications Nova Scotia seek advice on this matter and obtain legal advice on how to address this situation if concerns are identified.

1.11    Finally, Communications Nova Scotia's performance measurement, both at the Agency and advertising campaign levels, needs work.

### *Chapter 4 – Education and Early Childhood Development:  iNSchool Student Information System*

1.12    The iNSchool student information system does not fully protect the confidentiality, integrity and availability of information on students in the public school system.

1.13    We identified security weaknesses with the iNSchool system and exploited those weaknesses to gain unauthorized access to confidential student information in three school boards.  Before we wrote this report, the iNSchool project team fixed the security issues that enabled us to gain access to the student accounts.

1.14 The Department of Education and Early Childhood Development has implemented controls to protect the network and physical equipment that host iNSchool.

1.15 We found the development of iNSchool system was aided by an appropriate governance structure and reasonable project management practices were used throughout the project lifecycle.

### Chapter 5 – Environment:  Public Drinking Water Supply Program

1.16 The Department of Environment is not adequately monitoring public drinking water supplies to ensure public safety risks are appropriately addressed.  We identified instances in which the Department did not complete its required audit procedures or water samples were not obtained from water supply facilities within 30 days after a boil water advisory was removed.

1.17 Lack of adequate guidance for staff has resulted in inconsistencies in how audits are conducted, timing of audits of newly registered facilities, audit reports not issued in a timely manner, and inadequate follow up of deficiencies.

1.18 We also found management does not use the Department's information system to its fullest potential.

### Chapter 6 – Health and Wellness:  Physician Alternate Funding Arrangements

1.19 The Department of Health and Wellness' monitoring of alternative payment and academic funding plans for remunerating physicians is poor.

1.20 Alternative payment plans have limited reporting requirements, making it difficult for the Department to determine if an appropriate level of service is provided.  Academic funding plan contract deliverables are not reviewed.  If the Department becomes aware that requirements are not met, it does not take steps to achieve compliance.

1.21 We found the three academic funding plan departments we visited at Capital Health and the IWK Health Centre met their academic funding plan requirements for the deliverables we tested.

1.22 Health and Wellness is working towards the development of new academic funding and alternate payment models.  Although progress has been made, considerable work is still needed.

### *Chapter 7 – Natural Resources:  Mineral Resource Management*

1.23  The Department of Natural Resources is not adequately managing mineral resources in the Province.  A number of our recommendations address the need to implement basic processes which should have already been in place.

1.24  The Department's monitoring of mining activity is not adequate.  Operator annual reports are not received and reviewed, and site visits are not conducted by the Department as often as intended.  The Department is not doing enough to ensure the security it holds is adequate to cover potential costs for reclaiming mining sites.

1.25  Additionally, the Department does not have adequate processes to ensure gypsum income tax and mineral royalty payments are complete and accurate. We also found administration of the mineral incentive program needs to be strengthened.

# Follow-up

# 2 Follow-up of 2010 and 2011 Performance Audit Recommendations

## Summary

Government continues to take too long to implement recommendations from our performance audits. For more than five years, progress made to address identified weaknesses has been inadequate. Only 45% of our 2011 recommendations have been implemented. Overall, only 50% of recommendations from our 2010 and 2011 reports have been implemented. Government departments and agencies are not taking enough action to correct operational deficiencies they know to exist.

The low implementation rate of 45% for 2011 is, in large part, due to very low rates at four entities: the Chief Information Office (20%), and the Departments of Service Nova Scotia and Municipal Relations (33%), Labour and Advanced Education (40%), and Economic and Rural Development and Tourism (43%) . This lack of action has practical consequences in the management of programs. It means, for instance, that:

- planned disaster recovery of the provincial data centre may not be adequate;

- critical systems security weaknesses and collision reporting issues at the Registry of Motor Vehicles may still remain;

- fire safety in municipalities and public schools may continue to be at risk; and

- deficient processes, controls and documentation supporting the granting and monitoring of business loans may continue.

Positive steps have been taken to help address the continued poor implementation results. The Public Accounts Committee has accepted our proposals that the Committee formally accept and endorse the recommendations in our audit reports and request that the Government Audit Committee take responsibility for the ongoing monitoring and oversight of implementation. The Public Accounts Committee deferred acceptance of our third proposal of holding an annual hearing with the Audit Committee on the status of implementation of the accepted recommendations. We are encouraged by the Committee's actions and believe that these changes will result in more effective government monitoring and oversight leading to more timely correction of the operational deficiencies identified in our reports.

Details on the status of all performance audit recommendations from 2010 and 2011 can be found on our website at oag-ns.ca.

# 2 Follow-up of 2010 and 2011 Performance Audit Recommendations

## Background

2.1 Our Office's strategic priorities include serving the House of Assembly, considering the public interest, and improving government performance. We work towards these priorities by providing legislators with the information they need to hold government accountable. We obtain this information primarily by conducting audits which, over time, will cover the major activities of Government. The results of our audits are detailed in our Reports to the House of Assembly. Each report contains recommendations which provide practical, constructive advice to address issues raised by these audits.

2.2 We initially follow up the implementation status of recommendations two years after they are made. We believe two years is sufficient time for auditees to substantially address our recommendations.

2.3 This year we reported two follow-up chapters. Chapter 6 of our January 2014 Report provided information on the status of recommendations concerning financial reporting and other financial management issues, as well as how responsive departments and agencies were in implementing related recommendations from our 2010 audits.

2.4 This chapter reports the results of follow-up on the implementation status of the recommendations from our 2010 and 2011 performance audits. During this assignment, we reviewed department management's self-assessment of their progress in implementing the outstanding 2010 and 2011 recommendations. We also asked management to provide supporting information for recommendations they assessed as complete. Our review process focused on whether self-assessments and information provided by management were accurate, reliable and complete. This chapter includes summary level information on implementation status. More detailed information, including specific recommendations, can be found on our website at oag-ns.ca.

2.5 Our role is to make recommendations to improve government operations, and to report to the House on the status of those recommendations to assist Members in holding government accountable for their implementation. Once recommendations have been accepted, it is government's responsibility to regularly monitor to ensure that appropriate action has been taken to implement the recommendations.

## Review Objective and Scope

2.6    In February 2014, we completed a review of the status of performance audit recommendations included in Reports of the Auditor General from 2010 and 2011. Our objective was to provide moderate assurance on the implementation status of those recommendations.

2.7    We obtained Government's assessment of the recommendations and performed additional procedures on those which government assessed as do not intend to implement or action no longer applicable. We focused on the reasons why Government has chosen not to implement these recommendations. If the rationale appeared reasonable, we removed the recommendation from our statistics and will not conduct further follow-up work on it.

2.8    Our review of the implementation status was based on representations by department and agency management which we substantiated through interviews and examination of documentation for those recommendations assessed as complete. We performed sufficient work to satisfy us that the implementation status of complete, as described by management, is plausible in the circumstances. This provides moderate, not high level, assurance. Further information on the difference between high and moderate assurance is available in the Chartered Professional Accountants (CPA) Canada Handbook, Section 5025 – Standards for Assurance Engagements Other than Audits of Financial Statements and Other Historical Financial Information.

2.9    Our criteria were based on qualitative characteristics of information as described in the CPA Canada Handbook. We did not perform any procedures, and provide no assurance on recommendations noted in this report other than those we have reported as complete.

## Significant Observations

### Implementation Monitoring and Oversight

Conclusions and summary of observations

For more than five years we have reported poor results in implementation of our recommendations with no improvement in the current year. A change is needed to address inadequacies in the current process to monitor and oversee the implementation of our audit recommendations. The Public Accounts Committee accepted our proposals that it formally accept and endorse the recommendations in our reports that management agrees with, and request that the Government Audit Committee take responsibility for ongoing monitoring and oversight of

implementation.  The Public Accounts Committee deferred acceptance of our third proposal of holding an annual hearing with the Audit Committee on the status of implementation of the accepted recommendations.  We are encouraged by the Public Accounts Committee's response to our proposals and offered to assist the Committee in how to effectively implement the third proposal.  These changes should have a positive impact and contribute to better government administration in the Province.

2.10   For more than five years we have reported poor results in implementation of our recommendations.  We found no improvement this year, as discussed later in this chapter.  Continued poor results indicate there are inadequacies in the current Government process to monitor and oversee implementation progress.  We believe the lack of an effective Government monitoring and oversight function is an important contributing factor in the continued poor results.

2.11   In Spring 2013, we presented to the Public Accounts Committee, three action steps for consideration to help improve implementation of our recommendations.  We proposed that the Public Accounts Committee accept and endorse the recommendations in our reports that Government agreed with.  Once accepted, the Public Accounts Committee would ask the Government Audit Committee to assume responsibility for ongoing monitoring and oversight of implementation of our recommendations.  This would shift responsibility for action over to the deputy ministers on the Committee to correct any weaknesses or deficiencies identified in our reports.  We also proposed the Public Accounts Committee consider holding a hearing at least once annually on the status of implementation of audit recommendations.  At this hearing, the Committee would require the submission of an update report from the Audit Committee.

2.12   At its February 19, 2014 meeting, the Public Accounts Committee passed a motion accepting the first two action steps we proposed.  The Committee deferred acceptance of the third step, needing further consideration as to how it should be implemented.  We are encouraged by the Committee's response to our proposals.

2.13   By taking these steps, Government administration will be accountable to the House for their actions in addressing program deficiencies identified in our audit reports.  We believe such steps should have a substantial impact and contribute to better Government administration in the Province.  We offer to assist the Public Accounts Committee in how to effectively implement the third action step of holding annual hearings on implementation status of our audit recommendations.

## Implementation Results – 2010 and 2011

### Conclusions and summary of observations

Only 45% of the recommendations in our 2011 reports were implemented, with an overall implementation rate of 50% from our 2010 and 2011 reports. The overall response from Government in implementing recommendations is poor. We highlight below the offices or departments with the lowest percentage of implementation for our 2011 reports.

- Chief Information Office (20%, now part of the Department of Internal Services)
- Department of Service Nova Scotia and Municipal Relations (33%, now Service Nova Scotia)
- Department of Labour and Advanced Education (40%, now applies to the Department of Municipal Affairs)
- Department of Economic and Rural Development and Tourism (43%).

The poor responses mean, for example:

- planned disaster recovery of the provincial data centre may not be adequate;
- critical systems security and collision reporting issues at the Registry of Motor Vehicles may not be addressed;
- fire safety risks in municipalities and public schools may not be adequately addressed; and
- significant deficiencies may remain in the processes, controls and documentation supporting the granting and monitoring of business loans.

Government indicated it does not intend to implement two of our recommendations. We disagree with Government's rationale for not implementing these recommendations as the risks they addressed still exist.

2.14 *Do not intend or action no longer appropriate* – There are 301 recommendations made in our reports from 2010 and 2011. Eight recommendations were reported to us or we determined as do not intend to implement or action no longer appropriate. We reviewed the information provided by Government with respect to these recommendations and determined the rationale provided for six recommendations is reasonable. These recommendations have been removed from further analysis and statistics leaving 295 recommendations for the two years. We disagree with Government's rationale for not implementing the remaining two recommendations as the risks which the recommendations addressed still exist, as noted below.

- The Department of Health and Wellness does not intend to include wait list information concerning long term care placement on its

website. This is useful information which should be published and available to all Nova Scotians so they can make more informed decisions concerning when and where to seek placement in a long term care facility.

- The Department of Justice does not intend to take action to address the gap between unsupervised bail and pretrial detention for youth facing criminal charges. The 2006 *Report of the Nunn Commission of Inquiry* recommended the Province establish a bail supervision program in the Halifax Regional Municipality as it provides a greater assurance of compliance with bail conditions. The Department established a youth bail supervision program as a result of a Nunn Commission recommendation, but cancelled it in 2010. Compliance with bail conditions is more likely when there is some mechanism to monitor compliance.

2.15 *Overall analysis* – The following exhibits summarize the implementation status of the 295 recommendations made in 2010 and 2011.

| Implementation Status | 2010 Reports | 2011 Reports | Overall |
|---|---|---|---|
| Complete | 55% | 45% | 50% |
| Not Complete | 45% | 54% | 49% |
| Do Not Intend to Implement | 0% | 1% | 1% |
| No Longer Applicable or Required | 0% | 0% | 0% |
|  | 100% | 100% | 100% |

**Overall Results from 2010 – 11**



- Complete — 148
- Not Complete — 145
- Do Not Intend to Implement — 2
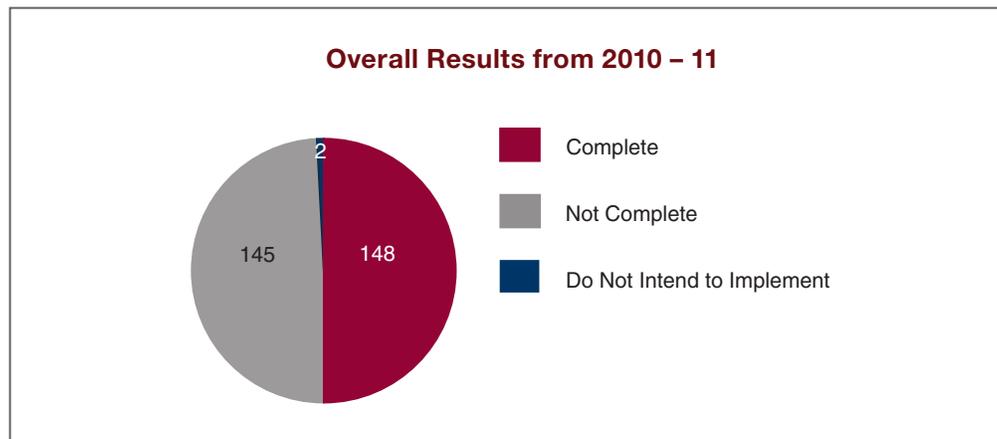
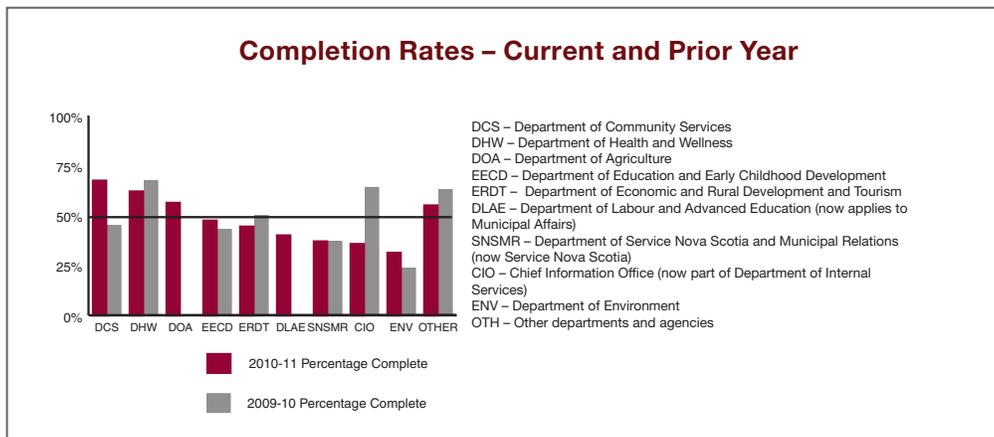2.16 The overall implementation rate this year is 50%, a decrease from the 62% implementation rate reported in May 2013. Similar to last year's experience, the overall response from Government in implementing recommendations is poor – 55% from 2010 have been completed and only 45% from 2011. These statistics show a continued lack of action by Government to address deficiencies we have identified.
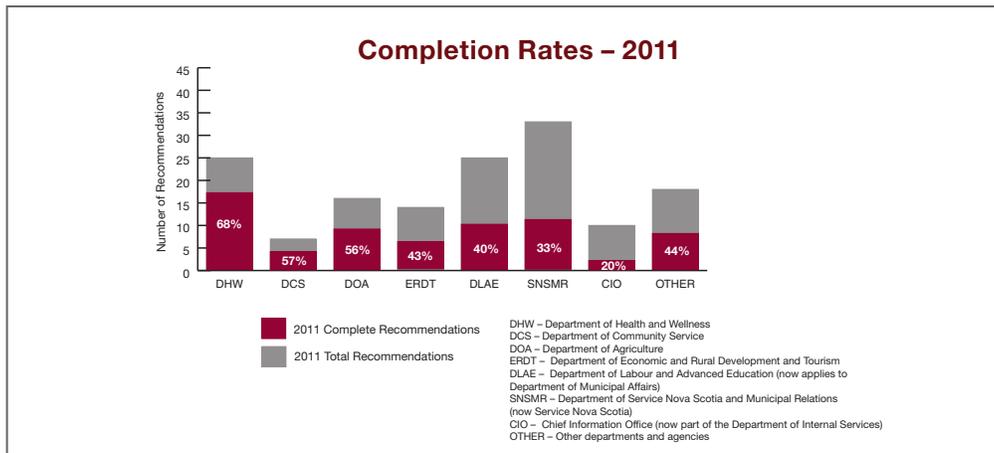
2.17 *Department and agency analysis 2010 and 2011* – The results by department and agency provide an indication of which organizations have made it a priority to address our recommendations. The following graph shows the implementation rate for those organizations to which we have made a significant number of recommendations. Only three departments had rates over 50%. The Department of Community Services had the highest rate, at 67%, followed by the Department of Health and Wellness at 62% and the Department of Agriculture with 56%. The other six departments or offices had rates of implementation less than 50%.

2.18 The following graph compares this year's 2010-11 implementation rates with last year's rates for 2009-10.



**Completion Rates – Current and Prior Year**

DCS – Department of Community Services
DHW – Department of Health and Wellness
DOA – Department of Agriculture
EECD – Department of Education and Early Childhood Development
ERDT – Department of Economic and Rural Development and Tourism
DLAE – Department of Labour and Advanced Education (now applies to Municipal Affairs)
SNSMR – Department of Service Nova Scotia and Municipal Relations (now Service Nova Scotia)
CIO – Chief Information Office (now part of Department of Internal Services)
ENV – Department of Environment
OTH – Other departments and agencies

2010-11 Percentage Complete
2009-10 Percentage Complete

2.19 *Department and agency analysis 2011* – When we make recommendations as a result of our audits, we seek acknowledgement from departments and agencies that they agree with and intend to implement the recommendations. Almost all published responses included in our reports indicate both agreement and intention to implement our recommendations. We therefore expect to see better implementation rates than we have found to date; we also expect to see substantial implementation within two years. The following graph shows the implementation rate for those organizations in which we conducted audits during 2011.



**Completion Rates – 2011**

2011 Complete Recommendations
2011 Total Recommendations

DHW – Department of Health and Wellness
DCS – Department of Community Service
DOA – Department of Agriculture
ERDT – Department of Economic and Rural Development and Tourism
DLAE – Department of Labour and Advanced Education (now applies to Department of Municipal Affairs)
SNSMR – Department of Service Nova Scotia and Municipal Relations (now Service Nova Scotia)
CIO – Chief Information Office (now part of the Department of Internal Services)
OTHER – Other departments and agencies

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2.20 In 2011, we audited program areas covering financial assistance to businesses, a hospital replacement project, new and replacement long term care facilities, fire marshal services, registry of motor vehicles, information systems, meat inspection program, and protection of persons in care. These audits examined matters of importance to public health, safety and economic well-being, and identified significant deficiencies that need to be addressed. We are disappointed with the overall implementation rate of 45% for our 2011 recommendations. 81 of the 148 recommendations from 2011, involving 13 departments or agencies, remain unimplemented. The following paragraphs outline our concerns with the four departments or agencies with the lowest response and to which a significant number of recommendations were made.

2.21 *Chief Information Office* – The Chief Information Office (now part of the Department of Internal Services) implemented 20% (2 of 10) of our 2011 recommendations. Nine of the recommendations were from our audit of disaster preparedness. Among those still not complete, the Office has not established a secondary processing site that can handle all of the critical systems in the event of a disaster to the Provincial data centre. Disaster response testing and training have not been performed. The Office's progress in addressing our concerns is inadequate and is not meeting expectations for completion.

2.22 *Department of Service Nova Scotia and Municipal Relations* – The Department of Service Nova Scotia and Municipal Relations (now Service Nova Scotia) implemented only 33% (11 of 33) of the recommendations we made in 2011. Among the issues at the Registry of Motor Vehicles which were not addressed: the Department has not implemented a process to eliminate the backlog of collision reports for processing. As well, the poor controls over the level of access assigned to users of the information systems have not been improved. The Department needs to complete implementation of recommendations related to this and other important registries. Although we believe that progress to date has been inadequate, we acknowledge that management has recently implemented a more rigorous internal process to monitor implementation status with a plan to substantially complete all of our recommendations by March 2015.

2.23 *Department of Labour and Advanced Education* – The Department of Labour and Advanced Education implemented 40% (10 of 25) of the recommendations from our 2011 audit of the Office of the Fire Marshal (now part of the Department of Municipal Affairs). Important recommendations related to the monitoring of municipalities and ensuring that public schools are inspected at the frequency specified in legislation have not been completed. Although we are somewhat disappointed with the Department's progress, we acknowledge that certain recommendations are dependent upon the support and cooperation of multiple stakeholders, including municipalities, which are more complex and time consuming to implement. Management has

indicated that progress continues to be made on achieving compliance with the recommendations.

2.24 *Department of Economic and Rural Development and Tourism* – The Department of Economic and Rural Development and Tourism implemented 43% (6 of 14) of the recommendations from our 2011 audit of financial assistance through the Industrial Expansion Fund (now the Nova Scotia Jobs Fund). The Department also made no further progress on implementing our recommendations from a related 2010 audit. We identified significant deficiencies in the Department's processes, controls and documentation supporting the application for and ongoing management of loans. The risk of inconsistent treatment of applicants, incomplete analysis, and poorly informed decisions is greater without a standard loan application and risk assessment process, as well as an appropriate level of documented support from clients. The Department has continued its slow pace in addressing known deficiencies in its programs which is not acceptable.

## Status of Recommendations by Entity, by Chapter

| Report and Chapter | Entity | Complete | Not Complete | Do Not Intend to Implement | Total |
|---|---|---|---|---|---|
| **Department of Agriculture** | | | | | |
| **November 2011** Chapter 3: Meat Inspection Program | DOA | 9 | 7 | | 16 |
| **Recommendations** | | **9** **56%** | **7** **44%** | **0** **0%** | **16** **100%** |
| **Department of Community Services** | | | | | |
| **November 2010** Chapter 2: Rent Supplement Housing | DCS MRHA WRHA | 5 1 3 | 2 | | 7 1 3 |
| Chapter 3: Services for Persons with Disabilities | DCS | 18 | 10 | | 28 |
| **November 2011** Chapter 4: Protection of Persons in Care | DCS | 4 | 3 | | 7 |
| **Recommendations** | | **31** **67%** | **15** **33%** | **0** **0%** | **46** **100%** |
| **Department of Economic and Rural Development and Tourism** | | | | | |
| **June 2010** Chapter 2: Financial Assistance to Businesses Through NSBI and IEF | ERDT | 2 | 2 | | 4 |
| **May 2011** Chapter 3: Financial Assistance to Businesses through NSBI and IEF | ERDT | 6 | 8 | | 14 |
| **Recommendations** | | **8** **44%** | **10** **56%** | **0** **0%** | **18** **100%** |
| **Department of Education and Early Childhood Development** | | | | | |
| **February 2010** Chapter 3: Contract Management of Public-Private Partnership Schools | EECD | 9 | 10 | | 19 |
| **Recommendations** | | **9** **47%** | **10** **53%** | **0** **0%** | **19** **100%** |
| **Regional School Boards** | | | | | |
| **February 2010** Chapter 3: Contract Management of Public-Private Partnership Schools | CBVRSB SRSB | 1 1 | | | 1 1 |
| **Recommendations** | | **2** **100%** | **0** **0%** | **0** **0%** | **2** **100%** |

*A list of abbreviations and entity names can be found at the end of this Appendix.*

## Status of Recommendations by Entity, by Chapter

| Report and Chapter | Entity | Complete | Not Complete | Do Not Intend to Implement | Total |
|---|---|---|---|---|---|
| **Department of Environment** | | | | | |
| **June 2010** Chapter 3: Management of Contaminated Sites | ENV | 5 | 11 | | 16 |
| **Recommendations** | | **5** **31%** | **11** **69%** | **0** **0%** | **16** **100%** |
| **Department of Finance and Treasury Board** | | | | | |
| **May 2011** Chapter 2: Follow-up of 2005, 2006, 2007, and 2008 Recommendations (former Treasury Board Office) | F&TB | 1 | | | 1 |
| Chapter 4: Colchester Regional Hospital Replacement (former Treasury Board Office) | F&TB | | 2 | | 2 |
| **November 2011** Chapter 2: Disaster Preparedness – Major Government Information Systems (former Department of Finance) | F&TB | 1 | 4 | | 5 |
| **Recommendations** | | **2** **25%** | **6** **75%** | **0** **0%** | **8** **100%** |
| **Department of Health and Wellness** | | | | | |
| **February 2010** Chapter 2: Electronic Health Records | DHW | 3 | 5 | | 8 |
| **June 2010** Chapter 4: Mental Health Services | DHW | 9 | 5 | | 14 |
| **May 2011** Chapter 4: Colchester Regional Hospital Replacement | DHW | 8 | 1 | | 9 |
| Chapter 5: Long Term Care – New and Replacement Facilities | DHW | 3 | 3 | 1 | 7 |
| **November 2011** Chapter 4: Protection of Persons in Care | DHW | 6 | 3 | | 9 |
| **Recommendations** | | **29** **62%** | **17** **36%** | **1** **2%** | **47** **100%** |

*A list of abbreviations and entity names can be found at the end of this Appendix.*

## Status of Recommendations by Entity, by Chapter

| Report and Chapter | Entity | Complete | Not Complete | Do Not Intend to Implement | Total |
|---|---|---|---|---|---|
| **District Health Authorities** | | | | | |
| **June 2010** <br> Chapter 4: Mental Health Services | AVH <br> CH <br> CEHHA <br> CHA <br> IWK <br> PCHA | 3 <br> 3 <br> 2 <br> <br> 2 | 1 <br> 1 <br> 2 <br> 1 <br> 1 <br> 1 | | 4 <br> 4 <br> 4 <br> 1 <br> 3 <br> 1 |
| **May 2011** <br> Chapter 4: Colchester Regional Hospital Replacement | CEHHA | 2 | 1 | | 3 |
| **Recommendations** | | **12** <br> **60%** | **8** <br> **40%** | **0** <br> **0%** | **20** <br> **100%** |
| **Department of Labour and Advanced Education (now applies to Department of Municipal Affairs)** | | | | | |
| **May 2011** <br> Chapter 6: Office of the Fire Marshal | LAE | 10 | 15 | | 25 |
| **Recommendations** | | **10** <br> **40%** | **15** <br> **60%** | **0** <br> **0%** | **25** <br> **100%** |
| **Department of Service Nova Scotia and Municipal Relations (now Service Nova Scotia)** | | | | | |
| **November 2010** <br> Chapter 4: Registry Systems | SNSMR | 9 | 12 | | 21 |
| **May 2011** <br> Chapter 7: Registry of Motor Vehicles | SNSMR | 8 | 13 | | 21 |
| Chapter 8: Registry of Motor Vehicles Information and Technology | SNSMR | 3 | 9 | | 12 |
| **Recommendations** | | **20** <br> **37%** | **34** <br> **63%** | **0** <br> **0%** | **54** <br> **100%** |
| **Chief Information Office (now part of the Department of Internal Services)** | | | | | |
| **November 2010** <br> Chapter 4: Registry Systems | CIO | 3 | 1 | | 4 |
| **May 2011** <br> Chapter 8: Registry of Motor Vehicles Information and Technology | CIO | | 1 | | 1 |
| **November 2011** <br> Chapter 2: Disaster Preparedness – Major Government Information Systems | CIO | 2 | 7 | | 9 |
| **Recommendations** | | **5** <br> **36%** | **9** <br> **64%** | **0** <br> **0%** | **14** <br> **100%** |

*A list of abbreviations and entity names can be found at the end of this Appendix.*

-up of 2010 and 2011 Performance Audit Recommendations

| Status of Recommendations by Entity, by Chapter | | | | | |
|---|---|---|---|---|---|
| Report and Chapter | Entity | Complete | Not Complete | Do Not Intend to Implement | Total |
| **Department of Energy** | | | | | |
| **November 2011** Chapter 5: Canada-Nova Scotia Offshore Petroleum Board | ENGY | | 1 | | 1 |
| **Executive Council Office** | | | | | |
| **June 2010** Chapter 2: Financial Assistance to Businesses Through NSBI and IEF | ECO | 1 | | | 1 |
| **Department of Justice** | | | | | |
| **November 2011** Chapter 6: Implementation of Nunn Commission of Inquiry Recommendations | DOJ | 1 | | 1 | 2 |
| **Nova Scotia Business Inc.** | | | | | |
| **June 2010** Chapter 2: Financial Assistance to Businesses Through NSBI and IEF | NSBI | 1 | 1 | | 2 |
| **May 2011** Chapter 3: Financial Assistance to Businesses through NSBI and IEF | NSBI | 3 | 1 | | 4 |
| **Sub-total** | | **4** | **2** | | **6** |
| **Total Recommendations** | | **148 50%** | **145 49%** | **2 1%** | **295 100%** |

| | |
|---|---|
| AVH – Annapolis Valley Health | ENV – Department of Environment |
| CBVRSB – Cape Breton-Victoria Regional School Board | ERDT – Department of Economic and Rural Development and Tourism |
| CH – Capital Health | F&TB – Department of Finance and Treasury Board |
| CEHHA – Colchester East Hants Health Authority | IEF – Industrial Expansion Fund |
| CHA – Cumberland Health Authority | IWK – IWK Health Centre |
| CIO – Chief Information Office | LAE – Department of Labour and Advanced Education |
| DCS – Department of Community Services | MRHA – Metropolitan Regional Housing Authority |
| DHW – Department of Health and Wellness | NSBI – Nova Scotia Business Inc. |
| DOA – Department of Agriculture | PCHA – Pictou County Health Authority |
| DOJ – Department of Justice | SNSMR – Department of Service Nova Scotia and Municipal Relations |
| ECO – Executive Council Office | SRSB – Strait Regional School Board |
| EECD – Department of Education and Early Childhood Development | WRHA – Western Regional Housing Authority |
| ENGY – Department of Energy | |

Report of the Auditor General • • • May 2014

# Performance Audits

# 3 Communications Nova Scotia: Advertising, Procurement, and Performance

## Summary

We found advertising campaigns and other communications from Communications Nova Scotia were generally nonpartisan in nature. However, the Agency persistently failed to follow the Province's procurement rules.

Eighty-four percent of the procurements we tested had problems. Issues included work commencing before purchase orders were created or contracts were signed, and large payments split into several smaller payments which fell just below the threshold for Procurement Office involvement. This demonstrates a lack of regard for the Province's procurement policies; we recommended the Agency ensure policies are followed.

We identified potential noncompliance with Canada Revenue Agency rules related to employees versus independent contractors. Communications Nova Scotia hires contractors to fulfill various roles. Many of these contractors work with the Agency over an extended period; it is difficult to distinguish these individuals from Provincial employees. We identified 10 instances in which the relationship appeared to meet many of Canada Revenue Agency's requirements for an employer-employee situation. We recommended that Communications Nova Scotia seek advice on this matter and obtain legal advice on how to address this situation if concerns are identified.

We also identified a potential concern when departmental Twitter accounts are used to retweet from political party accounts. The Agency's social media policy does not address Twitter and we have recommended it be updated.

Communications Nova Scotia's performance measurement, both at the Agency and advertising campaign levels, needs work. The Agency's objectives are difficult to assess because its accountability reports focus mostly on the work completed, rather than assessing the effectiveness of that work. At the advertising campaign level, objectives and campaign evaluations were inconsistent. We also found those campaigns with which Communications Nova Scotia was not involved were more likely to have issues.

# 3 Communications Nova Scotia: Advertising, Procurement, and Performance

## Background

3.1    Communications Nova Scotia was created in 1996 to provide central coordination of Government's communications activities.  It is a full service communication agency for the Province.  Its mission is *"To help Nova Scotians understand what our government is doing and why."*

3.2    Communications Nova Scotia had 107.8 full-time-equivalent staff at the time of our audit.  Half of its staff are located either at the central Communications Nova Scotia office or Queen's Printer; the remainder work in various departments across Government, reporting to managers in the central office.  Staff located in Government departments deal with day-to-day communications, such as news releases and questions from the media, while also advising department staff on how to deal with issues publicly.  Staff working out of head office include creative designers, editors and videographers, along with a marketing group to help guide advertising campaigns.  All staff are available to any department or agency of Government to assist with communication needs.

3.3    In addition to the expertise within Communications Nova Scotia, external communication resources are hired as necessary.  This occurs if a need is very specific and the skills do not exist within Communications Nova Scotia, or if there is more work to be done than existing staff can handle.

3.4    In fiscal 2013-14, Communications Nova Scotia's budget was $8.8 million; actual expenditures for 2012-13 were $8.7 million.  Much of the cost of external consultants is paid directly by the departments using those services. This would not be captured under the Communications Nova Scotia budget.

3.5    Communications Nova Scotia operates under the Communications and Information Act.  This Act has not been updated since 1992.  However, near the end of our fieldwork, Government passed an amendment to the Public Service Act.  In a news release, Government indicated the new legislation will better position Communications Nova Scotia as the Province's full service communication agency and ensure communications are nonpartisan.

## Audit Scope and Objectives

3.6    In fall 2013, we completed a performance audit of Communications Nova Scotia.   This included an assessment of information and advertising campaigns, procurement practices and performance measurement systems.

3.7    The purpose of the audit was to determine whether:

- Communications Nova Scotia's information and advertising are nonpartisan in nature and in compliance with applicable procurement requirements; and

- Communications Nova Scotia monitors its effectiveness and makes necessary changes when issues are identified.

3.8    The audit was conducted in accordance with sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

3.9    The objectives of the audit were to assess:

- whether advertising campaigns, news releases, media events, program and event signage, and social media releases are nonpartisan in nature;

- Communications Nova Scotia's compliance with Provincial procurement rules;

- monitoring of budgets for Communications Nova Scotia information and advertising campaigns;

- whether Communications Nova Scotia has adequate processes to measure and report on its effectiveness, and take corrective action when issues are identified; and

- whether Communications Nova Scotia ensures all significant advertising campaigns are assessed for effectiveness and appropriate steps taken when concerns are identified.

3.10   Audit criteria for this engagement were developed by this Office.  The audit objectives and criteria were discussed with, and accepted as appropriate by, senior management at Communications Nova Scotia.

3.11   Our audit approach included interviews with management and staff at Communications Nova Scotia, review of documentation and communications, and testing procurement files for compliance with Provincial procurement policies.  The audit covered the period from April 1, 2011 to September 1, 2013.

## Significant Audit Observations

## Advertising and Other Communications

### Conclusions and summary of observations

We examined news releases, advertising, signage, Twitter feeds, and Facebook posts and found they were generally nonpartisan. We did note that social media feeds operated by Communications Nova Scotia on behalf of Government and various departments sometimes link to political party Twitter feeds. The existing social media policy does not adequately address the use of Twitter. We recommended that the Agency update its social media policy and provide direction on appropriate use of social media accounts. We also found a lack of consistency in the approach used across Government social media feeds.

3.12 *Social media use* – We identified and examined 30 unique Twitter feeds pertaining to the Government of Nova Scotia. These include both French and English feeds for Government as a whole, but also many feeds for individual departments, agencies and offices. As illustrated by the following graphs, some entities use Twitter frequently, while others are occasional users.



Tweets by Number and Followers
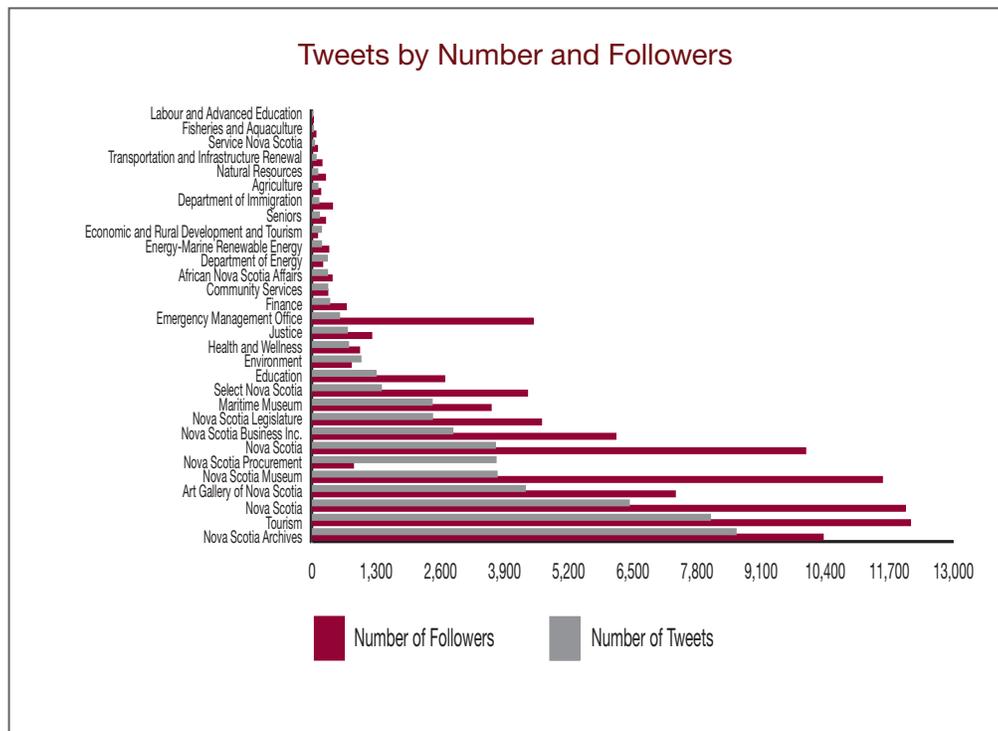
3.13   *Partisan communications* – We reviewed the tweets from each of the above feeds to see if there were any partisan-based messages posted to Government Twitter feeds.  While we did not find any tweets that we considered partisan in nature, we did note a number of situations of retweeting from political party feeds.  These retweets provide a direct link to partisan social media sites and exposure to politician and political party comments and accounts.

3.14   We identified 10 Facebook pages devoted to core Government or various departments.  We did not find any partisan-based comments on these sites.

3.15   While Communications Nova Scotia has a social media policy, it is very general, and does not provide specific direction on the appropriate use of social media tools such as Facebook and Twitter.  The policy was approved in July 2010 and has not been updated.

3.16   We are concerned by the lack of direction regarding acceptable use of Twitter and Facebook, including retweeting from or linking to political party feeds.  As the technological advancements in communications move quickly, it is imperative for Government to provide adequate direction to staff regarding the use of the newest technologies and approaches.  Related policies must be reviewed and updated on a much shorter cycle than a typical policy review to ensure they continue to address the ever-changing landscape in social media communications.

*Recommendation 3.1*
***Communications Nova Scotia should review and update its social media policies, including providing direction regarding the appropriate use of Government social media accounts.***

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation. This has been completed. A review of the current social media policy and guidelines took place over the winter, with new versions approved in April 2014.*

*Recommendation 3.2*
***Communications Nova Scotia should develop a schedule for future review of its social media policy.  This schedule should provide for timely review, considering the rate of change in available social media communication tools.***

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation. This has been completed. A review of the social media policy and guidelines will occur on an annual basis, to coincide with the updating of the annual corporate social media plan. The next review will occur in May 2015.*

3.17   *Advertisements, news releases and signage* – We reviewed 30 advertisements, news releases for 30 days, and 30 signs prepared by Communications Nova

Scotia and found no partisan content.  We looked for situations which referenced the party in power, attacked the views or policies of other parties, or provided links to party websites or social media feeds.  We did not identify any concerns.

3.18    *Lack of approvals* – Communications Nova Scotia policies require approval of news releases or advertisements.  We tested 50 sample items, comprised of 20 news releases and 30 advertisements, for approval.  Twenty-nine of the 50 sample items were approved for release, but this was often from Communications Nova Scotia staff working in the client department which is not in compliance with policies.  The remaining 21 sample items had no evidence of approval.

| Sample Testing Results – Approvals | | | |
| --- | --- | --- | --- |
| | **News Releases** | **Advertisements** | **Total** |
| Approval from Communications Nova Scotia | 17 | 6 | 23 (46%) |
| Approval from Client Department | 2 | 4 | 6 (12%) |
| No Approval | 1 | 20 | 21 (42%) |
| Total Sample Items | 20 | 30 | 50 |

*Recommendation 3.3*
*Communications Nova Scotia should follow its current policies and obtain documented approval from the client department before releasing any communications pertaining to that department.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees that it should follow its current policy. When communications staff in departments provide approvals, it is on behalf, and with the authorization of, program experts. Departmental program experts provide approvals throughout the communications planning process to verify that information is factually correct. Communications staff develop initial materials and information in consultation with program experts. It is then approved -- verbally or in writing -- by senior staff, Deputy Ministers, and Ministers at various points before being released publicly.  Final approval will be documented.*

3.19    *Announcements* – We identified funding announcements made across all mediums which were included in our audit – news releases, advertisements, Twitter, Facebook, and signage.  We assessed whether Communications Nova Scotia ensured funding announcements were not duplicated in subsequent communications.  Government often announces programs or projects at various stages of completion, but each of these announcements should be clearly identifiable as part of the same project to avoid the perception of new funding.

3.20    We identified multiple situations in which announcements were related to the same topic.  A common example was new school construction, in

which different stages such as initial approval, site selection, sod turning, construction completion and school opening may all have separate announcements. However, in all but one instance, we found subsequent announcements provided additional information related to projects and it was clear that these were not new funding announcements.

## Procurement

### Conclusions and summary of observations

We found Communications Nova Scotia failed to comply with Provincial procurement rules. Eighty-four percent of the samples we tested had problems. We identified multiple instances in which work started before the procurement was completed. We also found that Communications Nova Scotia did not obtain sufficient information from vendors to ensure the amounts charged were appropriate based on the purchase agreement. Staffing needs are routinely filled by hiring from the standing offer or via other procurement methods. The people hired are treated as self-employed contractors. The Province does not withhold or remit employment insurance, Canada pension plan, or income tax deductions. We identified a number of situations in which contractors work for extended periods on day-to-day work at Communications Nova Scotia under the direction of Agency management. It is difficult to distinguish them from Provincial employees. These individuals appear to meet many of the requirements to be considered an employee by Canada Revenue Agency. We recommended that the Agency seek advice on how to address this situation.

3.21 *Background* – Our audit of Communications Nova Scotia included procurement testing. We found 26 of 31 (84%) samples tested did not comply with Provincial procurement rules.

3.22 *Requests for proposals* – Requests for proposals are used for larger projects and require companies to submit a bid which includes information such as cost and project timing. Communications Nova Scotia issued three requests for proposals during our audit period; we found the overall approach used was reasonable in each case. However, in one instance, work appeared to have been completed before a contract was signed with the successful bidder. This was a common problem with the sample items we tested. It will be addressed further in the standing offer section below.

3.23 *Permanent exemption* – Provincial procurement rules permit departments to request permanent exemptions from compliance for specific situations. We reviewed two permanent exemption procurements, both for media buys, and found no issues.

3.24 *Alternative procurement* – Alternative procurements fall outside the usual procurement practices and were developed to allow for urgent or exceptional circumstances.  In each instance, the reason why an alternative procurement is necessary must be documented.  We tested three goods or services procured using this approach.  In two instances, we found work had started before the procurement process was completed (discussed later in this chapter).  For one of those two items, the procurement was not appropriately documented until after the work was completed.  We did not note any issues with the remaining alternative procurement sample.

3.25 *Standing offer* – Standing offers are contracts with pre-approved suppliers.  These suppliers provide goods and services at a specific price as needed.  This is the most common procurement method used by Communications Nova Scotia.  Twenty-one of our 31 procurement sample items were standing offer purchases.

3.26 We found every purchase we tested from a standing offer had problems; none were compliant with the procurement policy.

3.27 The procurement policy requires that the rates charged not exceed those approved for the standing offer.  Communications Nova Scotia does not obtain sufficient information from vendors to confirm whether this requirement is met.

3.28 Supplier invoices often included only the total amount billed, with a description such as professional services.  The invoices were commonly dated only for the week or month the services were provided, with no breakdown of the hours worked each day.  Fourteen of the 21 standing offer samples tested did not have enough information to determine the rate charged.  Of the remaining seven standing offer sample items, six had the correct rate and one charged more than the approved rate.

3.29 *Timing of work* – The procurement policy requires that work not begin on a project until a purchase order has been created.  This is also a good business practice.  We found 13 of the 21 standing offer sample items we tested did not have enough information to determine the start date of the work.  Of the remaining eight samples, in six instances, work began before the purchase order was issued.  Only two samples clearly showed work started after the procurement processes were completed.

**Recommendation 3.4**
**Communications Nova Scotia should require vendors to provide detailed information on invoices to support their billings.**

**Communications Nova Scotia Response:**
*Communications Nova Scotia agrees with this recommendation. CNS will require suppliers to provide detailed information on invoices.*

3.30 *Procurement under $1,000* – The procurement policy does not apply if a purchase is expected to cost less than $1,000. Departments process those transactions with no involvement or oversight from Government's Procurement Office.

3.31 Beyond the $1,000 limit, certain other procurement thresholds could be avoided by splitting a project into multiple invoices. The procurement policy specifically states that departments are not to split project payments in order to avoid procurement thresholds.

- Ministerial approval is required for any transaction over $5,000.

- Three quotes are required for goods and services between $1,000 and $10,000 (unless using another procurement method such as the standing offer).

- A public tender must be issued for goods and services over $10,000 (unless using the standing offer or alternate procurement).

3.32 Two of our sample items were payments less than $1,000. However, our testing found that both samples were one of several payments (under $1,000 each) related to two separate projects. Total costs for these projects were $26,800 and $45,200; neither had any involvement from the Procurement Office.

3.33 Both vendors with multiple, smaller payments were contracted to provide communication support services. Communications Nova Scotia management told us they use various vendors to provide services when work demands exceed the Agency's capacity. After identifying this issue, we completed additional audit testing and identified 27 vendors noted as providing communication support services (including the two from our original sample).

- 13 were paid using multiple payments under $1,000.

- Nine vendors had a total of 12 projects which exceeded the $25,000 maximum for purchasing temporary worker services from a standing offer.

- Nine of the suppliers were not procured via a standing offer. In these instances, three quotes should have been obtained prior to selecting a vendor.

*Recommendation 3.5*
*Communications Nova Scotia should comply with Provincial procurement rules.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation.*

3.34 *Employees versus contractors* – The 27 vendors identified above as providing communication services were treated as independent contractors by Communications Nova Scotia. No deductions were withheld or remitted by the Province for employment insurance, Canada pension plan, or income tax.

3.35 Canada Revenue Agency provides a checklist with 43 potential indicators to help assess whether an individual is an employee or self-employed as a contractor. We reviewed the 27 situations we identified during our audit and found 10 which met many of the requirements to be considered an employee-employer relationship. One of the Canada Revenue Agency's key indicators is the level of control in the relationship. The more control the employer has over the day-to-day work completed, the more likely the relationship is employee-employer. We noted a number of situations in which the individual hired was a student, or for whom day-to-day tasks were clearly directed by Agency management. We also noted some of the individuals are indistinguishable from regular employees because they work among Agency staff on an extended basis.

3.36 Management at Communications Nova Scotia told us they hire people from the standing offer to carry out the Agency's day-to-day work. This includes media buyers, communications advisors, and web designers. Communications Nova Scotia management told us they have not been able to get approval to add staff in recent years. Management told us they saw this approach as a way to obtain the necessary resources.

3.37 The Canada Revenue Agency notes that an employer is responsible for remitting both the deductions it withheld from employees, as well as its own matching amounts. If an employer fails to do so, it will be responsible for both portions, along with any interest or fines accruing.

3.38 We discussed our concerns regarding Canada Revenue Agency rules with management at Communications Nova Scotia and they indicated they were not aware of the issue.

*Recommendation 3.6*
*Communications Nova Scotia should seek advice to determine whether some of the individuals it engages as contractors may be considered employees by Canada Revenue Agency. Communications Nova Scotia should also obtain legal advice on how to best address this situation if concerns are identified.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation and will seek advice from the Public Service Commission, Finance and Treasury Board, Internal Services, and legal services, if required.*

## Project Monitoring

### Conclusions and summary of observations

Communications Nova Scotia's monitoring of the progress and status of its projects needs work. We found projects completed by external vendors were monitored against budgets, but deadlines for most projects were difficult to determine. We also noted Communications Nova Scotia carries out little monitoring or evaluation of advertising campaigns, meaning lessons learned from one campaign may not be carried forward to future campaigns.

3.39 *Monitoring* – We assessed how Communications Nova Scotia monitors deadlines and projects completed by internal staff as well as by external consultants. We found that Communications Nova Scotia is doing a poor job of documenting deadlines as well as the status of projects. While it is reasonable that smaller projects have less formal, documented monitoring, more significant projects should have detailed monitoring.

3.40 *External projects* – We assessed monitoring for 30 external projects tested in the procurement section of this audit and found Communications Nova Scotia staff tracked the budget for 26 of the 30 projects. The remaining four projects were over budget; two did not have an adequate explanation, and two had no approval for the increase. We also found there was no evidence projects were completed on time for 16 of 30 samples. However, we reviewed the final product of 15 projects and each was consistent with what we expected based on the project description. The remaining 15 projects did not have a final product which could be easily reviewed. For example, some projects provided basic communication or marketing support.

3.41 Management told us the deficiencies identified with monitoring are due to inconsistent documentation practices across the Agency. The current information system used by Communications Nova Scotia has the capability to track deadlines and keep notes. It could be used to better monitor how external contractors are performing.

3.42 *Internal projects* – Similar to external projects, routine monitoring and documentation of deadlines is lacking for internal projects, and should be improved. Communications Nova Scotia does not adequately document project deadlines and does not collect sufficient information to monitor progress or assess performance upon project completion.

3.43 We also found that Communications Nova Scotia does not adequately document advertising campaign monitoring. The campaigns we tested were only monitored for budget. There were no cost-benefit assessments to determine whether campaigns were the best use of funds to achieve desired outcomes.

*Recommendation 3.7*
*Communications Nova Scotia should implement a process to monitor significant external and internal projects. Documentation of monitoring should include information about project budgets and deadlines.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation. CNS, through its own internal organizational review process, had identified improvements needed in this area and has worked over the last three years to make significant progress. Further to this, CNS will be centralizing the project management function within the agency, and developing an internal process for monitoring that will focus on consistency and accuracy. Existing resources will be applied to ensure continued process improvements in project monitoring.*

## Performance Measurement and Evaluation

Conclusions and summary of observations

Communications Nova Scotia's measurement of, and reporting on, its performance needs work, both at an entity-wide and campaign level. Its accountability reports have been inconsistent, with little tangible performance results reported. Campaign-level evaluation has also been inconsistent. Goals were not adequately identified at the start of many projects, and evaluation was often not completed or was only completed on certain project objectives.

3.44 *Agency reporting* – While Communications Nova Scotia prepared annual accountability reports and annual statements of mandate during our audit period, the content of those reports was inadequate and inconsistent from year to year. In both instances, management told us the staff responsible for preparing these documents changed each year resulting in different approaches to setting and assessing goals for the Agency.

3.45 The content of Communications Nova Scotia's accountability reports has been focused on reporting the past year's accomplishments, rather than reporting how well it did against predetermined goals and objectives. Performance reporting should demonstrate whether Communications Nova Scotia has done a good job, not just list the tasks it has accomplished.

3.46 Management told us that they had already identified this issue and assigned staff to revise performance reporting. Management said they intend to prepare more concise and meaningful reports, starting with the 2013-14 accountability report. They also told us that they are working with the Department of Finance and Treasury Board to adjust the goals outlined in the Agency's current statement of mandate to facilitate these improvements.

> **Recommendation 3.8**
> **Communications Nova Scotia should develop measurable goals and objectives for the Agency. These should be reported against targets in the annual accountability report.**

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation. CNS, through its own internal organizational review process, had recognized this and has taken steps to improve both the Statement of Mandate and Accountability Reporting processes. Responsibility for both processes has now been centralized. Finance and Treasury Board has been consulted on proper process, development of appropriate goals and objectives, and significant changes have been made for the 2013-14 accountability reporting process and the 2014-15 Statement of Mandate process.*

3.47 *Campaign evaluations* – One of Communications Nova Scotia's roles is to design and implement advertising campaigns. Campaigns can range from a large project such as jobsHere, to smaller projects designed to remind people about programs such as flu immunization or heating rebates.

3.48 Communications Nova Scotia created a marketing division in 2010. This group is leading an effort to include measurable targets and objectives in all campaigns. It is also responsible to ensure that post-campaign evaluations are completed. Our audit found the Agency still has a great deal of work to do in evaluating campaigns.

3.49 We selected 21 campaigns for testing. 14 were larger campaigns with which the Communications Nova Scotia marketing group was more actively involved. The remaining seven were selected from smaller projects with varying degrees of involvement from Communications Nova Scotia.

3.50 We found 10 of the 21 samples had clear, complete objectives. Seven sample items had objectives that we considered were at too high a level to be effective. The remaining four samples had no objectives; these campaigns were operated largely outside of Communications Nova Scotia.

3.51 We found only four campaigns were fully evaluated. Three were larger campaigns operated under the direction of Communications Nova Scotia's marketing group. The fourth involved Communications Nova Scotia in a significant role at later stages of the campaign. For six campaigns, either the objectives were not adequately evaluated, or only some of the objectives of the campaign were addressed. The remaining 11 campaigns (six internal to Communications Nova Scotia and five external) had no meaningful evaluation completed to determine the success or failure of the campaign.

3.52 We are concerned that Communications Nova Scotia is not always involved in campaigns. We found information available on campaigns that did not involve Communications Nova Scotia was generally not adequate. Objectives were less likely to be clearly and completely defined, and evaluations were less likely to occur.

3.53 Campaign evaluation is not without challenges. There are a number of factors that make evaluation difficult – cost of surveys for population-wide initiatives, lack of data at the client department, and lack of clarity regarding the client department's goals. While challenges exist, it is important for Communications Nova Scotia to find ways of evaluating campaigns, and to ensure the evaluation is based on factors within the Agency's control – the campaign, not the program it supports. Without evaluation, there is no way to know whether the money spent on advertising and other campaigns was an effective use of provincial dollars.

*Recommendation 3.9*
*Communications Nova Scotia should include clearly-defined goals and objectives for all significant advertising campaigns.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees that goals and objectives should be clearly defined for all significant advertising campaigns and will work with departments to ensure this occurs.*

*Recommendation 3.10*
*Communications Nova Scotia should fully evaluate all significant advertising campaigns against objectives.*

*Communications Nova Scotia Response:*
*Communications Nova Scotia agrees with this recommendation. The setting of goals and objectives is critical to the success of any campaign, and our ability to evaluate. The introduction of Google Analytics in the fall of 2012 has increased our ability to measure impact.*

### Communications Nova Scotia Additional Comments

CNS is government's full-service communications agency responsible under legislation for communications planning; marketing; advertising; research; evaluation; media-relations; graphic design; Internet planning; photography; videography; writing and editorial services.   During the audit period, approximately 16,000 projects were managed through CNS. Happening concurrently was an internal organizational review, which identified issues related to project monitoring, measurement, and social media policy and guidelines. Progress has been made in these areas to date.

CNS will continue its process improvements, and will adhere to all government policies including procurement.

CNS is committed to continuous improvement and as communicators, continuous learning and growth is inherent in what we do.  Communications is an evolving industry, changing to meet the needs of the audiences it serves, and so too must we.

Part of the audit scope was to determine whether CNS's activities were non-partisan.  We are very pleased the results confirm that CNS is indeed non-partisan. CNS is an organization of dedicated, professional staff who are committed to helping Nova Scotians understand what their government is doing and why. These audit findings will help the Agency continue to improve.

# 4 Education and Early Childhood Development: iNSchool Student Information System

## Summary

The iNSchool student information system does not fully protect the confidentiality, integrity and availability of information on students in the public school system.

We identified security weaknesses with the iNSchool system. We chose three school boards to test and exploited those weaknesses to gain unauthorized access to confidential student information such as grades, medical conditions, health card numbers, parental or guardian contact information and home addresses. Unauthorized access to student information presents very serious risks, including unauthorized changes to data (e.g., grades, allergy warnings), student safety by having contact information available, and identity theft. Before we wrote this report, the iNSchool project team fixed the critical security issues that enabled us to gain access to the student accounts.

Government systems containing personal information are required to have a privacy impact assessment prepared to evaluate and mitigate privacy risks, such as the ones we found in iNSchool. An assessment was started for the system, but it was not completed. Important components of the assessment, such as strategies to mitigate privacy risk, remain unfinished.

The Department of Education and Early Childhood Development has implemented controls to protect the network and physical equipment that host iNSchool. These include intrusion detection systems, firewalls, performance and capacity monitoring, incident management (e.g., responding to hacking attempts), offsite back up of critical data and measures against environmental threats (e.g., fire). We made recommendations to enhance these processes to help ensure continuous availability of data and protect against unauthorized access to systems.

The development of the iNSchool system was aided by an appropriate governance structure with involvement from users and other stakeholders. Reasonable project management practices were used throughout the project lifecycle.

The design requirements of the new system appropriately considered the needs of its users and the concept of value for money. Government's procurement rules were followed in selecting the iNSchool system.

# 4 Education and Early Childhood Development: iNSchool Student Information System

## Background

4.1 The Department of Education and Early Childhood Development and the school boards implemented a suite of applications called the Nova Scotia Student Information System, commonly referred to as iNSchool. It provides access to up-to-date information on students, schools and programs in the public education system. Parents, students, teachers and school administrators can access student marks, performance plans, attendance records, assignment due dates, and school announcements, all through a web-based interface.

4.2 Prior to the implementation of iNSchool, school boards managed their own student information systems and processes. One goal of iNSchool is to provide consistent public school student data throughout the Province on a timelier basis.

4.3 The iNSchool suite of applications includes the following.

- PowerSchool: This application manages core student information, such as report cards, demographics and schedules. It includes an internet-accessible portal enabling parents and students to see current information on matters such as attendance, grades, assignments, teacher's comments, and upcoming school events. The system maintains records for approximately 120,000 students.

- TIENET: This application manages extended services for students with additional needs, such as individual program plans and information from the SchoolsPlus program, which provides additional supports and services to students.

- Learning Management and Reporting System: The scope of the Learning Management and Reporting Project is to support the learning and teaching function with a complete and integrated solution. It includes curriculum and resource management; instruction, classroom assessments and evaluation; Provincial and common assessments; and teacher professional learning. This application is expected to be implemented at a later date.

4.4 Implementation of iNSchool was managed by a project team which consists of the Department of Education and Early Childhood Development's Information Technology Services division, school board representatives and contract employees.

4.5    Some schools in all school boards were using the system by September 2010, and all schools throughout the Province used iNSchool by September 2013. Implementation rates varied because of differences in size of the school boards, legacy systems in place that required data conversion, and French translation requirements.

4.6    The capital cost of implementing PowerSchool and TIENET was budgeted at $12.75 million.  Actual costs as of March 31, 2013 totaled $12.5 million, leaving $0.25 million for remaining costs.

## Audit Objectives and Scope

4.7    In fall 2013, we completed an audit of the Nova Scotia Student Information System (iNSchool).  The goal of the audit was to determine whether appropriate processes were used in the planning, design, procurement and implementation of the system, and whether the system and information it contains are adequately controlled.

4.8    The detailed objectives of the audit were to assess whether the Department of Education and Early Childhood Development and the school boards:

- implemented an electronic student information system with sufficient controls in place to protect the confidentiality, integrity and availability of Nova Scotia's public school students' information;

- implemented adequate procedures to monitor and support the information needs of users throughout the iNSchool system; and

- followed procurement and implementation processes during the iNSchool project that ensured the system was designed to meet the needs of its users and consider value for money.

4.9    Audit criteria for this engagement were based on the IT Governance Institute's Control Objectives for Information and related Technology (COBIT 4.1). COBIT is a widely accepted, international source of best practices for the governance, control, management and audit of IT operations.  The audit objectives and criteria were discussed with, and accepted as appropriate by, Department of Education and Early Childhood Development senior management.

4.10   The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.  Audit fieldwork was performed between June and October 2013 on project management-related activities which occurred

during the period from 2009 through 2013. Technical aspects of systems were assessed at various points in time between July and December of 2013.

## Significant Audit Observations

## Information Security and Protection

### Conclusions and summary of observations

Security over student information in the iNSchool system needs improvement. The security settings of iNSchool and its hosting databases and operating systems need to be better configured to prevent unauthorized access. We were able to gain unauthorized access to many iNSchool user accounts and student information contained in them. We found several appropriate network controls, but we found security weaknesses at the operating system, database and application levels. System access requests are not documented and there is no evidence of periodic reviews of accounts for dormancy. The privacy impact assessment for iNSchool has not been finalized. Important components of the assessment related to the protection of data have not been completed. An IT disaster recovery plan does not exist to help restore iNSchool and supporting infrastructure in the event of a disaster. We have recommended improvements to manage and protect the physical environment supporting the systems that host iNSchool.

4.11 *Security management and controls* – Sensitive information stored in computer systems needs protection against unauthorized changes and disclosure. Best practices call for a security management process for important IT systems that includes establishing and maintaining roles and responsibilities, policies, standards and procedures. Good security management also includes system security monitoring, periodic testing, and implementing corrective actions for identified security weaknesses.

4.12 Each school board has its own dedicated copy of the iNSchool application running on servers that are managed and supported by the Department. The servers contain the operating systems necessary to run the iNSchool application and the databases which store iNSchool data. The school boards participate in the day-to-day administration of the application system and are responsible for functions such as managing user access and providing user support.

4.13 *Network controls* – The servers that run the iNSchool application are located on the Department's internal network. The Department has implemented safeguards on this network to help protect the iNSchool servers from being attacked or compromised by other Department servers that are also part of

the internal network and used in different program areas. Safeguards include multiple firewalls and intrusion detection systems which are monitored by staff.

4.14   *Operating system and database controls* – In the event network controls fail, the operating systems that run the iNSchool application and the databases that store its data need strong controls to prevent unauthorized access to students' personal information. Our audit identified weaknesses in operating system and database controls supporting the iNSchool application. These weaknesses included a lack of measures to force accounts to have strong passwords and insufficient logging of account activity.

4.15   *Application controls* – Users, including teachers and school administrators, access iNSchool from a website which is generally accessible to anyone over the Internet. This form of access increases risk and, accordingly, increases the need for strong access controls. We found that each school board administers its own password and account settings and that some of those settings were too weak to adequately prevent unauthorized access through the Internet. In addition, an analysis of PowerSchool system logs that track login attempts showed several examples that had the characteristics of individuals attempting to gain unauthorized access to the application. This further emphasizes the need to maintain strong username and password settings.

4.16   We attempted to gain access to the iNSchool data of three school boards by exploiting weak password controls and account settings. We were able to gain unauthorized access to iNSchool user accounts. The accounts accessed provided us with the ability to identify and target administrator accounts. As a result, we gained access to all students' information in two school boards and access to a large number of students' information in the third board.

4.17   Student information available to us as part of this exercise included:

- birthdates;

- medical information;

- home addresses;

- health card numbers;

- locker numbers and combinations;

- grades;

- iNSchool account information; and

- email addresses (student and parents).

4.18    Unauthorized access to student information presents very serious risks, including unauthorized changes to data (e.g., grades, allergy warnings), student safety by having contact information available, and identity theft.

4.19    After we informed the iNSchool project team of our findings, they added additional security controls in the PowerSchool application and addressed configuration and account weaknesses for higher-risk user accounts.  Further security upgrades to remaining user accounts are expected.

*Recommendation 4.1*
***The Department of Education and Early Childhood Development and school boards should implement consistent, strong controls on the operating systems, databases and applications of iNSchool, including enforcement of strong passwords and account settings.***

***Department of Education and Early Childhood Development Response:***
*There have not been any known compromises of iNSchool since it was first implemented.  Nevertheless, the Department agrees with this recommendation, and has upgraded the PowerSchool application and key user accounts to meet or exceed provincial standards on account management.  The Department will complete upgrades to remaining user accounts in the near future.*

4.20    *User account management* – School boards are responsible for providing access to the Power School and TIENET applications.  New users are assigned a username, password and access to the specific system modules needed to perform their jobs.  Each school board has its own processes for accepting requests for access including by email, phone, in person and through a central electronic tracking system.  These requests are not always documented and retained for future review.  Maintaining documentation of requests for system access, along with the specific system permissions granted, is important as it enables the administrator to track and manage access requests, as well as helping to ensure only authorized individuals receive access.

*Recommendation 4.2*
***The Department of Education and Early Childhood Development should work with the school boards to develop a process that tracks requests for, and changes to, access to iNSchool.***

***Department of Education and Early Childhood Development Response:***
*The Department agrees with this recommendation. Such a process is in place in some school boards. The Department will work with the remaining school boards to develop a process that tracks requests for and changes to access to iNSchool.*

4.21    School administrators are responsible for disabling unneeded user accounts.  All school boards told us that a periodic review is performed to ensure all existing user accounts are still needed.  However, we found no documented evidence of this process.

*Recommendation 4.3*
**The Department of Education and Early Childhood Development should work with the school boards to develop a process that records the outcome of the periodic review of accounts and the details of the resulting disabled accounts.**

***Department of Education and Early Childhood Development Response:***
*The Department agrees with this recommendation and will work with the school boards to develop a process that records the outcome of the periodic review of accounts and the details of the resulting disabled accounts.*

4.22 *Privacy impact assessment* – The Department of Education and Early Childhood Development privacy policy states:

> "The Department of Education shall complete a privacy impact assessment for any new program or service, or for a significant change to a program or service, which involves the collection, use or disclosure of personal information, as per the template maintained by the Information Access and Privacy Office, Department of Justice."

4.23 A privacy impact assessment is a thorough analysis of potential impacts on privacy and a consideration of measures to eliminate or mitigate negative impacts. This due diligence exercise ensures a system owner identifies and addresses potential privacy risks that may occur as a result of a system's design and operation.

4.24 The iNSchool project team prepared a draft privacy impact assessment. However, at the time of our audit, this document was not completed. The unfinished assessment did not address strategies to mitigate privacy risk, such as procedures to track and monitor the system for unauthorized use. This is a critical component that should have been documented and approved before the system was made available for use.

*Recommendation 4.4*
**The Department of Education and Early Childhood Development should complete and approve a privacy impact assessment for iNSchool. Processes should be developed and implemented to address any risks identified in the assessment.**

***Department of Education and Early Childhood Development Response:***
*The Privacy Impact Assessment was substantially completed during implementation of the system. The Department agrees with the recommendation and will finish the document and have it formally approved.*

4.25 *Continuous service* – In the event of a disaster, organizations need to minimize the interruption to key business functions should information technology become unavailable. It is important to regularly back up system data offsite

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and to have and test a comprehensive disaster recovery plan outlining how and where systems will be restored in order to have a timely recovery of the organization's operations.

4.26 The Department of Education and Early Childhood Development maintains backups of iNSchool data offsite and has administrative guides for restoring and configuring the systems. However, it does not have a disaster recovery plan.

**Recommendation 4.5**
**The Department of Education and Early Childhood Development should prepare a disaster recovery plan that includes the iNSchool system. The Department should provide training and perform testing on the disaster recovery plan.**

*Department of Education and Early Childhood Development Response:*
*The Department agrees with this recommendation and will prepare a disaster recovery plan that includes the iNSchool systems.*

4.27 *Physical environment* – Organizations implement safeguards to physically protect their computer systems. Risks to the physical security of systems come from both people (e.g., accidents or vandalism) and environmental factors (e.g., water, heat or electrical interruption), each of which could cause significant damage to information technology systems and possibly interrupt the organization's core services and operations.

4.28 The private-sector building owner is responsible for the heating and cooling, back-up power, and physical security for the building that houses the iNSchool servers. We found that appropriate infrastructure and controls are in place to protect the server room. This includes an uninterrupted power supply, environmental controls (e.g., controlling heat and humidity), fire suppression, and restricted access to the room. The server room also has a backup generator. However, the generator was not tested with a full electrical load during its last maintenance inspection to ensure it can support the full power requirements of the server room.

**Recommendation 4.6**
**The Department of Education and Early Childhood Development should validate with the building owner that generator maintenance is performed as scheduled, including a full load test.**

*Department of Education and Early Childhood Development Response:*
*The Department agrees with this recommendation and has made arrangements with the building owner to: i) obtain a copy of the maintenance report when scheduled generator maintenance is performed; and ii) obtain a copy of the test results report each time a full load test is performed. Copies of the most recent maintenance and load test results reports have been received.*

4.29 We also noted that the position of the server room in the building puts the systems at some risk of water damage. Therefore, there should be a water sensor installed on the floor inside the server room to assist in early detection of water leakage.

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**Recommendation 4.7**
**The Department of Education and Early Childhood Development should install a water sensor in its server room.**

**Department of Education and Early Childhood Development Response:**
*The Department agrees with this recommendation and will have a water sensor installed in the server room.*

## System Procurement and Implementation

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Conclusions and summary of observations

A reasonable project management process was used to guide the implementation of the iNSchool system. User needs were the basis for determining system requirements and ultimately selecting the preferred solution. Provincial procurement practices were followed. Appropriate levels of management and users were part of the governance structure of the project. Stakeholders were kept informed by way of regular status reports and meetings, and had forums available to provide input throughout the project. However, security considerations were not adequately addressed before implementation.

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4.30 *Project management* – Effective project management reduces the risk of unexpected costs, improves communications with stakeholders, and increases the value and quality of the end product. The success of planning, implementing and maintaining a new information system is reliant on the project management framework employed. A reasonable project management process was used to guide the implementation of the iNSchool system. The iNSchool project management framework addressed project governance, procurement, timeline and budget management, as well as system testing and training. Many stakeholders were involved throughout the project. However, as noted in the Information Security and Protection section above, security of the operating systems, databases, and PowerSchool applications were not adequately addressed as part of project management or the implementation process.

4.31 *Governance structure* – Appropriate levels of management and system users were part of the governance structure of the project. Strategic planning was facilitated through an Executive Steering Committee, a Management Steering Committee and a Project Managers Committee. Project organization groups included a Provincial Coordination Team, as well as functional and technical

forums with representatives from the school boards and the people who would regularly use the new system. Terms of reference were created and activities of the various committees were evident from regular status reports and meeting minutes. Stakeholder involvement was consistent throughout the project.

4.32 *Procurement* – We reviewed the procurement processes for the iNSchool system and determined that vendor selection procedures were in accordance with Provincial standards. The iNSchool project team worked with Government's procurement services office and followed an appropriate procurement strategy. There was a formal process to develop system requirements and score vendors against those requirements. A committee was formed with representation from the school boards and the Department of Education and Early Childhood Development to negotiate a fair and reasonable contract. Legal guidance was provided by the Department of Justice.

4.33 *User needs* – An appropriate process was used to select the best product to meet the needs of the users. The iNSchool system requirements were defined by its users. They described the processes followed before iNSchool, which then became the basis for what the new system must accomplish. Potential products were evaluated against these requirements. Users participated in feasibility studies and completed questionnaires during the product selection phase.

4.34 *Budget management* – An effective budget management process fosters partnership between business stakeholders; promotes effective and efficient use of IT resources; and provides transparency and accountability. A review of project documentation showed that the iNSchool project had reasonable processes in place to develop the budget with stakeholder input. Stakeholders were notified of how the project was doing against its budget through project status reports and at status meetings.

4.35 *Testing and change management* – The iNSchool project team executed an appropriate testing strategy that included a dedicated testing environment (a system isolated from live systems) and user involvement. Changes to processes and design are not unusual during the implementation of a new system and such changes need to be carefully managed. Changes for the iNSchool system were approved and tracked throughout its implementation.

4.36 *User support* – Training plans were developed in conjunction with the system vendors to meet the needs of all users. The project team and vendor were responsible for developing the training content and the vendor was responsible for delivery of initial training. The delivery of training was monitored and tracked within each school board. A website was created to store training and support materials. Surveys were administered to obtain and respond to feedback from users on training matters.

4.37 Once a project is fully implemented, ongoing support is needed. This should include documentation and communication of policies, roles, responsibilities, standards and guidelines with respect to ongoing support. This was not complete at the time fieldwork was conducted, but had been started. We encouraged the Department to continue its efforts.

## System Monitoring and Usage

### Conclusions and summary of observations

Reasonable processes were in place to monitor and evaluate system performance during the implementation of iNSchool. Department of Education and Early Childhood Development staff do not have documented performance monitoring procedures that they can refer to. There were processes at the school, board, department and vendor levels to address incidents with the iNSchool application. Common problems and incidents were reported and discussed at committee meetings. There is no problem management process to identify and respond to the root causes of system incidents. iNSchool is available for use at all school boards and there are indications that it is being used regularly by teachers and school administrators.

4.38 *System monitoring* – The ability of iNSchool to meet capacity and performance requirements was assessed as part of the procurement process. During the implementation phase, management monitored system performance. The infrastructure which supports iNSchool (network, servers and databases) was also continuously monitored with the assistance of vendor-supplied monitoring software.

4.39 The performance of networking hardware and servers hosting the iNSchool application should continue to be monitored and evaluated now that iNSchool is fully operational. The Department of Education and Early Childhood Development does not have documented procedures indicating which networking devices (e.g., intrusion detection systems, switches, routers, firewalls) and which servers and their metrics (e.g., CPU performance, memory usage, hard drive capacity) should be monitored. Other considerations include what monitoring should cover, frequency, and what action to take when potential performance or capacity issues are identified. Documentation of the procedures provides reference for staff as they ensure the system continues to maximize value and meets the needs of users.

> *Recommendation 4.8*
> *The Department of Education and Early Childhood Development should document and implement a performance management process that includes procedures to indicate which networking hardware, servers and metrics should be monitored, how frequently it should occur, what staff should look for, and steps to take if incidents are identified.*

*Department of Education and Early Childhood Development Response:*
*The Department uses industry standard monitoring software which contains an inventory of the devices monitored and the schedule. The inventory and schedule can be extracted when needed. The Department agrees with this recommendation and will document the existing process.*

4.40    *Incident and problem management* – Incident management is the process of identifying and resolving IT-related events that have a negative impact on an organization's computer systems.  This process focuses on fixing the immediate issue.  Problem management is the process of investigating why such incidents occur and attempting to fix the underlying issue that caused the incidents.  If these two processes are not in place and operating effectively, there could be extended interruption of IT systems.

4.41    System incidents were regularly discussed at status meetings during the implementation of iNSchool.  Each board was represented on the project management team and had opportunity to discuss common incidents.  These members still meet frequently and recurring issues can be discussed to determine if there are any commonalities.

4.42    Issues identified are recorded in the Department of Education and Early Childhood Development's ticketing system. Issues that cannot be fixed by the Department are sent to the vendor's ticketing system for review and possible resolution.  School boards are also able to submit a system incident to the Department's ticketing system if it cannot be resolved at the school board level.  However, not all school boards document the incidents that they have addressed without vendor assistance or discussions with the project management team.  This makes it difficult to track, manage and resolve incidents, or assess whether recurring incidents are a result of a greater problem.  There should be a problem management process that describes how all issues should be recorded and monitored over time across all school boards, to capture those incidents which did not require Department, vendor or project management team assistance.
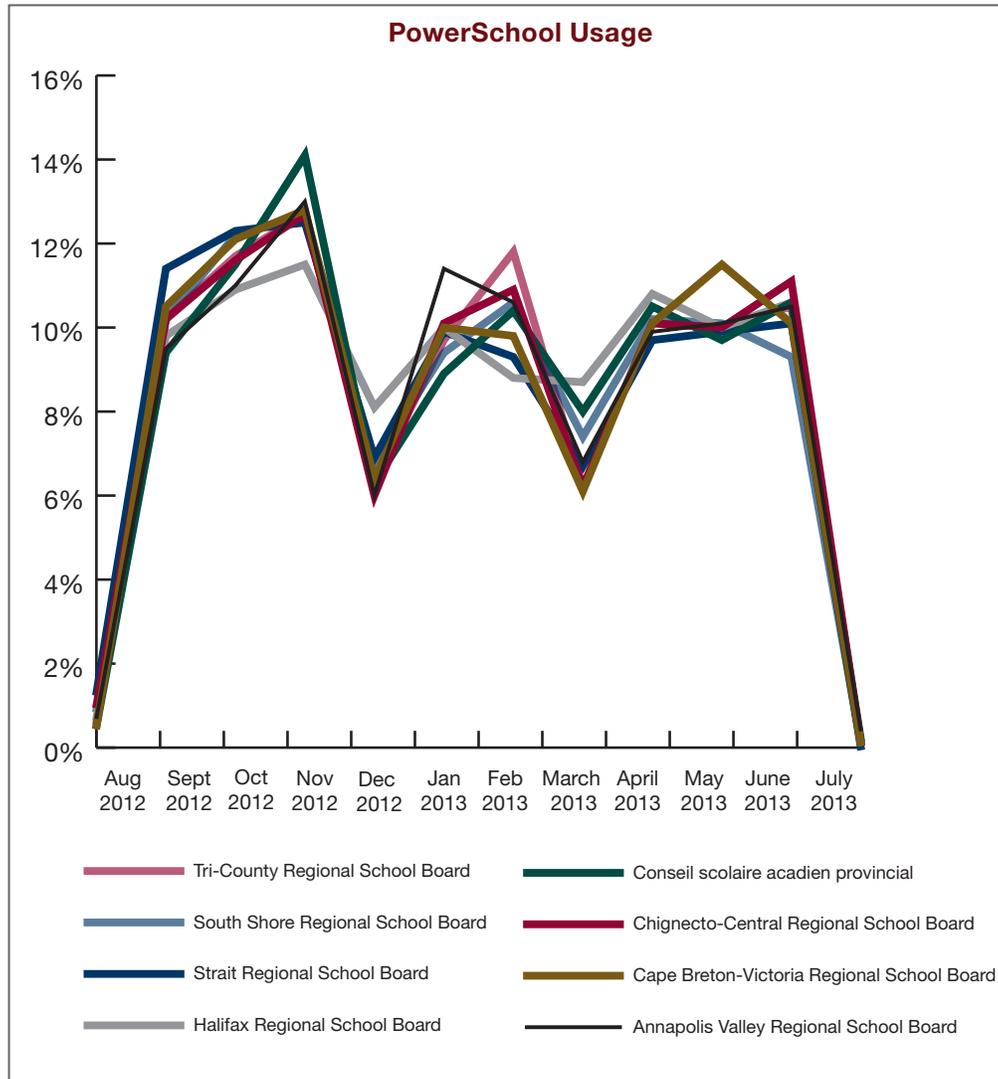
> *Recommendation 4.9*
> *The Department of Education and Early Childhood Development should work with the school boards to document and track iNSchool system incidents. Incidents should be analyzed to identify and respond to their root causes.*

*Department of Education and Early Childhood Development Response:*
*The Department agrees with this recommendation and will work with school boards who are not documenting all incidents. The Department will continue to work with school boards to analyze incidents and respond to their root causes.*

4.43    *System usage* – We analyzed iNSchool login data to determine if the system is generally being used on a regular basis by teachers and school administrators throughout the public school system.  The chart below shows that usage was consistent among the boards for the 2012-13 school year.  It aligns with the cyclical nature of the typical school year calendar.  For example, all school boards had their highest login rates during the month of November, which coincides with report card preparation.  The lowest login rates occurred in July, which reflects the summer vacation period.



**PowerSchool Usage**

Legend:
- Tri-County Regional School Board
- South Shore Regional School Board
- Strait Regional School Board
- Halifax Regional School Board
- Conseil scolaire acadien provincial
- Chignecto-Central Regional School Board
- Cape Breton-Victoria Regional School Board
- Annapolis Valley Regional School Board

| Department of Education and Early Childhood Development Additional Comments |
| --- |
| The Department received value from the audit and was pleased with the process, and the professionalism and quality of staff. We addressed the most significant recommendations immediately, and will deal with the others as indicated in the Department's response. As this report shows, the iNSchool program was delivered on time, on-budget, and with the necessary rigour to ensure that it meets the quality expectations of the public school system. |

# 5 Environment: Public Drinking Water Supply Program

## Summary

The Department of Environment is not adequately monitoring public drinking water supplies to ensure public safety risks are appropriately addressed. Audits are an important component of the Department's oversight role. Audits of municipal facilities were generally conducted on schedule; however registered facilities are not audited every three years as required. We also identified instances in which required audit procedures were not completed or water samples were not obtained from facilities within 30 days after a boil water advisory was removed. These are important controls to ensure the safety of public drinking water supplies.

Guidance for staff is not adequate in many important areas, including conducting, reporting and following up on deficiencies identified during audits. This has resulted in inconsistencies in how audits are conducted, timing of audits of newly registered facilities, audit reports not issued in a timely manner, and inadequate follow up of deficiencies. Clear guidance is necessary to help ensure risk areas are addressed, the Department's resources are used efficiently and effectively, and all facilities receive equitable treatment.

Management does not use the Department's information system to its fullest potential. Management needs to review its system to gain full advantage from the information it can provide. This will facilitate a greater ability to identify and manage risks.

We have made a number of recommendations to address the weaknesses identified during the audit which, if implemented, will strengthen the public drinking water supply program. These include the need for appropriate file review by management and a recommendation that the Department move forward with the planned review of its quality assurance process.

# 5 Environment: Public Drinking Water Supply Program

5.1 Operators of public drinking water supplies are responsible for maintaining the safety of their supplies. The Nova Scotia Environment Act is the principal legislation governing public water systems. The Department of Environment is the lead agency responsible for monitoring drinking water safety in the Province. Two Divisions within the Department share this responsibility: the Environmental Science and Program Management Division, and the Compliance Division.

5.2 The Environmental Science and Program Management Division is responsible for developing standards, guidelines and policies for use by public drinking water supply operators. The Division also certifies operators of water treatment and water distribution systems, maintains a list of laboratories approved for testing water, and provides technical support to the Compliance Division.

5.3 The Compliance Division conducts the majority of field operations. It completes facility audits, inspections and enforcement activities. Other functions include issuing approvals, classifying water systems, processing applications, and responding to complaints.

5.4 For operational purposes, the Compliance Division is divided into four regions. There are a total of 73 inspectors, nine of whom work solely on the public drinking water supply program. Inspectors are supported by other staff such as engineers, and compliance and inspection coordinators.

5.5 The Water and Wastewater Facilities and Public Drinking Water Supplies Regulations define public drinking water supplies as water supply systems that provide water for public consumption with at least 15 service connections or serve 25 or more individuals per day for at least 60 days of the year. It also includes facilities that serve any of the following at least 60 days of the year.

- *"A day care facility licensed in accordance with the Day Care Act,*

- *a permanent food establishment licensed in accordance with the Health Protection Act,*

- *a commercial property for the accommodation of the travelling or vacationing public comprising land used for camping or for overnight parking of recreational vehicles or containing a separate building or buildings containing at least one room to be used as an alternate form of accommodation in a campground,*

> • *a commercial property for the accommodation of the travelling or vacationing public containing more than four rental units, including cottages and cabin."*

5.6    Water supplies are divided into two groups.  There are 84 municipal water supplies in the Province which provide drinking water to approximately 60 percent of Nova Scotians.  These supplies tend to be larger, more complex operations.  There are also approximately 1,600 registered water supplies which are owned and operated by private organizations, not-for-profits, and government.  These supplies include facilities such as restaurants, apartments, campgrounds, schools and nursing homes.

## Audit Objectives and Scope

5.7    In winter 2014, we completed a performance audit of the public drinking water supply program at the Department of Environment.  We examined activities in the Central and Western Regions.  The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

5.8    The purpose of the audit was to determine whether safety risks related to public drinking water supplies are adequately managed.

5.9    The objectives of the audit were to determine if the Department:

- is adequately monitoring and enforcing compliance with applicable legislation, guidelines, standards and policies related to its responsibilities for public drinking water safety; and

- has adequate management information and processes to ensure it is effectively managing its responsibilities under applicable legislation, guidelines, standards and policies that relate to the Department's public drinking water supply program.

5.10   Audit criteria were developed specifically for this engagement and were discussed with, and accepted as appropriate by, senior management of the Department.

5.11   Our audit approach included interviews with Environmental Science and Program Management, and Compliance Division management and staff; documentation of systems and processes; examination of legislation, policies, guidelines, standards and other documentation; and testing compliance with legislation, policies, guidelines and standards.  Our main audit period included activities conducted from April 1, 2012 to March 31, 2013.  However, we examined activities outside of this period when necessary.

## Significant Audit Observations

### Monitoring and Enforcement

#### Conclusions and summary of observations

The Department is not adequately monitoring public drinking water supplies to ensure public safety risks are addressed. Audits of municipal facilities are generally conducted on schedule; however we identified instances of noncompliance with established policies and procedures, including audits of registered supplies not conducted every three years as required. We noted instances in which audits were partially completed, and inconsistencies among inspectors in how audits were conducted and when audit reports were issued. Inspectors did not always obtain water samples from facilities within 30 days after a boil water advisory was removed. We also found inadequate follow-up of deficiencies identified. We made a number of recommendations to address the weaknesses identified, including the need for clear guidance to inspectors regarding what is expected when conducting audits, when initial audits should be conducted on newly registered facilities, and when and how to follow up deficiencies.

5.12 *Audit frequency* – The Department conducts audits to determine if facilities are in compliance with legislation, and if municipal facilities are complying with their approval requirements. Department policy requires that inspectors audit municipal and registered facilities every three years. The Department has an activity tracking system which is used to schedule and document audits. Management told us that the system will automatically schedule the next audit three years from the completion of the previous audit.

5.13 We examined 20 municipal audits and found nine (45%) which were not audited within the three year frequency. However, the audits were only between three and a half months and six months late. We examined 38 registered facility audits and found 23 (61%) which were not completed within the three year frequency. Nine were between one month and six months late, three between six months and 12 months late, and 11 were between 23 months and seven years late. We also identified two facilities registered in 2002 which were not audited until ten years after registration.

5.14 Although municipal audits are generally conducted within the planned timeframe, audits of registered facilities are not. To ensure that water safety risks are identified, the Department needs to make sure it is meeting its planned facility audit frequency.

*Recommendation 5.1*
*The Department of Environment should conduct registered facility audits at the required frequency.*

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation.*

*Targeted Implementation Date:  June 30, 2014.*

*Note: All audits for registered facilities for the audit period will be completed by June 30, 2014.*

5.15    *Audit scheduling* – We found the scheduled audit dates in the activity tracking system were not consistent with the required three year audit frequency.  For example, we identified seven facilities for which the scheduled date of the next audit was between 22 months and 39 months later than it should have been.  We also noted instances in which the scheduled date was earlier than required.  Management was unable to explain why the scheduled dates were not meeting the three year frequency requirements.  Inspectors rely on the activity tracking system to provide them with notification of when to perform their audits so it is important that these audits, are scheduled properly.

> *Recommendation 5.2*
> *The Department of Environment should investigate why errors exist with scheduled audit dates in the activity tracking system and take the necessary action to address the problem.*

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. A review of the current (Activity Tracking System) ATS and the ATS business procedures will be conducted to determine why the error occurred.*

*Targeted Implementation Date:  September 30, 2014.*

*The department will take appropriate corrective actions to address findings of the review.*

*Targeted Implementation Date:  June 30, 2015.*

5.16    *Semi-annual inspections of municipal facilities* – In addition to municipal audits, Department practice is to complete semi-annual inspections of municipal facilities.  From a compliance perspective, these inspections consist primarily of inspectors conducting water tests for the existence of bacteria and chlorine residual.  We examined twenty municipal facilities and found that one facility only had one semi-annual inspection during 2012-13.  Management told us that the continued use of semi-annual inspections is currently under review.

5.17    *Audit checklists* – The Department uses an audit checklist to provide general guidance to inspectors when completing municipal and registered facility audits.  Checklists serve as evidence an audit was completed and help to

ensure consistency and completeness of work conducted.  Checklists were used in all facility audits we examined.

5.18    We examined the checklists and found they generally cover the legislated requirements, with the exception of the need for registered facilities to have contingency plans.  We found  inspectors have not been checking that registered facilities have a contingency plan in place.

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*Recommendation 5.3*
**The Department of Environment should require inspectors to determine if appropriate contingency plans exist when auditing registered facilities.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation.  The department is already in the process of conducting a review of the Drinking Water Program and will incorporate any changes relative to this recommendation upon completion of that review.*

*Targeted Implementation Date:  March 2016.*

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5.19    We also found there was minimal guidance available regarding which procedures inspectors should complete to address the areas identified in the audit checklists.  In response to our audit questions, management were not able to provide clear expectations of how inspectors should address the areas identified in the checklists.  We interviewed six inspectors and found there are inconsistencies in their approaches to conducting audits.

- Not all inspectors verify the operator's certificate to ensure the individual has the correct level of certification and the certificate has not expired.

- Some inspectors only review the annual report created and submitted by the facility to determine if proper water sampling was completed, while others examine the actual lab results, providing third party support that testing was done.

- Those inspectors who did review lab results during registered facility audits were not consistent in the extent of water testing they examined. Some examined 100% of the water testing completed, while others reviewed results on a sample basis.

5.20    *Water testing by inspectors* – Inspectors test water samples to help assess whether the facility's water is safe during the time of the audit.  There is no documented policy concerning the nature and extent of the water testing which inspectors should complete at municipal and registered facilities.  We found inconsistencies in practice at two regions we examined including when water testing is needed and when testing for the existence of bacteria and chlorine residual is required.

5.21   It is important to provide clear guidance to inspectors regarding which procedures to complete to appropriately address the various areas examined during facility audits.  Such guidance should help ensure that audits are conducted as efficiently and effectively as possible.

**Recommendation 5.4**
**The Department of Environment should develop and implement clear guidance supporting the areas covered during facility audits, including the nature and extent of water testing.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department will review current guidance on auditing and water testing. The departmental Inspector Training Program (ITP) modules for Municipal Drinking Water program (Module 5) and Registered Water Supplies program (Module 6) associated with the departmental Development Accountability Model (DAM) document will be revised as needed.*

*Targeted Implementation Date:  December 31, 2014.*

*The department will address the findings of the review and conduct refresher training for Inspectors and District Managers.*

*Targeted Implementation Date:  March 31, 2015.*

5.22   We asked management why inspectors are required to test the water for bacteria at 10% of registered facility audits.  They told us the Department does not have the resources necessary to conduct additional tests.  We examined 39 registered facility audits and found 19 (49%) identified deficiencies with water tests not completed as required.  We believe the Department should evaluate whether additional water tests at these facilities may be warranted given the high rate of noncompliance identified during audits.

**Recommendation 5.5**
**The Department of Environment should evaluate whether the current requirement for water testing by inspectors at registered facilities is appropriate and implement changes where required.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department is already in the process of conducting a review of the Drinking Water Program and will incorporate any changes relative to this recommendation upon completion of that review.*

*Targeted Implementation Date:  March 31, 2016.*

5.23 *Partially completed audits* – During our testing of registered facility audits, we noted five instances in which wells were not examined as required. It is important that the inspector examine the well to ensure there are no visible contaminants or other problems that could lead to water quality issues.

> **Recommendation 5.6**
> **The Department of Environment should complete all required procedures when conducting registered facility audits.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department will review current guidance on auditing and water testing. The departmental Inspector Training Program (ITP) modules for Municipal Drinking Water program (Module 5) and Registered Water Supplies program (Module 6) associated with the NSE Development Accountability Model (DAM) document will be reviewed and revised as needed.*

*Targeted Implementation Date:  December 31, 2014.*

*The department will address the findings of the review and conduct refresher training for Inspectors and District Managers.*

*Targeted Implementation Date:  March 31, 2015.*

5.24 *Deficiencies* – Violations of the Environment Act are noted as audit deficiencies. Audit reports are to include all deficiencies identified along with a date by when the facility must comply with the Act. These deficiencies and compliance dates are tracked in the Department's activity tracking system to remind the inspector when to follow up. Some deficiencies may not require follow up. For example, a deficiency may be corrected before the audit is completed or before the audit report is written. In these cases, inspectors are still supposed to enter the deficiency into the system so it is included in the facility's compliance history.

5.25 In the municipal audits we examined, we found 12 deficiencies which were not recorded in the activity tracking system as required. For the registered water supply audits we examined, we found five deficiencies that were not recorded. The facilities were required to take action in 14 of the 17 deficiencies noted in the reports, 13 of these were addressed. It is unknown whether the remaining deficiency was addressed because the inspector did not follow up. If deficiencies are not properly recorded and tracked in the activity tracking system there is a risk that these issues will not be followed up to ensure they have been properly addressed. Additionally, deficiencies will not be added to the compliance history of the facilities.

*Recommendation 5.7*
**The Department of Environment should record all deficiencies in the activity tracking system as required.**

*Department of Environment Response:*
*The department agrees with this recommendation. The department will conduct refresher training for all inspectors on the current Divisional Operating Procedure (DOP) NSE Activity Tracking System - Deficiencies and Enforcement.*

*Targeted Implementation Date:  September 30, 2014.*

5.26    *Audit reports* – After an inspector performs an audit, an audit report is created. This report documents deficiencies identified, corrective actions required, and the due date for compliance.  It also includes enforcement actions taken such as directives or warnings.  The Department does not require inspectors to obtain confirmation from the facility that it has received the audit report. Having the facility acknowledge receipt of the audit report would provide evidence that the audit was completed and the facility received the report.

*Recommendation 5.8*
**The Department of Environment should obtain documented acknowledgement from facilities that they have received the audit report.**

*Department of Environment Response:*
*The department intends to take this recommendation under advisement and will review the current Divisional Operating Procedure (DOP) NSE Activity Tracking System – Completing an Inspection and implement what is practical and feasible to the facility and the department given that documents are delivered in multiple ways.*

*Targeted Implementation Date:  November 30, 2014.*

5.27    There are no defined time frames to indicate when inspectors must send an audit report to a facility once an audit has been completed.  Inspectors typically mail completed reports to facilities.  Issuing reports in a timely manner helps promote facilities addressing deficiencies promptly.

5.28    For the 20 municipal audit files we examined, we were unable to determine when 12 audit reports were issued.  For the remaining eight files, five reports were mailed between 20 days and three months after the audit was completed. These reports identified 33 deficiencies.

5.29    For the 39 registered facility audits we examined, we were unable to find evidence to support when 37 audit reports were issued.  The inspectors told us they typically issue audit reports as soon as the inspector signs them. Seven of the 39 reports were signed between three and seven weeks after the audit was completed; five of these reports identified one or more deficiencies which needed to be addressed.

*Recommendation 5.9*
**The Department of Environment should establish time frames indicating when inspectors should issue audit reports. The Department should monitor compliance with these time frames.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department will conduct a review and revise the current Divisional Operating Procedure (DOP) NSE Activity Tracking System – Completing an Inspection.*

*Targeted Implementation Date: November 30, 2014.*

*The department will conduct refresher training for all inspectors on the current Divisional Operating Procedure (DOP) NSE Activity Tracking System – Completing an Inspection.*

*Targeted Implementation Date: January 31, 2015.*

5.30 *Deficiency follow-up* – The Department's Compliance Promotion and Enforcement Policy requires follow up of deficiencies identified. However, it does not provide guidance as to when inspectors should follow up deficiencies once a compliance date has been exceeded. There is also no guidance on the nature of follow-up required. Western Region management told us they require inspectors to initiate follow-up within ten days after the compliance date. The Central Region did not have a similar practice.

5.31 We examined a sample of registered facility audit files and found inconsistencies in the actions taken by inspectors to follow up water testing deficiencies.

- For five files, the facility was required to provide its next water test result.

- For seven files, the facility was not requested to provide any evidence of compliance with water testing requirements going forward.

5.32 A number of these facilities had water problems in 2012-13 which resulted in boil water advisories being issued. Since the requirement for facilities to test their water regularly is a key control in preventing the consumption of contaminated water, it is important to complete appropriate follow-up for instances of noncompliance.

*Recommendation 5.10*
**The Department of Environment should develop and implement a policy regarding the timing and nature of deficiency follow-up required by inspectors.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The timing of deficiency follow up depends on the risk and other factors associated with the deficiency and can vary substantially. NSE Inspectors are currently required to follow the Divisional Operating Procedure (DOP) on Compliance Promotion and Enforcement (Compliance Model). This Divisional Operating Procedure is scheduled for a review in 2014 and will incorporate this recommendation.*

*Targeted Implementation Date: March 31, 2015.*

5.33    *Municipal facility annual reports* – Municipal facilities are required to submit an annual report by April 1st. The report must include a summary of sampling results for the year, a description of any emergency situations which occurred and action taken, and whether any complaints were received. Information on other operational areas is required as well. These annual reports can be an important source of information to the Department on the current status of municipal facilities.

5.34    Although all 20 municipal facilities we tested submitted annual reports, only seven had all required information or reasonable explanations for missing items. We also noted that the reports were not reviewed by Department staff in a timely manner. Ten reports were reviewed between two months and eight months after submission.

5.35    If annual reports are not reviewed in a timely manner and do not include required information, there is a risk that the Department may not be aware of and therefore unable to address potential problems in a timely manner.

*Recommendation 5.11*
*The Department of Environment should ensure all annual reports are received and reviewed in a timely manner, and that they contain all required information.*

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department will review the DOP on Completing an Inspection and incorporate appropriate timelines for conducting report reviews.*

*Targeted Implementation Date: December 31, 2014*

5.36    *Boil water advisories* – Boil water advisories occur when an unacceptable level of bacteria is detected in a water sample. In order for a facility to be taken off the advisory, they must provide the Department with two clean water samples taken at least 24 hours apart. Department practice is that inspectors take water samples from the facility within 30 days after removing the boil water advisory to confirm that the water is still safe to drink.

5.37   We examined eight boil water advisories issued at municipal facilities and found both the facilities and the inspectors completed the required water testing.

5.38   We examined twenty boil water advisories issued at registered facilities.

- At one facility, no confirmatory sample was taken by the inspector after the boil water advisory was removed.

- For nine facilities, a sample to confirm water safety was not completed within 30 days after the advisory was removed.

5.39   We noted three instances in which the inspector's confirmatory sample identified unacceptable levels of bacteria requiring those facilities to again implement boil water advisories.  This highlights the importance of ensuring inspectors take samples within the 30-day requirement.

**Recommendation 5.12**
**The Department of Environment should conduct all boil water advisory confirmatory samples within the 30-day requirement.**

**Department of Environment Response:**
*The department agrees with and intends to implement this recommendation. The department will conduct refresher training on the Boil Advisory Procedure for all inspectors.*

*Targeted Implementation Date:  October 31, 2014*

5.40   Once a boil water advisory has been issued, we expected the Department would communicate with the facility to determine whether reasonable action is being taken to address the cause of the contamination.  However, there is no guidance available to inspectors as to when and how facilities should be contacted.  We noted four of the ten registered facility audit files we examined had some follow up, ranging from one day to 77 days after the advisory notification.  There was no evidence of follow-up in the remaining six files.

**Recommendation 5.13**
**The Department of Environment should develop and implement guidelines for contacting facilities when a boil water advisory is issued.**

**Department of Environment Response:**
*The department agrees with and intends to implement this recommendation.  The department will revise and conduct refresher training for inspectors on the Boil Advisory Procedure.*

*Targeted Implementation Date:  October 31, 2014*

5.41   *Newly registered facilities* – Once a facility is registered, an initial audit is required.  During the initial visit, inspectors provide information to the facility such as how and when to test their water and the need to use a qualified laboratory.  Where applicable, inspectors will also look at the well for any obvious problems.

5.42   Current policies do not address when an initial audit should be completed. Of the ten newly registered facilities that we examined, five were audited within three months of registration.  Four facilities were audited between four months and six and a half months after registration.  For one facility, there was no evidence an audit was completed.

5.43   It is important that the Department audit these facilities in a timely manner. Operators are new to the process and need to understand their responsibilities as soon as possible to help ensure the facilities' water is safe for consumption.

> *Recommendation 5.14*
> *The Department of Environment should establish a policy clarifying the time frame in which newly registered facilities should have an initial audit.*

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation and will conduct a review and revise the Divisional Operating Procedure (DOP) NSE Activity Tracking System – Completing an Inspection.*

*Targeted Implementation Date:  November 30, 2014.*

*The department will conduct refresher training for all inspectors on the current Divisional Operating Procedure (DOP) NSE Activity Tracking System – Completing an Inspection.*

*Targeted Implementation Date:  January 31, 2015.*

5.44   *Laboratories* – The Department of Environment approves laboratories that perform water quality analysis for public drinking water systems.  Labs must meet the qualifications noted in the Department's Policy on Acceptable Certification of Laboratories.

5.45   The Department's website notes 13 laboratories which are approved to conduct water quality analysis.  We found that the water supply facilities we tested were using labs approved by the Department.  We also examined evidence that four laboratories on the list had the qualifications necessary for Departmental approval.

5.46   *Qualified operators* – All municipal water supplies must be classified in accordance with the Water and Wastewater Facilities and Public Drinking

Water Supply Regulations.  Registered supplies must meet certain criteria in order to require classification.  Classification is based on a rating scale that considers factors such as the water supply source, population served, and treatment methods employed.  A classified facility must have an operator with the same or greater classification as the facility.  For example, a Class II facility would require a Class II or higher operator.

5.47   Individuals must apply to the Department for an operator certificate, and  for a renewal when the certificate expires in four years.  For a new certificate, individuals must meet certain qualifications concerning education and operating experience, and pass an examination.  For certificate renewal, there are training requirements which must be met.  Individuals are required to submit evidence with their application to support that they have met the requirements.  We examined a sample of new certificates and renewals and found the individuals provided adequate support that they met the qualifications.

5.48   The Department maintains a list of qualified operators on their website. This is available to inspectors to determine whether an operator has a valid certificate and at what level.

5.49   We examined 23 classified facilities and found one registered facility which did not have a qualified operator.  However, appropriate action was being taken by the Department to address the issue.

## Management Information and Processes

### Conclusions and summary of observations

The Compliance Division's activity tracking system can provide relevant and timely information to managers.  However, management were not fully utilizing the system to generate information relevant to the public drinking water supply program. Management needs to review the system's functionality to take full advantage of the information it can provide.  This will facilitate a greater ability to identify and manage risks.  We also found management did not follow up, in a timely manner, known or possible water supply issues identified in activity tracking system reports. Additionally, improvements are required in the Department's quality assurance program.

5.50   *Activity tracking system*  – The Compliance Division has a central database for use by staff and management to record audit details, inspections, and other activities.  The system captures information such as the name of the facility, date of audit or inspection, deficiency and enforcement items noted, and compliance dates.  Management receives periodic system reports to monitor Compliance Division activity by inspector, district and region.

5.51   We found the information system provides relevant and timely information. However, the data is not fully utilized.  Suggestions of how the Department could make better use of the data are described below.

5.52   *Analysis of activity tracking system data* – The activity tracking system has important data from audits and other activities which could be used for various types of trend analyses.  Examples of analysis that could be completed include:  cause of boil water advisories by region; correlation, if any, between enforcement and compliance; and the most common types of deficiencies in the Province.  Such analyses could highlight increased risks to public drinking water systems.  The Department could then evaluate and take  action as necessary to address those risks.

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**Recommendation 5.15**
**The Department of Environment should utilize information available in the activity tracking system for trend analyses and identification of risks.**

**Department of Environment Response:**
*The department agrees with and intends to implement this recommendation. The department will take action to scope out what analysis will be suitable to the department.*

*Targeted Implementation Date:  March 31, 2015*

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5.53   *Time tracking for key activities* – The Division does not currently track the time inspectors spend on key activities.  The activity tracking system or some other system or process should be used to track inspectors' time, including time to conduct municipal and registered facility audits, inspections, and deficiency follow-up.  This information would help management to plan and utilize staff resources and assess whether those resources are used in the most efficient and effective way possible.

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**Recommendation 5.16**
**The Department of Environment should track time for key inspector activities for use by management in operational planning and monitoring.**

**Department of Environment Response:**
*The Department does not plan to implement time tracking of inspector activities in relation to prioritizing our work on the drinking water program.   The Drinking water renewal project will identify program risks and align resources accordingly.*

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5.54   *Quality assurance process* – The Department created a quality assurance process in 2007-08.  A sample of files is reviewed to determine compliance with operational and administrative responsibilities.  A sample of activities to review by program is determined based on a risk assessment.  The Compliance Division is responsible for 25 program areas.  Each year, management selects two program areas to review based on the risk analysis.

5.55 Registered water activities were reviewed in 2007-08 as a pilot project when the quality assurance program was being developed. Once the quality assurance program was implemented in 2008-09, the municipal water program was reviewed. Neither the registered water or municipal water activities have been reviewed since. One issue identified in the municipal water program report has not been addressed. It relates to a lack of documentation to support that municipal water supply reports received by inspectors were reviewed. Our testing found that this is still an issue.

5.56 The current policy requires that a follow-up review be completed six months after recommendations are implemented to ensure the recommendations effectively address the issues identified. This is not taking place; management told us that this is not a realistic time period.

5.57 We noted a few areas for improvement in the quality assurance process. We found draft quality assurance reports are not completed in a timely manner. We identified one report in which the review was completed in January 2011 but management told us that the draft report was not provided to senior management until October 2011, nine months later. Similarly, for a March 2012 review, management told us that the draft report was not completed until January 2013, ten months after the review.

5.58 The current policy does not address the need to provide deadlines to staff to implement recommendations or the need to establish time frames to follow up on implementation. These requirements would help to ensure recommendations resulting from quality assurance reviews are addressed in a timely manner.

5.59 Management indicated that the quality assurance process is scheduled for review in 2014-15 and will address the issues noted above.

*Recommendation 5.17*
*The Department of Environment should conduct its planned review of the quality assurance process and implement changes as required.*

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation. The department will conduct the planned review of the current Quality Assurance/ Quality Control program and will address the findings of that review.*
*Targeted Implementation Date for the review completion: March 31, 2015,*
*Targeted Implementation Date for the necessary actions completion: October 30, 2015*

5.60 *File reviews* – Department policy requires district managers to review a sample of closed files on a regular basis to ensure the files have been properly opened, maintained and closed. For example, have required forms been used, and are documents in chronological order and date stamped. This review

helps to ensure facility files have adequate documentation to support the activities completed. Management told us that these reviews are not taking place.

**Recommendation 5.18**
**The Department of Environment should complete management file reviews as required.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation.*

*Targeted Implementation Date: June 30, 2014*

5.61 *Management reports* – Department management receives periodic reports outlining inspections and audits completed to date; whether these were completed on time; deficiencies and directives past due; potential errors and omissions in the activity tracking system and other relevant information to provide for appropriate monitoring of staff and information. We found management is not following up matters in a timely manner. For example, we tested five reports for each of Western and Central Regions that summarize potential errors and omissions in the activity tracking system. In both regions, two of five reports had issues noted with no evidence of being addressed nine months following the original report. The potential errors and omissions included not attaching identification records to the file. This information is needed to allow for searches on history of noncompliance.

5.62 Management also receives a report which allows them to ensure audits are completed on schedule. We analyzed fiscal 2012-13 data from the activity tracking system to determine if audits were completed by their scheduled dates in the Central and Western Regions. For registered facilities, we found there were 407 audits conducted and 165 (41%) were not completed by the scheduled date.

**Recommendation 5.19**
**The Department of Environment should review management reports from the activity tracking system in a timely manner and take appropriate action to address issues identified.**

*Department of Environment Response:*
*The department agrees with and intends to implement this recommendation.*

*Targeted Implementation Date: June 30, 2014*

| Department of Environment Additional Comments |
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Nova Scotia's drinking water meets Health Canada's Guidelines for Canadian Drinking Water Quality and is safe for Nova Scotians to consume.

In its latest report card (November 2011) on provincial and federal drinking water programs, Ecojustice cites the strong measures Nova Scotia has in place for treatment, standards and testing, and awards the province's program a second place finish nationally.

The Auditor General's recommendations, which focus on departmental processes and policies for the Nova Scotia program, will be implemented as part of or in tandem with the department's current review and update of the 2002 drinking water strategy. Provisions have also been made in the 2014-2015 budget that will enable the department to increase training and fill staff vacancies that have a direct role in achieving program deliverables.

Nova Scotia Environment thanks the Auditor General and his staff for their work as the recommendations serve to strengthen management of Nova Scotia's drinking water program.

# 6 Health and Wellness: Physician Alternate Funding Arrangements

## Summary

The Department of Health and Wellness' monitoring of alternative payment and academic funding plans is poor. Approximately $251 million per year is paid to physicians under these plans but the Department does not know if contract requirements are met.

Alternative payment plans have limited reporting requirements making it difficult for the Department to determine if an appropriate level of service is provided. When physicians paid through academic funding plans submit reports on contract deliverables, no review is completed. If the Department becomes aware that reporting requirements are not met, it does not take steps to achieve compliance.

Our work included testing at three academic funding departments to assess whether contract deliverables were met. Our testing results indicated those departments met their academic funding plan requirements for the deliverables we tested.

Although progress has been made towards the development of new alternative payment and academic funding models, considerable work is still needed. The Department has been working on improvements to these plans since 2008 and 2010. Health and Wellness must still develop detailed processes to guide daily operations, including an adequate monitoring process.

Health and Wellness contracts with a private company (Medavie Blue Cross) to audit physician compensation. However, the Department requested too few audits of alternate funding arrangements during our audit period. Medavie provides an annual risk analysis for alternative payment plans, but the majority of the physicians identified through the risk analysis are not selected by the Department for audit. We recommended the Department develop a risk-based approach to audit selection.

Additionally, the Department is not taking timely action to address issues. There were concerns around a specific group of alternative payment plan physicians as far back as 2009, but this group was not selected for audit until 2013. The audit results, which were very negative, were reported to the Department on September 30, 2013 but, as of January 2014, the Department had failed to take any action to address the findings. We recommended the Department develop a process to address all audit results in a timely manner.

# 6 Health and Wellness: Physician Alternate Funding Arrangements

## Background

6.1 The Department of Health and Wellness' Partnerships and Physician Services branch is responsible for the administration of alternative funding programs for physicians. The two major types of alternative funding arrangements are alternative payment plans and academic funding plans. These programs include physician remuneration arrangements which are not based on a fee-for-service model. Under fee-for-service, physicians bill the government through the MSI program for each service provided to a patient.

6.2 Alternative payment plans are used to recruit and retain physicians to areas of the province where the fee-for-service model may not result in competitive remuneration for the physician. These plans are also used in new models of care such as collaborative emergency centers. Alternative payment plans can be used for individual physicians or groups. The specific contract will depend on the physician's specialty. Each contract includes deliverables, or contract requirements, that outline the level of service to be provided by the physician. Deliverables can include hours per week and weeks per year that the physician must work, along with requirements to provide after-hours, weekend, and holiday, on-call coverage.

6.3 Academic funding plans are established for teaching or academic departments at the IWK or Capital Health. Physicians in these departments teach at Dalhousie University's medical school and have research responsibilities, in addition to providing clinical care. The traditional fee-for-service model does not remunerate physicians for these additional responsibilities. Each academic funding plan includes deliverables related to patient care, teaching, research and administration to be met by the physician group.

6.4 During the 2012-13 fiscal year, there were approximately 220 physicians across the Province paid via alternative payment plans with a value of approximately $38.5 million. For the same period, approximately 550 physicians were paid under academic funding plans with a value of approximately $212.5 million. Together these funding arrangements accounted for over 45 percent of total physician payments.

6.5 Physicians under alternative payment and academic funding plans are generally required to shadow bill for clinical services provided. When physicians shadow bill, claims for clinical services are submitted to the MSI program as if the physician was compensated on a fee-for-service basis. The same fee codes used in a fee-for-service environment are used to record

the services provided by the physician without triggering a payment. This allows tracking of clinical activity for alternative payment plan and academic funding plan physicians.

6.6 Medavie Blue Cross administers payments to physicians under both fee-for-service and alternative funding arrangements through a contract with the Province. Medavie is also contracted to monitor payments to physicians. Annual audit plans are determined by the Department and audit work is conducted by Medavie. Alternative payment and academic funding plans may be included for audit depending on what the Department decides. It is the Department's responsibility to address audit findings with alternative payment physicians or academic funding departments.

6.7 During our audit, the Department was in the process of developing new models for both alternative payment and academic funding plans with collaboration from key stakeholders. Department management told us they want the new models to improve accountability for funding and address other deficiencies.

## Audit Objectives and Scope

6.8 In winter 2014, we completed a performance audit of physician alternative payment plans and academic funding plans administered through the Department of Health and Wellness. It included Health and Wellness' administration and monitoring of contracts, physician compliance with academic funding agreements, auditing alternative funding agreements by Medavie, and the development of new alternative payment and academic funding models.

6.9 The purpose of the audit was to determine if:

- the Department of Health and Wellness has adequate processes to evaluate alternative funding mechanisms and implement needed improvements in a timely manner; and

- physicians are complying with the requirements of academic funding plan agreements.

6.10 The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

6.11 The objectives of the audit were to:

- assess the adequacy and effectiveness of the Department of Health and Wellness' processes to monitor academic funding plan and alternative payment plan agreements with physicians;

- determine if physicians are meeting the requirements of academic funding plans;

- determine if Medavie is auditing payments to physicians under academic funding plans and alternative payment plans as required by its contract with the Province and reporting the results to Health and Wellness;

- determine if Health and Wellness is addressing issues identified through the audits conducted by Medavie;

- determine if the new models for academic funding plans and alternative payment plans sufficiently address the deficiencies identified in the existing models; and

- determine if Health and Wellness has a process for the timely transition of physicians under academic funding plans and alternative payment plans to the Department's new alternative funding models.

6.12 Criteria were developed specifically for this engagement. The objectives and criteria were discussed with, and accepted as appropriate by, senior management at the Department of Health and Wellness and physicians responsible for managing the academic funding plan departments in which we completed detailed testing.

6.13 Our audit approach included interviews with management and staff at the Department of Health and Wellness, alternative payment plan physicians and academic funding physicians and staff. We reviewed alternative payment and academic funding agreements. We tested compliance with academic funding agreements. Our fieldwork did not include detailed testing of alternative payment plans. We conducted our audit in the fall of 2013 and winter of 2014; the audit period covered April 1, 2011 to September 30, 2013.

## Significant Audit Observations

## Contract Management

### Conclusions and summary of observations

The Department's monitoring of alternative payment and academic funding plans to ensure deliverables are met is poor. Alternative payment plans have limited reporting requirements and the Department is not using available information to assess whether physicians are providing the required level of clinical services. Academic funding plan departments are not always submitting the required

deliverable reports and the Department does not follow up on missing reports. When deliverable reports are submitted, they are not reviewed.  We identified instances in which alternate payment plan physicians were working under expired contracts.  We also found some physicians did not have signed letters agreeing to that hospital department's academic funding plan contract, although they were being paid under those contracts.

6.14  *Background* – Alternative payment and academic funding plans outline contract requirements or deliverables to be provided by individual physicians or groups of physicians.  For alternative payment plans, deliverables relate to the provision of clinical services within a community.  Academic funding plan deliverables encompass the clinical, research, education and administrative work which physicians in academic environments are responsible for.  Health and Wellness is responsible for monitoring contracts to ensure deliverables are met.

6.15  *Contracts* – Alternate payment plan physicians sign contracts with the Province.  Academic funding plans are contracts between the Province and a specific hospital department.  We identified instances in which physicians under academic funding plans and alternative payment plans did not have current contracts.

6.16  For academic funding plans, as individual physicians are not party to the contract with the hospital department, each physician must sign a letter agreeing to abide by the terms and conditions.  This letter is effectively the physician's contract with the Province.  It includes a requirement to shadow bill – using fee-for-service billing codes to create a record of clinical work under the academic funding plan.  Shadow billing does not trigger physician payments.

6.17  We tested a sample of 30 physicians added to academic funding plans during the audit period and identified four instances in which the physician had not signed a letter indicating acceptance of the academic funding contract.  We also found 18 of 31 alternate payment plan contracts we tested were signed after the effective date of the contract.  Three of these were more than one month late and one was almost three months late.

6.18  Signed contracts help to establish that both parties understand their respective roles and responsibilities.  Otherwise, there is a risk that physicians will not be aware of the terms and conditions of contracts.

*Recommendation 6.1*
*The Department of Health and Wellness should obtain a signed letter from all physicians added to academic funding plans acknowledging the physician's acceptance of the terms of the academic funding plan.  This letter should be signed before services are provided and payments are made.  Similarly, the Department should obtain signed contracts from alternate payment plan physicians before services are provided and payments made.*

*Department of Health and Wellness Response:*
*It has been the practice of DHW to require signed physician declarations from the academic funding plan Departments.  In 2012, the Department hired a dedicated resource for the management of the academic funding plans. Since November 2012, DHW has been able to enforce the requirement for physician declarations from the academic funding plan Departments to be signed. The Department also requires signed contracts from alternative payment plan physicians. The Department will endeavor to obtain the signed contracts before services are provided and payments are made.*

6.19    There are currently three clinics in the Province funded through a group alternative payment plan.  However, none of the clinics have a current contract with the Province.  In one instance, the group has existed since 1994 but has never had a contract.  The number of full-time-equivalent physicians in the group, as well as annual funding, have been outlined in an annual letter from Health and Wellness.  No deliverables or reporting requirements have been established.  The contracts with the remaining two alternative payment groups expired in 2007 and 2008.  Since that time, the Department has sent annual funding letters to these groups.

6.20    Of the 15 academic funding plans, 13 expired on or before March 31, 2013; two of these expired in 2007.  The Department has not renegotiated new agreements with the academic funding departments but has obtained Cabinet approval to extend the funding.  Management in some of the academic funding plan departments we spoke with expressed concerns related to the lack of current contracts.  There is a risk that the deliverables included in the academic funding plans are no longer appropriate.  In order to be meaningful, deliverables must be current.  As well, current contracts are necessary to ensure physicians are providing the services for which they are paid.

6.21    This is not the first time an audit by our Office has identified issues with lack of contracts or expired contracts at the Department of Health and Wellness.  In 2003 and 2008, this was identified as an issue because the Department did not have current contracts with home care service providers or long-term care facilities.  Health and Wellness has persistently allowed operators to continue without current contracts.  The Department needs to take this Office's recommendations regarding the importance of contracts more seriously.  Senior Department management need to take steps to ensure

signed contracts are in place for all physicians under academic funding or alternative payment plans.

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**Recommendation 6.2**
**The Department of Health and Wellness should have current, signed contracts for all alternative payment plans and academic funding plans.**

**Department of Health and Wellness Response:**
*DHW agrees with this recommendation and with the new academic funding plan Model, will have current, signed contracts for all existing academic funding plan Departments in 2015. The Department will move the 3 alternate payment plan physician groups currently without a contract, to a contract in 2015.*

6.22  *Academic funding plan deliverables* – We reviewed a sample of five academic funding plans and found each included deliverables related to clinical work, research, education and administration. The agreements also included specific indicators to support the achievement of deliverables.  For example, the volume of clinical services measured by shadow billing, research publications completed, and teaching hours provided at the Dalhousie Faculty of Medicine by academic funding department staff.

6.23  When academic funding plan contract requirements or deliverables were established, targets were not always included or were not regularly updated. For one of five agreements we tested, no targets were established.  For another agreement, only a clinical services target was included.  For the remaining three agreements we examined, the targets were established at the start of the agreement but were not updated in subsequent years.  Current targets for deliverables are necessary to ensure an appropriate level of service is provided.  Without targets, it is difficult to assess whether deliverables are met.

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**Recommendation 6.3**
**The Department of Health and Wellness should develop targets for all academic funding plan deliverables.  Targets should be reviewed annually to determine if changes are necessary.**

**Department of Health and Wellness Response:**
*DHW agrees with this recommendation and has developed an academic funding plan Deliverables Template with its stakeholder partners, CDHA, IWK, Dalhousie Faculty of Medicine, academic funding plan Physicians and Doctors Nova Scotia (DNS). DHW is currently developing targets for the academic funding plans.*

6.24  Although academic funding agreements provide a template for physician departments to report against deliverables on an annual basis, there are no deadlines for these reports.

*Recommendation 6.4*
*The Department of Health and Wellness should include reporting deadlines in all academic funding plans.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation and in combination with 6.3 is working to develop monitoring, and reporting deadlines for the academic funding plans.*

6.25   *Alternative payment plan deliverables* – Alternative payment contracts do not have comprehensive physician deliverables.  Contracts require physicians to shadow bill for clinical services in the community, and work a specific number of hours per week and weeks per year.  For example, under the family medicine alternative payment plan, each full time physician equivalent is required to provide 37.5 clinical hours per week and work at least 46 weeks per year.  Other responsibilities include providing community-based, after-hours, weekend and holiday on-call coverage sufficient to meet the medical needs of the community. With the exception of shadow billing, the contracts do not require physicians to submit documentation to the Department to support the clinical hours provided.  The contracts do require that physicians provide an annual report to Health and Wellness of days they were absent. We found these reports were not submitted and the contracts do not have consequences for noncompliance.

6.26   There are eight types of alternative payment plan contracts depending on the physician speciality. For three of these contract types, the contract template indicated agreements would be reviewed annually.  This has not occurred. Specific performance deliverables and reporting requirements are needed to ensure the level of service provided is consistent with the Department's expectations. Otherwise, it is difficult to hold physicians accountable under the terms of the contract.  Furthermore, specific deliverables would help demonstrate whether alternative payment positions met the goals of placing a physician in a particular community.

*Recommendation 6.5*
*The Department of Health and Wellness should develop physician-specific contract deliverables for alternative payment plans.  Contracts should include reporting timeframes and actions to be taken if deliverables are not met.*

*Department of Health and Wellness Response:*
*DHW has developed and is in the process of implementing a new alternate payment plan accountability model which requires individual deliverables for all contracts. The updated contract templates clearly specify reporting timeframes and actions if deliverables are not met.*

6.27   *Monitoring* – Health and Wellness does virtually no monitoring of performance against alternative payment or academic funding plan

deliverables.  There are no processes to track and assess deliverables to ensure contract requirements are met.

6.28 With the exception of shadow billing, there are no reporting requirements for alternative payment plans.  While the Department has shadow billing data for these physicians, it does not use this information to assess whether the physicians provided an appropriate level of clinical services.  The Department relies on Medavie to identify alternative payment plan physicians with low shadow billings relative to their salary, but Health and Wellness does limited work to address the concerns identified.

6.29 In the past, Health and Wellness had performance management committees to monitor the quarterly and annual deliverables reports from academic funding plan departments.  However, management told us these committees were suspended in January 2010 due to a lack of resources and the development of a new academic funding model.  Since the committees no longer exist, deliverables reports are to be submitted directly to Health and Wellness.

6.30 We selected five academic funding plans to determine if deliverable reports were submitted for the 2011-12 and 2012-13 fiscal years.

- For one department, a deliverable report was not submitted for either year.

- One department submitted its 2011-12 and 2012-13 reports in December 2013.

- For another sample item, the 2012-13 report was not received until ten months after year end.

- The remaining two departments submitted deliverable reports for both years.

6.31 In instances when reports were not provided, Health and Wellness took no action.  Even when deliverable reports were received, they were not assessed. During our audit, three academic funding departments expressed concern that Health and Wellness was not reviewing deliverable reports.  Some academic funding departments questioned the value of these reports if the information is not used, especially considering the time and resources required to prepare them.

*Recommendation 6.6*
*The Department of Health and Wellness should develop and implement processes to track and monitor performance against deliverables in alternative payment and academic funding plans.  This should include action to be taken if reports are not provided or if deliverables are not met.*

*Department of Health and Wellness Response:*

*DHW agrees with this recommendation and has already begun to take steps for tracking of deliverables. As a step in this direction, in February of 2014, 2 new tracking documents were developed: 1.) DHW Alternative Funding Document Review and Action Sheet; and 2.) DHW Alternative Funding Shadow Billing Review and Action Sheet.*

*DHW will be developing its deliverable monitoring system over 2014-15.*

6.32 *Payments* – We compared payments made during the audit period to the applicable contracts for 33 alternative payment plan physicians or groups and five academic funding departments. Overall payments were made in accordance with contracts, with only minor differences identified.

## Academic Funding Plans – Contract Compliance

### Conclusions and summary of observations

We found clinical, teaching and research deliverables were met for the three academic funding departments we tested. However, we identified instances in which shadow billings were not always supported by documentation in patient files.

6.33 *Background* – We conducted detailed testing at three academic funding plan departments. We wanted to assess whether these departments were meeting contract deliverables. Each department submitted annual deliverable reports to Health and Wellness. We focused our testing on clinical services provided, and teaching and research activity.

6.34 *Clinical services* – We selected 30 shadow billings from each of the three academic funding plan departments audited. In seven of 90 shadow billings tested, we were not able locate physician notes or other documentation to support that the patient was seen by that physician on the day we selected for testing. Six cases were related to inpatients at one academic funding department. Management acknowledged there should be documentation in patient files to support all shadow billings and indicated this has been communicated to physicians.

6.35 Two of the three academic funding departments selected had clinical activity targets included in their agreements. For each department, the targets were met in both 2011-12 and 2012-13.

6.36 *Teaching deliverables* – Each of the three academic funding departments included in our sample tracked teaching completed during the year. The teaching hours reported were supported by detailed schedules. We identified no issues with the teaching information other than minor differences due to

clerical errors.  We also met with senior leaders from Dalhousie's Faculty of Medicine.  They told us they have no issues with the teaching hours provided by academic funding departments.

6.37    *Research deliverables* – All three academic funding departments maintained supporting documentation for research activities reported.   Similar to teaching statistics, some minor differences were identified, but these had minimal impact on the information reported each year.

## Medavie Blue Cross Audits

### Conclusions and summary of observations

Health and Wellness contracts with a private company (Medavie Blue Cross) to audit payments to physicians.  The Department is responsible for audit selection but there is no established process to ensure high risk alternative funding plans are selected for audit.  During our audit period, only a limited number of alternative payment and academic funding plans were audited.  Furthermore, the scope of these audits was limited as they did not address all deliverables.  The audits that were completed identified potentially serious issues, but the Department did not address them in a timely manner.

6.38    *Background* – Medavie Blue Cross has a contract with the province to disburse and audit payments to physicians.  Medavie's annual audit plan is approved by Health and Wellness.  It considers both fee-for-service and alternative funding arrangements.   The audit plan may include audits of specific alternative payment and academic funding plans.  However, this could vary depending on what the Department requests.  Medavie is only contracted to perform the audit function.  The Department has the final decision on the specific audits completed. Medavie communicates audit results to Health and Wellness.  Department staff are responsible for discussing results with the auditees and addressing any issues identified.

6.39    We reviewed the approved audit plans for the 2011-12, 2012-13, and 2013-14 fiscal years.  We found Medavie completed all alternative payment and academic funding plan audits requested by Health and Wellness during this period.  Results were reported to the Department.

6.40    *Audit selection* – Audit work covers both fee-for-service and alternative funding arrangements.  Audits should focus on high risk areas.  For example, instances in which shadow billings or the number of patients seen by alternative payment plan physicians are lower than expected.  Health and Wellness does not have an established process to select alternative payment and academic funding audits.  Department staff meet with Medavie to discuss the audit plan, but no minutes are kept and decisions are not recorded.  There is no

support outlining why particular alternative payment and academic funding plans were selected for audit.

6.41 Each year, Medavie provides Health and Wellness with a risk analysis that identifies alternative payment physicians who may not be providing an appropriate level of service based on criteria such as shadow billing, days worked and patients seen. There is no evidence that Health and Wellness reviews this analysis.

6.42 During our audit period, the risk analysis identified 69 physicians, 27 of whom appeared on the risk analysis in more than one year. However, we found only four of these physicians were selected for audit. Without a detailed review of the risk analysis, potential issues identified by Medavie may go unaddressed. Additionally, if there are legitimate reasons why certain physicians are included on the risk analysis, this should be documented so these individuals are not continually identified or selected for audit.

*Recommendation 6.7*
**The Department of Health and Wellness should develop a risk assessment process for the selection of alternative payment and academic funding audits. This should include criteria to evaluate the risk analysis provided by Medavie.**

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation and will implement this recommendation. Strengthening the audit and evaluation role of DHW is part of both the new academic funding plan and alternate payment plan models.*

6.43 *Audit frequency* – The Department does not necessarily ask Medavie to audit alternative payment and academic funding plans each year. No alternative payment audits were requested in 2011-12, and no academic funding audits were requested 2012-13. The Department indicated there were no alternative payment audits in 2011-12 due to the development of a new alternative payment model. However, the implementation of this model did not begin until January 2014. The current model was still in use when Health and Wellness decided not to have any audits completed. Department staff were not able to provide a reason for the exclusion of academic funding audits from the 2012-13 plan.

6.44 Alternative funding arrangements cost $251 million in fiscal 2012-13. During the same period, $295 million was spent on fee-for-service payments. The number of audits completed during the audit period is not sufficient given the dollar amount of alternative funding arrangements and the lack of monitoring of these plans by the Department. Regular audits are necessary to monitor physician compliance with the plans and ensure an appropriate level of service is provided.

6.45 *Audit Scope* – The scope of alternative payment and academic funding plan audits requested by Health and Wellness is limited. Alternative payment plan audits only consider hours spent at the physician's clinic. However, many physicians under alternative payment plans are required to provide care within hospitals and nursing homes. This work is not considered in the audit process and can potentially understate the physician's clinical work. This concern has been expressed by physicians when responding to audits.

6.46 There are numerous deliverables outlined in academic funding plans but the scope of audits is limited. Health and Wellness requested the completeness and accuracy of shadow billing be assessed for a specific academic funding department, without consideration of the teaching, research and administrative deliverables not measured through shadow billing. Given the issues we identified with Health and Wellness' lack of monitoring of academic funding plans, excluding significant deliverables from the audit process is even more concerning.

**Recommendation 6.8**
*The Department of Health and Wellness should re-evaluate the mix of audits selected each year to determine if audit resources are being allocated to the appropriate areas.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation and will evaluate the mix of FFS, alternate payment plan and academic funding plan audits conducted as part of DHW's contract with Medavie.*

6.47 Under each academic funding plan, physician departments are required to submit billings for services provided to out-of-province patients so Nova Scotia can be reimbursed by the patient's home province or territory. Each academic funding plan includes a requirement that out-of-province billing is to be audited annually. If actual out-of-province billings are less than 95% of eligible out-of-province billings, Health and Wellness can recover the unbilled amounts from the academic funding department.

6.48 These audits are not being completed annually for all academic funding departments. Two out-of-province billing audits were completed in the 2011-12 fiscal year. Neither academic funding plan met the 95% target stipulated in the academic funding plan. In one instance, potential concerns were identified with the billing data. Health and Wellness has not followed up on the results of the audit to resolve the data issues and potentially recover any unbilled amounts. Management has been aware of these results since February 2012.

**Recommendation 6.9**
*The Department of Health and Wellness should follow up on out-of-province billing audits and collect any unbilled amounts.*

85

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation and will work toward a process of collecting unbilled out-of-province billings.*

6.49   *Timeliness of audit response* – Health and Wellness is not addressing issues identified by Medavie's alternative funding audits in a timely manner.

6.50   For five of the eight alternative payment audits Medavie conducted during our audit period, the results identified significant concerns with the low level of shadow billing and hours worked.  The physicians were shadow  billing between 31% and 64% of their salaries and working 20 or fewer hours per week when the contract requires 37.5 hours per week.  Medavie reported the audit results to Health and Wellness in April 2013.  However, the Department has only met with two of these physicians and that meeting did not occur until September 2013, approximately five months after the audit results were reported.  Furthermore, there is no record of meeting discussions, reasons for the poor results, or expectations for the future.

6.51   Audit results need to be communicated to physicians in a timely manner with plans for subsequent monitoring to correct deficiencies and promote change. Health and Wellness has taken the approach that simply identifying the issues with physicians is sufficient.

6.52   Each of the remaining alternative payment plan physicians audited during our audit period were identified on Medavie's risk analysis submitted to Health and Wellness for the two previous years.  Furthermore, Department staff told us they also had concerns around the level of service provided by these physicians dating back to 2009, but audits were not requested until 2013. The audits reported that the physicians shadow billed 29 to 42 percent of their annual salaries.  Additionally, the audits found that each physician worked fewer hours than their contracts required.  The results of the audit were reported to Health and Wellness in September 2013. Despite the severity of the audit results, as of January 14, 2014 Health and Wellness had not yet scheduled a meeting with the physicians to address the issues. The Department is potentially paying for a level of service that is not being provided.  Furthermore, this could also be impacting access to medical care for the community where these physicians practice.

6.53   This is not the first time the timely communication of audit results has been identified as an issue at Health and Wellness.  An April 2013 review of Medavie's physician payment and auditing functions by Governments' Internal Audit Centre noted that Health and Wellness was not taking appropriate action to respond to issues identified through Medavie's audits. The report recommended Health and Wellness determine and define its response and action plan for audit findings.  Our testing results indicate this has not been addressed.

*Recommendation 6.10*
*The Department of Health and Wellness should establish a process to communicate audit results and discuss Medavie audit findings with physicians in a timely manner. Discussions with physicians should be documented and action plans developed as needed to ensure deficiencies are corrected.*

*Department of Health and Wellness Response:*
*DHW agrees with the recommendation and will discuss audit findings in a timely manner. Minutes of audit meetings are now taken and a process around those meetings is being developed. Action plans detailing how audit findings will be dealt with will be developed.*

*Recommendation 6.11*
*The Department of Health and Wellness should take action to address completed audits that have not yet been discussed with physicians.*

*Department of Health and Wellness Response:*
*DHW agrees with the recommendation and will address this immediately with the physicians involved.*

6.54  *No record of meetings* – Health and Wellness does not maintain a record of meetings held with physicians to discuss audit results. Accordingly, there is no way to know whether matters identified during the audit have a reasonable explanation or if further follow up with physicians will be needed in the future.

6.55  In reviewing the alternative payment risk analysis provided to the Department by Medavie during the audit period, we identified seven physicians that had been previously audited but continued to appear on the risk analysis. For six of these, the Department had no documentation to support the conclusion reached by the audit or why the physician continued to appear on the risk analysis.

## New Alternative Payment and Academic Funding Plan Models

Conclusions and summary of observations

Although the Department of Health and Wellness has done considerable work in developing new academic funding and alternative payment models, many detailed processes still need to be worked out. Despite this, Health and Wellness has proceeded with implementation of new contracts for alternative payment physicians. The lack of deliverable monitoring was identified as a weakness in 2010 but monitoring processes have still not been developed for the new models. The Department began working towards changes in alternative payment and academic funding plans in 2008 and 2010, however, a great deal of work is still required.

6.56   *Background* – Health and Wellness is currently developing and implementing new funding models for both alternative payment and academic funding plans. These are intended to provide greater accountability for funding, along with establishing new deliverables for physicians. External consultants completed program reviews of existing arrangements in 2010. Significant weaknesses were identified in the existing models, including an overall lack of monitoring by Health and Wellness.

6.57   *Monitoring* – The reviews of both alternative payment and academic funding plans, along with our audit, identified an overall lack of monitoring by Health and Wellness. While the Department has done considerable work towards developing new models, there are no processes to monitor contract deliverables at a detailed level. Some high-level processes have been developed, but it is not clear how these will translate into day-to-day monitoring. Without adequate monitoring, it is questionable whether there is any value in establishing deliverables for alternative payment plans and academic funding plans. Recommendation 6.6 earlier in this chapter addresses the need for Health and Wellness to monitor alternative payment and academic funding arrangements.

6.58   The review of academic funding plans also recommended the performance management committees required in each academic funding plan be used to monitor the achievement of contract deliverables. However, as previously reported, these committees were suspended by Health and Wellness in 2010.

6.59   *Contract deliverables* – Although deliverables for new alternative payment and academic funding plans have not yet been finalized, Health and Wellness has signed contracts with alternative payment physicians in one district. Under the new model, district health authorities are responsible for determining alternative payment plan deliverables. The contracts indicate districts have 90 days to develop deliverables after the effective date of the contract. One alternative payment plan physician we met with was reluctant to sign a contract knowing additional details would be added to the contract at a later date. It is unfair to ask physicians to sign a contract that does not specify what is required of them. It is also a poor business practice by Health and Wellness to sign contracts and provide funding to physicians without outlining the services to be provided. Placing the responsibility of developing alternative payment plan deliverables with the district health authorities could result in inconsistent treatment of physicians throughout the province.

*Recommendation 6.12*
**The Department of Health and Wellness should not sign contracts with alternative payment plan physicians until deliverables have been finalized and included in the contracts.**

*Department of Health and Wellness Response:*
*DHW agrees with the recommendation and will work to make this the practice of the Department.*

*Recommendation 6.13*
*The Department of Health and Wellness should review all alternative payment plan deliverables developed by district health authorities for the new model prior to signing contracts to ensure consistency across the Province.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation and has begun to implement it within the new alternate payment plan model. All new alternate payment plan contracts have similar elements to provide consistency across the province, while still allowing for the inclusion of unique deliverables to meet community needs.*

6.60 Deliverables for academic funding plans under the new model have not yet been finalized. When this chapter was written, no new academic funding contracts had been signed.

6.61 *Timeliness* – After identifying issues with existing plans, Health and Wellness began working towards improvements in October 2008 (alternative payment) and July 2010 (academic funding). These processes eventually led to an initiative to develop new models for both types of payment plans. Several years later, the new models have still not been finalized and, in the meantime, there has been limited monitoring of the existing agreements to ensure contract deliverables are met.

6.62 Alternative payment plan physicians in one district health authority began to sign contracts under the new model in December 2013, with an effective date of April 2014. A schedule is in place to continue this process in the remaining district health authorities. However, contracts for group alternative payment plans have not been developed, nor have contracts for some physician specialities. Group alternative payment plan contracts were already identified as an issue in the existing model.

6.63 The development of the new model for academic funding plans is not yet complete. Health and Wellness hopes it will be completed by the end of 2014, with negotiations with academic funding departments tentatively scheduled to begin in January 2015. It is difficult to determine the likelihood of this deadline being met considering some of the recommendations from the 2010 academic funding plan review are still outstanding. Specifically, the review recommended a reduction in the number of academic funding plans and a move away from shadow billing as a method of tracking the level of clinical services provided by physicians. Both recommendations represent significant issues that will impact the development and negotiations of new academic funding plans, but discussions around these topics only began in January 2014. These recommendations should have been addressed much earlier in the process. Even if negotiations do begin in January 2015, it could be well into 2016 before physicians are transitioned to the new model.

# 7 Natural Resources: Mineral Resource Management

## Summary

The Department of Natural Resources is not adequately managing mineral resources in the Province. While the Department is issuing mineral exploration licenses and leases in compliance with the Act and Regulations, many fundamental administrative practices are not completed. A number of our recommendations address the need to implement basic processes which should have been in place prior to our audit. Implementing our recommendations will strengthen and enhance the management of mineral resources in the Province.

The Department's monitoring of mining activity is not adequate. Operator annual reports are not received and reviewed, and site visits are not conducted by the Department as often as intended. The Department is not doing enough to ensure the security it holds is adequate to cover potential costs for reclaiming mining sites. There is inadequate documentation and approval supporting decisions to accept security which does not cover all future site reclamation costs. No assessment has been completed to evaluate the Department's overall exposure for site reclamation costs and whether the risk is being appropriately managed. Additionally, the Department did not track and ensure lease rental payments due for 2012 and 2013 were received as required.

The Department does not have adequate processes to ensure gypsum income tax and mineral royalty payments are complete and accurate. It does not regularly review quarterly returns and payments and it does not have processes to ensure late or inaccurate payments are addressed. We recommended the Department verify the accuracy and completeness of royalty and gypsum income tax payments and follow up on late or inaccurate returns. Without adequate verification the Department may not be receiving full compensation for mineral resources mined in the Province.

Administration of the mineral incentive program needs to be strengthened. We found grant application and reporting deadlines were not always tracked and enforced, and expense requirements were not always supported before final grant payments were made. We also made recommendations for improvement in these areas.

# 7 Natural Resources: Mineral Resource Management

## Background

7.1 The Mineral Resources Act specifies that all mineral resources are owned by the Province. The Act and related Regulations outline the processes for application and issuance of mineral resource rights, annual reporting requirements, as well as royalty rates and payment to the Province. Although gypsum is not classified as a mineral under the Mineral Resources Act, the Gypsum Mining Income Tax Act and Regulations require an income tax be paid on all gypsum mined in the Province, similar to mineral royalties. In 2013, the Department started a review of the Mineral Resources Act and Regulations to identify areas for clarification or improvement to the existing legislation.

7.2 The Department of Natural Resources, through the Registry of Mineral and Petroleum Titles, is responsible for issuing rights to explore for, work, and remove minerals. The Department also coordinates policy and planning to guide development, management, and protection of mineral resources as well as to promote the scientific understanding of the geology of the Province for use by government, industry, and the public.

7.3 In August 2013, the Department launched an electronic information system for tracking and recording mineral claims in Nova Scotia called Nova Scotia's Registry of Claims or NovaROC. The system provides real time maps of mineral and petroleum claims in the Province, and replaces the paper-based system previously in use. Registered clients can apply for exploration licenses and mineral leases, and submit reports electronically. Development of the system started in the fall of 2011. As of January 2014, the Department was continuing work with the developer to address system implementation issues.

7.4 Mineral rights in the province are based on map claims, which are predefined areas established by the Department. Each claim is approximately 40 acres (16 hectares) in size. Up to 80 connected claims can be included under one license, and multiple licenses can be held. Mineral exploration licenses are required by anyone who wants to prospect and search for minerals or extract minerals. Licenses are renewed annually. License holders are required to perform a minimum amount of work for each license. Annual work requirements increase the longer a license is held. Work completed is documented in a prospector's statement, outlining the days of prospecting and the observations made, or in a technical report outlining observations, samples taken, aerial surveys, drill core samples, and other testing. Reports

are confidential for two years before they are released to the public.  Credit for work in excess of the required amount can be carried forward for up to nine years.  License holders may renew their license by paying a fee in lieu of the work requirements once in the first five years, and once every five years thereafter.

7.5     A mineral lease allows the holder exclusive rights to mine the specified minerals for the term of the lease, usually 20 years.  Mineral leases are obtained once an applicant intends to proceed to developing an active mine. Applicants are required to provide a written intention to undertake production within two years and must provide information such as mine and reclamation plans.  Applicants also provide reclamation security as determined by the Department.  Mineral lease holders are required to maintain all approvals required by the Department of Environment;  they must pay royalties to the Province on mineral production; pay an annual lease rental fee; and submit annual reports to the Department.

7.6     The Department launched the Nova Scotia Mineral Incentive Program in 2012 to promote mineral exploration activities in the Province.  It provides approximately $700,000 per year for grants under one of three streams.

- Prospector grants provide up to $15,000 in financial assistance to registered prospectors  for small scale mineral exploration activities in order to find economically viable mineral resources in Nova Scotia. To be eligible, applicants must have valid claims in good standing with the Registry of Mineral and Petroleum Titles.

- Advanced project grants provide funding to move projects closer to the production stage.  Advanced grants provide up to 50% of eligible costs, to a maximum of $100,000, for approved activities such as trenching, core drilling, surface and underground sampling, and surveys.  Any mineral exploration company or registered prospector is eligible to apply, provided they hold the mineral rights or an option to work the claims listed in the application.

- Prospector marketing grants provide funding, up to $1,250 per recipient, to any registered prospector to assist them in attending mineral industry conferences or trade shows to market their mineral property for option or sale.  Any registered prospector having Nova Scotia mineral claims in good standing available for sale or option is eligible to apply.

## Audit Objectives and Scope

7.7     In winter 2014, we completed a performance audit of the Mineral Resources Branch at the Department of Natural Resources.  The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

7.8     The audit objectives were to determine whether:

- exploration licenses and mineral leases are issued and monitored in compliance with the Act, Regulations and Department policies;

- adequate processes are in place to ensure environmental concerns are addressed related to mineral extraction and reclamation;

- mineral licensing and leasing processes are in line with Departmental strategic goals for geologic resources;

- royalty payments comply with legislated requirements and are assessed for accuracy and completeness;

- applications and payments under the Mineral Incentive Program are appropriately assessed against eligibility criteria and grant requirements; and

- the effectiveness of the Mineral Incentive Program is monitored, measured and evaluated.

7.9     Generally accepted criteria consistent with the objectives of the audit did not exist.  Audit criteria were developed specifically for this engagement using both internal and external sources.  Criteria were accepted as appropriate by senior management of the Department.

7.10    Our audit approach included interviews with management and staff; documentation of systems and processes; testing licensing and lease applications and reporting against legislated requirements; testing of royalty payments and mineral incentive grants for compliance with requirements; and examination of legislation and policies.  Our audit period included activities conducted primarily between April 1, 2011 and October 31, 2013.

## Significant Audit Observations

### Overall Comments

7.11    Throughout this chapter we identified many fundamental weaknesses in the management of mineral resources at the Department of Natural Resources.

Our observations highlight areas in which the Department has failed to adequately implement basic administrative practices to manage its activities. We noted, for example, there is no process to ensure royalty payments are correct or to follow up when lease rental payments are not received.  These are fundamental processes which the Department should have identified and put into effect.  Implementation of our recommendations will strengthen and enhance the management of mineral resources in the Province.

## Mineral Exploration Licensing and Leasing

### Conclusions and summary of observations

The Department is issuing exploration licenses and mineral leases in accordance with the Mineral Resources Act and Regulations.  However, it is not doing an adequate job of monitoring mining activities and ensuring reclamation security for mining projects is sufficient to cover potential costs to reclaim the sites if operators fail to do so.  Operator annual reports are not reviewed as required and site visits are not conducted as often as intended. The Department has not prepared guidelines for staff in estimating reclamation costs and does not regularly review and update estimated reclamation costs for specific sites to determine whether the security held is sufficient.  The Department has not prepared a risk assessment to evaluate its overall risk for reclaiming mining sites.  We found significant delays in the Department's review, approval and notification of claims renewals.  The Department did not track and ensure lease payments for 2012 and 2013 were submitted.  We recommended they track and follow up on lease payments not received.

7.12   *Reclamation security* – The Department is responsible for oversight and issuing licenses to explore for, and leases to develop, the province's mineral resources.  To develop a mine site, a mineral lease holder must provide security to the Department to cover the cost to reclaim the site.  The amount of security must be acceptable to the Department of Natural Resources as well as the Department of Environment.  Reclamation of a site includes removal of any buildings and structures, filling in pits, stabilizing tailings disposal sites, surface contouring, and revegetation work.  Depending on the mineral extracted and the mining method, sites which are not reclaimed may only require limited site work by the Department, such as erecting fencing, to safely secure the site and may not pose any ongoing environmental concerns to the surrounding land.

7.13   Security, in the form of cash, letter of credit from a bank, or bond from a third party, can be used to reclaim the site in the event the operator fails to do so.  To arrive at the amount of security needed, the Department normally calculates its own estimate of the cost to reclaim the mine site.  It uses this estimate in discussions with the mining operator about the methods to be used

to reclaim the site and the costs involved.  Reclamation security estimates are reviewed by Department staff before a final amount is accepted.

7.14    The Department has not developed guidelines for staff in estimating reclamation costs.  The Mineral Resources Regulations include the types of activities to be included in the reclamation security calculation; however, there are no guidelines addressing how estimates should be calculated.  The lack of clear guidelines to calculate cost estimates could result in the Department establishing inadequate security on a project, creating a potential liability to the Province if the operator fails to reclaim the site.  In August 2012, the Department, through participation on a multi-department committee, identified the need to formalize the process for setting reclamation security amounts.  A subcommittee was established to address this issue.  As of January 2014, this committee had not met.

*Recommendation 7.1*
*The Department of Natural Resources should develop guidelines to assist staff in calculating reclamation cost estimates.*

*Department of Natural Resources Response:*
*Agree.*

*The Department will update and formalize the existing guidelines to provide direction and guidance for DNR staff in the preparation of reclamation cost estimates.*

*The ongoing review of the Mineral Resources Act (the Act) may include revisions to sections (e.g., Section 77 of the Mineral Resources Regulations) and may add new sections to provide clarity to government and industry on how reclamation securities will be calculated.*

*Schedule: To be completed in 2014-15.*

7.15    Management indicated they seek to obtain 100% of the estimated cost to reclaim a mine site at the point of greatest site disturbance.  Some operators plan to reclaim a site while they mine, reducing the security required.  Management noted there are sites which have less security in place than the estimated cost to reclaim the sites.  Management indicated they may accept less than 100% of the estimated cost to reclaim a site, based on factors such as the size of the company and its ability to pay, and the Department's assessment of the risk associated with the mining operation.  We found the rationale for accepting less than 100% of estimated reclamation costs was not adequately documented in the files and staff did not obtain senior management approval.  These decisions involve an element of risk that should be clearly documented and approved at a senior level in the Department.

*Recommendation 7.2*
*The Department of Natural Resources should document its rationale and obtain approval from senior management when less than 100% of the estimated reclamation cost is obtained as security.*

*Department of Natural Resources Response:*
*Agree.*

*In the future, the rationale for instances where less than 100% of the estimated reclamation cost is obtained as security will be documented.*

*As part of the review of the Act, and in consultation with Nova Scotia Environment (NSE), reclamation bonding issues will be addressed. DNR may study and propose a self-bonding process for some projects that would provide security for the province and allow for less than 100% of the reclamation security to be held by the province.*

*DNR acknowledges that most of the bonding issues are related to some mines which have been operating for a long time (>20 years) and have had neither bonds nor reclamation plans reviewed on a regular basis. For new projects, reclamation plans, costing and security bonds are thought to be adequately addressed by existing DNR and NSE policies.*

*Schedule: On completion of the Act review (anticipated 2016-17).*

7.16   The Department does not maintain a complete list of currently-held reclamation security compared to the total estimated cost to reclaim mine sites. Although the Department determines the level of security it is prepared to accept on a project by project basis, it has not prepared an assessment of the overall risk for all projects. The lack of a global risk assessment could result in the Province being exposed to a level of risk the Department has failed to identify. The Province's potential liability for future reclamation work may be greater than anticipated if the risk of loss is not being appropriately identified and managed by the Department.

*Recommendation 7.3*
*The Department of Natural Resources should assess the estimated cost to reclaim mining sites against the current security held, and complete an assessment of the overall risk to the Province. If the existing security is inadequate, steps should be taken to reduce identified risks to acceptable levels.*

*Department of Natural Resources Response:*
*Agree.*

*Commencing with the 2013 Annual Report review process and follow-up site visits, DNR will compare the existing estimated reclamation costs for each Mineral*

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*Lease and Non-Mineral registration with the amount of security held, conduct an assessment of the risk to the province in cases where inadequate security is held and recommend ways to reduce the risk.*

*Schedule: To be completed in 2014-15.*

7.17    The Department does not regularly review or update the estimated costs to reclaim mining projects.  The Mineral Resources Regulations allow the Department to review reclamation security every two years.  If the Department does not regularly review and update estimates, increases in fuel, labour or other significant costs could mean it does not have sufficient security to reclaim sites.  Department management told us that significant changes to mine sites, such as changes to the remediation plans, or changes to the size of mining operations could trigger reviews of reclamation security.

**Recommendation 7.4**
**The Department of Natural Resources should regularly identify and assess sites requiring updated cost estimates, and ensure adequate security is maintained.**

**Department of Natural Resources Response:**
*Agree.*

*Commencing with the 2013 Annual Report review process and follow-up site visits, DNR will identify those sites that need to have existing reclamation cost estimates updated in order to ensure that adequate security is maintained.*

*Schedule: Ongoing; to be completed in 2015-16.*

7.18    *Mineral exploration licenses* – Mineral exploration licenses are required by anyone wanting to prospect and search for minerals.  New applications or renewals of exploration licenses require an application form be completed and submitted, indicating the land claims requested and providing the appropriate fee.  Applications are reviewed to determine if the land claimed is available, and to identify any which may have restrictions, such as those within provincial parks or ecologically sensitive areas.  Applications are rejected if the land claimed is already held under an exploration license.  Any restrictions or areas excluded are noted on the license.

7.19    We tested a sample of 30 mineral exploration license applications.  We found all 30 applications were in compliance with the Act and Regulations, and were issued appropriately.  We also tested a sample of five rejected applications, and found all five applications had been appropriately rejected.

7.20    *License annual reports* – Annual reports submitted to satisfy license requirements are reviewed by the Department.  The review includes ensuring

lab sample results and geological data gathered during prospecting are included with the report. The reviewer also ensures the report format and layout meets Department standards. The 21 files we examined complied with annual report requirements.

7.21    *Application and renewal processing* – The Department does not monitor the time it takes to process claims applications. Although estimated waiting periods are listed on the application website, management told us the stated wait times do not accurately reflect the Department's processing times. The longest waiting period for license processing listed on the website was 27 business days. We found 13 of 30 applications we tested took 100 days or more to be processed. The average processing time of these 13 samples was 223 days, with a maximum of 463 days between the application and approval notification. Of the five rejected applications we tested, four took 100 or more days between receipt of the application and notifying the client of the decision.

7.22    Licenses must be renewed each year. Once a renewal has been assessed and meets the requirements, a certificate of compliance is issued to the license holder, extending the license for one year. Until a certificate of compliance has been issued, prospectors cannot be guaranteed continued approval to work their claims. We noted instances in which approval decisions or notifications were delayed as detailed below.

- Two technical reports were not reviewed at least three months after they were received.

- Six months after a technical report was reviewed and accepted, a certificate of compliance had not yet been issued.

- Eight of the 21 renewal files tested had significant delays in signing and issuing the certificate of compliance, from four months into the renewal period to three months after the one-year extension had expired.

7.23    Failure to adequately monitor license applications and renewals to ensure decisions are made in a timely manner may result in unreasonable delays and in prospectors working on claims without authorization to do so. Department management told us that the staff position responsible for reviewing and assessing the reports was vacant between June 2013 and January 2014.

> *Recommendation 7.5*
> *The Department of Natural Resources should implement and monitor processing time performance standards for mineral exploration license applications and renewals.*

***Department of Natural Resources Response:***
*Agree.*

*DNR is committed to reviewing and implementing process efficiencies in the Registry of Mineral and Petroleum Rights (the Registry) with a goal to reducing approval times. A significant step to improving efficiency was the introduction of the new, electronic registry in August 2013. The electronic application called NovaROC, has had some programming and data migration issues that are currently being resolved. NovaROC will enable timely processing of licenses and leases. Design and development of the NovaROC application required diversion of Registry staff duties and this contributed to a backlog of un-processed applications that is currently being addressed.*

*DNR has filled the position (replaces a retirement) responsible for review of assessment files in the Stellarton office. The backlog of assessment files should be reviewed and approved before the end of 2014.*

*Schedule: Ongoing.*

7.24  *Mineral leases* – A mineral lease allows the holder exclusive right to mine specified minerals. Mineral lease applications are reviewed by the Department to ensure the applications meet legislated requirements. Staff use a checklist to make sure the requirements are appropriately addressed. We tested five mineral lease applications and renewals and determined all five were largely compliant with the Act and Regulations. We noted two deviations.

- One file did not have evidence the Department assessed the amount of reclamation security required and determined it to be appropriate. The Province may be holding inadequate security to reclaim the site in the event the operator fails to do so.

- One file only had a copy of the signed lease. The original of the document was not on file in the Registry of Mineral and Petroleum Titles as required.

7.25  Lease holders must submit an annual report on or before the first day of March. Reports provide information and maps on the layout and status of the site, information on the minerals remaining, changes to the mining method and changes to the approved reclamation plan. Reports also provide information on the amount of mineral produced and shipped during the year, which provides useful information to compare against quarterly royalty payments. We discuss this further in the royalties section later in this chapter.

7.26  We examined a sample of 10 annual reports from the 2011 and 2012 calendar years. We found five of the 10 reports were not submitted by the reporting deadline. Two reports were submitted 314 days late, while another report

was submitted 104 days late. We also noted issues concerning the quality of the information reported.

- One report did not provide drawings or maps showing the outline of the existing mine workings relative to the surface features, facilities, watercourses, property boundaries or waste storage areas.

- Two reports did not provide a plan clearly identifying the mineral development work, waste, and production intended for the coming year.

- Two reports did not provide a summary of the mineral extracted and the reserves.

- One report did not indicate the amount of the resource shipped and the destination.

7.27 There was no evidence the Department reviews lease annual reports to ensure they are compliant with regulated requirements. Staff indicated a review form was used in the past but was discontinued at least seven years ago. The Department does not record the reason if an annual report is not received. Based on a review of the 2011 calendar year, 18 companies did not provide an annual report as required. Eleven of those same companies did not provide a report in 2012. The Department maintains a list of reports received which has space for the reviewer's signature. This column was not used in either 2011 or 2012.

*Recommendation 7.6*
*The Department of Natural Resources should review and assess lease annual reports to ensure they meet reporting requirements. The review should be documented and report deficiencies followed up.*

*Department of Natural Resources Response:*
*Agree.*

*DNR will develop check-lists and consistent, standard practices for reviewing Annual Reports (i.e., Form 16) and Mineral Leases, and will ensure that annual reports will be received from industry by deadlines. The revised forms will be used by DNR staff, beginning with the 2013 Annual Reports, to ensure that Annual Reports meet reporting requirements. In addition, relevant information in the Annual Reports will be relayed to the Mine Assessor regarding royalty/tax payments received. The availability of the electronic Registry system (NovaROC) will improve the tracking of annual reports.*

*Schedule: Formalization and implementation of a practice for reviewing reports is underway and is expected to be completed in 2014-15.*

7.28 *Lease payments* – The Mineral Resources Act requires companies with mining leases to pay a lease rental fee to the Department for each claim

included under the lease. The Department does not have an adequate process for tracking lease rental fees and following up when they are not submitted. Of the 42 mining leases recorded for 2013, only 17 (40%) made lease payments as required, while the remaining 25 (60%) did not. The value of these lease payments range from $114 to $3,990 per lease, and totaled approximately $32,000 for the year. For 2012, only 63% of lease payments had been made as required. The Province should collect all lease rentals owed as claims under an active lease are not available for other interested prospectors to develop.

### Recommendation 7.7
**The Department of Natural Resources should establish and implement a process to track and receive lease payments on a timely basis.**

**Department of Natural Resources Response:**
*Agree.*

*The Registry and Mine Assessor will update the current hard-copy, manual leger system and will establish a modern, electronic tracking and cross-reference system for all Mineral Leases designed to better record all lease rental and royalty payments received on a quarterly and annual basis.*

*Schedule: To be completed in 2014-15.*

7.29 *Site visits* – The Department has an informal policy to visit active mine sites on an annual basis, with visits usually arranged after the lease annual reports are received. Site visits allow the Department to observe the mine sites and identify any issues. Visits are supposed to be documented in a report, outlining who went to the location, what was observed, and any future follow-up actions required. Of the 10 annual reports we tested, four did not have evidence of a site visit subsequent to filing the annual report. Although the Department also completes annual aerial flyovers and photos of mine sites which allows for observation of surface activity, site visits provide opportunity for more in-depth monitoring.

### Recommendation 7.8
**The Department of Natural Resources should develop and implement a policy on completing site visits, including documentation requirements and frequency.**

**Department of Natural Resources Response:**
*Agree.*

*As part of the ongoing review of the Act, DNR will revise and implement a policy on completing site visits, including documentation requirements and frequency, recognizing that not all projects will require an annual site visit.*

*Schedule: To be completed in 2015-16.*

7.30    When a mining site ceases production, operators must reclaim the site to the satisfaction of the Department within 12 months, unless a longer period is approved.   Since the Department of Environment is responsible for environmental matters related to mining projects, both departments work jointly to monitor progress on reclamation.   When an operator indicates the reclamation of a site is complete or partially complete, staff from both departments visit and assess the site, including reviewing and evaluating the work done and estimating any work outstanding.  We reviewed three projects where partial or full release of the reclamation security was requested, and found all three projects met the requirements, including appropriate approval from the Department of Environment.

7.31    *Electronic reporting* – The new information system for tracking and recording mineral claims initially included limited reporting functions.  Additional reports were being developed when we completed fieldwork in January 2014.  The system can provide financial reports on client fees paid and refunds issued, and information on clients, license renewals, regrouping or transfers of licenses, and summaries of work credits submitted.  Management stated reports were run as needed during system implementation.  Management told us they intend to have a regular reporting schedule once system implementation has been completed.

> ### Recommendation 7.9
> **The Department of Natural Resources should identify their information needs and implement regular reporting from the mineral information system.**

**Department of Natural Resources Response:**
*Agree.*

*Once fully functional, the NovaROC application will provide data required to create reports on a monthly, quarterly and annual basis. These reports will provide current, accurate descriptions of the status of Nova Scotia mineral tenure. It is anticipated the reporting functions in NovaROC will be operational before the end of 2014-15. Any future reporting gaps or deficiencies in NovaROC will be identified and addressed through system maintenance and improvement.*

*Schedule: NovaROC reporting functions will be operational in 2014-15.*

## Mineral Royalties and Gypsum Income Tax

### Conclusions and summary of observations

The Department does not have adequate policies and processes to ensure mineral royalty and gypsum income tax payments are complete and accurate.   The Department does not regularly review quarterly returns, and late or inaccurate

payments are not followed up. We recommended the Department establish processes to assess whether royalty and gypsum income tax payments received from operators are complete and accurate.

7.32 *Royalty rates* – The Mineral Resources Act requires mine operators to pay a royalty to the Province. Royalty rates are established in the Mineral Resources Regulations based on the mineral being mined. Royalty payments are calculated either as a rate per ton, 1% of the net value received by the producer, or 2% of the net value at the mine.

7.33 The Mineral Resources Regulations do not define how net value is to be determined. The Department interprets net value as meaning net revenue based on the Mineral Resources Act. Although most mine operators calculate royalties based on tonnage, for those operators using net value, such as limestone producers, the Department has not communicated its interpretation of net value and is unaware of how the operators are calculating the royalties. The lack of clarity on the calculation method for net value could result in inaccurate payment of royalties to the Province.

> **Recommendation 7.10**
> **The Department of Natural Resources should define and communicate the basis for calculation of mineral royalties to those operators not using a rate per ton.**

*Department of Natural Resources Response:*
*Agree.*

*To provide clarity, the Mine Assessor will prepare a definition for "net value" and provide it to the Lessees who do not use a rate-per-ton calculation method. The new definition will be included in the revised Act and Regulations. In the meantime, DNR will continue to meet with producers in advance of production to explain and demonstrate the royalty calculation.*

*Schedule: Ongoing. Clear methods for calculation of royalty payments will be included in the revised Act and Regulations (anticipated 2016-17).*

7.34 Gypsum mine operators must pay an income tax on the amount of gypsum recovered. The gypsum income tax rate is established in the Gypsum Mining Calculation of Income Regulations. For purposes of this chapter, we include gypsum income tax payments in the following discussions on royalties.

7.35 *Quarterly returns* – Mine operators are required to submit quarterly returns for both gypsum and mineral royalties. The royalty or tax payment is based on tons reported by the operator and the rates as defined in the Regulations.

7.36 The Department's review of quarterly returns is not adequate. Of the 30 returns we tested, 29 did not have evidence of review. We found two returns

used an incorrect royalty rate, resulting in underpayments totaling $9,026. Following our identification of these differences, the Department contacted the operator and received the additional payments.  One return did not have any information on how the payment was calculated.  We were unable to verify the mathematical accuracy of the return or the appropriateness of the determination of net value.

7.37    The Department has not established guidelines or processes for the review of quarterly returns.  Without an appropriate review process, incorrect royalty payments may not be detected and corrected by the Department, as the above examples demonstrate.

> *Recommendation 7.11*
> *The Department of Natural Resources should establish and implement guidelines for the review of quarterly royalty or tax returns, including follow up of inaccurate returns or returns with incomplete information.*

*Department of Natural Resources Response:*
*Agree.*

*The Mine Assessor and the Registry are committed to implementing a structured process for tracking of quarterly royalty/tax returns, including following up of inaccurate returns or returns with incomplete information. Recommendation 7.11 highlights the need for DNR to provide additional support to the Mine Assessor, or to transition some of the current Mine Assessor's duties to the Registry. The Mine Assessor's duties will be reviewed in 2014-15*

*Schedule: To be completed in 2014-15.*

7.38    Quarterly returns must be submitted to the Department by the 20th of the month after the quarter end.  The Department does not track and monitor returns to ensure they are submitted as required.  We tested 30 returns to determine if they were received before the deadline.

- Five returns were signed by the operator after the due date.  The royalties were deposited from 33 to 243 days after the due date.  In all five cases the Department took no action to follow up on returns not received on time.

- For nine cases, we were unable to determine if the returns were submitted by the deadline because they were not dated.  The royalties were deposited from 3 to 191 days after the due date.

7.39    The Mineral Resources Act and the Gypsum Mining Income Tax Act allow the Department to charge interest on late payments and charge penalties on inaccurate returns or for failing to submit required returns and reports. Management stated they do not normally charge interest or penalties on late

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returns.  Given the Department does not track when returns are received, it does not have the information needed to appropriately charge interest and penalties.  Of the 30 returns tested, none of the five operators who filed late returns requested an extension to their filing deadlines.  The Department did not charge interest or penalties on these late returns.

> ### Recommendation 7.12
> **The Department of Natural Resources should establish and implement guidelines for the tracking and use of interest and penalties on late or inaccurate royalty or tax returns.**

**Department of Natural Resources Response:**
*Agree.*

*DNR will consult with the Department of Finance and may conduct a jurisdictional review to examine policies and tools for use of interest and penalties on late or inaccurate royalty/tax returns. Implementation may coincide with implementation of the revised Act.*

*Schedule: To be completed by the end of 2015-16.*

7.40    Mine operators must submit annual reports to the Department as part of their lease terms.  The reports submitted are to include information on mineral production and shipments during the year.  The Department may also request other information, such as financial statements, reports, invoices or other documents to provide support for production amounts.  The Department does not compare the annual reported shipments or production amounts to the quarterly returns for consistency, nor has it requested additional support. The comparison of annual reports or other supporting documents to quarterly returns could identify potential differences that the Department may wish to investigate further.  It would also act as an important control to assess the reasonableness of royalty or tax payments received.

7.41    We obtained returns and annual reports for the 2011 and 2012 calendar years to identify any significant differences.  We selected eight operators, one of whom did not have any production in 2011.  Our analysis found discrepancies as noted below.

- There were four instances in which royalties paid were less than would have been paid if the annual production report amounts were used. The differences in reported quantities ranged from a low of 591 tons up to 573,844 tons, representing possible royalty values from $77 to $298,400.

- There was one instance in which royalties paid were more than would have been paid if the annual production was used.  The difference reported was 18,015 tons, with an approximate royalty value of $9,370.

- There were four operators who either did not provide an annual report, or did not provide the information in their annual reports to allow a comparison to be completed.

7.42    Since we do not know whether the annual reports or the quarterly returns are more accurate, we were unable to determine if any of these differences should have resulted in changes to the royalty payments made to the Province. However, such differences should be identified and investigated by the Department to ensure the correct royalties or taxes are received.

*Recommendation 7.13*
***The Department of Natural Resources should compare information in operator's annual reports to royalty or tax payments received and investigate significant variances.***

*Department of Natural Resources Response:*
*Agree.*

*The Mine Assessor and the Registry are committed to implementing a structured process for comparing information in operator's annual reports to royalty/tax payments received and to investigate significant variances. Recommendation 7.13 highlights the need for DNR to provide additional support to the Mine Assessor, or to transition some of the current Mine Assessor's duties to the Registry. The Mine Assessor's duties will be reviewed in 2014-15.*

*Schedule: To be completed in 2014-15.*

*Recommendation 7.14*
***The Department of Natural Resources should establish and implement guidelines to identify and periodically request additional information, such as financial statements, reports, or other supporting information, to verify the accuracy and completeness of royalty or tax returns.***

*Department of Natural Resources Response:*
*Agree.*

*DNR will establish and implement guidelines to identify and periodically request additional information, such as financial statements, reports, or other supporting information, to verify the accuracy and completeness of royalty/tax returns using the authority of the existing Act and any enhancements accepted in the future, revised Act.*

*Schedule: Guidelines to be implemented by the end of 2015-16.*

7.43    The Department does not regularly monitor or assess the appropriateness of the Province's royalty rates.  Management noted royalty rates were last reviewed when legislation was updated in 2004.  Rates have been periodically

adjusted by the consumer price index as part of Government's general assessment of fees, the latest in April 2013.  These changes do not take into consideration the competitiveness of the resources markets, the demand for specific minerals, or Government's economic goals.  Without regular review of royalty rates, the Government may not be receiving the full benefit from the Province's mineral resources or providing an appropriate competitive environment for mineral resource development.

*Recommendation 7.15*
**The Department should determine an appropriate timeframe and implement regular review of royalty rates to ensure they reflect the optimum economic benefit to the Province.**

*Department of Natural Resources Response:*
*Agree.*

*DNR is committed to implementing a predictable, transparent and competitive royalty regime in Nova Scotia as part of the review of the Act. A jurisdictional review will provide background on how royalties are calculated and set elsewhere in Canada. The revised Act may include a requirement that royalty rates be reviewed and revised on a regular basis. DNR will continue to work with the provincial/territorial Mine Assessors to regularly review Canadian royalty rates in the context of competitiveness of the resource markets, the demand for specific minerals and the economic goals of governments.*

*Schedule: On completion of the Act review (anticipated 2016-17).*

## Mineral Incentive Program

Conclusions and summary of observations

The Department's administration of the mineral incentive program needs to be strengthened.  We found instances in which the Department issued grants to applicants who did not meet eligibility criteria.  The Department does not always enforce deadlines for grant applications and reports.  We identified completed projects for which the grant recipients did not submit support for their expenses before final payment was made.  Grant applicants are required to obtain three quotes for expenses over specific thresholds; this requirement was not enforced by the Department.  We also found HST was reimbursed to applicants when they may be eligible for federal government reimbursement for the tax.

7.44   *Program goals* – The Department's overall objective for the mineral incentive program is to promote and increase exploration and mineral development activities in the Province.  At the time of our audit, the three-year program was in its second year of operation.  To determine whether the program

should continue after the three-year period, the Department needs to evaluate whether it has been successful in achieving its objectives.

> ***Recommendation 7.16***
> ***The Department of Natural Resources should evaluate the success of the mineral incentive program in achieving its objectives prior to making a decision on whether to continue the program.***

**Department of Natural Resources Response:**
*Agree.*

*In consultation with industry stakeholders, DNR will evaluate the success of the first two years of the Mineral Incentive Program.*

*Schedule: Program evaluation to be completed before the end of 2014 (calendar year).*

7.45   *Eligibility criteria* – The Department's eligibility criteria for the three grants under the mineral incentive program are clearly communicated to grant applicants.  The Department's website includes information on deadlines for applications, contact information, and application forms.  Information on the grant evaluation process and the considerations to be used to evaluate the applications is also clearly documented.  To determine if applications met all eligibility criteria, we tested a sample of 15 prospector grants (for small scale mineral exploration), 15 advanced project grants (for moving mining projects closer to production), and three marketing grants (for attendance at industry trade shows and conferences).

7.46   Of the 33 successful applicants selected, five did not meet the eligibility criteria.  There was no evidence the applicants held the mineral rights which the application related to.

- Two advanced project grant applicants indicated they had the option to work claims on behalf of another license holder.  There was no agreement filed with the Registry of Mineral and Petroleum Titles and no evidence the Department verified the agreements existed.

- Two prospector grant applicants did not hold the rights to all the claims included in their applications.  There was no evidence this difference was identified or followed up by staff reviewing the applications.

- One marketing grant applicant did not hold the rights to any of the claims included on the application.

7.47   Management stated the risk in these situations was very low as it would be unlikely applicants would undertake work for which they would not be able to benefit.  While we recognize the risk may not be high, good practice

would require the Department verify successful applicants meet eligibility requirements.

> **Recommendation 7.17**
> **The Department of Natural Resources should verify and document that successful grant applicants meet established eligibility criteria.**

*Department of Natural Resources Response:*
*Agree.*

*The existing grant application and review process is robust, although DNR recognizes that business relationships between prospectors/companies may change throughout the year and during a 'grant cycle'. There are also occurrences when one prospector may be assigned to attend a trade show to market mineral prospects on behalf of other prospectors, and there are occurrences of prospectors dropping or lapsing claims during the year. These examples of changing business relationships may suggest an appearance of ineligibility. To confirm eligibility, the Registry will work with companies to register option agreements with the Registry.*

*Schedule: Verification and documentation of successful grant applicants meeting eligibility criteria will be completed during the 2015-16 application process.*

7.48   *Evaluation of applicants* – Advanced project grants and prospector grants are evaluated by a review committee comprised of three Department staff. Applicants who do not have the capability to do the proposed work, or potential conflicts which could prevent the project from proceeding, such as working in a protected wilderness site, are rejected.  Applications are assessed based on a variety of factors including the market potential of the resource, the quality of the application, the degree of innovation of the proposal, and the likelihood of positive results.  All 30 advanced project grants and prospector grants we tested were evaluated by the review committee using a consistent process.

7.49   Management indicated marketing grant applications are evaluated through discussions between review committee members and other staff.  Applicants are selected based on the Department's assessment of the marketability of their claims.  This process is not documented in the files.

7.50   *Application and reporting deadlines* – To be considered for funding, applications must be submitted by the Department's application deadline.  For one prospector grant and one advanced project grant, we found no evidence that the applications were received by the application deadline.

7.51   Prospector grant and advanced project grant recipients must file a final report by an established reporting deadline to receive their final payment.   The

Department is not adequately ensuring reports are received on time.  We found no indication that five of 17 final reports were received by the reporting deadline.  Final reports for the remaining 13 projects were not due at the time of our testing.

> **Recommendation 7.18**
> **The Department of Natural Resources should develop and implement processes to receive grant applications and reports by established deadlines.**

*Department of Natural Resources Response:*
*Agree.*

*DNR notes that of the 30 advanced project and prospector grants reviewed by the Office of the Auditor General (OAG), only two lacked documented evidence that the applications were received on time. DNR will reinforce processes to ensure that all incoming documents are time stamped.*

*DNR suggests that the existing program announcement, application, review and approval processes are robust. DNR will review existing program administration practices to ensure application and reporting deadlines are met. DNR notes the OAG observation that, "All of the 30 advanced project grants and prospector grants we tested were evaluated by the review committee using a consistent process" (OAG Report, Section 7.48).*

*Schedule: Review and improvements of the program administration are ongoing.*

7.52    *Grant expenses and payments* – Successful grant applicants must obtain quotes for expenses in excess of $5,000 for prospector grants, and in excess of $10,000 for advanced project grants, unless the Department has approved sole sourcing in advance.  Of the 17 completed projects we tested, 13 had expenditures requiring three quotes.  None of the files contained evidence that three quotes were obtained.  One of the 13 files included a note outlining why a specific contractor would be used.  There was no evidence the Department approved the use of sole sourcing in this instance.

7.53    Of the 17 completed prospector grants and advanced project grants, we identified two which did not have invoices supporting all expenses claimed.  One advanced project grant had no supporting invoices for $72,008 of eligible expenses and one prospector grant was missing an invoice for $250.  The Department paid the approved grant funds.  Failure to obtain supporting documentation for expenses claimed could result in grant payments when the required expenses were not incurred.  It also prevents the Department from verifying the reasonability of expenses paid.

*Recommendation 7.19*
*The Department of Natural Resources should verify and document mineral incentive grant requirements are met before final payments are made.*

*Department of Natural Resources Response:*
*Agree.*

*DNR will strengthen existing processes for reviewing expense reports from grant recipients and ensure that all requirements are met before final payments are made. Regarding the absence of a supporting invoice for $72,008 (see OAG Report, Section 7.53), a February 21, 2013 letter from the program coordinator to the grant recipient states, "I am pleased to inform you that the report is suitable and that you [the grant recipient] have included all the necessary invoices pertaining to the NSMIP-funded activities". The letter appears to demonstrate that an invoice was included with the final reporting. We are working with the applicant to obtain a copy of the missing receipt.*

*Schedule: DNR will verify and document that all grant requirements are met before final payments are made in 2014-15.*

7.54   *HST eligibility* – At a minimum, advanced project grant recipients must incur eligible expenses equal to twice the approved grant.  If the grant recipient does not spend the minimum amount, the grant is reduced.  Of the eight completed advanced project grants we tested, four included HST (harmonized sales tax) as an eligible cost.  The applicants may be eligible for federal government reimbursement of HST.  Of the four projects, we identified two in which the applicants would have received less overall grant funding totalling $4,467 had HST not been included.  The remaining two applicants had sufficient eligible expenses and would not have received reduced grant payments. We were unable to determine whether one of the applicants included HST as invoices were not provided to support the expenses claimed.  The remaining three applicants did not claim HST.

*Recommendation 7.20*
*The Department of Natural Resources should exclude HST as an eligible grant expense for applicants eligible for federal government reimbursement of the tax.*

*Department of Natural Resources Response:*
*Agree.*

*The Department of Natural Resources will exclude HST as an eligible grant expense for applicants eligible for federal government reimbursement of the tax.*

*Schedule: To be implemented in the program in 2014-15.*

**Department of Natural Resources Additional Comments**

This audit by the Office of the Auditor General (OAG) is timely for several reasons. Aligned with the goals of the Natural Resources Strategy, the Department of Natural Resources (DNR) launched a review of the Mineral Resources Act (the Act) in 2013 and many of the OAG recommendations proposed will be addressed in the review.  DNR recognized prior to this audit that some basic processes needed to be addressed, and DNR is working on those as part of the Act review. The review of the Act is anticipated be completed in 2016-17.  The launch of the NovaROC application in the Registry of Mineral and Petroleum Rights in August 2013 will provide government with modern reporting and monitoring tools and better, more timely and accessible service for industry.

DNR agrees with the OAG comment that the *"implementation of our [OAG] recommendations will strengthen and enhance the management of mineral resources in the province"*.  DNR is pleased that the OAG audit also recognized the examples of professional and effective oversight by staff, especially those processes and decisions that are compliant with the Act and Regulations.  DNR is confident in the abilities of staff to support the Act, manage the province's mineral resources and provide sound advice to decision makers.